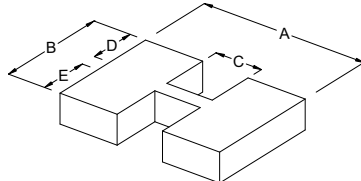
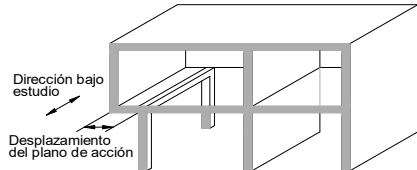
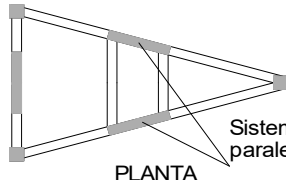




**PROTOTIPO EDUCACION - MÓDULO 4A**

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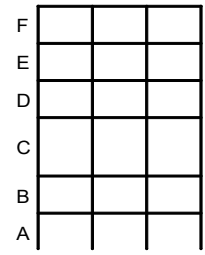
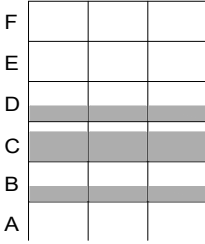
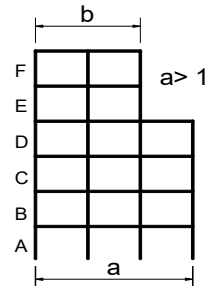
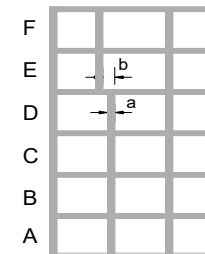
**14. IRREGULARIDADES EN PLANTA  
 (FIGURA A.3-1 de NSR10)**

TIPO	DESCRIPCION DE IRREGULARIDAD EN PLANTA	$\phi_p$
	2) $C \cdot D + C \cdot E > 0.50A \cdot B$ A: B: C: D: E:	
		
<b>TIPO 4P</b>	<b>DESPLAZAMIENTO DE LOS PLANOS DE ACCION</b>	<b>1.00</b>
		
<b>TIPO 5P</b>	<b>SISTEMAS NO PARALELOS</b>	<b>1.00</b>
		
<b>COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION <math>\phi_p</math>:</b>		<b>0.90</b>

**PROTOTIPO EDUCACION - MÓDULO 4A**

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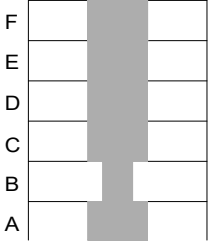
**14. IRREGULARIDADES EN LA ALTURA**  
 (FIGURA A.3-2 de NSR10)

TIPO	DESCRIPCION DE IRREGULARIDAD EN ALTURA	$\phi_a$
<b>TIPO 1aA-1bA</b>	PISO FLEXIBLE Y PISO FLEXIBLE EXTREMO	1.00
	$0.60 K_D \leq K_C < 0.70 K_D$ o $0.70(K_D + K_E + K_F)/3 \leq K_C < 0.80(K_D + K_E + K_F)/3$	1.00
	$K_C < 0.60 K_D$ o $K_C < 0.70(K_D + K_E + K_F)/3$	1.00
<b>TIPO 2A</b>	DISTRIBUCION DE MASAS	1.00
	$m_D > 1.50m_E$ o $m_D > 1.50m_C$	1.00
<b>TIPO 3A</b>	GEOMETRICA	1.00
	$a > 1.30 b$  $a =$ $b =$	1.00
<b>TIPO 4A</b>	DESPLAZAMIENTO DENTRO DEL PLANO DE ACCION	1.00
	$b > a$  $a =$ $b =$	1.00

**PROTOTIPO EDUCACION - MÓDULO 4A**

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**14. IRREGULARIDADES EN LA ALTURA  
(FIGURA A.3-2 de NSR10)**

TIPO	DESCRIPCION DE IRREGULARIDAD EN ALTURA	$\phi_a$
<b>TIPO 5aA-5bA</b>	PISO DEBIL Y PISO DEBIL EXTREMO	1.00
	$0.65 R_C \leq R_B < 0.80 R_C$	1.00
	$R_B < 0.65 R_C$	1.00
<b>COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION <math>\phi_a</math>:</b>		<b>1.00</b>

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
14. AUSENCIA DE REDUNDANCIA EN EL SISTEMA ESTRUCTURAL DE RESISTENCIA SÍSMICA (A.3.3.8 de NSR10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p>La redundancia en el sistema estructural permite la redistribución de fuerzas internas en caso de ocurrir una falla en los elementos principales. Sin la capacidad para la redistribución, el colapso estructural global puede resultar de la insuficiencia de los miembros individuales o conexiones. Debe asignarse un factor de reducción de resistencia por ausencia de redundancia en el sistema estructural de resistencia sísmica, <math>\phi_r</math>, en las dos direcciones principales en planta. Para este caso en particular el coeficiente viene dado por:</p> <p>COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, <math>\phi_r = 1.00</math></p>	

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
16. EMPLEO DEL COEFICIENTE DE DISIPACION DE ENERGIA, R (A.2.9.4 de NSR10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

**1. MODIFICACIÓN DEL COEFICIENTE DE CAPACIDAD DE DISIPACIÓN DE ENERGIA**

Coeficiente de capacidad de disipación de energía básico,  $R_o = 2.50$  (Tabla A.3-1 a A.3-5 de NSR10)

Coeficiente de reducción por irregularidad en planta de la edificación,  $\phi_p = 0.90$

Coeficiente de reducción por irregularidad en altura de la edificación,  $\phi_a = 1.00$

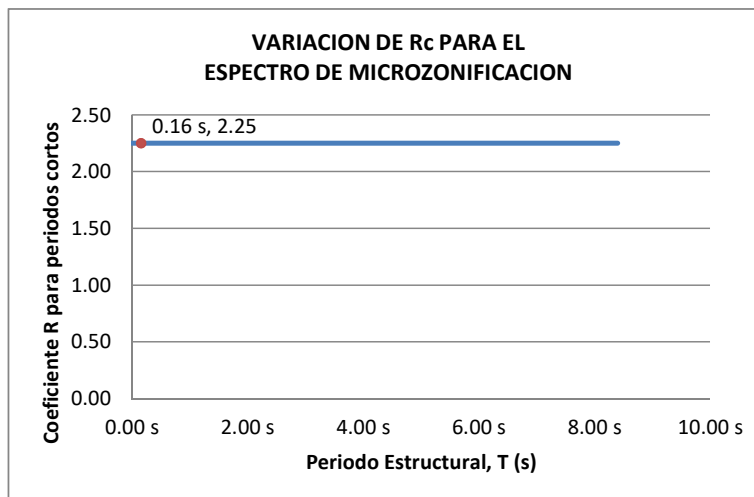
Coeficiente de reducción por ausencia de redundancia en la estructura,  $\phi_r = 1.00$

Se calcula el coeficiente de capacidad de disipación de energía reducido, R:

$$R = \phi_a \cdot \phi_p \cdot \phi_r \cdot R_o = 2.25 \quad (\text{A.3.3-1 de NSR10})$$

Una vez calculado el R, se determina el coeficiente de capacidad de disipación de energía definido para la zona de periodos cortos menos a  $T_c$ ,  $R_c$ :

$$R_c = R = 2.25$$



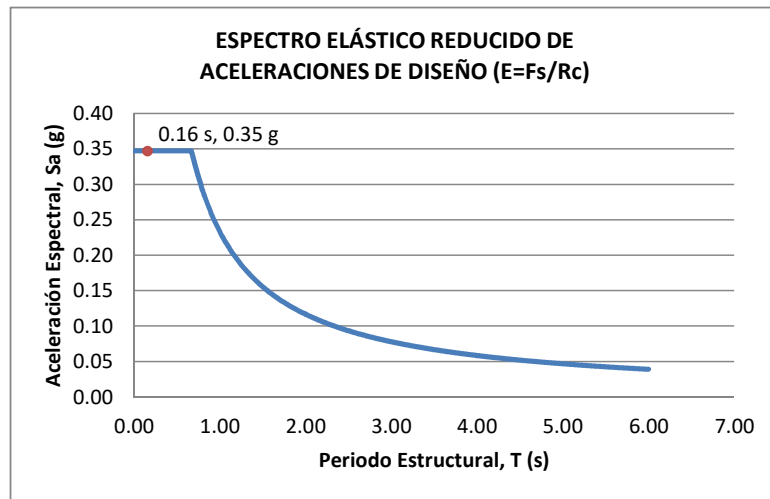
**17. ESPECTRO ELÁSTICO REDUCIDO DE ACELERACIONES DE DISEÑO (A.2.6 de NSR10)**

Como,  $F_s = S_a \cdot W$  (A.4.3-1 de NSR10)

y,  $E = \frac{F_s}{R_c}$  Donde E fuerzas sísmicas reducidas de diseño en los miembros estructurales (B.2.2 de NSR10)

entonces,  $E = \frac{S_a}{R_c} \cdot W$  Donde  $R_c = 2.25$

De acuerdo con los parámetros calculados anteriormente y los de microzonificación sísmica:



Para esta estructura,  $S_a/R_c = S_a/2.25 = 0.35 \text{ g}$

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004																												
12. METODO DE LA FUERZA HORIZONTAL EQUIVALENTE APLICADA AL UMBRAL DE DAÑO (A.4 de NSR10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com																												
1. DATOS GENERALES																													
<ul style="list-style-type: none"> <li>- Peso de la estructura, <math>W = 355 \text{ kN}</math></li> <li>- Aceleración espectral de umbral de daño, <math>S_{ad} = 0.07 \text{ g}</math></li> <li>- Cortante sísmico en la base, <math>V_{sd}</math></li> </ul>																													
$V_{sd} = S_{ad} \cdot g \cdot M = S_{ad} \cdot W = 24 \text{ kN} \quad (\text{A.12.4-1 de NSR10})$																													
Exponente, $k$ , relacionado con el periodo fundamental, $T$ , de la edificación de la siguiente manera:																													
<ul style="list-style-type: none"> <li>a) Para <math>T</math> menor o igual a 0.50 segundos, <math>k = 1.0</math></li> <li>b) Para <math>T</math> entre 0.50 y 2.5 segundos, <math>k = 0.75 + 0.50T</math>, y</li> <li>c) Para <math>t</math> mayor que 2.5 segundos, <math>k = 2.00</math></li> </ul>																													
Para este caso particular, el valor de $k = 1.00$ (A.4.3.2 de NSR10)																													
2. CALCULO DE LAS FUERZAS SISMICAS HORIZONTALES EQUIVALENTES DEL UMBRAL DE DAÑO																													
La fuerza sísmica horizontal, $F_x$ , en cualquier nivel $x$ , para la dirección en estudio, debe determinarse usando la siguiente ecuación:																													
$F_{Xd} = C_{VX} \cdot V_{sd} \quad (\text{A.4.3-2 de NSR10})$																													
$C_{VX} = \frac{m_x h_x^k}{\sum_{i=1}^n (m_i h_i^k)} \quad (\text{A.4.3-3 de NSR10})$																													
Aplicando las ecuaciones anteriores para cada nivel se Obtiene $F_x$ :																													
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>NIVEL</th> <th><math>W_x</math> (kN)</th> <th><math>h_x</math> (m)</th> <th><math>W_x h_x^k</math></th> <th><math>F_{xd}</math> (kN)</th> <th><math>V_{xd}</math> (kN)</th> <th><math>F_x</math> (%)</th> </tr> </thead> <tbody> <tr> <td>N1</td> <td>355</td> <td>3.25</td> <td>1155</td> <td>24</td> <td>24</td> <td>100.00%</td> </tr> <tr> <td colspan="7"><hr/></td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>355</b></td> <td></td> <td><b>1155</b></td> <td><b>24</b></td> <td></td> <td><b>100%</b></td> </tr> </tbody> </table>		NIVEL	$W_x$ (kN)	$h_x$ (m)	$W_x h_x^k$	$F_{xd}$ (kN)	$V_{xd}$ (kN)	$F_x$ (%)	N1	355	3.25	1155	24	24	100.00%	<hr/>							<b>TOTAL</b>	<b>355</b>		<b>1155</b>	<b>24</b>		<b>100%</b>
NIVEL	$W_x$ (kN)	$h_x$ (m)	$W_x h_x^k$	$F_{xd}$ (kN)	$V_{xd}$ (kN)	$F_x$ (%)																							
N1	355	3.25	1155	24	24	100.00%																							
<hr/>																													
<b>TOTAL</b>	<b>355</b>		<b>1155</b>	<b>24</b>		<b>100%</b>																							



<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>		Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com				
12. METODO DE LA FUERZA HORIZONTAL EQUIVALENTE (A.4 de NSR10)						
1. DATOS GENERALES						
- Peso de la estructura, $W = 355 \text{ kN}$						
- Aceleración Espectral, $S_a = 0.78 \text{ g}$						
- Cortante sísmico en la base, $V_s = S_a \cdot g \cdot M = S_a \cdot W = 278 \text{ kN}$ (A.4.3-1 de NSR10)						
- Exponente, k, relacionado con el periodo fundamental, T, de la edificación de la siguiente manera:						
a) Para T menor o igual a 0.50 segundos, $k = 1.0$						
b) Para T entre 0.50 y 2.5 segundos, $k = 0.75 + 0.50T$ , y						
c) Para t mayor que 2.5 segundos, $k = 2.00$						
Para este caso particular, el valor de $k = 1.00$ (A.4.3.2 de NSR10)						
2. CALCULO DE LAS FUERZAS SISMICAS HORIZONTALES EQUIVALENTES						
La fuerza sísmica horizontal, $F_x$ , en cualquier nivel x, para la dirección en estudio, debe determinarse usando la siguiente ecuación:						
$F_x = C_{VX} \cdot V_s$ (A.4.3-2 de NSR10)						
y						
$C_{VX} = \frac{m_x h_x^k}{\sum_{i=1}^n (m_i h_i^k)}$ (A.4.3-3 de NSR10)						
Aplicando las ecuaciones anteriores para cada nivel se Obtiene $F_x$ :						
NIVEL	$W_x$ (kN)	$h_x$ (m)	$W_x h_x^k$	$F_x$ (kN)	$V_x$ (kN)	$F_x$ (%)
N1	355	3.25	1155	278	278	100.00%
<hr/>						
<b>TOTAL</b>	<b>355</b>		<b>1155</b>	<b>278</b>		<b>100%</b>

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>		Proyecto No: P004	
		Archivo: MEMORIAS-004	
13. AJUSTE DEL CORTANTE BASAL EN EL PROGRAMA ETABS CON EL METODO DE LA FUERZA HORIZONTAL EQUIVALENTE PARA CHEQUEO DE DERIVAS		Fecha: Abril de 2017	
		Diseñó: Ingeniero Francisco J. Medina	
		Email: ingfcomedina@yahoo.com	

Los valores de Sa utilizados tanto para el chequeo de derivas (A.6.2.1.2 de NSR10) es el siguiente:

Aceleración Espectral, Sa = 0.78 g

Aceleración Espectral para chequeo de derivas, Sa/l = 0.63 g

Una vez calculado el cortante basal, Vs, por medio del método de la fuerza horizontal equivalente, se realiza el ajuste a la fuerza sísmica calculada por el programa ETABS:

Vs (FHE)		Vs (ETABS)		FACTOR DE AJUSTE	
V <sub>SX</sub>	V <sub>SY</sub>	V <sub>SX</sub>	V <sub>SY</sub>	FA <sub>X</sub>	FA <sub>Y</sub>
278 kN	278 kN	164 kN	214 kN	1.52	1.17

COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION $\phi_p$ :	0.90
COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION $\phi_a$ :	1.00
COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, $\phi_r$ =	1.00

Estructura: **IRREGULAR** Ajuste del Cortante Basal Vs al 90%

**Aceleración Espectral utilizada en el programa ETABS, Sa x FAx = 1.19 g**

**Aceleración Espectral utilizada en el programa ETABS, Sa x FAy = 0.91 g**

**Aceleración Espectral utilizada en el programa ETABS para chequeo de derivas, Sa/l x FAx = 0.95 g**

**Aceleración Espectral utilizada en el programa ETABS para chequeo de derivas, Sa/l x FAy = 0.73 g**

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>		Proyecto No: P004																									
		Archivo: MEMORIAS-004																									
13. AJUSTE CORTANTE BASAL EN PROGRAMA ETABS CON METODO DE LA FUERZA HORIZONTAL EQUIVALENTE PARA EL UMBRAL DE DAÑO PARA CHEQUEO DE DERIVAS		Fecha: Abril de 2017																									
		Diseñó: Ingeniero Francisco J. Medina																									
		Email: ingfcomedina@yahoo.com																									
<p>Los valores de Sa utilizados tanto para el chequeo de derivas (A.6.2.1.2 de NSR10) es el siguiente:</p> <p>Aceleración Espectral, Sad = 0.07 g</p> <p>Una vez calculado el cortante basal del umbral de daño, Vsd, por medio del método de la fuerza horizontal equivalente, se realiza el ajuste a la fuerza sísmica calculada por el programa ETABS:</p> <table border="1"> <thead> <tr> <th colspan="2">Vs (FHE)</th> <th colspan="2">Vs (ETABS)</th> <th colspan="2">FACTOR DE AJUSTE</th> </tr> <tr> <th>V<sub>SX</sub></th> <th>V<sub>SY</sub></th> <th>V<sub>SX</sub></th> <th>V<sub>SY</sub></th> <th>FA<sub>X</sub></th> <th>FA<sub>Y</sub></th> </tr> </thead> <tbody> <tr> <td>24 kN</td> <td>24 kN</td> <td>17.8 kN</td> <td>21.6 kN</td> <td>1.23</td> <td>1.01</td> </tr> </tbody> </table> <table border="1"> <tr> <td>COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION <math>\phi_p</math>:</td> <td>0.90</td> </tr> <tr> <td>COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION <math>\phi_a</math>:</td> <td>1.00</td> </tr> <tr> <td>COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, <math>\phi_r</math> =</td> <td>1.00</td> </tr> </table> <p>Estructura: <b>IRREGULAR</b> Ajuste del Cortante Basal Vs al 90%</p> <p><b>Aceleración Espectral utilizada en el programa ETABS, Sad x FAx = 0.08 g</b></p> <p><b>Aceleración Espectral utilizada en el programa ETABS, Sad x FAy = 0.07 g</b></p>				Vs (FHE)		Vs (ETABS)		FACTOR DE AJUSTE		V <sub>SX</sub>	V <sub>SY</sub>	V <sub>SX</sub>	V <sub>SY</sub>	FA <sub>X</sub>	FA <sub>Y</sub>	24 kN	24 kN	17.8 kN	21.6 kN	1.23	1.01	COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION $\phi_p$ :	0.90	COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION $\phi_a$ :	1.00	COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, $\phi_r$ =	1.00
Vs (FHE)		Vs (ETABS)		FACTOR DE AJUSTE																							
V <sub>SX</sub>	V <sub>SY</sub>	V <sub>SX</sub>	V <sub>SY</sub>	FA <sub>X</sub>	FA <sub>Y</sub>																						
24 kN	24 kN	17.8 kN	21.6 kN	1.23	1.01																						
COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION $\phi_p$ :	0.90																										
COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION $\phi_a$ :	1.00																										
COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, $\phi_r$ =	1.00																										

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004														
18. EVALUACIÓN DE LA DERIVA MAXIMA Y LIMITES DE LA DERIVA (A.6.3 de NSR10 Y A.6.4 de NSR10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com														
<p><b>DATOS DE ENTRADA</b> Se realiza la verificación de la deriva para la combinación tipo DER06 Max</p> <table border="1" data-bbox="305 457 1317 520"> <thead> <tr> <th>PUNTO</th> <th>NIVEL</th> <th>hpiso</th> <th>δx1</th> <th>δx2</th> <th>δy1</th> <th>δy2</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Base</td> <td>3.25 m</td> <td>0.00 mm</td> <td>0.01 mm</td> <td>0.00 mm</td> <td>-8.60 mm</td> </tr> </tbody> </table> <p><b>DESARROLLO ANALITICO</b></p> <p>- DERIVA MAXIMA (A.6.3.1 de NSR10):</p> <p>La deriva máxima para cualquier piso debe obtenerse así:</p> $\Delta_{max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})^2} \quad (A.6.3-1 \text{ de NSR10})$ <p>donde:</p> <ul style="list-style-type: none"> <li><math>\Delta_{max}^i</math> : deriva máxima para cualquier punto del piso i</li> <li><math>\delta_{tot,j}^i</math> : desplazamiento total horizontal, de cualquier punto del diafragma del piso i en la dirección j</li> <li><math>\delta_{tot,j}^{i-1}</math> : desplazamiento total horizontal, de cualquier punto del diafragma del piso i - 1 en la dirección j</li> </ul> <p>Por lo tanto se tiene que la deriva máxima es igual a:</p> $\Delta_{max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})} = 8.60 \text{ mm}$ <p>- LIMITES DE LA DERIVA (A.6.4.1 de NSR10):</p> <p>La deriva maxima para cualquier piso determinada de acuerdo con el procedimiento anterior, no puede exceder los siguientes límites establecidos en la tabla A.6.4-1 de NSR10, en el cual la deriva se expresa como un porcentaje de la altura de piso hpi:</p> $\frac{\Delta_{max}^i}{hpiso} (\%) = 0.26\% < 1.00\% \quad \text{ok}$		PUNTO	NIVEL	hpiso	δx1	δx2	δy1	δy2	2	Base	3.25 m	0.00 mm	0.01 mm	0.00 mm	-8.60 mm
PUNTO	NIVEL	hpiso	δx1	δx2	δy1	δy2									
2	Base	3.25 m	0.00 mm	0.01 mm	0.00 mm	-8.60 mm									

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
18. CHEQUEO DE LA DERIVA CON EXCENRICIDAD	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

NIVEL	PUNTO-COMB	h (m)	$\delta x_1 - \delta x_2$ (mm)	$\delta y_1 - \delta y_2$ (mm)	$\Delta_{max}$ (mm)	$\Delta_{max}$ (%)	$\Delta_{limite}$ (%)	Observ
N1	1-DER05 Max	3.25	10.40	3.40	10.94	0.34	1.00	o.k
Base								
N1	1-DER05 Min	3.25	10.40	6.80	12.43	0.38	1.00	o.k
Base								
N1	1-DER06 Max	3.25	0.00	5.30	5.30	0.16	1.00	o.k
Base								
N1	1-DER06 Min	3.25	0.00	8.70	8.70	0.27	1.00	o.k
Base								
N1	1-DER07 Max	3.25	10.40	4.10	11.18	0.34	1.00	o.k
Base								
N1	1-DER07 Min	3.25	10.40	6.10	12.06	0.37	1.00	o.k
Base								
N1	1-DER08 Max	3.25	0.00	6.00	6.00	0.18	1.00	o.k
Base								
N1	1-DER08 Min	3.25	0.00	8.00	8.00	0.25	1.00	o.k
Base								
N1	2-DER05 Max	3.25	5.50	3.40	6.47	0.20	1.00	o.k
Base								
N1	2-DER05 Min	3.25	5.40	6.70	8.61	0.26	1.00	o.k
Base								
N1	2-DER06 Max	3.25	0.01	5.30	5.30	0.16	1.00	o.k
Base								
N1	2-DER06 Min	3.25	0.01	8.60	8.60	0.26	1.00	o.k
Base								
N1	2-DER07 Max	3.25	5.40	4.00	6.72	0.21	1.00	o.k
Base								
N1	2-DER07 Min	3.25	5.40	6.00	8.07	0.25	1.00	o.k
Base								
N1	2-DER08 Max	3.25	0.01	5.90	5.90	0.18	1.00	o.k
Base								
N1	2-DER08 Min	3.25	0.01	7.90	7.90	0.24	1.00	o.k
Base								
N1	3-DER05 Max	3.25	10.40	3.40	10.94	0.34	1.00	o.k
Base								
N1	3-DER05 Min	3.25	10.40	6.80	12.43	0.38	1.00	o.k
Base								
N1	3-DER06 Max	3.25	0.00	5.30	5.30	0.16	1.00	o.k
Base								
N1	3-DER06 Min	3.25	0.00	8.70	8.70	0.27	1.00	o.k
Base								
N1	3-DER07 Max	3.25	10.40	4.10	11.18	0.34	1.00	o.k
Base								
N1	3-DER07 Min	3.25	10.40	6.10	12.06	0.37	1.00	o.k
Base								
N1	3-DER08 Max	3.25	0.00	6.00	6.00	0.18	1.00	o.k
Base								
N1	3-DER08 Min	3.25	0.00	8.00	8.00	0.25	1.00	o.k

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
18. CHEQUEO DE LA DERIVA CON EXCENTRICIDAD	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

NIVEL	PUNTO-COMB	h (m)	$\delta x_1 - \delta x_2$ (mm)	$\delta y_1 - \delta y_2$ (mm)	$\Delta_{max}$ (mm)	$\Delta_{max}$ (%)	$\Delta_{limite}$ (%)	Observ
Base								
N1	4-DER05 Max	3.25	5.40	3.40	6.38	0.20	1.00	o.k
Base								
N1	4-DER05 Min	3.25	5.50	6.70	8.67	0.27	1.00	o.k
Base								
N1	4-DER06 Max	3.25	0.01	5.30	5.30	0.16	1.00	o.k
Base								
N1	4-DER06 Min	3.25	0.01	8.60	8.60	0.26	1.00	o.k
Base								
N1	4-DER07 Max	3.25	5.40	4.00	6.72	0.21	1.00	o.k
Base								
N1	4-DER07 Min	3.25	5.40	6.00	8.07	0.25	1.00	o.k
Base								
N1	4-DER08 Max	3.25	0.01	5.90	5.90	0.18	1.00	o.k
Base								
N1	4-DER08 Min	3.25	0.01	7.90	7.90	0.24	1.00	o.k
Base								

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004														
18. EVALUACIÓN DE LA DERIVA MAXIMA Y LIMITES DE LA DERIVA PARA UMBRAL DE DAÑO (A.12.5 de NSR10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com														
<p><b>DATOS DE ENTRADA</b> Se realiza la verificación de la deriva para la combinación tipo DER06 Max</p> <table border="1" data-bbox="305 453 1317 520"> <thead> <tr> <th>PUNTO</th> <th>NIVEL</th> <th>hpiso</th> <th>δx1</th> <th>δx2</th> <th>δy1</th> <th>δy2</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Base</td> <td>3.25 m</td> <td>0.01 mm</td> <td>0.00 mm</td> <td>-1.10 mm</td> <td>0.00 mm</td> </tr> </tbody> </table> <p><b>DESARROLLO ANALITICO</b></p> <p>- DERIVA MAXIMA (A.6.3.1 de NSR10):</p> <p>La deriva máxima para cualquier piso debe obtenerse así:</p> $\Delta_{max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})^2} \quad (A.6.3-1 \text{ de NSR10})$ <p>donde:</p> <ul style="list-style-type: none"> <li><math>\Delta_{max}^i</math>: deriva máxima para cualquier punto del piso i</li> <li><math>\delta_{tot,j}^i</math>: desplazamiento total horizontal, de cualquier punto del diafragma del piso i en la dirección j</li> <li><math>\delta_{tot,j}^{i-1}</math>: desplazamiento total horizontal, de cualquier punto del diafragma del piso i - 1 en la dirección j</li> </ul> <p>Por lo tanto se tiene que la deriva máxima es igual a:</p> $\Delta_{max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})} = 1.10 \text{ mm}$ <p>- LIMITES DE LA DERIVA (Tabla A.12.5.1 de NSR10):</p> <p>La deriva maxima para cualquier piso determinada de acuerdo con el procedimiento anterior, no puede exceder los siguientes límites establecidos en la tabla A.12.5-1 de NSR10, en el cual la deriva se expresa como un porcentaje de la altura de piso hpi:</p> $\frac{\Delta_{max}^i}{hpiso} (\%) = 0.03\% < 0.40\% \quad \text{ok}$		PUNTO	NIVEL	hpiso	δx1	δx2	δy1	δy2	2	Base	3.25 m	0.01 mm	0.00 mm	-1.10 mm	0.00 mm
PUNTO	NIVEL	hpiso	δx1	δx2	δy1	δy2									
2	Base	3.25 m	0.01 mm	0.00 mm	-1.10 mm	0.00 mm									

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
18. CHEQUEO DE LA DERIVA MAXIMA Y LIMITES DE LA DERIVA PARA EL UMBRAL DE DAÑO	

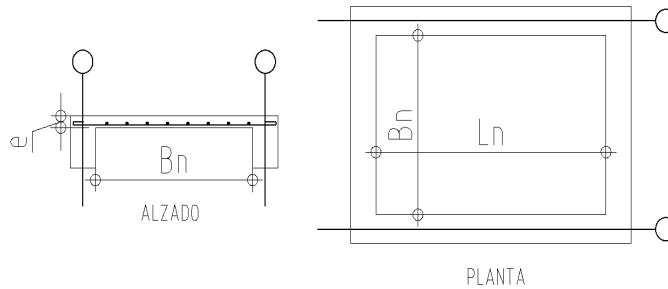
NIVEL	PUNTO-COMB	h (m)	$\delta x1-\delta x2$ (mm)	$\delta y1-\delta y2$ (mm)	$\Delta_{max}$ (mm)	$\Delta_{max}$ (%)	$\Delta_{limite}$ (%)	Observ
N1	-DERUD05 Ma	3.25	0.90	1.20	1.50	0.05	0.40	o.k
Base								
N1	-DERUD05 Mi	3.25	0.90	2.10	2.28	0.07	0.40	o.k
Base								
N1	-DERUD06 Ma	3.25	0.00	1.10	1.10	0.03	0.40	o.k
Base								
N1	-DERUD06 Mi	3.25	0.00	2.30	2.30	0.07	0.40	o.k
Base								
N1	-DERUD07 Ma	3.25	0.90	0.60	1.08	0.03	0.40	o.k
Base								
N1	-DERUD07 Mi	3.25	0.90	1.50	1.75	0.05	0.40	o.k
Base								
N1	-DERUD08 Ma	3.25	0.00	0.40	0.40	0.01	0.40	o.k
Base								
N1	-DERUD08 Mi	3.25	0.00	1.60	1.60	0.05	0.40	o.k
Base								
N1	-DERUD05 Ma	3.25	0.40	1.20	1.26	0.04	0.40	o.k
Base								
N1	-DERUD05 Mi	3.25	0.40	2.10	2.14	0.07	0.40	o.k
Base								
N1	-DERUD06 Ma	3.25	0.01	1.10	1.10	0.03	0.40	o.k
Base								
N1	-DERUD06 Mi	3.25	0.01	2.30	2.30	0.07	0.40	o.k
Base								
N1	-DERUD07 Ma	3.25	0.40	0.60	0.72	0.02	0.40	o.k
Base								
N1	-DERUD07 Mi	3.25	0.40	1.40	1.46	0.04	0.40	o.k
Base								
N1	-DERUD08 Ma	3.25	0.01	0.40	0.40	0.01	0.40	o.k
Base								
N1	-DERUD08 Mi	3.25	0.01	1.60	1.60	0.05	0.40	o.k
Base								
N1	-DERUD05 Ma	3.25	0.90	1.20	1.50	0.05	0.40	o.k
Base								
N1	-DERUD05 Mi	3.25	0.90	2.10	2.28	0.07	0.40	o.k
Base								
N1	-DERUD06 Ma	3.25	0.00	1.10	1.10	0.03	0.40	o.k
Base								
N1	-DERUD06 Mi	3.25	0.00	2.30	2.30	0.07	0.40	o.k
Base								
N1	-DERUD07 Ma	3.25	0.90	0.60	1.08	0.03	0.40	o.k
Base								
N1	-DERUD07 Mi	3.25	0.90	1.50	1.75	0.05	0.40	o.k
Base								
N1	-DERUD08 Ma	3.25	0.00	0.40	0.40	0.01	0.40	o.k



<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
18. CHEQUEO DE LA DERIVA MAXIMA Y LIMITES DE LA DERIVA PARA EL UMBRAL DE DAÑO	

NIVEL	PUNTO-COMB	h	$\delta x1-\delta x2$	$\delta y1-\delta y2$	$\Delta_{max}$	$\Delta_{max}$	$\Delta_{limite}$	Observ
		(m)	(mm)	(mm)	(mm)	(%)	(%)	
Base								
N1	-DERUD08 Mi	3.25	0.00	1.60	1.60	0.05	0.40	o.k
Base								
N1	-DERUD05 Ma	3.25	0.40	1.20	1.26	0.04	0.40	o.k
Base								
N1	-DERUD05 Mi	3.25	0.40	2.10	2.14	0.07	0.40	o.k
Base								
N1	-DERUD06 Ma	3.25	0.01	1.10	1.10	0.03	0.40	o.k
Base								
N1	-DERUD06 Mi	3.25	0.01	2.30	2.30	0.07	0.40	o.k
Base								
N1	-DERUD07 Ma	3.25	0.40	0.60	0.72	0.02	0.40	o.k
Base								
N1	-DERUD07 Mi	3.25	0.40	1.40	1.46	0.04	0.40	o.k
Base								
N1	-DERUD08 Ma	3.25	0.01	0.40	0.40	0.01	0.40	o.k
Base								
N1	-DERUD08 Mi	3.25	0.01	1.60	1.60	0.05	0.40	o.k
Base								

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
3. COMBINACIONES DE CARGAS MAYORADAS USANDO EL METODO DE RESISTENCIA PARA LA SUPERESTRUCTURA (NSR10 B.2.4)	



ESQUEMA GENERAL

1. DATOS GENERALES

Ln =	5.60 m
Bn =	2.40 m

Ln/Bn es mayor a 2, entonces se tiene una losa armada en una direccion.

	Espesor mínimo, h			
	Apoyo simple	Con un extremo continuo	Ambos extremos continuos	En voladizo
Elementos	Elementos que <b>NO</b> soporten o este ligados a divisiones y otro tipo de elementos susceptibles de dañarse debido a deflexiones grandes.			
Límite	L/20	L/24	L/28	L/10
L	2.40 m	N.A.	N.A.	N.A.
h <sub>mín</sub>	0.12 m	N.A.	N.A.	N.A.

Altura adoptada	0.15 m
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Espesor de placa, t	0.15 m
---------------------	--------

2. EVALUACION DE CARGA

Espesor de placa  $= \frac{\gamma_{concreto} \cdot t \cdot 1.0 \text{ m} \cdot 1.0 \text{ m}}{1.0 \text{ m} \cdot 1.0 \text{ m}} = 3.60 \text{ kN/m}^2$

Peso propio	3.60 kN/m <sup>2</sup>
-------------	------------------------

- Acabado de piso en concreto (Alistado e=0.02n) = 0.40 kN/m<sup>2</sup> (Tabla B.3.4.1-3 NSR10)
- Pañete en yeso o en concreto = 0.25 kN/m<sup>2</sup> (Tabla B.3.4.1-1 NSR10)
- Fachadas y particiones de mamposteria = 0.00 kN/m<sup>2</sup>
- Tela asfáltica de una capa = 0.05 kN/m<sup>2</sup> (Tabla B.3.4.1-4 NSR10)

Peso de materiales de construcción	0.70 kN/m <sup>2</sup>
------------------------------------	------------------------

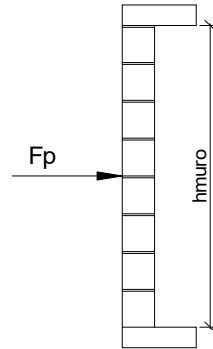
Carga muerta, D	4.30 kN/m <sup>2</sup>
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Carga viva	1.8 kN/m <sup>2</sup> (Tabla B.4.2.1-2 NSR10)
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<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004												
3. COMBINACIONES DE CARGAS MAYORADAS USANDO EL METODO DE RESISTENCIA PARA LA SUPERESTRUCTURA (NSR10 B.2.4)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com												
<b>DISEÑO ESTRUCTURAL</b>													
<b>ARMADURA POR RETRACCIÓN DE FRAGUADO Y CAMBIOS DE TEMPERATURA</b>													
$A_{s_{temp}} = 0.002 \cdot t_p \cdot 1000mm = 300 \text{ mm}^2/m$													
$\phi$ barra transv: <b>N 3</b>	As barra N3 = 71 mm <sup>2</sup> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Colocar barra N3 cada 0.24 m.</div>												
<p>Este refuerzo se coloca perpendicular por encima del refuerzo principal y una barra por cada peldaño. Entre sus funciones están: controlar los efectos de la retracción del fraguado y de los cambios de temperatura, mejorar la ductilidad y permitir una mejor redistribución de la carga.</p>													
<b>DISEÑO A FLEXION</b>													
$W_u = 1.2 \cdot D + 1.6 \cdot L = 8.0 \text{ kN/m}$ $M_u = (W_u \cdot B_n^2) / 8 = 6 \text{ kN-m/m}$													
Cuantía de diseño y área de acero longitudinal:													
$\rho = \frac{0.85 f'_c}{f_y} \left( 1 - \sqrt{1 - \frac{2 M_u}{\phi 0.85 f'_c \cdot b d^2}} \right) = 0.0011$ $A_{s_{req}} = \rho b d = 129 \text{ mm}^2$													
Área de refuerzo mínimo (C.10.5.1 de NSR10):													
$A_{s_{min 1}} = \frac{0.25 \sqrt{f'_c}}{f_y} b d = 327 \text{ mm}^2/m$ $A_{s_{min 2}} = \frac{1.4 b d}{f_y} = 400 \text{ mm}^2/m$													
Acero de refuerzo a colocar:													
$A_s = 400 \text{ mm}^2/m$													
$\phi$ barra transv: <b>N 3</b>	As barra N3 = 71 mm <sup>2</sup> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Colocar barra N3 cada 0.18 m.</div>												
$A_{s_{col}} = 0 \text{ mm}^2/m$													
- Deformación unitaria a tracción, $\epsilon_t$ :													
$\epsilon_t = \frac{0.85 f'_c \cdot \beta_1 \epsilon_c d_t b - \epsilon_c A_s f_y}{A_s f_y} = 73.0016$													
- Límite de deformación unitaria controlada por compresión. Deformación balanceada.:													
$\epsilon_1 = \frac{f_y}{E_s} = 0.0021 \quad (\text{C.10.3.2 de NSR10})$													
- Límite de deformación unitaria controlada por tracción:													
$\epsilon_2 = 0.0050$													
- Observación:													
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><math>\epsilon_1</math></td> <td style="text-align: center;">&gt;</td> <td style="text-align: center;"><math>\epsilon_t</math></td> <td style="text-align: center;">&lt;</td> <td style="text-align: center;"><math>\epsilon_2</math></td> <td style="border: 1px solid black; text-align: center; background-color: #d9ead3;">ok</td> </tr> <tr> <td style="text-align: center;">0.0021</td> <td style="text-align: center;">&gt;</td> <td style="text-align: center;">73.0016</td> <td style="text-align: center;">&lt;</td> <td style="text-align: center;">0.0050</td> <td style="border: 1px solid black; text-align: center; background-color: #d9ead3;"><math>\phi = 0.90</math></td> </tr> </table>		$\epsilon_1$	>	$\epsilon_t$	<	$\epsilon_2$	ok	0.0021	>	73.0016	<	0.0050	$\phi = 0.90$
$\epsilon_1$	>	$\epsilon_t$	<	$\epsilon_2$	ok								
0.0021	>	73.0016	<	0.0050	$\phi = 0.90$								
Este elemento estructural estará controlado por tracción donde se puede esperar un claro aviso previo de falla con deflexión y agrietamiento excesivo.													
- Límite de deformación unitaria máxima controlada por tracción:													

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>		Proyecto No: P004		
3. COMBINACIONES DE CARGAS MAYORADAS USANDO EL METODO DE RESISTENCIA PARA LA SUPERESTRUCTURA (NSR10 B.2.4)		Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com		
$\epsilon_{\text{máx}} = 0.0040$ (C.10.3-5 de NSR10)				
- Observación:	$\epsilon_{\text{máx}} > \epsilon_t$ $0.0040 > 73.0016$	<input type="button" value="ok"/>		
<p>De acuerdo con CR10.3.5 de NSR10, el objetivo de esta limitación es restringir la cuantía de refuerzo en vigas no preesforzadas a aproximadamente el mismo valor que se obtenía con 0.75pb el cual tiene un resultado de 0.00376. El límite propuesto de 0.004 es levemente más conservador.</p> <p>La armadura requerida por la flexión no debe ser menor a la requerida para controlar los cambios de temperatura.</p>				
<b>DISEÑO A CORTANTE</b>				
La sección crítica se localiza a la distancia "d" medida a partir del borde del apoyo:				
$V_u = 9.17 \text{ kN}$				
Resistencia al cortante proporcionada por el concreto:				
$\sqrt{f'_c} = 4.58 \text{ MPa} < 8.30 \text{ MPa}$ <input type="button" value="ok"/> (C.11.2.1 de NSR10)				
$\phi V_c = 0.17\lambda\sqrt{f'_c} \cdot bd = 70.11 \text{ kN}$ (C.11.2.1.1 de NSR10) <input type="button" value="No requiere estribos"/>				
Si el esfuerzo a corte que resiste el concreto es mayor que el actuante, está en capacidad de soportar las tensiones cortantes y por ello, no se requiere la colocación del refuerzo cortante. El espesor de la losa debe controlarse buscando siempre esta condición.				
<b>CALCULO DE DEFLEXION</b>				
Sostiene divisiones frágiles:		<input type="button" value="NO"/>		
x	EI	$\delta_{\text{máxima}}$	$\delta_{\text{permitida}}$	Observación
0.5	5,027 kN-m <sup>2</sup>	0.06 cm	0.67 cm	Cumple

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com



ESQUEMA GENERAL

- A.9.2 - GRADO DE DESEMPEÑO DE LOS ELEMENTOS NO ESTRUCTURALES.

De acuerdo con A.9.2.2 de NSR-10, la edificación se clasifica dentro de uno de los tres grados de desempeño de los elementos no estructurales definidos en A.9.2.1. Este grado de desempeño no puede ser inferior al mínimo permisible fijado en A.9.2.3.

A.9.2.3 - GRADO DE DESEMPEÑO MÍNIMO - Como mínimo debe cumplirse el grado de desempeño indicado en la tabla A.9.2-1 de NSR-10, para cada uno de los grupos de uso definidos en A.2.5.1.

TABLA A.9.2-1 de NSR-10  
Grado de desempeño mínimo requerido

Grupo de Uso	Grado de desempeño
IV	Superior
III	Superior
II	Bueno
I	Bajo

Para este caso y teniendo en cuenta que la edificación se clasifica como grupo de uso III se tiene el siguiente grado de desempeño:

Grupo de Uso	<b>III</b>
Grado de desempeño	<b>Superior</b>

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p>- A.9.4 - CRITERIO DE DISEÑO.</p> <p>En el presente análisis los elementos no estructurales se separan de la estructura principal. En este tipo de diseño los elementos no estructurales se aíslan lateralmente de la estructura dejando una separación suficiente para que la estructura al deformarse como consecuencia del sismo no los afecte adversamente. Los elementos no estructurales se apoyan en su parte inferior sobre la estructura, o se cuelgan de ella; por tanto deben ser capaces de resistir por sí mismo las fuerzas inerciales que les impone el sismo, y sus anclajes a la estructura deben ser capaces de resistir y transferir a la estructura estas fuerzas inducidas por el sismo. Además la separación a la estructura de la edificación debe ser lo suficientemente amplia para garantizar que no entren en contacto, para los desplazamientos impuestos por el sismo de diseño. En el espacio resultante deberá evitarse colocar elementos que rigidicen la unión eliminando la flexibilidad requerida por el diseño.</p> <p>A.9.4.2 - FUERZA SISMICA DE DISEÑO - Las Fuerzas sísmicas horizontales reducidas de diseño que actúan sobre cualquier elemento no estructural deben calcularse utilizando la siguiente ecuación:</p> $F_p = \frac{a_x a_p}{R_p} g M_p \geq \frac{A_a I}{2} g M_p \quad (\text{A.9.4-1 de NSR-10})$ <p>Donde los parámetros que intervienen en esta ecuación, se calculan de la siguiente manera:</p> <p>A.9.4.2.1 -Aceleracion en el punto de soporte del elemento, <math>a_x</math>. Corresponde a la aceleración horizontal que ocurre en el punto donde el elemento no estructural está soportado, o anclado, al sistema estructural de la edificación, cuando ésta se ve afectada por los movimientos sísmicos de diseño. Se calcula de la siguiente manera:</p> $a_x = A_s + \frac{(S_a - A_s)h_x}{h_{eq}} \quad \text{para } h_x \leq h_{eq} \quad (\text{A.9.4-2 de NSR-10})$ $a_x = S_a \frac{h_x}{h_{eq}} \quad \text{para } h_x > h_{eq}$ <p>- Altura equivalente del sistema de un grado de libertad que simula la edificación, <math>h_{eq} = 0.75 h_n = 0.75(3.25) \text{ m} = 2.44 \text{ m}</math>.</p> <p>- Aceleración máxima en la superficie del suelo estimada como la aceleración espectral correspondiente a un período de vibración igual a cero, <math>A_s = 0.10 \text{ g}</math>.</p> <p>- Aceleración espectral de diseño para un período de vibración dado, <math>S_a = 0.78 \text{ g}</math>.</p>	

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta lo anterior se calcula el valor de  $a_x$  para cada uno de los pisos de la edificación:

Nivel	As	Sa	hx	heq	$a_x$
N1	0.10	0.78	3.25	2.44	1.04

A.9.4.2.2 - Amplificación dinámica del elemento no estructural,  $a_p$ . Dependiendo de la rigidez, distribución de su masa y características de apoyo sobre la estructura, el elemento no estructural amplifica las aceleraciones que se presentan en su punto de soporte debido a efectos de resonancia. Los valores de  $a_p$  son tomados de las tablas A.9.5-1 y A.9.6-1 de NSR-10. Debido a que el muro en evaluación se trata de un elemento no estructural divisorio de altura total se tiene:

$a_p$
1.00

- Tipo de anclajes o amarres para determinar el coeficiente de capacidad de disipación de energía,  $R_p$ : No dúctiles.

A.9.4.2.3 - Capacidad de disipación de energía en el rango inelástico del elemento no estructural,  $R_p$ . Representa la capacidad de disipación de energía en el rango inelástico de respuesta del elemento en sí y de su sistema de anclaje o amparre a la estructura de la edificación. Teniendo en cuenta lo anterior se tiene:

Tipos de anclajes	$R_p$
Dúctiles	3.00

Adicionalmente se calcula el peso del elemento no estructural:

Densidad del muro	Densidad del revoque	Espesor del muro	Espesor del revoque	Base de la columneta	Altura efectiva, d	Longitud aferente
13 kN/m <sup>3</sup>	21 kN/m <sup>3</sup>	120 mm	15 mm	120 mm	100 mm	1800 mm

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta las variables anteriores se calcula la fuerza sísmica de diseño por piso:

Nivel	ax g	altura libre m	W Muro kN	W Revoque kN	W <sub>total</sub> = gMp kN	Fp kN
N1	1.04	2.75	7.72	1.56	9.28	3.22

Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone concentrada en el centro de gravedad del muro:

$$M_{1max} = \frac{F_p h_p}{4} \quad y \quad V_{1max} = \frac{F_p}{2}$$

Adicionalmente se calculan los valores de las fuerzas debidas a una inclinación del muro con respecto a la vertical, lo que resulta en una componente perpendicular al muro, debida a su propio peso:

$$\theta = \tan^{-1} \left( \frac{0.01 h_{libre}}{h_{libre}} \right) \quad M_{2max} = \frac{W_{total} 0.01 h_p}{4} \quad y \quad V_{2max} = \frac{W_{total} \sin \theta}{2}$$

Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:

- Diseño de columnetas:

Diámetro del refuerzo longitudinal: **N 3**

Nivel	M <sub>1max</sub> kN-m	M <sub>2max</sub> kN-m	M <sub>Stotal</sub> kN-m	ρ	Refuerzo	φ
N1	2.22	0.06	2.28	0.0054	1 N 3	0.90

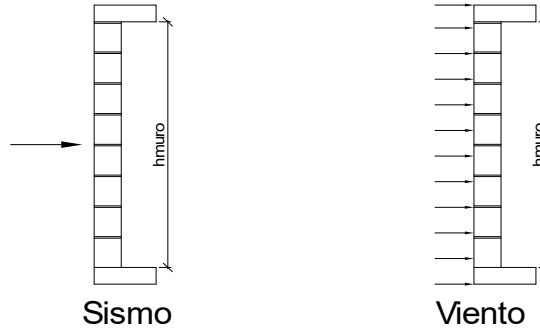


<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>				Proyecto No: P004		
				Archivo: MEMORIAS-004		
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)				Fecha: Abril de 2017		
				Diseñó: Ingeniero Francisco J. Medina		
				Email: ingfcomedina@yahoo.com		
- Diseño de anclajes:						
Diámetro de la barra de anclaje: <b>N 3</b>						
	$V_{1max}$	$V_{2max}$	$V_{Stotal}$	Fv	Av	Refuerzo
Nivel	kN	kN	kN	MPa	mm <sup>2</sup>	
N1	1.61	0.05	1.66	129.60	12.79	1 N 3
Debe dejarse la celda correspondiente a la última hilada sin relleno, para permitir el movimiento de la barra.						

**PROTOTIPO EDUCACION - MÓDULO 4A**

Proyecto No: P004  
Archivo: MEMORIAS-004  
Fecha: Abril de 2017  
Diseñó: Ingeniero Francisco J. Medina  
Email: ingfcomedina@yahoo.com

**25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES  
FACHADA MAMPOSTERIA NO REFORZADA  
(CAPITULO A.9 de NSR-10)**



ESQUEMA GENERAL

**A.9.2 - GRADO DE DESEMPEÑO DE LOS ELEMENTOS NO ESTRUCTURALES.**

De acuerdo con A.9.2.2 de NSR-10, la edificación se clasifica dentro de uno de los tres grados de desempeño de los elementos no estructurales definidos en A.9.2.1. Este grado de desempeño no puede ser inferior al mínimo permisible fijado en A.9.2.3.

A.9.2.3 - GRADO DE DESEMPEÑO MINIMO - Como mínimo debe cumplirse el grado de desempeño indicado en la tabla A.9.2-1 de NSR-10, para cada uno de los grupos de uso definidos en A.2.5.1.

TABLA A.9.2-1 de NSR-10  
Grado de desempeño mínimo requerido

Grupo de Uso	Grado de desempeño
IV	Superior
III	Superior
II	Bueno
I	Bajo

Para este caso y teniendo en cuenta que la edificación se clasifica como grupo de uso III se tiene el siguiente grado de desempeño:

Grupo de Uso	<b>III</b>
Grado de desempeño	<b>Superior</b>

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p>- A.9.4 - CRITERIO DE DISEÑO.</p> <p>En el presente análisis los elementos no estructurales se separan de la estructura principal. En este tipo de diseño los elementos no estructurales se aíslan lateralmente de la estructura dejando una separación suficiente para que la estructura al deformarse como consecuencia del sismo no los afecte adversamente. Los elementos no estructurales se apoyan en su parte inferior sobre la estructura, o se cuelgan de ella; por tanto deben ser capaces de resistir por sí mismo las fuerzas inerciales que les impone el sismo, y sus anclajes a la estructura deben ser capaces de resistir y transferir a la estructura estas fuerzas inducidas por el sismo. Además la separación a la estructura de la edificación debe ser lo suficientemente amplia para garantizar que no entren en contacto, para los desplazamientos impuestos por el sismo de diseño. En el espacio resultante deberá evitarse colocar elementos que rigidicen la unión eliminando la flexibilidad requerida por el diseño.</p> <p>A.9.4.2 - FUERZA SISMICA DE DISEÑO - Las Fuerzas sísmicas horizontales reducidas de diseño que actúan sobre cualquier elemento no estructural deben calcularse utilizando la siguiente ecuación:</p> $F_p = \frac{a_x a_p}{R_p} g M_p \geq \frac{A_a I}{2} g M_p \quad (\text{A.9.4-1 de NSR-10})$ <p>Donde los parámetros que intervienen en esta ecuación, se calculan de la siguiente manera:</p> <p>A.9.4.2.1 -Aceleracion en el punto de soporte del elemento, <math>a_x</math>. Corresponde a la aceleración horizontal que ocurre en el punto donde el elemento no estructural está soportado, o anclado, al sistema estructural de la edificación, cuando ésta se ve afectada por los movimientos sísmicos de diseño. Se calcula de la siguiente manera:</p> $a_x = A_s + \frac{(S_a - A_s)h_x}{h_{eq}} \quad \text{para } h_x \leq h_{eq} \quad (\text{A.9.4-2 de NSR-10})$ $a_x = S_a \frac{h_x}{h_{eq}} \quad \text{para } h_x > h_{eq}$ <ul style="list-style-type: none"> <li>- Altura equivalente del sistema de un grado de libertad que simula la edificación, <math>h_{eq} = 0.75 h_n = 0.75(3.25) \text{ m} = 2.44 \text{ m}</math>.</li> <li>- Aceleración máxima en la superficie del suelo estimada como la aceleración espectral correspondiente a un período de vibración igual a cero, <math>A_s = 0.10 \text{ g}</math>.</li> <li>- Aceleración espectral de diseño para un período de vibración dado, <math>S_a = 0.78 \text{ g}</math>.</li> </ul>	

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta lo anterior se calcula el valor de  $a_x$  para cada uno de los pisos de la edificación:

Nivel	As	Sa	hx	heq	$a_x$
N1	0.10	0.78	3.25	2.44	1.04

A.9.4.2.2 - Amplificación dinámica del elemento no estructural,  $a_p$ . Dependiendo de la rigidez, distribución de su masa y características de apoyo sobre la estructura, el elemento no estructural amplifica las aceleraciones que se presentan en su punto de soporte debido a efectos de resonancia. Los valores de  $a_p$  son tomados de las tablas A.9.5-1 y A.9.6-1 de NSR-10. Debido a que el muro en evaluación se trata de un elemento no estructural divisorio de altura total se tiene:

$a_p$
1.00

- Tipo de anclajes o amarres para determinar el coeficiente de capacidad de disipación de energía,  $R_p$ : No dúctiles.

A.9.4.2.3 - Capacidad de disipación de energía en el rango inelástico del elemento no estructural,  $R_p$ . Representa la capacidad de disipación de energía en el rango inelástico de respuesta del elemento en sí y de su sistema de anclaje o amparre a la estructura de la edificación. Teniendo en cuenta lo anterior se tiene:

Tipos de anclajes	$R_p$
Dúctiles	3.00

Adicionalmente se calcula el peso del elemento no estructural:

Densidad del muro	Densidad del revoque	Espesor del muro	Espesor del revoque	Base de la columneta	Altura efectiva, d	Longitud aferente
13 kN/m <sup>3</sup>	21 kN/m <sup>3</sup>	120 mm	15 mm	120 mm	100 mm	1800 mm

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta las variables anteriores se calcula la fuerza sísmica de diseño por piso:

Nivel	ax g	altura libre m	W Muro kN	W Revoque kN	W <sub>total</sub> = gMp kN	Fp kN
N1	1.04	2.75	7.72	1.56	9.28	3.22

Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone concentrada en el centro de gravedad del muro:

$$M_{1max} = \frac{F_p h_p}{4} \quad y \quad V_{1max} = \frac{F_p}{2}$$

Adicionalmente se calculan los valores de las fuerzas debidas a una inclinación del muro con respecto a la vertical, lo que resulta en una componente perpendicular al muro, debida a su propio peso:

$$\theta = \tan^{-1} \left( \frac{0.01 h_{libre}}{h_{libre}} \right) \quad M_{2max} = \frac{W_{total} 0.01 h_p}{4} \quad y \quad V_{2max} = \frac{W_{total} \sin \theta}{2}$$

Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:

Nivel	M <sub>1max</sub> kN-m	M <sub>2max</sub> kN-m	M <sub>Stotal</sub> kN-m	V <sub>1max</sub> kN	V <sub>2max</sub> kN	V <sub>Stotal</sub> kN
N1	2.22	0.06	2.28	1.61	0.05	1.66

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

B.6 - FUERZAS DE VIENTO

Calculo de los parámetros para la evaluación de viento

Altura del edificio	Exposición	$\lambda$	Kzt	I	Región	Vel viento km/h
3.25 m	C	1.12	1.15	1.25	3	125

Zona	Pnet10 kN/m <sup>2</sup>	Pnet kN/m <sup>2</sup>	Fv kN/m
5	0.45	0.72	1.30

Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone distribuida a lo largo del muro:

$$M_v = \frac{F_v h_p^2}{8} \quad y \quad V_v = \frac{F_v h_p}{2}$$

Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:

Nivel	altura libre m	Mv kN-m	Vv kN
N1	2.75	1.23	1.79

- Diseño de columnetas:

Diámetro del refuerzo longitudinal: N 3

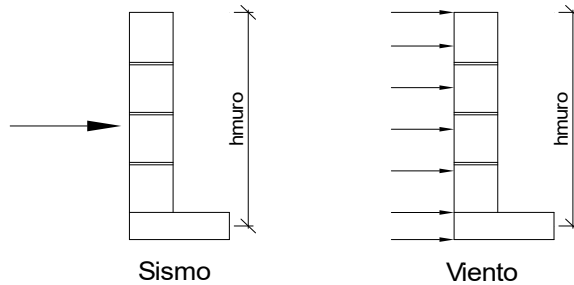
Nivel	MS <sub>total</sub> kN-m	Mv kN-m	Mmax kN-m	$\rho$	Refuerzo	$\phi$
N1	2.28	1.23	2.28	0.0054	1 N 3	0.90

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>				Proyecto No: P004		
				Archivo: MEMORIAS-004		
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)				Fecha: Abril de 2017		
				Diseñó: Ingeniero Francisco J. Medina		
				Email: ingfcomedina@yahoo.com		
- Diseño de anclajes:						
Diámetro de la barra de anclaje: <b>N 3</b>						
	$V_{Stotal}$	$V_v$	$V_{max}$	$F_v$	$A_v$	Refuerzo
Nivel	kN	kN	kN	MPa	mm <sup>2</sup>	
N1	1.66	1.79	1.79	129.60	13.78	1 N 3
Debe dejarse la celda correspondiente a la última hilada sin relleno, para permitir el movimiento de la barra.						

**PROTOTIPO EDUCACION - MÓDULO 4A**

Proyecto No: P004  
Archivo: MEMORIAS-004  
Fecha: Abril de 2017  
Diseñó: Ingeniero Francisco J. Medina  
Email: ingfcomedina@yahoo.com

25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES  
FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA  
(CAPITULO A.9 de NSR-10)



ESQUEMA GENERAL

- A.9.2 - GRADO DE DESEMPEÑO DE LOS ELEMENTOS NO ESTRUCTURALES.

De acuerdo con A.9.2.2 de NSR-10, la edificación se clasifica dentro de uno de los tres grados de desempeño de los elementos no estructurales definidos en A.9.2.1. Este grado de desempeño no puede ser inferior al mínimo permisible fijado en A.9.2.3.

A.9.2.3 - GRADO DE DESEMPEÑO MINIMO - Como mínimo debe cumplirse el grado de desempeño indicado en la tabla A.9.2-1 de NSR-10, para cada uno de los grupos de uso definidos en A.2.5.1.

TABLA A.9.2-1 de NSR-10  
Grado de desempeño mínimo requerido

Grupo de Uso	Grado de desempeño
IV	Superior
III	Superior
II	Bueno
I	Bajo

Para este caso y teniendo en cuenta que la edificación se clasifica como grupo de uso III se tiene el siguiente grado de desempeño:

Grupo de Uso	III
Grado de desempeño	Superior



<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p>- A.9.4 - CRITERIO DE DISEÑO.</p> <p>En el presente análisis los elementos no estructurales se separan de la estructura principal. En este tipo de diseño los elementos no estructurales se aíslan lateralmente de la estructura dejando una separación suficiente para que la estructura al deformarse como consecuencia del sismo no los afecte adversamente. Los elementos no estructurales se apoyan en su parte inferior sobre la estructura, o se cuelgan de ella; por tanto deben ser capaces de resistir por sí mismo las fuerzas inerciales que les impone el sismo, y sus anclajes a la estructura deben ser capaces de resistir y transferir a la estructura estas fuerzas inducidas por el sismo. Además la separación a la estructura de la edificación debe ser lo suficientemente amplia para garantizar que no entren en contacto, para los desplazamientos impuestos por el sismo de diseño. En el espacio resultante deberá evitarse colocar elementos que rigidicen la unión eliminando la flexibilidad requerida por el diseño.</p> <p>A.9.4.2 - FUERZA SISMICA DE DISEÑO - Las Fuerzas sísmicas horizontales reducidas de diseño que actúan sobre cualquier elemento no estructural deben calcularse utilizando la siguiente ecuación:</p> $F_p = \frac{a_x a_p}{R_p} g M_p \geq \frac{A_a I}{2} g M_p \quad (\text{A.9.4-1 de NSR-10})$ <p>Donde los parámetros que intervienen en esta ecuación, se calculan de la siguiente manera:</p> <p>A.9.4.2.1 -Aceleracion en el punto de soporte del elemento, <math>a_x</math>. Corresponde a la aceleración horizontal que ocurre en el punto donde el elemento no estructural está soportado, o anclado, al sistema estructural de la edificación, cuando ésta se ve afectada por los movimientos sísmicos de diseño. Se calcula de la siguiente manera:</p> $a_x = A_s + \frac{(S_a - A_s)h_x}{h_{eq}} \quad \text{para } h_x \leq h_{eq} \quad (\text{A.9.4-2 de NSR-10})$ $a_x = S_a \frac{h_x}{h_{eq}} \quad \text{para } h_x > h_{eq}$ <ul style="list-style-type: none"> <li>- Altura equivalente del sistema de un grado de libertad que simula la edificación, <math>h_{eq} = 0.75 h_n = 0.75(3.25) \text{ m} = 2.44 \text{ m}</math>.</li> <li>- Aceleración máxima en la superficie del suelo estimada como la aceleración espectral correspondiente a un período de vibración igual a cero, <math>A_s = 0.10 \text{ g}</math>.</li> <li>- Aceleración espectral de diseño para un período de vibración dado, <math>S_a = 0.78 \text{ g}</math>.</li> </ul>	

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta lo anterior se calcula el valor de  $a_x$  para cada uno de los pisos de la edificación:

Nivel	As	Sa	hx	heq	$a_x$
N1	0.10	0.78	3.25	2.44	1.04

A.9.4.2.2 - Amplificación dinámica del elemento no estructural,  $a_p$ . Dependiendo de la rigidez, distribución de su masa y características de apoyo sobre la estructura, el elemento no estructural amplifica las aceleraciones que se presentan en su punto de soporte debido a efectos de resonancia. Los valores de  $a_p$  son tomados de las tablas A.9.5-1 y A.9.6-1 de NSR-10. Debido a que el muro en evaluación se trata de un elemento no estructural divisorio de altura total se tiene:

$a_p$
2.50

- Tipo de anclajes o amarres para determinar el coeficiente de capacidad de disipación de energía,  $R_p$ : No dúctiles.

A.9.4.2.3 - Capacidad de disipación de energía en el rango inelástico del elemento no estructural,  $R_p$ . Representa la capacidad de disipación de energía en el rango inelástico de respuesta del elemento en sí y de su sistema de anclaje o amparre a la estructura de la edificación. Teniendo en cuenta lo anterior se tiene:

Tipos de anclajes	$R_p$
Dúctiles	3.00

Adicionalmente se calcula el peso del elemento no estructural:

Densidad del muro	Densidad del revoque	Espesor del muro	Espesor del revoque	Base de la columneta	Altura efectiva, d	Longitud aferente
23 kN/m <sup>3</sup>	21 kN/m <sup>3</sup>	120 mm	15 mm	120 mm	100 mm	500 mm

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta las variables anteriores se calcula la fuerza sísmica de diseño por piso:

Nivel	ax g	altura libre m	W Muro kN	W Revoque kN	W <sub>total</sub> = gMp kN	Fp kN
N1	1.04	1.75	2.42	0.28	2.69	2.34

Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone concentrada en el centro de gravedad del muro:

$$M_{1max} = \frac{F_p h_v}{2} \quad y \quad V_{1max} = F_p$$

Adicionalmente se calculan los valores de las fuerzas debidas a una inclinación del muro con respecto a la vertical, lo que resulta en una componente perpendicular al muro, debida a su propio peso:

$$\theta = \tan^{-1} \left( \frac{0.01 h_{libre}}{h_{libre}} \right) \quad M_{2max} = \frac{W_{total} 0.01 h_p}{4} \quad y \quad V_{2max} = \frac{W_{total} \sin \theta}{2}$$

Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:

Nivel	M <sub>1max</sub> kN-m	M <sub>2max</sub> kN-m	M <sub>Stotal</sub> kN-m	V <sub>1max</sub> kN	V <sub>2max</sub> kN	V <sub>Stotal</sub> kN
N1	2.04	0.01	2.06	2.34	0.01	2.35

<b>PROTOTIPO EDUCACION - MÓDULO 4A</b>		Proyecto No: P004 Archivo: MEMORIAS-004				
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)		Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com				
B.6 - FUERZAS DE VIENTO						
Calculo de los parámetros para la evaluación de viento						
Altura del edificio	Exposición	$\lambda$	Kzt	l	Región	Vel viento km/h
3.25 m	B	1.12	1.15	1.25	3	125
Zona	Pnet10 kN/m <sup>2</sup>	Pnet kN/m <sup>2</sup>	Fv kN/m			
5	0.45	0.72	0.36			
Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone distribuida a lo largo del muro:						
$M_v = \frac{F_v h_v^2}{2} \quad y \quad V_v = F_v h_p$						
Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:						
Nivel	altura libre m	Mv kN-m	Vv kN			
N1	1.75	0.55	0.63			
- Diseño de columnetas:						
Diámetro del refuerzo longitudinal: N 3						
Nivel	MS <sub>total</sub> kN-m	Mv kN-m	Mmax kN-m	$\rho$	Refuerzo	$\phi$
N1	2.06	0.55	2.06	0.0048	1 N 3	0.90

**PROTOTIPO EDUCACION - MÓDULO 4A**Proyecto No: P004  
Archivo: MEMORIAS-00425. DISEÑO DE ELEMENTOS NO ESTRUCTURALES  
FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA  
(CAPITULO A.9 de NSR-10)Fecha: Abril de 2017  
Diseñó: Ingeniero Francisco J. Medina  
Email: ingfcomedina@yahoo.com

- Diseño de anclajes:

Diámetro de la barra de anclaje: N 3

Nivel	$V_{Stotal}$ kN	$V_v$ kN	$V_{max}$ kN	$F_v$ MPa	$A_v$ mm <sup>2</sup>	Refuerzo
N1	2.35	0.63	2.35	129.60	18.13	1 N 3

Debe dejarse la celda correspondiente a la última hilada sin relleno, para permitir el movimiento de la barra.

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
1. CARACTERISTICAS GENERALES	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p><b>1 - GENERALES:</b></p> <ul style="list-style-type: none"> <li>- Tipo de Análisis: Diseño Estructural</li> <li>- Nombre del Proyecto: PROTOTIPO EDUCACION - MÓDULO 4B</li> <li>- Dirección: ZONA AMENAZA SISMICA BAJA de Colombia</li> <li>- Ocupación: Moderada (DMI)</li> <li>- Número de Pisos: 1</li> <li>- Grupo de Uso: III (Edificaciones de atención a la comunidad)</li> <li>- Coeficiente de importancia: 1.25</li> </ul> <p><b>2 - SISTEMA ESTRUCTURAL:</b></p> <ul style="list-style-type: none"> <li>- Sistema Estructural: Pórticos en concreto reforzado</li> <li>- Capacidad de Disipación de Energía: Mínima (DMI)</li> </ul> <p><b>3 - METODOLOGIA DE ANALISIS:</b></p> <ul style="list-style-type: none"> <li>- Metodo de Análisis Sísmico: Dinamico Espectral</li> <li>- Modelo Matemático: Tridimensional con diafragma Flexible</li> <li>- Método de análisis estructural: Matricial para la estructura principal</li> <li>- Método de diseño: Resistencia última</li> <li>- Espectro de Diseño: Elástico</li> <li>- Coeficiente de Amortiguamiento crítico (C.C.A.): 5%</li> <li>- Normativa: Reglamento Colombiano de Construcción Sismo Resistente (NSR10)</li> <li>- Programas utilizados: ETABS V16, SAFE12.0, DDCAD2004, EXCEL</li> </ul> <p><b>4 - MATERIALES:</b></p> <ul style="list-style-type: none"> <li>- Concreto de vigas aéreas, f'c: 21 MPa</li> <li>- Modulo de elasticidad en vigas aéreas, E: 21,538.11 MPa</li> <li>- Concreto de columnas, f'c: 21 MPa</li> <li>- Modulo de elasticidad en columnas, E: 21,538.11 MPa</li> <li>- Concreto de cimentación, f'c: 21 MPa</li> <li>- Modulo de elasticidad en cimentación, E: 21,538.11 MPa</li> <li>- Acero de refuerzo longitudinal f'y: 420 MPa</li> <li>- Acero de refuerzo transversal, f'yt: 420 MPa</li> </ul> <p><b>5 - FACTORES DE REDUCCION DE RESISTENCIA Y PARAMETROS DE DISEÑO:</b></p> <ul style="list-style-type: none"> <li>- Factor reducción de resistencia a secciones controladas por tracción, <math>\phi</math>: 0.90</li> <li>- Factor reducción de resistencia por cortante y torsion, <math>\phi</math>: 0.75</li> <li>- Factor reducción de resistencia a secciones controladas por compresión, <math>\phi</math>: 0.65</li> <li>- Factor de altura del bloque de esfuerzos a compresión, <math>\beta_1</math>: 0.85</li> <li>- Factor de modificación de propiedades mecánicas del concreto, <math>\lambda</math>: 1.00</li> <li>- Factor reducción de resistencia por cortante sismico, <math>\phi</math>: 0.60</li> </ul>	

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
1. CARACTERISTICAS GENERALES	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p><b>6 - DATOS DE ESTUDIO DE SUELOS:</b></p> <ul style="list-style-type: none"><li>- Zona de amenaza sísmica: Zona Baja</li><li>- Capacidad Portante admisible: 30 kN/m<sup>2</sup></li><li>- Tipo de cimentación: Zapatas y vigas de enlace</li><li>- Coeficiente de amplificación que afecta la zona de periodos cortos, Fa: 2.50</li><li>- Coeficiente de amplificación que afecta la zona de periodos intermedios, Fv: 3.50</li><li>- Clasificación del Perfil del Suelo: Tipo de Perfil E</li><li>- Profundidad de desplante: 1.00 m</li></ul>	

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
4. CONTROL DE DEFLEXIONES (C.9.5 de NSR10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

La tabla C.9.5 (a) es apropiada únicamente cuando se utilizan particiones livianas (véase B.3.4 del Título B de NSR10).

TABLA C.9.5(a) - Alturas o espesores mínimos de vigas no preesforzadas o losas reforzadas en una dirección a menos que se calculen las deflexiones:

CARACTERISTICAS	
Losas macizas en una dirección	◀
Vigas o losas nervadas en una dirección	

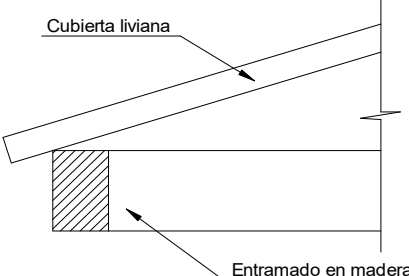
	Espesor mínimo, h				
	Apoyo simple	Con un extremo continuo	Ambos extremos continuos	En voladizo	
Elementos	Elementos que <b>NO</b> soporten o este ligados a divisiones y otro tipo de elementos susceptibles de dañarse debido a deflexiones grandes.				
Límite	L/20	L/24	L/28	L/10	
L	2.40 m	N.A.	N.A.	N.A.	
hmín	0.12 m	N.A.	N.A.	N.A.	0.12 m

Altura adoptada	<b>0.15 m</b>
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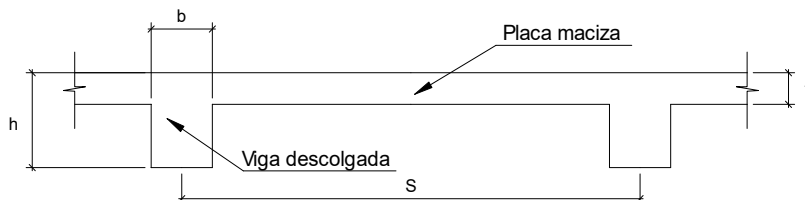
Nomenclatura:  
N.A. :No Aplica



<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004					
4. CONTROL DE DEFLEXIONES (C.9.5 de NSR10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com					
La tabla C.9.5 (a) es apropiada únicamente cuando se utilizan particiones livianas (véase B.3.4 del Título B de NSR10).						
TABLA C.9.5(a) - Alturas o espesores mínimos de vigas no preesforzadas o losas reforzadas en una dirección a menos que se calculen las deflexiones:						
CARACTERÍSTICAS						
Losas macizas en una dirección						
Vigas o losas nervadas en una dirección	◀					
Espesor mínimo, h						
	Apoyo simple	Con un extremo continuo	Ambos extremos continuos	En voladizo		
Elementos	Elementos que <b>NO</b> soporten o este ligados a divisiones y otro tipo de elementos susceptibles de dañarse debido a deflexiones grandes.					
Límite	L/16	L/18.5	L/21	L/8		
L	5.30 m	5.80 m	N.A.	2.40 m		
h <sub>mín</sub>	0.33 m	0.31 m	N.A.	0.30 m	0.33 m	
Altura adoptada						
0.35 m						
Nomenclatura:						
N.A. :No Aplica						

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004			
6. EVALUACIÓN DE CARGAS CUBIERTA LIVIANA (B3.3 de NSR10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com			
				
2. EVALUACION DE CARGA				
- Cubierta Liviana metalica tipo Sandwich - Metecno S=1"	= 0.09 kN/m <sup>2</sup> (Ver catálogo Metecno The Specialist)			
- Entramado de cubierta	= 0.20 kN/m <sup>2</sup>			
	<table border="1" data-bbox="454 987 1006 1029"> <tr> <td>Peso propio</td> <td>0.29 kN/m<sup>2</sup></td> </tr> </table>	Peso propio	0.29 kN/m <sup>2</sup>	
Peso propio	0.29 kN/m <sup>2</sup>			
- Canales suspendidos de acero	= 0.10 kN/m <sup>2</sup> (Tabla B.3.4.1-1 NSR10)			
- Cielo raso	= 0.25 kN/m <sup>2</sup>			
	<table border="1" data-bbox="454 1155 1006 1197"> <tr> <td>Peso de materiales de construcción</td> <td>0.35 kN/m<sup>2</sup></td> </tr> </table>	Peso de materiales de construcción	0.35 kN/m <sup>2</sup>	
Peso de materiales de construcción	0.35 kN/m <sup>2</sup>			
	<table border="1" data-bbox="454 1218 1006 1260"> <tr> <td><i>Carga muerta, D</i></td> <td>0.64 kN/m<sup>2</sup></td> </tr> </table>	<i>Carga muerta, D</i>	0.64 kN/m <sup>2</sup>	
<i>Carga muerta, D</i>	0.64 kN/m <sup>2</sup>			
	<table border="1" data-bbox="454 1281 1250 1323"> <tr> <td><i>Carga viva cubiertas (pend ≤ de 15°), Lr</i></td> <td>0.50 kN/m<sup>2</sup></td> <td>(Tabla B.4.2.1-2 NSR10)</td> </tr> </table>	<i>Carga viva cubiertas (pend ≤ de 15°), Lr</i>	0.50 kN/m <sup>2</sup>	(Tabla B.4.2.1-2 NSR10)
<i>Carga viva cubiertas (pend ≤ de 15°), Lr</i>	0.50 kN/m <sup>2</sup>	(Tabla B.4.2.1-2 NSR10)		
	<table border="1" data-bbox="454 1323 1250 1365"> <tr> <td><i>Carga viva cubiertas (pend &gt; de 15°), Lr</i></td> <td>0.35 kN/m<sup>2</sup></td> <td>(Tabla B.4.2.1-2 NSR10)</td> </tr> </table>	<i>Carga viva cubiertas (pend &gt; de 15°), Lr</i>	0.35 kN/m <sup>2</sup>	(Tabla B.4.2.1-2 NSR10)
<i>Carga viva cubiertas (pend &gt; de 15°), Lr</i>	0.35 kN/m <sup>2</sup>	(Tabla B.4.2.1-2 NSR10)		
	<table border="1" data-bbox="454 1365 1250 1407"> <tr> <td>Granizo</td> <td>1.00 kN/m<sup>2</sup></td> <td>(Tabla B.4.8.3-2 NSR10)</td> </tr> </table>	Granizo	1.00 kN/m <sup>2</sup>	(Tabla B.4.8.3-2 NSR10)
Granizo	1.00 kN/m <sup>2</sup>	(Tabla B.4.8.3-2 NSR10)		

**6. EVALUACIÓN DE CARGAS DE PLACA MACIZA DE CUBIERTA t = 0.15 m (B3.3 de NSR10)**



**1. DIMENSIONES DE LA PLACA**

Espesor de placa, t
0.15 m

**2. EVALUACION DE CARGA**

- Espesor de placa =  $\frac{\gamma_{concreto} \cdot t \cdot 1.0 \text{ m} \cdot 1.0 \text{ m}}{1.0 \text{ m} \cdot 1.0 \text{ m}} = 3.60 \text{ kN/m}^2$

Peso propio	3.60 kN/m <sup>2</sup>
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- Acabado de piso en concreto (Alistado e=0) = 0.40 kN/m<sup>2</sup> (Tabla B.3.4.1-3 NSR10)
- Pañete en yeso o en concreto = 0.25 kN/m<sup>2</sup> (Tabla B.3.4.1-1 NSR10)
- Fachadas y particiones de mampostería = 0.00 kN/m<sup>2</sup>
- Tela asfáltica de una capa = 0.05 kN/m<sup>2</sup> (Tabla B.3.4.1-4 NSR10)

Peso de materiales de construcción	0.70 kN/m <sup>2</sup>
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Carga muerta, D	4.30 kN/m <sup>2</sup>
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Carga viva Azoteas y Terrazas, Lr	2.0 kN/m <sup>2</sup> (Tabla B.4.2.1-2 NSR10)
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Granizo	1.00 kN/m <sup>2</sup> (Tabla B.4.8.3-2 NSR10)
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<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004	
8. PERIODO FUNDAMENTAL DE LA EDIFICACION (A.4.2 de NSR10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com	
<p>El periodo fundamental de la edificación se obtuvo a partir de las propiedades de su sistema de resistencia sísmica, de acuerdo con los principios de la dinámica estructural, utilizando un modelo matemático linealmente elástico de la estructura (A.4.2.1 de NSR10):</p>		
<p>- Periodo fundamental dinámico, <math>T = 0.207</math> s.</p>		
<p>El valor de T no puede exceder <math>C_u T_a</math>, donde <math>C_u</math> y <math>T_a</math> se calculan por medio de las siguientes ecuaciones:</p>		
<p><math>C_u = 1.75 - 1.2A_v \cdot F_v</math> (A.4.2-2 de NSR10)      Pero <math>C_u</math> no debe ser menor que 1.20</p>		
<p><math>T_a = C_t \cdot h^\alpha</math> (A.4.2-3 de NSR10)</p>		
<p>Para este caso <math>C_t</math> y <math>\alpha</math> tienen los valores dados de acuerdo con la tabla A.4.2-1 de NSR10:</p>		
Sistema estructural de resistencia sísmica	Ct	$\alpha$
Pórticos resistentes a momentos de concreto reforzado que resisten la totalidad de las fuerzas sísmicas y que no están limitados o adheridos a componentes más rígidos, estructurales o no estructurales, que limiten los desplazamientos horizontales al verse sometidos a las fuerzas sísmicas.	0.047	0.90
Pórticos resistentes a momentos de acero estructural que resisten la totalidad de las fuerzas sísmicas y que no están limitados o adheridos a componentes más rígidos, estructurales o no estructurales, que limiten los desplazamientos horizontales al verse sometidos a las fuerzas sísmicas.	0.072	0.80
Pórticos arriostrados de acero estructural con diagonales excentricas restringidas a pandeo.	0.073	0.75
Todos los otros sistemas estructurales basados en muros de rigidez similar o mayor a la de muros de concreto o mampostería.	0.049	0.75
<p><math>C_t = 0.047</math>      <math>\alpha = 0.90</math></p>		
<p>Aplicando las ecuaciones A.4.2.-2 y A.4.2-3 de NSR10 se tienen los siguientes resultados:</p>		
<p><math>C_u = 1.75 - 1.2A_v \cdot F_v = 1.33 &gt; 1.20</math>, entonces <math>C_u = 1.20</math></p>		
<p><math>T_a = C_t \cdot h^\alpha = 0.14</math> s      <math>C_u \cdot T_a = 0.16</math> s &lt; T, entonces T = 0.16 s</p>		

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
8. CURVA DE UMBRAL DE DAÑO PARA UN COEFICIENTE DE AMORTIGUAMIENTO DE 2% DEL CRÍTICO DECRETO 523 DE DICIEMBRE 16 DE 2010	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

1. CALCULO DEL PERIODO INICIAL, PERIODO CORTO Y PERIODO LARGO

$$\bar{S} = 1.25S = 4.38$$

- Periodo corto:  $T_{Cd} = 0.50\bar{S} = 2.19 \text{ s}$

- Periodo largo:  $T_{Ld} = 2.40\bar{S} = 10.50 \text{ s}$

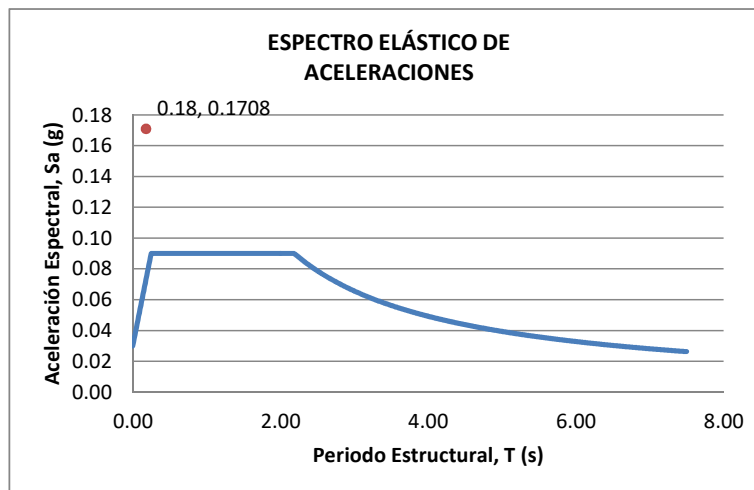
- Coeficiente que representa la aceleración pico efectiva, para el umbral de daño dado en A.12.2,  $A_d = 0.0$

2. ACELERACION MAXIMA ESPECTRAL DE DISEÑO

Periodo fundamental dinámico,  $T = 0.21 \text{ s}$

Periodo máximo de la estructura  $= C_u \cdot T_a = 0.16 \text{ s}$

De acuerdo con los parámetros calculados anteriormente:



Para esta estructura,  $S_{ad} = 0.07 \text{ g}$

**PROTOTIPO EDUCACION - MÓDULO 4B**

Proyecto No: P004  
Archivo: MEMORIAS-004  
Fecha: Abril de 2017  
Diseño: Ingeniero Francisco J. Medina  
Email: ingfcomedina@yahoo.com

**9. ESPECTRO ELÁSTICO DE ACELERACIONES DE DISEÑO  
(A.2.6.1 de NSR10)**

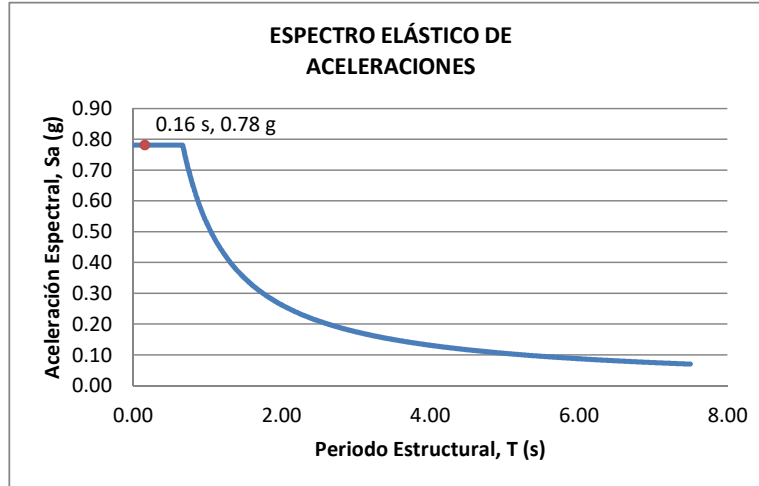
**1. CALCULO DEL PERIODO INICIAL, PERIODO CORTO Y PERIODO LARGO**

- Periodo inicial:  $T_o = 0.10 \frac{A_v \cdot F_v}{A_a \cdot F_a} = 0.14 \text{ s}$
- Periodo corto:  $T_c = 0.48 \frac{A_v \cdot F_v}{A_a \cdot F_a} = 0.67 \text{ s}$
- Periodo largo:  $T_L = 2.4 F_v = 8.40 \text{ s}$
  
- Coeficiente de aceleración horizontal pico efectiva,  $A_a = 0.10 \text{ g}$
- Coeficiente de velocidad horizontal pico efectiva,  $A_v = 0.10 \text{ g}$
- Coeficiente de amplificación que afecta la aceleración en la zona de periodos cortos,  $F_a = 2.50$
- Coeficiente de amplificación que afecta la aceleración en la zona de periodos intermedios,  $F_v = 3.50$ .

**2. ACELERACION MAXIMA ESPECTRAL DE DISEÑO**

Periodo fundamental dinámico,  $T = 0.21 \text{ s}$   
Periodo máximo de la estructura  $= C_u \cdot T_a = 0.16 \text{ s}$   
Coeficiente de Importancia  $I = 1.25$

De acuerdo con los parámetros calculados anteriormente:



Para esta estructura,  $S_a = 0.78 \text{ g}$

**PROTOTIPO EDUCACION - MÓDULO 4B**

NÚMERO DE MODOS DE VIBRACIÓN (NSR10 A.5.4.2)

Proyecto No: P004  
 Archivo: MEMORIAS-004  
 Fecha: Abril de 2017  
 Diseño: Ingeniero Francisco J. Medina  
 Email: ingfcomedina@yahoo.com

A.5.4.2 — NÚMERO DE MODOS DE VIBRACIÓN — Deben incluirse en el análisis dinámico todos los modos de vibración que contribuyan de una manera significativa a la respuesta dinámica de la estructura . Se considera que se ha cumplido este requisito cuando se demuestra que , con el número de modos empleados, p, se ha incluido en el cálculo de la respuesta, de cada una de las direcciones horizontales de análisis; j, por lo menos el 90 por ciento de la masa participante de la estructura.

PARTICIPACION DE MASA													
Mode	Period	UX	UY	UZ	SumUX	SumUY	SumUZ	RX	RY	RZ	SumRX	SumRY	SumRZ
1	0.21	0.66	0.00	0.00	0.66	0.00	0.00	0.00	0.66	0.38	0.00	0.66	0.38
2	0.17	0.00	1.00	0.00	0.66	1.00	0.00	1.00	0.00	0.00	1.00	0.66	0.38
3	0.13	0.34	0.00	0.00	1.00	1.00	0.00	0.00	0.34	0.62	1.00	1.00	1.00
4	0.04	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
5	0.01	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
6	0.01	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
7	0.01	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00





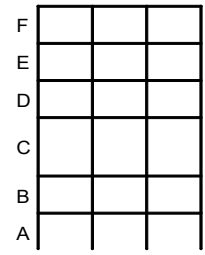
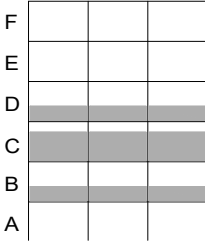
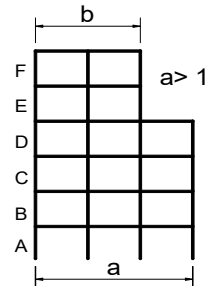
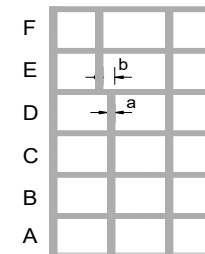
<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
14. IRREGULARIDADES EN PLANTA (FIGURA A.3-1 de NSR10)	

TIPO	DESCRIPCION DE IRREGULARIDAD EN PLANTA	$\phi_p$
	2) $C \cdot D + C \cdot E > 0.50A \cdot B$  A: B: C: D: E:	
<b>TIPO 4P</b>	DESPLAZAMIENTO DE LOS PLANOS DE ACCION	1.00
<b>TIPO 5P</b>	SISTEMAS NO PARALELOS	1.00
<b>COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION <math>\phi_p</math>:</b>		<b>0.90</b>

**PROTOTIPO EDUCACION - MÓDULO 4B**

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 Archivo: MEMORIAS-004  
 Fecha: Abril de 2017  
 Diseñó: Ingeniero Francisco J. Medina  
 Email: ingfcomedina@yahoo.com

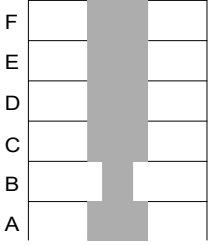
**14. IRREGULARIDADES EN LA ALTURA**  
 (FIGURA A.3-2 de NSR10)

TIPO	DESCRIPCION DE IRREGULARIDAD EN ALTURA	$\phi_a$
<b>TIPO 1aA-1bA</b>	PISO FLEXIBLE Y PISO FLEXIBLE EXTREMO	1.00
	$0.60 K_D \leq K_C < 0.70 K_D$ o $0.70(K_D + K_E + K_F)/3 \leq K_C < 0.80(K_D + K_E + K_F)/3$	1.00
	$K_C < 0.60 K_D$ o $K_C < 0.70(K_D + K_E + K_F)/3$	1.00
<b>TIPO 2A</b>	DISTRIBUCION DE MASAS	1.00
	$m_D > 1.50m_E$ o $m_D > 1.50m_C$	1.00
<b>TIPO 3A</b>	GEOMETRICA	1.00
	$a > 1.30 b$  $a =$ $b =$	1.00
<b>TIPO 4A</b>	DESPLAZAMIENTO DENTRO DEL PLANO DE ACCION	1.00
	$b > a$  $a =$ $b =$	1.00

**PROTOTIPO EDUCACION - MÓDULO 4B**

Proyecto No: P004  
 Archivo: MEMORIAS-004  
 Fecha: Abril de 2017  
 Diseñó: Ingeniero Francisco J. Medina  
 Email: ingfcomedina@yahoo.com

14. IRREGULARIDADES EN LA ALTURA  
 (FIGURA A.3-2 de NSR10)

TIPO	DESCRIPCION DE IRREGULARIDAD EN ALTURA	$\phi_a$
TIPO 5aA-5bA	PISO DEBIL Y PISO DEBIL EXTREMO	1.00
	$0.65 R_C \leq R_B < 0.80 R_C$	
	$R_B < 0.65 R_C$	1.00
<b>COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION <math>\phi_a</math>:</b>		<b>1.00</b>

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
14. AUSENCIA DE REDUNDANCIA EN EL SISTEMA ESTRUCTURAL DE RESISTENCIA SÍSMICA (A.3.3.8 de NSR10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p>La redundancia en el sistema estructural permite la redistribución de fuerzas internas en caso de ocurrir una falla en los elementos principales. Sin la capacidad para la redistribución, el colapso estructural global puede resultar de la insuficiencia de los miembros individuales o conexiones. Debe asignarse un factor de reducción de resistencia por ausencia de redundancia en el sistema estructural de resistencia sísmica, <math>\phi_r</math>, en las dos direcciones principales en planta. Para este caso en particular el coeficiente viene dado por:</p> <p>COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, <math>\phi_r = 1.00</math></p>	

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
16. EMPLEO DEL COEFICIENTE DE DISIPACION DE ENERGIA, R (A.2.9.4 de NSR10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

**1. MODIFICACIÓN DEL COEFICIENTE DE CAPACIDAD DE DISIPACIÓN DE ENERGIA**

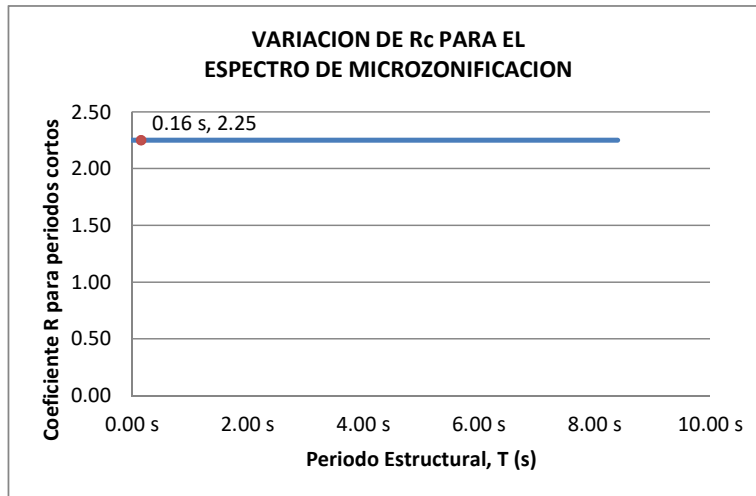
Coeficiente de capacidad de disipación de energía básico,  $R_o = 2.50$  (Tabla A.3-1 a A.3-5 de NSR10)  
 Coeficiente de reducción por irregularidad en planta de la edificación,  $\phi_p = 0.90$   
 Coeficiente de reducción por irregularidad en altura de la edificación,  $\phi_a = 1.00$   
 Coeficiente de reducción por ausencia de redundancia en la estructura,  $\phi_r = 1.00$

Se calcula el coeficiente de capacidad de disipación de energía reducido, R:

$$R = \phi_a \cdot \phi_p \cdot \phi_r \cdot R_o = 2.25 \quad (\text{A.3.3-1 de NSR10})$$

Una vez calculado el R, se determina el coeficiente de capacidad de disipación de energía definido para la zona de periodos cortos menos a  $T_c, R_c$ :

$$R_c = R = 2.25$$



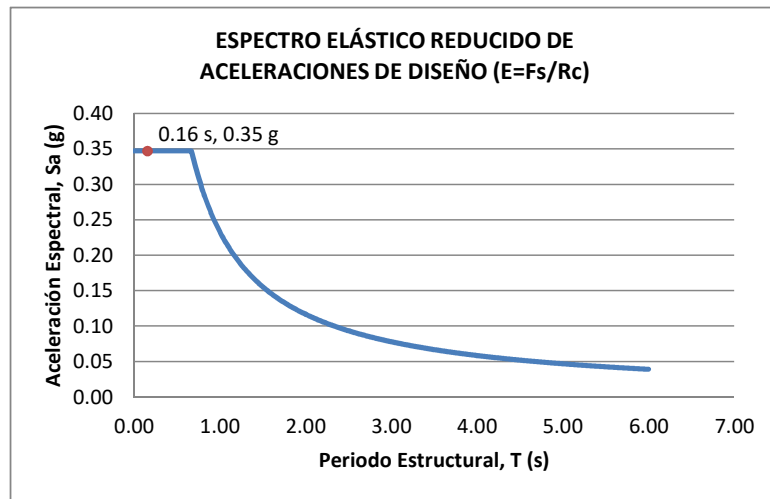
**17. ESPECTRO ELÁSTICO REDUCIDO DE ACELERACIONES DE DISEÑO (A.2.6 de NSR10)**

Como,  $F_s = S_a \cdot W$  (A.4.3-1 de NSR10)

y,  $E = \frac{F_s}{R_c}$  Donde E fuerzas sísmicas reducidas de diseño en los miembros estructurales (B.2.2 de NSR10)

entonces,  $E = \frac{S_a}{R_c} \cdot W$  Donde  $R_c = 2.25$

De acuerdo con los parámetros calculados anteriormente y los de microzonificación sísmica:



Para esta estructura,  $S_a/R_c = S_a/2.25 = 0.35 \text{ g}$

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004														
12. METODO DE LA FUERZA HORIZONTAL EQUIVALENTE APLICADA AL UMBRAL DE DAÑO (A.4 de NSR10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com														
1. DATOS GENERALES															
<ul style="list-style-type: none"> <li>- Peso de la estructura, <math>W = 262 \text{ kN}</math></li> <li>- Aceleración espectral de umbral de daño, <math>S_{ad} = 0.07 \text{ g}</math></li> <li>- Cortante sísmico en la base, <math>V_{sd}</math></li> </ul>															
$V_{sd} = S_{ad} \cdot g \cdot M = S_{ad} \cdot W = 18 \text{ kN} \quad (\text{A.12.4-1 de NSR10})$															
Exponente, $k$ , relacionado con el periodo fundamental, $T$ , de la edificación de la siguiente manera:															
<ul style="list-style-type: none"> <li>a) Para <math>T</math> menor o igual a 0.50 segundos, <math>k = 1.0</math></li> <li>b) Para <math>T</math> entre 0.50 y 2.5 segundos, <math>k = 0.75 + 0.50T</math>, y</li> <li>c) Para <math>t</math> mayor que 2.5 segundos, <math>k = 2.00</math></li> </ul>															
Para este caso particular, el valor de $k = 1.00$ (A.4.3.2 de NSR10)															
2. CALCULO DE LAS FUERZAS SISMICAS HORIZONTALES EQUIVALENTES DEL UMBRAL DE DAÑO															
La fuerza sísmica horizontal, $F_x$ , en cualquier nivel $x$ , para la dirección en estudio, debe determinarse usando la siguiente ecuación:															
$F_{Xd} = C_{VX} \cdot V_{sd} \quad (\text{A.4.3-2 de NSR10})$															
$C_{VX} = \frac{m_x h_x^k}{\sum_{i=1}^n (m_i h_i^k)} \quad (\text{A.4.3-3 de NSR10})$															
Aplicando las ecuaciones anteriores para cada nivel se Obtiene $F_x$ :															
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>NIVEL</th> <th><math>W_x</math> (kN)</th> <th><math>h_x</math> (m)</th> <th><math>W_x h_x^k</math></th> <th><math>F_{xd}</math> (kN)</th> <th><math>V_{xd}</math> (kN)</th> <th><math>F_x</math> (%)</th> </tr> </thead> <tbody> <tr> <td>N1</td> <td>262</td> <td>3.25</td> <td>852</td> <td>18</td> <td>18</td> <td>100.00%</td> </tr> </tbody> </table>		NIVEL	$W_x$ (kN)	$h_x$ (m)	$W_x h_x^k$	$F_{xd}$ (kN)	$V_{xd}$ (kN)	$F_x$ (%)	N1	262	3.25	852	18	18	100.00%
NIVEL	$W_x$ (kN)	$h_x$ (m)	$W_x h_x^k$	$F_{xd}$ (kN)	$V_{xd}$ (kN)	$F_x$ (%)									
N1	262	3.25	852	18	18	100.00%									
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td><b>TOTAL</b></td> <td><b>262</b></td> <td><b>852</b></td> <td><b>18</b></td> <td><b>18</b></td> <td><b>100%</b></td> </tr> </table>		<b>TOTAL</b>	<b>262</b>	<b>852</b>	<b>18</b>	<b>18</b>	<b>100%</b>								
<b>TOTAL</b>	<b>262</b>	<b>852</b>	<b>18</b>	<b>18</b>	<b>100%</b>										

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>		Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com				
12. METODO DE LA FUERZA HORIZONTAL EQUIVALENTE (A.4 de NSR10)						
1. DATOS GENERALES						
- Peso de la estructura, $W = 262 \text{ kN}$						
- Aceleración Espectral, $S_a = 0.78 \text{ g}$						
- Cortante sísmico en la base, $V_s = S_a \cdot g \cdot M = S_a \cdot W = 205 \text{ kN}$ (A.4.3-1 de NSR10)						
- Exponente, k, relacionado con el periodo fundamental, T, de la edificación de la siguiente manera:						
a) Para T menor o igual a 0.50 segundos, $k = 1.0$						
b) Para T entre 0.50 y 2.5 segundos, $k = 0.75 + 0.50T$ , y						
c) Para t mayor que 2.5 segundos, $k = 2.00$						
Para este caso particular, el valor de $k = 1.00$ (A.4.3.2 de NSR10)						
2. CALCULO DE LAS FUERZAS SISMICAS HORIZONTALES EQUIVALENTES						
La fuerza sísmica horizontal, $F_x$ , en cualquier nivel x, para la dirección en estudio, debe determinarse usando la siguiente ecuación:						
$F_x = C_{VX} \cdot V_s$ (A.4.3-2 de NSR10)						
y						
$C_{VX} = \frac{m_x h_x^k}{\sum_{i=1}^n (m_i h_i^k)}$ (A.4.3-3 de NSR10)						
Aplicando las ecuaciones anteriores para cada nivel se Obtiene $F_x$ :						
NIVEL	$W_x$ (kN)	$h_x$ (m)	$W_x h_x^k$	$F_x$ (kN)	$V_x$ (kN)	$F_x$ (%)
N1	262	3.25	852	205	205	100.00%
<hr/>						
<b>TOTAL</b>	<b>262</b>		<b>852</b>	<b>205</b>		<b>100%</b>



<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>		Proyecto No: P004	
		Archivo: MEMORIAS-004	
13. AJUSTE DEL CORTANTE BASAL EN EL PROGRAMA ETABS CON EL METODO DE LA FUERZA HORIZONTAL EQUIVALENTE PARA CHEQUEO DE DERIVAS		Fecha: Abril de 2017	
		Diseñó: Ingeniero Francisco J. Medina	
		Email: ingfcomedina@yahoo.com	

Los valores de Sa utilizados tanto para el chequeo de derivas (A.6.2.1.2 de NSR10) es el siguiente:

Aceleración Espectral, Sa = 0.78 g

Aceleración Espectral para chequeo de derivas, Sa/l = 0.63 g

Una vez calculado el cortante basal, Vs, por medio del método de la fuerza horizontal equivalente, se realiza el ajuste a la fuerza sísmica calculada por el programa ETABS:

Vs (FHE)		Vs (ETABS)		FACTOR DE AJUSTE	
V <sub>SX</sub>	V <sub>SY</sub>	V <sub>SX</sub>	V <sub>SY</sub>	FA <sub>X</sub>	FA <sub>Y</sub>
205 kN	205 kN	158 kN	209 kN	1.17	1.00

COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION $\phi_p$ :	0.90
COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION $\phi_a$ :	1.00
COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, $\phi_r$ =	1.00

Estructura: **IRREGULAR** Ajuste del Cortante Basal Vs al 90%

**Aceleración Espectral utilizada en el programa ETABS, Sa x FAx = 0.91 g**

**Aceleración Espectral utilizada en el programa ETABS, Sa x FAy = 0.78 g**

**Aceleración Espectral utilizada en el programa ETABS para chequeo de derivas, Sa/l x FAx = 0.73 g**

**Aceleración Espectral utilizada en el programa ETABS para chequeo de derivas, Sa/l x FAy = 0.63 g**

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>		Proyecto No: P004																									
		Archivo: MEMORIAS-004																									
13. AJUSTE CORTANTE BASAL EN PROGRAMA ETABS CON METODO DE LA FUERZA HORIZONTAL EQUIVALENTE PARA EL UMBRAL DE DAÑO PARA CHEQUEO DE DERIVAS		Fecha: Abril de 2017																									
		Diseñó: Ingeniero Francisco J. Medina																									
		Email: ingfcomedina@yahoo.com																									
<p>Los valores de Sa utilizados tanto para el chequeo de derivas (A.6.2.1.2 de NSR10) es el siguiente:</p> <p>Aceleración Espectral, <math>S_d = 0.07</math> g</p> <p>Una vez calculado el cortante basal del umbral de daño, <math>V_{sd}</math>, por medio del método de la fuerza horizontal equivalente, se realiza el ajuste a la fuerza sísmica calculada por el programa ETABS:</p> <table border="1"> <thead> <tr> <th colspan="2">Vs (FHE)</th> <th colspan="2">Vs (ETABS)</th> <th colspan="2">FACTOR DE AJUSTE</th> </tr> <tr> <th><math>V_{sx}</math></th> <th><math>V_{sy}</math></th> <th><math>V_{sx}</math></th> <th><math>V_{sy}</math></th> <th><math>FA_x</math></th> <th><math>FA_y</math></th> </tr> </thead> <tbody> <tr> <td>18 kN</td> <td>18 kN</td> <td>30.6 kN</td> <td>38.0 kN</td> <td>1.00</td> <td>1.00</td> </tr> </tbody> </table> <table border="1"> <tr> <td>COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION <math>\phi_p</math>:</td> <td>0.90</td> </tr> <tr> <td>COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION <math>\phi_a</math>:</td> <td>1.00</td> </tr> <tr> <td>COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, <math>\phi_r</math> =</td> <td>1.00</td> </tr> </table> <p>Estructura: <b>IRREGULAR</b> Ajuste del Cortante Basal Vs al 90%</p> <p><b>Aceleración Espectral utilizada en el programa ETABS, <math>S_d \times FA_x = 0.07</math> g</b></p> <p><b>Aceleración Espectral utilizada en el programa ETABS, <math>S_d \times FA_y = 0.07</math> g</b></p>				Vs (FHE)		Vs (ETABS)		FACTOR DE AJUSTE		$V_{sx}$	$V_{sy}$	$V_{sx}$	$V_{sy}$	$FA_x$	$FA_y$	18 kN	18 kN	30.6 kN	38.0 kN	1.00	1.00	COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION $\phi_p$ :	0.90	COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION $\phi_a$ :	1.00	COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, $\phi_r$ =	1.00
Vs (FHE)		Vs (ETABS)		FACTOR DE AJUSTE																							
$V_{sx}$	$V_{sy}$	$V_{sx}$	$V_{sy}$	$FA_x$	$FA_y$																						
18 kN	18 kN	30.6 kN	38.0 kN	1.00	1.00																						
COEFICIENTE DE IRREGULARIDAD EN PLANTA DE LA EDIFICACION $\phi_p$ :	0.90																										
COEFICIENTE DE IRREGULARIDAD EN ALTURA DE LA EDIFICACION $\phi_a$ :	1.00																										
COEFICIENTE DE REDUCCION POR AUSENCIA DE REDUNDANCIA, $\phi_r$ =	1.00																										

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004														
18. EVALUACIÓN DE LA DERIVA MAXIMA Y LIMITES DE LA DERIVA (A.6.3 de NSR10 Y A.6.4 de NSR10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com														
<p><b>DATOS DE ENTRADA</b> Se realiza la verificación de la deriva para la combinación tipo DER06 Max</p> <table border="1" data-bbox="305 457 1317 520"> <thead> <tr> <th>PUNTO</th> <th>NIVEL</th> <th>hpiso</th> <th>δx1</th> <th>δx2</th> <th>δy1</th> <th>δy2</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Base</td> <td>3.25 m</td> <td>0.00 mm</td> <td>-0.01 mm</td> <td>0.00 mm</td> <td>-8.90 mm</td> </tr> </tbody> </table> <p><b>DESARROLLO ANALITICO</b></p> <p>- DERIVA MAXIMA (A.6.3.1 de NSR10):</p> <p>La deriva máxima para cualquier piso debe obtenerse así:</p> $\Delta_{max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})^2} \quad (A.6.3-1 \text{ de NSR10})$ <p>donde:</p> <ul style="list-style-type: none"> <li><math>\Delta_{max}^i</math>: deriva máxima para cualquier punto del piso i</li> <li><math>\delta_{tot,j}^i</math>: desplazamiento total horizontal, de cualquier punto del diafragma del piso i en la dirección j</li> <li><math>\delta_{tot,j}^{i-1}</math>: desplazamiento total horizontal, de cualquier punto del diafragma del piso i - 1 en la dirección j</li> </ul> <p>Por lo tanto se tiene que la deriva máxima es igual a:</p> $\Delta_{max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})} = 8.90 \text{ mm}$ <p>- LIMITES DE LA DERIVA (A.6.4.1 de NSR10):</p> <p>La deriva maxima para cualquier piso determinada de acuerdo con el procedimiento anterior, no puede exceder los siguientes límites establecidos en la tabla A.6.4-1 de NSR10, en el cual la deriva se expresa como un porcentaje de la altura de piso hpi:</p> $\frac{\Delta_{max}^i}{hpiso} (\%) = 0.27\% < 1.00\% \quad \text{ok}$		PUNTO	NIVEL	hpiso	δx1	δx2	δy1	δy2	2	Base	3.25 m	0.00 mm	-0.01 mm	0.00 mm	-8.90 mm
PUNTO	NIVEL	hpiso	δx1	δx2	δy1	δy2									
2	Base	3.25 m	0.00 mm	-0.01 mm	0.00 mm	-8.90 mm									

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
18. CHEQUEO DE LA DERIVA CON EXCENRICIDAD	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

NIVEL	PUNTO-COMB	h (m)	$\delta x1-\delta x2$ (mm)	$\delta y1-\delta y2$ (mm)	$\Delta_{max}$ (mm)	$\Delta_{max}$ (%)	$\Delta_{limite}$ (%)	Observ
N1	1-DER05 Max	3.25	11.30	3.30	11.77	0.36	1.00	o.k
Base								
N1	1-DER05 Min	3.25	11.30	6.30	12.94	0.40	1.00	o.k
Base								
N1	1-DER06 Max	3.25	0.01	6.00	6.00	0.18	1.00	o.k
Base								
N1	1-DER06 Min	3.25	0.02	9.00	9.00	0.28	1.00	o.k
Base								
N1	1-DER07 Max	3.25	11.30	3.90	11.95	0.37	1.00	o.k
Base								
N1	1-DER07 Min	3.25	11.30	5.70	12.66	0.39	1.00	o.k
Base								
N1	1-DER08 Max	3.25	0.01	6.60	6.60	0.20	1.00	o.k
Base								
N1	1-DER08 Min	3.25	0.02	8.40	8.40	0.26	1.00	o.k
Base								
N1	2-DER05 Max	3.25	5.20	3.30	6.16	0.19	1.00	o.k
Base								
N1	2-DER05 Min	3.25	5.20	6.20	8.09	0.25	1.00	o.k
Base								
N1	2-DER06 Max	3.25	0.01	6.00	6.00	0.18	1.00	o.k
Base								
N1	2-DER06 Min	3.25	0.01	8.90	8.90	0.27	1.00	o.k
Base								
N1	2-DER07 Max	3.25	5.20	3.80	6.44	0.20	1.00	o.k
Base								
N1	2-DER07 Min	3.25	5.20	5.70	7.72	0.24	1.00	o.k
Base								
N1	2-DER08 Max	3.25	0.01	6.50	6.50	0.20	1.00	o.k
Base								
N1	2-DER08 Min	3.25	0.01	8.40	8.40	0.26	1.00	o.k
Base								
N1	3-DER05 Max	3.25	11.30	3.30	11.77	0.36	1.00	o.k
Base								
N1	3-DER05 Min	3.25	11.30	6.30	12.94	0.40	1.00	o.k
Base								
N1	3-DER06 Max	3.25	0.01	6.00	6.00	0.18	1.00	o.k
Base								
N1	3-DER06 Min	3.25	0.02	9.00	9.00	0.28	1.00	o.k
Base								
N1	3-DER07 Max	3.25	11.30	3.90	11.95	0.37	1.00	o.k
Base								
N1	3-DER07 Min	3.25	11.30	5.70	12.66	0.39	1.00	o.k
Base								
N1	3-DER08 Max	3.25	0.01	6.60	6.60	0.20	1.00	o.k
Base								
N1	3-DER08 Min	3.25	0.02	8.40	8.40	0.26	1.00	o.k

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
18. CHEQUEO DE LA DERIVA CON EXCENTRICIDAD	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

NIVEL	PUNTO-COMB	h (m)	$\delta x_1 - \delta x_2$ (mm)	$\delta y_1 - \delta y_2$ (mm)	$\Delta_{max}$ (mm)	$\Delta_{max}$ (%)	$\Delta_{limite}$ (%)	Observ
Base								
N1	4-DER05 Max	3.25	5.20	3.30	6.16	0.19	1.00	o.k
Base								
N1	4-DER05 Min	3.25	5.20	6.20	8.09	0.25	1.00	o.k
Base								
N1	4-DER06 Max	3.25	0.00	6.00	6.00	0.18	1.00	o.k
Base								
N1	4-DER06 Min	3.25	0.02	8.90	8.90	0.27	1.00	o.k
Base								
N1	4-DER07 Max	3.25	5.20	3.80	6.44	0.20	1.00	o.k
Base								
N1	4-DER07 Min	3.25	5.20	5.70	7.72	0.24	1.00	o.k
Base								
N1	4-DER08 Max	3.25	0.01	6.50	6.50	0.20	1.00	o.k
Base								
N1	4-DER08 Min	3.25	0.02	8.40	8.40	0.26	1.00	o.k
Base								

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004														
18. EVALUACIÓN DE LA DERIVA MAXIMA Y LIMITES DE LA DERIVA PARA UMBRAL DE DAÑO (A.12.5 de NSR10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com														
<p><b>DATOS DE ENTRADA</b> Se realiza la verificación de la deriva para la combinación tipo DER06 Max</p> <table border="1" data-bbox="305 453 1317 520"> <thead> <tr> <th>PUNTO</th> <th>NIVEL</th> <th>hpiso</th> <th>δx1</th> <th>δx2</th> <th>δy1</th> <th>δy2</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Base</td> <td>3.25 m</td> <td>0.00 mm</td> <td>0.00 mm</td> <td>-0.30 mm</td> <td>0.00 mm</td> </tr> </tbody> </table> <p><b>DESARROLLO ANALITICO</b></p> <p>- DERIVA MAXIMA (A.6.3.1 de NSR10):</p> <p>La deriva máxima para cualquier piso debe obtenerse así:</p> $\Delta_{max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})^2} \quad \text{(A.6.3-1 de NSR10)}$ <p>donde:</p> <ul style="list-style-type: none"> <li><math>\Delta_{max}^i</math>: deriva máxima para cualquier punto del piso i</li> <li><math>\delta_{tot,j}^i</math>: desplazamiento total horizontal, de cualquier punto del diafragma del piso i en la dirección j</li> <li><math>\delta_{tot,j}^{i-1}</math>: desplazamiento total horizontal, de cualquier punto del diafragma del piso i - 1 en la dirección j</li> </ul> <p>Por lo tanto se tiene que la deriva máxima es igual a:</p> $\Delta_{max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})^2} = 0.30 \text{ mm}$ <p>- LIMITES DE LA DERIVA (Tabla A.12.5.1 de NSR10):</p> <p>La deriva maxima para cualquier piso determinada de acuerdo con el procedimiento anterior, no puede exceder los siguientes límites establecidos en la tabla A.12.5-1 de NSR10, en el cual la deriva se expresa como un porcentaje de la altura de piso hpi:</p> $\frac{\Delta_{max}^i}{hpiso} (\%) = 0.01\% < 0.40\% \quad \text{ok}$		PUNTO	NIVEL	hpiso	δx1	δx2	δy1	δy2	2	Base	3.25 m	0.00 mm	0.00 mm	-0.30 mm	0.00 mm
PUNTO	NIVEL	hpiso	δx1	δx2	δy1	δy2									
2	Base	3.25 m	0.00 mm	0.00 mm	-0.30 mm	0.00 mm									

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
18. CHEQUEO DE LA DERIVA MAXIMA Y LIMITES DE LA DERIVA PARA EL UMBRAL DE DAÑO	

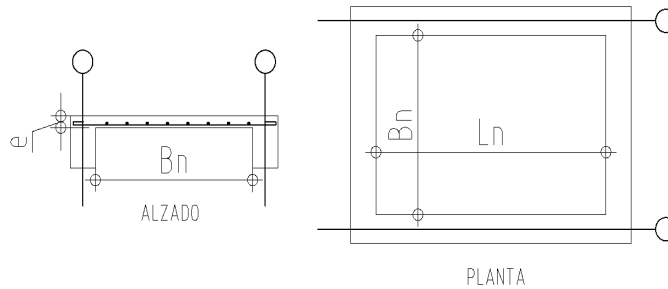
NIVEL	PUNTO-COMB	h (m)	$\delta x1-\delta x2$ (mm)	$\delta y1-\delta y2$ (mm)	$\Delta_{max}$ (mm)	$\Delta_{max}$ (%)	$\Delta_{limite}$ (%)	Observ
N1	-DERUD05 Ma	3.25	1.80	0.70	1.93	0.06	0.40	o.k
Base								
N1	-DERUD05 Mi	3.25	1.80	2.20	2.84	0.09	0.40	o.k
Base								
N1	-DERUD06 Ma	3.25	0.00	0.30	0.30	0.01	0.40	o.k
Base								
N1	-DERUD06 Mi	3.25	0.01	2.60	2.60	0.08	0.40	o.k
Base								
N1	-DERUD07 Ma	3.25	1.80	0.20	1.81	0.06	0.40	o.k
Base								
N1	-DERUD07 Mi	3.25	1.80	1.70	2.48	0.08	0.40	o.k
Base								
N1	-DERUD08 Ma	3.25	0.00	0.20	0.20	0.01	0.40	o.k
Base								
N1	-DERUD08 Mi	3.25	0.01	2.10	2.10	0.06	0.40	o.k
Base								
N1	-DERUD05 Ma	3.25	0.70	0.70	0.99	0.03	0.40	o.k
Base								
N1	-DERUD05 Mi	3.25	0.70	2.20	2.31	0.07	0.40	o.k
Base								
N1	-DERUD06 Ma	3.25	0.00	0.30	0.30	0.01	0.40	o.k
Base								
N1	-DERUD06 Mi	3.25	0.00	2.60	2.60	0.08	0.40	o.k
Base								
N1	-DERUD07 Ma	3.25	0.70	0.20	0.73	0.02	0.40	o.k
Base								
N1	-DERUD07 Mi	3.25	0.70	1.70	1.84	0.06	0.40	o.k
Base								
N1	-DERUD08 Ma	3.25	0.00	0.20	0.20	0.01	0.40	o.k
Base								
N1	-DERUD08 Mi	3.25	0.00	2.10	2.10	0.06	0.40	o.k
Base								
N1	-DERUD05 Ma	3.25	1.80	0.70	1.93	0.06	0.40	o.k
Base								
N1	-DERUD05 Mi	3.25	1.80	2.20	2.84	0.09	0.40	o.k
Base								
N1	-DERUD06 Ma	3.25	0.00	0.30	0.30	0.01	0.40	o.k
Base								
N1	-DERUD06 Mi	3.25	0.01	2.60	2.60	0.08	0.40	o.k
Base								
N1	-DERUD07 Ma	3.25	1.80	0.20	1.81	0.06	0.40	o.k
Base								
N1	-DERUD07 Mi	3.25	1.80	1.70	2.48	0.08	0.40	o.k
Base								
N1	-DERUD08 Ma	3.25	0.00	0.20	0.20	0.01	0.40	o.k

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
18. CHEQUEO DE LA DERIVA MAXIMA Y LIMITES DE LA DERIVA PARA EL UMBRAL DE DAÑO	

NIVEL	PUNTO-COMB	h (m)	$\delta x1-\delta x2$ (mm)	$\delta y1-\delta y2$ (mm)	$\Delta_{max}$ (mm)	$\Delta_{max}$ (%)	$\Delta_{limite}$ (%)	Observ
Base								
N1	-DERUD08 Mi	3.25	0.01	2.10	2.10	0.06	0.40	o.k
Base								
N1	-DERUD05 Ma	3.25	0.70	0.70	0.99	0.03	0.40	o.k
Base								
N1	-DERUD05 Mi	3.25	0.70	2.20	2.31	0.07	0.40	o.k
Base								
N1	-DERUD06 Ma	3.25	0.00	0.30	0.30	0.01	0.40	o.k
Base								
N1	-DERUD06 Mi	3.25	0.01	2.60	2.60	0.08	0.40	o.k
Base								
N1	-DERUD07 Ma	3.25	0.70	0.20	0.73	0.02	0.40	o.k
Base								
N1	-DERUD07 Mi	3.25	0.70	1.70	1.84	0.06	0.40	o.k
Base								
N1	-DERUD08 Ma	3.25	0.00	0.20	0.20	0.01	0.40	o.k
Base								
N1	-DERUD08 Mi	3.25	0.01	2.10	2.10	0.06	0.40	o.k
Base								



<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004 Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
3. COMBINACIONES DE CARGAS MAYORADAS USANDO EL METODO DE RESISTENCIA PARA LA SUPERESTRUCTURA (NSR10 B.2.4)	



ESQUEMA GENERAL

1. DATOS GENERALES

Ln =	5.60 m
Bn =	2.40 m

Ln/Bn es mayor a 2, entonces se tiene una losa armada en una direccion.

	Espesor mínimo, h			
	Apoyo simple	Con un extremo continuo	Ambos extremos continuos	En voladizo
Elementos	Elementos que <b>NO</b> soporten o este ligados a divisiones y otro tipo de elementos susceptibles de dañarse debido a deflexiones grandes.			
Límite	L/20	L/24	L/28	L/10
L	2.40 m	N.A.	N.A.	N.A.
h <sub>mín</sub>	0.12 m	N.A.	N.A.	N.A.

Altura adoptada	0.15 m
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Espesor de placa, t	0.15 m
---------------------	--------

2. EVALUACION DE CARGA

Espesor de placa  $= \frac{\gamma_{concreto} \cdot t \cdot 1.0 \text{ m} \cdot 1.0 \text{ m}}{1.0 \text{ m} \cdot 1.0 \text{ m}} = 3.60 \text{ kN/m}^2$

Peso propio	3.60 kN/m <sup>2</sup>
-------------	------------------------

- Acabado de piso en concreto (Alistado e=0.02n) = 0.40 kN/m<sup>2</sup> (Tabla B.3.4.1-3 NSR10)
- Pañete en yeso o en concreto = 0.25 kN/m<sup>2</sup> (Tabla B.3.4.1-1 NSR10)
- Fachadas y particiones de mamposteria = 0.00 kN/m<sup>2</sup>
- Tela asfáltica de una capa = 0.05 kN/m<sup>2</sup> (Tabla B.3.4.1-4 NSR10)

Peso de materiales de construcción	0.70 kN/m <sup>2</sup>
------------------------------------	------------------------

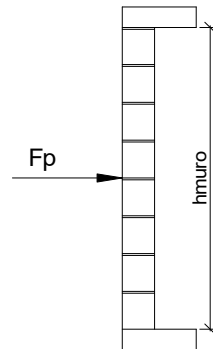
Carga muerta, D	4.30 kN/m <sup>2</sup>
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Carga viva	1.8 kN/m <sup>2</sup> (Tabla B.4.2.1-2 NSR10)
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<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>		Proyecto No: P004			
3. COMBINACIONES DE CARGAS MAYORADAS USANDO EL METODO DE RESISTENCIA PARA LA SUPERESTRUCTURA (NSR10 B.2.4)		Archivo: MEMORIAS-004			
		Fecha: Abril de 2017			
		Diseño: Ingeniero Francisco J. Medina			
		Email: ingfcomedina@yahoo.com			
<b>DISEÑO ESTRUCTURAL</b>					
<b>ARMADURA POR RETRACCIÓN DE FRAGUADO Y CAMBIOS DE TEMPERATURA</b>					
$A_{s_{temp}} = 0.002 \cdot t_p \cdot 1000mm =$		300 mm <sup>2</sup> /m			
φ barra transv: <b>N 3</b>	As barra N3 = 71 mm <sup>2</sup>	Colocar barra N3 cada 0.24 m.			
Este refuerzo se coloca perpendicular por encima del refuerzo principal y una barra por cada peldaño. Entre sus funciones están: controlar los efectos de la retracción del fraguado y de los cambios de temperatura, mejorar la ductilidad y permitir una mejor redistribución de la carga.					
<b>DISEÑO A FLEXION</b>					
Wu = 1.2*D + 1.6*L =		8.0 kN/m			
Mu = (Wu*Bn <sup>2</sup> )/8 =		6 kN-m/m			
Cuantía de diseño y área de acero longitudinal:					
$\rho = \frac{0.85f'c}{fy} \left( 1 - \sqrt{1 - \frac{2Mu}{\phi 0.85f'c \cdot bd^2}} \right) =$		0.0011			
		$A_{s_{req}} = \rho bd =$ 129 mm <sup>2</sup>			
Area de refuerzo mínimo (C.10.5.1 de NSR10):					
$A_{s_{min1}} = \frac{0.25\sqrt{f'c}}{fy} bd =$		327 mm <sup>2</sup> /m			
		$A_{s_{min2}} = \frac{1.4bd}{fy} =$ 400 mm <sup>2</sup> /m			
Acero de refuerzo a colocar:					
		As = 400 mm <sup>2</sup> /m			
φ barra transv: <b>N 3</b>	As barra N3 = 71 mm <sup>2</sup>	Colocar barra N3 cada 0.18 m.			
		Ascol = 0 mm <sup>2</sup> /m			
- Deformación unitaria a tracción, εt:					
$\epsilon_t = \frac{0.85f'c \cdot \beta_1 \epsilon_c d_t b - \epsilon_c A_s f_y}{A_s f_y} =$		73.0016			
- Límite de deformación unitaria controlada por compresión. Deformación balanceada.:					
$\epsilon_1 = \frac{fy}{Es} =$		0.0021 (C.10.3.2 de NSR10)			
- Límite de deformación unitaria controlada por tracción:					
		ε2 = 0.0050			
- Observación:					
ε1	>	εt	<	ε2	ok
0.0021	>	73.0016	<	0.0050	φ = 0.90
Este elemento estructural estará controlado por tracción donde se puede esperar un claro aviso previo de falla con deflexión y agrietamiento excesivo.					
- Límite de deformación unitaria máxima controlada por tracción:					

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>		Proyecto No: P004								
3. COMBINACIONES DE CARGAS MAYORADAS USANDO EL METODO DE RESISTENCIA PARA LA SUPERESTRUCTURA (NSR10 B.2.4)		Archivo: MEMORIAS-004								
		Fecha: Abril de 2017								
		Diseño: Ingeniero Francisco J. Medina								
		Email: ingfcomedina@yahoo.com								
$\epsilon_{\text{máx}} = 0.0040$ (C.10.3-5 de NSR10)										
- Observación:	<table style="margin-left: auto; margin-right: auto;"> <tr> <td><math>\epsilon_{\text{máx}}</math></td> <td>&gt;</td> <td><math>\epsilon_t</math></td> <td></td> </tr> <tr> <td>0.0040</td> <td>&gt;</td> <td>73.0016</td> <td style="text-align: center;"><span style="border: 1px solid green; padding: 2px;">ok</span></td> </tr> </table>	$\epsilon_{\text{máx}}$	>	$\epsilon_t$		0.0040	>	73.0016	<span style="border: 1px solid green; padding: 2px;">ok</span>	
$\epsilon_{\text{máx}}$	>	$\epsilon_t$								
0.0040	>	73.0016	<span style="border: 1px solid green; padding: 2px;">ok</span>							
-	De acuerdo con CR10.3.5 de NSR10, el objetivo de esta limitación es restringir la cuantía de refuerzo en vigas no preesforzadas a aproximadamente el mismo valor que se obtenía con 0.75pb el cual tiene un resultado de 0.00376. El límite propuesto de 0.004 es levemente más conservador.									
-	La armadura requerida por la flexión no debe ser menor a la requerida para controlar los cambios de temperatura.									
<b>DISEÑO A CORTANTE</b>										
La sección crítica se localiza a la distancia "d" medida a partir del borde del apoyo:										
$V_u = 9.17 \text{ kN}$										
Resistencia al cortante proporcionada por el concreto:										
$\sqrt{f'_c} = 4.58 \text{ MPa} < 8.30 \text{ MPa}$ <span style="float: right;">(C.11.2.1 de NSR10)</span>										
$\phi V_c = 0.17\lambda\sqrt{f'_c} \cdot bd = 70.11 \text{ kN}$ (C.11.2.1.1 de NSR10) <span style="float: right;"><span style="border: 1px solid gray; padding: 2px;">No requiere estribos</span></span>										
Si el esfuerzo a corte que resiste el concreto es mayor que el actuante, está en capacidad de soportar las tensiones cortantes y por ello, no se requiere la colocación del refuerzo cortante. El espesor de la losa debe controlarse buscando siempre esta condición.										
<b>CALCULO DE DEFLEXION</b>										
Sostiene divisiones frágiles:		NO								
x	EI	$\delta_{\text{máxima}}$	$\delta_{\text{permitida}}$	Observación						
0.5	5,027 kN-m <sup>2</sup>	0.06 cm	0.67 cm	Cumple						

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com



ESQUEMA GENERAL

- A.9.2 - GRADO DE DESEMPEÑO DE LOS ELEMENTOS NO ESTRUCTURALES.

De acuerdo con A.9.2.2 de NSR-10, la edificación se clasifica dentro de uno de los tres grados de desempeño de los elementos no estructurales definidos en A.9.2.1. Este grado de desempeño no puede ser inferior al mínimo permisible fijado en A.9.2.3.

A.9.2.3 - GRADO DE DESEMPEÑO MÍNIMO - Como mínimo debe cumplirse el grado de desempeño indicado en la tabla A.9.2-1 de NSR-10, para cada uno de los grupos de uso definidos en A.2.5.1.

TABLA A.9.2-1 de NSR-10  
Grado de desempeño mínimo requerido

Grupo de Uso	Grado de desempeño
IV	Superior
III	Superior
II	Bueno
I	Bajo

Para este caso y teniendo en cuenta que la edificación se clasifica como grupo de uso III se tiene el siguiente grado de desempeño:

Grupo de Uso	<b>III</b>
Grado de desempeño	<b>Superior</b>

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p>- A.9.4 - CRITERIO DE DISEÑO.</p> <p>En el presente análisis los elementos no estructurales se separan de la estructura principal. En este tipo de diseño los elementos no estructurales se aíslan lateralmente de la estructura dejando una separación suficiente para que la estructura al deformarse como consecuencia del sismo no los afecte adversamente. Los elementos no estructurales se apoyan en su parte inferior sobre la estructura, o se cuelgan de ella; por tanto deben ser capaces de resistir por sí mismo las fuerzas inerciales que les impone el sismo, y sus anclajes a la estructura deben ser capaces de resistir y transferir a la estructura estas fuerzas inducidas por el sismo. Además la separación a la estructura de la edificación debe ser lo suficientemente amplia para garantizar que no entren en contacto, para los desplazamientos impuestos por el sismo de diseño. En el espacio resultante deberá evitarse colocar elementos que rigidicen la unión eliminando la flexibilidad requerida por el diseño.</p> <p>A.9.4.2 - FUERZA SISMICA DE DISEÑO - Las Fuerzas sísmicas horizontales reducidas de diseño que actúan sobre cualquier elemento no estructural deben calcularse utilizando la siguiente ecuación:</p> $F_p = \frac{a_x a_p}{R_p} g M_p \geq \frac{A_a I}{2} g M_p \quad (\text{A.9.4-1 de NSR-10})$ <p>Donde los parámetros que intervienen en esta ecuación, se calculan de la siguiente manera:</p> <p>A.9.4.2.1 -Aceleracion en el punto de soporte del elemento, <math>a_x</math>. Corresponde a la aceleración horizontal que ocurre en el punto donde el elemento no estructural está soportado, o anclado, al sistema estructural de la edificación, cuando ésta se ve afectada por los movimientos sísmicos de diseño. Se calcula de la siguiente manera:</p> $a_x = A_s + \frac{(S_a - A_s)h_x}{h_{eq}} \quad \text{para } h_x \leq h_{eq} \quad (\text{A.9.4-2 de NSR-10})$ $a_x = S_a \frac{h_x}{h_{eq}} \quad \text{para } h_x > h_{eq}$ <p>- Altura equivalente del sistema de un grado de libertad que simula la edificación, <math>h_{eq} = 0.75 h_n = 0.75(3.25) \text{ m} = 2.44 \text{ m}</math>.</p> <p>- Aceleración máxima en la superficie del suelo estimada como la aceleración espectral correspondiente a un período de vibración igual a cero, <math>A_s = 0.10 \text{ g}</math>.</p> <p>- Aceleración espectral de diseño para un período de vibración dado, <math>S_a = 0.78 \text{ g}</math>.</p>	

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta lo anterior se calcula el valor de  $a_x$  para cada uno de los pisos de la edificación:

Nivel	As	Sa	hx	heq	$a_x$
N1	0.10	0.78	3.25	2.44	1.04

A.9.4.2.2 - Amplificación dinámica del elemento no estructural,  $a_p$ . Dependiendo de la rigidez, distribución de su masa y características de apoyo sobre la estructura, el elemento no estructural amplifica las aceleraciones que se presentan en su punto de soporte debido a efectos de resonancia. Los valores de  $a_p$  son tomados de las tablas A.9.5-1 y A.9.6-1 de NSR-10. Debido a que el muro en evaluación se trata de un elemento no estructural divisorio de altura total se tiene:

$a_p$
1.00

- Tipo de anclajes o amarres para determinar el coeficiente de capacidad de disipación de energía,  $R_p$ : No dúctiles.

A.9.4.2.3 - Capacidad de disipación de energía en el rango inelástico del elemento no estructural,  $R_p$ . Representa la capacidad de disipación de energía en el rango inelástico de respuesta del elemento en sí y de su sistema de anclaje o amparre a la estructura de la edificación. Teniendo en cuenta lo anterior se tiene:

Tipos de anclajes	$R_p$
Dúctiles	3.00

Adicionalmente se calcula el peso del elemento no estructural:

Densidad del muro	Densidad del revoque	Espesor del muro	Espesor del revoque	Base de la columneta	Altura efectiva, d	Longitud aferente
13 kN/m <sup>3</sup>	21 kN/m <sup>3</sup>	120 mm	15 mm	120 mm	100 mm	1800 mm

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta las variables anteriores se calcula la fuerza sísmica de diseño por piso:

Nivel	ax g	altura libre m	W Muro kN	W Revoque kN	W <sub>total</sub> = gMp kN	Fp kN
N1	1.04	2.90	8.14	1.64	9.79	3.40

Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone concentrada en el centro de gravedad del muro:

$$M_{1max} = \frac{F_p h_p}{4} \quad y \quad V_{1max} = \frac{F_p}{2}$$

Adicionalmente se calculan los valores de las fuerzas debidas a una inclinación del muro con respecto a la vertical, lo que resulta en una componente perpendicular al muro, debida a su propio peso:

$$\theta = \tan^{-1} \left( \frac{0.01 h_{libre}}{h_{libre}} \right) \quad M_{2max} = \frac{W_{total} 0.01 h_p}{4} \quad y \quad V_{2max} = \frac{W_{total} \sin \theta}{2}$$

Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:

- Diseño de columnetas:

Diámetro del refuerzo longitudinal: **N 3**

Nivel	M <sub>1max</sub> kN-m	M <sub>2max</sub> kN-m	M <sub>Stotal</sub> kN-m	ρ	Refuerzo	φ
N1	2.46	0.07	2.53	0.0060	2 N 3	0.90

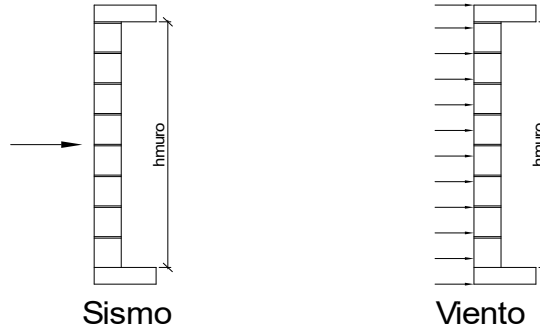
<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>				Proyecto No: P004		
				Archivo: MEMORIAS-004		
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES MUROS DIVISORIOS DE ALTURA TOTAL (CAPITULO A.9 de NSR-10)				Fecha: Abril de 2017		
				Diseñó: Ingeniero Francisco J. Medina		
				Email: ingfcomedina@yahoo.com		
- Diseño de anclajes:						
Diámetro de la barra de anclaje: N 3						
Nivel	V <sub>1max</sub> kN	V <sub>2max</sub> kN	V <sub>Stotal</sub> kN	Fv MPa	Av mm <sup>2</sup>	Refuerzo
N1	1.70	0.05	1.75	129.60	13.49	1 N 3
Debe dejarse la celda correspondiente a la última hilada sin relleno, para permitir el movimiento de la barra.						



**PROTOTIPO EDUCACION - MÓDULO 4B**

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Archivo: MEMORIAS-004  
Fecha: Abril de 2017  
Diseñó: Ingeniero Francisco J. Medina  
Email: ingfcomedina@yahoo.com

**25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES  
FACHADA MAMPOSTERIA NO REFORZADA  
(CAPITULO A.9 de NSR-10)**



ESQUEMA GENERAL

**A.9.2 - GRADO DE DESEMPEÑO DE LOS ELEMENTOS NO ESTRUCTURALES.**

De acuerdo con A.9.2.2 de NSR-10, la edificación se clasifica dentro de uno de los tres grados de desempeño de los elementos no estructurales definidos en A.9.2.1. Este grado de desempeño no puede ser inferior al mínimo permisible fijado en A.9.2.3.

A.9.2.3 - GRADO DE DESEMPEÑO MINIMO - Como mínimo debe cumplirse el grado de desempeño indicado en la tabla A.9.2-1 de NSR-10, para cada uno de los grupos de uso definidos en A.2.5.1.

TABLA A.9.2-1 de NSR-10  
Grado de desempeño mínimo requerido

Grupo de Uso	Grado de desempeño
IV	Superior
III	Superior
II	Bueno
I	Bajo

Para este caso y teniendo en cuenta que la edificación se clasifica como grupo de uso III se tiene el siguiente grado de desempeño:

Grupo de Uso	<b>III</b>
Grado de desempeño	<b>Superior</b>

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p>- A.9.4 - CRITERIO DE DISEÑO.</p> <p>En el presente análisis los elementos no estructurales se separan de la estructura principal. En este tipo de diseño los elementos no estructurales se aíslan lateralmente de la estructura dejando una separación suficiente para que la estructura al deformarse como consecuencia del sismo no los afecte adversamente. Los elementos no estructurales se apoyan en su parte inferior sobre la estructura, o se cuelgan de ella; por tanto deben ser capaces de resistir por sí mismo las fuerzas inerciales que les impone el sismo, y sus anclajes a la estructura deben ser capaces de resistir y transferir a la estructura estas fuerzas inducidas por el sismo. Además la separación a la estructura de la edificación debe ser lo suficientemente amplia para garantizar que no entren en contacto, para los desplazamientos impuestos por el sismo de diseño. En el espacio resultante deberá evitarse colocar elementos que rigidicen la unión eliminando la flexibilidad requerida por el diseño.</p> <p>A.9.4.2 - FUERZA SISMICA DE DISEÑO - Las Fuerzas sísmicas horizontales reducidas de diseño que actúan sobre cualquier elemento no estructural deben calcularse utilizando la siguiente ecuación:</p> $F_p = \frac{a_x a_p}{R_p} g M_p \geq \frac{A_a I}{2} g M_p \quad (\text{A.9.4-1 de NSR-10})$ <p>Donde los parámetros que intervienen en esta ecuación, se calculan de la siguiente manera:</p> <p>A.9.4.2.1 -Aceleracion en el punto de soporte del elemento, <math>a_x</math>. Corresponde a la aceleración horizontal que ocurre en el punto donde el elemento no estructural está soportado, o anclado, al sistema estructural de la edificación, cuando ésta se ve afectada por los movimientos sísmicos de diseño. Se calcula de la siguiente manera:</p> $a_x = A_s + \frac{(S_a - A_s)h_x}{h_{eq}} \quad \text{para } h_x \leq h_{eq} \quad (\text{A.9.4-2 de NSR-10})$ $a_x = S_a \frac{h_x}{h_{eq}} \quad \text{para } h_x > h_{eq}$ <ul style="list-style-type: none"> <li>- Altura equivalente del sistema de un grado de libertad que simula la edificación, <math>h_{eq} = 0.75 h_n = 0.75(3.25) \text{ m} = 2.44 \text{ m}</math>.</li> <li>- Aceleración máxima en la superficie del suelo estimada como la aceleración espectral correspondiente a un período de vibración igual a cero, <math>A_s = 0.10 \text{ g}</math>.</li> <li>- Aceleración espectral de diseño para un período de vibración dado, <math>S_a = 0.78 \text{ g}</math>.</li> </ul>	

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta lo anterior se calcula el valor de  $a_x$  para cada uno de los pisos de la edificación:

Nivel	As	Sa	hx	heq	$a_x$
N1	0.10	0.78	3.25	2.44	1.04

A.9.4.2.2 - Amplificación dinámica del elemento no estructural,  $a_p$ . Dependiendo de la rigidez, distribución de su masa y características de apoyo sobre la estructura, el elemento no estructural amplifica las aceleraciones que se presentan en su punto de soporte debido a efectos de resonancia. Los valores de  $a_p$  son tomados de las tablas A.9.5-1 y A.9.6-1 de NSR-10. Debido a que el muro en evaluación se trata de un elemento no estructural divisorio de altura total se tiene:

$a_p$
1.00

- Tipo de anclajes o amarres para determinar el coeficiente de capacidad de disipación de energía,  $R_p$ : No dúctiles.

A.9.4.2.3 - Capacidad de disipación de energía en el rango inelástico del elemento no estructural,  $R_p$ . Representa la capacidad de disipación de energía en el rango inelástico de respuesta del elemento en sí y de su sistema de anclaje o amparre a la estructura de la edificación. Teniendo en cuenta lo anterior se tiene:

Tipos de anclajes	$R_p$
Dúctiles	3.00

Adicionalmente se calcula el peso del elemento no estructural:

Densidad del muro	Densidad del revoque	Espesor del muro	Espesor del revoque	Base de la columneta	Altura efectiva, d	Longitud aferente
13 kN/m <sup>3</sup>	21 kN/m <sup>3</sup>	120 mm	15 mm	120 mm	100 mm	1800 mm

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta las variables anteriores se calcula la fuerza sísmica de diseño por piso:

Nivel	ax g	altura libre m	W Muro kN	W Revoque kN	W <sub>total</sub> = gMp kN	Fp kN
N1	1.04	2.90	8.14	1.64	9.79	3.40

Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone concentrada en el centro de gravedad del muro:

$$M_{1max} = \frac{F_p h_p}{4} \quad y \quad V_{1max} = \frac{F_p}{2}$$

Adicionalmente se calculan los valores de las fuerzas debidas a una inclinación del muro con respecto a la vertical, lo que resulta en una componente perpendicular al muro, debida a su propio peso:

$$\theta = \tan^{-1} \left( \frac{0.01 h_{libre}}{h_{libre}} \right) \quad M_{2max} = \frac{W_{total} 0.01 h_p}{4} \quad y \quad V_{2max} = \frac{W_{total} \sin \theta}{2}$$

Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:

Nivel	M <sub>1max</sub> kN-m	M <sub>2max</sub> kN-m	M <sub>Stotal</sub> kN-m	V <sub>1max</sub> kN	V <sub>2max</sub> kN	V <sub>Stotal</sub> kN
N1	2.46	0.07	2.53	1.70	0.05	1.75

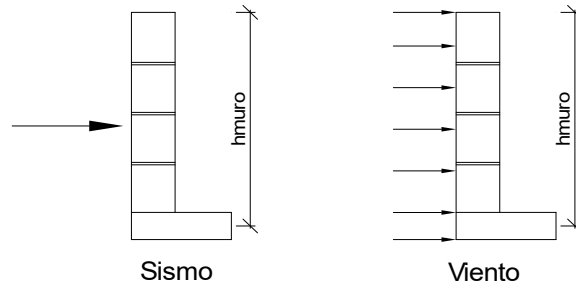
<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>		Proyecto No: P004				
		Archivo: MEMORIAS-004				
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)		Fecha: Abril de 2017				
		Diseñó: Ingeniero Francisco J. Medina				
		Email: ingfcomedina@yahoo.com				
B.6 - FUERZAS DE VIENTO						
Calculo de los parámetros para la evaluación de viento						
Altura del edificio	Exposición	$\lambda$	Kzt	l	Región	Vel viento km/h
3.25 m	C	1.12	1.15	1.25	3	125
Zona	Pnet10 kN/m <sup>2</sup>	Pnet kN/m <sup>2</sup>	Fv kN/m			
5	0.45	0.72	1.30			
Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone distribuida a lo largo del muro:						
$M_v = \frac{F_v h_p^2}{8}$ y $V_v = \frac{F_v h_p}{2}$						
Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:						
Nivel	altura libre m	Mv kN-m	Vv kN			
N1	2.90	1.36	1.88			
- Diseño de columnetas:						
Diámetro del refuerzo longitudinal: N 3						
Nivel	MS <sub>total</sub> kN-m	Mv kN-m	Mmax kN-m	$\rho$	Refuerzo	$\phi$
N1	2.53	1.36	2.53	0.0060	2 N 3	0.90

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>				Proyecto No: P004		
				Archivo: MEMORIAS-004		
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)				Fecha: Abril de 2017		
				Diseñó: Ingeniero Francisco J. Medina		
				Email: ingfcomedina@yahoo.com		
- Diseño de anclajes:						
Diámetro de la barra de anclaje: N 3						
Nivel	V <sub>Stotal</sub> kN	Vv kN	Vmax kN	Fv MPa	Av mm <sup>2</sup>	Refuerzo
N1	1.75	1.88	1.88	129.60	14.53	1 N 3
Debe dejarse la celda correspondiente a la última hilada sin relleno, para permitir el movimiento de la barra.						

**PROTOTIPO EDUCACION - MÓDULO 4B**

Proyecto No: P004  
Archivo: MEMORIAS-004  
Fecha: Abril de 2017  
Diseñó: Ingeniero Francisco J. Medina  
Email: ingfcomedina@yahoo.com

25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES  
FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA  
(CAPITULO A.9 de NSR-10)



ESQUEMA GENERAL

- A.9.2 - GRADO DE DESEMPEÑO DE LOS ELEMENTOS NO ESTRUCTURALES.

De acuerdo con A.9.2.2 de NSR-10, la edificación se clasifica dentro de uno de los tres grados de desempeño de los elementos no estructurales definidos en A.9.2.1. Este grado de desempeño no puede ser inferido al mínimo permisible fijado en A.9.2.3.

A.9.2.3 - GRADO DE DESEMPEÑO MINIMO - Como mínimo debe cumplirse el grado de desempeño indicado en la tabla A.9.2-1 de NSR-10, para cada uno de los grupos de uso definidos en A.2.5.1.

TABLA A.9.2-1 de NSR-10  
Grado de desempeño mínimo requerido

Grupo de Uso	Grado de desempeño
IV	Superior
III	Superior
II	Bueno
I	Bajo

Para este caso y teniendo en cuenta que la edificación se clasifica como grupo de uso III se tiene el siguiente grado de desempeño:

Grupo de Uso	<b>III</b>
Grado de desempeño	<b>Superior</b>

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com
<p>- A.9.4 - CRITERIO DE DISEÑO.</p> <p>En el presente análisis los elementos no estructurales se separan de la estructura principal. En este tipo de diseño los elementos no estructurales se aíslan lateralmente de la estructura dejando una separación suficiente para que la estructura al deformarse como consecuencia del sismo no los afecte adversamente. Los elementos no estructurales se apoyan en su parte inferior sobre la estructura, o se cuelgan de ella; por tanto deben ser capaces de resistir por sí mismo las fuerzas inerciales que les impone el sismo, y sus anclajes a la estructura deben ser capaces de resistir y transferir a la estructura estas fuerzas inducidas por el sismo. Además la separación a la estructura de la edificación debe ser lo suficientemente amplia para garantizar que no entren en contacto, para los desplazamientos impuestos por el sismo de diseño. En el espacio resultante deberá evitarse colocar elementos que rigidicen la unión eliminando la flexibilidad requerida por el diseño.</p> <p>A.9.4.2 - FUERZA SISMICA DE DISEÑO - Las Fuerzas sísmicas horizontales reducidas de diseño que actúan sobre cualquier elemento no estructural deben calcularse utilizando la siguiente ecuación:</p> $F_p = \frac{a_x a_p}{R_p} g M_p \geq \frac{A_a I}{2} g M_p \quad (\text{A.9.4-1 de NSR-10})$ <p>Donde los parámetros que intervienen en esta ecuación, se calculan de la siguiente manera:</p> <p>A.9.4.2.1 -Aceleracion en el punto de soporte del elemento, <math>a_x</math>. Corresponde a la aceleración horizontal que ocurre en el punto donde el elemento no estructural está soportado, o anclado, al sistema estructural de la edificación, cuando ésta se ve afectada por los movimientos sísmicos de diseño. Se calcula de la siguiente manera:</p> $a_x = A_s + \frac{(S_a - A_s)h_x}{h_{eq}} \quad \text{para } h_x \leq h_{eq} \quad (\text{A.9.4-2 de NSR-10})$ $a_x = S_a \frac{h_x}{h_{eq}} \quad \text{para } h_x > h_{eq}$ <p>- Altura equivalente del sistema de un grado de libertad que simula la edificación, <math>h_{eq} = 0.75 h_n = 0.75(3.25) \text{ m} = 2.44 \text{ m}</math>.</p> <p>- Aceleración máxima en la superficie del suelo estimada como la aceleración espectral correspondiente a un período de vibración igual a cero, <math>A_s = 0.10 \text{ g}</math>.</p> <p>- Aceleración espectral de diseño para un período de vibración dado, <math>S_a = 0.78 \text{ g}</math>.</p>	



<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta lo anterior se calcula el valor de  $a_x$  para cada uno de los pisos de la edificación:

Nivel	As	Sa	hx	heq	$a_x$
N1	0.10	0.78	3.25	2.44	1.04

A.9.4.2.2 - Amplificación dinámica del elemento no estructural,  $a_p$ . Dependiendo de la rigidez, distribución de su masa y características de apoyo sobre la estructura, el elemento no estructural amplifica las aceleraciones que se presentan en su punto de soporte debido a efectos de resonancia. Los valores de  $a_p$  son tomados de las tablas A.9.5-1 y A.9.6-1 de NSR-10. Debido a que el muro en evaluación se trata de un elemento no estructural divisorio de altura total se tiene:

$a_p$
2.50

- Tipo de anclajes o amarres para determinar el coeficiente de capacidad de disipación de energía,  $R_p$ : No dúctiles.

A.9.4.2.3 - Capacidad de disipación de energía en el rango inelástico del elemento no estructural,  $R_p$ . Representa la capacidad de disipación de energía en el rango inelástico de respuesta del elemento en sí y de su sistema de anclaje o amparre a la estructura de la edificación. Teniendo en cuenta lo anterior se tiene:

Tipos de anclajes	$R_p$
Dúctiles	3.00

Adicionalmente se calcula el peso del elemento no estructural:

Densidad del muro	Densidad del revoque	Espesor del muro	Espesor del revoque	Base de la columneta	Altura efectiva, d	Longitud aferente
23 kN/m <sup>3</sup>	21 kN/m <sup>3</sup>	120 mm	15 mm	120 mm	100 mm	500 mm

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>	Proyecto No: P004 Archivo: MEMORIAS-004
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)	Fecha: Abril de 2017 Diseñó: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com

Teniendo en cuenta las variables anteriores se calcula la fuerza sísmica de diseño por piso:

Nivel	ax g	altura libre m	W Muro kN	W Revoque kN	W <sub>total</sub> = gMp kN	Fp kN
N1	1.04	1.75	2.42	0.28	2.69	2.34

Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone concentrada en el centro de gravedad del muro:

$$M_{1max} = \frac{F_p h_v}{2} \quad y \quad V_{1max} = F_p$$

Adicionalmente se calculan los valores de las fuerzas debidas a una inclinación del muro con respecto a la vertical, lo que resulta en una componente perpendicular al muro, debida a su propio peso:

$$\theta = \tan^{-1} \left( \frac{0.01 h_{libre}}{h_{libre}} \right) \quad M_{2max} = \frac{W_{total} 0.01 h_p}{4} \quad y \quad V_{2max} = \frac{W_{total} \sin \theta}{2}$$

Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:

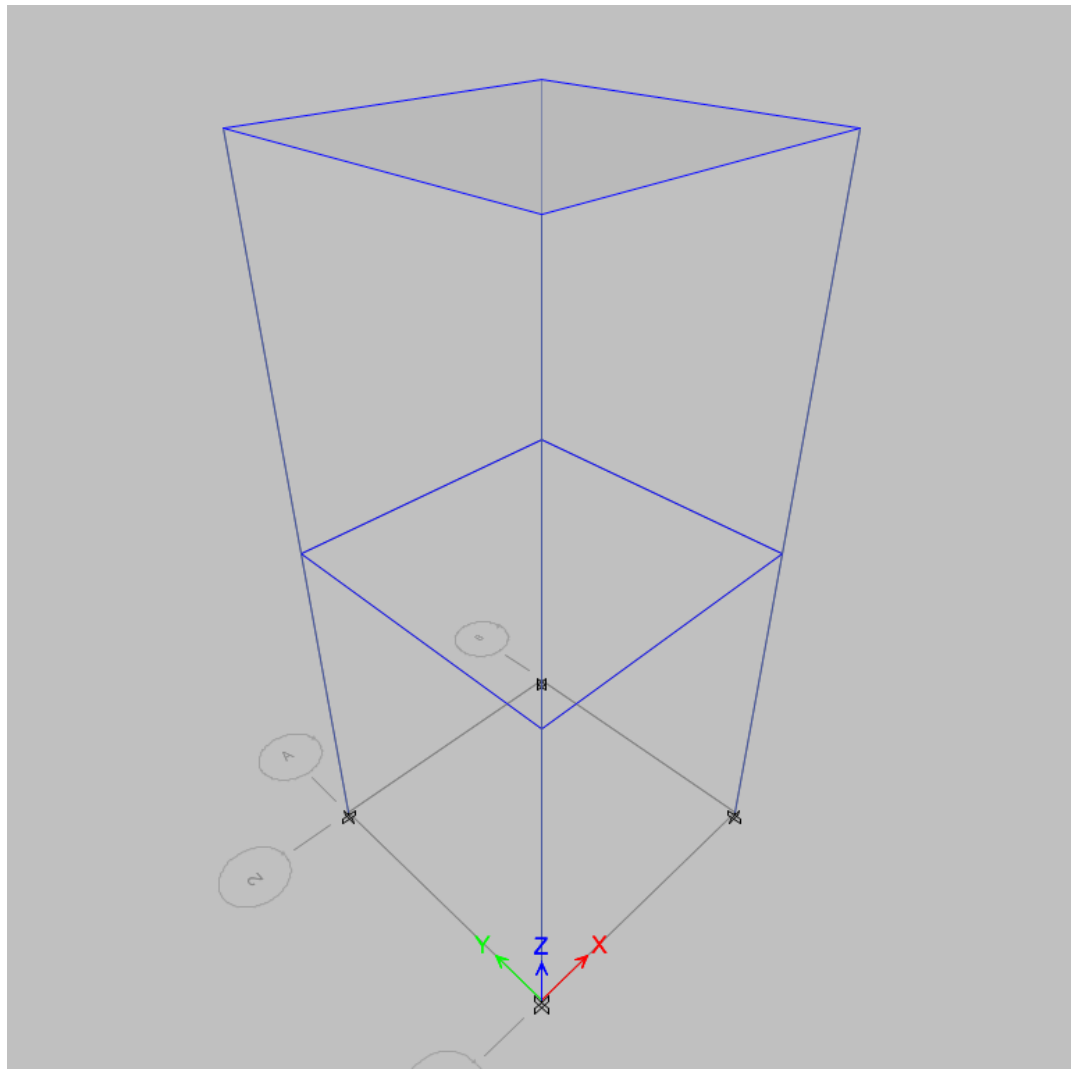
Nivel	M <sub>1max</sub> kN-m	M <sub>2max</sub> kN-m	M <sub>Stotal</sub> kN-m	V <sub>1max</sub> kN	V <sub>2max</sub> kN	V <sub>Stotal</sub> kN
N1	2.04	0.01	2.06	2.34	0.01	2.35

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>		Proyecto No: P004 Archivo: MEMORIAS-004				
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA (CAPITULO A.9 de NSR-10)		Fecha: Abril de 2017 Diseño: Ingeniero Francisco J. Medina Email: ingfcomedina@yahoo.com				
B.6 - FUERZAS DE VIENTO						
Calculo de los parámetros para la evaluación de viento						
Altura del edificio	Exposición	$\lambda$	Kzt	I	Región	Vel viento km/h
3.25 m	B	1.12	1.15	1.25	3	125
Zona	Pnet10 kN/m <sup>2</sup>	Pnet kN/m <sup>2</sup>	Fv kN/m			
5	0.45	0.72	0.36			
Se calculan los valores de las fuerzas internas en los elementos no estructurales la cual se supone distribuida a lo largo del muro:						
$M_v = \frac{F_v h_v^2}{2} \quad y \quad V_v = F_v h_p$						
Aplicando las ecuaciones anteriores se obtiene la siguiente tabla:						
Nivel	altura libre m	Mv kN-m	Vv kN			
N1	1.75	0.55	0.63			
- Diseño de columnetas:						
Diámetro del refuerzo longitudinal: N 3						
Nivel	MS <sub>total</sub> kN-m	Mv kN-m	Mmax kN-m	$\rho$	Refuerzo	$\phi$
N1	2.06	0.55	2.06	0.0048	1 N 3	0.90

<b>PROTOTIPO EDUCACION - MÓDULO 4B</b>				Proyecto No: P004		
25. DISEÑO DE ELEMENTOS NO ESTRUCTURALES				Archivo: MEMORIAS-004		
FACHADA ANTEPECHO MAMPOSTERIA NO REFORZADA				Fecha: Abril de 2017		
(CAPITULO A.9 de NSR-10)				Diseñó: Ingeniero Francisco J. Medina		
				Email: ingfcomedina@yahoo.com		
- Diseño de anclajes:						
Diámetro de la barra de anclaje: N 3						
Nivel	$V_{Stotal}$ kN	Vv kN	Vmax kN	Fv MPa	Av mm <sup>2</sup>	Refuerzo
N1	2.35	0.63	2.35	129.60	18.13	1 N 3
Debe dejarse la celda correspondiente a la última hilada sin relleno, para permitir el movimiento de la barra.						

## **ANEXO 2: DATOS DE ENTRADA**

**ZONA DE AMENAZA SISMICA ALTA**



## Project Report

Model File: 004 2017 TANQUE EDUCACION (ALTA), Revision 0  
25/04/2017

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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N2	3000	6000	Yes	None	No
N1	3000	3000	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	600	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	2.6
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	2.6

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	2600	0
3	2600	0	0
4	2600	2600	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None

### 1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	5477.59	5477.59	1.3	1.3	5477.59	5477.59	1.3	1.3	1.3	1.3

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	5477.59	5477.59	18.5143	1.3	1.3

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N2	15677.99	15677.99	0
N1	5477.59	5477.59	0
Base	1765.8	1765.8	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC28	Concrete	24870.1	0.2	23.56	Fc=28 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C35X35	CONC28	Concrete Rectangular
V30X30	CONC28	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
Losa2d	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#7	22.2	4
#8	25.4	5
15M	16	2

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N2	1	4	From Area	
N2	2	5	From Area	
N2	3	7	From Area	
N2	4	8	From Area	
N1	1	2	D1	
N1	2	14	D1	
N1	3	6	D1	
N1	4	17	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N2	C1	1	Column	3000	C35X35	C35X35	11
N2	C2	2	Column	3000	C35X35	C35X35	11
N2	C3	3	Column	3000	C35X35	C35X35	11
N2	C4	4	Column	3000	C35X35	C35X35	11
N1	C1	7	Column	3000	C35X35	C35X35	11
N1	C2	8	Column	3000	C35X35	C35X35	11
N1	C3	9	Column	3000	C35X35	C35X35	11
N1	C4	10	Column	3000	C35X35	C35X35	11
N2	B1	5	Beam	2600	V30X30	V30X30	11
N2	B2	6	Beam	2600	V30X30	V30X30	11
N2	B4	11	Beam	2600	V30X30	V30X30	11
N2	B6	12	Beam	2600	V30X30	V30X30	11
N1	B1	13	Beam	2600	V30X30	V30X30	11
N1	B2	14	Beam	2600	V30X30	V30X30	11
N1	B4	16	Beam	2600	V30X30	V30X30	11
N1	B6	18	Beam	2600	V30X30	V30X30	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section
N2	F5	1	Losa2d

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

Table 4.1 - Load Patterns

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	
F	Other	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

Table 4.2 - Frame Loads - Distributed (Part 1 of 2)

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N2	B1	5	Beam	D	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	D	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	D	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	D	Force	Gravity	0	1	0	2600
N2	B1	5	Beam	LR	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	LR	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	LR	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	LR	Force	Gravity	0	1	0	2600
N2	B1	5	Beam	G	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	G	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	G	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	G	Force	Gravity	0	1	0	2600

Table 4.2 - Frame Loads - Distributed (Part 2 of 2)

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N2	B1	5	8.43	8.43
N2	B2	6	8.43	8.43
N2	B4	11	8.43	8.43
N2	B6	12	8.43	8.43
N2	B1	5	1.56	1.56
N2	B2	6	1.56	1.56
N2	B4	11	1.56	1.56
N2	B6	12	1.56	1.56
N2	B1	5	0.87	0.87
N2	B2	6	0.87	0.87
N2	B4	11	0.87	0.87
N2	B6	12	0.87	0.87

#### 4.2.2 Area Loads

Table 4.3 - Shell Loads - Uniform

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N2	F5	1	D	Gravity	3.85

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N2	F5	1	L	Gravity	1.8
N2	F5	1	F	Gravity	7.4

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
Umbr	0	0.1	2
Umbr	0.01	0.108	
Umbr	0.02	0.116	
Umbr	0.03	0.124	
Umbr	0.04	0.132	
Umbr	0.05	0.14	
Umbr	0.06	0.148	
Umbr	0.07	0.156	
Umbr	0.08	0.164	
Umbr	0.09	0.172	
Umbr	0.1	0.18	
Umbr	0.11	0.188	
Umbr	0.12	0.196	
Umbr	0.13	0.204	
Umbr	0.14	0.212	
Umbr	0.15	0.22	
Umbr	0.16	0.228	
Umbr	0.17	0.236	
Umbr	0.18	0.244	
Umbr	0.19	0.252	
Umbr	0.2	0.26	
Umbr	0.21	0.268	
Umbr	0.22	0.276	
Umbr	0.23	0.284	
Umbr	0.24	0.292	
Umbr	0.25	0.3	
Umbr	0.26	0.3	
Umbr	0.27	0.3	
Umbr	0.28	0.3	
Umbr	0.29	0.3	
Umbr	0.3	0.3	
Umbr	0.31	0.3	
Umbr	0.32	0.3	
Umbr	0.33	0.3	
Umbr	0.34	0.3	
Umbr	0.35	0.3	
Umbr	0.36	0.3	
Umbr	0.37	0.3	
Umbr	0.38	0.3	
Umbr	0.39	0.3	
Umbr	0.4	0.3	
Umbr	0.41	0.3	
Umbr	0.42	0.3	
Umbr	0.43	0.3	
Umbr	0.44	0.3	
Umbr	0.45	0.3	
Umbr	0.46	0.3	
Umbr	0.47	0.3	
Umbr	0.48	0.3	
Umbr	0.49	0.3	

Name	Period sec	Acceleration	Damping %
Umbr	0.5	0.3	
Umbr	0.51	0.3	
Umbr	0.52	0.3	
Umbr	0.53	0.3	
Umbr	0.54	0.3	
Umbr	0.55	0.3	
Umbr	0.56	0.3	
Umbr	0.57	0.3	
Umbr	0.58	0.3	
Umbr	0.59	0.3	
Umbr	0.6	0.3	
Umbr	0.61	0.3	
Umbr	0.62	0.3	
Umbr	0.63	0.3	
Umbr	0.64	0.3	
Umbr	0.65	0.3	
Umbr	0.66	0.3	
Umbr	0.67	0.3	
Umbr	0.68	0.3	
Umbr	0.69	0.3	
Umbr	0.7	0.3	
Umbr	0.71	0.3	
Umbr	0.72	0.3	
Umbr	0.73	0.3	
Umbr	0.74	0.3	
Umbr	0.75	0.3	
Umbr	0.76	0.3	
Umbr	0.77	0.3	
Umbr	0.78	0.3	
Umbr	0.79	0.3	
Umbr	0.8	0.3	
Umbr	0.81	0.3	
Umbr	0.82	0.3	
Umbr	0.83	0.3	
Umbr	0.84	0.3	
Umbr	0.85	0.3	
Umbr	0.86	0.3	
Umbr	0.87	0.3	
Umbr	0.88	0.3	
Umbr	0.89	0.3	
Umbr	0.9	0.3	
Umbr	0.91	0.3	
Umbr	0.92	0.3	
Umbr	0.93	0.3	
Umbr	0.94	0.3	
Umbr	0.95	0.3	
Umbr	0.96	0.3	
Umbr	0.97	0.3	
Umbr	0.98	0.3	
Umbr	0.99	0.3	
Umbr	1	0.3	
Umbr	1.01	0.297	
Umbr	1.02	0.294	
Umbr	1.03	0.291	
Umbr	1.04	0.288	
Umbr	1.05	0.286	
Umbr	1.06	0.283	
Umbr	1.07	0.28	
Umbr	1.08	0.278	
Umbr	1.09	0.275	



Name	Period sec	Acceleration	Damping %
Umbr	1.1	0.273	
Umbr	1.11	0.27	
Umbr	1.12	0.268	
Umbr	1.13	0.265	
Umbr	1.14	0.263	
Umbr	1.15	0.261	
Umbr	1.16	0.259	
Umbr	1.17	0.256	
Umbr	1.18	0.254	
Umbr	1.19	0.252	
Umbr	1.2	0.25	
Umbr	1.21	0.248	
Umbr	1.22	0.246	
Umbr	1.23	0.244	
Umbr	1.24	0.242	
Umbr	1.25	0.24	
Umbr	1.26	0.238	
Umbr	1.27	0.236	
Umbr	1.28	0.234	
Umbr	1.29	0.233	
Umbr	1.3	0.231	
Umbr	1.31	0.229	
Umbr	1.32	0.227	
Umbr	1.33	0.226	
Umbr	1.34	0.224	
Umbr	1.35	0.222	
Umbr	1.36	0.221	
Umbr	1.37	0.219	
Umbr	1.38	0.217	
Umbr	1.39	0.216	
Umbr	1.4	0.214	
Umbr	1.41	0.213	
Umbr	1.42	0.211	
Umbr	1.43	0.21	
Umbr	1.44	0.208	
Umbr	1.45	0.207	
Umbr	1.46	0.205	
Umbr	1.47	0.204	
Umbr	1.48	0.203	
Umbr	1.49	0.201	
Umbr	1.5	0.2	
Umbr	1.51	0.199	
Umbr	1.52	0.197	
Umbr	1.53	0.196	
Umbr	1.54	0.195	
Umbr	1.55	0.194	
Umbr	1.56	0.192	
Umbr	1.57	0.191	
Umbr	1.58	0.19	
Umbr	1.59	0.189	
Umbr	1.6	0.188	
Umbr	1.61	0.186	
Umbr	1.62	0.185	
Umbr	1.63	0.184	
Umbr	1.64	0.183	
Umbr	1.65	0.182	
Umbr	1.66	0.181	
Umbr	1.67	0.18	
Umbr	1.68	0.179	
Umbr	1.69	0.178	

Name	Period sec	Acceleration	Damping %
Umbr	1.7	0.176	
Umbr	1.71	0.175	
Umbr	1.72	0.174	
Umbr	1.73	0.173	
Umbr	1.74	0.172	
Umbr	1.75	0.171	
Umbr	1.76	0.17	
Umbr	1.77	0.169	
Umbr	1.78	0.169	
Umbr	1.79	0.168	
Umbr	1.8	0.167	
Umbr	1.81	0.166	
Umbr	1.82	0.165	
Umbr	1.83	0.164	
Umbr	1.84	0.163	
Umbr	1.85	0.162	
Umbr	1.86	0.161	
Umbr	1.87	0.16	
Umbr	1.88	0.16	
Umbr	1.89	0.159	
Umbr	1.9	0.158	
Umbr	1.91	0.157	
Umbr	1.92	0.156	
Umbr	1.93	0.155	
Umbr	1.94	0.155	
Umbr	1.95	0.154	
Umbr	1.96	0.153	
Umbr	1.97	0.152	
Umbr	1.98	0.152	
Umbr	1.99	0.151	
Umbr	2	0.15	
Umbr	2.01	0.149	
Umbr	2.02	0.149	
Umbr	2.03	0.148	
Umbr	2.04	0.147	
Umbr	2.05	0.146	
Umbr	2.06	0.146	
Umbr	2.07	0.145	
Umbr	2.08	0.144	
Umbr	2.09	0.144	
Umbr	2.1	0.143	
Umbr	2.11	0.142	
Umbr	2.12	0.142	
Umbr	2.13	0.141	
Umbr	2.14	0.14	
Umbr	2.15	0.14	
Umbr	2.16	0.139	
Umbr	2.17	0.138	
Umbr	2.18	0.138	
Umbr	2.19	0.137	
Umbr	2.2	0.136	
Umbr	2.21	0.136	
Umbr	2.22	0.135	
Umbr	2.23	0.135	
Umbr	2.24	0.134	
Umbr	2.25	0.133	
Umbr	2.26	0.133	
Umbr	2.27	0.132	
Umbr	2.28	0.132	
Umbr	2.29	0.131	

Name	Period sec	Acceleration	Damping %
Umbr	2.3	0.13	
Umbr	2.31	0.13	
Umbr	2.32	0.129	
Umbr	2.33	0.129	
Umbr	2.34	0.128	
Umbr	2.35	0.128	
Umbr	2.36	0.127	
Umbr	2.37	0.127	
Umbr	2.38	0.126	
Umbr	2.39	0.126	
Umbr	2.4	0.125	
Umbr	2.41	0.124	
Umbr	2.42	0.124	
Umbr	2.43	0.123	
Umbr	2.44	0.123	
Umbr	2.45	0.122	
Umbr	2.46	0.122	
Umbr	2.47	0.121	
Umbr	2.48	0.121	
Umbr	2.49	0.12	
Umbr	2.5	0.12	
Umbr	2.51	0.12	
Umbr	2.52	0.119	
Umbr	2.53	0.119	
Umbr	2.54	0.118	
Umbr	2.55	0.118	
Umbr	2.56	0.117	
Umbr	2.57	0.117	
Umbr	2.58	0.116	
Umbr	2.59	0.116	
Umbr	2.6	0.115	
Umbr	2.61	0.115	
Umbr	2.62	0.115	
Umbr	2.63	0.114	
Umbr	2.64	0.114	
Umbr	2.65	0.113	
Umbr	2.66	0.113	
Umbr	2.67	0.112	
Umbr	2.68	0.112	
Umbr	2.69	0.112	
Umbr	2.7	0.111	
Umbr	2.71	0.111	
Umbr	2.72	0.11	
Umbr	2.73	0.11	
Umbr	2.74	0.109	
Umbr	2.75	0.109	
Umbr	2.76	0.109	
Umbr	2.77	0.108	
Umbr	2.78	0.108	
Umbr	2.79	0.108	
Umbr	2.8	0.107	
Umbr	2.81	0.107	
Umbr	2.82	0.106	
Umbr	2.83	0.106	
Umbr	2.84	0.106	
Umbr	2.85	0.105	
Umbr	2.86	0.105	
Umbr	2.87	0.105	
Umbr	2.88	0.104	
Umbr	2.89	0.104	

Name	Period sec	Acceleration	Damping %
Umbr	2.9	0.103	
Umbr	2.91	0.103	
Umbr	2.92	0.103	
Umbr	2.93	0.102	
Umbr	2.94	0.102	
Umbr	2.95	0.102	
Umbr	2.96	0.101	
Umbr	2.97	0.101	
Umbr	2.98	0.101	
Umbr	2.99	0.1	
Umbr	3	0.1	
Umbr	3.01	0.1	
Umbr	3.02	0.099	
Umbr	3.03	0.099	
Umbr	3.04	0.099	
Umbr	3.05	0.098	
Umbr	3.06	0.098	
Umbr	3.07	0.098	
Umbr	3.08	0.097	
Umbr	3.09	0.097	
Umbr	3.1	0.097	
Umbr	3.11	0.096	
Umbr	3.12	0.096	
Umbr	3.13	0.096	
Umbr	3.14	0.096	
Umbr	3.15	0.095	
Umbr	3.16	0.095	
Umbr	3.17	0.095	
Umbr	3.18	0.094	
Umbr	3.19	0.094	
Umbr	3.2	0.094	
Umbr	3.21	0.093	
Umbr	3.22	0.093	
Umbr	3.23	0.093	
Umbr	3.24	0.093	
Umbr	3.25	0.092	
Umbr	3.26	0.092	
Umbr	3.27	0.092	
Umbr	3.28	0.091	
Umbr	3.29	0.091	
Umbr	3.3	0.091	
Umbr	3.31	0.091	
Umbr	3.32	0.09	
Umbr	3.33	0.09	
Umbr	3.34	0.09	
Umbr	3.35	0.09	
Umbr	3.36	0.089	
Umbr	3.37	0.089	
Umbr	3.38	0.089	
Umbr	3.39	0.088	
Umbr	3.4	0.088	
Umbr	3.41	0.088	
Umbr	3.42	0.088	
Umbr	3.43	0.087	
Umbr	3.44	0.087	
Umbr	3.45	0.087	
Umbr	3.46	0.087	
Umbr	3.47	0.086	
Umbr	3.48	0.086	
Umbr	3.49	0.086	

Name	Period sec	Acceleration	Damping %
Umbr	3.5	0.086	
Umbr	3.51	0.085	
Umbr	3.52	0.085	
Umbr	3.53	0.085	
Umbr	3.54	0.085	
Umbr	3.55	0.085	
Umbr	3.56	0.084	
Umbr	3.57	0.084	
Umbr	3.58	0.084	
Umbr	3.59	0.084	
Umbr	3.6	0.083	
Umbr	3.61	0.083	
Umbr	3.62	0.083	
Umbr	3.63	0.083	
Umbr	3.64	0.082	
Umbr	3.65	0.082	
Umbr	3.66	0.082	
Umbr	3.67	0.082	
Umbr	3.68	0.082	
Umbr	3.69	0.081	
Umbr	3.7	0.081	
Umbr	3.71	0.081	
Umbr	3.72	0.081	
Umbr	3.73	0.08	
Umbr	3.74	0.08	
Umbr	3.75	0.08	
Umbr	3.76	0.08	
Umbr	3.77	0.08	
Umbr	3.78	0.079	
Umbr	3.79	0.079	
Umbr	3.8	0.079	
Umbr	3.81	0.079	
Umbr	3.82	0.079	
Umbr	3.83	0.078	
Umbr	3.84	0.078	
Umbr	3.85	0.078	
Umbr	3.86	0.078	
Umbr	3.87	0.078	
Umbr	3.88	0.077	
Umbr	3.89	0.077	
Umbr	3.9	0.077	
Umbr	3.91	0.077	
Umbr	3.92	0.077	
Umbr	3.93	0.076	
Umbr	3.94	0.076	
Umbr	3.95	0.076	
Umbr	3.96	0.076	
Umbr	3.97	0.076	
Umbr	3.98	0.075	
Umbr	3.99	0.075	
Umbr	4	0.075	
Umbr	4.01	0.075	
Umbr	4.02	0.075	
Umbr	4.03	0.074	
Umbr	4.04	0.074	
Umbr	4.05	0.074	
Umbr	4.06	0.074	
Umbr	4.07	0.074	
Umbr	4.08	0.074	
Umbr	4.09	0.073	

Name	Period sec	Acceleration	Damping %
Umbr	4.1	0.073	
Umbr	4.11	0.073	
Umbr	4.12	0.073	
Umbr	4.13	0.073	
Umbr	4.14	0.072	
Umbr	4.15	0.072	
Umbr	4.16	0.072	
Umbr	4.17	0.072	
Umbr	4.18	0.072	
Umbr	4.19	0.072	
Umbr	4.2	0.071	
Umbr	4.21	0.071	
Umbr	4.22	0.071	
Umbr	4.23	0.071	
Umbr	4.24	0.071	
Umbr	4.25	0.071	
Umbr	4.26	0.07	
Umbr	4.27	0.07	
Umbr	4.28	0.07	
Umbr	4.29	0.07	
Umbr	4.3	0.07	
Umbr	4.31	0.07	
Umbr	4.32	0.069	
Umbr	4.33	0.069	
Umbr	4.34	0.069	
Umbr	4.35	0.069	
Umbr	4.36	0.069	
Umbr	4.37	0.069	
Umbr	4.38	0.068	
Umbr	4.39	0.068	
Umbr	4.4	0.068	
Umbr	4.41	0.068	
Umbr	4.42	0.068	
Umbr	4.43	0.068	
Umbr	4.44	0.068	
Umbr	4.45	0.067	
Umbr	4.46	0.067	
Umbr	4.47	0.067	
Umbr	4.48	0.067	
Umbr	4.49	0.067	
Umbr	4.5	0.067	
Umbr	4.51	0.067	
Umbr	4.52	0.066	
Umbr	4.53	0.066	
Umbr	4.54	0.066	
Umbr	4.55	0.066	
Umbr	4.56	0.066	
Umbr	4.57	0.066	
Umbr	4.58	0.066	
Umbr	4.59	0.065	
Umbr	4.6	0.065	
Umbr	4.61	0.065	
Umbr	4.62	0.065	
Umbr	4.63	0.065	
Umbr	4.64	0.065	
Umbr	4.65	0.065	
Umbr	4.66	0.064	
Umbr	4.67	0.064	
Umbr	4.68	0.064	
Umbr	4.69	0.064	

Name	Period sec	Acceleration	Damping %
Umbr	4.7	0.064	
Umbr	4.71	0.064	
Umbr	4.72	0.064	
Umbr	4.73	0.063	
Umbr	4.74	0.063	
Umbr	4.75	0.063	
Umbr	4.76	0.063	
Umbr	4.77	0.063	
Umbr	4.78	0.063	
Umbr	4.79	0.063	
Umbr	4.8	0.063	
Umbr	4.81	0.062	
Umbr	4.82	0.062	
Umbr	4.83	0.062	
Umbr	4.84	0.061	
Umbr	4.85	0.061	
Umbr	4.86	0.061	
Umbr	4.87	0.061	
Umbr	4.88	0.06	
Umbr	4.89	0.06	
Umbr	4.9	0.06	
Umbr	4.91	0.06	
Umbr	4.92	0.059	
Umbr	4.93	0.059	
Umbr	4.94	0.059	
Umbr	4.95	0.059	
Umbr	4.96	0.059	
Umbr	4.97	0.058	
Umbr	4.98	0.058	
Umbr	4.99	0.058	
Umbr	5	0.058	
Umbr	5.01	0.057	
Umbr	5.02	0.057	
Umbr	5.03	0.057	
Umbr	5.04	0.057	
Umbr	5.05	0.056	
Umbr	5.06	0.056	
Umbr	5.07	0.056	
Umbr	5.08	0.056	
Umbr	5.09	0.056	
Umbr	5.1	0.055	
Umbr	5.11	0.055	
Umbr	5.12	0.055	
Umbr	5.13	0.055	
Umbr	5.14	0.055	
Umbr	5.15	0.054	
Umbr	5.16	0.054	
Umbr	5.17	0.054	
Umbr	5.18	0.054	
Umbr	5.19	0.053	
Umbr	5.2	0.053	
Umbr	5.21	0.053	
Umbr	5.22	0.053	
Umbr	5.23	0.053	
Umbr	5.24	0.052	
Umbr	5.25	0.052	
Umbr	5.26	0.052	
Umbr	5.27	0.052	
Umbr	5.28	0.052	
Umbr	5.29	0.051	

Name	Period sec	Acceleration	Damping %
Umbr	5.3	0.051	
Umbr	5.31	0.051	
Umbr	5.32	0.051	
Umbr	5.33	0.051	
Umbr	5.34	0.05	
Umbr	5.35	0.05	
Umbr	5.36	0.05	
Umbr	5.37	0.05	
Umbr	5.38	0.05	
Umbr	5.39	0.05	
Umbr	5.4	0.049	
Umbr	5.41	0.049	
Umbr	5.42	0.049	
Umbr	5.43	0.049	
Umbr	5.44	0.049	
Umbr	5.45	0.048	
Umbr	5.46	0.048	
Umbr	5.47	0.048	
Umbr	5.48	0.048	
Umbr	5.49	0.048	
Umbr	5.5	0.048	
Umbr	5.51	0.047	
Umbr	5.52	0.047	
Umbr	5.53	0.047	
Umbr	5.54	0.047	
Umbr	5.55	0.047	
Umbr	5.56	0.047	
Umbr	5.57	0.046	
Umbr	5.58	0.046	
Umbr	5.59	0.046	
Umbr	5.6	0.046	
Umbr	5.61	0.046	
Umbr	5.62	0.046	
Umbr	5.63	0.045	
Umbr	5.64	0.045	
Umbr	5.65	0.045	
Umbr	5.66	0.045	
Umbr	5.67	0.045	
Umbr	5.68	0.045	
Umbr	5.69	0.044	
Umbr	5.7	0.044	
Umbr	5.71	0.044	
Umbr	5.72	0.044	
Umbr	5.73	0.044	
Umbr	5.74	0.044	
Umbr	5.75	0.044	
Umbr	5.76	0.043	
Umbr	5.77	0.043	
Umbr	5.78	0.043	
Umbr	5.79	0.043	
Umbr	5.8	0.043	
Umbr	5.81	0.043	
Umbr	5.82	0.043	
Umbr	5.83	0.042	
Umbr	5.84	0.042	
Umbr	5.85	0.042	
Umbr	5.86	0.042	
Umbr	5.87	0.042	
Umbr	5.88	0.042	
Umbr	5.89	0.042	



Name	Period sec	Acceleration	Damping %
Umbr	5.9	0.041	
Umbr	5.91	0.041	
Umbr	5.92	0.041	
Umbr	5.93	0.041	
Umbr	5.94	0.041	
Umbr	5.95	0.041	
Umbr	5.96	0.041	
Umbr	5.97	0.04	
Umbr	5.98	0.04	
Umbr	5.99	0.04	
Umbr	6	0.04	
Umbr	6.01	0.04	
Umbr	6.02	0.04	
Umbr	6.03	0.04	
Umbr	6.04	0.039	
Umbr	6.05	0.039	
Umbr	6.06	0.039	
Umbr	6.07	0.039	
Umbr	6.08	0.039	
Umbr	6.09	0.039	
Umbr	6.1	0.039	
Umbr	6.11	0.039	
Umbr	6.12	0.038	
Umbr	6.13	0.038	
Umbr	6.14	0.038	
Umbr	6.15	0.038	
Umbr	6.16	0.038	
Umbr	6.17	0.038	
Umbr	6.18	0.038	
Umbr	6.19	0.038	
Umbr	6.2	0.037	
Umbr	6.21	0.037	
Umbr	6.22	0.037	
Umbr	6.23	0.037	
Umbr	6.24	0.037	
Umbr	6.25	0.037	
Umbr	6.26	0.037	
Umbr	6.27	0.037	
Umbr	6.28	0.037	
Umbr	6.29	0.036	
Umbr	6.3	0.036	
Umbr	6.31	0.036	
Umbr	6.32	0.036	
Umbr	6.33	0.036	
Umbr	6.34	0.036	
Umbr	6.35	0.036	
Umbr	6.36	0.036	
Umbr	6.37	0.035	
Umbr	6.38	0.035	
Umbr	6.39	0.035	
Umbr	6.4	0.035	
Umbr	6.41	0.035	
Umbr	6.42	0.035	
Umbr	6.43	0.035	
Umbr	6.44	0.035	
Umbr	6.45	0.035	
Umbr	6.46	0.035	
Umbr	6.47	0.034	
Umbr	6.48	0.034	
Umbr	6.49	0.034	

Name	Period sec	Acceleration	Damping %
Umbr	6.5	0.034	
Umbr	6.51	0.034	
Umbr	6.52	0.034	
Umbr	6.53	0.034	
Umbr	6.54	0.034	
Umbr	6.55	0.034	
Umbr	6.56	0.033	
Umbr	6.57	0.033	
Umbr	6.58	0.033	
Umbr	6.59	0.033	
Umbr	6.6	0.033	
Umbr	6.61	0.033	
Umbr	6.62	0.033	
Umbr	6.63	0.033	
Umbr	6.64	0.033	
Umbr	6.65	0.033	
Umbr	6.66	0.032	
Umbr	6.67	0.032	
Umbr	6.68	0.032	
Umbr	6.69	0.032	
Umbr	6.7	0.032	
Umbr	6.71	0.032	
Umbr	6.72	0.032	
Umbr	6.73	0.032	
Umbr	6.74	0.032	
Umbr	6.75	0.032	
Umbr	6.76	0.032	
Umbr	6.77	0.031	
Umbr	6.78	0.031	
Umbr	6.79	0.031	
Umbr	6.8	0.031	
Umbr	6.81	0.031	
Umbr	6.82	0.031	
Umbr	6.83	0.031	
Umbr	6.84	0.031	
Umbr	6.85	0.031	
Umbr	6.86	0.031	
Umbr	6.87	0.031	
Umbr	6.88	0.03	
Umbr	6.89	0.03	
Umbr	6.9	0.03	
Umbr	6.91	0.03	
Umbr	6.92	0.03	
Umbr	6.93	0.03	
Umbr	6.94	0.03	
Umbr	6.95	0.03	
Umbr	6.96	0.03	
Umbr	6.97	0.03	
Umbr	6.98	0.03	
Umbr	6.99	0.029	
Umbr	7	0.029	
Umbr	7.01	0.029	
Umbr	7.02	0.029	
Umbr	7.03	0.029	
Umbr	7.04	0.029	
Umbr	7.05	0.029	
Umbr	7.06	0.029	
Umbr	7.07	0.029	
Umbr	7.08	0.029	
Umbr	7.09	0.029	

Name	Period sec	Acceleration	Damping %
Umbr	7.1	0.029	
Umbr	7.11	0.028	
Umbr	7.12	0.028	
Umbr	7.13	0.028	
Umbr	7.14	0.028	
Umbr	7.15	0.028	
Umbr	7.16	0.028	
Umbr	7.17	0.028	
Umbr	7.18	0.028	
Umbr	7.19	0.028	
Umbr	7.2	0.028	
Umbr	7.21	0.028	
Umbr	7.22	0.028	
Umbr	7.23	0.028	
Umbr	7.24	0.027	
Umbr	7.25	0.027	
Umbr	7.26	0.027	
Umbr	7.27	0.027	
Umbr	7.28	0.027	
Umbr	7.29	0.027	
Umbr	7.3	0.027	
Umbr	7.31	0.027	
Umbr	7.32	0.027	
Umbr	7.33	0.027	
Umbr	7.34	0.027	
Umbr	7.35	0.027	
Umbr	7.36	0.027	
Umbr	7.37	0.027	
Umbr	7.38	0.026	
Umbr	7.39	0.026	
Umbr	7.4	0.026	
Umbr	7.41	0.026	
Umbr	7.42	0.026	
Umbr	7.43	0.026	
Umbr	7.44	0.026	
Umbr	7.45	0.026	
Umbr	7.46	0.026	
Umbr	7.47	0.026	
Umbr	7.48	0.026	
Umbr	7.49	0.026	
Umbr	7.5	0.026	

**4.4 Load Cases**

**Table 4.5 - Load Cases - Summary**

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum
F	Linear Static

**4.5 Load Combinations**

**Table 4.6 - Load Combinations**

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB1	F	1.4		No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB2	F	1.2		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB3	F	1.2		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB4	F	1.2		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB5	F	1.2		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB6	F	1.2		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB7	F	0.9		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
COMB8	F	0.9		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM01	F	1		No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM02	F	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM03	F	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM04	F	1		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM05	F	1		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM06	F	1		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM07	F	1		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
CIM08	F	1		No
DER01	D	1.4	Linear Add	No
DER01	F	1.4		No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER02	F	1.2		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER03	F	1.2		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER04	F	1.2		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER05	F	1.2		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER06	F	1.2		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER07	F	0.9		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DER08	F	0.9		No
DERUD01	D	1.4	Linear Add	No
DERUD01	F	1.4		No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD02	F	1.2		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD03	F	1.2		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD04	F	1.2		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD05	F	1.2		No
DERUD06	D	1.2	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD06	F	1.2		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD07	F	0.9		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
DERUD08	F	0.9		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM09	F	0.6		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM10	F	0.6		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM11	F	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM12	F	1		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM13	F	1		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM14	F	1		No
CIM15	D	0.6	Linear Add	No
CIM15	F	0.6		No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB9	F	0.9		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB10	F	0.9		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
COMB11	F	0.9		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER09	F	1.2		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD09	F	1.2		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DER10	G	1.6		No
DER10	F	1.2		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD10	F	1.2		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DER11	F	1.2		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No
DERUD11	F	1.2		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	221.1316	287.4711	-287.4711	0	0	0	0
L	0	0	12.168	15.8184	-15.8184	0	0	0	0
LR	0	0	16.224	21.0912	-21.0912	0	0	0	0
EX Max	294.5548	0	0	9.574E-07	1650.6904	382.9212	0	0	0
EY Max	0	294.5548	0	1650.6904	0	382.9212	0	0	0
DISX Max	196.3699	0	0	0	1100.4603	255.2808	0	0	0
DISY Max	0	196.3699	0	1100.4603	0	255.2808	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	9.048	11.7624	-11.7624	0	0	0	0
DERUX Max	56.5466	0	0	0	317.8182	73.5105	0	0	0
DERUY Max	0	56.5466	0	317.8182	0	73.5105	0	0	0
F	0	0	50.024	65.0312	-65.0312	0	0	0	0
COMB1	0	0	379.6178	493.5032	-493.5032	0	0	0	0
COMB2	0	0	352.9675	458.8578	-458.8578	0	0	0	0
COMB3	0	0	363.5131	472.5671	-472.5671	0	0	0	0
COMB4	0	0	345.6667	449.3667	-449.3667	0	0	0	0
COMB5 Max	196.3699	58.911	337.5547	768.9592	661.6391	331.8651	0	0	0
COMB5 Min	-196.3699	-58.911	337.5547	108.6831	-1539.2814	-331.8651	0	0	0
COMB6 Max	58.911	196.3699	337.5547	1539.2814	-108.6831	331.8651	0	0	0
COMB6 Min	-58.911	-196.3699	337.5547	-661.6391	-768.9592	-331.8651	0	0	0
COMB7 Max	58.911	196.3699	244.04	1417.7123	12.886	331.8651	0	0	0
COMB7 Min	-58.911	-196.3699	244.04	-783.2082	-647.3901	-331.8651	0	0	0
COMB8 Max	196.3699	58.911	244.04	647.3901	783.2082	331.8651	0	0	0
COMB8 Min	-196.3699	-58.911	244.04	-12.886	-1417.7123	-331.8651	0	0	0
ENVE Max	196.3699	196.3699	379.6178	1539.2814	783.2082	331.8651	0	0	0
ENVE Min	-196.3699	-196.3699	244.04	-783.2082	-1539.2814	-331.8651	0	0	0
CIM01	0	0	271.1556	352.5023	-352.5023	0	0	0	0
CIM02	0	0	283.3236	368.3207	-368.3207	0	0	0	0
CIM03	0	0	287.3796	373.5935	-373.5935	0	0	0	0
CIM04	0	0	292.4496	380.1845	-380.1845	0	0	0	0
CIM05 Max	137.4589	41.2377	271.1556	583.5989	417.8199	232.3055	0	0	0
CIM05 Min	-137.4589	-41.2377	271.1556	121.4056	-1122.8245	-232.3055	0	0	0
CIM06 Max	41.2377	137.4589	271.1556	1122.8245	-121.4056	232.3055	0	0	0
CIM06 Min	-41.2377	-137.4589	271.1556	-417.8199	-583.5989	-232.3055	0	0	0
CIM07 Max	104.076	31.4192	292.4496	556.2581	203.0595	176.1438	0	0	0
CIM07 Min	-104.076	-31.4192	292.4496	204.1108	-963.4284	-176.1438	0	0	0
CIM08 Max	31.4192	104.076	292.4496	963.4284	-204.1108	176.1438	0	0	0
CIM08 Min	-31.4192	-104.076	292.4496	-203.0595	-556.2581	-176.1438	0	0	0
DER01	0	0	379.6178	493.5032	-493.5032	0	0	0	0
DER02	0	0	352.9675	458.8578	-458.8578	0	0	0	0
DER03	0	0	363.5131	472.5671	-472.5671	0	0	0	0
DER04	0	0	345.6667	449.3667	-449.3667	0	0	0	0
DER05 Max	294.5548	0	337.5547	438.8211	1211.8693	382.9212	0	0	0
DER05 Min	-294.5548	0	337.5547	438.8211	-2089.5115	-382.9212	0	0	0
DER06 Max	0	294.5548	337.5547	2089.5115	-438.8211	382.9212	0	0	0
DER06 Min	0	-294.5548	337.5547	-1211.8693	-438.8211	-382.9212	0	0	0
DER07 Max	294.5548	0	244.04	317.2521	1333.4384	382.9212	0	0	0
DER07 Min	-294.5548	0	244.04	317.2521	-1967.9425	-382.9212	0	0	0
DER08 Max	0	294.5548	244.04	1967.9425	-317.2521	382.9212	0	0	0
DER08 Min	0	-294.5548	244.04	-1333.4384	-317.2521	-382.9212	0	0	0
DERUD01	0	0	379.6178	493.5032	-493.5032	0	0	0	0
DERUD02	0	0	352.9675	458.8578	-458.8578	0	0	0	0
DERUD03	0	0	363.5131	472.5671	-472.5671	0	0	0	0
DERUD04	0	0	345.6667	449.3667	-449.3667	0	0	0	0



Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Max	56.5466	0	337.5547	438.8211	-121.0029	73.5105	0	0	0
DERUD05 Min	-56.5466	0	337.5547	438.8211	-756.6394	-73.5105	0	0	0
DERUD06 Max	0	56.5466	337.5547	756.6394	-438.8211	73.5105	0	0	0
DERUD06 Min	0	-56.5466	337.5547	121.0029	-438.8211	-73.5105	0	0	0
DERUD07 Max	56.5466	0	244.04	317.2521	0.5662	73.5105	0	0	0
DERUD07 Min	-56.5466	0	244.04	317.2521	-635.0703	-73.5105	0	0	0
DERUD08 Max	0	56.5466	244.04	635.0703	-317.2521	73.5105	0	0	0
DERUD08 Min	0	-56.5466	244.04	-0.5662	-317.2521	-73.5105	0	0	0
CIM09 Max	137.4589	41.2377	162.6934	442.598	558.8208	232.3055	0	0	0
CIM09 Min	-137.4589	-41.2377	162.6934	-19.5953	-981.8236	-232.3055	0	0	0
CIM10 Max	41.2377	137.4589	162.6934	981.8236	19.5953	232.3055	0	0	0
CIM10 Min	-41.2377	-137.4589	162.6934	-558.8208	-442.598	-232.3055	0	0	0
CIM11	0	0	280.2036	364.2647	-364.2647	0	0	0	0
CIM12	0	0	287.0676	373.1879	-373.1879	0	0	0	0
CIM13 Max	104.076	31.4192	287.0676	549.2615	210.0561	176.1438	0	0	0
CIM13 Min	-104.076	-31.4192	287.0676	197.1142	-956.4318	-176.1438	0	0	0
CIM14 Max	31.4192	104.076	287.0676	956.4318	-197.1142	176.1438	0	0	0
CIM14 Min	-31.4192	-104.076	287.0676	-210.0561	-549.2615	-176.1438	0	0	0
CIM15	0	0	162.6934	211.5014	-211.5014	0	0	0	0
COMB9	0	0	334.3723	434.684	-434.684	0	0	0	0
COMB10	0	0	337.0243	438.1316	-438.1316	0	0	0	0
COMB11	0	0	327.0715	425.193	-425.193	0	0	0	0
DER09	0	0	349.3795	454.1934	-454.1934	0	0	0	0
DERUD09	0	0	349.3795	454.1934	-454.1934	0	0	0	0
DER10	0	0	352.0315	457.641	-457.641	0	0	0	0
DERUD10	0	0	352.0315	457.641	-457.641	0	0	0	0
DER11	0	0	342.0787	444.7023	-444.7023	0	0	0	0
DERUD11	0	0	342.0787	444.7023	-444.7023	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	5477.59	5477.59	1.3	1.3	5477.59	5477.59	1.3	1.3	1.3	1.3

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	0	0	1	1.3	1.3	3
N1	D1	L	0	0	0	1	1.3	1.3	3
N1	D1	LR	0	0	0	1	1.3	1.3	3
N1	D1	EX Max	11.9	7.276E-09	0	1	1.3	1.3	3
N1	D1	EY Max	0	11.9	0	1	1.3	1.3	3
N1	D1	DISX Max	7.9	6.558E-09	0	1	1.3	1.3	3
N1	D1	DISY Max	4.067E-09	7.9	0	1	1.3	1.3	3
N1	D1	W	0	0	0	1	1.3	1.3	3
N1	D1	G	0	0	0	1	1.3	1.3	3
N1	D1	DERUX Max	2.3	0	0	1	1.3	1.3	3
N1	D1	DERUY Max	1.306E-09	2.3	0	1	1.3	1.3	3
N1	D1	F	0	0	0	1	1.3	1.3	3
N1	D1	COMB1	0	0	0	1	1.3	1.3	3
N1	D1	COMB2	0	0	0	1	1.3	1.3	3
N1	D1	COMB3	0	0	0	1	1.3	1.3	3
N1	D1	COMB4	0	0	0	1	1.3	1.3	3
N1	D1	COMB5 Max	7.9	2.4	0	1	1.3	1.3	3
N1	D1	COMB5 Min	-7.9	-2.4	0	1	1.3	1.3	3
N1	D1	COMB6 Max	2.4	7.9	0	1	1.3	1.3	3
N1	D1	COMB6 Min	-2.4	-7.9	0	1	1.3	1.3	3
N1	D1	COMB7 Max	2.4	7.9	0	1	1.3	1.3	3

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	COMB7 Min	-2.4	-7.9	0	1	1.3	1.3	3
N1	D1	COMB8 Max	7.9	2.4	0	1	1.3	1.3	3
N1	D1	COMB8 Min	-7.9	-2.4	0	1	1.3	1.3	3
N1	D1	ENVE Max	7.9	7.9	0	1	1.3	1.3	3
N1	D1	ENVE Min	-7.9	-7.9	0	1	1.3	1.3	3
N1	D1	CIM01	0	0	0	1	1.3	1.3	3
N1	D1	CIM02	0	0	0	1	1.3	1.3	3
N1	D1	CIM03	0	0	0	1	1.3	1.3	3
N1	D1	CIM04	0	0	0	1	1.3	1.3	3
N1	D1	CIM05 Max	5.5	1.7	0	1	1.3	1.3	3
N1	D1	CIM05 Min	-5.5	-1.7	0	1	1.3	1.3	3
N1	D1	CIM06 Max	1.7	5.5	0	1	1.3	1.3	3
N1	D1	CIM06 Min	-1.7	-5.5	0	1	1.3	1.3	3
N1	D1	CIM07 Max	4.2	1.3	0	1	1.3	1.3	3
N1	D1	CIM07 Min	-4.2	-1.3	0	1	1.3	1.3	3
N1	D1	CIM08 Max	1.3	4.2	0	1	1.3	1.3	3
N1	D1	CIM08 Min	-1.3	-4.2	0	1	1.3	1.3	3
N1	D1	DER01	0	0	0	1	1.3	1.3	3
N1	D1	DER02	0	0	0	1	1.3	1.3	3
N1	D1	DER03	0	0	0	1	1.3	1.3	3
N1	D1	DER04	0	0	0	1	1.3	1.3	3
N1	D1	DER05 Max	11.9	7.276E-09	0	1	1.3	1.3	3
N1	D1	DER05 Min	-11.9	-7.276E-09	0	1	1.3	1.3	3
N1	D1	DER06 Max	0	11.9	0	1	1.3	1.3	3
N1	D1	DER06 Min	0	-11.9	0	1	1.3	1.3	3
N1	D1	DER07 Max	11.9	7.276E-09	0	1	1.3	1.3	3
N1	D1	DER07 Min	-11.9	-7.276E-09	0	1	1.3	1.3	3
N1	D1	DER08 Max	0	11.9	0	1	1.3	1.3	3
N1	D1	DER08 Min	0	-11.9	0	1	1.3	1.3	3
N1	D1	DERUD01	0	0	0	1	1.3	1.3	3
N1	D1	DERUD02	0	0	0	1	1.3	1.3	3
N1	D1	DERUD03	0	0	0	1	1.3	1.3	3
N1	D1	DERUD04	0	0	0	1	1.3	1.3	3
N1	D1	DERUD05 Max	2.3	0	0	1	1.3	1.3	3
N1	D1	DERUD05 Min	-2.3	0	0	1	1.3	1.3	3
N1	D1	DERUD06 Max	1.306E-09	2.3	0	1	1.3	1.3	3
N1	D1	DERUD06 Min	-1.306E-09	-2.3	0	1	1.3	1.3	3
N1	D1	DERUD07 Max	2.3	0	0	1	1.3	1.3	3
N1	D1	DERUD07 Min	-2.3	0	0	1	1.3	1.3	3
N1	D1	DERUD08 Max	1.306E-09	2.3	0	1	1.3	1.3	3
N1	D1	DERUD08 Min	-1.306E-09	-2.3	0	1	1.3	1.3	3
N1	D1	CIM09 Max	5.5	1.7	0	1	1.3	1.3	3
N1	D1	CIM09 Min	-5.5	-1.7	0	1	1.3	1.3	3
N1	D1	CIM10 Max	1.7	5.5	0	1	1.3	1.3	3
N1	D1	CIM10 Min	-1.7	-5.5	0	1	1.3	1.3	3
N1	D1	CIM11	0	0	0	1	1.3	1.3	3
N1	D1	CIM12	0	0	0	1	1.3	1.3	3
N1	D1	CIM13 Max	4.2	1.3	0	1	1.3	1.3	3
N1	D1	CIM13 Min	-4.2	-1.3	0	1	1.3	1.3	3
N1	D1	CIM14 Max	1.3	4.2	0	1	1.3	1.3	3
N1	D1	CIM14 Min	-1.3	-4.2	0	1	1.3	1.3	3
N1	D1	CIM15	0	0	0	1	1.3	1.3	3
N1	D1	COMB9	0	0	0	1	1.3	1.3	3
N1	D1	COMB10	0	0	0	1	1.3	1.3	3
N1	D1	COMB11	0	0	0	1	1.3	1.3	3
N1	D1	DER09	0	0	0	1	1.3	1.3	3
N1	D1	DERUD09	0	0	0	1	1.3	1.3	3
N1	D1	DER10	0	0	0	1	1.3	1.3	3
N1	D1	DERUD10	0	0	0	1	1.3	1.3	3
N1	D1	DER11	0	0	0	1	1.3	1.3	3

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	DERUD11	0	0	0	1	1.3	1.3	3

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	X	0	0	1.135
N1	D	Y	0	0	1.098
N1	L	X	0	0	1.173
N1	L	Y	0	0	1.191
N1	LR	X	0	0	1.214
N1	LR	Y	0	0	1.142
N1	EX Max	X	11.9	11.9	1
N1	EY Max	Y	11.9	11.9	1
N1	DISX Max	X	7.9	7.9	1
N1	DISY Max	Y	7.9	7.9	1
N1	G	X	0	0	1.114
N1	G	Y	0	0	1.103
N1	DERUX Max	X	2.3	2.3	1
N1	DERUY Max	Y	2.3	2.3	1
N1	F	X	0	0	1.344
N1	F	Y	0	0	1.189
N1	COMB1	X	0	0	1.174
N1	COMB1	Y	0	0	1.119
N1	COMB2	X	0	0	1.174
N1	COMB2	Y	0	0	1.125
N1	COMB3	X	0	0	1.176
N1	COMB3	Y	0	0	1.124
N1	COMB4	X	0	0	1.174
N1	COMB4	Y	0	0	1.123
N1	COMB5 Max	X	7.9	7.9	1
N1	COMB5 Max	Y	2.4	2.4	1
N1	COMB5 Min	X	7.9	7.9	1
N1	COMB5 Min	Y	2.4	2.4	1
N1	COMB6 Max	X	2.4	2.4	1
N1	COMB6 Max	Y	7.9	7.9	1
N1	COMB6 Min	X	2.4	2.4	1
N1	COMB6 Min	Y	7.9	7.9	1
N1	COMB7 Max	X	2.4	2.4	1
N1	COMB7 Max	Y	7.9	7.9	1
N1	COMB7 Min	X	2.4	2.4	1
N1	COMB7 Min	Y	7.9	7.9	1
N1	COMB8 Max	X	7.9	7.9	1
N1	COMB8 Max	Y	2.4	2.4	1
N1	COMB8 Min	X	7.9	7.9	1
N1	COMB8 Min	Y	2.4	2.4	1
N1	ENVE Max	X	7.9	7.9	1
N1	ENVE Max	Y	7.9	7.9	1
N1	ENVE Min	X	7.9	7.9	1
N1	ENVE Min	Y	7.9	7.9	1
N1	CIM01	X	0	0	1.174
N1	CIM01	Y	0	0	1.119
N1	CIM02	X	0	0	1.174
N1	CIM02	Y	0	0	1.123
N1	CIM03	X	0	0	1.175
N1	CIM03	Y	0	0	1.12
N1	CIM04	X	0	0	1.175
N1	CIM04	Y	0	0	1.123
N1	CIM05 Max	X	5.5	5.5	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	CIM05 Max	Y	1.7	1.7	1
N1	CIM05 Min	X	5.5	5.5	1
N1	CIM05 Min	Y	1.7	1.7	1
N1	CIM06 Max	X	1.7	1.7	1
N1	CIM06 Max	Y	5.5	5.5	1
N1	CIM06 Min	X	1.7	1.7	1
N1	CIM06 Min	Y	5.5	5.5	1
N1	CIM07 Max	X	4.2	4.2	1
N1	CIM07 Max	Y	1.3	1.3	1
N1	CIM07 Min	X	4.2	4.2	1
N1	CIM07 Min	Y	1.3	1.3	1
N1	CIM08 Max	X	1.3	1.3	1
N1	CIM08 Max	Y	4.2	4.2	1
N1	CIM08 Min	X	1.3	1.3	1
N1	CIM08 Min	Y	4.2	4.2	1
N1	DER01	X	0	0	1.174
N1	DER01	Y	0	0	1.119
N1	DER02	X	0	0	1.174
N1	DER02	Y	0	0	1.125
N1	DER03	X	0	0	1.176
N1	DER03	Y	0	0	1.124
N1	DER04	X	0	0	1.174
N1	DER04	Y	0	0	1.123
N1	DER05 Max	X	11.9	11.9	1
N1	DER05 Min	X	11.9	11.9	1
N1	DER06 Max	Y	11.9	11.9	1
N1	DER06 Min	Y	11.9	11.9	1
N1	DER07 Max	X	11.9	11.9	1
N1	DER07 Min	X	11.9	11.9	1
N1	DER08 Max	Y	11.9	11.9	1
N1	DER08 Min	Y	11.9	11.9	1
N1	DERUD01	X	0	0	1.174
N1	DERUD01	Y	0	0	1.119
N1	DERUD02	X	0	0	1.174
N1	DERUD02	Y	0	0	1.125
N1	DERUD03	X	0	0	1.176
N1	DERUD03	Y	0	0	1.124
N1	DERUD04	X	0	0	1.174
N1	DERUD04	Y	0	0	1.123
N1	DERUD05 Max	X	2.3	2.3	1
N1	DERUD05 Min	X	2.3	2.3	1
N1	DERUD06 Max	Y	2.3	2.3	1
N1	DERUD06 Min	Y	2.3	2.3	1
N1	DERUD07 Max	X	2.3	2.3	1
N1	DERUD07 Min	X	2.3	2.3	1
N1	DERUD08 Max	Y	2.3	2.3	1
N1	DERUD08 Min	Y	2.3	2.3	1
N1	CIM09 Max	X	5.5	5.5	1
N1	CIM09 Max	Y	1.7	1.7	1
N1	CIM09 Min	X	5.5	5.5	1
N1	CIM09 Min	Y	1.7	1.7	1
N1	CIM10 Max	X	1.7	1.7	1
N1	CIM10 Max	Y	5.5	5.5	1
N1	CIM10 Min	X	1.7	1.7	1
N1	CIM10 Min	Y	5.5	5.5	1
N1	CIM11	X	0	0	1.171
N1	CIM11	Y	0	0	1.118
N1	CIM12	X	0	0	1.172
N1	CIM12	Y	0	0	1.122
N1	CIM13 Max	X	4.2	4.2	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	CIM13 Max	Y	1.3	1.3	1
N1	CIM13 Min	X	4.2	4.2	1
N1	CIM13 Min	Y	1.3	1.3	1
N1	CIM14 Max	X	1.3	1.3	1
N1	CIM14 Max	Y	4.2	4.2	1
N1	CIM14 Min	X	1.3	1.3	1
N1	CIM14 Min	Y	4.2	4.2	1
N1	CIM15	X	0	0	1.174
N1	CIM15	Y	0	0	1.119
N1	COMB9	X	0	0	1.166
N1	COMB9	Y	0	0	1.121
N1	COMB10	X	0	0	1.164
N1	COMB10	Y	0	0	1.118
N1	COMB11	X	0	0	1.165
N1	COMB11	Y	0	0	1.119
N1	DER09	X	0	0	1.173
N1	DER09	Y	0	0	1.125
N1	DERUD09	X	0	0	1.173
N1	DERUD09	Y	0	0	1.125
N1	DER10	X	0	0	1.171
N1	DER10	Y	0	0	1.122
N1	DERUD10	X	0	0	1.171
N1	DERUD10	Y	0	0	1.122
N1	DER11	X	0	0	1.173
N1	DER11	Y	0	0	1.122
N1	DERUD11	X	0	0	1.173
N1	DERUD11	Y	0	0	1.122

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	D	X	4.664E-07	1	0	0	6
N2	D	Y	4.664E-07	3	2.6	0	6
N2	L	X	4.684E-08	1	0	0	6
N2	L	Y	4.684E-08	3	2.6	0	6
N2	LR	X	4.996E-08	1	0	0	6
N2	LR	Y	4.996E-08	3	2.6	0	6
N2	EX Max	X	0.005257	4	2.6	2.6	6
N2	EY Max	Y	0.005257	3	2.6	0	6
N2	DISX Max	X	0.003505	4	2.6	2.6	6
N2	DISY Max	Y	0.003505	3	2.6	0	6
N2	G	X	2.786E-08	1	0	0	6
N2	G	Y	2.786E-08	3	2.6	0	6
N2	DERUX Max	X	0.001012	4	2.6	2.6	6
N2	DERUY Max	Y	0.001012	3	2.6	0	6
N2	F	X	1.926E-07	1	0	0	6
N2	F	Y	1.926E-07	3	2.6	0	6
N2	COMB1	X	1E-06	1	0	0	6
N2	COMB1	Y	1E-06	3	2.6	0	6
N2	COMB2	X	1E-06	1	0	0	6
N2	COMB2	Y	1E-06	3	2.6	0	6
N2	COMB3	X	1E-06	1	0	0	6
N2	COMB3	Y	1E-06	3	2.6	0	6
N2	COMB4	X	1E-06	1	0	0	6
N2	COMB4	Y	1E-06	3	2.6	0	6
N2	COMB5 Max	X	0.003505	2	0	2.6	6
N2	COMB5 Max	Y	0.001052	3	2.6	0	6
N2	COMB5 Min	X	0.003505	4	2.6	2.6	6
N2	COMB5 Min	Y	0.001052	4	2.6	2.6	6

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	COMB6 Max	X	0.001052	2	0	2.6	6
N2	COMB6 Max	Y	0.003505	3	2.6	0	6
N2	COMB6 Min	X	0.001052	4	2.6	2.6	6
N2	COMB6 Min	Y	0.003505	4	2.6	2.6	6
N2	COMB7 Max	X	0.001052	2	0	2.6	6
N2	COMB7 Max	Y	0.003505	3	2.6	0	6
N2	COMB7 Min	X	0.001052	4	2.6	2.6	6
N2	COMB7 Min	Y	0.003505	4	2.6	2.6	6
N2	COMB8 Max	X	0.003505	2	0	2.6	6
N2	COMB8 Max	Y	0.001052	3	2.6	0	6
N2	COMB8 Min	X	0.003505	4	2.6	2.6	6
N2	COMB8 Min	Y	0.001052	4	2.6	2.6	6
N2	ENVE Max	X	0.003505	2	0	2.6	6
N2	ENVE Max	Y	0.003505	3	2.6	0	6
N2	ENVE Min	X	0.003505	4	2.6	2.6	6
N2	ENVE Min	Y	0.003505	4	2.6	2.6	6
N2	CIM01	X	1E-06	1	0	0	6
N2	CIM01	Y	1E-06	3	2.6	0	6
N2	CIM02	X	1E-06	1	0	0	6
N2	CIM02	Y	1E-06	3	2.6	0	6
N2	CIM03	X	1E-06	1	0	0	6
N2	CIM03	Y	1E-06	3	2.6	0	6
N2	CIM04	X	1E-06	1	0	0	6
N2	CIM04	Y	1E-06	3	2.6	0	6
N2	CIM05 Max	X	0.002454	2	0	2.6	6
N2	CIM05 Max	Y	0.000737	3	2.6	0	6
N2	CIM05 Min	X	0.002454	4	2.6	2.6	6
N2	CIM05 Min	Y	0.000737	4	2.6	2.6	6
N2	CIM06 Max	X	0.000737	2	0	2.6	6
N2	CIM06 Max	Y	0.002454	3	2.6	0	6
N2	CIM06 Min	X	0.000737	4	2.6	2.6	6
N2	CIM06 Min	Y	0.002454	4	2.6	2.6	6
N2	CIM07 Max	X	0.001858	2	0	2.6	6
N2	CIM07 Max	Y	0.000561	3	2.6	0	6
N2	CIM07 Min	X	0.001858	4	2.6	2.6	6
N2	CIM07 Min	Y	0.000561	4	2.6	2.6	6
N2	CIM08 Max	X	0.000561	2	0	2.6	6
N2	CIM08 Max	Y	0.001858	3	2.6	0	6
N2	CIM08 Min	X	0.000561	4	2.6	2.6	6
N2	CIM08 Min	Y	0.001858	4	2.6	2.6	6
N2	DER01	X	1E-06	1	0	0	6
N2	DER01	Y	1E-06	3	2.6	0	6
N2	DER02	X	1E-06	1	0	0	6
N2	DER02	Y	1E-06	3	2.6	0	6
N2	DER03	X	1E-06	1	0	0	6
N2	DER03	Y	1E-06	3	2.6	0	6
N2	DER04	X	1E-06	1	0	0	6
N2	DER04	Y	1E-06	3	2.6	0	6
N2	DER05 Max	X	0.005258	2	0	2.6	6
N2	DER05 Min	X	0.005258	4	2.6	2.6	6
N2	DER06 Max	Y	0.005258	3	2.6	0	6
N2	DER06 Min	Y	0.005258	4	2.6	2.6	6
N2	DER07 Max	X	0.005257	2	0	2.6	6
N2	DER07 Min	X	0.005257	4	2.6	2.6	6
N2	DER08 Max	Y	0.005257	3	2.6	0	6
N2	DER08 Min	Y	0.005257	4	2.6	2.6	6
N2	DERUD01	X	1E-06	1	0	0	6
N2	DERUD01	Y	1E-06	3	2.6	0	6
N2	DERUD02	X	1E-06	1	0	0	6
N2	DERUD02	Y	1E-06	3	2.6	0	6

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	DERUD03	X	1E-06	1	0	0	6
N2	DERUD03	Y	1E-06	3	2.6	0	6
N2	DERUD04	X	1E-06	1	0	0	6
N2	DERUD04	Y	1E-06	3	2.6	0	6
N2	DERUD05 Max	X	0.001013	2	0	2.6	6
N2	DERUD05 Min	X	0.001013	4	2.6	2.6	6
N2	DERUD06 Max	Y	0.001013	3	2.6	0	6
N2	DERUD06 Min	Y	0.001013	4	2.6	2.6	6
N2	DERUD07 Max	X	0.001012	2	0	2.6	6
N2	DERUD07 Min	X	0.001012	4	2.6	2.6	6
N2	DERUD08 Max	Y	0.001012	3	2.6	0	6
N2	DERUD08 Min	Y	0.001012	4	2.6	2.6	6
N2	CIM09 Max	X	0.002454	2	0	2.6	6
N2	CIM09 Max	Y	0.000736	3	2.6	0	6
N2	CIM09 Min	X	0.002454	4	2.6	2.6	6
N2	CIM09 Min	Y	0.000736	4	2.6	2.6	6
N2	CIM10 Max	X	0.000736	2	0	2.6	6
N2	CIM10 Max	Y	0.002454	3	2.6	0	6
N2	CIM10 Min	X	0.000736	4	2.6	2.6	6
N2	CIM10 Min	Y	0.002454	4	2.6	2.6	6
N2	CIM11	X	1E-06	1	0	0	6
N2	CIM11	Y	1E-06	3	2.6	0	6
N2	CIM12	X	1E-06	1	0	0	6
N2	CIM12	Y	1E-06	3	2.6	0	6
N2	CIM13 Max	X	0.001858	2	0	2.6	6
N2	CIM13 Max	Y	0.000561	3	2.6	0	6
N2	CIM13 Min	X	0.001858	4	2.6	2.6	6
N2	CIM13 Min	Y	0.000561	4	2.6	2.6	6
N2	CIM14 Max	X	0.000561	2	0	2.6	6
N2	CIM14 Max	Y	0.001858	3	2.6	0	6
N2	CIM14 Min	X	0.000561	4	2.6	2.6	6
N2	CIM14 Min	Y	0.001858	4	2.6	2.6	6
N2	CIM15	X	3.954E-07	1	0	0	6
N2	CIM15	Y	3.954E-07	3	2.6	0	6
N2	COMB9	X	1E-06	1	0	0	6
N2	COMB9	Y	1E-06	3	2.6	0	6
N2	COMB10	X	1E-06	1	0	0	6
N2	COMB10	Y	1E-06	3	2.6	0	6
N2	COMB11	X	1E-06	1	0	0	6
N2	COMB11	Y	1E-06	3	2.6	0	6
N2	DER09	X	1E-06	1	0	0	6
N2	DER09	Y	1E-06	3	2.6	0	6
N2	DERUD09	X	1E-06	1	0	0	6
N2	DERUD09	Y	1E-06	3	2.6	0	6
N2	DER10	X	1E-06	1	0	0	6
N2	DER10	Y	1E-06	3	2.6	0	6
N2	DERUD10	X	1E-06	1	0	0	6
N2	DERUD10	Y	1E-06	3	2.6	0	6
N2	DER11	X	1E-06	1	0	0	6
N2	DER11	Y	1E-06	3	2.6	0	6
N2	DERUD11	X	1E-06	1	0	0	6
N2	DERUD11	Y	1E-06	3	2.6	0	6
N1	D	X	0	3	2.6	0	3
N1	D	Y	0	4	2.6	2.6	3
N1	L	X	0	3	2.6	0	3
N1	L	Y	0	3	2.6	0	3
N1	LR	X	0	3	2.6	0	3
N1	LR	Y	0	4	2.6	2.6	3
N1	EX Max	X	0.00395	4	2.6	2.6	3
N1	EY Max	Y	0.00395	4	2.6	2.6	3

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DISX Max	X	0.002633	4	2.6	2.6	3
N1	DISY Max	Y	0.002633	4	2.6	2.6	3
N1	G	X	0	3	2.6	0	3
N1	G	Y	0	4	2.6	2.6	3
N1	DERUX Max	X	0.00076	4	2.6	2.6	3
N1	DERUY Max	Y	0.00076	4	2.6	2.6	3
N1	F	X	0	3	2.6	0	3
N1	F	Y	0	4	2.6	2.6	3
N1	COMB1	X	0	3	2.6	0	3
N1	COMB1	Y	0	4	2.6	2.6	3
N1	COMB2	X	0	3	2.6	0	3
N1	COMB2	Y	0	4	2.6	2.6	3
N1	COMB3	X	0	3	2.6	0	3
N1	COMB3	Y	0	4	2.6	2.6	3
N1	COMB4	X	0	3	2.6	0	3
N1	COMB4	Y	0	4	2.6	2.6	3
N1	COMB5 Max	X	0.002633	4	2.6	2.6	3
N1	COMB5 Max	Y	0.00079	4	2.6	2.6	3
N1	COMB5 Min	X	0.002633	4	2.6	2.6	3
N1	COMB5 Min	Y	0.00079	4	2.6	2.6	3
N1	COMB6 Max	X	0.00079	4	2.6	2.6	3
N1	COMB6 Max	Y	0.002633	4	2.6	2.6	3
N1	COMB6 Min	X	0.00079	4	2.6	2.6	3
N1	COMB6 Min	Y	0.002633	4	2.6	2.6	3
N1	COMB7 Max	X	0.00079	4	2.6	2.6	3
N1	COMB7 Max	Y	0.002633	4	2.6	2.6	3
N1	COMB7 Min	X	0.00079	4	2.6	2.6	3
N1	COMB7 Min	Y	0.002633	4	2.6	2.6	3
N1	COMB8 Max	X	0.002633	4	2.6	2.6	3
N1	COMB8 Max	Y	0.00079	4	2.6	2.6	3
N1	COMB8 Min	X	0.002633	4	2.6	2.6	3
N1	COMB8 Min	Y	0.00079	4	2.6	2.6	3
N1	ENVE Max	X	0.002633	4	2.6	2.6	3
N1	ENVE Max	Y	0.002633	4	2.6	2.6	3
N1	ENVE Min	X	0.002633	4	2.6	2.6	3
N1	ENVE Min	Y	0.002633	4	2.6	2.6	3
N1	CIM01	X	0	3	2.6	0	3
N1	CIM01	Y	0	4	2.6	2.6	3
N1	CIM02	X	0	3	2.6	0	3
N1	CIM02	Y	0	4	2.6	2.6	3
N1	CIM03	X	0	3	2.6	0	3
N1	CIM03	Y	0	4	2.6	2.6	3
N1	CIM04	X	0	3	2.6	0	3
N1	CIM04	Y	0	4	2.6	2.6	3
N1	CIM05 Max	X	0.001843	4	2.6	2.6	3
N1	CIM05 Max	Y	0.000553	4	2.6	2.6	3
N1	CIM05 Min	X	0.001843	4	2.6	2.6	3
N1	CIM05 Min	Y	0.000553	4	2.6	2.6	3
N1	CIM06 Max	X	0.000553	4	2.6	2.6	3
N1	CIM06 Max	Y	0.001843	4	2.6	2.6	3
N1	CIM06 Min	X	0.000553	4	2.6	2.6	3
N1	CIM06 Min	Y	0.001843	4	2.6	2.6	3
N1	CIM07 Max	X	0.001396	4	2.6	2.6	3
N1	CIM07 Max	Y	0.000421	4	2.6	2.6	3
N1	CIM07 Min	X	0.001396	4	2.6	2.6	3
N1	CIM07 Min	Y	0.000421	4	2.6	2.6	3
N1	CIM08 Max	X	0.000421	4	2.6	2.6	3
N1	CIM08 Max	Y	0.001396	4	2.6	2.6	3
N1	CIM08 Min	X	0.000421	4	2.6	2.6	3
N1	CIM08 Min	Y	0.001396	4	2.6	2.6	3



Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER01	X	0	3	2.6	0	3
N1	DER01	Y	0	4	2.6	2.6	3
N1	DER02	X	0	3	2.6	0	3
N1	DER02	Y	0	4	2.6	2.6	3
N1	DER03	X	0	3	2.6	0	3
N1	DER03	Y	0	4	2.6	2.6	3
N1	DER04	X	0	3	2.6	0	3
N1	DER04	Y	0	4	2.6	2.6	3
N1	DER05 Max	X	0.00395	4	2.6	2.6	3
N1	DER05 Min	X	0.00395	4	2.6	2.6	3
N1	DER06 Max	Y	0.00395	4	2.6	2.6	3
N1	DER06 Min	Y	0.00395	4	2.6	2.6	3
N1	DER07 Max	X	0.00395	4	2.6	2.6	3
N1	DER07 Min	X	0.00395	4	2.6	2.6	3
N1	DER08 Max	Y	0.00395	4	2.6	2.6	3
N1	DER08 Min	Y	0.00395	4	2.6	2.6	3
N1	DERUD01	X	0	3	2.6	0	3
N1	DERUD01	Y	0	4	2.6	2.6	3
N1	DERUD02	X	0	3	2.6	0	3
N1	DERUD02	Y	0	4	2.6	2.6	3
N1	DERUD03	X	0	3	2.6	0	3
N1	DERUD03	Y	0	4	2.6	2.6	3
N1	DERUD04	X	0	3	2.6	0	3
N1	DERUD04	Y	0	4	2.6	2.6	3
N1	DERUD05 Max	X	0.00076	4	2.6	2.6	3
N1	DERUD05 Min	X	0.00076	4	2.6	2.6	3
N1	DERUD06 Max	Y	0.00076	4	2.6	2.6	3
N1	DERUD06 Min	Y	0.00076	4	2.6	2.6	3
N1	DERUD07 Max	X	0.00076	4	2.6	2.6	3
N1	DERUD07 Min	X	0.00076	4	2.6	2.6	3
N1	DERUD08 Max	Y	0.00076	4	2.6	2.6	3
N1	DERUD08 Min	Y	0.00076	4	2.6	2.6	3
N1	CIM09 Max	X	0.001843	4	2.6	2.6	3
N1	CIM09 Max	Y	0.000553	4	2.6	2.6	3
N1	CIM09 Min	X	0.001843	4	2.6	2.6	3
N1	CIM09 Min	Y	0.000553	4	2.6	2.6	3
N1	CIM10 Max	X	0.000553	4	2.6	2.6	3
N1	CIM10 Max	Y	0.001843	4	2.6	2.6	3
N1	CIM10 Min	X	0.000553	4	2.6	2.6	3
N1	CIM10 Min	Y	0.001843	4	2.6	2.6	3
N1	CIM11	X	0	3	2.6	0	3
N1	CIM11	Y	0	4	2.6	2.6	3
N1	CIM12	X	0	3	2.6	0	3
N1	CIM12	Y	0	4	2.6	2.6	3
N1	CIM13 Max	X	0.001396	4	2.6	2.6	3
N1	CIM13 Max	Y	0.000421	4	2.6	2.6	3
N1	CIM13 Min	X	0.001396	4	2.6	2.6	3
N1	CIM13 Min	Y	0.000421	4	2.6	2.6	3
N1	CIM14 Max	X	0.000421	4	2.6	2.6	3
N1	CIM14 Max	Y	0.001396	4	2.6	2.6	3
N1	CIM14 Min	X	0.000421	4	2.6	2.6	3
N1	CIM14 Min	Y	0.001396	4	2.6	2.6	3
N1	CIM15	X	0	3	2.6	0	3
N1	CIM15	Y	0	4	2.6	2.6	3
N1	COMB9	X	0	3	2.6	0	3
N1	COMB9	Y	0	4	2.6	2.6	3
N1	COMB10	X	0	3	2.6	0	3
N1	COMB10	Y	0	4	2.6	2.6	3
N1	COMB11	X	0	3	2.6	0	3
N1	COMB11	Y	0	4	2.6	2.6	3

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER09	X	0	3	2.6	0	3
N1	DER09	Y	0	4	2.6	2.6	3
N1	DERUD09	X	0	3	2.6	0	3
N1	DERUD09	Y	0	4	2.6	2.6	3
N1	DER10	X	0	3	2.6	0	3
N1	DER10	Y	0	4	2.6	2.6	3
N1	DERUD10	X	0	3	2.6	0	3
N1	DERUD10	Y	0	4	2.6	2.6	3
N1	DER11	X	0	3	2.6	0	3
N1	DER11	Y	0	4	2.6	2.6	3
N1	DERUD11	X	0	3	2.6	0	3
N1	DERUD11	Y	0	4	2.6	2.6	3

Table 5.6 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	D	Top	132.7816	0	0	0	172.6161	-172.6161
N2	D	Bottom	167.4148	0	0	0	217.6392	-217.6392
N2	L	Top	12.168	0	0	0	15.8184	-15.8184
N2	L	Bottom	12.168	0	0	0	15.8184	-15.8184
N2	LR	Top	16.224	0	0	0	21.0912	-21.0912
N2	LR	Bottom	16.224	0	0	0	21.0912	-21.0912
N2	EX Max	Top	0	255.8384	0	332.59	0	0.0029
N2	EX Max	Bottom	0	255.8384	0	332.59	0	769.8836
N2	EY Max	Top	0	0	255.8384	332.59	0.0029	0
N2	EY Max	Bottom	0	0	255.8384	332.59	769.8836	5.84E-07
N2	DISX Max	Top	0	170.559	0	221.7266	0	0.0019
N2	DISX Max	Bottom	0	170.559	0	221.7266	0	513.2557
N2	DISY Max	Top	0	0	170.559	221.7266	0.0019	0
N2	DISY Max	Bottom	0	0	170.559	221.7266	513.2557	0
N2	W	Top	0	0	0	0	0	0
N2	W	Bottom	0	0	0	0	0	0
N2	G	Top	9.048	0	0	0	11.7624	-11.7624
N2	G	Bottom	9.048	0	0	0	11.7624	-11.7624
N2	DERUX Max	Top	0	49.159	0	63.9066	0	0.0006
N2	DERUX Max	Bottom	0	49.159	0	63.9066	0	147.9329
N2	DERUY Max	Top	0	0	49.159	63.9066	0.0006	0
N2	DERUY Max	Bottom	0	0	49.159	63.9066	147.9329	0
N2	F	Top	50.024	0	0	0	65.0312	-65.0312
N2	F	Bottom	50.024	0	0	0	65.0312	-65.0312
N2	COMB1	Top	255.9278	0	0	0	332.7062	-332.7062
N2	COMB1	Bottom	304.4143	0	0	0	395.7386	-395.7386
N2	COMB2	Top	246.9475	0	0	0	321.0318	-321.0318
N2	COMB2	Bottom	288.5074	0	0	0	375.0596	-375.0596
N2	COMB3	Top	257.4931	0	0	0	334.7411	-334.7411
N2	COMB3	Bottom	299.053	0	0	0	388.7688	-388.7688
N2	COMB4	Top	239.6467	0	0	0	311.5407	-311.5407
N2	COMB4	Bottom	281.2066	0	0	0	365.5685	-365.5685
N2	COMB5 Max	Top	231.5347	170.559	51.1677	288.2446	300.9957	-300.9932
N2	COMB5 Max	Bottom	273.0946	170.559	51.1677	288.2446	508.9996	158.2328
N2	COMB5 Min	Top	231.5347	-170.559	-51.1677	-288.2446	300.9946	-300.9971
N2	COMB5 Min	Bottom	273.0946	-170.559	-51.1677	-288.2446	201.0462	-868.2787
N2	COMB6 Max	Top	231.5347	51.1677	170.559	288.2446	300.9971	-300.9946
N2	COMB6 Max	Bottom	273.0946	51.1677	170.559	288.2446	868.2787	-201.0462
N2	COMB6 Min	Top	231.5347	-51.1677	-170.559	-288.2446	300.9932	-300.9957
N2	COMB6 Min	Bottom	273.0946	-51.1677	-170.559	-288.2446	-158.2328	-508.9996
N2	COMB7 Max	Top	164.525	51.1677	170.559	288.2446	213.8845	-213.882
N2	COMB7 Max	Bottom	195.6949	51.1677	170.559	288.2446	767.6591	-100.4267
N2	COMB7 Min	Top	164.525	-51.1677	-170.559	-288.2446	213.8806	-213.8831

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	COMB7 Min	Bottom	195.6949	-51.1677	-170.559	-288.2446	-258.8523	-408.3801
N2	COMB8 Max	Top	164.525	170.559	51.1677	288.2446	213.8831	-213.8806
N2	COMB8 Max	Bottom	195.6949	170.559	51.1677	288.2446	408.3801	258.8523
N2	COMB8 Min	Top	164.525	-170.559	-51.1677	-288.2446	213.882	-213.8845
N2	COMB8 Min	Bottom	195.6949	-170.559	-51.1677	-288.2446	100.4267	-767.6591
N2	ENVE Max	Top	257.4931	170.559	170.559	288.2446	334.7411	-213.8806
N2	ENVE Max	Bottom	304.4143	170.559	170.559	288.2446	868.2787	258.8523
N2	ENVE Min	Top	164.525	-170.559	-170.559	-288.2446	213.8806	-334.7411
N2	ENVE Min	Bottom	195.6949	-170.559	-170.559	-288.2446	-258.8523	-868.2787
N2	CIM01	Top	182.8056	0	0	0	237.6473	-237.6473
N2	CIM01	Bottom	217.4388	0	0	0	282.6704	-282.6704
N2	CIM02	Top	194.9736	0	0	0	253.4657	-253.4657
N2	CIM02	Bottom	229.6068	0	0	0	298.4888	-298.4888
N2	CIM03	Top	199.0296	0	0	0	258.7385	-258.7385
N2	CIM03	Bottom	233.6628	0	0	0	303.7616	-303.7616
N2	CIM04	Top	204.0996	0	0	0	265.3295	-265.3295
N2	CIM04	Bottom	238.7328	0	0	0	310.3526	-310.3526
N2	CIM05 Max	Top	182.8056	119.3913	35.8174	201.7712	237.6477	-237.6459
N2	CIM05 Max	Bottom	217.4388	119.3913	35.8174	201.7712	390.4541	76.6086
N2	CIM05 Min	Top	182.8056	-119.3913	-35.8174	-201.7712	237.6469	-237.6486
N2	CIM05 Min	Bottom	217.4388	-119.3913	-35.8174	-201.7712	174.8867	-641.9495
N2	CIM06 Max	Top	182.8056	35.8174	119.3913	201.7712	237.6486	-237.6469
N2	CIM06 Max	Bottom	217.4388	35.8174	119.3913	201.7712	641.9495	-174.8867
N2	CIM06 Min	Top	182.8056	-35.8174	-119.3913	-201.7712	237.6459	-237.6477
N2	CIM06 Min	Bottom	217.4388	-35.8174	-119.3913	-201.7712	-76.6086	-390.4541
N2	CIM07 Max	Top	204.0996	90.3962	27.2894	152.9914	265.3298	-265.3284
N2	CIM07 Max	Bottom	238.7328	90.3962	27.2894	152.9914	392.4736	-38.3271
N2	CIM07 Min	Top	204.0996	-90.3962	-27.2894	-152.9914	265.3292	-265.3305
N2	CIM07 Min	Bottom	238.7328	-90.3962	-27.2894	-152.9914	228.2317	-582.3782
N2	CIM08 Max	Top	204.0996	27.2894	90.3962	152.9914	265.3305	-265.3292
N2	CIM08 Max	Bottom	238.7328	27.2894	90.3962	152.9914	582.3782	-228.2317
N2	CIM08 Min	Top	204.0996	-27.2894	-90.3962	-152.9914	265.3284	-265.3298
N2	CIM08 Min	Bottom	238.7328	-27.2894	-90.3962	-152.9914	38.3271	-392.4736
N2	DER01	Top	255.9278	0	0	0	332.7062	-332.7062
N2	DER01	Bottom	304.4143	0	0	0	395.7386	-395.7386
N2	DER02	Top	246.9475	0	0	0	321.0318	-321.0318
N2	DER02	Bottom	288.5074	0	0	0	375.0596	-375.0596
N2	DER03	Top	257.4931	0	0	0	334.7411	-334.7411
N2	DER03	Bottom	299.053	0	0	0	388.7688	-388.7688
N2	DER04	Top	239.6467	0	0	0	311.5407	-311.5407
N2	DER04	Bottom	281.2066	0	0	0	365.5685	-365.5685
N2	DER05 Max	Top	231.5347	255.8384	0	332.59	300.9951	-300.9922
N2	DER05 Max	Bottom	273.0946	255.8384	0	332.59	355.0229	-414.8607
N2	DER05 Min	Top	231.5347	-255.8384	0	-332.59	300.9951	-300.9981
N2	DER05 Min	Bottom	273.0946	-255.8384	0	-332.59	355.0229	-1124.9065
N2	DER06 Max	Top	231.5347	0	255.8384	332.59	300.9981	-300.9951
N2	DER06 Max	Bottom	273.0946	0	255.8384	332.59	1124.9065	-355.0229
N2	DER06 Min	Top	231.5347	0	-255.8384	-332.59	300.9922	-300.9951
N2	DER06 Min	Bottom	273.0946	0	-255.8384	-332.59	-414.8607	-355.0229
N2	DER07 Max	Top	164.525	255.8384	0	332.59	213.8826	-213.8796
N2	DER07 Max	Bottom	195.6949	255.8384	0	332.59	254.4034	515.4802
N2	DER07 Min	Top	164.525	-255.8384	0	-332.59	213.8826	-213.8855
N2	DER07 Min	Bottom	195.6949	-255.8384	0	-332.59	254.4034	-1024.287
N2	DER08 Max	Top	164.525	0	255.8384	332.59	213.8855	-213.8826
N2	DER08 Max	Bottom	195.6949	0	255.8384	332.59	1024.287	-254.4034
N2	DER08 Min	Top	164.525	0	-255.8384	-332.59	213.8796	-213.8826
N2	DER08 Min	Bottom	195.6949	0	-255.8384	-332.59	-515.4802	-254.4034
N2	DERUD01	Top	255.9278	0	0	0	332.7062	-332.7062
N2	DERUD01	Bottom	304.4143	0	0	0	395.7386	-395.7386
N2	DERUD02	Top	246.9475	0	0	0	321.0318	-321.0318

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	DERUD02	Bottom	288.5074	0	0	0	375.0596	-375.0596
N2	DERUD03	Top	257.4931	0	0	0	334.7411	-334.7411
N2	DERUD03	Bottom	299.053	0	0	0	388.7688	-388.7688
N2	DERUD04	Top	239.6467	0	0	0	311.5407	-311.5407
N2	DERUD04	Bottom	281.2066	0	0	0	365.5685	-365.5685
N2	DERUD05 Max	Top	231.5347	49.159	0	63.9066	300.9951	-300.9946
N2	DERUD05 Max	Bottom	273.0946	49.159	0	63.9066	355.0229	-207.09
N2	DERUD05 Min	Top	231.5347	-49.159	0	-63.9066	300.9951	-300.9957
N2	DERUD05 Min	Bottom	273.0946	-49.159	0	-63.9066	355.0229	-502.9559
N2	DERUD06 Max	Top	231.5347	0	49.159	63.9066	300.9957	-300.9951
N2	DERUD06 Max	Bottom	273.0946	0	49.159	63.9066	502.9559	-355.0229
N2	DERUD06 Min	Top	231.5347	0	-49.159	-63.9066	300.9946	-300.9951
N2	DERUD06 Min	Bottom	273.0946	0	-49.159	-63.9066	207.09	-355.0229
N2	DERUD07 Max	Top	164.525	49.159	0	63.9066	213.8826	-213.882
N2	DERUD07 Max	Bottom	195.6949	49.159	0	63.9066	254.4034	-106.4705
N2	DERUD07 Min	Top	164.525	-49.159	0	-63.9066	213.8826	-213.8831
N2	DERUD07 Min	Bottom	195.6949	-49.159	0	-63.9066	254.4034	-402.3363
N2	DERUD08 Max	Top	164.525	0	49.159	63.9066	213.8831	-213.8826
N2	DERUD08 Max	Bottom	195.6949	0	49.159	63.9066	402.3363	-254.4034
N2	DERUD08 Min	Top	164.525	0	-49.159	-63.9066	213.882	-213.8826
N2	DERUD08 Min	Bottom	195.6949	0	-49.159	-63.9066	106.4705	-254.4034
N2	CIM09 Max	Top	109.6834	119.3913	35.8174	201.7712	142.5888	-142.587
N2	CIM09 Max	Bottom	130.4633	119.3913	35.8174	201.7712	277.386	189.6767
N2	CIM09 Min	Top	109.6834	-119.3913	-35.8174	-201.7712	142.588	-142.5897
N2	CIM09 Min	Bottom	130.4633	-119.3913	-35.8174	-201.7712	61.8186	-528.8813
N2	CIM10 Max	Top	109.6834	35.8174	119.3913	201.7712	142.5897	-142.588
N2	CIM10 Max	Bottom	130.4633	35.8174	119.3913	201.7712	528.8813	-61.8186
N2	CIM10 Min	Top	109.6834	-35.8174	-119.3913	-201.7712	142.587	-142.5888
N2	CIM10 Min	Bottom	130.4633	-35.8174	-119.3913	-201.7712	-189.6767	-277.386
N2	CIM11	Top	191.8536	0	0	0	249.4097	-249.4097
N2	CIM11	Bottom	226.4868	0	0	0	294.4328	-294.4328
N2	CIM12	Top	198.7176	0	0	0	258.3329	-258.3329
N2	CIM12	Bottom	233.3508	0	0	0	303.356	-303.356
N2	CIM13 Max	Top	198.7176	90.3962	27.2894	152.9914	258.3332	-258.3318
N2	CIM13 Max	Bottom	233.3508	90.3962	27.2894	152.9914	385.477	-31.3305
N2	CIM13 Min	Top	198.7176	-90.3962	-27.2894	-152.9914	258.3326	-258.3339
N2	CIM13 Min	Bottom	233.3508	-90.3962	-27.2894	-152.9914	221.2351	-575.3816
N2	CIM14 Max	Top	198.7176	27.2894	90.3962	152.9914	258.3339	-258.3326
N2	CIM14 Max	Bottom	233.3508	27.2894	90.3962	152.9914	575.3816	-221.2351
N2	CIM14 Min	Top	198.7176	-27.2894	-90.3962	-152.9914	258.3318	-258.3332
N2	CIM14 Min	Bottom	233.3508	-27.2894	-90.3962	-152.9914	31.3305	-385.477
N2	CIM15	Top	109.6834	0	0	0	142.5884	-142.5884
N2	CIM15	Bottom	130.4633	0	0	0	169.6023	-169.6023
N2	COMB9	Top	228.3523	0	0	0	296.858	-296.858
N2	COMB9	Bottom	269.9122	0	0	0	350.8858	-350.8858
N2	COMB10	Top	231.0043	0	0	0	300.3056	-300.3056
N2	COMB10	Bottom	272.5642	0	0	0	354.3334	-354.3334
N2	COMB11	Top	221.0515	0	0	0	287.367	-287.367
N2	COMB11	Bottom	262.6114	0	0	0	341.3948	-341.3948
N2	DER09	Top	243.3595	0	0	0	316.3674	-316.3674
N2	DER09	Bottom	284.9194	0	0	0	370.3952	-370.3952
N2	DERUD09	Top	243.3595	0	0	0	316.3674	-316.3674
N2	DERUD09	Bottom	284.9194	0	0	0	370.3952	-370.3952
N2	DER10	Top	246.0115	0	0	0	319.815	-319.815
N2	DER10	Bottom	287.5714	0	0	0	373.8428	-373.8428
N2	DERUD10	Top	246.0115	0	0	0	319.815	-319.815
N2	DERUD10	Bottom	287.5714	0	0	0	373.8428	-373.8428
N2	DER11	Top	236.0587	0	0	0	306.8763	-306.8763
N2	DER11	Bottom	277.6186	0	0	0	360.9041	-360.9041
N2	DERUD11	Top	236.0587	0	0	0	306.8763	-306.8763

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	DERUD11	Bottom	277.6186	0	0	0	360.9041	-360.9041
N1	D	Top	186.4984	0	0	0	242.4479	-242.4479
N1	D	Bottom	221.1316	0	0	0	287.4711	-287.4711
N1	L	Top	12.168	0	0	0	15.8184	-15.8184
N1	L	Bottom	12.168	0	0	0	15.8184	-15.8184
N1	LR	Top	16.224	0	0	0	21.0912	-21.0912
N1	LR	Bottom	16.224	0	0	0	21.0912	-21.0912
N1	EX Max	Top	0	294.5548	0	382.9212	0	769.8836
N1	EX Max	Bottom	0	294.5548	0	382.9212	9.574E-07	1650.6904
N1	EY Max	Top	0	0	294.5548	382.9212	769.8836	5.84E-07
N1	EY Max	Bottom	0	0	294.5548	382.9212	1650.6904	0
N1	DISX Max	Top	0	196.3699	0	255.2808	0	513.2557
N1	DISX Max	Bottom	0	196.3699	0	255.2808	0	1100.4603
N1	DISY Max	Top	0	0	196.3699	255.2808	513.2557	0
N1	DISY Max	Bottom	0	0	196.3699	255.2808	1100.4603	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	9.048	0	0	0	11.7624	-11.7624
N1	G	Bottom	9.048	0	0	0	11.7624	-11.7624
N1	DERUX Max	Top	0	56.5466	0	73.5105	0	147.9329
N1	DERUX Max	Bottom	0	56.5466	0	73.5105	0	317.8182
N1	DERUY Max	Top	0	0	56.5466	73.5105	147.9329	0
N1	DERUY Max	Bottom	0	0	56.5466	73.5105	317.8182	0
N1	F	Top	50.024	0	0	0	65.0312	-65.0312
N1	F	Bottom	50.024	0	0	0	65.0312	-65.0312
N1	COMB1	Top	331.1314	0	0	0	430.4708	-430.4708
N1	COMB1	Bottom	379.6178	0	0	0	493.5032	-493.5032
N1	COMB2	Top	311.4077	0	0	0	404.83	-404.83
N1	COMB2	Bottom	352.9675	0	0	0	458.8578	-458.8578
N1	COMB3	Top	321.9533	0	0	0	418.5393	-418.5393
N1	COMB3	Bottom	363.5131	0	0	0	472.5671	-472.5671
N1	COMB4	Top	304.1069	0	0	0	395.3389	-395.3389
N1	COMB4	Bottom	345.6667	0	0	0	449.3667	-449.3667
N1	COMB5 Max	Top	295.9949	196.3699	58.911	331.8651	538.7701	128.4624
N1	COMB5 Max	Bottom	337.5547	196.3699	58.911	331.8651	768.9592	661.6391
N1	COMB5 Min	Top	295.9949	-196.3699	-58.911	-331.8651	230.8166	-898.0491
N1	COMB5 Min	Bottom	337.5547	-196.3699	-58.911	-331.8651	108.6831	-1539.2814
N1	COMB6 Max	Top	295.9949	58.911	196.3699	331.8651	898.0491	-230.8166
N1	COMB6 Max	Bottom	337.5547	58.911	196.3699	331.8651	1539.2814	-108.6831
N1	COMB6 Min	Top	295.9949	-58.911	-196.3699	-331.8651	-128.4624	-538.7701
N1	COMB6 Min	Bottom	337.5547	-58.911	-196.3699	-331.8651	-661.6391	-768.9592
N1	COMB7 Max	Top	212.8702	58.911	196.3699	331.8651	789.9869	-122.7545
N1	COMB7 Max	Bottom	244.04	58.911	196.3699	331.8651	1417.7123	12.886
N1	COMB7 Min	Top	212.8702	-58.911	-196.3699	-331.8651	-236.5245	-430.7079
N1	COMB7 Min	Bottom	244.04	-58.911	-196.3699	-331.8651	-783.2082	-647.3901
N1	COMB8 Max	Top	212.8702	196.3699	58.911	331.8651	430.7079	236.5245
N1	COMB8 Max	Bottom	244.04	196.3699	58.911	331.8651	647.3901	783.2082
N1	COMB8 Min	Top	212.8702	-196.3699	-58.911	-331.8651	122.7545	-789.9869
N1	COMB8 Min	Bottom	244.04	-196.3699	-58.911	-331.8651	-12.886	-1417.7123
N1	ENVE Max	Top	331.1314	196.3699	196.3699	331.8651	898.0491	236.5245
N1	ENVE Max	Bottom	379.6178	196.3699	196.3699	331.8651	1539.2814	783.2082
N1	ENVE Min	Top	212.8702	-196.3699	-196.3699	-331.8651	-236.5245	-898.0491
N1	ENVE Min	Bottom	244.04	-196.3699	-196.3699	-331.8651	-783.2082	-1539.2814
N1	CIM01	Top	236.5224	0	0	0	307.4791	-307.4791
N1	CIM01	Bottom	271.1556	0	0	0	352.5023	-352.5023
N1	CIM02	Top	248.6904	0	0	0	323.2975	-323.2975
N1	CIM02	Bottom	283.3236	0	0	0	368.3207	-368.3207
N1	CIM03	Top	252.7464	0	0	0	328.5703	-328.5703
N1	CIM03	Bottom	287.3796	0	0	0	373.5935	-373.5935
N1	CIM04	Top	257.8164	0	0	0	335.1613	-335.1613

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM04	Bottom	292.4496	0	0	0	380.1845	-380.1845
N1	CIM05 Max	Top	236.5224	137.4589	41.2377	232.3055	415.2628	51.7999
N1	CIM05 Max	Bottom	271.1556	137.4589	41.2377	232.3055	583.5989	417.8199
N1	CIM05 Min	Top	236.5224	-137.4589	-41.2377	-232.3055	199.6954	-666.7581
N1	CIM05 Min	Bottom	271.1556	-137.4589	-41.2377	-232.3055	121.4056	-1122.8245
N1	CIM06 Max	Top	236.5224	41.2377	137.4589	232.3055	666.7581	-199.6954
N1	CIM06 Max	Bottom	271.1556	41.2377	137.4589	232.3055	1122.8245	-121.4056
N1	CIM06 Min	Top	236.5224	-41.2377	-137.4589	-232.3055	-51.7999	-415.2628
N1	CIM06 Min	Bottom	271.1556	-41.2377	-137.4589	-232.3055	-417.8199	-583.5989
N1	CIM07 Max	Top	257.8164	104.076	31.4192	176.1438	417.2822	-63.1358
N1	CIM07 Max	Bottom	292.4496	104.076	31.4192	176.1438	556.2581	203.0595
N1	CIM07 Min	Top	257.8164	-104.076	-31.4192	-176.1438	253.0404	-607.1869
N1	CIM07 Min	Bottom	292.4496	-104.076	-31.4192	-176.1438	204.1108	-963.4284
N1	CIM08 Max	Top	257.8164	31.4192	104.076	176.1438	607.1869	-253.0404
N1	CIM08 Max	Bottom	292.4496	31.4192	104.076	176.1438	963.4284	-204.1108
N1	CIM08 Min	Top	257.8164	-31.4192	-104.076	-176.1438	63.1358	-417.2822
N1	CIM08 Min	Bottom	292.4496	-31.4192	-104.076	-176.1438	-203.0595	-556.2581
N1	DER01	Top	331.1314	0	0	0	430.4708	-430.4708
N1	DER01	Bottom	379.6178	0	0	0	493.5032	-493.5032
N1	DER02	Top	311.4077	0	0	0	404.83	-404.83
N1	DER02	Bottom	352.9675	0	0	0	458.8578	-458.8578
N1	DER03	Top	321.9533	0	0	0	418.5393	-418.5393
N1	DER03	Bottom	363.5131	0	0	0	472.5671	-472.5671
N1	DER04	Top	304.1069	0	0	0	395.3389	-395.3389
N1	DER04	Bottom	345.6667	0	0	0	449.3667	-449.3667
N1	DER05 Max	Top	295.9949	294.5548	0	382.9212	384.7933	385.0903
N1	DER05 Max	Bottom	337.5547	294.5548	0	382.9212	438.8211	1211.8693
N1	DER05 Min	Top	295.9949	-294.5548	0	-382.9212	384.7933	-1154.6769
N1	DER05 Min	Bottom	337.5547	-294.5548	0	-382.9212	438.8211	-2089.5115
N1	DER06 Max	Top	295.9949	0	294.5548	382.9212	1154.6769	-384.7933
N1	DER06 Max	Bottom	337.5547	0	294.5548	382.9212	2089.5115	-438.8211
N1	DER06 Min	Top	295.9949	0	-294.5548	-382.9212	-385.0903	-384.7933
N1	DER06 Min	Bottom	337.5547	0	-294.5548	-382.9212	-1211.8693	-438.8211
N1	DER07 Max	Top	212.8702	294.5548	0	382.9212	276.7312	493.1524
N1	DER07 Max	Bottom	244.04	294.5548	0	382.9212	317.2521	1333.4384
N1	DER07 Min	Top	212.8702	-294.5548	0	-382.9212	276.7312	-1046.6148
N1	DER07 Min	Bottom	244.04	-294.5548	0	-382.9212	317.2521	-1967.9425
N1	DER08 Max	Top	212.8702	0	294.5548	382.9212	1046.6148	-276.7312
N1	DER08 Max	Bottom	244.04	0	294.5548	382.9212	1967.9425	-317.2521
N1	DER08 Min	Top	212.8702	0	-294.5548	-382.9212	-493.1524	-276.7312
N1	DER08 Min	Bottom	244.04	0	-294.5548	-382.9212	-1333.4384	-317.2521
N1	DERUD01	Top	331.1314	0	0	0	430.4708	-430.4708
N1	DERUD01	Bottom	379.6178	0	0	0	493.5032	-493.5032
N1	DERUD02	Top	311.4077	0	0	0	404.83	-404.83
N1	DERUD02	Bottom	352.9675	0	0	0	458.8578	-458.8578
N1	DERUD03	Top	321.9533	0	0	0	418.5393	-418.5393
N1	DERUD03	Bottom	363.5131	0	0	0	472.5671	-472.5671
N1	DERUD04	Top	304.1069	0	0	0	395.3389	-395.3389
N1	DERUD04	Bottom	345.6667	0	0	0	449.3667	-449.3667
N1	DERUD05 Max	Top	295.9949	56.5466	0	73.5105	384.7933	-236.8604
N1	DERUD05 Max	Bottom	337.5547	56.5466	0	73.5105	438.8211	-121.0029
N1	DERUD05 Min	Top	295.9949	-56.5466	0	-73.5105	384.7933	-532.7263
N1	DERUD05 Min	Bottom	337.5547	-56.5466	0	-73.5105	438.8211	-756.6394
N1	DERUD06 Max	Top	295.9949	0	56.5466	73.5105	532.7263	-384.7933
N1	DERUD06 Max	Bottom	337.5547	0	56.5466	73.5105	756.6394	-438.8211
N1	DERUD06 Min	Top	295.9949	0	-56.5466	-73.5105	236.8604	-384.7933
N1	DERUD06 Min	Bottom	337.5547	0	-56.5466	-73.5105	121.0029	-438.8211
N1	DERUD07 Max	Top	212.8702	56.5466	0	73.5105	276.7312	-128.7983
N1	DERUD07 Max	Bottom	244.04	56.5466	0	73.5105	317.2521	0.5662
N1	DERUD07 Min	Top	212.8702	-56.5466	0	-73.5105	276.7312	-424.6641

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD07 Min	Bottom	244.04	-56.5466	0	-73.5105	317.2521	-635.0703
N1	DERUD08 Max	Top	212.8702	0	56.5466	73.5105	424.6641	-276.7312
N1	DERUD08 Max	Bottom	244.04	0	56.5466	73.5105	635.0703	-317.2521
N1	DERUD08 Min	Top	212.8702	0	-56.5466	-73.5105	128.7983	-276.7312
N1	DERUD08 Min	Bottom	244.04	0	-56.5466	-73.5105	-0.5662	-317.2521
N1	CIM09 Max	Top	141.9134	137.4589	41.2377	232.3055	292.2712	174.7915
N1	CIM09 Max	Bottom	162.6934	137.4589	41.2377	232.3055	442.598	558.8208
N1	CIM09 Min	Top	141.9134	-137.4589	-41.2377	-232.3055	76.7038	-543.7665
N1	CIM09 Min	Bottom	162.6934	-137.4589	-41.2377	-232.3055	-19.5953	-981.8236
N1	CIM10 Max	Top	141.9134	41.2377	137.4589	232.3055	543.7665	-76.7038
N1	CIM10 Max	Bottom	162.6934	41.2377	137.4589	232.3055	981.8236	19.5953
N1	CIM10 Min	Top	141.9134	-41.2377	-137.4589	-232.3055	-174.7915	-292.2712
N1	CIM10 Min	Bottom	162.6934	-41.2377	-137.4589	-232.3055	-558.8208	-442.598
N1	CIM11	Top	245.5704	0	0	0	319.2415	-319.2415
N1	CIM11	Bottom	280.2036	0	0	0	364.2647	-364.2647
N1	CIM12	Top	252.4344	0	0	0	328.1647	-328.1647
N1	CIM12	Bottom	287.0676	0	0	0	373.1879	-373.1879
N1	CIM13 Max	Top	252.4344	104.076	31.4192	176.1438	410.2856	-56.1392
N1	CIM13 Max	Bottom	287.0676	104.076	31.4192	176.1438	549.2615	210.0561
N1	CIM13 Min	Top	252.4344	-104.076	-31.4192	-176.1438	246.0438	-600.1903
N1	CIM13 Min	Bottom	287.0676	-104.076	-31.4192	-176.1438	197.1142	-956.4318
N1	CIM14 Max	Top	252.4344	31.4192	104.076	176.1438	600.1903	-246.0438
N1	CIM14 Max	Bottom	287.0676	31.4192	104.076	176.1438	956.4318	-197.1142
N1	CIM14 Min	Top	252.4344	-31.4192	-104.076	-176.1438	56.1392	-410.2856
N1	CIM14 Min	Bottom	287.0676	-31.4192	-104.076	-176.1438	-210.0561	-549.2615
N1	CIM15	Top	141.9134	0	0	0	184.4875	-184.4875
N1	CIM15	Bottom	162.6934	0	0	0	211.5014	-211.5014
N1	COMB9	Top	292.8125	0	0	0	380.6562	-380.6562
N1	COMB9	Bottom	334.3723	0	0	0	434.684	-434.684
N1	COMB10	Top	295.4645	0	0	0	384.1038	-384.1038
N1	COMB10	Bottom	337.0243	0	0	0	438.1316	-438.1316
N1	COMB11	Top	285.5117	0	0	0	371.1652	-371.1652
N1	COMB11	Bottom	327.0715	0	0	0	425.193	-425.193
N1	DER09	Top	307.8197	0	0	0	400.1656	-400.1656
N1	DER09	Bottom	349.3795	0	0	0	454.1934	-454.1934
N1	DERUD09	Top	307.8197	0	0	0	400.1656	-400.1656
N1	DERUD09	Bottom	349.3795	0	0	0	454.1934	-454.1934
N1	DER10	Top	310.4717	0	0	0	403.6132	-403.6132
N1	DER10	Bottom	352.0315	0	0	0	457.641	-457.641
N1	DERUD10	Top	310.4717	0	0	0	403.6132	-403.6132
N1	DERUD10	Bottom	352.0315	0	0	0	457.641	-457.641
N1	DER11	Top	300.5189	0	0	0	390.6745	-390.6745
N1	DER11	Bottom	342.0787	0	0	0	444.7023	-444.7023
N1	DERUD11	Top	300.5189	0	0	0	390.6745	-390.6745
N1	DERUD11	Bottom	342.0787	0	0	0	444.7023	-444.7023

5.3 Point Results

Table 5.7 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	-0.3796	-0.3796	55.2829	0.3723	-0.3723	0
Base	1	13	L	-0.0697	-0.0697	3.042	0.0683	-0.0683	0
Base	1	13	LR	-0.0743	-0.0743	4.056	0.0729	-0.0729	0
Base	1	13	EX Max	73.6387	0	199.0752	0	154.1942	0
Base	1	13	EY Max	0	73.6387	199.0752	154.1942	0	0
Base	1	13	DISX Max	49.0925	0	132.7168	0	102.7962	0
Base	1	13	DISY Max	0	49.0925	132.7168	102.7962	0	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	-0.0414	-0.0414	2.262	0.0406	-0.0406	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	DERUX Max	14.1366	0	38.3272	0	29.6425	0
Base	1	13	DERUY Max	0	14.1366	38.3272	29.6425	0	0
Base	1	13	F	-0.2864	-0.2864	12.506	0.2809	-0.2809	0
Base	1	13	COMB1	-0.9323	-0.9323	94.9045	0.9145	-0.9145	0
Base	1	13	COMB2	-0.9477	-0.9477	88.2419	0.9296	-0.9296	0
Base	1	13	COMB3	-0.9877	-0.9877	90.8783	0.9688	-0.9688	0
Base	1	13	COMB4	-0.9059	-0.9059	86.4167	0.8886	-0.8886	0
Base	1	13	COMB5 Max	48.2237	13.859	256.9205	31.691	101.944	0
Base	1	13	COMB5 Min	-49.9612	-15.5965	-88.1431	-29.9867	-103.6484	0
Base	1	13	COMB6 Max	13.859	48.2237	256.9205	103.6484	29.9867	0
Base	1	13	COMB6 Min	-15.5965	-49.9612	-88.1431	-101.944	-31.691	0
Base	1	13	COMB7 Max	14.1284	48.4931	233.5418	103.3841	30.2509	0
Base	1	13	COMB7 Min	-15.3271	-49.6918	-111.5218	-102.2083	-31.4268	0
Base	1	13	COMB8 Max	48.4931	14.1284	233.5418	31.4268	102.2083	0
Base	1	13	COMB8 Min	-49.6918	-15.3271	-111.5218	-30.2509	-103.3841	0
Base	1	13	ENVE Max	48.4931	48.4931	256.9205	103.6484	102.2083	0
Base	1	13	ENVE Min	-49.9612	-49.9612	-111.5218	-102.2083	-103.6484	0
Base	1	13	CIM01	-0.6659	-0.6659	67.7889	0.6532	-0.6532	0
Base	1	13	CIM02	-0.7356	-0.7356	70.8309	0.7216	-0.7216	0
Base	1	13	CIM03	-0.7402	-0.7402	71.8449	0.7261	-0.7261	0
Base	1	13	CIM04	-0.7739	-0.7739	73.1124	0.7591	-0.7591	0
Base	1	13	CIM05 Max	33.6988	9.6435	188.5612	22.2404	71.3041	0
Base	1	13	CIM05 Min	-35.0307	-10.9754	-52.9834	-20.934	-72.6105	0
Base	1	13	CIM06 Max	9.6435	33.6988	188.5612	72.6105	20.934	0
Base	1	13	CIM06 Min	-10.9754	-35.0307	-52.9834	-71.3041	-22.2404	0
Base	1	13	CIM07 Max	25.2451	7.0809	164.687	17.2065	53.7228	0
Base	1	13	CIM07 Min	-26.7929	-8.6287	-18.4622	-15.6883	-55.2411	0
Base	1	13	CIM08 Max	7.0809	25.2451	164.687	55.2411	15.6883	0
Base	1	13	CIM08 Min	-8.6287	-26.7929	-18.4622	-53.7228	-17.2065	0
Base	1	13	DER01	-0.9323	-0.9323	94.9045	0.9145	-0.9145	0
Base	1	13	DER02	-0.9477	-0.9477	88.2419	0.9296	-0.9296	0
Base	1	13	DER03	-0.9877	-0.9877	90.8783	0.9688	-0.9688	0
Base	1	13	DER04	-0.9059	-0.9059	86.4167	0.8886	-0.8886	0
Base	1	13	DER05 Max	72.7699	-0.8688	283.4638	0.8522	153.3421	0
Base	1	13	DER05 Min	-74.5075	-0.8688	-114.6865	0.8522	-155.0464	0
Base	1	13	DER06 Max	-0.8688	72.7699	283.4638	155.0464	-0.8522	0
Base	1	13	DER06 Min	-0.8688	-74.5075	-114.6865	-153.3421	-0.8522	0
Base	1	13	DER07 Max	73.0394	-0.5993	260.0852	0.5879	153.6063	0
Base	1	13	DER07 Min	-74.238	-0.5993	-138.0651	0.5879	-154.7822	0
Base	1	13	DER08 Max	-0.5993	73.0394	260.0852	154.7822	-0.5879	0
Base	1	13	DER08 Min	-0.5993	-74.238	-138.0651	-153.6063	-0.5879	0
Base	1	13	DERUD01	-0.9323	-0.9323	94.9045	0.9145	-0.9145	0
Base	1	13	DERUD02	-0.9477	-0.9477	88.2419	0.9296	-0.9296	0
Base	1	13	DERUD03	-0.9877	-0.9877	90.8783	0.9688	-0.9688	0
Base	1	13	DERUD04	-0.9059	-0.9059	86.4167	0.8886	-0.8886	0
Base	1	13	DERUD05 Max	13.2679	-0.8688	122.7158	0.8522	28.7903	0
Base	1	13	DERUD05 Min	-15.0054	-0.8688	46.0615	0.8522	-30.4947	0
Base	1	13	DERUD06 Max	-0.8688	13.2679	122.7158	30.4947	-0.8522	0
Base	1	13	DERUD06 Min	-0.8688	-15.0054	46.0615	-28.7903	-0.8522	0
Base	1	13	DERUD07 Max	13.5373	-0.5993	99.3372	0.5879	29.0546	0
Base	1	13	DERUD07 Min	-14.736	-0.5993	22.6829	0.5879	-30.2304	0
Base	1	13	DERUD08 Max	-0.5993	13.5373	99.3372	30.2304	-0.5879	0
Base	1	13	DERUD08 Min	-0.5993	-14.736	22.6829	-29.0546	-0.5879	0
Base	1	13	CIM09 Max	33.9652	9.9099	161.4456	21.9791	71.5654	0
Base	1	13	CIM09 Min	-34.7643	-10.709	-80.0989	-21.1953	-72.3493	0
Base	1	13	CIM10 Max	9.9099	33.9652	161.4456	72.3493	21.1953	0
Base	1	13	CIM10 Min	-10.709	-34.7643	-80.0989	-71.5654	-21.9791	0
Base	1	13	CIM11	-0.7074	-0.7074	70.0509	0.6939	-0.6939	0
Base	1	13	CIM12	-0.7493	-0.7493	71.7669	0.735	-0.735	0
Base	1	13	CIM13 Max	25.2698	7.1055	163.3415	17.1823	53.747	0



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	CIM13 Min	-26.7683	-8.604	-19.8077	-15.7124	-55.2169	0
Base	1	13	CIM14 Max	7.1055	25.2698	163.3415	55.2169	15.7124	0
Base	1	13	CIM14 Min	-8.604	-26.7683	-19.8077	-53.747	-17.1823	0
Base	1	13	CIM15	-0.3996	-0.3996	40.6733	0.3919	-0.3919	0
Base	1	13	COMB9	-0.8454	-0.8454	83.5931	0.8292	-0.8292	0
Base	1	13	COMB10	-0.8492	-0.8492	84.2561	0.833	-0.833	0
Base	1	13	COMB11	-0.8036	-0.8036	81.7679	0.7883	-0.7883	0
Base	1	13	DER09	-0.9313	-0.9313	87.3449	0.9135	-0.9135	0
Base	1	13	DERUD09	-0.9313	-0.9313	87.3449	0.9135	-0.9135	0
Base	1	13	DER10	-0.9351	-0.9351	88.0079	0.9172	-0.9172	0
Base	1	13	DERUD10	-0.9351	-0.9351	88.0079	0.9172	-0.9172	0
Base	1	13	DER11	-0.8895	-0.8895	85.5197	0.8725	-0.8725	0
Base	1	13	DERUD11	-0.8895	-0.8895	85.5197	0.8725	-0.8725	0
Base	2	15	D	-0.3796	0.3796	55.2829	-0.3723	-0.3723	0
Base	2	15	L	-0.0697	0.0697	3.042	-0.0683	-0.0683	0
Base	2	15	LR	-0.0743	0.0743	4.056	-0.0729	-0.0729	0
Base	2	15	EX Max	73.6387	0	199.0752	0	154.1942	0
Base	2	15	EY Max	0	73.6387	199.0752	154.1942	0	0
Base	2	15	DISX Max	49.0925	0	132.7168	0	102.7962	0
Base	2	15	DISY Max	0	49.0925	132.7168	102.7962	0	0
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	-0.0414	0.0414	2.262	-0.0406	-0.0406	0
Base	2	15	DERUX Max	14.1366	0	38.3272	0	29.6425	0
Base	2	15	DERUY Max	0	14.1366	38.3272	29.6425	0	0
Base	2	15	F	-0.2864	0.2864	12.506	-0.2809	-0.2809	0
Base	2	15	COMB1	-0.9323	0.9323	94.9045	-0.9145	-0.9145	0
Base	2	15	COMB2	-0.9477	0.9477	88.2419	-0.9296	-0.9296	0
Base	2	15	COMB3	-0.9877	0.9877	90.8783	-0.9688	-0.9688	0
Base	2	15	COMB4	-0.9059	0.9059	86.4167	-0.8886	-0.8886	0
Base	2	15	COMB5 Max	48.2237	15.5965	256.9205	29.9867	101.944	0
Base	2	15	COMB5 Min	-49.9612	-13.859	-88.1431	-31.691	-103.6484	0
Base	2	15	COMB6 Max	13.859	49.9612	256.9205	101.944	29.9867	0
Base	2	15	COMB6 Min	-15.5965	-48.2237	-88.1431	-103.6484	-31.691	0
Base	2	15	COMB7 Max	14.1284	49.6918	233.5418	102.2083	30.2509	0
Base	2	15	COMB7 Min	-15.3271	-48.4931	-111.5218	-103.3841	-31.4268	0
Base	2	15	COMB8 Max	48.4931	15.3271	233.5418	30.2509	102.2083	0
Base	2	15	COMB8 Min	-49.6918	-14.1284	-111.5218	-31.4268	-103.3841	0
Base	2	15	ENVE Max	48.4931	49.9612	256.9205	102.2083	102.2083	0
Base	2	15	ENVE Min	-49.9612	-48.4931	-111.5218	-103.6484	-103.6484	0
Base	2	15	CIM01	-0.6659	0.6659	67.7889	-0.6532	-0.6532	0
Base	2	15	CIM02	-0.7356	0.7356	70.8309	-0.7216	-0.7216	0
Base	2	15	CIM03	-0.7402	0.7402	71.8449	-0.7261	-0.7261	0
Base	2	15	CIM04	-0.7739	0.7739	73.1124	-0.7591	-0.7591	0
Base	2	15	CIM05 Max	33.6988	10.9754	188.5612	20.934	71.3041	0
Base	2	15	CIM05 Min	-35.0307	-9.6435	-52.9834	-22.2404	-72.6105	0
Base	2	15	CIM06 Max	9.6435	35.0307	188.5612	71.3041	20.934	0
Base	2	15	CIM06 Min	-10.9754	-33.6988	-52.9834	-72.6105	-22.2404	0
Base	2	15	CIM07 Max	25.2451	8.6287	164.687	15.6883	53.7228	0
Base	2	15	CIM07 Min	-26.7929	-7.0809	-18.4622	-17.2065	-55.2411	0
Base	2	15	CIM08 Max	7.0809	26.7929	164.687	53.7228	15.6883	0
Base	2	15	CIM08 Min	-8.6287	-25.2451	-18.4622	-55.2411	-17.2065	0
Base	2	15	DER01	-0.9323	0.9323	94.9045	-0.9145	-0.9145	0
Base	2	15	DER02	-0.9477	0.9477	88.2419	-0.9296	-0.9296	0
Base	2	15	DER03	-0.9877	0.9877	90.8783	-0.9688	-0.9688	0
Base	2	15	DER04	-0.9059	0.9059	86.4167	-0.8886	-0.8886	0
Base	2	15	DER05 Max	72.7699	0.8688	283.4638	-0.8522	153.3421	0
Base	2	15	DER05 Min	-74.5075	0.8688	-114.6865	-0.8522	-155.0464	0
Base	2	15	DER06 Max	-0.8688	74.5075	283.4638	153.3421	-0.8522	0
Base	2	15	DER06 Min	-0.8688	-72.7699	-114.6865	-155.0464	-0.8522	0
Base	2	15	DER07 Max	73.0394	0.5993	260.0852	-0.5879	153.6063	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DER07 Min	-74.238	0.5993	-138.0651	-0.5879	-154.7822	0
Base	2	15	DER08 Max	-0.5993	74.238	260.0852	153.6063	-0.5879	0
Base	2	15	DER08 Min	-0.5993	-73.0394	-138.0651	-154.7822	-0.5879	0
Base	2	15	DERUD01	-0.9323	0.9323	94.9045	-0.9145	-0.9145	0
Base	2	15	DERUD02	-0.9477	0.9477	88.2419	-0.9296	-0.9296	0
Base	2	15	DERUD03	-0.9877	0.9877	90.8783	-0.9688	-0.9688	0
Base	2	15	DERUD04	-0.9059	0.9059	86.4167	-0.8886	-0.8886	0
Base	2	15	DERUD05 Max	13.2679	0.8688	122.7158	-0.8522	28.7903	0
Base	2	15	DERUD05 Min	-15.0054	0.8688	46.0615	-0.8522	-30.4947	0
Base	2	15	DERUD06 Max	-0.8688	15.0054	122.7158	28.7903	-0.8522	0
Base	2	15	DERUD06 Min	-0.8688	-13.2679	46.0615	-30.4947	-0.8522	0
Base	2	15	DERUD07 Max	13.5373	0.5993	99.3372	-0.5879	29.0546	0
Base	2	15	DERUD07 Min	-14.736	0.5993	22.6829	-0.5879	-30.2304	0
Base	2	15	DERUD08 Max	-0.5993	14.736	99.3372	29.0546	-0.5879	0
Base	2	15	DERUD08 Min	-0.5993	-13.5373	22.6829	-30.2304	-0.5879	0
Base	2	15	CIM09 Max	33.9652	10.709	161.4456	21.1953	71.5654	0
Base	2	15	CIM09 Min	-34.7643	-9.9099	-80.0989	-21.9791	-72.3493	0
Base	2	15	CIM10 Max	9.9099	34.7643	161.4456	71.5654	21.1953	0
Base	2	15	CIM10 Min	-10.709	-33.9652	-80.0989	-72.3493	-21.9791	0
Base	2	15	CIM11	-0.7074	0.7074	70.0509	-0.6939	-0.6939	0
Base	2	15	CIM12	-0.7493	0.7493	71.7669	-0.735	-0.735	0
Base	2	15	CIM13 Max	25.2698	8.604	163.3415	15.7124	53.747	0
Base	2	15	CIM13 Min	-26.7683	-7.1055	-19.8077	-17.1823	-55.2169	0
Base	2	15	CIM14 Max	7.1055	26.7683	163.3415	53.747	15.7124	0
Base	2	15	CIM14 Min	-8.604	-25.2698	-19.8077	-55.2169	-17.1823	0
Base	2	15	CIM15	-0.3996	0.3996	40.6733	-0.3919	-0.3919	0
Base	2	15	COMB9	-0.8454	0.8454	83.5931	-0.8292	-0.8292	0
Base	2	15	COMB10	-0.8492	0.8492	84.2561	-0.833	-0.833	0
Base	2	15	COMB11	-0.8036	0.8036	81.7679	-0.7883	-0.7883	0
Base	2	15	DER09	-0.9313	0.9313	87.3449	-0.9135	-0.9135	0
Base	2	15	DERUD09	-0.9313	0.9313	87.3449	-0.9135	-0.9135	0
Base	2	15	DER10	-0.9351	0.9351	88.0079	-0.9172	-0.9172	0
Base	2	15	DERUD10	-0.9351	0.9351	88.0079	-0.9172	-0.9172	0
Base	2	15	DER11	-0.8895	0.8895	85.5197	-0.8725	-0.8725	0
Base	2	15	DERUD11	-0.8895	0.8895	85.5197	-0.8725	-0.8725	0
Base	3	16	D	0.3796	-0.3796	55.2829	0.3723	0.3723	0
Base	3	16	L	0.0697	-0.0697	3.042	0.0683	0.0683	0
Base	3	16	LR	0.0743	-0.0743	4.056	0.0729	0.0729	0
Base	3	16	EX Max	73.6387	0	199.0752	0	154.1942	0
Base	3	16	EY Max	0	73.6387	199.0752	154.1942	0	0
Base	3	16	DISX Max	49.0925	0	132.7168	0	102.7962	0
Base	3	16	DISY Max	0	49.0925	132.7168	102.7962	0	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	0.0414	-0.0414	2.262	0.0406	0.0406	0
Base	3	16	DERUX Max	14.1366	0	38.3272	0	29.6425	0
Base	3	16	DERUY Max	0	14.1366	38.3272	29.6425	0	0
Base	3	16	F	0.2864	-0.2864	12.506	0.2809	0.2809	0
Base	3	16	COMB1	0.9323	-0.9323	94.9045	0.9145	0.9145	0
Base	3	16	COMB2	0.9477	-0.9477	88.2419	0.9296	0.9296	0
Base	3	16	COMB3	0.9877	-0.9877	90.8783	0.9688	0.9688	0
Base	3	16	COMB4	0.9059	-0.9059	86.4167	0.8886	0.8886	0
Base	3	16	COMB5 Max	49.9612	13.859	256.9205	31.691	103.6484	0
Base	3	16	COMB5 Min	-48.2237	-15.5965	-88.1431	-29.9867	-101.944	0
Base	3	16	COMB6 Max	15.5965	48.2237	256.9205	103.6484	31.691	0
Base	3	16	COMB6 Min	-13.859	-49.9612	-88.1431	-101.944	-29.9867	0
Base	3	16	COMB7 Max	15.3271	48.4931	233.5418	103.3841	31.4268	0
Base	3	16	COMB7 Min	-14.1284	-49.6918	-111.5218	-102.2083	-30.2509	0
Base	3	16	COMB8 Max	49.6918	14.1284	233.5418	31.4268	103.3841	0
Base	3	16	COMB8 Min	-48.4931	-15.3271	-111.5218	-30.2509	-102.2083	0
Base	3	16	ENVE Max	49.9612	48.4931	256.9205	103.6484	103.6484	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	ENVE Min	-48.4931	-49.9612	-111.5218	-102.2083	-102.2083	0
Base	3	16	CIM01	0.6659	-0.6659	67.7889	0.6532	0.6532	0
Base	3	16	CIM02	0.7356	-0.7356	70.8309	0.7216	0.7216	0
Base	3	16	CIM03	0.7402	-0.7402	71.8449	0.7261	0.7261	0
Base	3	16	CIM04	0.7739	-0.7739	73.1124	0.7591	0.7591	0
Base	3	16	CIM05 Max	35.0307	9.6435	188.5612	22.2404	72.6105	0
Base	3	16	CIM05 Min	-33.6988	-10.9754	-52.9834	-20.934	-71.3041	0
Base	3	16	CIM06 Max	10.9754	33.6988	188.5612	72.6105	22.2404	0
Base	3	16	CIM06 Min	-9.6435	-35.0307	-52.9834	-71.3041	-20.934	0
Base	3	16	CIM07 Max	26.7929	7.0809	164.687	17.2065	55.2411	0
Base	3	16	CIM07 Min	-25.2451	-8.6287	-18.4622	-15.6883	-53.7228	0
Base	3	16	CIM08 Max	8.6287	25.2451	164.687	55.2411	17.2065	0
Base	3	16	CIM08 Min	-7.0809	-26.7929	-18.4622	-53.7228	-15.6883	0
Base	3	16	DER01	0.9323	-0.9323	94.9045	0.9145	0.9145	0
Base	3	16	DER02	0.9477	-0.9477	88.2419	0.9296	0.9296	0
Base	3	16	DER03	0.9877	-0.9877	90.8783	0.9688	0.9688	0
Base	3	16	DER04	0.9059	-0.9059	86.4167	0.8886	0.8886	0
Base	3	16	DER05 Max	74.5075	-0.8688	283.4638	0.8522	155.0464	0
Base	3	16	DER05 Min	-72.7699	-0.8688	-114.6865	0.8522	-153.3421	0
Base	3	16	DER06 Max	0.8688	72.7699	283.4638	155.0464	0.8522	0
Base	3	16	DER06 Min	0.8688	-74.5075	-114.6865	-153.3421	0.8522	0
Base	3	16	DER07 Max	74.238	-0.5993	260.0852	0.5879	154.7822	0
Base	3	16	DER07 Min	-73.0394	-0.5993	-138.0651	0.5879	-153.6063	0
Base	3	16	DER08 Max	0.5993	73.0394	260.0852	154.7822	0.5879	0
Base	3	16	DER08 Min	0.5993	-74.238	-138.0651	-153.6063	0.5879	0
Base	3	16	DERUD01	0.9323	-0.9323	94.9045	0.9145	0.9145	0
Base	3	16	DERUD02	0.9477	-0.9477	88.2419	0.9296	0.9296	0
Base	3	16	DERUD03	0.9877	-0.9877	90.8783	0.9688	0.9688	0
Base	3	16	DERUD04	0.9059	-0.9059	86.4167	0.8886	0.8886	0
Base	3	16	DERUD05 Max	15.0054	-0.8688	122.7158	0.8522	30.4947	0
Base	3	16	DERUD05 Min	-13.2679	-0.8688	46.0615	0.8522	-28.7903	0
Base	3	16	DERUD06 Max	0.8688	13.2679	122.7158	30.4947	0.8522	0
Base	3	16	DERUD06 Min	0.8688	-15.0054	46.0615	-28.7903	0.8522	0
Base	3	16	DERUD07 Max	14.736	-0.5993	99.3372	0.5879	30.2304	0
Base	3	16	DERUD07 Min	-13.5373	-0.5993	22.6829	0.5879	-29.0546	0
Base	3	16	DERUD08 Max	0.5993	13.5373	99.3372	30.2304	0.5879	0
Base	3	16	DERUD08 Min	0.5993	-14.736	22.6829	-29.0546	0.5879	0
Base	3	16	CIM09 Max	34.7643	9.9099	161.4456	21.9791	72.3493	0
Base	3	16	CIM09 Min	-33.9652	-10.709	-80.0989	-21.1953	-71.5654	0
Base	3	16	CIM10 Max	10.709	33.9652	161.4456	72.3493	21.9791	0
Base	3	16	CIM10 Min	-9.9099	-34.7643	-80.0989	-71.5654	-21.1953	0
Base	3	16	CIM11	0.7074	-0.7074	70.0509	0.6939	0.6939	0
Base	3	16	CIM12	0.7493	-0.7493	71.7669	0.735	0.735	0
Base	3	16	CIM13 Max	26.7683	7.1055	163.3415	17.1823	55.2169	0
Base	3	16	CIM13 Min	-25.2698	-8.604	-19.8077	-15.7124	-53.747	0
Base	3	16	CIM14 Max	8.604	25.2698	163.3415	55.2169	17.1823	0
Base	3	16	CIM14 Min	-7.1055	-26.7683	-19.8077	-53.747	-15.7124	0
Base	3	16	CIM15	0.3996	-0.3996	40.6733	0.3919	0.3919	0
Base	3	16	COMB9	0.8454	-0.8454	83.5931	0.8292	0.8292	0
Base	3	16	COMB10	0.8492	-0.8492	84.2561	0.833	0.833	0
Base	3	16	COMB11	0.8036	-0.8036	81.7679	0.7883	0.7883	0
Base	3	16	DER09	0.9313	-0.9313	87.3449	0.9135	0.9135	0
Base	3	16	DERUD09	0.9313	-0.9313	87.3449	0.9135	0.9135	0
Base	3	16	DER10	0.9351	-0.9351	88.0079	0.9172	0.9172	0
Base	3	16	DERUD10	0.9351	-0.9351	88.0079	0.9172	0.9172	0
Base	3	16	DER11	0.8895	-0.8895	85.5197	0.8725	0.8725	0
Base	3	16	DERUD11	0.8895	-0.8895	85.5197	0.8725	0.8725	0
Base	4	18	D	0.3796	0.3796	55.2829	-0.3723	0.3723	0
Base	4	18	L	0.0697	0.0697	3.042	-0.0683	0.0683	0
Base	4	18	LR	0.0743	0.0743	4.056	-0.0729	0.0729	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	EX Max	73.6387	0	199.0752	0	154.1942	0
Base	4	18	EY Max	0	73.6387	199.0752	154.1942	0	0
Base	4	18	DISX Max	49.0925	0	132.7168	0	102.7962	0
Base	4	18	DISY Max	0	49.0925	132.7168	102.7962	0	0
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	0.0414	0.0414	2.262	-0.0406	0.0406	0
Base	4	18	DERUX Max	14.1366	0	38.3272	0	29.6425	0
Base	4	18	DERUY Max	0	14.1366	38.3272	29.6425	0	0
Base	4	18	F	0.2864	0.2864	12.506	-0.2809	0.2809	0
Base	4	18	COMB1	0.9323	0.9323	94.9045	-0.9145	0.9145	0
Base	4	18	COMB2	0.9477	0.9477	88.2419	-0.9296	0.9296	0
Base	4	18	COMB3	0.9877	0.9877	90.8783	-0.9688	0.9688	0
Base	4	18	COMB4	0.9059	0.9059	86.4167	-0.8886	0.8886	0
Base	4	18	COMB5 Max	49.9612	15.5965	256.9205	29.9867	103.6484	0
Base	4	18	COMB5 Min	-48.2237	-13.859	-88.1431	-31.691	-101.944	0
Base	4	18	COMB6 Max	15.5965	49.9612	256.9205	101.944	31.691	0
Base	4	18	COMB6 Min	-13.859	-48.2237	-88.1431	-103.6484	-29.9867	0
Base	4	18	COMB7 Max	15.3271	49.6918	233.5418	102.2083	31.4268	0
Base	4	18	COMB7 Min	-14.1284	-48.4931	-111.5218	-103.3841	-30.2509	0
Base	4	18	COMB8 Max	49.6918	15.3271	233.5418	30.2509	103.3841	0
Base	4	18	COMB8 Min	-48.4931	-14.1284	-111.5218	-31.4268	-102.2083	0
Base	4	18	ENVE Max	49.9612	49.9612	256.9205	102.2083	103.6484	0
Base	4	18	ENVE Min	-48.4931	-48.4931	-111.5218	-103.6484	-102.2083	0
Base	4	18	CIM01	0.6659	0.6659	67.7889	-0.6532	0.6532	0
Base	4	18	CIM02	0.7356	0.7356	70.8309	-0.7216	0.7216	0
Base	4	18	CIM03	0.7402	0.7402	71.8449	-0.7261	0.7261	0
Base	4	18	CIM04	0.7739	0.7739	73.1124	-0.7591	0.7591	0
Base	4	18	CIM05 Max	35.0307	10.9754	188.5612	20.934	72.6105	0
Base	4	18	CIM05 Min	-33.6988	-9.6435	-52.9834	-22.2404	-71.3041	0
Base	4	18	CIM06 Max	10.9754	35.0307	188.5612	71.3041	22.2404	0
Base	4	18	CIM06 Min	-9.6435	-33.6988	-52.9834	-72.6105	-20.934	0
Base	4	18	CIM07 Max	26.7929	8.6287	164.687	15.6883	55.2411	0
Base	4	18	CIM07 Min	-25.2451	-7.0809	-18.4622	-17.2065	-53.7228	0
Base	4	18	CIM08 Max	8.6287	26.7929	164.687	53.7228	17.2065	0
Base	4	18	CIM08 Min	-7.0809	-25.2451	-18.4622	-55.2411	-15.6883	0
Base	4	18	DER01	0.9323	0.9323	94.9045	-0.9145	0.9145	0
Base	4	18	DER02	0.9477	0.9477	88.2419	-0.9296	0.9296	0
Base	4	18	DER03	0.9877	0.9877	90.8783	-0.9688	0.9688	0
Base	4	18	DER04	0.9059	0.9059	86.4167	-0.8886	0.8886	0
Base	4	18	DER05 Max	74.5075	0.8688	283.4638	-0.8522	155.0464	0
Base	4	18	DER05 Min	-72.7699	0.8688	-114.6865	-0.8522	-153.3421	0
Base	4	18	DER06 Max	0.8688	74.5075	283.4638	153.3421	0.8522	0
Base	4	18	DER06 Min	0.8688	-72.7699	-114.6865	-155.0464	0.8522	0
Base	4	18	DER07 Max	74.238	0.5993	260.0852	-0.5879	154.7822	0
Base	4	18	DER07 Min	-73.0394	0.5993	-138.0651	-0.5879	-153.6063	0
Base	4	18	DER08 Max	0.5993	74.238	260.0852	153.6063	0.5879	0
Base	4	18	DER08 Min	0.5993	-73.0394	-138.0651	-154.7822	0.5879	0
Base	4	18	DERUD01	0.9323	0.9323	94.9045	-0.9145	0.9145	0
Base	4	18	DERUD02	0.9477	0.9477	88.2419	-0.9296	0.9296	0
Base	4	18	DERUD03	0.9877	0.9877	90.8783	-0.9688	0.9688	0
Base	4	18	DERUD04	0.9059	0.9059	86.4167	-0.8886	0.8886	0
Base	4	18	DERUD05 Max	15.0054	0.8688	122.7158	-0.8522	30.4947	0
Base	4	18	DERUD05 Min	-13.2679	0.8688	46.0615	-0.8522	-28.7903	0
Base	4	18	DERUD06 Max	0.8688	15.0054	122.7158	28.7903	0.8522	0
Base	4	18	DERUD06 Min	0.8688	-13.2679	46.0615	-30.4947	0.8522	0
Base	4	18	DERUD07 Max	14.736	0.5993	99.3372	-0.5879	30.2304	0
Base	4	18	DERUD07 Min	-13.5373	0.5993	22.6829	-0.5879	-29.0546	0
Base	4	18	DERUD08 Max	0.5993	14.736	99.3372	29.0546	0.5879	0
Base	4	18	DERUD08 Min	0.5993	-13.5373	22.6829	-30.2304	0.5879	0
Base	4	18	CIM09 Max	34.7643	10.709	161.4456	21.1953	72.3493	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	CIM09 Min	-33.9652	-9.9099	-80.0989	-21.9791	-71.5654	0
Base	4	18	CIM10 Max	10.709	34.7643	161.4456	71.5654	21.9791	0
Base	4	18	CIM10 Min	-9.9099	-33.9652	-80.0989	-72.3493	-21.1953	0
Base	4	18	CIM11	0.7074	0.7074	70.0509	-0.6939	0.6939	0
Base	4	18	CIM12	0.7493	0.7493	71.7669	-0.735	0.735	0
Base	4	18	CIM13 Max	26.7683	8.604	163.3415	15.7124	55.2169	0
Base	4	18	CIM13 Min	-25.2698	-7.1055	-19.8077	-17.1823	-53.747	0
Base	4	18	CIM14 Max	8.604	26.7683	163.3415	53.747	17.1823	0
Base	4	18	CIM14 Min	-7.1055	-25.2698	-19.8077	-55.2169	-15.7124	0
Base	4	18	CIM15	0.3996	0.3996	40.6733	-0.3919	0.3919	0
Base	4	18	COMB9	0.8454	0.8454	83.5931	-0.8292	0.8292	0
Base	4	18	COMB10	0.8492	0.8492	84.2561	-0.833	0.833	0
Base	4	18	COMB11	0.8036	0.8036	81.7679	-0.7883	0.7883	0
Base	4	18	DER09	0.9313	0.9313	87.3449	-0.9135	0.9135	0
Base	4	18	DERUD09	0.9313	0.9313	87.3449	-0.9135	0.9135	0
Base	4	18	DER10	0.9351	0.9351	88.0079	-0.9172	0.9172	0
Base	4	18	DERUD10	0.9351	0.9351	88.0079	-0.9172	0.9172	0
Base	4	18	DER11	0.8895	0.8895	85.5197	-0.8725	0.8725	0
Base	4	18	DERUD11	0.8895	0.8895	85.5197	-0.8725	0.8725	0

5.4 Modal Results

Table 5.8 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.259	3.865	24.2836	589.6921
Modal	2	0.259	3.865	24.2836	589.6921
Modal	3	0.207	4.837	30.3897	923.5332
Modal	4	0.049	20.366	127.9656	16375.2021
Modal	5	0.049	20.366	127.9656	16375.2021
Modal	6	0.044	22.675	142.4728	20298.4896
Modal	7	0.034	29.414	184.8167	34157.1955
Modal	8	0.009	107.158	673.2946	453325.6505
Modal	9	0.009	107.158	673.2946	453325.6505
Modal	10	0.009	108.781	683.4882	467156.0803
Modal	11	0.009	110.333	693.2433	480586.333

Table 5.9 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.259	0.0017	0.919	0	0.0017	0.919	0
Modal	2	0.259	0.919	0.0017	0	0.9207	0.9207	0
Modal	3	0.207	0	0	0	0.9207	0.9207	0
Modal	4	0.049	0.0178	0.0615	0	0.9385	0.9822	0
Modal	5	0.049	0.0615	0.0178	0	1	1	0
Modal	6	0.044	0	0	0	1	1	0
Modal	7	0.034	0	0	0	1	1	0
Modal	8	0.009	0	0	0	1	1	0
Modal	9	0.009	0	0	0	1	1	0
Modal	10	0.009	0	0	0	1	1	0
Modal	11	0.009	0	0	0	1	1	0

Table 5.9 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0.3022	0.0006	0	0.3022	0.0006	0
Modal	2	0.0006	0.3022	0	0.3028	0.3028	0
Modal	3	0	0	0.9287	0.3028	0.3028	0.9287

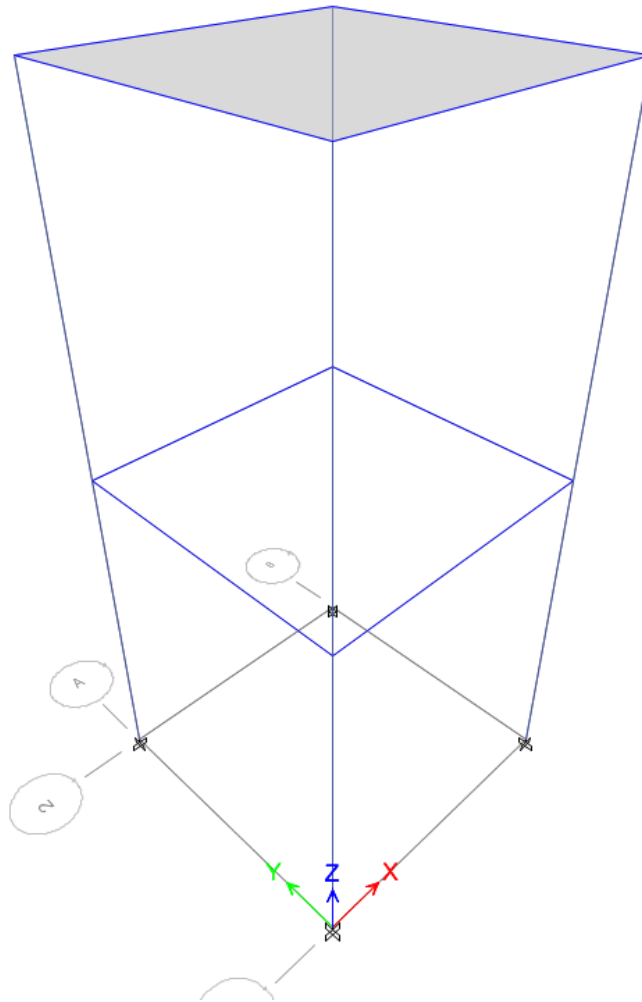
Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	4	0.5407	0.1565	0	0.8435	0.4593	0.9287
Modal	5	0.1565	0.5407	0	1	1	0.9287
Modal	6	0	0	0.0713	1	1	1
Modal	7	0	0	0	1	1	1
Modal	8	0	0	0	1	1	1
Modal	9	0	0	0	1	1	1
Modal	10	0	0	0	1	1	1
Modal	11	0	0	0	1	1	1

**Table 5.10 - Modal Load Participation Ratios**

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

**Table 5.11 - Modal Direction Factors**

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.259	0.002	0.998	0	0
Modal	2	0.259	0.998	0.002	0	0
Modal	3	0.207	0	0	0	1
Modal	4	0.049	0.225	0.775	0	0
Modal	5	0.049	0.775	0.225	0	0
Modal	6	0.044	0	0	0	1
Modal	7	0.034	0	0	0	0
Modal	8	0.009	0	0	0	0
Modal	9	0.009	0	0	0	0
Modal	10	0.009	0	0	0	0
Modal	11	0.009	0	0	0	0



## Project Report

Model File: 004 2017 TANQUE EDUCACION (BAJA), Revision 0  
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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N2	3000	6000	Yes	None	No
N1	3000	3000	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	600	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	2.6
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	2.6

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	2600	0
3	2600	0	0
4	2600	2600	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None

### 1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	4583.88	4583.88	1.3	1.3	4583.88	4583.88	1.3	1.3	1.3	1.3

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	4583.88	4583.88	15.4935	1.3	1.3

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N2	15252.76	15252.76	0
N1	4583.88	4583.88	0
Base	1297.32	1297.32	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC28	Concrete	24870.1	0.2	23.56	Fc=28 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C30X30	CONC28	Concrete Rectangular
V30X30	CONC28	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
Losa2d	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#7	22.2	4
#8	25.4	5
15M	16	2

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N2	1	4	From Area	
N2	2	5	From Area	
N2	3	7	From Area	
N2	4	8	From Area	
N1	1	2	D1	
N1	2	14	D1	
N1	3	6	D1	
N1	4	17	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N2	C1	1	Column	3000	C30X30	C30X30	11
N2	C2	2	Column	3000	C30X30	C30X30	11
N2	C3	3	Column	3000	C30X30	C30X30	11
N2	C4	4	Column	3000	C30X30	C30X30	11
N1	C1	7	Column	3000	C30X30	C30X30	11
N1	C2	8	Column	3000	C30X30	C30X30	11
N1	C3	9	Column	3000	C30X30	C30X30	11
N1	C4	10	Column	3000	C30X30	C30X30	11
N2	B1	5	Beam	2600	V30X30	V30X30	11
N2	B2	6	Beam	2600	V30X30	V30X30	11
N2	B4	11	Beam	2600	V30X30	V30X30	11
N2	B6	12	Beam	2600	V30X30	V30X30	11
N1	B1	13	Beam	2600	V30X30	V30X30	11
N1	B2	14	Beam	2600	V30X30	V30X30	11
N1	B4	16	Beam	2600	V30X30	V30X30	11
N1	B6	18	Beam	2600	V30X30	V30X30	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section
N2	F5	1	Losa2d

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

Table 4.1 - Load Patterns

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	
F	Other	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

Table 4.2 - Frame Loads - Distributed (Part 1 of 2)

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N2	B1	5	Beam	D	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	D	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	D	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	D	Force	Gravity	0	1	0	2600
N2	B1	5	Beam	LR	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	LR	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	LR	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	LR	Force	Gravity	0	1	0	2600
N2	B1	5	Beam	G	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	G	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	G	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	G	Force	Gravity	0	1	0	2600

Table 4.2 - Frame Loads - Distributed (Part 2 of 2)

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N2	B1	5	8.43	8.43
N2	B2	6	8.43	8.43
N2	B4	11	8.43	8.43
N2	B6	12	8.43	8.43
N2	B1	5	1.56	1.56
N2	B2	6	1.56	1.56
N2	B4	11	1.56	1.56
N2	B6	12	1.56	1.56
N2	B1	5	0.87	0.87
N2	B2	6	0.87	0.87
N2	B4	11	0.87	0.87
N2	B6	12	0.87	0.87

#### 4.2.2 Area Loads

Table 4.3 - Shell Loads - Uniform

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N2	F5	1	D	Gravity	3.85

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N2	F5	1	L	Gravity	1.8
N2	F5	1	F	Gravity	7.4

4.3 Load Cases

Table 4.4 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum
F	Linear Static

4.4 Load Combinations

Table 4.5 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB1	F	1.4		No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB2	F	1.2		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB3	F	1.2		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB4	F	1.2		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB5	F	1.2		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB6	F	1.2		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB7	F	0.9		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
COMB8	F	0.9		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM01	F	1		No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM02	F	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM03	F	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM04	F	1		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM05	F	1		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM06	F	1		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM07	F	1		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
CIM08	F	1		No
DER01	D	1.4	Linear Add	No
DER01	F	1.4		No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER02	F	1.2		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER03	F	1.2		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER04	F	1.2		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER05	F	1.2		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER06	F	1.2		No
DER07	D	0.9	Linear Add	No



Name	Load Case/Combo	Scale Factor	Type	Auto
DER07	EX	1		No
DER07	F	0.9		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DER08	F	0.9		No
DERUD01	D	1.4	Linear Add	No
DERUD01	F	1.4		No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD02	F	1.2		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD03	F	1.2		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD04	F	1.2		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD05	F	1.2		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD06	F	1.2		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD07	F	0.9		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
DERUD08	F	0.9		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM09	F	0.6		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM10	F	0.6		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM11	F	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM12	F	1		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM13	F	1		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM14	F	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM15	D	0.6	Linear Add	No
CIM15	F	0.6		No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB9	F	0.9		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB10	F	0.9		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
COMB11	F	0.9		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER09	F	1.2		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD09	F	1.2		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER10	F	1.2		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD10	F	1.2		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DER11	F	1.2		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No
DERUD11	F	1.2		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	203.603	264.6838	-264.6838	0	0	0	0
L	0	0	12.168	15.8184	-15.8184	0	0	0	0
LR	0	0	16.224	21.0912	-21.0912	0	0	0	0
EX Max	143.6726	0	0	1.168E-06	811.3549	186.7744	0	0	0
EY Max	0	143.6656	0	811.3156	0	186.7653	0	0	0
DISX Max	95.7817	0	0	0	540.9033	124.5162	0	0	0
DISY Max	0	95.748	0	540.7129	0	124.4724	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	9.048	11.7624	-11.7624	0	0	0	0
DERUX Max	0	0	0	0	0	0	0	0	0
DERUY Max	0	0	0	0	0	0	0	0	0
F	0	0	50.024	65.0312	-65.0312	0	0	0	0
COMB1	0	0	355.0777	461.6011	-461.6011	0	0	0	0
COMB2	0	0	331.9332	431.5131	-431.5131	0	0	0	0
COMB3	0	0	342.4788	445.2224	-445.2224	0	0	0	0
COMB4	0	0	324.6324	422.0221	-422.0221	0	0	0	0
COMB5 Max	95.7817	28.7244	316.5204	573.6903	129.4268	161.858	0	0	0
COMB5 Min	-95.7817	-28.7244	316.5204	249.2626	-952.3798	-161.858	0	0	0
COMB6 Max	28.7345	95.748	316.5204	952.1894	-249.2055	161.8273	0	0	0
COMB6 Min	-28.7345	-95.748	316.5204	-129.2365	-573.7474	-161.8273	0	0	0
COMB7 Max	28.7345	95.748	228.2643	837.4565	-134.4726	161.8273	0	0	0
COMB7 Min	-28.7345	-95.748	228.2643	-243.9694	-459.0145	-161.8273	0	0	0
COMB8 Max	95.7817	28.7244	228.2643	458.9574	244.1598	161.858	0	0	0
COMB8 Min	-95.7817	-28.7244	228.2643	134.5297	-837.6468	-161.858	0	0	0
ENVE Max	95.7817	95.748	355.0777	952.1894	244.1598	161.858	0	0	0
ENVE Min	-95.7817	-95.748	228.2643	-243.9694	-952.3798	-161.858	0	0	0
CIM01	0	0	253.627	329.715	-329.715	0	0	0	0
CIM02	0	0	265.795	345.5334	-345.5334	0	0	0	0
CIM03	0	0	269.851	350.8062	-350.8062	0	0	0	0
CIM04	0	0	274.921	357.3972	-357.3972	0	0	0	0
CIM05 Max	67.0472	20.1071	253.627	443.2648	48.9173	113.3006	0	0	0
CIM05 Min	-67.0472	-20.1071	253.627	216.1653	-708.3474	-113.3006	0	0	0
CIM06 Max	20.1142	67.0236	253.627	708.2141	-216.1254	113.2791	0	0	0
CIM06 Min	-20.1142	-67.0236	253.627	-48.784	-443.3047	-113.2791	0	0	0
CIM07 Max	50.7643	15.3197	274.921	443.9113	-70.7185	85.9092	0	0	0
CIM07 Min	-50.7643	-15.3197	274.921	270.8832	-644.076	-85.9092	0	0	0
CIM08 Max	15.3251	50.7465	274.921	643.9751	-270.8527	85.893	0	0	0
CIM08 Min	-15.3251	-50.7465	274.921	70.8194	-443.9418	-85.893	0	0	0
DER01	0	0	355.0777	461.6011	-461.6011	0	0	0	0
DER02	0	0	331.9332	431.5131	-431.5131	0	0	0	0
DER03	0	0	342.4788	445.2224	-445.2224	0	0	0	0
DER04	0	0	324.6324	422.0221	-422.0221	0	0	0	0
DER05 Max	143.6726	0	316.5204	411.4765	399.8785	186.7744	0	0	0
DER05 Min	-143.6726	0	316.5204	411.4765	-1222.8314	-186.7744	0	0	0
DER06 Max	0	143.6656	316.5204	1222.792	-411.4765	186.7653	0	0	0
DER06 Min	0	-143.6656	316.5204	-399.8391	-411.4765	-186.7653	0	0	0
DER07 Max	143.6726	0	228.2643	296.7435	514.6114	186.7744	0	0	0
DER07 Min	-143.6726	0	228.2643	296.7435	-1108.0985	-186.7744	0	0	0
DER08 Max	0	143.6656	228.2643	1108.0591	-296.7435	186.7653	0	0	0
DER08 Min	0	-143.6656	228.2643	-514.572	-296.7435	-186.7653	0	0	0
DERUD01	0	0	355.0777	461.6011	-461.6011	0	0	0	0
DERUD02	0	0	331.9332	431.5131	-431.5131	0	0	0	0
DERUD03	0	0	342.4788	445.2224	-445.2224	0	0	0	0
DERUD04	0	0	324.6324	422.0221	-422.0221	0	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Max	0	0	316.5204	411.4765	-411.4765	0	0	0	0
DERUD05 Min	0	0	316.5204	411.4765	-411.4765	0	0	0	0
DERUD06 Max	0	0	316.5204	411.4765	-411.4765	0	0	0	0
DERUD06 Min	0	0	316.5204	411.4765	-411.4765	0	0	0	0
DERUD07 Max	0	0	228.2643	296.7435	-296.7435	0	0	0	0
DERUD07 Min	0	0	228.2643	296.7435	-296.7435	0	0	0	0
DERUD08 Max	0	0	228.2643	296.7435	-296.7435	0	0	0	0
DERUD08 Min	0	0	228.2643	296.7435	-296.7435	0	0	0	0
CIM09 Max	67.0472	20.1071	152.1762	311.3787	180.8033	113.3006	0	0	0
CIM09 Min	-67.0472	-20.1071	152.1762	84.2793	-576.4613	-113.3006	0	0	0
CIM10 Max	20.1142	67.0236	152.1762	576.3281	-84.2393	113.2791	0	0	0
CIM10 Min	-20.1142	-67.0236	152.1762	-180.67	-311.4187	-113.2791	0	0	0
CIM11	0	0	262.675	341.4774	-341.4774	0	0	0	0
CIM12	0	0	269.539	350.4006	-350.4006	0	0	0	0
CIM13 Max	50.7643	15.3197	269.539	436.9147	-63.7219	85.9092	0	0	0
CIM13 Min	-50.7643	-15.3197	269.539	263.8866	-637.0794	-85.9092	0	0	0
CIM14 Max	15.3251	50.7465	269.539	636.9785	-263.8561	85.893	0	0	0
CIM14 Min	-15.3251	-50.7465	269.539	63.8228	-436.9452	-85.893	0	0	0
CIM15	0	0	152.1762	197.829	-197.829	0	0	0	0
COMB9	0	0	313.338	407.3393	-407.3393	0	0	0	0
COMB10	0	0	315.99	410.7869	-410.7869	0	0	0	0
COMB11	0	0	306.0372	397.8483	-397.8483	0	0	0	0
DER09	0	0	328.3452	426.8487	-426.8487	0	0	0	0
DERUD09	0	0	328.3452	426.8487	-426.8487	0	0	0	0
DER10	0	0	330.9972	430.2963	-430.2963	0	0	0	0
DERUD10	0	0	330.9972	430.2963	-430.2963	0	0	0	0
DER11	0	0	321.0444	417.3577	-417.3577	0	0	0	0
DERUD11	0	0	321.0444	417.3577	-417.3577	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	4583.88	4583.88	1.3	1.3	4583.88	4583.88	1.3	1.3	1.3	1.3

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	0	0	1	1.3	1.3	3
N1	D1	L	0	0	0	1	1.3	1.3	3
N1	D1	LR	0	0	0	1	1.3	1.3	3
N1	D1	EX Max	8.5	7.276E-09	0	1	1.3	1.3	3
N1	D1	EY Max	2.572E-09	8.5	0	1	1.3	1.3	3
N1	D1	DISX Max	5.7	5.145E-09	0	1	1.3	1.3	3
N1	D1	DISY Max	5.145E-09	5.7	0	1	1.3	1.3	3
N1	D1	W	0	0	0	1	1.3	1.3	3
N1	D1	G	0	0	0	1	1.3	1.3	3
N1	D1	DERUX Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUY Max	0	0	0	1	1.3	1.3	3
N1	D1	F	0	0	0	1	1.3	1.3	3
N1	D1	COMB1	0	0	0	1	1.3	1.3	3
N1	D1	COMB2	0	0	0	1	1.3	1.3	3
N1	D1	COMB3	0	0	0	1	1.3	1.3	3
N1	D1	COMB4	0	0	0	1	1.3	1.3	3
N1	D1	COMB5 Max	5.7	1.7	0	1	1.3	1.3	3
N1	D1	COMB5 Min	-5.7	-1.7	0	1	1.3	1.3	3
N1	D1	COMB6 Max	1.7	5.7	0	1	1.3	1.3	3
N1	D1	COMB6 Min	-1.7	-5.7	0	1	1.3	1.3	3
N1	D1	COMB7 Max	1.7	5.7	0	1	1.3	1.3	3

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	COMB7 Min	-1.7	-5.7	0	1	1.3	1.3	3
N1	D1	COMB8 Max	5.7	1.7	0	1	1.3	1.3	3
N1	D1	COMB8 Min	-5.7	-1.7	0	1	1.3	1.3	3
N1	D1	ENVE Max	5.7	5.7	0	1	1.3	1.3	3
N1	D1	ENVE Min	-5.7	-5.7	0	1	1.3	1.3	3
N1	D1	CIM01	0	0	0	1	1.3	1.3	3
N1	D1	CIM02	0	0	0	1	1.3	1.3	3
N1	D1	CIM03	0	0	0	1	1.3	1.3	3
N1	D1	CIM04	0	0	0	1	1.3	1.3	3
N1	D1	CIM05 Max	4	1.2	0	1	1.3	1.3	3
N1	D1	CIM05 Min	-4	-1.2	0	1	1.3	1.3	3
N1	D1	CIM06 Max	1.2	4	0	1	1.3	1.3	3
N1	D1	CIM06 Min	-1.2	-4	0	1	1.3	1.3	3
N1	D1	CIM07 Max	3	0.9	0	1	1.3	1.3	3
N1	D1	CIM07 Min	-3	-0.9	0	1	1.3	1.3	3
N1	D1	CIM08 Max	0.9	3	0	1	1.3	1.3	3
N1	D1	CIM08 Min	-0.9	-3	0	1	1.3	1.3	3
N1	D1	DER01	0	0	0	1	1.3	1.3	3
N1	D1	DER02	0	0	0	1	1.3	1.3	3
N1	D1	DER03	0	0	0	1	1.3	1.3	3
N1	D1	DER04	0	0	0	1	1.3	1.3	3
N1	D1	DER05 Max	8.5	7.276E-09	0	1	1.3	1.3	3
N1	D1	DER05 Min	-8.5	-7.276E-09	0	1	1.3	1.3	3
N1	D1	DER06 Max	2.572E-09	8.5	0	1	1.3	1.3	3
N1	D1	DER06 Min	-2.572E-09	-8.5	0	1	1.3	1.3	3
N1	D1	DER07 Max	8.5	7.276E-09	0	1	1.3	1.3	3
N1	D1	DER07 Min	-8.5	-7.276E-09	0	1	1.3	1.3	3
N1	D1	DER08 Max	2.572E-09	8.5	0	1	1.3	1.3	3
N1	D1	DER08 Min	-2.572E-09	-8.5	0	1	1.3	1.3	3
N1	D1	DERUD01	0	0	0	1	1.3	1.3	3
N1	D1	DERUD02	0	0	0	1	1.3	1.3	3
N1	D1	DERUD03	0	0	0	1	1.3	1.3	3
N1	D1	DERUD04	0	0	0	1	1.3	1.3	3
N1	D1	DERUD05 Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUD05 Min	0	0	0	1	1.3	1.3	3
N1	D1	DERUD06 Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUD06 Min	0	0	0	1	1.3	1.3	3
N1	D1	DERUD07 Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUD07 Min	0	0	0	1	1.3	1.3	3
N1	D1	DERUD08 Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUD08 Min	0	0	0	1	1.3	1.3	3
N1	D1	CIM09 Max	4	1.2	0	1	1.3	1.3	3
N1	D1	CIM09 Min	-4	-1.2	0	1	1.3	1.3	3
N1	D1	CIM10 Max	1.2	4	0	1	1.3	1.3	3
N1	D1	CIM10 Min	-1.2	-4	0	1	1.3	1.3	3
N1	D1	CIM11	0	0	0	1	1.3	1.3	3
N1	D1	CIM12	0	0	0	1	1.3	1.3	3
N1	D1	CIM13 Max	3	0.9	0	1	1.3	1.3	3
N1	D1	CIM13 Min	-3	-0.9	0	1	1.3	1.3	3
N1	D1	CIM14 Max	0.9	3	0	1	1.3	1.3	3
N1	D1	CIM14 Min	-0.9	-3	0	1	1.3	1.3	3
N1	D1	CIM15	0	0	0	1	1.3	1.3	3
N1	D1	COMB9	0	0	0	1	1.3	1.3	3
N1	D1	COMB10	0	0	0	1	1.3	1.3	3
N1	D1	COMB11	0	0	0	1	1.3	1.3	3
N1	D1	DER09	0	0	0	1	1.3	1.3	3
N1	D1	DERUD09	0	0	0	1	1.3	1.3	3
N1	D1	DER10	0	0	0	1	1.3	1.3	3
N1	D1	DERUD10	0	0	0	1	1.3	1.3	3
N1	D1	DER11	0	0	0	1	1.3	1.3	3

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	DERUD11	0	0	0	1	1.3	1.3	3

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	X	0	0	1.056
N1	D	Y	0	0	1.062
N1	L	X	0	0	1.054
N1	L	Y	0	0	1.05
N1	LR	X	0	0	1.165
N1	LR	Y	0	0	1.149
N1	EX Max	X	8.5	8.5	1
N1	EY Max	Y	8.5	8.5	1
N1	DISX Max	X	5.7	5.7	1
N1	DISY Max	Y	5.7	5.7	1
N1	G	X	0	0	1.046
N1	G	Y	0	0	1.061
N1	F	X	0	0	1.088
N1	F	Y	0	0	1.082
N1	COMB1	X	0	0	1.064
N1	COMB1	Y	0	0	1.068
N1	COMB2	X	0	0	1.064
N1	COMB2	Y	0	0	1.067
N1	COMB3	X	0	0	1.066
N1	COMB3	Y	0	0	1.069
N1	COMB4	X	0	0	1.064
N1	COMB4	Y	0	0	1.068
N1	COMB5 Max	X	5.7	5.7	1
N1	COMB5 Max	Y	1.7	1.7	1
N1	COMB5 Min	X	5.7	5.7	1
N1	COMB5 Min	Y	1.7	1.7	1
N1	COMB6 Max	X	1.7	1.7	1
N1	COMB6 Max	Y	5.7	5.7	1
N1	COMB6 Min	X	1.7	1.7	1
N1	COMB6 Min	Y	5.7	5.7	1
N1	COMB7 Max	X	1.7	1.7	1
N1	COMB7 Max	Y	5.7	5.7	1
N1	COMB7 Min	X	1.7	1.7	1
N1	COMB7 Min	Y	5.7	5.7	1
N1	COMB8 Max	X	5.7	5.7	1
N1	COMB8 Max	Y	1.7	1.7	1
N1	COMB8 Min	X	5.7	5.7	1
N1	COMB8 Min	Y	1.7	1.7	1
N1	ENVE Max	X	5.7	5.7	1
N1	ENVE Max	Y	5.7	5.7	1
N1	ENVE Min	X	5.7	5.7	1
N1	ENVE Min	Y	5.7	5.7	1
N1	CIM01	X	0	0	1.064
N1	CIM01	Y	0	0	1.068
N1	CIM02	X	0	0	1.063
N1	CIM02	Y	0	0	1.066
N1	CIM03	X	0	0	1.066
N1	CIM03	Y	0	0	1.07
N1	CIM04	X	0	0	1.065
N1	CIM04	Y	0	0	1.068
N1	CIM05 Max	X	4	4	1
N1	CIM05 Max	Y	1.2	1.2	1
N1	CIM05 Min	X	4	4	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	CIM05 Min	Y	1.2	1.2	1
N1	CIM06 Max	X	1.2	1.2	1
N1	CIM06 Max	Y	4	4	1
N1	CIM06 Min	X	1.2	1.2	1
N1	CIM06 Min	Y	4	4	1
N1	CIM07 Max	X	3	3	1
N1	CIM07 Max	Y	0.9	0.9	1
N1	CIM07 Min	X	3	3	1
N1	CIM07 Min	Y	0.9	0.9	1
N1	CIM08 Max	X	0.9	0.9	1
N1	CIM08 Max	Y	3	3	1
N1	CIM08 Min	X	0.9	0.9	1
N1	CIM08 Min	Y	3	3	1
N1	DER01	X	0	0	1.064
N1	DER01	Y	0	0	1.068
N1	DER02	X	0	0	1.064
N1	DER02	Y	0	0	1.067
N1	DER03	X	0	0	1.066
N1	DER03	Y	0	0	1.069
N1	DER04	X	0	0	1.064
N1	DER04	Y	0	0	1.068
N1	DER05 Max	X	8.5	8.5	1
N1	DER05 Min	X	8.5	8.5	1
N1	DER06 Max	Y	8.5	8.5	1
N1	DER06 Min	Y	8.5	8.5	1
N1	DER07 Max	X	8.5	8.5	1
N1	DER07 Min	X	8.5	8.5	1
N1	DER08 Max	Y	8.5	8.5	1
N1	DER08 Min	Y	8.5	8.5	1
N1	DERUD01	X	0	0	1.064
N1	DERUD01	Y	0	0	1.068
N1	DERUD02	X	0	0	1.064
N1	DERUD02	Y	0	0	1.067
N1	DERUD03	X	0	0	1.066
N1	DERUD03	Y	0	0	1.069
N1	DERUD04	X	0	0	1.064
N1	DERUD04	Y	0	0	1.068
N1	DERUD05 Max	X	0	0	1.063
N1	DERUD05 Max	Y	0	0	1.067
N1	DERUD05 Min	X	0	0	1.063
N1	DERUD05 Min	Y	0	0	1.067
N1	DERUD06 Max	X	0	0	1.063
N1	DERUD06 Max	Y	0	0	1.067
N1	DERUD06 Min	X	0	0	1.063
N1	DERUD06 Min	Y	0	0	1.067
N1	DERUD07 Max	X	0	0	1.064
N1	DERUD07 Max	Y	0	0	1.068
N1	DERUD07 Min	X	0	0	1.064
N1	DERUD07 Min	Y	0	0	1.068
N1	DERUD08 Max	X	0	0	1.064
N1	DERUD08 Max	Y	0	0	1.068
N1	DERUD08 Min	X	0	0	1.064
N1	DERUD08 Min	Y	0	0	1.068
N1	CIM09 Max	X	4	4	1
N1	CIM09 Max	Y	1.2	1.2	1
N1	CIM09 Min	X	4	4	1
N1	CIM09 Min	Y	1.2	1.2	1
N1	CIM10 Max	X	1.2	1.2	1
N1	CIM10 Max	Y	4	4	1
N1	CIM10 Min	X	1.2	1.2	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	CIM10 Min	Y	4	4	1
N1	CIM11	X	0	0	1.064
N1	CIM11	Y	0	0	1.068
N1	CIM12	X	0	0	1.063
N1	CIM12	Y	0	0	1.067
N1	CIM13 Max	X	3	3	1
N1	CIM13 Max	Y	0.9	0.9	1
N1	CIM13 Min	X	3	3	1
N1	CIM13 Min	Y	0.9	0.9	1
N1	CIM14 Max	X	0.9	0.9	1
N1	CIM14 Max	Y	3	3	1
N1	CIM14 Min	X	0.9	0.9	1
N1	CIM14 Min	Y	3	3	1
N1	CIM15	X	0	0	1.064
N1	CIM15	Y	0	0	1.068
N1	COMB9	X	0	0	1.062
N1	COMB9	Y	0	0	1.065
N1	COMB10	X	0	0	1.062
N1	COMB10	Y	0	0	1.066
N1	COMB11	X	0	0	1.062
N1	COMB11	Y	0	0	1.066
N1	DER09	X	0	0	1.063
N1	DER09	Y	0	0	1.066
N1	DERUD09	X	0	0	1.063
N1	DERUD09	Y	0	0	1.066
N1	DER10	X	0	0	1.063
N1	DER10	Y	0	0	1.067
N1	DERUD10	X	0	0	1.063
N1	DERUD10	Y	0	0	1.067
N1	DER11	X	0	0	1.063
N1	DER11	Y	0	0	1.067
N1	DERUD11	X	0	0	1.063
N1	DERUD11	Y	0	0	1.067

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	D	X	3.951E-07	2	0	2.6	6
N2	D	Y	3.951E-07	1	0	0	6
N2	L	X	3.924E-08	2	0	2.6	6
N2	L	Y	3.924E-08	1	0	0	6
N2	LR	X	4.186E-08	2	0	2.6	6
N2	LR	Y	4.186E-08	1	0	0	6
N2	EX Max	X	0.003405	1	0	0	6
N2	EY Max	Y	0.003405	3	2.6	0	6
N2	DISX Max	X	0.00227	1	0	0	6
N2	DISY Max	Y	0.002269	3	2.6	0	6
N2	G	X	2.334E-08	2	0	2.6	6
N2	G	Y	2.334E-08	1	0	0	6
N2	F	X	1.613E-07	2	0	2.6	6
N2	F	Y	1.613E-07	1	0	0	6
N2	COMB1	X	1E-06	2	0	2.6	6
N2	COMB1	Y	1E-06	1	0	0	6
N2	COMB2	X	1E-06	2	0	2.6	6
N2	COMB2	Y	1E-06	1	0	0	6
N2	COMB3	X	1E-06	2	0	2.6	6
N2	COMB3	Y	1E-06	1	0	0	6
N2	COMB4	X	1E-06	2	0	2.6	6
N2	COMB4	Y	1E-06	1	0	0	6



Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	COMB5 Max	X	0.002271	2	0	2.6	6
N2	COMB5 Max	Y	0.000681	1	0	0	6
N2	COMB5 Min	X	0.002271	4	2.6	2.6	6
N2	COMB5 Min	Y	0.000681	2	0	2.6	6
N2	COMB6 Max	X	0.000682	2	0	2.6	6
N2	COMB6 Max	Y	0.00227	1	0	0	6
N2	COMB6 Min	X	0.000682	4	2.6	2.6	6
N2	COMB6 Min	Y	0.00227	2	0	2.6	6
N2	COMB7 Max	X	0.000681	2	0	2.6	6
N2	COMB7 Max	Y	0.00227	1	0	0	6
N2	COMB7 Min	X	0.000681	4	2.6	2.6	6
N2	COMB7 Min	Y	0.00227	2	0	2.6	6
N2	COMB8 Max	X	0.00227	2	0	2.6	6
N2	COMB8 Max	Y	0.000681	1	0	0	6
N2	COMB8 Min	X	0.00227	4	2.6	2.6	6
N2	COMB8 Min	Y	0.000681	2	0	2.6	6
N2	ENVE Max	X	0.002271	2	0	2.6	6
N2	ENVE Max	Y	0.00227	1	0	0	6
N2	ENVE Min	X	0.002271	4	2.6	2.6	6
N2	ENVE Min	Y	0.00227	2	0	2.6	6
N2	CIM01	X	1E-06	2	0	2.6	6
N2	CIM01	Y	1E-06	1	0	0	6
N2	CIM02	X	1E-06	2	0	2.6	6
N2	CIM02	Y	1E-06	1	0	0	6
N2	CIM03	X	1E-06	2	0	2.6	6
N2	CIM03	Y	1E-06	1	0	0	6
N2	CIM04	X	1E-06	2	0	2.6	6
N2	CIM04	Y	1E-06	1	0	0	6
N2	CIM05 Max	X	0.00159	2	0	2.6	6
N2	CIM05 Max	Y	0.000477	1	0	0	6
N2	CIM05 Min	X	0.00159	4	2.6	2.6	6
N2	CIM05 Min	Y	0.000477	2	0	2.6	6
N2	CIM06 Max	X	0.000477	2	0	2.6	6
N2	CIM06 Max	Y	0.001589	1	0	0	6
N2	CIM06 Min	X	0.000477	4	2.6	2.6	6
N2	CIM06 Min	Y	0.001589	2	0	2.6	6
N2	CIM07 Max	X	0.001204	2	0	2.6	6
N2	CIM07 Max	Y	0.000364	1	0	0	6
N2	CIM07 Min	X	0.001204	4	2.6	2.6	6
N2	CIM07 Min	Y	0.000364	2	0	2.6	6
N2	CIM08 Max	X	0.000364	2	0	2.6	6
N2	CIM08 Max	Y	0.001203	1	0	0	6
N2	CIM08 Min	X	0.000364	4	2.6	2.6	6
N2	CIM08 Min	Y	0.001203	2	0	2.6	6
N2	DER01	X	1E-06	2	0	2.6	6
N2	DER01	Y	1E-06	1	0	0	6
N2	DER02	X	1E-06	2	0	2.6	6
N2	DER02	Y	1E-06	1	0	0	6
N2	DER03	X	1E-06	2	0	2.6	6
N2	DER03	Y	1E-06	1	0	0	6
N2	DER04	X	1E-06	2	0	2.6	6
N2	DER04	Y	1E-06	1	0	0	6
N2	DER05 Max	X	0.003406	1	0	0	6
N2	DER05 Min	X	0.003406	3	2.6	0	6
N2	DER06 Max	Y	0.003406	3	2.6	0	6
N2	DER06 Min	Y	0.003406	4	2.6	2.6	6
N2	DER07 Max	X	0.003405	1	0	0	6
N2	DER07 Min	X	0.003405	3	2.6	0	6
N2	DER08 Max	Y	0.003405	3	2.6	0	6
N2	DER08 Min	Y	0.003405	4	2.6	2.6	6

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	DERUD01	X	1E-06	2	0	2.6	6
N2	DERUD01	Y	1E-06	1	0	0	6
N2	DERUD02	X	1E-06	2	0	2.6	6
N2	DERUD02	Y	1E-06	1	0	0	6
N2	DERUD03	X	1E-06	2	0	2.6	6
N2	DERUD03	Y	1E-06	1	0	0	6
N2	DERUD04	X	1E-06	2	0	2.6	6
N2	DERUD04	Y	1E-06	1	0	0	6
N2	DERUD05 Max	X	1E-06	2	0	2.6	6
N2	DERUD05 Max	Y	1E-06	1	0	0	6
N2	DERUD05 Min	X	1E-06	2	0	2.6	6
N2	DERUD05 Min	Y	1E-06	1	0	0	6
N2	DERUD06 Max	X	1E-06	2	0	2.6	6
N2	DERUD06 Max	Y	1E-06	1	0	0	6
N2	DERUD06 Min	X	1E-06	2	0	2.6	6
N2	DERUD06 Min	Y	1E-06	1	0	0	6
N2	DERUD07 Max	X	1E-06	2	0	2.6	6
N2	DERUD07 Max	Y	1E-06	1	0	0	6
N2	DERUD07 Min	X	1E-06	2	0	2.6	6
N2	DERUD07 Min	Y	1E-06	1	0	0	6
N2	DERUD08 Max	X	1E-06	2	0	2.6	6
N2	DERUD08 Max	Y	1E-06	1	0	0	6
N2	DERUD08 Min	X	1E-06	2	0	2.6	6
N2	DERUD08 Min	Y	1E-06	1	0	0	6
N2	CIM09 Max	X	0.001589	2	0	2.6	6
N2	CIM09 Max	Y	0.000477	1	0	0	6
N2	CIM09 Min	X	0.001589	4	2.6	2.6	6
N2	CIM09 Min	Y	0.000477	2	0	2.6	6
N2	CIM10 Max	X	0.000477	2	0	2.6	6
N2	CIM10 Max	Y	0.001589	1	0	0	6
N2	CIM10 Min	X	0.000477	4	2.6	2.6	6
N2	CIM10 Min	Y	0.001589	2	0	2.6	6
N2	CIM11	X	1E-06	2	0	2.6	6
N2	CIM11	Y	1E-06	1	0	0	6
N2	CIM12	X	1E-06	2	0	2.6	6
N2	CIM12	Y	1E-06	1	0	0	6
N2	CIM13 Max	X	0.001204	2	0	2.6	6
N2	CIM13 Max	Y	0.000364	1	0	0	6
N2	CIM13 Min	X	0.001204	4	2.6	2.6	6
N2	CIM13 Min	Y	0.000364	2	0	2.6	6
N2	CIM14 Max	X	0.000364	2	0	2.6	6
N2	CIM14 Max	Y	0.001203	1	0	0	6
N2	CIM14 Min	X	0.000364	4	2.6	2.6	6
N2	CIM14 Min	Y	0.001203	2	0	2.6	6
N2	CIM15	X	3.339E-07	2	0	2.6	6
N2	CIM15	Y	3.339E-07	1	0	0	6
N2	COMB9	X	1E-06	2	0	2.6	6
N2	COMB9	Y	1E-06	1	0	0	6
N2	COMB10	X	1E-06	2	0	2.6	6
N2	COMB10	Y	1E-06	1	0	0	6
N2	COMB11	X	1E-06	2	0	2.6	6
N2	COMB11	Y	1E-06	1	0	0	6
N2	DER09	X	1E-06	2	0	2.6	6
N2	DER09	Y	1E-06	1	0	0	6
N2	DERUD09	X	1E-06	2	0	2.6	6
N2	DERUD09	Y	1E-06	1	0	0	6
N2	DER10	X	1E-06	2	0	2.6	6
N2	DER10	Y	1E-06	1	0	0	6
N2	DERUD10	X	1E-06	2	0	2.6	6
N2	DERUD10	Y	1E-06	1	0	0	6

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	DER11	X	1E-06	2	0	2.6	6
N2	DER11	Y	1E-06	1	0	0	6
N2	DERUD11	X	1E-06	2	0	2.6	6
N2	DERUD11	Y	1E-06	1	0	0	6
N1	D	X	0	4	2.6	2.6	3
N1	D	Y	0	2	0	2.6	3
N1	L	X	0	4	2.6	2.6	3
N1	L	Y	0	2	0	2.6	3
N1	LR	X	0	4	2.6	2.6	3
N1	LR	Y	0	2	0	2.6	3
N1	EX Max	X	0.002832	3	2.6	0	3
N1	EY Max	Y	0.002832	4	2.6	2.6	3
N1	DISX Max	X	0.001888	3	2.6	0	3
N1	DISY Max	Y	0.001888	4	2.6	2.6	3
N1	G	X	0	4	2.6	2.6	3
N1	G	Y	0	2	0	2.6	3
N1	F	X	0	4	2.6	2.6	3
N1	F	Y	0	2	0	2.6	3
N1	COMB1	X	0	4	2.6	2.6	3
N1	COMB1	Y	0	2	0	2.6	3
N1	COMB2	X	0	4	2.6	2.6	3
N1	COMB2	Y	0	2	0	2.6	3
N1	COMB3	X	0	4	2.6	2.6	3
N1	COMB3	Y	0	2	0	2.6	3
N1	COMB4	X	0	4	2.6	2.6	3
N1	COMB4	Y	0	2	0	2.6	3
N1	COMB5 Max	X	0.001888	3	2.6	0	3
N1	COMB5 Max	Y	0.000566	2	0	2.6	3
N1	COMB5 Min	X	0.001888	3	2.6	0	3
N1	COMB5 Min	Y	0.000566	2	0	2.6	3
N1	COMB6 Max	X	0.000566	3	2.6	0	3
N1	COMB6 Max	Y	0.001888	2	0	2.6	3
N1	COMB6 Min	X	0.000566	3	2.6	0	3
N1	COMB6 Min	Y	0.001888	2	0	2.6	3
N1	COMB7 Max	X	0.000566	3	2.6	0	3
N1	COMB7 Max	Y	0.001888	2	0	2.6	3
N1	COMB7 Min	X	0.000566	3	2.6	0	3
N1	COMB7 Min	Y	0.001888	2	0	2.6	3
N1	COMB8 Max	X	0.001888	3	2.6	0	3
N1	COMB8 Max	Y	0.000566	2	0	2.6	3
N1	COMB8 Min	X	0.001888	3	2.6	0	3
N1	COMB8 Min	Y	0.000566	2	0	2.6	3
N1	ENVE Max	X	0.001888	3	2.6	0	3
N1	ENVE Max	Y	0.001888	2	0	2.6	3
N1	ENVE Min	X	0.001888	3	2.6	0	3
N1	ENVE Min	Y	0.001888	2	0	2.6	3
N1	CIM01	X	0	4	2.6	2.6	3
N1	CIM01	Y	0	2	0	2.6	3
N1	CIM02	X	0	4	2.6	2.6	3
N1	CIM02	Y	0	2	0	2.6	3
N1	CIM03	X	0	4	2.6	2.6	3
N1	CIM03	Y	0	2	0	2.6	3
N1	CIM04	X	0	4	2.6	2.6	3
N1	CIM04	Y	0	2	0	2.6	3
N1	CIM05 Max	X	0.001322	3	2.6	0	3
N1	CIM05 Max	Y	0.000396	2	0	2.6	3
N1	CIM05 Min	X	0.001322	3	2.6	0	3
N1	CIM05 Min	Y	0.000396	2	0	2.6	3
N1	CIM06 Max	X	0.000397	3	2.6	0	3
N1	CIM06 Max	Y	0.001321	2	0	2.6	3

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM06 Min	X	0.000397	3	2.6	0	3
N1	CIM06 Min	Y	0.001321	2	0	2.6	3
N1	CIM07 Max	X	0.001001	3	2.6	0	3
N1	CIM07 Max	Y	0.000302	2	0	2.6	3
N1	CIM07 Min	X	0.001001	3	2.6	0	3
N1	CIM07 Min	Y	0.000302	2	0	2.6	3
N1	CIM08 Max	X	0.000302	3	2.6	0	3
N1	CIM08 Max	Y	0.001	2	0	2.6	3
N1	CIM08 Min	X	0.000302	3	2.6	0	3
N1	CIM08 Min	Y	0.001	2	0	2.6	3
N1	DER01	X	0	4	2.6	2.6	3
N1	DER01	Y	0	2	0	2.6	3
N1	DER02	X	0	4	2.6	2.6	3
N1	DER02	Y	0	2	0	2.6	3
N1	DER03	X	0	4	2.6	2.6	3
N1	DER03	Y	0	2	0	2.6	3
N1	DER04	X	0	4	2.6	2.6	3
N1	DER04	Y	0	2	0	2.6	3
N1	DER05 Max	X	0.002832	3	2.6	0	3
N1	DER05 Min	X	0.002832	3	2.6	0	3
N1	DER06 Max	Y	0.002832	4	2.6	2.6	3
N1	DER06 Min	Y	0.002832	4	2.6	2.6	3
N1	DER07 Max	X	0.002832	3	2.6	0	3
N1	DER07 Min	X	0.002832	3	2.6	0	3
N1	DER08 Max	Y	0.002832	4	2.6	2.6	3
N1	DER08 Min	Y	0.002832	4	2.6	2.6	3
N1	DERUD01	X	0	4	2.6	2.6	3
N1	DERUD01	Y	0	2	0	2.6	3
N1	DERUD02	X	0	4	2.6	2.6	3
N1	DERUD02	Y	0	2	0	2.6	3
N1	DERUD03	X	0	4	2.6	2.6	3
N1	DERUD03	Y	0	2	0	2.6	3
N1	DERUD04	X	0	4	2.6	2.6	3
N1	DERUD04	Y	0	2	0	2.6	3
N1	DERUD05 Max	X	0	4	2.6	2.6	3
N1	DERUD05 Max	Y	0	2	0	2.6	3
N1	DERUD05 Min	X	0	4	2.6	2.6	3
N1	DERUD05 Min	Y	0	2	0	2.6	3
N1	DERUD06 Max	X	0	4	2.6	2.6	3
N1	DERUD06 Max	Y	0	2	0	2.6	3
N1	DERUD06 Min	X	0	4	2.6	2.6	3
N1	DERUD06 Min	Y	0	2	0	2.6	3
N1	DERUD07 Max	X	0	4	2.6	2.6	3
N1	DERUD07 Max	Y	0	2	0	2.6	3
N1	DERUD07 Min	X	0	4	2.6	2.6	3
N1	DERUD07 Min	Y	0	2	0	2.6	3
N1	DERUD08 Max	X	0	4	2.6	2.6	3
N1	DERUD08 Max	Y	0	2	0	2.6	3
N1	DERUD08 Min	X	0	4	2.6	2.6	3
N1	DERUD08 Min	Y	0	2	0	2.6	3
N1	CIM09 Max	X	0.001322	3	2.6	0	3
N1	CIM09 Max	Y	0.000396	2	0	2.6	3
N1	CIM09 Min	X	0.001322	3	2.6	0	3
N1	CIM09 Min	Y	0.000396	2	0	2.6	3
N1	CIM10 Max	X	0.000397	3	2.6	0	3
N1	CIM10 Max	Y	0.001321	2	0	2.6	3
N1	CIM10 Min	X	0.000397	3	2.6	0	3
N1	CIM10 Min	Y	0.001321	2	0	2.6	3
N1	CIM11	X	0	4	2.6	2.6	3
N1	CIM11	Y	0	2	0	2.6	3

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM12	X	0	4	2.6	2.6	3
N1	CIM12	Y	0	2	0	2.6	3
N1	CIM13 Max	X	0.001001	3	2.6	0	3
N1	CIM13 Max	Y	0.000302	2	0	2.6	3
N1	CIM13 Min	X	0.001001	3	2.6	0	3
N1	CIM13 Min	Y	0.000302	2	0	2.6	3
N1	CIM14 Max	X	0.000302	3	2.6	0	3
N1	CIM14 Max	Y	0.001	2	0	2.6	3
N1	CIM14 Min	X	0.000302	3	2.6	0	3
N1	CIM14 Min	Y	0.001	2	0	2.6	3
N1	CIM15	X	0	4	2.6	2.6	3
N1	CIM15	Y	0	2	0	2.6	3
N1	COMB9	X	0	4	2.6	2.6	3
N1	COMB9	Y	0	2	0	2.6	3
N1	COMB10	X	0	4	2.6	2.6	3
N1	COMB10	Y	0	2	0	2.6	3
N1	COMB11	X	0	4	2.6	2.6	3
N1	COMB11	Y	0	2	0	2.6	3
N1	DER09	X	0	4	2.6	2.6	3
N1	DER09	Y	0	2	0	2.6	3
N1	DERUD09	X	0	4	2.6	2.6	3
N1	DERUD09	Y	0	2	0	2.6	3
N1	DER10	X	0	4	2.6	2.6	3
N1	DER10	Y	0	2	0	2.6	3
N1	DERUD10	X	0	4	2.6	2.6	3
N1	DERUD10	Y	0	2	0	2.6	3
N1	DER11	X	0	4	2.6	2.6	3
N1	DER11	Y	0	2	0	2.6	3
N1	DERUD11	X	0	4	2.6	2.6	3
N1	DERUD11	Y	0	2	0	2.6	3

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N2	D	X	0.001185	0	255400000000
N2	D	Y	0.001185	0	262900000000
N2	L	X	0.0001177	0	160500000000
N2	L	Y	0.0001177	0	160000000000
N2	LR	X	0.0001256	0	500100000000
N2	LR	Y	0.0001256	0	496300000000
N2	EX Max	X	10.2	10.2	1
N2	EY Max	Y	10.2	10.2	1
N2	DISX Max	X	6.8	6.8	1
N2	DISY Max	Y	6.8	6.8	1
N2	G	X	7.003E-05	0	445000000000
N2	G	Y	7.003E-05	0	480800000000
N2	F	X	0.000484	0	163600000000
N2	F	Y	0.000484	0	165300000000
N2	COMB1	X	0.002337	0	219700000000
N2	COMB1	Y	0.002337	0	224500000000
N2	COMB2	X	0.002254	0	216400000000
N2	COMB2	Y	0.002254	0	220400000000
N2	COMB3	X	0.002322	0	226400000000
N2	COMB3	Y	0.002322	0	230700000000
N2	COMB4	X	0.002184	0	218900000000
N2	COMB4	Y	0.002184	0	223100000000
N2	COMB5 Max	X	6.8	6.8	1
N2	COMB5 Max	Y	2	2	1.001

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N2	COMB5 Min	X	6.8	6.8	1
N2	COMB5 Min	Y	2	2	1.001
N2	COMB6 Max	X	2	2	1.001
N2	COMB6 Max	Y	6.8	6.8	1
N2	COMB6 Min	X	2	2	1.001
N2	COMB6 Min	Y	6.8	6.8	1
N2	COMB7 Max	X	2	2	1.001
N2	COMB7 Max	Y	6.8	6.8	1
N2	COMB7 Min	X	2	2	1.001
N2	COMB7 Min	Y	6.8	6.8	1
N2	COMB8 Max	X	6.8	6.8	1
N2	COMB8 Max	Y	2	2	1.001
N2	COMB8 Min	X	6.8	6.8	1
N2	COMB8 Min	Y	2	2	1.001
N2	ENVE Max	X	6.8	6.8	1
N2	ENVE Max	Y	6.8	6.8	1
N2	ENVE Min	X	6.8	6.8	1
N2	ENVE Min	Y	6.8	6.8	1
N2	CIM01	X	0.001669	0	219700000000
N2	CIM01	Y	0.001669	0	224500000000
N2	CIM02	X	0.001787	0	214500000000
N2	CIM02	Y	0.001787	0	218700000000
N2	CIM03	X	0.001795	0	228600000000
N2	CIM03	Y	0.001795	0	233400000000
N2	CIM04	X	0.001852	0	222100000000
N2	CIM04	Y	0.001852	0	226400000000
N2	CIM05 Max	X	4.8	4.8	1
N2	CIM05 Max	Y	1.4	1.4	1.001
N2	CIM05 Min	X	4.8	4.8	1
N2	CIM05 Min	Y	1.4	1.4	1.001
N2	CIM06 Max	X	1.4	1.4	1.001
N2	CIM06 Max	Y	4.8	4.8	1
N2	CIM06 Min	X	1.4	1.4	1.001
N2	CIM06 Min	Y	4.8	4.8	1
N2	CIM07 Max	X	3.6	3.6	1.001
N2	CIM07 Max	Y	1.1	1.1	1.002
N2	CIM07 Min	X	3.6	3.6	1.001
N2	CIM07 Min	Y	1.1	1.1	1.002
N2	CIM08 Max	X	1.1	1.1	1.002
N2	CIM08 Max	Y	3.6	3.6	1.001
N2	CIM08 Min	X	1.1	1.1	1.002
N2	CIM08 Min	Y	3.6	3.6	1.001
N2	DER01	X	0.002337	0	219700000000
N2	DER01	Y	0.002337	0	224500000000
N2	DER02	X	0.002254	0	216400000000
N2	DER02	Y	0.002254	0	220400000000
N2	DER03	X	0.002322	0	226400000000
N2	DER03	Y	0.002322	0	230700000000
N2	DER04	X	0.002184	0	218900000000
N2	DER04	Y	0.002184	0	223100000000
N2	DER05 Max	X	10.2	10.2	1
N2	DER05 Min	X	10.2	10.2	1
N2	DER06 Max	Y	10.2	10.2	1
N2	DER06 Min	Y	10.2	10.2	1
N2	DER07 Max	X	10.2	10.2	1
N2	DER07 Min	X	10.2	10.2	1
N2	DER08 Max	Y	10.2	10.2	1
N2	DER08 Min	Y	10.2	10.2	1
N2	DERUD01	X	0.002337	0	219700000000

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N2	DERUD01	Y	0.002337	0	224500000000
N2	DERUD02	X	0.002254	0	216400000000
N2	DERUD02	Y	0.002254	0	220400000000
N2	DERUD03	X	0.002322	0	226400000000
N2	DERUD03	Y	0.002322	0	230700000000
N2	DERUD04	X	0.002184	0	218900000000
N2	DERUD04	Y	0.002184	0	223100000000
N2	DERUD05 Max	X	0.002121	0	215300000000
N2	DERUD05 Max	Y	0.002121	0	219600000000
N2	DERUD05 Min	X	0.002121	0	215300000000
N2	DERUD05 Min	Y	0.002121	0	219600000000
N2	DERUD06 Max	X	0.002121	0	215300000000
N2	DERUD06 Max	Y	0.002121	0	219600000000
N2	DERUD06 Min	X	0.002121	0	215300000000
N2	DERUD06 Min	Y	0.002121	0	219600000000
N2	DERUD07 Max	X	0.001502	0	219700000000
N2	DERUD07 Max	Y	0.001502	0	224500000000
N2	DERUD07 Min	X	0.001502	0	219700000000
N2	DERUD07 Min	Y	0.001502	0	224500000000
N2	DERUD08 Max	X	0.001502	0	219700000000
N2	DERUD08 Max	Y	0.001502	0	224500000000
N2	DERUD08 Min	X	0.001502	0	219700000000
N2	DERUD08 Min	Y	0.001502	0	224500000000
N2	CIM09 Max	X	4.8	4.8	1
N2	CIM09 Max	Y	1.4	1.4	1.001
N2	CIM09 Min	X	4.8	4.8	1
N2	CIM09 Min	Y	1.4	1.4	1.001
N2	CIM10 Max	X	1.4	1.4	1.001
N2	CIM10 Max	Y	4.8	4.8	1
N2	CIM10 Min	X	1.4	1.4	1.001
N2	CIM10 Min	Y	4.8	4.8	1
N2	CIM11	X	0.001739	0	224200000000
N2	CIM11	Y	0.001739	0	229400000000
N2	CIM12	X	0.00181	0	219000000000
N2	CIM12	Y	0.00181	0	223500000000
N2	CIM13 Max	X	3.6	3.6	1.001
N2	CIM13 Max	Y	1.1	1.1	1.002
N2	CIM13 Min	X	3.6	3.6	1.001
N2	CIM13 Min	Y	1.1	1.1	1.002
N2	CIM14 Max	X	1.1	1.1	1.002
N2	CIM14 Max	Y	3.6	3.6	1.001
N2	CIM14 Min	X	1.1	1.1	1.002
N2	CIM14 Min	Y	3.6	3.6	1.001
N2	CIM15	X	0.001002	0	219700000000
N2	CIM15	Y	0.001002	0	224500000000
N2	COMB9	X	0.002081	0	219500000000
N2	COMB9	Y	0.002081	0	223900000000
N2	COMB10	X	0.002088	0	226500000000
N2	COMB10	Y	0.002088	0	231600000000
N2	COMB11	X	0.002011	0	222300000000
N2	COMB11	Y	0.002011	0	227100000000
N2	DER09	X	0.002227	0	214700000000
N2	DER09	Y	0.002227	0	218800000000
N2	DERUD09	X	0.002227	0	214700000000
N2	DERUD09	Y	0.002227	0	218800000000
N2	DER10	X	0.002233	0	221000000000
N2	DER10	Y	0.002233	0	225700000000
N2	DERUD10	X	0.002233	0	221000000000
N2	DERUD10	Y	0.002233	0	225700000000

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N2	DER11	X	0.002156	0	217100000000
N2	DER11	Y	0.002156	0	221500000000
N2	DERUD11	X	0.002156	0	217100000000
N2	DERUD11	Y	0.002156	0	221500000000
N1	D	X	0	0	1.056
N1	D	Y	0	0	1.062
N1	L	X	0	0	1.054
N1	L	Y	0	0	1.05
N1	LR	X	0	0	1.165
N1	LR	Y	0	0	1.149
N1	EX Max	X	8.5	8.5	1
N1	EY Max	Y	8.5	8.5	1
N1	DISX Max	X	5.7	5.7	1
N1	DISY Max	Y	5.7	5.7	1
N1	G	X	0	0	1.046
N1	G	Y	0	0	1.061
N1	F	X	0	0	1.088
N1	F	Y	0	0	1.082
N1	COMB1	X	0	0	1.064
N1	COMB1	Y	0	0	1.068
N1	COMB2	X	0	0	1.064
N1	COMB2	Y	0	0	1.067
N1	COMB3	X	0	0	1.066
N1	COMB3	Y	0	0	1.069
N1	COMB4	X	0	0	1.064
N1	COMB4	Y	0	0	1.068
N1	COMB5 Max	X	5.7	5.7	1
N1	COMB5 Max	Y	1.7	1.7	1
N1	COMB5 Min	X	5.7	5.7	1
N1	COMB5 Min	Y	1.7	1.7	1
N1	COMB6 Max	X	1.7	1.7	1
N1	COMB6 Max	Y	5.7	5.7	1
N1	COMB6 Min	X	1.7	1.7	1
N1	COMB6 Min	Y	5.7	5.7	1
N1	COMB7 Max	X	1.7	1.7	1
N1	COMB7 Max	Y	5.7	5.7	1
N1	COMB7 Min	X	1.7	1.7	1
N1	COMB7 Min	Y	5.7	5.7	1
N1	COMB8 Max	X	5.7	5.7	1
N1	COMB8 Max	Y	1.7	1.7	1
N1	COMB8 Min	X	5.7	5.7	1
N1	COMB8 Min	Y	1.7	1.7	1
N1	ENVE Max	X	5.7	5.7	1
N1	ENVE Max	Y	5.7	5.7	1
N1	ENVE Min	X	5.7	5.7	1
N1	ENVE Min	Y	5.7	5.7	1
N1	CIM01	X	0	0	1.064
N1	CIM01	Y	0	0	1.068
N1	CIM02	X	0	0	1.063
N1	CIM02	Y	0	0	1.066
N1	CIM03	X	0	0	1.066
N1	CIM03	Y	0	0	1.07
N1	CIM04	X	0	0	1.065
N1	CIM04	Y	0	0	1.068
N1	CIM05 Max	X	4	4	1
N1	CIM05 Max	Y	1.2	1.2	1
N1	CIM05 Min	X	4	4	1
N1	CIM05 Min	Y	1.2	1.2	1
N1	CIM06 Max	X	1.2	1.2	1



Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM06 Max	Y	4	4	1
N1	CIM06 Min	X	1.2	1.2	1
N1	CIM06 Min	Y	4	4	1
N1	CIM07 Max	X	3	3	1
N1	CIM07 Max	Y	0.9	0.9	1
N1	CIM07 Min	X	3	3	1
N1	CIM07 Min	Y	0.9	0.9	1
N1	CIM08 Max	X	0.9	0.9	1
N1	CIM08 Max	Y	3	3	1
N1	CIM08 Min	X	0.9	0.9	1
N1	CIM08 Min	Y	3	3	1
N1	DER01	X	0	0	1.064
N1	DER01	Y	0	0	1.068
N1	DER02	X	0	0	1.064
N1	DER02	Y	0	0	1.067
N1	DER03	X	0	0	1.066
N1	DER03	Y	0	0	1.069
N1	DER04	X	0	0	1.064
N1	DER04	Y	0	0	1.068
N1	DER05 Max	X	8.5	8.5	1
N1	DER05 Min	X	8.5	8.5	1
N1	DER06 Max	Y	8.5	8.5	1
N1	DER06 Min	Y	8.5	8.5	1
N1	DER07 Max	X	8.5	8.5	1
N1	DER07 Min	X	8.5	8.5	1
N1	DER08 Max	Y	8.5	8.5	1
N1	DER08 Min	Y	8.5	8.5	1
N1	DERUD01	X	0	0	1.064
N1	DERUD01	Y	0	0	1.068
N1	DERUD02	X	0	0	1.064
N1	DERUD02	Y	0	0	1.067
N1	DERUD03	X	0	0	1.066
N1	DERUD03	Y	0	0	1.069
N1	DERUD04	X	0	0	1.064
N1	DERUD04	Y	0	0	1.068
N1	DERUD05 Max	X	0	0	1.063
N1	DERUD05 Max	Y	0	0	1.067
N1	DERUD05 Min	X	0	0	1.063
N1	DERUD05 Min	Y	0	0	1.067
N1	DERUD06 Max	X	0	0	1.063
N1	DERUD06 Max	Y	0	0	1.067
N1	DERUD06 Min	X	0	0	1.063
N1	DERUD06 Min	Y	0	0	1.067
N1	DERUD07 Max	X	0	0	1.064
N1	DERUD07 Max	Y	0	0	1.068
N1	DERUD07 Min	X	0	0	1.064
N1	DERUD07 Min	Y	0	0	1.068
N1	DERUD08 Max	X	0	0	1.064
N1	DERUD08 Max	Y	0	0	1.068
N1	DERUD08 Min	X	0	0	1.064
N1	DERUD08 Min	Y	0	0	1.068
N1	CIM09 Max	X	4	4	1
N1	CIM09 Max	Y	1.2	1.2	1
N1	CIM09 Min	X	4	4	1
N1	CIM09 Min	Y	1.2	1.2	1
N1	CIM10 Max	X	1.2	1.2	1
N1	CIM10 Max	Y	4	4	1
N1	CIM10 Min	X	1.2	1.2	1
N1	CIM10 Min	Y	4	4	1

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM11	X	0	0	1.064
N1	CIM11	Y	0	0	1.068
N1	CIM12	X	0	0	1.063
N1	CIM12	Y	0	0	1.067
N1	CIM13 Max	X	3	3	1
N1	CIM13 Max	Y	0.9	0.9	1
N1	CIM13 Min	X	3	3	1
N1	CIM13 Min	Y	0.9	0.9	1
N1	CIM14 Max	X	0.9	0.9	1
N1	CIM14 Max	Y	3	3	1
N1	CIM14 Min	X	0.9	0.9	1
N1	CIM14 Min	Y	3	3	1
N1	CIM15	X	0	0	1.064
N1	CIM15	Y	0	0	1.068
N1	COMB9	X	0	0	1.062
N1	COMB9	Y	0	0	1.065
N1	COMB10	X	0	0	1.062
N1	COMB10	Y	0	0	1.066
N1	COMB11	X	0	0	1.062
N1	COMB11	Y	0	0	1.066
N1	DER09	X	0	0	1.063
N1	DER09	Y	0	0	1.066
N1	DERUD09	X	0	0	1.063
N1	DERUD09	Y	0	0	1.066
N1	DER10	X	0	0	1.063
N1	DER10	Y	0	0	1.067
N1	DERUD10	X	0	0	1.063
N1	DERUD10	Y	0	0	1.067
N1	DER11	X	0	0	1.063
N1	DER11	Y	0	0	1.067
N1	DERUD11	X	0	0	1.063
N1	DERUD11	Y	0	0	1.067

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	D	Top	133.2057	0	0	0	173.1674	-173.1674
N2	D	Bottom	158.6505	0	0	0	206.2456	-206.2456
N2	L	Top	12.168	0	0	0	15.8184	-15.8184
N2	L	Bottom	12.168	0	0	0	15.8184	-15.8184
N2	LR	Top	16.224	0	0	0	21.0912	-21.0912
N2	LR	Bottom	16.224	0	0	0	21.0912	-21.0912
N2	EX Max	Top	0	126.3515	0	164.2569	0	0.0017
N2	EX Max	Bottom	0	126.3515	0	164.2569	0	380.5462
N2	EY Max	Top	0	0	126.3453	164.2489	0.0017	0
N2	EY Max	Bottom	0	0	126.3453	164.2489	380.5278	5.058E-07
N2	DISX Max	Top	0	84.2343	0	109.5046	0	0.0012
N2	DISX Max	Bottom	0	84.2343	0	109.5046	0	253.6975
N2	DISY Max	Top	0	0	84.2047	109.4661	0.0012	0
N2	DISY Max	Bottom	0	0	84.2047	109.4661	253.6082	0
N2	W	Top	0	0	0	0	0	0
N2	W	Bottom	0	0	0	0	0	0
N2	G	Top	9.048	0	0	0	11.7624	-11.7624
N2	G	Bottom	9.048	0	0	0	11.7624	-11.7624
N2	DERUX Max	Top	0	0	0	0	0	0
N2	DERUX Max	Bottom	0	0	0	0	0	0
N2	DERUY Max	Top	0	0	0	0	0	0
N2	DERUY Max	Bottom	0	0	0	0	0	0

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	F	Top	50.024	0	0	0	65.0312	-65.0312
N2	F	Bottom	50.024	0	0	0	65.0312	-65.0312
N2	COMB1	Top	256.5216	0	0	0	333.478	-333.478
N2	COMB1	Bottom	292.1443	0	0	0	379.7876	-379.7876
N2	COMB2	Top	247.4564	0	0	0	321.6933	-321.6933
N2	COMB2	Bottom	277.9902	0	0	0	361.3872	-361.3872
N2	COMB3	Top	258.002	0	0	0	335.4026	-335.4026
N2	COMB3	Bottom	288.5358	0	0	0	375.0965	-375.0965
N2	COMB4	Top	240.1556	0	0	0	312.2023	-312.2023
N2	COMB4	Bottom	270.6894	0	0	0	351.8962	-351.8962
N2	COMB5 Max	Top	232.0436	84.2343	25.2614	142.3444	301.657	-301.6556
N2	COMB5 Max	Bottom	262.5774	84.2343	25.2614	142.3444	417.4331	-87.6531
N2	COMB5 Min	Top	232.0436	-84.2343	-25.2614	-142.3444	301.6564	-301.6579
N2	COMB5 Min	Bottom	262.5774	-84.2343	-25.2614	-142.3444	265.2681	-595.0481
N2	COMB6 Max	Top	232.0436	25.2703	84.2047	142.3174	301.6579	-301.6564
N2	COMB6 Max	Bottom	262.5774	25.2703	84.2047	142.3174	594.9588	-265.2413
N2	COMB6 Min	Top	232.0436	-25.2703	-84.2047	-142.3174	301.6556	-301.657
N2	COMB6 Min	Bottom	262.5774	-25.2703	-84.2047	-142.3174	87.7424	-417.4598
N2	COMB7 Max	Top	164.9067	25.2703	84.2047	142.3174	214.3799	-214.3784
N2	COMB7 Max	Bottom	187.807	25.2703	84.2047	142.3174	497.7573	-168.0399
N2	COMB7 Min	Top	164.9067	-25.2703	-84.2047	-142.3174	214.3776	-214.3791
N2	COMB7 Min	Bottom	187.807	-25.2703	-84.2047	-142.3174	-9.4591	-320.2584
N2	COMB8 Max	Top	164.9067	84.2343	25.2614	142.3444	214.3791	-214.3776
N2	COMB8 Max	Bottom	187.807	84.2343	25.2614	142.3444	320.2316	9.5483
N2	COMB8 Min	Top	164.9067	-84.2343	-25.2614	-142.3444	214.3784	-214.3799
N2	COMB8 Min	Bottom	187.807	-84.2343	-25.2614	-142.3444	168.0667	-497.8466
N2	ENVE Max	Top	258.002	84.2343	84.2047	142.3444	335.4026	-214.3776
N2	ENVE Max	Bottom	292.1443	84.2343	84.2047	142.3444	594.9588	9.5483
N2	ENVE Min	Top	164.9067	-84.2343	-84.2047	-142.3444	214.3776	-335.4026
N2	ENVE Min	Bottom	187.807	-84.2343	-84.2047	-142.3444	-9.4591	-595.0481
N2	CIM01	Top	183.2297	0	0	0	238.1986	-238.1986
N2	CIM01	Bottom	208.6745	0	0	0	271.2768	-271.2768
N2	CIM02	Top	195.3977	0	0	0	254.017	-254.017
N2	CIM02	Bottom	220.8425	0	0	0	287.0952	-287.0952
N2	CIM03	Top	199.4537	0	0	0	259.2898	-259.2898
N2	CIM03	Bottom	224.8985	0	0	0	292.368	-292.368
N2	CIM04	Top	204.5237	0	0	0	265.8808	-265.8808
N2	CIM04	Bottom	229.9685	0	0	0	298.959	-298.959
N2	CIM05 Max	Top	183.2297	58.964	17.683	99.6411	238.1988	-238.1978
N2	CIM05 Max	Bottom	208.6745	58.964	17.683	99.6411	324.5345	-93.6886
N2	CIM05 Min	Top	183.2297	-58.964	-17.683	-99.6411	238.1983	-238.1994
N2	CIM05 Min	Bottom	208.6745	-58.964	-17.683	-99.6411	218.0191	-448.8651
N2	CIM06 Max	Top	183.2297	17.6892	58.9433	99.6222	238.1994	-238.1983
N2	CIM06 Max	Bottom	208.6745	17.6892	58.9433	99.6222	448.8026	-218.0004
N2	CIM06 Min	Top	183.2297	-17.6892	-58.9433	-99.6222	238.1978	-238.1988
N2	CIM06 Min	Bottom	208.6745	-17.6892	-58.9433	-99.6222	93.7511	-324.5533
N2	CIM07 Max	Top	204.5237	44.6442	13.4727	75.552	265.881	-265.8802
N2	CIM07 Max	Bottom	229.9685	44.6442	13.4727	75.552	339.5363	-164.4994
N2	CIM07 Min	Top	204.5237	-44.6442	-13.4727	-75.552	265.8806	-265.8814
N2	CIM07 Min	Bottom	229.9685	-44.6442	-13.4727	-75.552	258.3817	-433.4187
N2	CIM08 Max	Top	204.5237	13.4775	44.6285	75.5378	265.8814	-265.8806
N2	CIM08 Max	Bottom	229.9685	13.4775	44.6285	75.5378	433.3714	-258.3674
N2	CIM08 Min	Top	204.5237	-13.4775	-44.6285	-75.5378	265.8802	-265.881
N2	CIM08 Min	Bottom	229.9685	-13.4775	-44.6285	-75.5378	164.5467	-339.5506
N2	DER01	Top	256.5216	0	0	0	333.478	-333.478
N2	DER01	Bottom	292.1443	0	0	0	379.7876	-379.7876
N2	DER02	Top	247.4564	0	0	0	321.6933	-321.6933
N2	DER02	Bottom	277.9902	0	0	0	361.3872	-361.3872
N2	DER03	Top	258.002	0	0	0	335.4026	-335.4026
N2	DER03	Bottom	288.5358	0	0	0	375.0965	-375.0965

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	DER04	Top	240.1556	0	0	0	312.2023	-312.2023
N2	DER04	Bottom	270.6894	0	0	0	351.8962	-351.8962
N2	DER05 Max	Top	232.0436	126.3515	0	164.2569	301.6567	-301.655
N2	DER05 Max	Bottom	262.5774	126.3515	0	164.2569	341.3506	39.1956
N2	DER05 Min	Top	232.0436	-126.3515	0	-164.2569	301.6567	-301.6584
N2	DER05 Min	Bottom	262.5774	-126.3515	0	-164.2569	341.3506	-721.8968
N2	DER06 Max	Top	232.0436	0	126.3453	164.2489	301.6584	-301.6567
N2	DER06 Max	Bottom	262.5774	0	126.3453	164.2489	721.8784	-341.3506
N2	DER06 Min	Top	232.0436	0	-126.3453	-164.2489	301.655	-301.6567
N2	DER06 Min	Bottom	262.5774	0	-126.3453	-164.2489	-39.1772	-341.3506
N2	DER07 Max	Top	164.9067	126.3515	0	164.2569	214.3787	-214.377
N2	DER07 Max	Bottom	187.807	126.3515	0	164.2569	244.1491	136.3971
N2	DER07 Min	Top	164.9067	-126.3515	0	-164.2569	214.3787	-214.3805
N2	DER07 Min	Bottom	187.807	-126.3515	0	-164.2569	244.1491	-624.6954
N2	DER08 Max	Top	164.9067	0	126.3453	164.2489	214.3805	-214.3787
N2	DER08 Max	Bottom	187.807	0	126.3453	164.2489	624.6769	-244.1491
N2	DER08 Min	Top	164.9067	0	-126.3453	-164.2489	214.377	-214.3787
N2	DER08 Min	Bottom	187.807	0	-126.3453	-164.2489	-136.3786	-244.1491
N2	DERUD01	Top	256.5216	0	0	0	333.478	-333.478
N2	DERUD01	Bottom	292.1443	0	0	0	379.7876	-379.7876
N2	DERUD02	Top	247.4564	0	0	0	321.6933	-321.6933
N2	DERUD02	Bottom	277.9902	0	0	0	361.3872	-361.3872
N2	DERUD03	Top	258.002	0	0	0	335.4026	-335.4026
N2	DERUD03	Bottom	288.5358	0	0	0	375.0965	-375.0965
N2	DERUD04	Top	240.1556	0	0	0	312.2023	-312.2023
N2	DERUD04	Bottom	270.6894	0	0	0	351.8962	-351.8962
N2	DERUD05 Max	Top	232.0436	0	0	0	301.6567	-301.6567
N2	DERUD05 Max	Bottom	262.5774	0	0	0	341.3506	-341.3506
N2	DERUD05 Min	Top	232.0436	0	0	0	301.6567	-301.6567
N2	DERUD05 Min	Bottom	262.5774	0	0	0	341.3506	-341.3506
N2	DERUD06 Max	Top	232.0436	0	0	0	301.6567	-301.6567
N2	DERUD06 Max	Bottom	262.5774	0	0	0	341.3506	-341.3506
N2	DERUD06 Min	Top	232.0436	0	0	0	301.6567	-301.6567
N2	DERUD06 Min	Bottom	262.5774	0	0	0	341.3506	-341.3506
N2	DERUD07 Max	Top	164.9067	0	0	0	214.3787	-214.3787
N2	DERUD07 Max	Bottom	187.807	0	0	0	244.1491	-244.1491
N2	DERUD07 Min	Top	164.9067	0	0	0	214.3787	-214.3787
N2	DERUD07 Min	Bottom	187.807	0	0	0	244.1491	-244.1491
N2	DERUD08 Max	Top	164.9067	0	0	0	214.3787	-214.3787
N2	DERUD08 Max	Bottom	187.807	0	0	0	244.1491	-244.1491
N2	DERUD08 Min	Top	164.9067	0	0	0	214.3787	-214.3787
N2	DERUD08 Min	Bottom	187.807	0	0	0	244.1491	-244.1491
N2	CIM09 Max	Top	109.9378	58.964	17.683	99.6411	142.9194	-142.9183
N2	CIM09 Max	Bottom	125.2047	58.964	17.683	99.6411	216.0238	14.8221
N2	CIM09 Min	Top	109.9378	-58.964	-17.683	-99.6411	142.9189	-142.92
N2	CIM09 Min	Bottom	125.2047	-58.964	-17.683	-99.6411	109.5084	-340.3543
N2	CIM10 Max	Top	109.9378	17.6892	58.9433	99.6222	142.92	-142.9189
N2	CIM10 Max	Bottom	125.2047	17.6892	58.9433	99.6222	340.2918	-109.4896
N2	CIM10 Min	Top	109.9378	-17.6892	-58.9433	-99.6222	142.9183	-142.9194
N2	CIM10 Min	Bottom	125.2047	-17.6892	-58.9433	-99.6222	-14.7597	-216.0426
N2	CIM11	Top	192.2777	0	0	0	249.961	-249.961
N2	CIM11	Bottom	217.7225	0	0	0	283.0392	-283.0392
N2	CIM12	Top	199.1417	0	0	0	258.8842	-258.8842
N2	CIM12	Bottom	224.5865	0	0	0	291.9624	-291.9624
N2	CIM13 Max	Top	199.1417	44.6442	13.4727	75.552	258.8844	-258.8836
N2	CIM13 Max	Bottom	224.5865	44.6442	13.4727	75.552	332.5397	-157.5028
N2	CIM13 Min	Top	199.1417	-44.6442	-13.4727	-75.552	258.884	-258.8848
N2	CIM13 Min	Bottom	224.5865	-44.6442	-13.4727	-75.552	251.3851	-426.4221
N2	CIM14 Max	Top	199.1417	13.4775	44.6285	75.5378	258.8848	-258.884
N2	CIM14 Max	Bottom	224.5865	13.4775	44.6285	75.5378	426.3748	-251.3708

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	CIM14 Min	Top	199.1417	-13.4775	-44.6285	-75.5378	258.8836	-258.8844
N2	CIM14 Min	Bottom	224.5865	-13.4775	-44.6285	-75.5378	157.5501	-332.554
N2	CIM15	Top	109.9378	0	0	0	142.9192	-142.9192
N2	CIM15	Bottom	125.2047	0	0	0	162.7661	-162.7661
N2	COMB9	Top	228.8612	0	0	0	297.5196	-297.5196
N2	COMB9	Bottom	259.395	0	0	0	337.2135	-337.2135
N2	COMB10	Top	231.5132	0	0	0	300.9672	-300.9672
N2	COMB10	Bottom	262.047	0	0	0	340.6611	-340.6611
N2	COMB11	Top	221.5604	0	0	0	288.0285	-288.0285
N2	COMB11	Bottom	252.0942	0	0	0	327.7224	-327.7224
N2	DER09	Top	243.8684	0	0	0	317.0289	-317.0289
N2	DER09	Bottom	274.4022	0	0	0	356.7228	-356.7228
N2	DERUD09	Top	243.8684	0	0	0	317.0289	-317.0289
N2	DERUD09	Bottom	274.4022	0	0	0	356.7228	-356.7228
N2	DER10	Top	246.5204	0	0	0	320.4765	-320.4765
N2	DER10	Bottom	277.0542	0	0	0	360.1704	-360.1704
N2	DERUD10	Top	246.5204	0	0	0	320.4765	-320.4765
N2	DERUD10	Bottom	277.0542	0	0	0	360.1704	-360.1704
N2	DER11	Top	236.5676	0	0	0	307.5379	-307.5379
N2	DER11	Bottom	267.1014	0	0	0	347.2318	-347.2318
N2	DERUD11	Top	236.5676	0	0	0	307.5379	-307.5379
N2	DERUD11	Bottom	267.1014	0	0	0	347.2318	-347.2318
N1	D	Top	178.1582	0	0	0	231.6056	-231.6056
N1	D	Bottom	203.603	0	0	0	264.6838	-264.6838
N1	L	Top	12.168	0	0	0	15.8184	-15.8184
N1	L	Bottom	12.168	0	0	0	15.8184	-15.8184
N1	LR	Top	16.224	0	0	0	21.0912	-21.0912
N1	LR	Bottom	16.224	0	0	0	21.0912	-21.0912
N1	EX Max	Top	0	143.6726	0	186.7744	0	380.5462
N1	EX Max	Bottom	0	143.6726	0	186.7744	1.168E-06	811.3549
N1	EY Max	Top	0	0	143.6656	186.7653	380.5278	0
N1	EY Max	Bottom	0	0	143.6656	186.7653	811.3156	0
N1	DISX Max	Top	0	95.7817	0	124.5162	0	253.6975
N1	DISX Max	Bottom	0	95.7817	0	124.5162	0	540.9033
N1	DISY Max	Top	0	0	95.748	124.4724	253.6082	0
N1	DISY Max	Bottom	0	0	95.748	124.4724	540.7129	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	9.048	0	0	0	11.7624	-11.7624
N1	G	Bottom	9.048	0	0	0	11.7624	-11.7624
N1	DERUX Max	Top	0	0	0	0	0	0
N1	DERUX Max	Bottom	0	0	0	0	0	0
N1	DERUY Max	Top	0	0	0	0	0	0
N1	DERUY Max	Bottom	0	0	0	0	0	0
N1	F	Top	50.024	0	0	0	65.0312	-65.0312
N1	F	Bottom	50.024	0	0	0	65.0312	-65.0312
N1	COMB1	Top	319.455	0	0	0	415.2915	-415.2915
N1	COMB1	Bottom	355.0777	0	0	0	461.6011	-461.6011
N1	COMB2	Top	301.3994	0	0	0	391.8192	-391.8192
N1	COMB2	Bottom	331.9332	0	0	0	431.5131	-431.5131
N1	COMB3	Top	311.945	0	0	0	405.5285	-405.5285
N1	COMB3	Bottom	342.4788	0	0	0	445.2224	-445.2224
N1	COMB4	Top	294.0986	0	0	0	382.3282	-382.3282
N1	COMB4	Bottom	324.6324	0	0	0	422.0221	-422.0221
N1	COMB5 Max	Top	285.9866	95.7817	28.7244	161.858	447.865	-118.0851
N1	COMB5 Max	Bottom	316.5204	95.7817	28.7244	161.858	573.6903	129.4268
N1	COMB5 Min	Top	285.9866	-95.7817	-28.7244	-161.858	295.7001	-625.4801
N1	COMB5 Min	Bottom	316.5204	-95.7817	-28.7244	-161.858	249.2626	-952.3798
N1	COMB6 Max	Top	285.9866	28.7345	95.748	161.8273	625.3908	-295.6733
N1	COMB6 Max	Bottom	316.5204	28.7345	95.748	161.8273	952.1894	-249.2055

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COMB6 Min	Top	285.9866	-28.7345	-95.748	-161.8273	118.1744	-447.8918
N1	COMB6 Min	Bottom	316.5204	-28.7345	-95.748	-161.8273	-129.2365	-573.7474
N1	COMB7 Max	Top	205.3639	28.7345	95.748	161.8273	520.5813	-190.8639
N1	COMB7 Max	Bottom	228.2643	28.7345	95.748	161.8273	837.4565	-134.4726
N1	COMB7 Min	Top	205.3639	-28.7345	-95.748	-161.8273	13.3649	-343.0824
N1	COMB7 Min	Bottom	228.2643	-28.7345	-95.748	-161.8273	-243.9694	-459.0145
N1	COMB8 Max	Top	205.3639	95.7817	28.7244	161.858	343.0556	-13.2756
N1	COMB8 Max	Bottom	228.2643	95.7817	28.7244	161.858	458.9574	244.1598
N1	COMB8 Min	Top	205.3639	-95.7817	-28.7244	-161.858	190.8907	-520.6706
N1	COMB8 Min	Bottom	228.2643	-95.7817	-28.7244	-161.858	134.5297	-837.6468
N1	ENVE Max	Top	319.455	95.7817	95.748	161.858	625.3908	-13.2756
N1	ENVE Max	Bottom	355.0777	95.7817	95.748	161.858	952.1894	244.1598
N1	ENVE Min	Top	205.3639	-95.7817	-95.748	-161.858	13.3649	-625.4801
N1	ENVE Min	Bottom	228.2643	-95.7817	-95.748	-161.858	-243.9694	-952.3798
N1	CIM01	Top	228.1822	0	0	0	296.6368	-296.6368
N1	CIM01	Bottom	253.627	0	0	0	329.715	-329.715
N1	CIM02	Top	240.3502	0	0	0	312.4552	-312.4552
N1	CIM02	Bottom	265.795	0	0	0	345.5334	-345.5334
N1	CIM03	Top	244.4062	0	0	0	317.728	-317.728
N1	CIM03	Bottom	269.851	0	0	0	350.8062	-350.8062
N1	CIM04	Top	249.4762	0	0	0	324.319	-324.319
N1	CIM04	Bottom	274.921	0	0	0	357.3972	-357.3972
N1	CIM05 Max	Top	228.1822	67.0472	20.1071	113.3006	349.8945	-119.0486
N1	CIM05 Max	Bottom	253.627	67.0472	20.1071	113.3006	443.2648	48.9173
N1	CIM05 Min	Top	228.1822	-67.0472	-20.1071	-113.3006	243.3791	-474.2251
N1	CIM05 Min	Bottom	253.627	-67.0472	-20.1071	-113.3006	216.1653	-708.3474
N1	CIM06 Max	Top	228.1822	20.1142	67.0236	113.2791	474.1626	-243.3603
N1	CIM06 Max	Bottom	253.627	20.1142	67.0236	113.2791	708.2141	-216.1254
N1	CIM06 Min	Top	228.1822	-20.1142	-67.0236	-113.2791	119.1111	-349.9133
N1	CIM06 Min	Bottom	253.627	-20.1142	-67.0236	-113.2791	-48.784	-443.3047
N1	CIM07 Max	Top	249.4762	50.7643	15.3197	85.9092	364.8963	-189.8593
N1	CIM07 Max	Bottom	274.921	50.7643	15.3197	85.9092	443.9113	-70.7185
N1	CIM07 Min	Top	249.4762	-50.7643	-15.3197	-85.9092	283.7417	-458.7787
N1	CIM07 Min	Bottom	274.921	-50.7643	-15.3197	-85.9092	270.8832	-644.076
N1	CIM08 Max	Top	249.4762	15.3251	50.7465	85.893	458.7314	-283.7274
N1	CIM08 Max	Bottom	274.921	15.3251	50.7465	85.893	643.9751	-270.8527
N1	CIM08 Min	Top	249.4762	-15.3251	-50.7465	-85.893	189.9067	-364.9106
N1	CIM08 Min	Bottom	274.921	-15.3251	-50.7465	-85.893	70.8194	-443.9418
N1	DER01	Top	319.455	0	0	0	415.2915	-415.2915
N1	DER01	Bottom	355.0777	0	0	0	461.6011	-461.6011
N1	DER02	Top	301.3994	0	0	0	391.8192	-391.8192
N1	DER02	Bottom	331.9332	0	0	0	431.5131	-431.5131
N1	DER03	Top	311.945	0	0	0	405.5285	-405.5285
N1	DER03	Bottom	342.4788	0	0	0	445.2224	-445.2224
N1	DER04	Top	294.0986	0	0	0	382.3282	-382.3282
N1	DER04	Bottom	324.6324	0	0	0	422.0221	-422.0221
N1	DER05 Max	Top	285.9866	143.6726	0	186.7744	371.7826	8.7637
N1	DER05 Max	Bottom	316.5204	143.6726	0	186.7744	411.4765	399.8785
N1	DER05 Min	Top	285.9866	-143.6726	0	-186.7744	371.7826	-752.3288
N1	DER05 Min	Bottom	316.5204	-143.6726	0	-186.7744	411.4765	-1222.8314
N1	DER06 Max	Top	285.9866	0	143.6656	186.7653	752.3103	-371.7826
N1	DER06 Max	Bottom	316.5204	0	143.6656	186.7653	1222.792	-411.4765
N1	DER06 Min	Top	285.9866	0	-143.6656	-186.7653	-8.7452	-371.7826
N1	DER06 Min	Bottom	316.5204	0	-143.6656	-186.7653	-399.8391	-411.4765
N1	DER07 Max	Top	205.3639	143.6726	0	186.7744	266.9731	113.5731
N1	DER07 Max	Bottom	228.2643	143.6726	0	186.7744	296.7435	514.6114
N1	DER07 Min	Top	205.3639	-143.6726	0	-186.7744	266.9731	-647.5194
N1	DER07 Min	Bottom	228.2643	-143.6726	0	-186.7744	296.7435	-1108.0985
N1	DER08 Max	Top	205.3639	0	143.6656	186.7653	647.5009	-266.9731
N1	DER08 Max	Bottom	228.2643	0	143.6656	186.7653	1108.0591	-296.7435

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DER08 Min	Top	205.3639	0	-143.6656	-186.7653	-113.5546	-266.9731
N1	DER08 Min	Bottom	228.2643	0	-143.6656	-186.7653	-514.572	-296.7435
N1	DERUD01	Top	319.455	0	0	0	415.2915	-415.2915
N1	DERUD01	Bottom	355.0777	0	0	0	461.6011	-461.6011
N1	DERUD02	Top	301.3994	0	0	0	391.8192	-391.8192
N1	DERUD02	Bottom	331.9332	0	0	0	431.5131	-431.5131
N1	DERUD03	Top	311.945	0	0	0	405.5285	-405.5285
N1	DERUD03	Bottom	342.4788	0	0	0	445.2224	-445.2224
N1	DERUD04	Top	294.0986	0	0	0	382.3282	-382.3282
N1	DERUD04	Bottom	324.6324	0	0	0	422.0221	-422.0221
N1	DERUD05 Max	Top	285.9866	0	0	0	371.7826	-371.7826
N1	DERUD05 Max	Bottom	316.5204	0	0	0	411.4765	-411.4765
N1	DERUD05 Min	Top	285.9866	0	0	0	371.7826	-371.7826
N1	DERUD05 Min	Bottom	316.5204	0	0	0	411.4765	-411.4765
N1	DERUD06 Max	Top	285.9866	0	0	0	371.7826	-371.7826
N1	DERUD06 Max	Bottom	316.5204	0	0	0	411.4765	-411.4765
N1	DERUD06 Min	Top	285.9866	0	0	0	371.7826	-371.7826
N1	DERUD06 Min	Bottom	316.5204	0	0	0	411.4765	-411.4765
N1	DERUD07 Max	Top	205.3639	0	0	0	266.9731	-266.9731
N1	DERUD07 Max	Bottom	228.2643	0	0	0	296.7435	-296.7435
N1	DERUD07 Min	Top	205.3639	0	0	0	266.9731	-266.9731
N1	DERUD07 Min	Bottom	228.2643	0	0	0	296.7435	-296.7435
N1	DERUD08 Max	Top	205.3639	0	0	0	266.9731	-266.9731
N1	DERUD08 Max	Bottom	228.2643	0	0	0	296.7435	-296.7435
N1	DERUD08 Min	Top	205.3639	0	0	0	266.9731	-266.9731
N1	DERUD08 Min	Bottom	228.2643	0	0	0	296.7435	-296.7435
N1	CIM09 Max	Top	136.9093	67.0472	20.1071	113.3006	231.2398	-0.3938
N1	CIM09 Max	Bottom	152.1762	67.0472	20.1071	113.3006	311.3787	180.8033
N1	CIM09 Min	Top	136.9093	-67.0472	-20.1071	-113.3006	124.7244	-355.5703
N1	CIM09 Min	Bottom	152.1762	-67.0472	-20.1071	-113.3006	84.2793	-576.4613
N1	CIM10 Max	Top	136.9093	20.1142	67.0236	113.2791	355.5078	-124.7056
N1	CIM10 Max	Bottom	152.1762	20.1142	67.0236	113.2791	576.3281	-84.2393
N1	CIM10 Min	Top	136.9093	-20.1142	-67.0236	-113.2791	0.4563	-231.2586
N1	CIM10 Min	Bottom	152.1762	-20.1142	-67.0236	-113.2791	-180.67	-311.4187
N1	CIM11	Top	237.2302	0	0	0	308.3992	-308.3992
N1	CIM11	Bottom	262.675	0	0	0	341.4774	-341.4774
N1	CIM12	Top	244.0942	0	0	0	317.3224	-317.3224
N1	CIM12	Bottom	269.539	0	0	0	350.4006	-350.4006
N1	CIM13 Max	Top	244.0942	50.7643	15.3197	85.9092	357.8997	-182.8627
N1	CIM13 Max	Bottom	269.539	50.7643	15.3197	85.9092	436.9147	-63.7219
N1	CIM13 Min	Top	244.0942	-50.7643	-15.3197	-85.9092	276.7451	-451.7821
N1	CIM13 Min	Bottom	269.539	-50.7643	-15.3197	-85.9092	263.8866	-637.0794
N1	CIM14 Max	Top	244.0942	15.3251	50.7465	85.893	451.7348	-276.7308
N1	CIM14 Max	Bottom	269.539	15.3251	50.7465	85.893	636.9785	-263.8561
N1	CIM14 Min	Top	244.0942	-15.3251	-50.7465	-85.893	182.9101	-357.914
N1	CIM14 Min	Bottom	269.539	-15.3251	-50.7465	-85.893	63.8228	-436.9452
N1	CIM15	Top	136.9093	0	0	0	177.9821	-177.9821
N1	CIM15	Bottom	152.1762	0	0	0	197.829	-197.829
N1	COMB9	Top	282.8042	0	0	0	367.6454	-367.6454
N1	COMB9	Bottom	313.338	0	0	0	407.3393	-407.3393
N1	COMB10	Top	285.4562	0	0	0	371.093	-371.093
N1	COMB10	Bottom	315.99	0	0	0	410.7869	-410.7869
N1	COMB11	Top	275.5034	0	0	0	358.1544	-358.1544
N1	COMB11	Bottom	306.0372	0	0	0	397.8483	-397.8483
N1	DER09	Top	297.8114	0	0	0	387.1548	-387.1548
N1	DER09	Bottom	328.3452	0	0	0	426.8487	-426.8487
N1	DERUD09	Top	297.8114	0	0	0	387.1548	-387.1548
N1	DERUD09	Bottom	328.3452	0	0	0	426.8487	-426.8487
N1	DER10	Top	300.4634	0	0	0	390.6024	-390.6024
N1	DER10	Bottom	330.9972	0	0	0	430.2963	-430.2963

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD10	Top	300.4634	0	0	0	390.6024	-390.6024
N1	DERUD10	Bottom	330.9972	0	0	0	430.2963	-430.2963
N1	DER11	Top	290.5106	0	0	0	377.6638	-377.6638
N1	DER11	Bottom	321.0444	0	0	0	417.3577	-417.3577
N1	DERUD11	Top	290.5106	0	0	0	377.6638	-377.6638
N1	DERUD11	Bottom	321.0444	0	0	0	417.3577	-417.3577

## 5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	-0.2416	-0.2416	50.9007	0.2383	-0.2383	0
Base	1	13	L	-0.0515	-0.0515	3.042	0.0508	-0.0508	0
Base	1	13	LR	-0.0549	-0.0549	4.056	0.0542	-0.0542	0
Base	1	13	EX Max	35.9181	0	104.4391	0	67.1917	0
Base	1	13	EY Max	0	35.9164	104.434	67.1885	0	0
Base	1	13	DISX Max	23.9454	0	69.626	0	44.7945	0
Base	1	13	DISY Max	0	23.937	69.6015	44.7787	0	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	-0.0306	-0.0306	2.262	0.0302	-0.0302	0
Base	1	13	DERUX Max	0	0	0	0	0	0
Base	1	13	DERUY Max	0	0	0	0	0	0
Base	1	13	F	-0.2117	-0.2117	12.506	0.2089	-0.2089	0
Base	1	13	COMB1	-0.6347	-0.6347	88.7694	0.6261	-0.6261	0
Base	1	13	COMB2	-0.6539	-0.6539	82.9833	0.6451	-0.6451	0
Base	1	13	COMB3	-0.6834	-0.6834	85.6197	0.6742	-0.6742	0
Base	1	13	COMB4	-0.623	-0.623	81.1581	0.6146	-0.6146	0
Base	1	13	COMB5 Max	23.3499	6.5856	169.6366	14.0211	44.207	0
Base	1	13	COMB5 Min	-24.541	-7.7766	-11.3764	-12.8461	-45.382	0
Base	1	13	COMB6 Max	6.5881	23.3415	169.6194	45.3662	12.8509	0
Base	1	13	COMB6 Min	-7.7792	-24.5325	-11.3593	-44.1912	-14.0258	0
Base	1	13	COMB7 Max	6.7756	23.529	147.5554	45.1812	13.0358	0
Base	1	13	COMB7 Min	-7.5917	-24.345	-33.4233	-44.3762	-13.8409	0
Base	1	13	COMB8 Max	23.5374	6.7731	147.5726	13.8361	44.392	0
Base	1	13	COMB8 Min	-24.3535	-7.5891	-33.4404	-13.0311	-45.197	0
Base	1	13	ENVE Max	23.5374	23.529	169.6366	45.3662	44.392	0
Base	1	13	ENVE Min	-24.541	-24.5325	-33.4404	-44.3762	-45.382	0
Base	1	13	CIM01	-0.4534	-0.4534	63.4067	0.4472	-0.4472	0
Base	1	13	CIM02	-0.5049	-0.5049	66.4487	0.498	-0.498	0
Base	1	13	CIM03	-0.5083	-0.5083	67.4627	0.5014	-0.5014	0
Base	1	13	CIM04	-0.5332	-0.5332	68.7302	0.526	-0.526	0
Base	1	13	CIM05 Max	16.3084	4.5734	126.7613	9.8508	30.9089	0
Base	1	13	CIM05 Min	-17.2152	-5.4801	0.0522	-8.9563	-31.8034	0
Base	1	13	CIM06 Max	4.5752	16.3025	126.7493	31.7923	8.9596	0
Base	1	13	CIM06 Min	-5.4819	-17.2093	0.0642	-30.8979	-9.8541	0
Base	1	13	CIM07 Max	12.1579	3.2967	116.7683	7.6906	23.2151	0
Base	1	13	CIM07 Min	-13.2243	-4.3631	20.6922	-6.6386	-24.2671	0
Base	1	13	CIM08 Max	3.2981	12.1534	116.7592	24.2587	6.6411	0
Base	1	13	CIM08 Min	-4.3645	-13.2198	20.7013	-23.2067	-7.6931	0
Base	1	13	DER01	-0.6347	-0.6347	88.7694	0.6261	-0.6261	0
Base	1	13	DER02	-0.6539	-0.6539	82.9833	0.6451	-0.6451	0
Base	1	13	DER03	-0.6834	-0.6834	85.6197	0.6742	-0.6742	0
Base	1	13	DER04	-0.623	-0.623	81.1581	0.6146	-0.6146	0
Base	1	13	DER05 Max	35.3226	-0.5955	183.5692	0.5875	66.6042	0
Base	1	13	DER05 Min	-36.5137	-0.5955	-25.309	0.5875	-67.7792	0
Base	1	13	DER06 Max	-0.5955	35.3209	183.5641	67.7759	-0.5875	0
Base	1	13	DER06 Min	-0.5955	-36.5119	-25.3039	-66.601	-0.5875	0
Base	1	13	DER07 Max	35.5101	-0.408	161.5051	0.4025	66.7892	0
Base	1	13	DER07 Min	-36.3262	-0.408	-47.373	0.4025	-67.5942	0



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	DER08 Max	-0.408	35.5084	161.5001	67.591	-0.4025	0
Base	1	13	DER08 Min	-0.408	-36.3244	-47.3679	-66.7859	-0.4025	0
Base	1	13	DERUD01	-0.6347	-0.6347	88.7694	0.6261	-0.6261	0
Base	1	13	DERUD02	-0.6539	-0.6539	82.9833	0.6451	-0.6451	0
Base	1	13	DERUD03	-0.6834	-0.6834	85.6197	0.6742	-0.6742	0
Base	1	13	DERUD04	-0.623	-0.623	81.1581	0.6146	-0.6146	0
Base	1	13	DERUD05 Max	-0.5955	-0.5955	79.1301	0.5875	-0.5875	0
Base	1	13	DERUD05 Min	-0.5955	-0.5955	79.1301	0.5875	-0.5875	0
Base	1	13	DERUD06 Max	-0.5955	-0.5955	79.1301	0.5875	-0.5875	0
Base	1	13	DERUD06 Min	-0.5955	-0.5955	79.1301	0.5875	-0.5875	0
Base	1	13	DERUD07 Max	-0.408	-0.408	57.0661	0.4025	-0.4025	0
Base	1	13	DERUD07 Min	-0.408	-0.408	57.0661	0.4025	-0.4025	0
Base	1	13	DERUD08 Max	-0.408	-0.408	57.0661	0.4025	-0.4025	0
Base	1	13	DERUD08 Min	-0.408	-0.408	57.0661	0.4025	-0.4025	0
Base	1	13	CIM09 Max	16.4898	4.7548	101.3986	9.6719	31.0878	0
Base	1	13	CIM09 Min	-17.0338	-5.2988	-25.3105	-9.1352	-31.6245	0
Base	1	13	CIM10 Max	4.7565	16.4839	101.3866	31.6134	9.1385	0
Base	1	13	CIM10 Min	-5.3006	-17.0279	-25.2985	-31.0768	-9.6752	0
Base	1	13	CIM11	-0.484	-0.484	65.6687	0.4775	-0.4775	0
Base	1	13	CIM12	-0.515	-0.515	67.3847	0.508	-0.508	0
Base	1	13	CIM13 Max	12.1761	3.3149	115.4228	7.6726	23.2331	0
Base	1	13	CIM13 Min	-13.2061	-4.3449	19.3467	-6.6566	-24.2491	0
Base	1	13	CIM14 Max	3.3163	12.1716	115.4137	24.2407	6.6591	0
Base	1	13	CIM14 Min	-4.3462	-13.2016	19.3558	-23.2247	-7.6751	0
Base	1	13	CIM15	-0.272	-0.272	38.044	0.2683	-0.2683	0
Base	1	13	COMB9	-0.5782	-0.5782	78.3345	0.5704	-0.5704	0
Base	1	13	COMB10	-0.581	-0.581	78.9975	0.5732	-0.5732	0
Base	1	13	COMB11	-0.5473	-0.5473	76.5093	0.5399	-0.5399	0
Base	1	13	DER09	-0.6418	-0.6418	82.0863	0.6331	-0.6331	0
Base	1	13	DERUD09	-0.6418	-0.6418	82.0863	0.6331	-0.6331	0
Base	1	13	DER10	-0.6446	-0.6446	82.7493	0.6359	-0.6359	0
Base	1	13	DERUD10	-0.6446	-0.6446	82.7493	0.6359	-0.6359	0
Base	1	13	DER11	-0.6109	-0.6109	80.2611	0.6026	-0.6026	0
Base	1	13	DERUD11	-0.6109	-0.6109	80.2611	0.6026	-0.6026	0
Base	2	15	D	-0.2416	0.2416	50.9007	-0.2383	-0.2383	0
Base	2	15	L	-0.0515	0.0515	3.042	-0.0508	-0.0508	0
Base	2	15	LR	-0.0549	0.0549	4.056	-0.0542	-0.0542	0
Base	2	15	EX Max	35.9181	0	104.4391	0	67.1917	0
Base	2	15	EY Max	0	35.9164	104.434	67.1885	0	0
Base	2	15	DISX Max	23.9454	0	69.626	0	44.7945	0
Base	2	15	DISY Max	0	23.937	69.6015	44.7787	0	0
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	-0.0306	0.0306	2.262	-0.0302	-0.0302	0
Base	2	15	DERUX Max	0	0	0	0	0	0
Base	2	15	DERUY Max	0	0	0	0	0	0
Base	2	15	F	-0.2117	0.2117	12.506	-0.2089	-0.2089	0
Base	2	15	COMB1	-0.6347	0.6347	88.7694	-0.6261	-0.6261	0
Base	2	15	COMB2	-0.6539	0.6539	82.9833	-0.6451	-0.6451	0
Base	2	15	COMB3	-0.6834	0.6834	85.6197	-0.6742	-0.6742	0
Base	2	15	COMB4	-0.623	0.623	81.1581	-0.6146	-0.6146	0
Base	2	15	COMB5 Max	23.3499	7.7766	169.6366	12.8461	44.207	0
Base	2	15	COMB5 Min	-24.541	-6.5856	-11.3764	-14.0211	-45.382	0
Base	2	15	COMB6 Max	6.5881	24.5325	169.6194	44.1912	12.8509	0
Base	2	15	COMB6 Min	-7.7792	-23.3415	-11.3593	-45.3662	-14.0258	0
Base	2	15	COMB7 Max	6.7756	24.345	147.5554	44.3762	13.0358	0
Base	2	15	COMB7 Min	-7.5917	-23.529	-33.4233	-45.1812	-13.8409	0
Base	2	15	COMB8 Max	23.5374	7.5891	147.5726	13.0311	44.392	0
Base	2	15	COMB8 Min	-24.3535	-6.7731	-33.4404	-13.8361	-45.197	0
Base	2	15	ENVE Max	23.5374	24.5325	169.6366	44.3762	44.392	0
Base	2	15	ENVE Min	-24.541	-23.529	-33.4404	-45.3662	-45.382	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	CIM01	-0.4534	0.4534	63.4067	-0.4472	-0.4472	0
Base	2	15	CIM02	-0.5049	0.5049	66.4487	-0.498	-0.498	0
Base	2	15	CIM03	-0.5083	0.5083	67.4627	-0.5014	-0.5014	0
Base	2	15	CIM04	-0.5332	0.5332	68.7302	-0.526	-0.526	0
Base	2	15	CIM05 Max	16.3084	5.4801	126.7613	8.9563	30.9089	0
Base	2	15	CIM05 Min	-17.2152	-4.5734	0.0522	-9.8508	-31.8034	0
Base	2	15	CIM06 Max	4.5752	17.2093	126.7493	30.8979	8.9596	0
Base	2	15	CIM06 Min	-5.4819	-16.3025	0.0642	-31.7923	-9.8541	0
Base	2	15	CIM07 Max	12.1579	4.3631	116.7683	6.6386	23.2151	0
Base	2	15	CIM07 Min	-13.2243	-3.2967	20.6922	-7.6906	-24.2671	0
Base	2	15	CIM08 Max	3.2981	13.2198	116.7592	23.2067	6.6411	0
Base	2	15	CIM08 Min	-4.3645	-12.1534	20.7013	-24.2587	-7.6931	0
Base	2	15	DER01	-0.6347	0.6347	88.7694	-0.6261	-0.6261	0
Base	2	15	DER02	-0.6539	0.6539	82.9833	-0.6451	-0.6451	0
Base	2	15	DER03	-0.6834	0.6834	85.6197	-0.6742	-0.6742	0
Base	2	15	DER04	-0.623	0.623	81.1581	-0.6146	-0.6146	0
Base	2	15	DER05 Max	35.3226	0.5955	183.5692	-0.5875	66.6042	0
Base	2	15	DER05 Min	-36.5137	0.5955	-25.309	-0.5875	-67.7792	0
Base	2	15	DER06 Max	-0.5955	36.5119	183.5641	66.601	-0.5875	0
Base	2	15	DER06 Min	-0.5955	-35.3209	-25.3039	-67.7759	-0.5875	0
Base	2	15	DER07 Max	35.5101	0.408	161.5051	-0.4025	66.7892	0
Base	2	15	DER07 Min	-36.3262	0.408	-47.373	-0.4025	-67.5942	0
Base	2	15	DER08 Max	-0.408	36.3244	161.5001	66.7859	-0.4025	0
Base	2	15	DER08 Min	-0.408	-35.5084	-47.3679	-67.591	-0.4025	0
Base	2	15	DERUD01	-0.6347	0.6347	88.7694	-0.6261	-0.6261	0
Base	2	15	DERUD02	-0.6539	0.6539	82.9833	-0.6451	-0.6451	0
Base	2	15	DERUD03	-0.6834	0.6834	85.6197	-0.6742	-0.6742	0
Base	2	15	DERUD04	-0.623	0.623	81.1581	-0.6146	-0.6146	0
Base	2	15	DERUD05 Max	-0.5955	0.5955	79.1301	-0.5875	-0.5875	0
Base	2	15	DERUD05 Min	-0.5955	0.5955	79.1301	-0.5875	-0.5875	0
Base	2	15	DERUD06 Max	-0.5955	0.5955	79.1301	-0.5875	-0.5875	0
Base	2	15	DERUD06 Min	-0.5955	0.5955	79.1301	-0.5875	-0.5875	0
Base	2	15	DERUD07 Max	-0.408	0.408	57.0661	-0.4025	-0.4025	0
Base	2	15	DERUD07 Min	-0.408	0.408	57.0661	-0.4025	-0.4025	0
Base	2	15	DERUD08 Max	-0.408	0.408	57.0661	-0.4025	-0.4025	0
Base	2	15	DERUD08 Min	-0.408	0.408	57.0661	-0.4025	-0.4025	0
Base	2	15	CIM09 Max	16.4898	5.2988	101.3986	9.1352	31.0878	0
Base	2	15	CIM09 Min	-17.0338	-4.7548	-25.3105	-9.6719	-31.6245	0
Base	2	15	CIM10 Max	4.7565	17.0279	101.3866	31.0768	9.1385	0
Base	2	15	CIM10 Min	-5.3006	-16.4839	-25.2985	-31.6134	-9.6752	0
Base	2	15	CIM11	-0.484	0.484	65.6687	-0.4775	-0.4775	0
Base	2	15	CIM12	-0.515	0.515	67.3847	-0.508	-0.508	0
Base	2	15	CIM13 Max	12.1761	4.3449	115.4228	6.6566	23.2331	0
Base	2	15	CIM13 Min	-13.2061	-3.3149	19.3467	-7.6726	-24.2491	0
Base	2	15	CIM14 Max	3.3163	13.2016	115.4137	23.2247	6.6591	0
Base	2	15	CIM14 Min	-4.3462	-12.1716	19.3558	-24.2407	-7.6751	0
Base	2	15	CIM15	-0.272	0.272	38.044	-0.2683	-0.2683	0
Base	2	15	COMB9	-0.5782	0.5782	78.3345	-0.5704	-0.5704	0
Base	2	15	COMB10	-0.581	0.581	78.9975	-0.5732	-0.5732	0
Base	2	15	COMB11	-0.5473	0.5473	76.5093	-0.5399	-0.5399	0
Base	2	15	DER09	-0.6418	0.6418	82.0863	-0.6331	-0.6331	0
Base	2	15	DERUD09	-0.6418	0.6418	82.0863	-0.6331	-0.6331	0
Base	2	15	DER10	-0.6446	0.6446	82.7493	-0.6359	-0.6359	0
Base	2	15	DERUD10	-0.6446	0.6446	82.7493	-0.6359	-0.6359	0
Base	2	15	DER11	-0.6109	0.6109	80.2611	-0.6026	-0.6026	0
Base	2	15	DERUD11	-0.6109	0.6109	80.2611	-0.6026	-0.6026	0
Base	3	16	D	0.2416	-0.2416	50.9007	0.2383	0.2383	0
Base	3	16	L	0.0515	-0.0515	3.042	0.0508	0.0508	0
Base	3	16	LR	0.0549	-0.0549	4.056	0.0542	0.0542	0
Base	3	16	EX Max	35.9181	0	104.4391	0	67.1917	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	EY Max	0	35.9164	104.434	67.1885	0	0
Base	3	16	DISX Max	23.9454	0	69.626	0	44.7945	0
Base	3	16	DISY Max	0	23.937	69.6015	44.7787	0	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	0.0306	-0.0306	2.262	0.0302	0.0302	0
Base	3	16	DERUX Max	0	0	0	0	0	0
Base	3	16	DERUY Max	0	0	0	0	0	0
Base	3	16	F	0.2117	-0.2117	12.506	0.2089	0.2089	0
Base	3	16	COMB1	0.6347	-0.6347	88.7694	0.6261	0.6261	0
Base	3	16	COMB2	0.6539	-0.6539	82.9833	0.6451	0.6451	0
Base	3	16	COMB3	0.6834	-0.6834	85.6197	0.6742	0.6742	0
Base	3	16	COMB4	0.623	-0.623	81.1581	0.6146	0.6146	0
Base	3	16	COMB5 Max	24.541	6.5856	169.6366	14.0211	45.382	0
Base	3	16	COMB5 Min	-23.3499	-7.7766	-11.3764	-12.8461	-44.207	0
Base	3	16	COMB6 Max	7.7792	23.3415	169.6194	45.3662	14.0258	0
Base	3	16	COMB6 Min	-6.5881	-24.5325	-11.3593	-44.1912	-12.8509	0
Base	3	16	COMB7 Max	7.5917	23.529	147.5554	45.1812	13.8409	0
Base	3	16	COMB7 Min	-6.7756	-24.345	-33.4233	-44.3762	-13.0358	0
Base	3	16	COMB8 Max	24.3535	6.7731	147.5726	13.8361	45.197	0
Base	3	16	COMB8 Min	-23.5374	-7.5891	-33.4404	-13.0311	-44.392	0
Base	3	16	ENVE Max	24.541	23.529	169.6366	45.3662	45.382	0
Base	3	16	ENVE Min	-23.5374	-24.5325	-33.4404	-44.3762	-44.392	0
Base	3	16	CIM01	0.4534	-0.4534	63.4067	0.4472	0.4472	0
Base	3	16	CIM02	0.5049	-0.5049	66.4487	0.498	0.498	0
Base	3	16	CIM03	0.5083	-0.5083	67.4627	0.5014	0.5014	0
Base	3	16	CIM04	0.5332	-0.5332	68.7302	0.526	0.526	0
Base	3	16	CIM05 Max	17.2152	4.5734	126.7613	9.8508	31.8034	0
Base	3	16	CIM05 Min	-16.3084	-5.4801	0.0522	-8.9563	-30.9089	0
Base	3	16	CIM06 Max	5.4819	16.3025	126.7493	31.7923	9.8541	0
Base	3	16	CIM06 Min	-4.5752	-17.2093	0.0642	-30.8979	-8.9596	0
Base	3	16	CIM07 Max	13.2243	3.2967	116.7683	7.6906	24.2671	0
Base	3	16	CIM07 Min	-12.1579	-4.3631	20.6922	-6.6386	-23.2151	0
Base	3	16	CIM08 Max	4.3645	12.1534	116.7592	24.2587	7.6931	0
Base	3	16	CIM08 Min	-3.2981	-13.2198	20.7013	-23.2067	-6.6411	0
Base	3	16	DER01	0.6347	-0.6347	88.7694	0.6261	0.6261	0
Base	3	16	DER02	0.6539	-0.6539	82.9833	0.6451	0.6451	0
Base	3	16	DER03	0.6834	-0.6834	85.6197	0.6742	0.6742	0
Base	3	16	DER04	0.623	-0.623	81.1581	0.6146	0.6146	0
Base	3	16	DER05 Max	36.5137	-0.5955	183.5692	0.5875	67.7792	0
Base	3	16	DER05 Min	-35.3226	-0.5955	-25.309	0.5875	-66.6042	0
Base	3	16	DER06 Max	0.5955	35.3209	183.5641	67.7759	0.5875	0
Base	3	16	DER06 Min	0.5955	-36.5119	-25.3039	-66.601	0.5875	0
Base	3	16	DER07 Max	36.3262	-0.408	161.5051	0.4025	67.5942	0
Base	3	16	DER07 Min	-35.5101	-0.408	-47.373	0.4025	-66.7892	0
Base	3	16	DER08 Max	0.408	35.5084	161.5001	67.591	0.4025	0
Base	3	16	DER08 Min	0.408	-36.3244	-47.3679	-66.7859	0.4025	0
Base	3	16	DERUD01	0.6347	-0.6347	88.7694	0.6261	0.6261	0
Base	3	16	DERUD02	0.6539	-0.6539	82.9833	0.6451	0.6451	0
Base	3	16	DERUD03	0.6834	-0.6834	85.6197	0.6742	0.6742	0
Base	3	16	DERUD04	0.623	-0.623	81.1581	0.6146	0.6146	0
Base	3	16	DERUD05 Max	0.5955	-0.5955	79.1301	0.5875	0.5875	0
Base	3	16	DERUD05 Min	0.5955	-0.5955	79.1301	0.5875	0.5875	0
Base	3	16	DERUD06 Max	0.5955	-0.5955	79.1301	0.5875	0.5875	0
Base	3	16	DERUD06 Min	0.5955	-0.5955	79.1301	0.5875	0.5875	0
Base	3	16	DERUD07 Max	0.408	-0.408	57.0661	0.4025	0.4025	0
Base	3	16	DERUD07 Min	0.408	-0.408	57.0661	0.4025	0.4025	0
Base	3	16	DERUD08 Max	0.408	-0.408	57.0661	0.4025	0.4025	0
Base	3	16	DERUD08 Min	0.408	-0.408	57.0661	0.4025	0.4025	0
Base	3	16	CIM09 Max	17.0338	4.7548	101.3986	9.6719	31.6245	0
Base	3	16	CIM09 Min	-16.4898	-5.2988	-25.3105	-9.1352	-31.0878	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	CIM10 Max	5.3006	16.4839	101.3866	31.6134	9.6752	0
Base	3	16	CIM10 Min	-4.7565	-17.0279	-25.2985	-31.0768	-9.1385	0
Base	3	16	CIM11	0.484	-0.484	65.6687	0.4775	0.4775	0
Base	3	16	CIM12	0.515	-0.515	67.3847	0.508	0.508	0
Base	3	16	CIM13 Max	13.2061	3.3149	115.4228	7.6726	24.2491	0
Base	3	16	CIM13 Min	-12.1761	-4.3449	19.3467	-6.6566	-23.2331	0
Base	3	16	CIM14 Max	4.3462	12.1716	115.4137	24.2407	7.6751	0
Base	3	16	CIM14 Min	-3.3163	-13.2016	19.3558	-23.2247	-6.6591	0
Base	3	16	CIM15	0.272	-0.272	38.044	0.2683	0.2683	0
Base	3	16	COMB9	0.5782	-0.5782	78.3345	0.5704	0.5704	0
Base	3	16	COMB10	0.581	-0.581	78.9975	0.5732	0.5732	0
Base	3	16	COMB11	0.5473	-0.5473	76.5093	0.5399	0.5399	0
Base	3	16	DER09	0.6418	-0.6418	82.0863	0.6331	0.6331	0
Base	3	16	DERUD09	0.6418	-0.6418	82.0863	0.6331	0.6331	0
Base	3	16	DER10	0.6446	-0.6446	82.7493	0.6359	0.6359	0
Base	3	16	DERUD10	0.6446	-0.6446	82.7493	0.6359	0.6359	0
Base	3	16	DER11	0.6109	-0.6109	80.2611	0.6026	0.6026	0
Base	3	16	DERUD11	0.6109	-0.6109	80.2611	0.6026	0.6026	0
Base	4	18	D	0.2416	0.2416	50.9007	-0.2383	0.2383	0
Base	4	18	L	0.0515	0.0515	3.042	-0.0508	0.0508	0
Base	4	18	LR	0.0549	0.0549	4.056	-0.0542	0.0542	0
Base	4	18	EX Max	35.9181	0	104.4391	0	67.1917	0
Base	4	18	EY Max	0	35.9164	104.434	67.1885	0	0
Base	4	18	DISX Max	23.9454	0	69.626	0	44.7945	0
Base	4	18	DISY Max	0	23.937	69.6015	44.7787	0	0
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	0.0306	0.0306	2.262	-0.0302	0.0302	0
Base	4	18	DERUX Max	0	0	0	0	0	0
Base	4	18	DERUY Max	0	0	0	0	0	0
Base	4	18	F	0.2117	0.2117	12.506	-0.2089	0.2089	0
Base	4	18	COMB1	0.6347	0.6347	88.7694	-0.6261	0.6261	0
Base	4	18	COMB2	0.6539	0.6539	82.9833	-0.6451	0.6451	0
Base	4	18	COMB3	0.6834	0.6834	85.6197	-0.6742	0.6742	0
Base	4	18	COMB4	0.623	0.623	81.1581	-0.6146	0.6146	0
Base	4	18	COMB5 Max	24.541	7.7766	169.6366	12.8461	45.382	0
Base	4	18	COMB5 Min	-23.3499	-6.5856	-11.3764	-14.0211	-44.207	0
Base	4	18	COMB6 Max	7.7792	24.5325	169.6194	44.1912	14.0258	0
Base	4	18	COMB6 Min	-6.5881	-23.3415	-11.3593	-45.3662	-12.8509	0
Base	4	18	COMB7 Max	7.5917	24.345	147.5554	44.3762	13.8409	0
Base	4	18	COMB7 Min	-6.7756	-23.529	-33.4233	-45.1812	-13.0358	0
Base	4	18	COMB8 Max	24.3535	7.5891	147.5726	13.0311	45.197	0
Base	4	18	COMB8 Min	-23.5374	-6.7731	-33.4404	-13.8361	-44.392	0
Base	4	18	ENVE Max	24.541	24.5325	169.6366	44.3762	45.382	0
Base	4	18	ENVE Min	-23.5374	-23.529	-33.4404	-45.3662	-44.392	0
Base	4	18	CIM01	0.4534	0.4534	63.4067	-0.4472	0.4472	0
Base	4	18	CIM02	0.5049	0.5049	66.4487	-0.498	0.498	0
Base	4	18	CIM03	0.5083	0.5083	67.4627	-0.5014	0.5014	0
Base	4	18	CIM04	0.5332	0.5332	68.7302	-0.526	0.526	0
Base	4	18	CIM05 Max	17.2152	5.4801	126.7613	8.9563	31.8034	0
Base	4	18	CIM05 Min	-16.3084	-4.5734	0.0522	-9.8508	-30.9089	0
Base	4	18	CIM06 Max	5.4819	17.2093	126.7493	30.8979	9.8541	0
Base	4	18	CIM06 Min	-4.5752	-16.3025	0.0642	-31.7923	-8.9596	0
Base	4	18	CIM07 Max	13.2243	4.3631	116.7683	6.6386	24.2671	0
Base	4	18	CIM07 Min	-12.1579	-3.2967	20.6922	-7.6906	-23.2151	0
Base	4	18	CIM08 Max	4.3645	13.2198	116.7592	23.2067	7.6931	0
Base	4	18	CIM08 Min	-3.2981	-12.1534	20.7013	-24.2587	-6.6411	0
Base	4	18	DER01	0.6347	0.6347	88.7694	-0.6261	0.6261	0
Base	4	18	DER02	0.6539	0.6539	82.9833	-0.6451	0.6451	0
Base	4	18	DER03	0.6834	0.6834	85.6197	-0.6742	0.6742	0
Base	4	18	DER04	0.623	0.623	81.1581	-0.6146	0.6146	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DER05 Max	36.5137	0.5955	183.5692	-0.5875	67.7792	0
Base	4	18	DER05 Min	-35.3226	0.5955	-25.309	-0.5875	-66.6042	0
Base	4	18	DER06 Max	0.5955	36.5119	183.5641	66.601	0.5875	0
Base	4	18	DER06 Min	0.5955	-35.3209	-25.3039	-67.7759	0.5875	0
Base	4	18	DER07 Max	36.3262	0.408	161.5051	-0.4025	67.5942	0
Base	4	18	DER07 Min	-35.5101	0.408	-47.373	-0.4025	-66.7892	0
Base	4	18	DER08 Max	0.408	36.3244	161.5001	66.7859	0.4025	0
Base	4	18	DER08 Min	0.408	-35.5084	-47.3679	-67.591	0.4025	0
Base	4	18	DERUD01	0.6347	0.6347	88.7694	-0.6261	0.6261	0
Base	4	18	DERUD02	0.6539	0.6539	82.9833	-0.6451	0.6451	0
Base	4	18	DERUD03	0.6834	0.6834	85.6197	-0.6742	0.6742	0
Base	4	18	DERUD04	0.623	0.623	81.1581	-0.6146	0.6146	0
Base	4	18	DERUD05 Max	0.5955	0.5955	79.1301	-0.5875	0.5875	0
Base	4	18	DERUD05 Min	0.5955	0.5955	79.1301	-0.5875	0.5875	0
Base	4	18	DERUD06 Max	0.5955	0.5955	79.1301	-0.5875	0.5875	0
Base	4	18	DERUD06 Min	0.5955	0.5955	79.1301	-0.5875	0.5875	0
Base	4	18	DERUD07 Max	0.408	0.408	57.0661	-0.4025	0.4025	0
Base	4	18	DERUD07 Min	0.408	0.408	57.0661	-0.4025	0.4025	0
Base	4	18	DERUD08 Max	0.408	0.408	57.0661	-0.4025	0.4025	0
Base	4	18	DERUD08 Min	0.408	0.408	57.0661	-0.4025	0.4025	0
Base	4	18	CIM09 Max	17.0338	5.2988	101.3986	9.1352	31.6245	0
Base	4	18	CIM09 Min	-16.4898	-4.7548	-25.3105	-9.6719	-31.0878	0
Base	4	18	CIM10 Max	5.3006	17.0279	101.3866	31.0768	9.6752	0
Base	4	18	CIM10 Min	-4.7565	-16.4839	-25.2985	-31.6134	-9.1385	0
Base	4	18	CIM11	0.484	0.484	65.6687	-0.4775	0.4775	0
Base	4	18	CIM12	0.515	0.515	67.3847	-0.508	0.508	0
Base	4	18	CIM13 Max	13.2061	4.3449	115.4228	6.6566	24.2491	0
Base	4	18	CIM13 Min	-12.1761	-3.3149	19.3467	-7.6726	-23.2331	0
Base	4	18	CIM14 Max	4.3462	13.2016	115.4137	23.2247	7.6751	0
Base	4	18	CIM14 Min	-3.3163	-12.1716	19.3558	-24.2407	-6.6591	0
Base	4	18	CIM15	0.272	0.272	38.044	-0.2683	0.2683	0
Base	4	18	COMB9	0.5782	0.5782	78.3345	-0.5704	0.5704	0
Base	4	18	COMB10	0.581	0.581	78.9975	-0.5732	0.5732	0
Base	4	18	COMB11	0.5473	0.5473	76.5093	-0.5399	0.5399	0
Base	4	18	DER09	0.6418	0.6418	82.0863	-0.6331	0.6331	0
Base	4	18	DERUD09	0.6418	0.6418	82.0863	-0.6331	0.6331	0
Base	4	18	DER10	0.6446	0.6446	82.7493	-0.6359	0.6359	0
Base	4	18	DERUD10	0.6446	0.6446	82.7493	-0.6359	0.6359	0
Base	4	18	DER11	0.6109	0.6109	80.2611	-0.6026	0.6026	0
Base	4	18	DERUD11	0.6109	0.6109	80.2611	-0.6026	0.6026	0

#### 5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.299	3.347	21.0275	442.1549
Modal	2	0.299	3.347	21.0275	442.1549
Modal	3	0.249	4.019	25.2518	637.6518
Modal	4	0.059	17.012	106.8868	11424.7901
Modal	5	0.059	17.012	106.8868	11424.7901
Modal	6	0.053	18.791	118.0661	13939.6106
Modal	7	0.034	29.583	185.8763	34549.9827
Modal	8	0.009	108.566	682.1415	465316.9703
Modal	9	0.009	108.566	682.1415	465316.9703
Modal	10	0.009	110.251	692.7266	479870.1596
Modal	11	0.009	111.825	702.62	493674.8363

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.299	0.005	0.9301	0	0.005	0.9301	0
Modal	2	0.299	0.9301	0.005	0	0.9351	0.9351	0
Modal	3	0.249	0	0	0	0.9351	0.9351	0
Modal	4	0.059	0.0263	0.0385	0	0.9615	0.9737	0
Modal	5	0.059	0.0385	0.0263	0	1	1	0
Modal	6	0.053	0	0	0	1	1	0
Modal	7	0.034	0	0	0	1	1	0
Modal	8	0.009	0	0	0	1	1	0
Modal	9	0.009	0	0	0	1	1	0
Modal	10	0.009	0	0	0	1	1	0
Modal	11	0.009	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

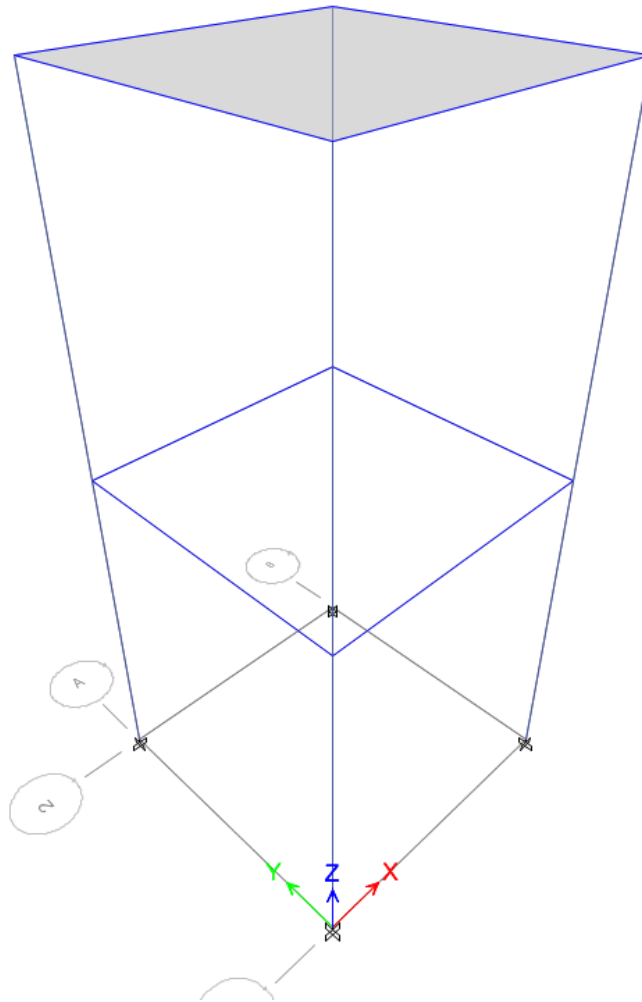
Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0.2367	0.0013	0	0.2367	0.0013	0
Modal	2	0.0013	0.2367	0	0.238	0.238	0
Modal	3	0	0	0.9409	0.238	0.238	0.9409
Modal	4	0.4527	0.3093	0	0.6907	0.5473	0.9409
Modal	5	0.3093	0.4527	0	1	1	0.9409
Modal	6	0	0	0.0591	1	1	1
Modal	7	0	0	0	1	1	1
Modal	8	0	0	0	1	1	1
Modal	9	0	0	0	1	1	1
Modal	10	0	0	0	1	1	1
Modal	11	0	0	0	1	1	1

Table 5.11 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.12 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.299	0.005	0.995	0	0
Modal	2	0.299	0.995	0.005	0	0
Modal	3	0.249	0	0	0	1
Modal	4	0.059	0.406	0.594	0	0
Modal	5	0.059	0.594	0.406	0	0
Modal	6	0.053	0	0	0	1
Modal	7	0.034	0	0	0	0
Modal	8	0.009	0	0	0	0
Modal	9	0.009	0	0	0	0
Modal	10	0.009	0	0	0	0
Modal	11	0.009	0	0	0	0



## Project Report

Model File: 004 2017 TANQUE EDUCACION (INTERMEDIA), Revision 0  
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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N2	3000	6000	Yes	None	No
N1	3000	3000	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	600	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	2.6
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	2.6

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	2600	0
3	2600	0	0
4	2600	2600	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None

### 1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	4583.88	4583.88	1.3	1.3	4583.88	4583.88	1.3	1.3	1.3	1.3

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	4583.88	4583.88	15.4935	1.3	1.3

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N2	15252.76	15252.76	0
N1	4583.88	4583.88	0
Base	1297.32	1297.32	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC28	Concrete	24870.1	0.2	23.56	Fc=28 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C30X30	CONC28	Concrete Rectangular
V30X30	CONC28	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
Losa2d	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#7	22.2	4
#8	25.4	5
15M	16	2

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N2	1	4	From Area	
N2	2	5	From Area	
N2	3	7	From Area	
N2	4	8	From Area	
N1	1	2	D1	
N1	2	14	D1	
N1	3	6	D1	
N1	4	17	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N2	C1	1	Column	3000	C30X30	C30X30	11
N2	C2	2	Column	3000	C30X30	C30X30	11
N2	C3	3	Column	3000	C30X30	C30X30	11
N2	C4	4	Column	3000	C30X30	C30X30	11
N1	C1	7	Column	3000	C30X30	C30X30	11
N1	C2	8	Column	3000	C30X30	C30X30	11
N1	C3	9	Column	3000	C30X30	C30X30	11
N1	C4	10	Column	3000	C30X30	C30X30	11
N2	B1	5	Beam	2600	V30X30	V30X30	11
N2	B2	6	Beam	2600	V30X30	V30X30	11
N2	B4	11	Beam	2600	V30X30	V30X30	11
N2	B6	12	Beam	2600	V30X30	V30X30	11
N1	B1	13	Beam	2600	V30X30	V30X30	11
N1	B2	14	Beam	2600	V30X30	V30X30	11
N1	B4	16	Beam	2600	V30X30	V30X30	11
N1	B6	18	Beam	2600	V30X30	V30X30	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section
N2	F5	1	Losa2d

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

Table 4.1 - Load Patterns

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	
F	Other	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

Table 4.2 - Frame Loads - Distributed (Part 1 of 2)

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N2	B1	5	Beam	D	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	D	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	D	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	D	Force	Gravity	0	1	0	2600
N2	B1	5	Beam	LR	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	LR	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	LR	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	LR	Force	Gravity	0	1	0	2600
N2	B1	5	Beam	G	Force	Gravity	0	1	0	2600
N2	B2	6	Beam	G	Force	Gravity	0	1	0	2600
N2	B4	11	Beam	G	Force	Gravity	0	1	0	2600
N2	B6	12	Beam	G	Force	Gravity	0	1	0	2600

Table 4.2 - Frame Loads - Distributed (Part 2 of 2)

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N2	B1	5	8.43	8.43
N2	B2	6	8.43	8.43
N2	B4	11	8.43	8.43
N2	B6	12	8.43	8.43
N2	B1	5	1.56	1.56
N2	B2	6	1.56	1.56
N2	B4	11	1.56	1.56
N2	B6	12	1.56	1.56
N2	B1	5	0.87	0.87
N2	B2	6	0.87	0.87
N2	B4	11	0.87	0.87
N2	B6	12	0.87	0.87

#### 4.2.2 Area Loads

Table 4.3 - Shell Loads - Uniform

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N2	F5	1	D	Gravity	3.85

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N2	F5	1	L	Gravity	1.8
N2	F5	1	F	Gravity	7.4

4.3 Load Cases

Table 4.4 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum
F	Linear Static

4.4 Load Combinations

Table 4.5 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB1	F	1.4		No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB2	F	1.2		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB3	F	1.2		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB4	F	1.2		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB5	F	1.2		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB6	F	1.2		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB7	F	0.9		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
COMB8	F	0.9		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM01	F	1		No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM02	F	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM03	F	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM04	F	1		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM05	F	1		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM06	F	1		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM07	F	1		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
CIM08	F	1		No
DER01	D	1.4	Linear Add	No
DER01	F	1.4		No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER02	F	1.2		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER03	F	1.2		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER04	F	1.2		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER05	F	1.2		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER06	F	1.2		No
DER07	D	0.9	Linear Add	No



Name	Load Case/Combo	Scale Factor	Type	Auto
DER07	EX	1		No
DER07	F	0.9		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DER08	F	0.9		No
DERUD01	D	1.4	Linear Add	No
DERUD01	F	1.4		No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD02	F	1.2		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD03	F	1.2		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD04	F	1.2		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD05	F	1.2		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD06	F	1.2		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD07	F	0.9		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
DERUD08	F	0.9		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM09	F	0.6		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM10	F	0.6		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM11	F	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM12	F	1		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM13	F	1		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM14	F	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM15	D	0.6	Linear Add	No
CIM15	F	0.6		No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB9	F	0.9		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB10	F	0.9		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
COMB11	F	0.9		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER09	F	1.2		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD09	F	1.2		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER10	F	1.2		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD10	F	1.2		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DER11	F	1.2		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No
DERUD11	F	1.2		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	203.603	264.6838	-264.6838	0	0	0	0
L	0	0	12.168	15.8184	-15.8184	0	0	0	0
LR	0	0	16.224	21.0912	-21.0912	0	0	0	0
EX Max	195.3947	0	0	9.527E-07	1103.4427	254.0131	0	0	0
EY Max	0	195.3947	0	1103.4427	0	254.0131	0	0	0
DISX Max	130.2632	0	0	6.743E-07	735.6285	169.3421	0	0	0
DISY Max	0	130.2173	0	735.3696	6.75E-07	169.2825	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	9.048	11.7624	-11.7624	0	0	0	0
DERUX Max	0	0	0	0	0	0	0	0	0
DERUY Max	0	0	0	0	0	0	0	0	0
F	0	0	50.024	65.0312	-65.0312	0	0	0	0
COMB1	0	0	355.0777	461.6011	-461.6011	0	0	0	0
COMB2	0	0	331.9332	431.5131	-431.5131	0	0	0	0
COMB3	0	0	342.4788	445.2224	-445.2224	0	0	0	0
COMB4	0	0	324.6324	422.0221	-422.0221	0	0	0	0
COMB5 Max	130.2632	39.0652	316.5204	632.0873	324.152	220.1268	0	0	0
COMB5 Min	-130.2632	-39.0652	316.5204	190.8656	-1147.1049	-220.1268	0	0	0
COMB6 Max	39.0789	130.2173	316.5204	1146.8461	-190.7879	220.0851	0	0	0
COMB6 Min	-39.0789	-130.2173	316.5204	-323.8931	-632.165	-220.0851	0	0	0
COMB7 Max	39.0789	130.2173	228.2643	1032.1131	-76.055	220.0851	0	0	0
COMB7 Min	-39.0789	-130.2173	228.2643	-438.6261	-517.4321	-220.0851	0	0	0
COMB8 Max	130.2632	39.0652	228.2643	517.3544	438.8849	220.1268	0	0	0
COMB8 Min	-130.2632	-39.0652	228.2643	76.1327	-1032.372	-220.1268	0	0	0
ENVE Max	130.2632	130.2173	355.0777	1146.8461	438.8849	220.1268	0	0	0
ENVE Min	-130.2632	-130.2173	228.2643	-438.6261	-1147.1049	-220.1268	0	0	0
CIM01	0	0	253.627	329.715	-329.715	0	0	0	0
CIM02	0	0	265.795	345.5334	-345.5334	0	0	0	0
CIM03	0	0	269.851	350.8062	-350.8062	0	0	0	0
CIM04	0	0	274.921	357.3972	-357.3972	0	0	0	0
CIM05 Max	91.1842	27.3456	253.627	484.1427	185.2249	154.0888	0	0	0
CIM05 Min	-91.1842	-27.3456	253.627	175.2874	-844.655	-154.0888	0	0	0
CIM06 Max	27.3553	91.1521	253.627	844.4738	-175.2331	154.0596	0	0	0
CIM06 Min	-27.3553	-91.1521	253.627	-185.0437	-484.197	-154.0596	0	0	0
CIM07 Max	69.0395	20.8348	274.921	475.0564	32.4858	116.8365	0	0	0
CIM07 Min	-69.0395	-20.8348	274.921	239.7381	-747.2803	-116.8365	0	0	0
CIM08 Max	20.8421	69.0152	274.921	747.1431	-239.6967	116.8145	0	0	0
CIM08 Min	-20.8421	-69.0152	274.921	-32.3486	-475.0978	-116.8145	0	0	0
DER01	0	0	355.0777	461.6011	-461.6011	0	0	0	0
DER02	0	0	331.9332	431.5131	-431.5131	0	0	0	0
DER03	0	0	342.4788	445.2224	-445.2224	0	0	0	0
DER04	0	0	324.6324	422.0221	-422.0221	0	0	0	0
DER05 Max	195.3947	0	316.5204	411.4765	691.9663	254.0131	0	0	0
DER05 Min	-195.3947	0	316.5204	411.4765	-1514.9192	-254.0131	0	0	0
DER06 Max	0	195.3947	316.5204	1514.9192	-411.4765	254.0131	0	0	0
DER06 Min	0	-195.3947	316.5204	-691.9663	-411.4765	-254.0131	0	0	0
DER07 Max	195.3947	0	228.2643	296.7435	806.6992	254.0131	0	0	0
DER07 Min	-195.3947	0	228.2643	296.7435	-1400.1863	-254.0131	0	0	0
DER08 Max	0	195.3947	228.2643	1400.1863	-296.7435	254.0131	0	0	0
DER08 Min	0	-195.3947	228.2643	-806.6992	-296.7435	-254.0131	0	0	0
DERUD01	0	0	355.0777	461.6011	-461.6011	0	0	0	0
DERUD02	0	0	331.9332	431.5131	-431.5131	0	0	0	0
DERUD03	0	0	342.4788	445.2224	-445.2224	0	0	0	0
DERUD04	0	0	324.6324	422.0221	-422.0221	0	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Max	0	0	316.5204	411.4765	-411.4765	0	0	0	0
DERUD05 Min	0	0	316.5204	411.4765	-411.4765	0	0	0	0
DERUD06 Max	0	0	316.5204	411.4765	-411.4765	0	0	0	0
DERUD06 Min	0	0	316.5204	411.4765	-411.4765	0	0	0	0
DERUD07 Max	0	0	228.2643	296.7435	-296.7435	0	0	0	0
DERUD07 Min	0	0	228.2643	296.7435	-296.7435	0	0	0	0
DERUD08 Max	0	0	228.2643	296.7435	-296.7435	0	0	0	0
DERUD08 Min	0	0	228.2643	296.7435	-296.7435	0	0	0	0
CIM09 Max	91.1842	27.3456	152.1762	352.2566	317.1109	154.0888	0	0	0
CIM09 Min	-91.1842	-27.3456	152.1762	43.4014	-712.769	-154.0888	0	0	0
CIM10 Max	27.3553	91.1521	152.1762	712.5877	-43.347	154.0596	0	0	0
CIM10 Min	-27.3553	-91.1521	152.1762	-316.9297	-352.311	-154.0596	0	0	0
CIM11	0	0	262.675	341.4774	-341.4774	0	0	0	0
CIM12	0	0	269.539	350.4006	-350.4006	0	0	0	0
CIM13 Max	69.0395	20.8348	269.539	468.0598	39.4824	116.8365	0	0	0
CIM13 Min	-69.0395	-20.8348	269.539	232.7415	-740.2837	-116.8365	0	0	0
CIM14 Max	20.8421	69.0152	269.539	740.1465	-232.7001	116.8145	0	0	0
CIM14 Min	-20.8421	-69.0152	269.539	-39.3452	-468.1012	-116.8145	0	0	0
CIM15	0	0	152.1762	197.829	-197.829	0	0	0	0
COMB9	0	0	313.338	407.3393	-407.3393	0	0	0	0
COMB10	0	0	315.99	410.7869	-410.7869	0	0	0	0
COMB11	0	0	306.0372	397.8483	-397.8483	0	0	0	0
DER09	0	0	328.3452	426.8487	-426.8487	0	0	0	0
DERUD09	0	0	328.3452	426.8487	-426.8487	0	0	0	0
DER10	0	0	330.9972	430.2963	-430.2963	0	0	0	0
DERUD10	0	0	330.9972	430.2963	-430.2963	0	0	0	0
DER11	0	0	321.0444	417.3577	-417.3577	0	0	0	0
DERUD11	0	0	321.0444	417.3577	-417.3577	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	4583.88	4583.88	1.3	1.3	4583.88	4583.88	1.3	1.3	1.3	1.3

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	0	0	1	1.3	1.3	3
N1	D1	L	0	0	0	1	1.3	1.3	3
N1	D1	LR	0	0	0	1	1.3	1.3	3
N1	D1	EX Max	11.6	2.572E-09	0	1	1.3	1.3	3
N1	D1	EY Max	1.029E-08	11.6	0	1	1.3	1.3	3
N1	D1	DISX Max	7.7	7.5E-09	0	1	1.3	1.3	3
N1	D1	DISY Max	7.717E-09	7.7	0	1	1.3	1.3	3
N1	D1	W	0	0	0	1	1.3	1.3	3
N1	D1	G	0	0	0	1	1.3	1.3	3
N1	D1	DERUX Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUY Max	0	0	0	1	1.3	1.3	3
N1	D1	F	0	0	0	1	1.3	1.3	3
N1	D1	COMB1	0	0	0	1	1.3	1.3	3
N1	D1	COMB2	0	0	0	1	1.3	1.3	3
N1	D1	COMB3	0	0	0	1	1.3	1.3	3
N1	D1	COMB4	0	0	0	1	1.3	1.3	3
N1	D1	COMB5 Max	7.7	2.3	0	1	1.3	1.3	3
N1	D1	COMB5 Min	-7.7	-2.3	0	1	1.3	1.3	3
N1	D1	COMB6 Max	2.3	7.7	0	1	1.3	1.3	3
N1	D1	COMB6 Min	-2.3	-7.7	0	1	1.3	1.3	3
N1	D1	COMB7 Max	2.3	7.7	0	1	1.3	1.3	3

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	COMB7 Min	-2.3	-7.7	0	1	1.3	1.3	3
N1	D1	COMB8 Max	7.7	2.3	0	1	1.3	1.3	3
N1	D1	COMB8 Min	-7.7	-2.3	0	1	1.3	1.3	3
N1	D1	ENVE Max	7.7	7.7	0	1	1.3	1.3	3
N1	D1	ENVE Min	-7.7	-7.7	0	1	1.3	1.3	3
N1	D1	CIM01	0	0	0	1	1.3	1.3	3
N1	D1	CIM02	0	0	0	1	1.3	1.3	3
N1	D1	CIM03	0	0	0	1	1.3	1.3	3
N1	D1	CIM04	0	0	0	1	1.3	1.3	3
N1	D1	CIM05 Max	5.4	1.6	0	1	1.3	1.3	3
N1	D1	CIM05 Min	-5.4	-1.6	0	1	1.3	1.3	3
N1	D1	CIM06 Max	1.6	5.4	0	1	1.3	1.3	3
N1	D1	CIM06 Min	-1.6	-5.4	0	1	1.3	1.3	3
N1	D1	CIM07 Max	4.1	1.2	0	1	1.3	1.3	3
N1	D1	CIM07 Min	-4.1	-1.2	0	1	1.3	1.3	3
N1	D1	CIM08 Max	1.2	4.1	0	1	1.3	1.3	3
N1	D1	CIM08 Min	-1.2	-4.1	0	1	1.3	1.3	3
N1	D1	DER01	0	0	0	1	1.3	1.3	3
N1	D1	DER02	0	0	0	1	1.3	1.3	3
N1	D1	DER03	0	0	0	1	1.3	1.3	3
N1	D1	DER04	0	0	0	1	1.3	1.3	3
N1	D1	DER05 Max	11.6	2.572E-09	0	1	1.3	1.3	3
N1	D1	DER05 Min	-11.6	-2.572E-09	0	1	1.3	1.3	3
N1	D1	DER06 Max	1.029E-08	11.6	0	1	1.3	1.3	3
N1	D1	DER06 Min	-1.029E-08	-11.6	0	1	1.3	1.3	3
N1	D1	DER07 Max	11.6	2.572E-09	0	1	1.3	1.3	3
N1	D1	DER07 Min	-11.6	-2.572E-09	0	1	1.3	1.3	3
N1	D1	DER08 Max	1.029E-08	11.6	0	1	1.3	1.3	3
N1	D1	DER08 Min	-1.029E-08	-11.6	0	1	1.3	1.3	3
N1	D1	DERUD01	0	0	0	1	1.3	1.3	3
N1	D1	DERUD02	0	0	0	1	1.3	1.3	3
N1	D1	DERUD03	0	0	0	1	1.3	1.3	3
N1	D1	DERUD04	0	0	0	1	1.3	1.3	3
N1	D1	DERUD05 Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUD05 Min	0	0	0	1	1.3	1.3	3
N1	D1	DERUD06 Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUD06 Min	0	0	0	1	1.3	1.3	3
N1	D1	DERUD07 Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUD07 Min	0	0	0	1	1.3	1.3	3
N1	D1	DERUD08 Max	0	0	0	1	1.3	1.3	3
N1	D1	DERUD08 Min	0	0	0	1	1.3	1.3	3
N1	D1	CIM09 Max	5.4	1.6	0	1	1.3	1.3	3
N1	D1	CIM09 Min	-5.4	-1.6	0	1	1.3	1.3	3
N1	D1	CIM10 Max	1.6	5.4	0	1	1.3	1.3	3
N1	D1	CIM10 Min	-1.6	-5.4	0	1	1.3	1.3	3
N1	D1	CIM11	0	0	0	1	1.3	1.3	3
N1	D1	CIM12	0	0	0	1	1.3	1.3	3
N1	D1	CIM13 Max	4.1	1.2	0	1	1.3	1.3	3
N1	D1	CIM13 Min	-4.1	-1.2	0	1	1.3	1.3	3
N1	D1	CIM14 Max	1.2	4.1	0	1	1.3	1.3	3
N1	D1	CIM14 Min	-1.2	-4.1	0	1	1.3	1.3	3
N1	D1	CIM15	0	0	0	1	1.3	1.3	3
N1	D1	COMB9	0	0	0	1	1.3	1.3	3
N1	D1	COMB10	0	0	0	1	1.3	1.3	3
N1	D1	COMB11	0	0	0	1	1.3	1.3	3
N1	D1	DER09	0	0	0	1	1.3	1.3	3
N1	D1	DERUD09	0	0	0	1	1.3	1.3	3
N1	D1	DER10	0	0	0	1	1.3	1.3	3
N1	D1	DERUD10	0	0	0	1	1.3	1.3	3
N1	D1	DER11	0	0	0	1	1.3	1.3	3

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	DERUD11	0	0	0	1	1.3	1.3	3

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	X	0	0	1.056
N1	D	Y	0	0	1.062
N1	L	X	0	0	1.054
N1	L	Y	0	0	1.05
N1	LR	X	0	0	1.165
N1	LR	Y	0	0	1.149
N1	EX Max	X	11.6	11.6	1
N1	EY Max	Y	11.6	11.6	1
N1	DISX Max	X	7.7	7.7	1
N1	DISY Max	Y	7.7	7.7	1
N1	G	X	0	0	1.046
N1	G	Y	0	0	1.061
N1	F	X	0	0	1.088
N1	F	Y	0	0	1.082
N1	COMB1	X	0	0	1.064
N1	COMB1	Y	0	0	1.068
N1	COMB2	X	0	0	1.064
N1	COMB2	Y	0	0	1.067
N1	COMB3	X	0	0	1.066
N1	COMB3	Y	0	0	1.069
N1	COMB4	X	0	0	1.064
N1	COMB4	Y	0	0	1.068
N1	COMB5 Max	X	7.7	7.7	1
N1	COMB5 Max	Y	2.3	2.3	1
N1	COMB5 Min	X	7.7	7.7	1
N1	COMB5 Min	Y	2.3	2.3	1
N1	COMB6 Max	X	2.3	2.3	1
N1	COMB6 Max	Y	7.7	7.7	1
N1	COMB6 Min	X	2.3	2.3	1
N1	COMB6 Min	Y	7.7	7.7	1
N1	COMB7 Max	X	2.3	2.3	1
N1	COMB7 Max	Y	7.7	7.7	1
N1	COMB7 Min	X	2.3	2.3	1
N1	COMB7 Min	Y	7.7	7.7	1
N1	COMB8 Max	X	7.7	7.7	1
N1	COMB8 Max	Y	2.3	2.3	1
N1	COMB8 Min	X	7.7	7.7	1
N1	COMB8 Min	Y	2.3	2.3	1
N1	ENVE Max	X	7.7	7.7	1
N1	ENVE Max	Y	7.7	7.7	1
N1	ENVE Min	X	7.7	7.7	1
N1	ENVE Min	Y	7.7	7.7	1
N1	CIM01	X	0	0	1.064
N1	CIM01	Y	0	0	1.068
N1	CIM02	X	0	0	1.063
N1	CIM02	Y	0	0	1.066
N1	CIM03	X	0	0	1.066
N1	CIM03	Y	0	0	1.07
N1	CIM04	X	0	0	1.065
N1	CIM04	Y	0	0	1.068
N1	CIM05 Max	X	5.4	5.4	1
N1	CIM05 Max	Y	1.6	1.6	1
N1	CIM05 Min	X	5.4	5.4	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	CIM05 Min	Y	1.6	1.6	1
N1	CIM06 Max	X	1.6	1.6	1
N1	CIM06 Max	Y	5.4	5.4	1
N1	CIM06 Min	X	1.6	1.6	1
N1	CIM06 Min	Y	5.4	5.4	1
N1	CIM07 Max	X	4.1	4.1	1
N1	CIM07 Max	Y	1.2	1.2	1
N1	CIM07 Min	X	4.1	4.1	1
N1	CIM07 Min	Y	1.2	1.2	1
N1	CIM08 Max	X	1.2	1.2	1
N1	CIM08 Max	Y	4.1	4.1	1
N1	CIM08 Min	X	1.2	1.2	1
N1	CIM08 Min	Y	4.1	4.1	1
N1	DER01	X	0	0	1.064
N1	DER01	Y	0	0	1.068
N1	DER02	X	0	0	1.064
N1	DER02	Y	0	0	1.067
N1	DER03	X	0	0	1.066
N1	DER03	Y	0	0	1.069
N1	DER04	X	0	0	1.064
N1	DER04	Y	0	0	1.068
N1	DER05 Max	X	11.6	11.6	1
N1	DER05 Min	X	11.6	11.6	1
N1	DER06 Max	Y	11.6	11.6	1
N1	DER06 Min	Y	11.6	11.6	1
N1	DER07 Max	X	11.6	11.6	1
N1	DER07 Min	X	11.6	11.6	1
N1	DER08 Max	Y	11.6	11.6	1
N1	DER08 Min	Y	11.6	11.6	1
N1	DERUD01	X	0	0	1.064
N1	DERUD01	Y	0	0	1.068
N1	DERUD02	X	0	0	1.064
N1	DERUD02	Y	0	0	1.067
N1	DERUD03	X	0	0	1.066
N1	DERUD03	Y	0	0	1.069
N1	DERUD04	X	0	0	1.064
N1	DERUD04	Y	0	0	1.068
N1	DERUD05 Max	X	0	0	1.063
N1	DERUD05 Max	Y	0	0	1.067
N1	DERUD05 Min	X	0	0	1.063
N1	DERUD05 Min	Y	0	0	1.067
N1	DERUD06 Max	X	0	0	1.063
N1	DERUD06 Max	Y	0	0	1.067
N1	DERUD06 Min	X	0	0	1.063
N1	DERUD06 Min	Y	0	0	1.067
N1	DERUD07 Max	X	0	0	1.064
N1	DERUD07 Max	Y	0	0	1.068
N1	DERUD07 Min	X	0	0	1.064
N1	DERUD07 Min	Y	0	0	1.068
N1	DERUD08 Max	X	0	0	1.064
N1	DERUD08 Max	Y	0	0	1.068
N1	DERUD08 Min	X	0	0	1.064
N1	DERUD08 Min	Y	0	0	1.068
N1	CIM09 Max	X	5.4	5.4	1
N1	CIM09 Max	Y	1.6	1.6	1
N1	CIM09 Min	X	5.4	5.4	1
N1	CIM09 Min	Y	1.6	1.6	1
N1	CIM10 Max	X	1.6	1.6	1
N1	CIM10 Max	Y	5.4	5.4	1
N1	CIM10 Min	X	1.6	1.6	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	CIM10 Min	Y	5.4	5.4	1
N1	CIM11	X	0	0	1.064
N1	CIM11	Y	0	0	1.068
N1	CIM12	X	0	0	1.063
N1	CIM12	Y	0	0	1.067
N1	CIM13 Max	X	4.1	4.1	1
N1	CIM13 Max	Y	1.2	1.2	1
N1	CIM13 Min	X	4.1	4.1	1
N1	CIM13 Min	Y	1.2	1.2	1
N1	CIM14 Max	X	1.2	1.2	1
N1	CIM14 Max	Y	4.1	4.1	1
N1	CIM14 Min	X	1.2	1.2	1
N1	CIM14 Min	Y	4.1	4.1	1
N1	CIM15	X	0	0	1.064
N1	CIM15	Y	0	0	1.068
N1	COMB9	X	0	0	1.062
N1	COMB9	Y	0	0	1.065
N1	COMB10	X	0	0	1.062
N1	COMB10	Y	0	0	1.066
N1	COMB11	X	0	0	1.062
N1	COMB11	Y	0	0	1.066
N1	DER09	X	0	0	1.063
N1	DER09	Y	0	0	1.066
N1	DERUD09	X	0	0	1.063
N1	DERUD09	Y	0	0	1.066
N1	DER10	X	0	0	1.063
N1	DER10	Y	0	0	1.067
N1	DERUD10	X	0	0	1.063
N1	DERUD10	Y	0	0	1.067
N1	DER11	X	0	0	1.063
N1	DER11	Y	0	0	1.067
N1	DERUD11	X	0	0	1.063
N1	DERUD11	Y	0	0	1.067

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	D	X	3.951E-07	2	0	2.6	6
N2	D	Y	3.951E-07	1	0	0	6
N2	L	X	3.924E-08	2	0	2.6	6
N2	L	Y	3.924E-08	1	0	0	6
N2	LR	X	4.186E-08	2	0	2.6	6
N2	LR	Y	4.186E-08	1	0	0	6
N2	EX Max	X	0.004631	1	0	0	6
N2	EY Max	Y	0.004631	3	2.6	0	6
N2	DISX Max	X	0.003087	1	0	0	6
N2	DISY Max	Y	0.003086	3	2.6	0	6
N2	G	X	2.334E-08	2	0	2.6	6
N2	G	Y	2.334E-08	1	0	0	6
N2	F	X	1.613E-07	2	0	2.6	6
N2	F	Y	1.613E-07	1	0	0	6
N2	COMB1	X	1E-06	2	0	2.6	6
N2	COMB1	Y	1E-06	1	0	0	6
N2	COMB2	X	1E-06	2	0	2.6	6
N2	COMB2	Y	1E-06	1	0	0	6
N2	COMB3	X	1E-06	2	0	2.6	6
N2	COMB3	Y	1E-06	1	0	0	6
N2	COMB4	X	1E-06	2	0	2.6	6
N2	COMB4	Y	1E-06	1	0	0	6



Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	COMB5 Max	X	0.003088	2	0	2.6	6
N2	COMB5 Max	Y	0.000927	1	0	0	6
N2	COMB5 Min	X	0.003088	4	2.6	2.6	6
N2	COMB5 Min	Y	0.000927	2	0	2.6	6
N2	COMB6 Max	X	0.000927	2	0	2.6	6
N2	COMB6 Max	Y	0.003087	1	0	0	6
N2	COMB6 Min	X	0.000927	4	2.6	2.6	6
N2	COMB6 Min	Y	0.003087	2	0	2.6	6
N2	COMB7 Max	X	0.000927	2	0	2.6	6
N2	COMB7 Max	Y	0.003087	1	0	0	6
N2	COMB7 Min	X	0.000927	4	2.6	2.6	6
N2	COMB7 Min	Y	0.003087	2	0	2.6	6
N2	COMB8 Max	X	0.003088	2	0	2.6	6
N2	COMB8 Max	Y	0.000926	1	0	0	6
N2	COMB8 Min	X	0.003088	4	2.6	2.6	6
N2	COMB8 Min	Y	0.000926	2	0	2.6	6
N2	ENVE Max	X	0.003088	2	0	2.6	6
N2	ENVE Max	Y	0.003087	1	0	0	6
N2	ENVE Min	X	0.003088	4	2.6	2.6	6
N2	ENVE Min	Y	0.003087	2	0	2.6	6
N2	CIM01	X	1E-06	2	0	2.6	6
N2	CIM01	Y	1E-06	1	0	0	6
N2	CIM02	X	1E-06	2	0	2.6	6
N2	CIM02	Y	1E-06	1	0	0	6
N2	CIM03	X	1E-06	2	0	2.6	6
N2	CIM03	Y	1E-06	1	0	0	6
N2	CIM04	X	1E-06	2	0	2.6	6
N2	CIM04	Y	1E-06	1	0	0	6
N2	CIM05 Max	X	0.002162	2	0	2.6	6
N2	CIM05 Max	Y	0.000649	1	0	0	6
N2	CIM05 Min	X	0.002162	4	2.6	2.6	6
N2	CIM05 Min	Y	0.000649	2	0	2.6	6
N2	CIM06 Max	X	0.000649	2	0	2.6	6
N2	CIM06 Max	Y	0.002161	1	0	0	6
N2	CIM06 Min	X	0.000649	4	2.6	2.6	6
N2	CIM06 Min	Y	0.002161	2	0	2.6	6
N2	CIM07 Max	X	0.001637	2	0	2.6	6
N2	CIM07 Max	Y	0.000494	1	0	0	6
N2	CIM07 Min	X	0.001637	4	2.6	2.6	6
N2	CIM07 Min	Y	0.000494	2	0	2.6	6
N2	CIM08 Max	X	0.000495	2	0	2.6	6
N2	CIM08 Max	Y	0.001636	1	0	0	6
N2	CIM08 Min	X	0.000495	4	2.6	2.6	6
N2	CIM08 Min	Y	0.001636	2	0	2.6	6
N2	DER01	X	1E-06	2	0	2.6	6
N2	DER01	Y	1E-06	1	0	0	6
N2	DER02	X	1E-06	2	0	2.6	6
N2	DER02	Y	1E-06	1	0	0	6
N2	DER03	X	1E-06	2	0	2.6	6
N2	DER03	Y	1E-06	1	0	0	6
N2	DER04	X	1E-06	2	0	2.6	6
N2	DER04	Y	1E-06	1	0	0	6
N2	DER05 Max	X	0.004631	1	0	0	6
N2	DER05 Min	X	0.004631	3	2.6	0	6
N2	DER06 Max	Y	0.004631	3	2.6	0	6
N2	DER06 Min	Y	0.004631	4	2.6	2.6	6
N2	DER07 Max	X	0.004631	1	0	0	6
N2	DER07 Min	X	0.004631	3	2.6	0	6
N2	DER08 Max	Y	0.004631	3	2.6	0	6
N2	DER08 Min	Y	0.004631	4	2.6	2.6	6

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	DERUD01	X	1E-06	2	0	2.6	6
N2	DERUD01	Y	1E-06	1	0	0	6
N2	DERUD02	X	1E-06	2	0	2.6	6
N2	DERUD02	Y	1E-06	1	0	0	6
N2	DERUD03	X	1E-06	2	0	2.6	6
N2	DERUD03	Y	1E-06	1	0	0	6
N2	DERUD04	X	1E-06	2	0	2.6	6
N2	DERUD04	Y	1E-06	1	0	0	6
N2	DERUD05 Max	X	1E-06	2	0	2.6	6
N2	DERUD05 Max	Y	1E-06	1	0	0	6
N2	DERUD05 Min	X	1E-06	2	0	2.6	6
N2	DERUD05 Min	Y	1E-06	1	0	0	6
N2	DERUD06 Max	X	1E-06	2	0	2.6	6
N2	DERUD06 Max	Y	1E-06	1	0	0	6
N2	DERUD06 Min	X	1E-06	2	0	2.6	6
N2	DERUD06 Min	Y	1E-06	1	0	0	6
N2	DERUD07 Max	X	1E-06	2	0	2.6	6
N2	DERUD07 Max	Y	1E-06	1	0	0	6
N2	DERUD07 Min	X	1E-06	2	0	2.6	6
N2	DERUD07 Min	Y	1E-06	1	0	0	6
N2	DERUD08 Max	X	1E-06	2	0	2.6	6
N2	DERUD08 Max	Y	1E-06	1	0	0	6
N2	DERUD08 Min	X	1E-06	2	0	2.6	6
N2	DERUD08 Min	Y	1E-06	1	0	0	6
N2	CIM09 Max	X	0.002161	2	0	2.6	6
N2	CIM09 Max	Y	0.000648	1	0	0	6
N2	CIM09 Min	X	0.002161	4	2.6	2.6	6
N2	CIM09 Min	Y	0.000648	2	0	2.6	6
N2	CIM10 Max	X	0.000649	2	0	2.6	6
N2	CIM10 Max	Y	0.002161	1	0	0	6
N2	CIM10 Min	X	0.000649	4	2.6	2.6	6
N2	CIM10 Min	Y	0.002161	2	0	2.6	6
N2	CIM11	X	1E-06	2	0	2.6	6
N2	CIM11	Y	1E-06	1	0	0	6
N2	CIM12	X	1E-06	2	0	2.6	6
N2	CIM12	Y	1E-06	1	0	0	6
N2	CIM13 Max	X	0.001637	2	0	2.6	6
N2	CIM13 Max	Y	0.000494	1	0	0	6
N2	CIM13 Min	X	0.001637	4	2.6	2.6	6
N2	CIM13 Min	Y	0.000494	2	0	2.6	6
N2	CIM14 Max	X	0.000495	2	0	2.6	6
N2	CIM14 Max	Y	0.001636	1	0	0	6
N2	CIM14 Min	X	0.000495	4	2.6	2.6	6
N2	CIM14 Min	Y	0.001636	2	0	2.6	6
N2	CIM15	X	3.339E-07	2	0	2.6	6
N2	CIM15	Y	3.339E-07	1	0	0	6
N2	COMB9	X	1E-06	2	0	2.6	6
N2	COMB9	Y	1E-06	1	0	0	6
N2	COMB10	X	1E-06	2	0	2.6	6
N2	COMB10	Y	1E-06	1	0	0	6
N2	COMB11	X	1E-06	2	0	2.6	6
N2	COMB11	Y	1E-06	1	0	0	6
N2	DER09	X	1E-06	2	0	2.6	6
N2	DER09	Y	1E-06	1	0	0	6
N2	DERUD09	X	1E-06	2	0	2.6	6
N2	DERUD09	Y	1E-06	1	0	0	6
N2	DER10	X	1E-06	2	0	2.6	6
N2	DER10	Y	1E-06	1	0	0	6
N2	DERUD10	X	1E-06	2	0	2.6	6
N2	DERUD10	Y	1E-06	1	0	0	6

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N2	DER11	X	1E-06	2	0	2.6	6
N2	DER11	Y	1E-06	1	0	0	6
N2	DERUD11	X	1E-06	2	0	2.6	6
N2	DERUD11	Y	1E-06	1	0	0	6
N1	D	X	0	4	2.6	2.6	3
N1	D	Y	0	2	0	2.6	3
N1	L	X	0	4	2.6	2.6	3
N1	L	Y	0	2	0	2.6	3
N1	LR	X	0	4	2.6	2.6	3
N1	LR	Y	0	2	0	2.6	3
N1	EX Max	X	0.003852	3	2.6	0	3
N1	EY Max	Y	0.003852	4	2.6	2.6	3
N1	DISX Max	X	0.002568	3	2.6	0	3
N1	DISY Max	Y	0.002567	4	2.6	2.6	3
N1	G	X	0	4	2.6	2.6	3
N1	G	Y	0	2	0	2.6	3
N1	F	X	0	4	2.6	2.6	3
N1	F	Y	0	2	0	2.6	3
N1	COMB1	X	0	4	2.6	2.6	3
N1	COMB1	Y	0	2	0	2.6	3
N1	COMB2	X	0	4	2.6	2.6	3
N1	COMB2	Y	0	2	0	2.6	3
N1	COMB3	X	0	4	2.6	2.6	3
N1	COMB3	Y	0	2	0	2.6	3
N1	COMB4	X	0	4	2.6	2.6	3
N1	COMB4	Y	0	2	0	2.6	3
N1	COMB5 Max	X	0.002568	3	2.6	0	3
N1	COMB5 Max	Y	0.00077	2	0	2.6	3
N1	COMB5 Min	X	0.002568	3	2.6	0	3
N1	COMB5 Min	Y	0.00077	2	0	2.6	3
N1	COMB6 Max	X	0.00077	3	2.6	0	3
N1	COMB6 Max	Y	0.002567	2	0	2.6	3
N1	COMB6 Min	X	0.00077	3	2.6	0	3
N1	COMB6 Min	Y	0.002567	2	0	2.6	3
N1	COMB7 Max	X	0.00077	3	2.6	0	3
N1	COMB7 Max	Y	0.002567	2	0	2.6	3
N1	COMB7 Min	X	0.00077	3	2.6	0	3
N1	COMB7 Min	Y	0.002567	2	0	2.6	3
N1	COMB8 Max	X	0.002568	3	2.6	0	3
N1	COMB8 Max	Y	0.00077	2	0	2.6	3
N1	COMB8 Min	X	0.002568	3	2.6	0	3
N1	COMB8 Min	Y	0.00077	2	0	2.6	3
N1	ENVE Max	X	0.002568	3	2.6	0	3
N1	ENVE Max	Y	0.002567	2	0	2.6	3
N1	ENVE Min	X	0.002568	3	2.6	0	3
N1	ENVE Min	Y	0.002567	2	0	2.6	3
N1	CIM01	X	0	4	2.6	2.6	3
N1	CIM01	Y	0	2	0	2.6	3
N1	CIM02	X	0	4	2.6	2.6	3
N1	CIM02	Y	0	2	0	2.6	3
N1	CIM03	X	0	4	2.6	2.6	3
N1	CIM03	Y	0	2	0	2.6	3
N1	CIM04	X	0	4	2.6	2.6	3
N1	CIM04	Y	0	2	0	2.6	3
N1	CIM05 Max	X	0.001798	3	2.6	0	3
N1	CIM05 Max	Y	0.000539	2	0	2.6	3
N1	CIM05 Min	X	0.001798	3	2.6	0	3
N1	CIM05 Min	Y	0.000539	2	0	2.6	3
N1	CIM06 Max	X	0.000539	3	2.6	0	3
N1	CIM06 Max	Y	0.001797	2	0	2.6	3

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM06 Min	X	0.000539	3	2.6	0	3
N1	CIM06 Min	Y	0.001797	2	0	2.6	3
N1	CIM07 Max	X	0.001361	3	2.6	0	3
N1	CIM07 Max	Y	0.000411	2	0	2.6	3
N1	CIM07 Min	X	0.001361	3	2.6	0	3
N1	CIM07 Min	Y	0.000411	2	0	2.6	3
N1	CIM08 Max	X	0.000411	3	2.6	0	3
N1	CIM08 Max	Y	0.001361	2	0	2.6	3
N1	CIM08 Min	X	0.000411	3	2.6	0	3
N1	CIM08 Min	Y	0.001361	2	0	2.6	3
N1	DER01	X	0	4	2.6	2.6	3
N1	DER01	Y	0	2	0	2.6	3
N1	DER02	X	0	4	2.6	2.6	3
N1	DER02	Y	0	2	0	2.6	3
N1	DER03	X	0	4	2.6	2.6	3
N1	DER03	Y	0	2	0	2.6	3
N1	DER04	X	0	4	2.6	2.6	3
N1	DER04	Y	0	2	0	2.6	3
N1	DER05 Max	X	0.003852	3	2.6	0	3
N1	DER05 Min	X	0.003852	3	2.6	0	3
N1	DER06 Max	Y	0.003852	4	2.6	2.6	3
N1	DER06 Min	Y	0.003852	4	2.6	2.6	3
N1	DER07 Max	X	0.003852	3	2.6	0	3
N1	DER07 Min	X	0.003852	3	2.6	0	3
N1	DER08 Max	Y	0.003852	4	2.6	2.6	3
N1	DER08 Min	Y	0.003852	4	2.6	2.6	3
N1	DERUD01	X	0	4	2.6	2.6	3
N1	DERUD01	Y	0	2	0	2.6	3
N1	DERUD02	X	0	4	2.6	2.6	3
N1	DERUD02	Y	0	2	0	2.6	3
N1	DERUD03	X	0	4	2.6	2.6	3
N1	DERUD03	Y	0	2	0	2.6	3
N1	DERUD04	X	0	4	2.6	2.6	3
N1	DERUD04	Y	0	2	0	2.6	3
N1	DERUD05 Max	X	0	4	2.6	2.6	3
N1	DERUD05 Max	Y	0	2	0	2.6	3
N1	DERUD05 Min	X	0	4	2.6	2.6	3
N1	DERUD05 Min	Y	0	2	0	2.6	3
N1	DERUD06 Max	X	0	4	2.6	2.6	3
N1	DERUD06 Max	Y	0	2	0	2.6	3
N1	DERUD06 Min	X	0	4	2.6	2.6	3
N1	DERUD06 Min	Y	0	2	0	2.6	3
N1	DERUD07 Max	X	0	4	2.6	2.6	3
N1	DERUD07 Max	Y	0	2	0	2.6	3
N1	DERUD07 Min	X	0	4	2.6	2.6	3
N1	DERUD07 Min	Y	0	2	0	2.6	3
N1	DERUD08 Max	X	0	4	2.6	2.6	3
N1	DERUD08 Max	Y	0	2	0	2.6	3
N1	DERUD08 Min	X	0	4	2.6	2.6	3
N1	DERUD08 Min	Y	0	2	0	2.6	3
N1	CIM09 Max	X	0.001798	3	2.6	0	3
N1	CIM09 Max	Y	0.000539	2	0	2.6	3
N1	CIM09 Min	X	0.001798	3	2.6	0	3
N1	CIM09 Min	Y	0.000539	2	0	2.6	3
N1	CIM10 Max	X	0.000539	3	2.6	0	3
N1	CIM10 Max	Y	0.001797	2	0	2.6	3
N1	CIM10 Min	X	0.000539	3	2.6	0	3
N1	CIM10 Min	Y	0.001797	2	0	2.6	3
N1	CIM11	X	0	4	2.6	2.6	3
N1	CIM11	Y	0	2	0	2.6	3

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM12	X	0	4	2.6	2.6	3
N1	CIM12	Y	0	2	0	2.6	3
N1	CIM13 Max	X	0.001361	3	2.6	0	3
N1	CIM13 Max	Y	0.000411	2	0	2.6	3
N1	CIM13 Min	X	0.001361	3	2.6	0	3
N1	CIM13 Min	Y	0.000411	2	0	2.6	3
N1	CIM14 Max	X	0.000411	3	2.6	0	3
N1	CIM14 Max	Y	0.001361	2	0	2.6	3
N1	CIM14 Min	X	0.000411	3	2.6	0	3
N1	CIM14 Min	Y	0.001361	2	0	2.6	3
N1	CIM15	X	0	4	2.6	2.6	3
N1	CIM15	Y	0	2	0	2.6	3
N1	COMB9	X	0	4	2.6	2.6	3
N1	COMB9	Y	0	2	0	2.6	3
N1	COMB10	X	0	4	2.6	2.6	3
N1	COMB10	Y	0	2	0	2.6	3
N1	COMB11	X	0	4	2.6	2.6	3
N1	COMB11	Y	0	2	0	2.6	3
N1	DER09	X	0	4	2.6	2.6	3
N1	DER09	Y	0	2	0	2.6	3
N1	DERUD09	X	0	4	2.6	2.6	3
N1	DERUD09	Y	0	2	0	2.6	3
N1	DER10	X	0	4	2.6	2.6	3
N1	DER10	Y	0	2	0	2.6	3
N1	DERUD10	X	0	4	2.6	2.6	3
N1	DERUD10	Y	0	2	0	2.6	3
N1	DER11	X	0	4	2.6	2.6	3
N1	DER11	Y	0	2	0	2.6	3
N1	DERUD11	X	0	4	2.6	2.6	3
N1	DERUD11	Y	0	2	0	2.6	3

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N2	D	X	0.001185	0	255400000000
N2	D	Y	0.001185	0	262900000000
N2	L	X	0.0001177	0	160500000000
N2	L	Y	0.0001177	0	160000000000
N2	LR	X	0.0001256	0	500100000000
N2	LR	Y	0.0001256	0	496300000000
N2	EX Max	X	13.9	13.9	1
N2	EY Max	Y	13.9	13.9	1
N2	DISX Max	X	9.3	9.3	1
N2	DISY Max	Y	9.3	9.3	1
N2	G	X	7.003E-05	0	445000000000
N2	G	Y	7.003E-05	0	480800000000
N2	F	X	0.000484	0	163600000000
N2	F	Y	0.000484	0	165300000000
N2	COMB1	X	0.002337	0	219700000000
N2	COMB1	Y	0.002337	0	224500000000
N2	COMB2	X	0.002254	0	216400000000
N2	COMB2	Y	0.002254	0	220400000000
N2	COMB3	X	0.002322	0	226400000000
N2	COMB3	Y	0.002322	0	230700000000
N2	COMB4	X	0.002184	0	218900000000
N2	COMB4	Y	0.002184	0	223100000000
N2	COMB5 Max	X	9.3	9.3	1
N2	COMB5 Max	Y	2.8	2.8	1.001

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N2	COMB5 Min	X	9.3	9.3	1
N2	COMB5 Min	Y	2.8	2.8	1.001
N2	COMB6 Max	X	2.8	2.8	1.001
N2	COMB6 Max	Y	9.3	9.3	1
N2	COMB6 Min	X	2.8	2.8	1.001
N2	COMB6 Min	Y	9.3	9.3	1
N2	COMB7 Max	X	2.8	2.8	1.001
N2	COMB7 Max	Y	9.3	9.3	1
N2	COMB7 Min	X	2.8	2.8	1.001
N2	COMB7 Min	Y	9.3	9.3	1
N2	COMB8 Max	X	9.3	9.3	1
N2	COMB8 Max	Y	2.8	2.8	1.001
N2	COMB8 Min	X	9.3	9.3	1
N2	COMB8 Min	Y	2.8	2.8	1.001
N2	ENVE Max	X	9.3	9.3	1
N2	ENVE Max	Y	9.3	9.3	1
N2	ENVE Min	X	9.3	9.3	1
N2	ENVE Min	Y	9.3	9.3	1
N2	CIM01	X	0.001669	0	219700000000
N2	CIM01	Y	0.001669	0	224500000000
N2	CIM02	X	0.001787	0	214500000000
N2	CIM02	Y	0.001787	0	218700000000
N2	CIM03	X	0.001795	0	228600000000
N2	CIM03	Y	0.001795	0	233400000000
N2	CIM04	X	0.001852	0	222100000000
N2	CIM04	Y	0.001852	0	226400000000
N2	CIM05 Max	X	6.5	6.5	1
N2	CIM05 Max	Y	1.9	1.9	1.001
N2	CIM05 Min	X	6.5	6.5	1
N2	CIM05 Min	Y	1.9	1.9	1.001
N2	CIM06 Max	X	1.9	1.9	1.001
N2	CIM06 Max	Y	6.5	6.5	1
N2	CIM06 Min	X	1.9	1.9	1.001
N2	CIM06 Min	Y	6.5	6.5	1
N2	CIM07 Max	X	4.9	4.9	1
N2	CIM07 Max	Y	1.5	1.5	1.001
N2	CIM07 Min	X	4.9	4.9	1
N2	CIM07 Min	Y	1.5	1.5	1.001
N2	CIM08 Max	X	1.5	1.5	1.001
N2	CIM08 Max	Y	4.9	4.9	1
N2	CIM08 Min	X	1.5	1.5	1.001
N2	CIM08 Min	Y	4.9	4.9	1
N2	DER01	X	0.002337	0	219700000000
N2	DER01	Y	0.002337	0	224500000000
N2	DER02	X	0.002254	0	216400000000
N2	DER02	Y	0.002254	0	220400000000
N2	DER03	X	0.002322	0	226400000000
N2	DER03	Y	0.002322	0	230700000000
N2	DER04	X	0.002184	0	218900000000
N2	DER04	Y	0.002184	0	223100000000
N2	DER05 Max	X	13.9	13.9	1
N2	DER05 Min	X	13.9	13.9	1
N2	DER06 Max	Y	13.9	13.9	1
N2	DER06 Min	Y	13.9	13.9	1
N2	DER07 Max	X	13.9	13.9	1
N2	DER07 Min	X	13.9	13.9	1
N2	DER08 Max	Y	13.9	13.9	1
N2	DER08 Min	Y	13.9	13.9	1
N2	DERUD01	X	0.002337	0	219700000000

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N2	DERUD01	Y	0.002337	0	224500000000
N2	DERUD02	X	0.002254	0	216400000000
N2	DERUD02	Y	0.002254	0	220400000000
N2	DERUD03	X	0.002322	0	226400000000
N2	DERUD03	Y	0.002322	0	230700000000
N2	DERUD04	X	0.002184	0	218900000000
N2	DERUD04	Y	0.002184	0	223100000000
N2	DERUD05 Max	X	0.002121	0	215300000000
N2	DERUD05 Max	Y	0.002121	0	219600000000
N2	DERUD05 Min	X	0.002121	0	215300000000
N2	DERUD05 Min	Y	0.002121	0	219600000000
N2	DERUD06 Max	X	0.002121	0	215300000000
N2	DERUD06 Max	Y	0.002121	0	219600000000
N2	DERUD06 Min	X	0.002121	0	215300000000
N2	DERUD06 Min	Y	0.002121	0	219600000000
N2	DERUD07 Max	X	0.001502	0	219700000000
N2	DERUD07 Max	Y	0.001502	0	224500000000
N2	DERUD07 Min	X	0.001502	0	219700000000
N2	DERUD07 Min	Y	0.001502	0	224500000000
N2	DERUD08 Max	X	0.001502	0	219700000000
N2	DERUD08 Max	Y	0.001502	0	224500000000
N2	DERUD08 Min	X	0.001502	0	219700000000
N2	DERUD08 Min	Y	0.001502	0	224500000000
N2	CIM09 Max	X	6.5	6.5	1
N2	CIM09 Max	Y	1.9	1.9	1.001
N2	CIM09 Min	X	6.5	6.5	1
N2	CIM09 Min	Y	1.9	1.9	1.001
N2	CIM10 Max	X	1.9	1.9	1.001
N2	CIM10 Max	Y	6.5	6.5	1
N2	CIM10 Min	X	1.9	1.9	1.001
N2	CIM10 Min	Y	6.5	6.5	1
N2	CIM11	X	0.001739	0	224200000000
N2	CIM11	Y	0.001739	0	229400000000
N2	CIM12	X	0.00181	0	219000000000
N2	CIM12	Y	0.00181	0	223500000000
N2	CIM13 Max	X	4.9	4.9	1
N2	CIM13 Max	Y	1.5	1.5	1.001
N2	CIM13 Min	X	4.9	4.9	1
N2	CIM13 Min	Y	1.5	1.5	1.001
N2	CIM14 Max	X	1.5	1.5	1.001
N2	CIM14 Max	Y	4.9	4.9	1
N2	CIM14 Min	X	1.5	1.5	1.001
N2	CIM14 Min	Y	4.9	4.9	1
N2	CIM15	X	0.001002	0	219700000000
N2	CIM15	Y	0.001002	0	224500000000
N2	COMB9	X	0.002081	0	219500000000
N2	COMB9	Y	0.002081	0	223900000000
N2	COMB10	X	0.002088	0	226500000000
N2	COMB10	Y	0.002088	0	231600000000
N2	COMB11	X	0.002011	0	222300000000
N2	COMB11	Y	0.002011	0	227100000000
N2	DER09	X	0.002227	0	214700000000
N2	DER09	Y	0.002227	0	218800000000
N2	DERUD09	X	0.002227	0	214700000000
N2	DERUD09	Y	0.002227	0	218800000000
N2	DER10	X	0.002233	0	221000000000
N2	DER10	Y	0.002233	0	225700000000
N2	DERUD10	X	0.002233	0	221000000000
N2	DERUD10	Y	0.002233	0	225700000000

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N2	DER11	X	0.002156	0	217100000000
N2	DER11	Y	0.002156	0	221500000000
N2	DERUD11	X	0.002156	0	217100000000
N2	DERUD11	Y	0.002156	0	221500000000
N1	D	X	0	0	1.056
N1	D	Y	0	0	1.062
N1	L	X	0	0	1.054
N1	L	Y	0	0	1.05
N1	LR	X	0	0	1.165
N1	LR	Y	0	0	1.149
N1	EX Max	X	11.6	11.6	1
N1	EY Max	Y	11.6	11.6	1
N1	DISX Max	X	7.7	7.7	1
N1	DISY Max	Y	7.7	7.7	1
N1	G	X	0	0	1.046
N1	G	Y	0	0	1.061
N1	F	X	0	0	1.088
N1	F	Y	0	0	1.082
N1	COMB1	X	0	0	1.064
N1	COMB1	Y	0	0	1.068
N1	COMB2	X	0	0	1.064
N1	COMB2	Y	0	0	1.067
N1	COMB3	X	0	0	1.066
N1	COMB3	Y	0	0	1.069
N1	COMB4	X	0	0	1.064
N1	COMB4	Y	0	0	1.068
N1	COMB5 Max	X	7.7	7.7	1
N1	COMB5 Max	Y	2.3	2.3	1
N1	COMB5 Min	X	7.7	7.7	1
N1	COMB5 Min	Y	2.3	2.3	1
N1	COMB6 Max	X	2.3	2.3	1
N1	COMB6 Max	Y	7.7	7.7	1
N1	COMB6 Min	X	2.3	2.3	1
N1	COMB6 Min	Y	7.7	7.7	1
N1	COMB7 Max	X	2.3	2.3	1
N1	COMB7 Max	Y	7.7	7.7	1
N1	COMB7 Min	X	2.3	2.3	1
N1	COMB7 Min	Y	7.7	7.7	1
N1	COMB8 Max	X	7.7	7.7	1
N1	COMB8 Max	Y	2.3	2.3	1
N1	COMB8 Min	X	7.7	7.7	1
N1	COMB8 Min	Y	2.3	2.3	1
N1	ENVE Max	X	7.7	7.7	1
N1	ENVE Max	Y	7.7	7.7	1
N1	ENVE Min	X	7.7	7.7	1
N1	ENVE Min	Y	7.7	7.7	1
N1	CIM01	X	0	0	1.064
N1	CIM01	Y	0	0	1.068
N1	CIM02	X	0	0	1.063
N1	CIM02	Y	0	0	1.066
N1	CIM03	X	0	0	1.066
N1	CIM03	Y	0	0	1.07
N1	CIM04	X	0	0	1.065
N1	CIM04	Y	0	0	1.068
N1	CIM05 Max	X	5.4	5.4	1
N1	CIM05 Max	Y	1.6	1.6	1
N1	CIM05 Min	X	5.4	5.4	1
N1	CIM05 Min	Y	1.6	1.6	1
N1	CIM06 Max	X	1.6	1.6	1



Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM06 Max	Y	5.4	5.4	1
N1	CIM06 Min	X	1.6	1.6	1
N1	CIM06 Min	Y	5.4	5.4	1
N1	CIM07 Max	X	4.1	4.1	1
N1	CIM07 Max	Y	1.2	1.2	1
N1	CIM07 Min	X	4.1	4.1	1
N1	CIM07 Min	Y	1.2	1.2	1
N1	CIM08 Max	X	1.2	1.2	1
N1	CIM08 Max	Y	4.1	4.1	1
N1	CIM08 Min	X	1.2	1.2	1
N1	CIM08 Min	Y	4.1	4.1	1
N1	DER01	X	0	0	1.064
N1	DER01	Y	0	0	1.068
N1	DER02	X	0	0	1.064
N1	DER02	Y	0	0	1.067
N1	DER03	X	0	0	1.066
N1	DER03	Y	0	0	1.069
N1	DER04	X	0	0	1.064
N1	DER04	Y	0	0	1.068
N1	DER05 Max	X	11.6	11.6	1
N1	DER05 Min	X	11.6	11.6	1
N1	DER06 Max	Y	11.6	11.6	1
N1	DER06 Min	Y	11.6	11.6	1
N1	DER07 Max	X	11.6	11.6	1
N1	DER07 Min	X	11.6	11.6	1
N1	DER08 Max	Y	11.6	11.6	1
N1	DER08 Min	Y	11.6	11.6	1
N1	DERUD01	X	0	0	1.064
N1	DERUD01	Y	0	0	1.068
N1	DERUD02	X	0	0	1.064
N1	DERUD02	Y	0	0	1.067
N1	DERUD03	X	0	0	1.066
N1	DERUD03	Y	0	0	1.069
N1	DERUD04	X	0	0	1.064
N1	DERUD04	Y	0	0	1.068
N1	DERUD05 Max	X	0	0	1.063
N1	DERUD05 Max	Y	0	0	1.067
N1	DERUD05 Min	X	0	0	1.063
N1	DERUD05 Min	Y	0	0	1.067
N1	DERUD06 Max	X	0	0	1.063
N1	DERUD06 Max	Y	0	0	1.067
N1	DERUD06 Min	X	0	0	1.063
N1	DERUD06 Min	Y	0	0	1.067
N1	DERUD07 Max	X	0	0	1.064
N1	DERUD07 Max	Y	0	0	1.068
N1	DERUD07 Min	X	0	0	1.064
N1	DERUD07 Min	Y	0	0	1.068
N1	DERUD08 Max	X	0	0	1.064
N1	DERUD08 Max	Y	0	0	1.068
N1	DERUD08 Min	X	0	0	1.064
N1	DERUD08 Min	Y	0	0	1.068
N1	CIM09 Max	X	5.4	5.4	1
N1	CIM09 Max	Y	1.6	1.6	1
N1	CIM09 Min	X	5.4	5.4	1
N1	CIM09 Min	Y	1.6	1.6	1
N1	CIM10 Max	X	1.6	1.6	1
N1	CIM10 Max	Y	5.4	5.4	1
N1	CIM10 Min	X	1.6	1.6	1
N1	CIM10 Min	Y	5.4	5.4	1

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM11	X	0	0	1.064
N1	CIM11	Y	0	0	1.068
N1	CIM12	X	0	0	1.063
N1	CIM12	Y	0	0	1.067
N1	CIM13 Max	X	4.1	4.1	1
N1	CIM13 Max	Y	1.2	1.2	1
N1	CIM13 Min	X	4.1	4.1	1
N1	CIM13 Min	Y	1.2	1.2	1
N1	CIM14 Max	X	1.2	1.2	1
N1	CIM14 Max	Y	4.1	4.1	1
N1	CIM14 Min	X	1.2	1.2	1
N1	CIM14 Min	Y	4.1	4.1	1
N1	CIM15	X	0	0	1.064
N1	CIM15	Y	0	0	1.068
N1	COMB9	X	0	0	1.062
N1	COMB9	Y	0	0	1.065
N1	COMB10	X	0	0	1.062
N1	COMB10	Y	0	0	1.066
N1	COMB11	X	0	0	1.062
N1	COMB11	Y	0	0	1.066
N1	DER09	X	0	0	1.063
N1	DER09	Y	0	0	1.066
N1	DERUD09	X	0	0	1.063
N1	DERUD09	Y	0	0	1.066
N1	DER10	X	0	0	1.063
N1	DER10	Y	0	0	1.067
N1	DERUD10	X	0	0	1.063
N1	DERUD10	Y	0	0	1.067
N1	DER11	X	0	0	1.063
N1	DER11	Y	0	0	1.067
N1	DERUD11	X	0	0	1.063
N1	DERUD11	Y	0	0	1.067

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	D	Top	133.2057	0	0	0	173.1674	-173.1674
N2	D	Bottom	158.6505	0	0	0	206.2456	-206.2456
N2	L	Top	12.168	0	0	0	15.8184	-15.8184
N2	L	Bottom	12.168	0	0	0	15.8184	-15.8184
N2	LR	Top	16.224	0	0	0	21.0912	-21.0912
N2	LR	Bottom	16.224	0	0	0	21.0912	-21.0912
N2	EX Max	Top	0	171.838	0	223.3894	0	0.0023
N2	EX Max	Bottom	0	171.838	0	223.3894	0	517.5429
N2	EY Max	Top	0	0	171.838	223.3894	0.0023	0
N2	EY Max	Bottom	0	0	171.838	223.3894	517.5429	0
N2	DISX Max	Top	0	114.5587	0	148.9263	0	0.0016
N2	DISX Max	Bottom	0	114.5587	0	148.9263	0	345.0286
N2	DISY Max	Top	0	0	114.5183	148.8738	0.0016	0
N2	DISY Max	Bottom	0	0	114.5183	148.8738	344.9072	0
N2	W	Top	0	0	0	0	0	0
N2	W	Bottom	0	0	0	0	0	0
N2	G	Top	9.048	0	0	0	11.7624	-11.7624
N2	G	Bottom	9.048	0	0	0	11.7624	-11.7624
N2	DERUX Max	Top	0	0	0	0	0	0
N2	DERUX Max	Bottom	0	0	0	0	0	0
N2	DERUY Max	Top	0	0	0	0	0	0
N2	DERUY Max	Bottom	0	0	0	0	0	0

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	F	Top	50.024	0	0	0	65.0312	-65.0312
N2	F	Bottom	50.024	0	0	0	65.0312	-65.0312
N2	COMB1	Top	256.5216	0	0	0	333.478	-333.478
N2	COMB1	Bottom	292.1443	0	0	0	379.7876	-379.7876
N2	COMB2	Top	247.4564	0	0	0	321.6933	-321.6933
N2	COMB2	Bottom	277.9902	0	0	0	361.3872	-361.3872
N2	COMB3	Top	258.002	0	0	0	335.4026	-335.4026
N2	COMB3	Bottom	288.5358	0	0	0	375.0965	-375.0965
N2	COMB4	Top	240.1556	0	0	0	312.2023	-312.2023
N2	COMB4	Bottom	270.6894	0	0	0	351.8962	-351.8962
N2	COMB5 Max	Top	232.0436	114.5587	34.3555	193.5884	301.6572	-301.6551
N2	COMB5 Max	Bottom	262.5774	114.5587	34.3555	193.5884	444.8227	3.678
N2	COMB5 Min	Top	232.0436	-114.5587	-34.3555	-193.5884	301.6562	-301.6583
N2	COMB5 Min	Bottom	262.5774	-114.5587	-34.3555	-193.5884	237.8784	-686.3792
N2	COMB6 Max	Top	232.0436	34.3676	114.5183	193.5517	301.6583	-301.6562
N2	COMB6 Max	Bottom	262.5774	34.3676	114.5183	193.5517	686.2578	-237.842
N2	COMB6 Min	Top	232.0436	-34.3676	-114.5183	-193.5517	301.6551	-301.6572
N2	COMB6 Min	Bottom	262.5774	-34.3676	-114.5183	-193.5517	-3.5566	-444.8592
N2	COMB7 Max	Top	164.9067	34.3676	114.5183	193.5517	214.3803	-214.3783
N2	COMB7 Max	Bottom	187.807	34.3676	114.5183	193.5517	589.0563	-140.6406
N2	COMB7 Min	Top	164.9067	-34.3676	-114.5183	-193.5517	214.3772	-214.3792
N2	COMB7 Min	Bottom	187.807	-34.3676	-114.5183	-193.5517	-100.758	-347.6577
N2	COMB8 Max	Top	164.9067	114.5587	34.3555	193.5884	214.3792	-214.3772
N2	COMB8 Max	Bottom	187.807	114.5587	34.3555	193.5884	347.6213	100.8794
N2	COMB8 Min	Top	164.9067	-114.5587	-34.3555	-193.5884	214.3783	-214.3803
N2	COMB8 Min	Bottom	187.807	-114.5587	-34.3555	-193.5884	140.677	-589.1777
N2	ENVE Max	Top	258.002	114.5587	114.5183	193.5884	335.4026	-214.3772
N2	ENVE Max	Bottom	292.1443	114.5587	114.5183	193.5884	686.2578	100.8794
N2	ENVE Min	Top	164.9067	-114.5587	-114.5183	-193.5884	214.3772	-335.4026
N2	ENVE Min	Bottom	187.807	-114.5587	-114.5183	-193.5884	-100.758	-686.3792
N2	CIM01	Top	183.2297	0	0	0	238.1986	-238.1986
N2	CIM01	Bottom	208.6745	0	0	0	271.2768	-271.2768
N2	CIM02	Top	195.3977	0	0	0	254.017	-254.017
N2	CIM02	Bottom	220.8425	0	0	0	287.0952	-287.0952
N2	CIM03	Top	199.4537	0	0	0	259.2898	-259.2898
N2	CIM03	Bottom	224.8985	0	0	0	292.368	-292.368
N2	CIM04	Top	204.5237	0	0	0	265.8808	-265.8808
N2	CIM04	Bottom	229.9685	0	0	0	298.959	-298.959
N2	CIM05 Max	Top	183.2297	80.1911	24.0489	135.5119	238.1989	-238.1975
N2	CIM05 Max	Bottom	208.6745	80.1911	24.0489	135.5119	343.7073	-29.7568
N2	CIM05 Min	Top	183.2297	-80.1911	-24.0489	-135.5119	238.1983	-238.1997
N2	CIM05 Min	Bottom	208.6745	-80.1911	-24.0489	-135.5119	198.8463	-512.7968
N2	CIM06 Max	Top	183.2297	24.0573	80.1628	135.4862	238.1997	-238.1983
N2	CIM06 Max	Bottom	208.6745	24.0573	80.1628	135.4862	512.7118	-198.8208
N2	CIM06 Min	Top	183.2297	-24.0573	-80.1628	-135.4862	238.1975	-238.1989
N2	CIM06 Min	Bottom	208.6745	-24.0573	-80.1628	-135.4862	29.8418	-343.7328
N2	CIM07 Max	Top	204.5237	60.7161	18.3229	102.7507	265.881	-265.88
N2	CIM07 Max	Bottom	229.9685	60.7161	18.3229	102.7507	354.1442	-116.0939
N2	CIM07 Min	Top	204.5237	-60.7161	-18.3229	-102.7507	265.8805	-265.8816
N2	CIM07 Min	Bottom	229.9685	-60.7161	-18.3229	-102.7507	243.7739	-481.8242
N2	CIM08 Max	Top	204.5237	18.3294	60.6947	102.7313	265.8816	-265.8805
N2	CIM08 Max	Bottom	229.9685	18.3294	60.6947	102.7313	481.7598	-243.7544
N2	CIM08 Min	Top	204.5237	-18.3294	-60.6947	-102.7313	265.88	-265.881
N2	CIM08 Min	Bottom	229.9685	-18.3294	-60.6947	-102.7313	116.1582	-354.1636
N2	DER01	Top	256.5216	0	0	0	333.478	-333.478
N2	DER01	Bottom	292.1443	0	0	0	379.7876	-379.7876
N2	DER02	Top	247.4564	0	0	0	321.6933	-321.6933
N2	DER02	Bottom	277.9902	0	0	0	361.3872	-361.3872
N2	DER03	Top	258.002	0	0	0	335.4026	-335.4026
N2	DER03	Bottom	288.5358	0	0	0	375.0965	-375.0965

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	DER04	Top	240.1556	0	0	0	312.2023	-312.2023
N2	DER04	Bottom	270.6894	0	0	0	351.8962	-351.8962
N2	DER05 Max	Top	232.0436	171.838	0	223.3894	301.6567	-301.6544
N2	DER05 Max	Bottom	262.5774	171.838	0	223.3894	341.3506	176.1923
N2	DER05 Min	Top	232.0436	-171.838	0	-223.3894	301.6567	-301.659
N2	DER05 Min	Bottom	262.5774	-171.838	0	-223.3894	341.3506	-858.8935
N2	DER06 Max	Top	232.0436	0	171.838	223.3894	301.659	-301.6567
N2	DER06 Max	Bottom	262.5774	0	171.838	223.3894	858.8935	-341.3506
N2	DER06 Min	Top	232.0436	0	-171.838	-223.3894	301.6544	-301.6567
N2	DER06 Min	Bottom	262.5774	0	-171.838	-223.3894	-176.1923	-341.3506
N2	DER07 Max	Top	164.9067	171.838	0	223.3894	214.3787	-214.3764
N2	DER07 Max	Bottom	187.807	171.838	0	223.3894	244.1491	273.3937
N2	DER07 Min	Top	164.9067	-171.838	0	-223.3894	214.3787	-214.3811
N2	DER07 Min	Bottom	187.807	-171.838	0	-223.3894	244.1491	-761.692
N2	DER08 Max	Top	164.9067	0	171.838	223.3894	214.3811	-214.3787
N2	DER08 Max	Bottom	187.807	0	171.838	223.3894	761.692	-244.1491
N2	DER08 Min	Top	164.9067	0	-171.838	-223.3894	214.3764	-214.3787
N2	DER08 Min	Bottom	187.807	0	-171.838	-223.3894	-273.3937	-244.1491
N2	DERUD01	Top	256.5216	0	0	0	333.478	-333.478
N2	DERUD01	Bottom	292.1443	0	0	0	379.7876	-379.7876
N2	DERUD02	Top	247.4564	0	0	0	321.6933	-321.6933
N2	DERUD02	Bottom	277.9902	0	0	0	361.3872	-361.3872
N2	DERUD03	Top	258.002	0	0	0	335.4026	-335.4026
N2	DERUD03	Bottom	288.5358	0	0	0	375.0965	-375.0965
N2	DERUD04	Top	240.1556	0	0	0	312.2023	-312.2023
N2	DERUD04	Bottom	270.6894	0	0	0	351.8962	-351.8962
N2	DERUD05 Max	Top	232.0436	0	0	0	301.6567	-301.6567
N2	DERUD05 Max	Bottom	262.5774	0	0	0	341.3506	-341.3506
N2	DERUD05 Min	Top	232.0436	0	0	0	301.6567	-301.6567
N2	DERUD05 Min	Bottom	262.5774	0	0	0	341.3506	-341.3506
N2	DERUD06 Max	Top	232.0436	0	0	0	301.6567	-301.6567
N2	DERUD06 Max	Bottom	262.5774	0	0	0	341.3506	-341.3506
N2	DERUD06 Min	Top	232.0436	0	0	0	301.6567	-301.6567
N2	DERUD06 Min	Bottom	262.5774	0	0	0	341.3506	-341.3506
N2	DERUD07 Max	Top	164.9067	0	0	0	214.3787	-214.3787
N2	DERUD07 Max	Bottom	187.807	0	0	0	244.1491	-244.1491
N2	DERUD07 Min	Top	164.9067	0	0	0	214.3787	-214.3787
N2	DERUD07 Min	Bottom	187.807	0	0	0	244.1491	-244.1491
N2	DERUD08 Max	Top	164.9067	0	0	0	214.3787	-214.3787
N2	DERUD08 Max	Bottom	187.807	0	0	0	244.1491	-244.1491
N2	DERUD08 Min	Top	164.9067	0	0	0	214.3787	-214.3787
N2	DERUD08 Min	Bottom	187.807	0	0	0	244.1491	-244.1491
N2	CIM09 Max	Top	109.9378	80.1911	24.0489	135.5119	142.9195	-142.9181
N2	CIM09 Max	Bottom	125.2047	80.1911	24.0489	135.5119	235.1966	78.7539
N2	CIM09 Min	Top	109.9378	-80.1911	-24.0489	-135.5119	142.9188	-142.9202
N2	CIM09 Min	Bottom	125.2047	-80.1911	-24.0489	-135.5119	90.3356	-404.2861
N2	CIM10 Max	Top	109.9378	24.0573	80.1628	135.4862	142.9202	-142.9188
N2	CIM10 Max	Bottom	125.2047	24.0573	80.1628	135.4862	404.2011	-90.3101
N2	CIM10 Min	Top	109.9378	-24.0573	-80.1628	-135.4862	142.9181	-142.9195
N2	CIM10 Min	Bottom	125.2047	-24.0573	-80.1628	-135.4862	-78.6689	-235.2221
N2	CIM11	Top	192.2777	0	0	0	249.961	-249.961
N2	CIM11	Bottom	217.7225	0	0	0	283.0392	-283.0392
N2	CIM12	Top	199.1417	0	0	0	258.8842	-258.8842
N2	CIM12	Bottom	224.5865	0	0	0	291.9624	-291.9624
N2	CIM13 Max	Top	199.1417	60.7161	18.3229	102.7507	258.8844	-258.8834
N2	CIM13 Max	Bottom	224.5865	60.7161	18.3229	102.7507	347.1476	-109.0973
N2	CIM13 Min	Top	199.1417	-60.7161	-18.3229	-102.7507	258.8839	-258.885
N2	CIM13 Min	Bottom	224.5865	-60.7161	-18.3229	-102.7507	236.7773	-474.8276
N2	CIM14 Max	Top	199.1417	18.3294	60.6947	102.7313	258.885	-258.8839
N2	CIM14 Max	Bottom	224.5865	18.3294	60.6947	102.7313	474.7632	-236.7578

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N2	CIM14 Min	Top	199.1417	-18.3294	-60.6947	-102.7313	258.8834	-258.8844
N2	CIM14 Min	Bottom	224.5865	-18.3294	-60.6947	-102.7313	109.1616	-347.167
N2	CIM15	Top	109.9378	0	0	0	142.9192	-142.9192
N2	CIM15	Bottom	125.2047	0	0	0	162.7661	-162.7661
N2	COMB9	Top	228.8612	0	0	0	297.5196	-297.5196
N2	COMB9	Bottom	259.395	0	0	0	337.2135	-337.2135
N2	COMB10	Top	231.5132	0	0	0	300.9672	-300.9672
N2	COMB10	Bottom	262.047	0	0	0	340.6611	-340.6611
N2	COMB11	Top	221.5604	0	0	0	288.0285	-288.0285
N2	COMB11	Bottom	252.0942	0	0	0	327.7224	-327.7224
N2	DER09	Top	243.8684	0	0	0	317.0289	-317.0289
N2	DER09	Bottom	274.4022	0	0	0	356.7228	-356.7228
N2	DERUD09	Top	243.8684	0	0	0	317.0289	-317.0289
N2	DERUD09	Bottom	274.4022	0	0	0	356.7228	-356.7228
N2	DER10	Top	246.5204	0	0	0	320.4765	-320.4765
N2	DER10	Bottom	277.0542	0	0	0	360.1704	-360.1704
N2	DERUD10	Top	246.5204	0	0	0	320.4765	-320.4765
N2	DERUD10	Bottom	277.0542	0	0	0	360.1704	-360.1704
N2	DER11	Top	236.5676	0	0	0	307.5379	-307.5379
N2	DER11	Bottom	267.1014	0	0	0	347.2318	-347.2318
N2	DERUD11	Top	236.5676	0	0	0	307.5379	-307.5379
N2	DERUD11	Bottom	267.1014	0	0	0	347.2318	-347.2318
N1	D	Top	178.1582	0	0	0	231.6056	-231.6056
N1	D	Bottom	203.603	0	0	0	264.6838	-264.6838
N1	L	Top	12.168	0	0	0	15.8184	-15.8184
N1	L	Bottom	12.168	0	0	0	15.8184	-15.8184
N1	LR	Top	16.224	0	0	0	21.0912	-21.0912
N1	LR	Bottom	16.224	0	0	0	21.0912	-21.0912
N1	EX Max	Top	0	195.3947	0	254.0131	0	517.5429
N1	EX Max	Bottom	0	195.3947	0	254.0131	9.527E-07	1103.4427
N1	EY Max	Top	0	0	195.3947	254.0131	517.5429	0
N1	EY Max	Bottom	0	0	195.3947	254.0131	1103.4427	0
N1	DISX Max	Top	0	130.2632	0	169.3421	0	345.0286
N1	DISX Max	Bottom	0	130.2632	0	169.3421	6.743E-07	735.6285
N1	DISY Max	Top	0	0	130.2173	169.2825	344.9072	0
N1	DISY Max	Bottom	0	0	130.2173	169.2825	735.3696	6.75E-07
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	9.048	0	0	0	11.7624	-11.7624
N1	G	Bottom	9.048	0	0	0	11.7624	-11.7624
N1	DERUX Max	Top	0	0	0	0	0	0
N1	DERUX Max	Bottom	0	0	0	0	0	0
N1	DERUY Max	Top	0	0	0	0	0	0
N1	DERUY Max	Bottom	0	0	0	0	0	0
N1	F	Top	50.024	0	0	0	65.0312	-65.0312
N1	F	Bottom	50.024	0	0	0	65.0312	-65.0312
N1	COMB1	Top	319.455	0	0	0	415.2915	-415.2915
N1	COMB1	Bottom	355.0777	0	0	0	461.6011	-461.6011
N1	COMB2	Top	301.3994	0	0	0	391.8192	-391.8192
N1	COMB2	Bottom	331.9332	0	0	0	431.5131	-431.5131
N1	COMB3	Top	311.945	0	0	0	405.5285	-405.5285
N1	COMB3	Bottom	342.4788	0	0	0	445.2224	-445.2224
N1	COMB4	Top	294.0986	0	0	0	382.3282	-382.3282
N1	COMB4	Bottom	324.6324	0	0	0	422.0221	-422.0221
N1	COMB5 Max	Top	285.9866	130.2632	39.0652	220.1268	475.2547	-26.754
N1	COMB5 Max	Bottom	316.5204	130.2632	39.0652	220.1268	632.0873	324.152
N1	COMB5 Min	Top	285.9866	-130.2632	-39.0652	-220.1268	268.3104	-716.8112
N1	COMB5 Min	Bottom	316.5204	-130.2632	-39.0652	-220.1268	190.8656	-1147.1049
N1	COMB6 Max	Top	285.9866	39.0789	130.2173	220.0851	716.6897	-268.274
N1	COMB6 Max	Bottom	316.5204	39.0789	130.2173	220.0851	1146.8461	-190.7879

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COMB6 Min	Top	285.9866	-39.0789	-130.2173	-220.0851	26.8754	-475.2911
N1	COMB6 Min	Bottom	316.5204	-39.0789	-130.2173	-220.0851	-323.8931	-632.165
N1	COMB7 Max	Top	205.3639	39.0789	130.2173	220.0851	611.8803	-163.4646
N1	COMB7 Max	Bottom	228.2643	39.0789	130.2173	220.0851	1032.1131	-76.055
N1	COMB7 Min	Top	205.3639	-39.0789	-130.2173	-220.0851	-77.934	-370.4817
N1	COMB7 Min	Bottom	228.2643	-39.0789	-130.2173	-220.0851	-438.6261	-517.4321
N1	COMB8 Max	Top	205.3639	130.2632	39.0652	220.1268	370.4453	78.0555
N1	COMB8 Max	Bottom	228.2643	130.2632	39.0652	220.1268	517.3544	438.8849
N1	COMB8 Min	Top	205.3639	-130.2632	-39.0652	-220.1268	163.501	-612.0017
N1	COMB8 Min	Bottom	228.2643	-130.2632	-39.0652	-220.1268	76.1327	-1032.372
N1	ENVE Max	Top	319.455	130.2632	130.2173	220.1268	716.6897	78.0555
N1	ENVE Max	Bottom	355.0777	130.2632	130.2173	220.1268	1146.8461	438.8849
N1	ENVE Min	Top	205.3639	-130.2632	-130.2173	-220.1268	-77.934	-716.8112
N1	ENVE Min	Bottom	228.2643	-130.2632	-130.2173	-220.1268	-438.6261	-1147.1049
N1	CIM01	Top	228.1822	0	0	0	296.6368	-296.6368
N1	CIM01	Bottom	253.627	0	0	0	329.715	-329.715
N1	CIM02	Top	240.3502	0	0	0	312.4552	-312.4552
N1	CIM02	Bottom	265.795	0	0	0	345.5334	-345.5334
N1	CIM03	Top	244.4062	0	0	0	317.728	-317.728
N1	CIM03	Bottom	269.851	0	0	0	350.8062	-350.8062
N1	CIM04	Top	249.4762	0	0	0	324.319	-324.319
N1	CIM04	Bottom	274.921	0	0	0	357.3972	-357.3972
N1	CIM05 Max	Top	228.1822	91.1842	27.3456	154.0888	369.0673	-55.1168
N1	CIM05 Max	Bottom	253.627	91.1842	27.3456	154.0888	484.1427	185.2249
N1	CIM05 Min	Top	228.1822	-91.1842	-27.3456	-154.0888	224.2063	-538.1568
N1	CIM05 Min	Bottom	253.627	-91.1842	-27.3456	-154.0888	175.2874	-844.655
N1	CIM06 Max	Top	228.1822	27.3553	91.1521	154.0596	538.0718	-224.1808
N1	CIM06 Max	Bottom	253.627	27.3553	91.1521	154.0596	844.4738	-175.2331
N1	CIM06 Min	Top	228.1822	-27.3553	-91.1521	-154.0596	55.2018	-369.0928
N1	CIM06 Min	Bottom	253.627	-27.3553	-91.1521	-154.0596	-185.0437	-484.197
N1	CIM07 Max	Top	249.4762	69.0395	20.8348	116.8365	379.5042	-141.4539
N1	CIM07 Max	Bottom	274.921	69.0395	20.8348	116.8365	475.0564	32.4858
N1	CIM07 Min	Top	249.4762	-69.0395	-20.8348	-116.8365	269.1339	-507.1842
N1	CIM07 Min	Bottom	274.921	-69.0395	-20.8348	-116.8365	239.7381	-747.2803
N1	CIM08 Max	Top	249.4762	20.8421	69.0152	116.8145	507.1198	-269.1144
N1	CIM08 Max	Bottom	274.921	20.8421	69.0152	116.8145	747.1431	-239.6967
N1	CIM08 Min	Top	249.4762	-20.8421	-69.0152	-116.8145	141.5182	-379.5236
N1	CIM08 Min	Bottom	274.921	-20.8421	-69.0152	-116.8145	-32.3486	-475.0978
N1	DER01	Top	319.455	0	0	0	415.2915	-415.2915
N1	DER01	Bottom	355.0777	0	0	0	461.6011	-461.6011
N1	DER02	Top	301.3994	0	0	0	391.8192	-391.8192
N1	DER02	Bottom	331.9332	0	0	0	431.5131	-431.5131
N1	DER03	Top	311.945	0	0	0	405.5285	-405.5285
N1	DER03	Bottom	342.4788	0	0	0	445.2224	-445.2224
N1	DER04	Top	294.0986	0	0	0	382.3282	-382.3282
N1	DER04	Bottom	324.6324	0	0	0	422.0221	-422.0221
N1	DER05 Max	Top	285.9866	195.3947	0	254.0131	371.7826	145.7603
N1	DER05 Max	Bottom	316.5204	195.3947	0	254.0131	411.4765	691.9663
N1	DER05 Min	Top	285.9866	-195.3947	0	-254.0131	371.7826	-889.3254
N1	DER05 Min	Bottom	316.5204	-195.3947	0	-254.0131	411.4765	-1514.9192
N1	DER06 Max	Top	285.9866	0	195.3947	254.0131	889.3254	-371.7826
N1	DER06 Max	Bottom	316.5204	0	195.3947	254.0131	1514.9192	-411.4765
N1	DER06 Min	Top	285.9866	0	-195.3947	-254.0131	-145.7603	-371.7826
N1	DER06 Min	Bottom	316.5204	0	-195.3947	-254.0131	-691.9663	-411.4765
N1	DER07 Max	Top	205.3639	195.3947	0	254.0131	266.9731	250.5698
N1	DER07 Max	Bottom	228.2643	195.3947	0	254.0131	296.7435	806.6992
N1	DER07 Min	Top	205.3639	-195.3947	0	-254.0131	266.9731	-784.516
N1	DER07 Min	Bottom	228.2643	-195.3947	0	-254.0131	296.7435	-1400.1863
N1	DER08 Max	Top	205.3639	0	195.3947	254.0131	784.516	-266.9731
N1	DER08 Max	Bottom	228.2643	0	195.3947	254.0131	1400.1863	-296.7435

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DER08 Min	Top	205.3639	0	-195.3947	-254.0131	-250.5698	-266.9731
N1	DER08 Min	Bottom	228.2643	0	-195.3947	-254.0131	-806.6992	-296.7435
N1	DERUD01	Top	319.455	0	0	0	415.2915	-415.2915
N1	DERUD01	Bottom	355.0777	0	0	0	461.6011	-461.6011
N1	DERUD02	Top	301.3994	0	0	0	391.8192	-391.8192
N1	DERUD02	Bottom	331.9332	0	0	0	431.5131	-431.5131
N1	DERUD03	Top	311.945	0	0	0	405.5285	-405.5285
N1	DERUD03	Bottom	342.4788	0	0	0	445.2224	-445.2224
N1	DERUD04	Top	294.0986	0	0	0	382.3282	-382.3282
N1	DERUD04	Bottom	324.6324	0	0	0	422.0221	-422.0221
N1	DERUD05 Max	Top	285.9866	0	0	0	371.7826	-371.7826
N1	DERUD05 Max	Bottom	316.5204	0	0	0	411.4765	-411.4765
N1	DERUD05 Min	Top	285.9866	0	0	0	371.7826	-371.7826
N1	DERUD05 Min	Bottom	316.5204	0	0	0	411.4765	-411.4765
N1	DERUD06 Max	Top	285.9866	0	0	0	371.7826	-371.7826
N1	DERUD06 Max	Bottom	316.5204	0	0	0	411.4765	-411.4765
N1	DERUD06 Min	Top	285.9866	0	0	0	371.7826	-371.7826
N1	DERUD06 Min	Bottom	316.5204	0	0	0	411.4765	-411.4765
N1	DERUD07 Max	Top	205.3639	0	0	0	266.9731	-266.9731
N1	DERUD07 Max	Bottom	228.2643	0	0	0	296.7435	-296.7435
N1	DERUD07 Min	Top	205.3639	0	0	0	266.9731	-266.9731
N1	DERUD07 Min	Bottom	228.2643	0	0	0	296.7435	-296.7435
N1	DERUD08 Max	Top	205.3639	0	0	0	266.9731	-266.9731
N1	DERUD08 Max	Bottom	228.2643	0	0	0	296.7435	-296.7435
N1	DERUD08 Min	Top	205.3639	0	0	0	266.9731	-266.9731
N1	DERUD08 Min	Bottom	228.2643	0	0	0	296.7435	-296.7435
N1	CIM09 Max	Top	136.9093	91.1842	27.3456	154.0888	250.4126	63.5379
N1	CIM09 Max	Bottom	152.1762	91.1842	27.3456	154.0888	352.2566	317.1109
N1	CIM09 Min	Top	136.9093	-91.1842	-27.3456	-154.0888	105.5516	-419.5021
N1	CIM09 Min	Bottom	152.1762	-91.1842	-27.3456	-154.0888	43.4014	-712.769
N1	CIM10 Max	Top	136.9093	27.3553	91.1521	154.0596	419.4171	-105.5261
N1	CIM10 Max	Bottom	152.1762	27.3553	91.1521	154.0596	712.5877	-43.347
N1	CIM10 Min	Top	136.9093	-27.3553	-91.1521	-154.0596	-63.4529	-250.4381
N1	CIM10 Min	Bottom	152.1762	-27.3553	-91.1521	-154.0596	-316.9297	-352.311
N1	CIM11	Top	237.2302	0	0	0	308.3992	-308.3992
N1	CIM11	Bottom	262.675	0	0	0	341.4774	-341.4774
N1	CIM12	Top	244.0942	0	0	0	317.3224	-317.3224
N1	CIM12	Bottom	269.539	0	0	0	350.4006	-350.4006
N1	CIM13 Max	Top	244.0942	69.0395	20.8348	116.8365	372.5076	-134.4573
N1	CIM13 Max	Bottom	269.539	69.0395	20.8348	116.8365	468.0598	39.4824
N1	CIM13 Min	Top	244.0942	-69.0395	-20.8348	-116.8365	262.1373	-500.1876
N1	CIM13 Min	Bottom	269.539	-69.0395	-20.8348	-116.8365	232.7415	-740.2837
N1	CIM14 Max	Top	244.0942	20.8421	69.0152	116.8145	500.1232	-262.1178
N1	CIM14 Max	Bottom	269.539	20.8421	69.0152	116.8145	740.1465	-232.7001
N1	CIM14 Min	Top	244.0942	-20.8421	-69.0152	-116.8145	134.5216	-372.527
N1	CIM14 Min	Bottom	269.539	-20.8421	-69.0152	-116.8145	-39.3452	-468.1012
N1	CIM15	Top	136.9093	0	0	0	177.9821	-177.9821
N1	CIM15	Bottom	152.1762	0	0	0	197.829	-197.829
N1	COMB9	Top	282.8042	0	0	0	367.6454	-367.6454
N1	COMB9	Bottom	313.338	0	0	0	407.3393	-407.3393
N1	COMB10	Top	285.4562	0	0	0	371.093	-371.093
N1	COMB10	Bottom	315.99	0	0	0	410.7869	-410.7869
N1	COMB11	Top	275.5034	0	0	0	358.1544	-358.1544
N1	COMB11	Bottom	306.0372	0	0	0	397.8483	-397.8483
N1	DER09	Top	297.8114	0	0	0	387.1548	-387.1548
N1	DER09	Bottom	328.3452	0	0	0	426.8487	-426.8487
N1	DERUD09	Top	297.8114	0	0	0	387.1548	-387.1548
N1	DERUD09	Bottom	328.3452	0	0	0	426.8487	-426.8487
N1	DER10	Top	300.4634	0	0	0	390.6024	-390.6024
N1	DER10	Bottom	330.9972	0	0	0	430.2963	-430.2963

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD10	Top	300.4634	0	0	0	390.6024	-390.6024
N1	DERUD10	Bottom	330.9972	0	0	0	430.2963	-430.2963
N1	DER11	Top	290.5106	0	0	0	377.6638	-377.6638
N1	DER11	Bottom	321.0444	0	0	0	417.3577	-417.3577
N1	DERUD11	Top	290.5106	0	0	0	377.6638	-377.6638
N1	DERUD11	Bottom	321.0444	0	0	0	417.3577	-417.3577

## 5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	-0.2416	-0.2416	50.9007	0.2383	-0.2383	0
Base	1	13	L	-0.0515	-0.0515	3.042	0.0508	-0.0508	0
Base	1	13	LR	-0.0549	-0.0549	4.056	0.0542	-0.0542	0
Base	1	13	EX Max	48.8487	0	142.0371	0	91.3807	0
Base	1	13	EY Max	0	48.8487	142.0371	91.3807	0	0
Base	1	13	DISX Max	32.5658	0	94.6914	0	60.9205	0
Base	1	13	DISY Max	0	32.5543	94.6581	60.8991	0	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	-0.0306	-0.0306	2.262	0.0302	-0.0302	0
Base	1	13	DERUX Max	0	0	0	0	0	0
Base	1	13	DERUY Max	0	0	0	0	0	0
Base	1	13	F	-0.2117	-0.2117	12.506	0.2089	-0.2089	0
Base	1	13	COMB1	-0.6347	-0.6347	88.7694	0.6261	-0.6261	0
Base	1	13	COMB2	-0.6539	-0.6539	82.9833	0.6451	-0.6451	0
Base	1	13	COMB3	-0.6834	-0.6834	85.6197	0.6742	-0.6742	0
Base	1	13	COMB4	-0.623	-0.623	81.1581	0.6146	-0.6146	0
Base	1	13	COMB5 Max	31.9702	9.1708	202.2189	18.8572	60.333	0
Base	1	13	COMB5 Min	-33.1613	-10.3618	-43.9588	-17.6822	-61.508	0
Base	1	13	COMB6 Max	9.1742	31.9588	202.1956	61.4865	17.6887	0
Base	1	13	COMB6 Min	-10.3653	-33.1499	-43.9354	-60.3116	-18.8636	0
Base	1	13	COMB7 Max	9.3617	32.1463	180.1316	61.3016	17.8736	0
Base	1	13	COMB7 Min	-10.1778	-32.9624	-65.9995	-60.4965	-18.6787	0
Base	1	13	COMB8 Max	32.1578	9.3583	180.1549	18.6722	60.518	0
Base	1	13	COMB8 Min	-32.9738	-10.1743	-66.0228	-17.8672	-61.323	0
Base	1	13	ENVE Max	32.1578	32.1463	202.2189	61.4865	60.518	0
Base	1	13	ENVE Min	-33.1613	-33.1499	-66.0228	-60.4965	-61.508	0
Base	1	13	CIM01	-0.4534	-0.4534	63.4067	0.4472	-0.4472	0
Base	1	13	CIM02	-0.5049	-0.5049	66.4487	0.498	-0.498	0
Base	1	13	CIM03	-0.5083	-0.5083	67.4627	0.5014	-0.5014	0
Base	1	13	CIM04	-0.5332	-0.5332	68.7302	0.526	-0.526	0
Base	1	13	CIM05 Max	22.3427	6.383	149.5689	13.236	42.1971	0
Base	1	13	CIM05 Min	-23.2494	-7.2898	-22.7555	-12.3416	-43.0916	0
Base	1	13	CIM06 Max	6.3855	22.3347	149.5526	43.0766	12.3461	0
Base	1	13	CIM06 Min	-7.2922	-23.2414	-22.7391	-42.1821	-13.2405	0
Base	1	13	CIM07 Max	16.7267	4.6755	134.062	10.2698	31.7619	0
Base	1	13	CIM07 Min	-17.7931	-5.7419	3.3985	-9.2179	-32.8139	0
Base	1	13	CIM08 Max	4.6773	16.7206	134.0497	32.8025	9.2213	0
Base	1	13	CIM08 Min	-5.7437	-17.787	3.4108	-31.7505	-10.2733	0
Base	1	13	DER01	-0.6347	-0.6347	88.7694	0.6261	-0.6261	0
Base	1	13	DER02	-0.6539	-0.6539	82.9833	0.6451	-0.6451	0
Base	1	13	DER03	-0.6834	-0.6834	85.6197	0.6742	-0.6742	0
Base	1	13	DER04	-0.623	-0.623	81.1581	0.6146	-0.6146	0
Base	1	13	DER05 Max	48.2531	-0.5955	221.1672	0.5875	90.7932	0
Base	1	13	DER05 Min	-49.4442	-0.5955	-62.9071	0.5875	-91.9682	0
Base	1	13	DER06 Max	-0.5955	48.2531	221.1672	91.9682	-0.5875	0
Base	1	13	DER06 Min	-0.5955	-49.4442	-62.9071	-90.7932	-0.5875	0
Base	1	13	DER07 Max	48.4407	-0.408	199.1032	0.4025	90.9782	0
Base	1	13	DER07 Min	-49.2567	-0.408	-84.9711	0.4025	-91.7832	0



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	DER08 Max	-0.408	48.4407	199.1032	91.7832	-0.4025	0
Base	1	13	DER08 Min	-0.408	-49.2567	-84.9711	-90.9782	-0.4025	0
Base	1	13	DERUD01	-0.6347	-0.6347	88.7694	0.6261	-0.6261	0
Base	1	13	DERUD02	-0.6539	-0.6539	82.9833	0.6451	-0.6451	0
Base	1	13	DERUD03	-0.6834	-0.6834	85.6197	0.6742	-0.6742	0
Base	1	13	DERUD04	-0.623	-0.623	81.1581	0.6146	-0.6146	0
Base	1	13	DERUD05 Max	-0.5955	-0.5955	79.1301	0.5875	-0.5875	0
Base	1	13	DERUD05 Min	-0.5955	-0.5955	79.1301	0.5875	-0.5875	0
Base	1	13	DERUD06 Max	-0.5955	-0.5955	79.1301	0.5875	-0.5875	0
Base	1	13	DERUD06 Min	-0.5955	-0.5955	79.1301	0.5875	-0.5875	0
Base	1	13	DERUD07 Max	-0.408	-0.408	57.0661	0.4025	-0.4025	0
Base	1	13	DERUD07 Min	-0.408	-0.408	57.0661	0.4025	-0.4025	0
Base	1	13	DERUD08 Max	-0.408	-0.408	57.0661	0.4025	-0.4025	0
Base	1	13	DERUD08 Min	-0.408	-0.408	57.0661	0.4025	-0.4025	0
Base	1	13	CIM09 Max	22.524	6.5644	124.2062	13.0571	42.376	0
Base	1	13	CIM09 Min	-23.0681	-7.1084	-48.1182	-12.5205	-42.9127	0
Base	1	13	CIM10 Max	6.5668	22.516	124.1899	42.8977	12.525	0
Base	1	13	CIM10 Min	-7.1108	-23.06	-48.1018	-42.361	-13.0616	0
Base	1	13	CIM11	-0.484	-0.484	65.6687	0.4775	-0.4775	0
Base	1	13	CIM12	-0.515	-0.515	67.3847	0.508	-0.508	0
Base	1	13	CIM13 Max	16.7449	4.6937	132.7165	10.2519	31.7798	0
Base	1	13	CIM13 Min	-17.7748	-5.7237	2.053	-9.2358	-32.7959	0
Base	1	13	CIM14 Max	4.6956	16.7388	132.7042	32.7845	9.2393	0
Base	1	13	CIM14 Min	-5.7255	-17.7688	2.0653	-31.7685	-10.2553	0
Base	1	13	CIM15	-0.272	-0.272	38.044	0.2683	-0.2683	0
Base	1	13	COMB9	-0.5782	-0.5782	78.3345	0.5704	-0.5704	0
Base	1	13	COMB10	-0.581	-0.581	78.9975	0.5732	-0.5732	0
Base	1	13	COMB11	-0.5473	-0.5473	76.5093	0.5399	-0.5399	0
Base	1	13	DER09	-0.6418	-0.6418	82.0863	0.6331	-0.6331	0
Base	1	13	DERUD09	-0.6418	-0.6418	82.0863	0.6331	-0.6331	0
Base	1	13	DER10	-0.6446	-0.6446	82.7493	0.6359	-0.6359	0
Base	1	13	DERUD10	-0.6446	-0.6446	82.7493	0.6359	-0.6359	0
Base	1	13	DER11	-0.6109	-0.6109	80.2611	0.6026	-0.6026	0
Base	1	13	DERUD11	-0.6109	-0.6109	80.2611	0.6026	-0.6026	0
Base	2	15	D	-0.2416	0.2416	50.9007	-0.2383	-0.2383	0
Base	2	15	L	-0.0515	0.0515	3.042	-0.0508	-0.0508	0
Base	2	15	LR	-0.0549	0.0549	4.056	-0.0542	-0.0542	0
Base	2	15	EX Max	48.8487	0	142.0371	0	91.3807	0
Base	2	15	EY Max	0	48.8487	142.0371	91.3807	0	0
Base	2	15	DISX Max	32.5658	0	94.6914	0	60.9205	0
Base	2	15	DISY Max	0	32.5543	94.6581	60.8991	0	0
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	-0.0306	0.0306	2.262	-0.0302	-0.0302	0
Base	2	15	DERUX Max	0	0	0	0	0	0
Base	2	15	DERUY Max	0	0	0	0	0	0
Base	2	15	F	-0.2117	0.2117	12.506	-0.2089	-0.2089	0
Base	2	15	COMB1	-0.6347	0.6347	88.7694	-0.6261	-0.6261	0
Base	2	15	COMB2	-0.6539	0.6539	82.9833	-0.6451	-0.6451	0
Base	2	15	COMB3	-0.6834	0.6834	85.6197	-0.6742	-0.6742	0
Base	2	15	COMB4	-0.623	0.623	81.1581	-0.6146	-0.6146	0
Base	2	15	COMB5 Max	31.9702	10.3618	202.2189	17.6822	60.333	0
Base	2	15	COMB5 Min	-33.1613	-9.1708	-43.9588	-18.8572	-61.508	0
Base	2	15	COMB6 Max	9.1742	33.1499	202.1956	60.3116	17.6887	0
Base	2	15	COMB6 Min	-10.3653	-31.9588	-43.9354	-61.4865	-18.8636	0
Base	2	15	COMB7 Max	9.3617	32.9624	180.1316	60.4965	17.8736	0
Base	2	15	COMB7 Min	-10.1778	-32.1463	-65.9995	-61.3016	-18.6787	0
Base	2	15	COMB8 Max	32.1578	10.1743	180.1549	17.8672	60.518	0
Base	2	15	COMB8 Min	-32.9738	-9.3583	-66.0228	-18.6722	-61.323	0
Base	2	15	ENVE Max	32.1578	33.1499	202.2189	60.4965	60.518	0
Base	2	15	ENVE Min	-33.1613	-32.1463	-66.0228	-61.4865	-61.508	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	CIM01	-0.4534	0.4534	63.4067	-0.4472	-0.4472	0
Base	2	15	CIM02	-0.5049	0.5049	66.4487	-0.498	-0.498	0
Base	2	15	CIM03	-0.5083	0.5083	67.4627	-0.5014	-0.5014	0
Base	2	15	CIM04	-0.5332	0.5332	68.7302	-0.526	-0.526	0
Base	2	15	CIM05 Max	22.3427	7.2898	149.5689	12.3416	42.1971	0
Base	2	15	CIM05 Min	-23.2494	-6.383	-22.7555	-13.236	-43.0916	0
Base	2	15	CIM06 Max	6.3855	23.2414	149.5526	42.1821	12.3461	0
Base	2	15	CIM06 Min	-7.2922	-22.3347	-22.7391	-43.0766	-13.2405	0
Base	2	15	CIM07 Max	16.7267	5.7419	134.062	9.2179	31.7619	0
Base	2	15	CIM07 Min	-17.7931	-4.6755	3.3985	-10.2698	-32.8139	0
Base	2	15	CIM08 Max	4.6773	17.787	134.0497	31.7505	9.2213	0
Base	2	15	CIM08 Min	-5.7437	-16.7206	3.4108	-32.8025	-10.2733	0
Base	2	15	DER01	-0.6347	0.6347	88.7694	-0.6261	-0.6261	0
Base	2	15	DER02	-0.6539	0.6539	82.9833	-0.6451	-0.6451	0
Base	2	15	DER03	-0.6834	0.6834	85.6197	-0.6742	-0.6742	0
Base	2	15	DER04	-0.623	0.623	81.1581	-0.6146	-0.6146	0
Base	2	15	DER05 Max	48.2531	0.5955	221.1672	-0.5875	90.7932	0
Base	2	15	DER05 Min	-49.4442	0.5955	-62.9071	-0.5875	-91.9682	0
Base	2	15	DER06 Max	-0.5955	49.4442	221.1672	90.7932	-0.5875	0
Base	2	15	DER06 Min	-0.5955	-48.2531	-62.9071	-91.9682	-0.5875	0
Base	2	15	DER07 Max	48.4407	0.408	199.1032	-0.4025	90.9782	0
Base	2	15	DER07 Min	-49.2567	0.408	-84.9711	-0.4025	-91.7832	0
Base	2	15	DER08 Max	-0.408	49.2567	199.1032	90.9782	-0.4025	0
Base	2	15	DER08 Min	-0.408	-48.4407	-84.9711	-91.7832	-0.4025	0
Base	2	15	DERUD01	-0.6347	0.6347	88.7694	-0.6261	-0.6261	0
Base	2	15	DERUD02	-0.6539	0.6539	82.9833	-0.6451	-0.6451	0
Base	2	15	DERUD03	-0.6834	0.6834	85.6197	-0.6742	-0.6742	0
Base	2	15	DERUD04	-0.623	0.623	81.1581	-0.6146	-0.6146	0
Base	2	15	DERUD05 Max	-0.5955	0.5955	79.1301	-0.5875	-0.5875	0
Base	2	15	DERUD05 Min	-0.5955	0.5955	79.1301	-0.5875	-0.5875	0
Base	2	15	DERUD06 Max	-0.5955	0.5955	79.1301	-0.5875	-0.5875	0
Base	2	15	DERUD06 Min	-0.5955	0.5955	79.1301	-0.5875	-0.5875	0
Base	2	15	DERUD07 Max	-0.408	0.408	57.0661	-0.4025	-0.4025	0
Base	2	15	DERUD07 Min	-0.408	0.408	57.0661	-0.4025	-0.4025	0
Base	2	15	DERUD08 Max	-0.408	0.408	57.0661	-0.4025	-0.4025	0
Base	2	15	DERUD08 Min	-0.408	0.408	57.0661	-0.4025	-0.4025	0
Base	2	15	CIM09 Max	22.524	7.1084	124.2062	12.5205	42.376	0
Base	2	15	CIM09 Min	-23.0681	-6.5644	-48.1182	-13.0571	-42.9127	0
Base	2	15	CIM10 Max	6.5668	23.06	124.1899	42.361	12.525	0
Base	2	15	CIM10 Min	-7.1108	-22.516	-48.1018	-42.8977	-13.0616	0
Base	2	15	CIM11	-0.484	0.484	65.6687	-0.4775	-0.4775	0
Base	2	15	CIM12	-0.515	0.515	67.3847	-0.508	-0.508	0
Base	2	15	CIM13 Max	16.7449	5.7237	132.7165	9.2358	31.7798	0
Base	2	15	CIM13 Min	-17.7748	-4.6937	2.053	-10.2519	-32.7959	0
Base	2	15	CIM14 Max	4.6956	17.7688	132.7042	31.7685	9.2393	0
Base	2	15	CIM14 Min	-5.7255	-16.7388	2.0653	-32.7845	-10.2553	0
Base	2	15	CIM15	-0.272	0.272	38.044	-0.2683	-0.2683	0
Base	2	15	COMB9	-0.5782	0.5782	78.3345	-0.5704	-0.5704	0
Base	2	15	COMB10	-0.581	0.581	78.9975	-0.5732	-0.5732	0
Base	2	15	COMB11	-0.5473	0.5473	76.5093	-0.5399	-0.5399	0
Base	2	15	DER09	-0.6418	0.6418	82.0863	-0.6331	-0.6331	0
Base	2	15	DERUD09	-0.6418	0.6418	82.0863	-0.6331	-0.6331	0
Base	2	15	DER10	-0.6446	0.6446	82.7493	-0.6359	-0.6359	0
Base	2	15	DERUD10	-0.6446	0.6446	82.7493	-0.6359	-0.6359	0
Base	2	15	DER11	-0.6109	0.6109	80.2611	-0.6026	-0.6026	0
Base	2	15	DERUD11	-0.6109	0.6109	80.2611	-0.6026	-0.6026	0
Base	3	16	D	0.2416	-0.2416	50.9007	0.2383	0.2383	0
Base	3	16	L	0.0515	-0.0515	3.042	0.0508	0.0508	0
Base	3	16	LR	0.0549	-0.0549	4.056	0.0542	0.0542	0
Base	3	16	EX Max	48.8487	0	142.0371	0	91.3807	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	EY Max	0	48.8487	142.0371	91.3807	0	0
Base	3	16	DISX Max	32.5658	0	94.6914	0	60.9205	0
Base	3	16	DISY Max	0	32.5543	94.6581	60.8991	0	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	0.0306	-0.0306	2.262	0.0302	0.0302	0
Base	3	16	DERUX Max	0	0	0	0	0	0
Base	3	16	DERUY Max	0	0	0	0	0	0
Base	3	16	F	0.2117	-0.2117	12.506	0.2089	0.2089	0
Base	3	16	COMB1	0.6347	-0.6347	88.7694	0.6261	0.6261	0
Base	3	16	COMB2	0.6539	-0.6539	82.9833	0.6451	0.6451	0
Base	3	16	COMB3	0.6834	-0.6834	85.6197	0.6742	0.6742	0
Base	3	16	COMB4	0.623	-0.623	81.1581	0.6146	0.6146	0
Base	3	16	COMB5 Max	33.1613	9.1708	202.2189	18.8572	61.508	0
Base	3	16	COMB5 Min	-31.9702	-10.3618	-43.9588	-17.6822	-60.333	0
Base	3	16	COMB6 Max	10.3653	31.9588	202.1956	61.4865	18.8636	0
Base	3	16	COMB6 Min	-9.1742	-33.1499	-43.9354	-60.3116	-17.6887	0
Base	3	16	COMB7 Max	10.1778	32.1463	180.1316	61.3016	18.6787	0
Base	3	16	COMB7 Min	-9.3617	-32.9624	-65.9995	-60.4965	-17.8736	0
Base	3	16	COMB8 Max	32.9738	9.3583	180.1549	18.6722	61.323	0
Base	3	16	COMB8 Min	-32.1578	-10.1743	-66.0228	-17.8672	-60.518	0
Base	3	16	ENVE Max	33.1613	32.1463	202.2189	61.4865	61.508	0
Base	3	16	ENVE Min	-32.1578	-33.1499	-66.0228	-60.4965	-60.518	0
Base	3	16	CIM01	0.4534	-0.4534	63.4067	0.4472	0.4472	0
Base	3	16	CIM02	0.5049	-0.5049	66.4487	0.498	0.498	0
Base	3	16	CIM03	0.5083	-0.5083	67.4627	0.5014	0.5014	0
Base	3	16	CIM04	0.5332	-0.5332	68.7302	0.526	0.526	0
Base	3	16	CIM05 Max	23.2494	6.383	149.5689	13.236	43.0916	0
Base	3	16	CIM05 Min	-22.3427	-7.2898	-22.7555	-12.3416	-42.1971	0
Base	3	16	CIM06 Max	7.2922	22.3347	149.5526	43.0766	13.2405	0
Base	3	16	CIM06 Min	-6.3855	-23.2414	-22.7391	-42.1821	-12.3461	0
Base	3	16	CIM07 Max	17.7931	4.6755	134.062	10.2698	32.8139	0
Base	3	16	CIM07 Min	-16.7267	-5.7419	3.3985	-9.2179	-31.7619	0
Base	3	16	CIM08 Max	5.7437	16.7206	134.0497	32.8025	10.2733	0
Base	3	16	CIM08 Min	-4.6773	-17.787	3.4108	-31.7505	-9.2213	0
Base	3	16	DER01	0.6347	-0.6347	88.7694	0.6261	0.6261	0
Base	3	16	DER02	0.6539	-0.6539	82.9833	0.6451	0.6451	0
Base	3	16	DER03	0.6834	-0.6834	85.6197	0.6742	0.6742	0
Base	3	16	DER04	0.623	-0.623	81.1581	0.6146	0.6146	0
Base	3	16	DER05 Max	49.4442	-0.5955	221.1672	0.5875	91.9682	0
Base	3	16	DER05 Min	-48.2531	-0.5955	-62.9071	0.5875	-90.7932	0
Base	3	16	DER06 Max	0.5955	48.2531	221.1672	91.9682	0.5875	0
Base	3	16	DER06 Min	0.5955	-49.4442	-62.9071	-90.7932	0.5875	0
Base	3	16	DER07 Max	49.2567	-0.408	199.1032	0.4025	91.7832	0
Base	3	16	DER07 Min	-48.4407	-0.408	-84.9711	0.4025	-90.9782	0
Base	3	16	DER08 Max	0.408	48.4407	199.1032	91.7832	0.4025	0
Base	3	16	DER08 Min	0.408	-49.2567	-84.9711	-90.9782	0.4025	0
Base	3	16	DERUD01	0.6347	-0.6347	88.7694	0.6261	0.6261	0
Base	3	16	DERUD02	0.6539	-0.6539	82.9833	0.6451	0.6451	0
Base	3	16	DERUD03	0.6834	-0.6834	85.6197	0.6742	0.6742	0
Base	3	16	DERUD04	0.623	-0.623	81.1581	0.6146	0.6146	0
Base	3	16	DERUD05 Max	0.5955	-0.5955	79.1301	0.5875	0.5875	0
Base	3	16	DERUD05 Min	0.5955	-0.5955	79.1301	0.5875	0.5875	0
Base	3	16	DERUD06 Max	0.5955	-0.5955	79.1301	0.5875	0.5875	0
Base	3	16	DERUD06 Min	0.5955	-0.5955	79.1301	0.5875	0.5875	0
Base	3	16	DERUD07 Max	0.408	-0.408	57.0661	0.4025	0.4025	0
Base	3	16	DERUD07 Min	0.408	-0.408	57.0661	0.4025	0.4025	0
Base	3	16	DERUD08 Max	0.408	-0.408	57.0661	0.4025	0.4025	0
Base	3	16	DERUD08 Min	0.408	-0.408	57.0661	0.4025	0.4025	0
Base	3	16	CIM09 Max	23.0681	6.5644	124.2062	13.0571	42.9127	0
Base	3	16	CIM09 Min	-22.524	-7.1084	-48.1182	-12.5205	-42.376	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	CIM10 Max	7.1108	22.516	124.1899	42.8977	13.0616	0
Base	3	16	CIM10 Min	-6.5668	-23.06	-48.1018	-42.361	-12.525	0
Base	3	16	CIM11	0.484	-0.484	65.6687	0.4775	0.4775	0
Base	3	16	CIM12	0.515	-0.515	67.3847	0.508	0.508	0
Base	3	16	CIM13 Max	17.7748	4.6937	132.7165	10.2519	32.7959	0
Base	3	16	CIM13 Min	-16.7449	-5.7237	2.053	-9.2358	-31.7798	0
Base	3	16	CIM14 Max	5.7255	16.7388	132.7042	32.7845	10.2553	0
Base	3	16	CIM14 Min	-4.6956	-17.7688	2.0653	-31.7685	-9.2393	0
Base	3	16	CIM15	0.272	-0.272	38.044	0.2683	0.2683	0
Base	3	16	COMB9	0.5782	-0.5782	78.3345	0.5704	0.5704	0
Base	3	16	COMB10	0.581	-0.581	78.9975	0.5732	0.5732	0
Base	3	16	COMB11	0.5473	-0.5473	76.5093	0.5399	0.5399	0
Base	3	16	DER09	0.6418	-0.6418	82.0863	0.6331	0.6331	0
Base	3	16	DERUD09	0.6418	-0.6418	82.0863	0.6331	0.6331	0
Base	3	16	DER10	0.6446	-0.6446	82.7493	0.6359	0.6359	0
Base	3	16	DERUD10	0.6446	-0.6446	82.7493	0.6359	0.6359	0
Base	3	16	DER11	0.6109	-0.6109	80.2611	0.6026	0.6026	0
Base	3	16	DERUD11	0.6109	-0.6109	80.2611	0.6026	0.6026	0
Base	4	18	D	0.2416	0.2416	50.9007	-0.2383	0.2383	0
Base	4	18	L	0.0515	0.0515	3.042	-0.0508	0.0508	0
Base	4	18	LR	0.0549	0.0549	4.056	-0.0542	0.0542	0
Base	4	18	EX Max	48.8487	0	142.0371	0	91.3807	0
Base	4	18	EY Max	0	48.8487	142.0371	91.3807	0	0
Base	4	18	DISX Max	32.5658	0	94.6914	0	60.9205	0
Base	4	18	DISY Max	0	32.5543	94.6581	60.8991	0	0
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	0.0306	0.0306	2.262	-0.0302	0.0302	0
Base	4	18	DERUX Max	0	0	0	0	0	0
Base	4	18	DERUY Max	0	0	0	0	0	0
Base	4	18	F	0.2117	0.2117	12.506	-0.2089	0.2089	0
Base	4	18	COMB1	0.6347	0.6347	88.7694	-0.6261	0.6261	0
Base	4	18	COMB2	0.6539	0.6539	82.9833	-0.6451	0.6451	0
Base	4	18	COMB3	0.6834	0.6834	85.6197	-0.6742	0.6742	0
Base	4	18	COMB4	0.623	0.623	81.1581	-0.6146	0.6146	0
Base	4	18	COMB5 Max	33.1613	10.3618	202.2189	17.6822	61.508	0
Base	4	18	COMB5 Min	-31.9702	-9.1708	-43.9588	-18.8572	-60.333	0
Base	4	18	COMB6 Max	10.3653	33.1499	202.1956	60.3116	18.8636	0
Base	4	18	COMB6 Min	-9.1742	-31.9588	-43.9354	-61.4865	-17.6887	0
Base	4	18	COMB7 Max	10.1778	32.9624	180.1316	60.4965	18.6787	0
Base	4	18	COMB7 Min	-9.3617	-32.1463	-65.9995	-61.3016	-17.8736	0
Base	4	18	COMB8 Max	32.9738	10.1743	180.1549	17.8672	61.323	0
Base	4	18	COMB8 Min	-32.1578	-9.3583	-66.0228	-18.6722	-60.518	0
Base	4	18	ENVE Max	33.1613	33.1499	202.2189	60.4965	61.508	0
Base	4	18	ENVE Min	-32.1578	-32.1463	-66.0228	-61.4865	-60.518	0
Base	4	18	CIM01	0.4534	0.4534	63.4067	-0.4472	0.4472	0
Base	4	18	CIM02	0.5049	0.5049	66.4487	-0.498	0.498	0
Base	4	18	CIM03	0.5083	0.5083	67.4627	-0.5014	0.5014	0
Base	4	18	CIM04	0.5332	0.5332	68.7302	-0.526	0.526	0
Base	4	18	CIM05 Max	23.2494	7.2898	149.5689	12.3416	43.0916	0
Base	4	18	CIM05 Min	-22.3427	-6.383	-22.7555	-13.236	-42.1971	0
Base	4	18	CIM06 Max	7.2922	23.2414	149.5526	42.1821	13.2405	0
Base	4	18	CIM06 Min	-6.3855	-22.3347	-22.7391	-43.0766	-12.3461	0
Base	4	18	CIM07 Max	17.7931	5.7419	134.062	9.2179	32.8139	0
Base	4	18	CIM07 Min	-16.7267	-4.6755	3.3985	-10.2698	-31.7619	0
Base	4	18	CIM08 Max	5.7437	17.787	134.0497	31.7505	10.2733	0
Base	4	18	CIM08 Min	-4.6773	-16.7206	3.4108	-32.8025	-9.2213	0
Base	4	18	DER01	0.6347	0.6347	88.7694	-0.6261	0.6261	0
Base	4	18	DER02	0.6539	0.6539	82.9833	-0.6451	0.6451	0
Base	4	18	DER03	0.6834	0.6834	85.6197	-0.6742	0.6742	0
Base	4	18	DER04	0.623	0.623	81.1581	-0.6146	0.6146	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DER05 Max	49.4442	0.5955	221.1672	-0.5875	91.9682	0
Base	4	18	DER05 Min	-48.2531	0.5955	-62.9071	-0.5875	-90.7932	0
Base	4	18	DER06 Max	0.5955	49.4442	221.1672	90.7932	0.5875	0
Base	4	18	DER06 Min	0.5955	-48.2531	-62.9071	-91.9682	0.5875	0
Base	4	18	DER07 Max	49.2567	0.408	199.1032	-0.4025	91.7832	0
Base	4	18	DER07 Min	-48.4407	0.408	-84.9711	-0.4025	-90.9782	0
Base	4	18	DER08 Max	0.408	49.2567	199.1032	90.9782	0.4025	0
Base	4	18	DER08 Min	0.408	-48.4407	-84.9711	-91.7832	0.4025	0
Base	4	18	DERUD01	0.6347	0.6347	88.7694	-0.6261	0.6261	0
Base	4	18	DERUD02	0.6539	0.6539	82.9833	-0.6451	0.6451	0
Base	4	18	DERUD03	0.6834	0.6834	85.6197	-0.6742	0.6742	0
Base	4	18	DERUD04	0.623	0.623	81.1581	-0.6146	0.6146	0
Base	4	18	DERUD05 Max	0.5955	0.5955	79.1301	-0.5875	0.5875	0
Base	4	18	DERUD05 Min	0.5955	0.5955	79.1301	-0.5875	0.5875	0
Base	4	18	DERUD06 Max	0.5955	0.5955	79.1301	-0.5875	0.5875	0
Base	4	18	DERUD06 Min	0.5955	0.5955	79.1301	-0.5875	0.5875	0
Base	4	18	DERUD07 Max	0.408	0.408	57.0661	-0.4025	0.4025	0
Base	4	18	DERUD07 Min	0.408	0.408	57.0661	-0.4025	0.4025	0
Base	4	18	DERUD08 Max	0.408	0.408	57.0661	-0.4025	0.4025	0
Base	4	18	DERUD08 Min	0.408	0.408	57.0661	-0.4025	0.4025	0
Base	4	18	CIM09 Max	23.0681	7.1084	124.2062	12.5205	42.9127	0
Base	4	18	CIM09 Min	-22.524	-6.5644	-48.1182	-13.0571	-42.376	0
Base	4	18	CIM10 Max	7.1108	23.06	124.1899	42.361	13.0616	0
Base	4	18	CIM10 Min	-6.5668	-22.516	-48.1018	-42.8977	-12.525	0
Base	4	18	CIM11	0.484	0.484	65.6687	-0.4775	0.4775	0
Base	4	18	CIM12	0.515	0.515	67.3847	-0.508	0.508	0
Base	4	18	CIM13 Max	17.7748	5.7237	132.7165	9.2358	32.7959	0
Base	4	18	CIM13 Min	-16.7449	-4.6937	2.053	-10.2519	-31.7798	0
Base	4	18	CIM14 Max	5.7255	17.7688	132.7042	31.7685	10.2553	0
Base	4	18	CIM14 Min	-4.6956	-16.7388	2.0653	-32.7845	-9.2393	0
Base	4	18	CIM15	0.272	0.272	38.044	-0.2683	0.2683	0
Base	4	18	COMB9	0.5782	0.5782	78.3345	-0.5704	0.5704	0
Base	4	18	COMB10	0.581	0.581	78.9975	-0.5732	0.5732	0
Base	4	18	COMB11	0.5473	0.5473	76.5093	-0.5399	0.5399	0
Base	4	18	DER09	0.6418	0.6418	82.0863	-0.6331	0.6331	0
Base	4	18	DERUD09	0.6418	0.6418	82.0863	-0.6331	0.6331	0
Base	4	18	DER10	0.6446	0.6446	82.7493	-0.6359	0.6359	0
Base	4	18	DERUD10	0.6446	0.6446	82.7493	-0.6359	0.6359	0
Base	4	18	DER11	0.6109	0.6109	80.2611	-0.6026	0.6026	0
Base	4	18	DERUD11	0.6109	0.6109	80.2611	-0.6026	0.6026	0

#### 5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.299	3.347	21.0275	442.1549
Modal	2	0.299	3.347	21.0275	442.1549
Modal	3	0.249	4.019	25.2518	637.6518
Modal	4	0.059	17.012	106.8868	11424.7901
Modal	5	0.059	17.012	106.8868	11424.7901
Modal	6	0.053	18.791	118.0661	13939.6106
Modal	7	0.034	29.583	185.8763	34549.9827
Modal	8	0.009	108.566	682.1415	465316.9703
Modal	9	0.009	108.566	682.1415	465316.9703
Modal	10	0.009	110.251	692.7266	479870.1596
Modal	11	0.009	111.825	702.62	493674.8363

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.299	0.005	0.9301	0	0.005	0.9301	0
Modal	2	0.299	0.9301	0.005	0	0.9351	0.9351	0
Modal	3	0.249	0	0	0	0.9351	0.9351	0
Modal	4	0.059	0.0263	0.0385	0	0.9615	0.9737	0
Modal	5	0.059	0.0385	0.0263	0	1	1	0
Modal	6	0.053	0	0	0	1	1	0
Modal	7	0.034	0	0	0	1	1	0
Modal	8	0.009	0	0	0	1	1	0
Modal	9	0.009	0	0	0	1	1	0
Modal	10	0.009	0	0	0	1	1	0
Modal	11	0.009	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

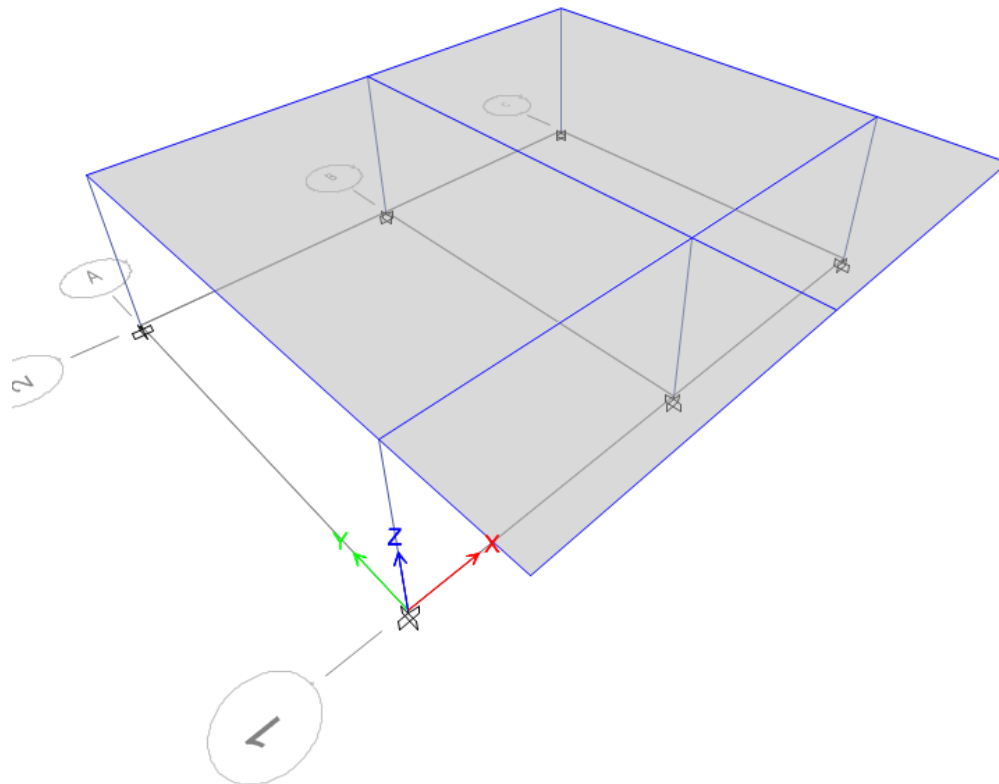
Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0.2367	0.0013	0	0.2367	0.0013	0
Modal	2	0.0013	0.2367	0	0.238	0.238	0
Modal	3	0	0	0.9409	0.238	0.238	0.9409
Modal	4	0.4527	0.3093	0	0.6907	0.5473	0.9409
Modal	5	0.3093	0.4527	0	1	1	0.9409
Modal	6	0	0	0.0591	1	1	1
Modal	7	0	0	0	1	1	1
Modal	8	0	0	0	1	1	1
Modal	9	0	0	0	1	1	1
Modal	10	0	0	0	1	1	1
Modal	11	0	0	0	1	1	1

Table 5.11 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.12 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.299	0.005	0.995	0	0
Modal	2	0.299	0.995	0.005	0	0
Modal	3	0.249	0	0	0	1
Modal	4	0.059	0.406	0.594	0	0
Modal	5	0.059	0.594	0.406	0	0
Modal	6	0.053	0	0	0	1
Modal	7	0.034	0	0	0	0
Modal	8	0.009	0	0	0	0
Modal	9	0.009	0	0	0	0
Modal	10	0.009	0	0	0	0
Modal	11	0.009	0	0	0	0



## Project Report

Model File: 004 2017 PROTOTIPO EDUCACION MODULO 1A\_DES, Revision 0  
04/04/2017

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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	5.6
G1	X	C	Yes	End	11.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	5600	0	0
4	5600	8200	0
5	11200	0	0
6	11200	8200	0
10	0	-2400	0
11	5600	-2400	0
12	11200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below
C5	5	5	Below
C6	6	6	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B3	5	6	None
B4	1	3	None
B5	3	5	None

Beam	I-End Point	J-End Point	Curve Type
B6	2	4	None
B7	4	6	None
B10	10	11	None
B11	11	12	None
B8	10	1	None
B9	11	3	None
B12	12	5	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	10	12	None
		2	12	5	None
		3	5	1	None
		4	1	10	None
F2	4	1	1	5	None
		2	5	6	None
		3	6	2	None
		4	2	1	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	43415.21	43415.21	5.6	-0.7769	43415.21	43415.21	5.6	-0.7769	5.6	2.9966

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	43415.21	43415.21	798.9884	5.6	-0.7769

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	58089.64	58089.64	0
Base	3747.82	3747.82	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	v	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	5	10	D1	
N1	6	20	Disconnected	
N1	10	25	D1	
N1	11	26	D1	
N1	12	27	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	5	19	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	6	21	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	C5	11	Column	3250	C40X40	C40X40	11
N1	C6	12	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	8200	V30X50	V30X50	11
N1	B2	14	Beam	8200	V30X50	V30X50	11
N1	B3	15	Beam	8200	V30X50	V30X50	11
N1	B4	16	Beam	5600	V30X50	V30X50	11
N1	B5	17	Beam	5600	V30X50	V30X50	11
N1	B6	18	Beam	5600	V30X50	V30X50	11
N1	B7	19	Beam	5600	V30X50	V30X50	11
N1	B10	22	Beam	5600	VB20X50	VB20X50	11
N1	B11	23	Beam	5600	VB20X50	VB20X50	11
N1	B8	2	Beam	2400	V30X50	V30X50	11
N1	B9	4	Beam	2400	V30X50	V30X50	11
N1	B12	6	Beam	2400	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F1	1	LOSA	90
N1	F2	2	CUB	

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed**

Story	Label	Unique Name	Design Type	Load Pattern	Load Type	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm	Force at Start kN/m	Force at End kN/m
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B3	15	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B4	16	Beam	D	Force	Gravity	0	1	0	5600	4.4	4.4
N1	B5	17	Beam	D	Force	Gravity	0	1	0	5600	4.4	4.4
N1	B10	22	Beam	D	Force	Gravity	0	1	0	5600	3.1	3.1
N1	B11	23	Beam	D	Force	Gravity	0	1	0	5600	3.1	3.1

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	1	D	Gravity	4.3
N1	F2	2	D	Gravity	0.64
N1	F1	1	L	Gravity	1.8
N1	F2	2	L	Gravity	0
N1	F1	1	LR	Gravity	0
N1	F2	2	LR	Gravity	0.5
N1	F1	1	G	Gravity	1
N1	F2	2	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0	1.1813	5
NSR10DERIVA	0.1	1.1813	
NSR10DERIVA	0.2	1.1813	
NSR10DERIVA	0.3	1.1813	
NSR10DERIVA	0.4	1.1813	
NSR10DERIVA	0.5	1.1813	
NSR10DERIVA	0.6	1.1813	
NSR10DERIVA	0.7	1.0971	
NSR10DERIVA	0.8	0.96	
NSR10DERIVA	0.9	0.8533	
NSR10DERIVA	1	0.768	
NSR10DERIVA	1.2	0.64	

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	1.5	0.512	
NSR10DERIVA	1.7	0.4518	
NSR10DERIVA	2	0.384	
NSR10DERIVA	2.5	0.3072	
NSR10DERIVA	3	0.256	
NSR10DERIVA	3.5	0.2194	
NSR10DERIVA	4	0.1843	
NSR10DERIVA	5	0.118	
NSR10DERIVA	8	0.0461	
NSR10DERIVA	11	0.0244	
NSR10DERIVA	15	0.0131	
disNSR10	0	1.4766	5
disNSR10	0.1	1.4766	
disNSR10	0.2	1.4766	
disNSR10	0.3	1.4766	
disNSR10	0.4	1.4766	
disNSR10	0.5	1.4766	
disNSR10	0.6	1.4766	
disNSR10	0.7	1.3714	
disNSR10	0.8	1.2	
disNSR10	0.9	1.0667	
disNSR10	1	0.96	
disNSR10	1.2	0.8	
disNSR10	1.5	0.64	
disNSR10	1.7	0.5647	
disNSR10	2	0.48	
disNSR10	2.5	0.384	
disNSR10	3	0.32	
disNSR10	3.5	0.2743	
disNSR10	4	0.2304	
disNSR10	5	0.1475	
disNSR10	8	0.0576	
disNSR10	11	0.0305	
disNSR10	15	0.0164	
UMBRAL	0	0.1	2
UMBRAL	0.01	0.108	
UMBRAL	0.02	0.116	
UMBRAL	0.03	0.124	
UMBRAL	0.04	0.132	
UMBRAL	0.05	0.14	
UMBRAL	0.06	0.148	
UMBRAL	0.07	0.156	
UMBRAL	0.08	0.164	
UMBRAL	0.09	0.172	
UMBRAL	0.1	0.18	
UMBRAL	0.11	0.188	
UMBRAL	0.12	0.196	
UMBRAL	0.13	0.204	
UMBRAL	0.14	0.212	
UMBRAL	0.15	0.22	
UMBRAL	0.16	0.228	
UMBRAL	0.17	0.236	
UMBRAL	0.18	0.244	
UMBRAL	0.19	0.252	
UMBRAL	0.2	0.26	
UMBRAL	0.21	0.268	
UMBRAL	0.22	0.276	
UMBRAL	0.23	0.284	
UMBRAL	0.24	0.292	
UMBRAL	0.25	0.3	

Name	Period sec	Acceleration	Damping %
UMBRAL	0.26	0.3	
UMBRAL	0.27	0.3	
UMBRAL	0.28	0.3	
UMBRAL	0.29	0.3	
UMBRAL	0.3	0.3	
UMBRAL	0.31	0.3	
UMBRAL	0.32	0.3	
UMBRAL	0.33	0.3	
UMBRAL	0.34	0.3	
UMBRAL	0.35	0.3	
UMBRAL	0.36	0.3	
UMBRAL	0.37	0.3	
UMBRAL	0.38	0.3	
UMBRAL	0.39	0.3	
UMBRAL	0.4	0.3	
UMBRAL	0.41	0.3	
UMBRAL	0.42	0.3	
UMBRAL	0.43	0.3	
UMBRAL	0.44	0.3	
UMBRAL	0.45	0.3	
UMBRAL	0.46	0.3	
UMBRAL	0.47	0.3	
UMBRAL	0.48	0.3	
UMBRAL	0.49	0.3	
UMBRAL	0.5	0.3	
UMBRAL	0.51	0.3	
UMBRAL	0.52	0.3	
UMBRAL	0.53	0.3	
UMBRAL	0.54	0.3	
UMBRAL	0.55	0.3	
UMBRAL	0.56	0.3	
UMBRAL	0.57	0.3	
UMBRAL	0.58	0.3	
UMBRAL	0.59	0.3	
UMBRAL	0.6	0.3	
UMBRAL	0.61	0.3	
UMBRAL	0.62	0.3	
UMBRAL	0.63	0.3	
UMBRAL	0.64	0.3	
UMBRAL	0.65	0.3	
UMBRAL	0.66	0.3	
UMBRAL	0.67	0.3	
UMBRAL	0.68	0.3	
UMBRAL	0.69	0.3	
UMBRAL	0.7	0.3	
UMBRAL	0.71	0.3	
UMBRAL	0.72	0.3	
UMBRAL	0.73	0.3	
UMBRAL	0.74	0.3	
UMBRAL	0.75	0.3	
UMBRAL	0.76	0.3	
UMBRAL	0.77	0.3	
UMBRAL	0.78	0.3	
UMBRAL	0.79	0.3	
UMBRAL	0.8	0.3	
UMBRAL	0.81	0.3	
UMBRAL	0.82	0.3	
UMBRAL	0.83	0.3	
UMBRAL	0.84	0.3	
UMBRAL	0.85	0.3	



Name	Period sec	Acceleration	Damping %
UMBRAL	0.86	0.3	
UMBRAL	0.87	0.3	
UMBRAL	0.88	0.3	
UMBRAL	0.89	0.3	
UMBRAL	0.9	0.3	
UMBRAL	0.91	0.3	
UMBRAL	0.92	0.3	
UMBRAL	0.93	0.3	
UMBRAL	0.94	0.3	
UMBRAL	0.95	0.3	
UMBRAL	0.96	0.3	
UMBRAL	0.97	0.3	
UMBRAL	0.98	0.3	
UMBRAL	0.99	0.3	
UMBRAL	1	0.3	
UMBRAL	1.01	0.297	
UMBRAL	1.02	0.294	
UMBRAL	1.03	0.291	
UMBRAL	1.04	0.288	
UMBRAL	1.05	0.286	
UMBRAL	1.06	0.283	
UMBRAL	1.07	0.28	
UMBRAL	1.08	0.278	
UMBRAL	1.09	0.275	
UMBRAL	1.1	0.273	
UMBRAL	1.11	0.27	
UMBRAL	1.12	0.268	
UMBRAL	1.13	0.265	
UMBRAL	1.14	0.263	
UMBRAL	1.15	0.261	
UMBRAL	1.16	0.259	
UMBRAL	1.17	0.256	
UMBRAL	1.18	0.254	
UMBRAL	1.19	0.252	
UMBRAL	1.2	0.25	
UMBRAL	1.21	0.248	
UMBRAL	1.22	0.246	
UMBRAL	1.23	0.244	
UMBRAL	1.24	0.242	
UMBRAL	1.25	0.24	
UMBRAL	1.26	0.238	
UMBRAL	1.27	0.236	
UMBRAL	1.28	0.234	
UMBRAL	1.29	0.233	
UMBRAL	1.3	0.231	
UMBRAL	1.31	0.229	
UMBRAL	1.32	0.227	
UMBRAL	1.33	0.226	
UMBRAL	1.34	0.224	
UMBRAL	1.35	0.222	
UMBRAL	1.36	0.221	
UMBRAL	1.37	0.219	
UMBRAL	1.38	0.217	
UMBRAL	1.39	0.216	
UMBRAL	1.4	0.214	
UMBRAL	1.41	0.213	
UMBRAL	1.42	0.211	
UMBRAL	1.43	0.21	
UMBRAL	1.44	0.208	
UMBRAL	1.45	0.207	

Name	Period sec	Acceleration	Damping %
UMBRAL	1.46	0.205	
UMBRAL	1.47	0.204	
UMBRAL	1.48	0.203	
UMBRAL	1.49	0.201	
UMBRAL	1.5	0.2	
UMBRAL	1.51	0.199	
UMBRAL	1.52	0.197	
UMBRAL	1.53	0.196	
UMBRAL	1.54	0.195	
UMBRAL	1.55	0.194	
UMBRAL	1.56	0.192	
UMBRAL	1.57	0.191	
UMBRAL	1.58	0.19	
UMBRAL	1.59	0.189	
UMBRAL	1.6	0.188	
UMBRAL	1.61	0.186	
UMBRAL	1.62	0.185	
UMBRAL	1.63	0.184	
UMBRAL	1.64	0.183	
UMBRAL	1.65	0.182	
UMBRAL	1.66	0.181	
UMBRAL	1.67	0.18	
UMBRAL	1.68	0.179	
UMBRAL	1.69	0.178	
UMBRAL	1.7	0.176	
UMBRAL	1.71	0.175	
UMBRAL	1.72	0.174	
UMBRAL	1.73	0.173	
UMBRAL	1.74	0.172	
UMBRAL	1.75	0.171	
UMBRAL	1.76	0.17	
UMBRAL	1.77	0.169	
UMBRAL	1.78	0.169	
UMBRAL	1.79	0.168	
UMBRAL	1.8	0.167	
UMBRAL	1.81	0.166	
UMBRAL	1.82	0.165	
UMBRAL	1.83	0.164	
UMBRAL	1.84	0.163	
UMBRAL	1.85	0.162	
UMBRAL	1.86	0.161	
UMBRAL	1.87	0.16	
UMBRAL	1.88	0.16	
UMBRAL	1.89	0.159	
UMBRAL	1.9	0.158	
UMBRAL	1.91	0.157	
UMBRAL	1.92	0.156	
UMBRAL	1.93	0.155	
UMBRAL	1.94	0.155	
UMBRAL	1.95	0.154	
UMBRAL	1.96	0.153	
UMBRAL	1.97	0.152	
UMBRAL	1.98	0.152	
UMBRAL	1.99	0.151	
UMBRAL	2	0.15	
UMBRAL	2.01	0.149	
UMBRAL	2.02	0.149	
UMBRAL	2.03	0.148	
UMBRAL	2.04	0.147	
UMBRAL	2.05	0.146	

Name	Period sec	Acceleration	Damping %
UMBRAL	2.06	0.146	
UMBRAL	2.07	0.145	
UMBRAL	2.08	0.144	
UMBRAL	2.09	0.144	
UMBRAL	2.1	0.143	
UMBRAL	2.11	0.142	
UMBRAL	2.12	0.142	
UMBRAL	2.13	0.141	
UMBRAL	2.14	0.14	
UMBRAL	2.15	0.14	
UMBRAL	2.16	0.139	
UMBRAL	2.17	0.138	
UMBRAL	2.18	0.138	
UMBRAL	2.19	0.137	
UMBRAL	2.2	0.136	
UMBRAL	2.21	0.136	
UMBRAL	2.22	0.135	
UMBRAL	2.23	0.135	
UMBRAL	2.24	0.134	
UMBRAL	2.25	0.133	
UMBRAL	2.26	0.133	
UMBRAL	2.27	0.132	
UMBRAL	2.28	0.132	
UMBRAL	2.29	0.131	
UMBRAL	2.3	0.13	
UMBRAL	2.31	0.13	
UMBRAL	2.32	0.129	
UMBRAL	2.33	0.129	
UMBRAL	2.34	0.128	
UMBRAL	2.35	0.128	
UMBRAL	2.36	0.127	
UMBRAL	2.37	0.127	
UMBRAL	2.38	0.126	
UMBRAL	2.39	0.126	
UMBRAL	2.4	0.125	
UMBRAL	2.41	0.124	
UMBRAL	2.42	0.124	
UMBRAL	2.43	0.123	
UMBRAL	2.44	0.123	
UMBRAL	2.45	0.122	
UMBRAL	2.46	0.122	
UMBRAL	2.47	0.121	
UMBRAL	2.48	0.121	
UMBRAL	2.49	0.12	
UMBRAL	2.5	0.12	
UMBRAL	2.51	0.12	
UMBRAL	2.52	0.119	
UMBRAL	2.53	0.119	
UMBRAL	2.54	0.118	
UMBRAL	2.55	0.118	
UMBRAL	2.56	0.117	
UMBRAL	2.57	0.117	
UMBRAL	2.58	0.116	
UMBRAL	2.59	0.116	
UMBRAL	2.6	0.115	
UMBRAL	2.61	0.115	
UMBRAL	2.62	0.115	
UMBRAL	2.63	0.114	
UMBRAL	2.64	0.114	
UMBRAL	2.65	0.113	

Name	Period sec	Acceleration	Damping %
UMBRAL	2.66	0.113	
UMBRAL	2.67	0.112	
UMBRAL	2.68	0.112	
UMBRAL	2.69	0.112	
UMBRAL	2.7	0.111	
UMBRAL	2.71	0.111	
UMBRAL	2.72	0.11	
UMBRAL	2.73	0.11	
UMBRAL	2.74	0.109	
UMBRAL	2.75	0.109	
UMBRAL	2.76	0.109	
UMBRAL	2.77	0.108	
UMBRAL	2.78	0.108	
UMBRAL	2.79	0.108	
UMBRAL	2.8	0.107	
UMBRAL	2.81	0.107	
UMBRAL	2.82	0.106	
UMBRAL	2.83	0.106	
UMBRAL	2.84	0.106	
UMBRAL	2.85	0.105	
UMBRAL	2.86	0.105	
UMBRAL	2.87	0.105	
UMBRAL	2.88	0.104	
UMBRAL	2.89	0.104	
UMBRAL	2.9	0.103	
UMBRAL	2.91	0.103	
UMBRAL	2.92	0.103	
UMBRAL	2.93	0.102	
UMBRAL	2.94	0.102	
UMBRAL	2.95	0.102	
UMBRAL	2.96	0.101	
UMBRAL	2.97	0.101	
UMBRAL	2.98	0.101	
UMBRAL	2.99	0.1	
UMBRAL	3	0.1	
UMBRAL	3.01	0.1	
UMBRAL	3.02	0.099	
UMBRAL	3.03	0.099	
UMBRAL	3.04	0.099	
UMBRAL	3.05	0.098	
UMBRAL	3.06	0.098	
UMBRAL	3.07	0.098	
UMBRAL	3.08	0.097	
UMBRAL	3.09	0.097	
UMBRAL	3.1	0.097	
UMBRAL	3.11	0.096	
UMBRAL	3.12	0.096	
UMBRAL	3.13	0.096	
UMBRAL	3.14	0.096	
UMBRAL	3.15	0.095	
UMBRAL	3.16	0.095	
UMBRAL	3.17	0.095	
UMBRAL	3.18	0.094	
UMBRAL	3.19	0.094	
UMBRAL	3.2	0.094	
UMBRAL	3.21	0.093	
UMBRAL	3.22	0.093	
UMBRAL	3.23	0.093	
UMBRAL	3.24	0.093	
UMBRAL	3.25	0.092	

Name	Period sec	Acceleration	Damping %
UMBRAL	3.26	0.092	
UMBRAL	3.27	0.092	
UMBRAL	3.28	0.091	
UMBRAL	3.29	0.091	
UMBRAL	3.3	0.091	
UMBRAL	3.31	0.091	
UMBRAL	3.32	0.09	
UMBRAL	3.33	0.09	
UMBRAL	3.34	0.09	
UMBRAL	3.35	0.09	
UMBRAL	3.36	0.089	
UMBRAL	3.37	0.089	
UMBRAL	3.38	0.089	
UMBRAL	3.39	0.088	
UMBRAL	3.4	0.088	
UMBRAL	3.41	0.088	
UMBRAL	3.42	0.088	
UMBRAL	3.43	0.087	
UMBRAL	3.44	0.087	
UMBRAL	3.45	0.087	
UMBRAL	3.46	0.087	
UMBRAL	3.47	0.086	
UMBRAL	3.48	0.086	
UMBRAL	3.49	0.086	
UMBRAL	3.5	0.086	
UMBRAL	3.51	0.085	
UMBRAL	3.52	0.085	
UMBRAL	3.53	0.085	
UMBRAL	3.54	0.085	
UMBRAL	3.55	0.085	
UMBRAL	3.56	0.084	
UMBRAL	3.57	0.084	
UMBRAL	3.58	0.084	
UMBRAL	3.59	0.084	
UMBRAL	3.6	0.083	
UMBRAL	3.61	0.083	
UMBRAL	3.62	0.083	
UMBRAL	3.63	0.083	
UMBRAL	3.64	0.082	
UMBRAL	3.65	0.082	
UMBRAL	3.66	0.082	
UMBRAL	3.67	0.082	
UMBRAL	3.68	0.082	
UMBRAL	3.69	0.081	
UMBRAL	3.7	0.081	
UMBRAL	3.71	0.081	
UMBRAL	3.72	0.081	
UMBRAL	3.73	0.08	
UMBRAL	3.74	0.08	
UMBRAL	3.75	0.08	
UMBRAL	3.76	0.08	
UMBRAL	3.77	0.08	
UMBRAL	3.78	0.079	
UMBRAL	3.79	0.079	
UMBRAL	3.8	0.079	
UMBRAL	3.81	0.079	
UMBRAL	3.82	0.079	
UMBRAL	3.83	0.078	
UMBRAL	3.84	0.078	
UMBRAL	3.85	0.078	

Name	Period sec	Acceleration	Damping %
UMBRAL	3.86	0.078	
UMBRAL	3.87	0.078	
UMBRAL	3.88	0.077	
UMBRAL	3.89	0.077	
UMBRAL	3.9	0.077	
UMBRAL	3.91	0.077	
UMBRAL	3.92	0.077	
UMBRAL	3.93	0.076	
UMBRAL	3.94	0.076	
UMBRAL	3.95	0.076	
UMBRAL	3.96	0.076	
UMBRAL	3.97	0.076	
UMBRAL	3.98	0.075	
UMBRAL	3.99	0.075	
UMBRAL	4	0.075	
UMBRAL	4.01	0.075	
UMBRAL	4.02	0.075	
UMBRAL	4.03	0.074	
UMBRAL	4.04	0.074	
UMBRAL	4.05	0.074	
UMBRAL	4.06	0.074	
UMBRAL	4.07	0.074	
UMBRAL	4.08	0.074	
UMBRAL	4.09	0.073	
UMBRAL	4.1	0.073	
UMBRAL	4.11	0.073	
UMBRAL	4.12	0.073	
UMBRAL	4.13	0.073	
UMBRAL	4.14	0.072	
UMBRAL	4.15	0.072	
UMBRAL	4.16	0.072	
UMBRAL	4.17	0.072	
UMBRAL	4.18	0.072	
UMBRAL	4.19	0.072	
UMBRAL	4.2	0.071	
UMBRAL	4.21	0.071	
UMBRAL	4.22	0.071	
UMBRAL	4.23	0.071	
UMBRAL	4.24	0.071	
UMBRAL	4.25	0.071	
UMBRAL	4.26	0.07	
UMBRAL	4.27	0.07	
UMBRAL	4.28	0.07	
UMBRAL	4.29	0.07	
UMBRAL	4.3	0.07	
UMBRAL	4.31	0.07	
UMBRAL	4.32	0.069	
UMBRAL	4.33	0.069	
UMBRAL	4.34	0.069	
UMBRAL	4.35	0.069	
UMBRAL	4.36	0.069	
UMBRAL	4.37	0.069	
UMBRAL	4.38	0.068	
UMBRAL	4.39	0.068	
UMBRAL	4.4	0.068	
UMBRAL	4.41	0.068	
UMBRAL	4.42	0.068	
UMBRAL	4.43	0.068	
UMBRAL	4.44	0.068	
UMBRAL	4.45	0.067	

Name	Period sec	Acceleration	Damping %
UMBRAL	4.46	0.067	
UMBRAL	4.47	0.067	
UMBRAL	4.48	0.067	
UMBRAL	4.49	0.067	
UMBRAL	4.5	0.067	
UMBRAL	4.51	0.067	
UMBRAL	4.52	0.066	
UMBRAL	4.53	0.066	
UMBRAL	4.54	0.066	
UMBRAL	4.55	0.066	
UMBRAL	4.56	0.066	
UMBRAL	4.57	0.066	
UMBRAL	4.58	0.066	
UMBRAL	4.59	0.065	
UMBRAL	4.6	0.065	
UMBRAL	4.61	0.065	
UMBRAL	4.62	0.065	
UMBRAL	4.63	0.065	
UMBRAL	4.64	0.065	
UMBRAL	4.65	0.065	
UMBRAL	4.66	0.064	
UMBRAL	4.67	0.064	
UMBRAL	4.68	0.064	
UMBRAL	4.69	0.064	
UMBRAL	4.7	0.064	
UMBRAL	4.71	0.064	
UMBRAL	4.72	0.064	
UMBRAL	4.73	0.063	
UMBRAL	4.74	0.063	
UMBRAL	4.75	0.063	
UMBRAL	4.76	0.063	
UMBRAL	4.77	0.063	
UMBRAL	4.78	0.063	
UMBRAL	4.79	0.063	
UMBRAL	4.8	0.063	
UMBRAL	4.81	0.062	
UMBRAL	4.82	0.062	
UMBRAL	4.83	0.062	
UMBRAL	4.84	0.061	
UMBRAL	4.85	0.061	
UMBRAL	4.86	0.061	
UMBRAL	4.87	0.061	
UMBRAL	4.88	0.06	
UMBRAL	4.89	0.06	
UMBRAL	4.9	0.06	
UMBRAL	4.91	0.06	
UMBRAL	4.92	0.059	
UMBRAL	4.93	0.059	
UMBRAL	4.94	0.059	
UMBRAL	4.95	0.059	
UMBRAL	4.96	0.059	
UMBRAL	4.97	0.058	
UMBRAL	4.98	0.058	
UMBRAL	4.99	0.058	
UMBRAL	5	0.058	
UMBRAL	5.01	0.057	
UMBRAL	5.02	0.057	
UMBRAL	5.03	0.057	
UMBRAL	5.04	0.057	
UMBRAL	5.05	0.056	

Name	Period sec	Acceleration	Damping %
UMBRAL	5.06	0.056	
UMBRAL	5.07	0.056	
UMBRAL	5.08	0.056	
UMBRAL	5.09	0.056	
UMBRAL	5.1	0.055	
UMBRAL	5.11	0.055	
UMBRAL	5.12	0.055	
UMBRAL	5.13	0.055	
UMBRAL	5.14	0.055	
UMBRAL	5.15	0.054	
UMBRAL	5.16	0.054	
UMBRAL	5.17	0.054	
UMBRAL	5.18	0.054	
UMBRAL	5.19	0.053	
UMBRAL	5.2	0.053	
UMBRAL	5.21	0.053	
UMBRAL	5.22	0.053	
UMBRAL	5.23	0.053	
UMBRAL	5.24	0.052	
UMBRAL	5.25	0.052	
UMBRAL	5.26	0.052	
UMBRAL	5.27	0.052	
UMBRAL	5.28	0.052	
UMBRAL	5.29	0.051	
UMBRAL	5.3	0.051	
UMBRAL	5.31	0.051	
UMBRAL	5.32	0.051	
UMBRAL	5.33	0.051	
UMBRAL	5.34	0.05	
UMBRAL	5.35	0.05	
UMBRAL	5.36	0.05	
UMBRAL	5.37	0.05	
UMBRAL	5.38	0.05	
UMBRAL	5.39	0.05	
UMBRAL	5.4	0.049	
UMBRAL	5.41	0.049	
UMBRAL	5.42	0.049	
UMBRAL	5.43	0.049	
UMBRAL	5.44	0.049	
UMBRAL	5.45	0.048	
UMBRAL	5.46	0.048	
UMBRAL	5.47	0.048	
UMBRAL	5.48	0.048	
UMBRAL	5.49	0.048	
UMBRAL	5.5	0.048	
UMBRAL	5.51	0.047	
UMBRAL	5.52	0.047	
UMBRAL	5.53	0.047	
UMBRAL	5.54	0.047	
UMBRAL	5.55	0.047	
UMBRAL	5.56	0.047	
UMBRAL	5.57	0.046	
UMBRAL	5.58	0.046	
UMBRAL	5.59	0.046	
UMBRAL	5.6	0.046	
UMBRAL	5.61	0.046	
UMBRAL	5.62	0.046	
UMBRAL	5.63	0.045	
UMBRAL	5.64	0.045	
UMBRAL	5.65	0.045	



Name	Period sec	Acceleration	Damping %
UMBRAL	5.66	0.045	
UMBRAL	5.67	0.045	
UMBRAL	5.68	0.045	
UMBRAL	5.69	0.044	
UMBRAL	5.7	0.044	
UMBRAL	5.71	0.044	
UMBRAL	5.72	0.044	
UMBRAL	5.73	0.044	
UMBRAL	5.74	0.044	
UMBRAL	5.75	0.044	
UMBRAL	5.76	0.043	
UMBRAL	5.77	0.043	
UMBRAL	5.78	0.043	
UMBRAL	5.79	0.043	
UMBRAL	5.8	0.043	
UMBRAL	5.81	0.043	
UMBRAL	5.82	0.043	
UMBRAL	5.83	0.042	
UMBRAL	5.84	0.042	
UMBRAL	5.85	0.042	
UMBRAL	5.86	0.042	
UMBRAL	5.87	0.042	
UMBRAL	5.88	0.042	
UMBRAL	5.89	0.042	
UMBRAL	5.9	0.041	
UMBRAL	5.91	0.041	
UMBRAL	5.92	0.041	
UMBRAL	5.93	0.041	
UMBRAL	5.94	0.041	
UMBRAL	5.95	0.041	
UMBRAL	5.96	0.041	
UMBRAL	5.97	0.04	
UMBRAL	5.98	0.04	
UMBRAL	5.99	0.04	
UMBRAL	6	0.04	
UMBRAL	6.01	0.04	
UMBRAL	6.02	0.04	
UMBRAL	6.03	0.04	
UMBRAL	6.04	0.039	
UMBRAL	6.05	0.039	
UMBRAL	6.06	0.039	
UMBRAL	6.07	0.039	
UMBRAL	6.08	0.039	
UMBRAL	6.09	0.039	
UMBRAL	6.1	0.039	
UMBRAL	6.11	0.039	
UMBRAL	6.12	0.038	
UMBRAL	6.13	0.038	
UMBRAL	6.14	0.038	
UMBRAL	6.15	0.038	
UMBRAL	6.16	0.038	
UMBRAL	6.17	0.038	
UMBRAL	6.18	0.038	
UMBRAL	6.19	0.038	
UMBRAL	6.2	0.037	
UMBRAL	6.21	0.037	
UMBRAL	6.22	0.037	
UMBRAL	6.23	0.037	
UMBRAL	6.24	0.037	
UMBRAL	6.25	0.037	

Name	Period sec	Acceleration	Damping %
UMBRAL	6.26	0.037	
UMBRAL	6.27	0.037	
UMBRAL	6.28	0.037	
UMBRAL	6.29	0.036	
UMBRAL	6.3	0.036	
UMBRAL	6.31	0.036	
UMBRAL	6.32	0.036	
UMBRAL	6.33	0.036	
UMBRAL	6.34	0.036	
UMBRAL	6.35	0.036	
UMBRAL	6.36	0.036	
UMBRAL	6.37	0.035	
UMBRAL	6.38	0.035	
UMBRAL	6.39	0.035	
UMBRAL	6.4	0.035	
UMBRAL	6.41	0.035	
UMBRAL	6.42	0.035	
UMBRAL	6.43	0.035	
UMBRAL	6.44	0.035	
UMBRAL	6.45	0.035	
UMBRAL	6.46	0.035	
UMBRAL	6.47	0.034	
UMBRAL	6.48	0.034	
UMBRAL	6.49	0.034	
UMBRAL	6.5	0.034	
UMBRAL	6.51	0.034	
UMBRAL	6.52	0.034	
UMBRAL	6.53	0.034	
UMBRAL	6.54	0.034	
UMBRAL	6.55	0.034	
UMBRAL	6.56	0.033	
UMBRAL	6.57	0.033	
UMBRAL	6.58	0.033	
UMBRAL	6.59	0.033	
UMBRAL	6.6	0.033	
UMBRAL	6.61	0.033	
UMBRAL	6.62	0.033	
UMBRAL	6.63	0.033	
UMBRAL	6.64	0.033	
UMBRAL	6.65	0.033	
UMBRAL	6.66	0.032	
UMBRAL	6.67	0.032	
UMBRAL	6.68	0.032	
UMBRAL	6.69	0.032	
UMBRAL	6.7	0.032	
UMBRAL	6.71	0.032	
UMBRAL	6.72	0.032	
UMBRAL	6.73	0.032	
UMBRAL	6.74	0.032	
UMBRAL	6.75	0.032	
UMBRAL	6.76	0.032	
UMBRAL	6.77	0.031	
UMBRAL	6.78	0.031	
UMBRAL	6.79	0.031	
UMBRAL	6.8	0.031	
UMBRAL	6.81	0.031	
UMBRAL	6.82	0.031	
UMBRAL	6.83	0.031	
UMBRAL	6.84	0.031	
UMBRAL	6.85	0.031	

Name	Period sec	Acceleration	Damping %
UMBRAL	6.86	0.031	
UMBRAL	6.87	0.031	
UMBRAL	6.88	0.03	
UMBRAL	6.89	0.03	
UMBRAL	6.9	0.03	
UMBRAL	6.91	0.03	
UMBRAL	6.92	0.03	
UMBRAL	6.93	0.03	
UMBRAL	6.94	0.03	
UMBRAL	6.95	0.03	
UMBRAL	6.96	0.03	
UMBRAL	6.97	0.03	
UMBRAL	6.98	0.03	
UMBRAL	6.99	0.029	
UMBRAL	7	0.029	
UMBRAL	7.01	0.029	
UMBRAL	7.02	0.029	
UMBRAL	7.03	0.029	
UMBRAL	7.04	0.029	
UMBRAL	7.05	0.029	
UMBRAL	7.06	0.029	
UMBRAL	7.07	0.029	
UMBRAL	7.08	0.029	
UMBRAL	7.09	0.029	
UMBRAL	7.1	0.029	
UMBRAL	7.11	0.028	
UMBRAL	7.12	0.028	
UMBRAL	7.13	0.028	
UMBRAL	7.14	0.028	
UMBRAL	7.15	0.028	
UMBRAL	7.16	0.028	
UMBRAL	7.17	0.028	
UMBRAL	7.18	0.028	
UMBRAL	7.19	0.028	
UMBRAL	7.2	0.028	
UMBRAL	7.21	0.028	
UMBRAL	7.22	0.028	
UMBRAL	7.23	0.028	
UMBRAL	7.24	0.027	
UMBRAL	7.25	0.027	
UMBRAL	7.26	0.027	
UMBRAL	7.27	0.027	
UMBRAL	7.28	0.027	
UMBRAL	7.29	0.027	
UMBRAL	7.3	0.027	
UMBRAL	7.31	0.027	
UMBRAL	7.32	0.027	
UMBRAL	7.33	0.027	
UMBRAL	7.34	0.027	
UMBRAL	7.35	0.027	
UMBRAL	7.36	0.027	
UMBRAL	7.37	0.027	
UMBRAL	7.38	0.026	
UMBRAL	7.39	0.026	
UMBRAL	7.4	0.026	
UMBRAL	7.41	0.026	
UMBRAL	7.42	0.026	
UMBRAL	7.43	0.026	
UMBRAL	7.44	0.026	
UMBRAL	7.45	0.026	

Name	Period sec	Acceleration	Damping %
UMBRAL	7.46	0.026	
UMBRAL	7.47	0.026	
UMBRAL	7.48	0.026	
UMBRAL	7.49	0.026	
UMBRAL	7.5	0.026	

4.4 Load Cases

Table 4.5 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.6 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM010	D	0.6	Linear Add	No
CIM010	DISX	0.21		No
CIM010	DISY	0.7		No
CIM011	D	1	Linear Add	No
CIM011	G	1		No
CIM012	D	1	Linear Add	No
CIM012	G	0.75		No
CIM012	L	0.75		No
CIM013	D	1	Linear Add	No
CIM013	G	0.75		No
CIM013	L	0.75		No
CIM013	DISX	0.53		No
CIM013	DISY	0.16		No
CIM014	D	1	Linear Add	No
CIM014	G	0.75		No
CIM014	L	0.75		No
CIM014	DISX	0.16		No
CIM014	DISY	0.53		No
CIM015	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	591.9032	1014.3272	-3314.6579	0	0	0	0
L	0	0	48.384	-58.2017	-270.9504	0	0	0	0
LR	0	0	45.92	188.2734	-257.152	0	0	0	0
EX Max	788.4501	0	0	0	2568.7317	3948.0672	0	0	0
EY Max	0	787.7495	0	2566.6506	0	4411.3972	0	0	0
DISX Max	175.9903	0	0	0	573.3679	881.2501	0	0	0
DISY Max	0	175.834	0	572.9034	0	984.6702	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	118.72	344.2126	-664.832	0	0	0	0
DERUX Max	108.6123	0	0	0	353.8945	483.3241	0	0	0
DERUY Max	0	114.7699	0	373.9439	0	642.7112	0	0	0
COMB1	0	0	828.6645	1420.0581	-4640.5211	0	0	0	0
COMB2	0	0	810.6582	1218.2066	-4539.6861	0	0	0	0
COMB3	0	0	832.1398	1460.2284	-4659.9831	0	0	0	0
COMB4	0	0	781.6278	1253.1276	-4377.1159	0	0	0	0
COMB5 Max	175.9903	52.7502	758.6678	1330.8619	-3675.172	1176.6511	0	0	0
COMB5 Min	-175.9903	-52.7502	758.6678	987.1199	-4821.9078	-1176.6511	0	0	0
COMB6 Max	52.7971	175.834	758.6678	1731.8943	-4076.5295	1249.0452	0	0	0
COMB6 Min	-52.7971	-175.834	758.6678	586.0875	-4420.5503	-1249.0452	0	0	0
COMB7 Max	52.7971	175.834	532.7129	1485.7979	-2811.1818	1249.0452	0	0	0
COMB7 Min	-52.7971	-175.834	532.7129	339.9911	-3155.2025	-1249.0452	0	0	0
COMB8 Max	175.9903	52.7502	532.7129	1084.7655	-2409.8242	1176.6511	0	0	0
COMB8 Min	-175.9903	-52.7502	532.7129	741.0235	-3556.56	-1176.6511	0	0	0
ENVE Max	175.9903	175.834	832.1398	1731.8943	-2409.8242	1249.0452	0	0	0
ENVE Min	-175.9903	-175.834	532.7129	339.9911	-4821.9078	-1249.0452	0	0	0
CIM01	0	0	591.9032	1014.3272	-3314.6579	0	0	0	0
CIM02	0	0	640.2872	956.1255	-3585.6083	0	0	0	0
CIM03	0	0	637.8232	1202.6006	-3571.8099	0	0	0	0
CIM04	0	0	662.6312	1111.881	-3710.7347	0	0	0	0
CIM05 Max	123.1932	36.9251	591.9032	1134.6369	-2913.3004	823.6558	0	0	0
CIM05 Min	-123.1932	-36.9251	591.9032	894.0175	-3716.0155	-823.6558	0	0	0
CIM06 Max	36.958	123.0838	591.9032	1415.3596	-3194.2507	874.3317	0	0	0
CIM06 Min	-36.958	-123.0838	591.9032	613.2948	-3435.0652	-874.3317	0	0	0
CIM07 Max	93.2749	28.1334	662.6312	1203.5455	-3406.8497	624.6098	0	0	0
CIM07 Min	-93.2749	-28.1334	662.6312	1020.2164	-4014.6197	-624.6098	0	0	0
CIM08 Max	28.1585	93.192	662.6312	1415.5198	-3618.9959	662.8752	0	0	0
CIM08 Min	-28.1585	-93.192	662.6312	808.2422	-3802.4736	-662.8752	0	0	0
DER01	0	0	828.6645	1420.0581	-4640.5211	0	0	0	0
DER02	0	0	810.6582	1218.2066	-4539.6861	0	0	0	0
DER03	0	0	832.1398	1460.2284	-4659.9831	0	0	0	0
DER04	0	0	781.6278	1253.1276	-4377.1159	0	0	0	0
DER05 Max	788.4501	0	758.6678	1158.9909	-1679.8082	3948.0672	0	0	0
DER05 Min	-788.4501	0	758.6678	1158.9909	-6817.2716	-3948.0672	0	0	0
DER06 Max	0	787.7495	758.6678	3725.6415	-4248.5399	4411.3972	0	0	0
DER06 Min	0	-787.7495	758.6678	-1407.6597	-4248.5399	-4411.3972	0	0	0
DER07 Max	788.4501	0	532.7129	912.8945	-414.4604	3948.0672	0	0	0
DER07 Min	-788.4501	0	532.7129	912.8945	-5551.9238	-3948.0672	0	0	0
DER08 Max	0	787.7495	532.7129	3479.5451	-2983.1921	4411.3972	0	0	0
DER08 Min	0	-787.7495	532.7129	-1653.7561	-2983.1921	-4411.3972	0	0	0
DERUD01	0	0	828.6645	1420.0581	-4640.5211	0	0	0	0
DERUD02	0	0	810.6582	1218.2066	-4539.6861	0	0	0	0
DERUD03	0	0	832.1398	1460.2284	-4659.9831	0	0	0	0
DERUD04	0	0	781.6278	1253.1276	-4377.1159	0	0	0	0
DERUD05 Max	108.6123	0	758.6678	1158.9909	-3894.6454	483.3241	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-108.6123	0	758.6678	1158.9909	-4602.4344	-483.3241	0	0	0
DERUD06 Max	0	114.7699	758.6678	1532.9348	-4248.5399	642.7112	0	0	0
DERUD06 Min	0	-114.7699	758.6678	785.047	-4248.5399	-642.7112	0	0	0
DERUD07 Max	108.6123	0	532.7129	912.8945	-2629.2977	483.3241	0	0	0
DERUD07 Min	-108.6123	0	532.7129	912.8945	-3337.0866	-483.3241	0	0	0
DERUD08 Max	0	114.7699	532.7129	1286.8384	-2983.1921	642.7112	0	0	0
DERUD08 Min	0	-114.7699	532.7129	538.9506	-2983.1921	-642.7112	0	0	0
CIM09 Max	123.1932	36.9251	355.1419	728.906	-1587.4372	823.6558	0	0	0
CIM09 Min	-123.1932	-36.9251	355.1419	488.2866	-2390.1523	-823.6558	0	0	0
CIM010 Max	36.958	123.0838	355.1419	1009.6287	-1868.3875	874.3317	0	0	0
CIM010 Min	-36.958	-123.0838	355.1419	207.564	-2109.202	-874.3317	0	0	0
CIM011	0	0	710.6232	1358.5398	-3979.4899	0	0	0	0
CIM012	0	0	717.2312	1228.8353	-4016.4947	0	0	0	0
CIM013 Max	93.2749	28.1334	717.2312	1320.4999	-3712.6097	624.6098	0	0	0
CIM013 Min	-93.2749	-28.1334	717.2312	1137.1708	-4320.3797	-624.6098	0	0	0
CIM014 Max	28.1585	93.192	717.2312	1532.4741	-3924.7559	662.8752	0	0	0
CIM014 Min	-28.1585	-93.192	717.2312	925.1966	-4108.2336	-662.8752	0	0	0
CIM015	0	0	355.1419	608.5963	-1988.7948	0	0	0	0
COMB9	0	0	818.0278	1331.0972	-4580.9559	0	0	0	0
COMB10	0	0	948.6198	1709.7311	-5312.2711	0	0	0	0
COMB11	0	0	818.0278	1331.0972	-4580.9559	0	0	0	0
DER09	0	0	847.0582	1296.1762	-4743.5261	0	0	0	0
DER10	0	0	948.6198	1709.7311	-5312.2711	0	0	0	0
DER11	0	0	818.0278	1331.0972	-4580.9559	0	0	0	0
DERUD09	0	0	847.0582	1296.1762	-4743.5261	0	0	0	0
DERUD10	0	0	948.6198	1709.7311	-5312.2711	0	0	0	0
DERUD11	0	0	818.0278	1331.0972	-4580.9559	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	43415.21	43415.21	5.6	-0.7769	43415.21	43415.21	5.6	-0.7769	5.6	2.9966

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.3	0	1	5.6	-0.7769	3.25
N1	D1	L	0	-0.3	0	1	5.6	-0.7769	3.25
N1	D1	LR	0	0.004565	0	1	5.6	-0.7769	3.25
N1	D1	EX Max	15	0	0.001614	1	5.6	-0.7769	3.25
N1	D1	EY Max	0	11.7	0	1	5.6	-0.7769	3.25
N1	D1	DISX Max	3.3	0	0.00036	1	5.6	-0.7769	3.25
N1	D1	DISY Max	0	2.6	0	1	5.6	-0.7769	3.25
N1	D1	W	0	0	0	1	5.6	-0.7769	3.25
N1	D1	G	0	-0.1	0	1	5.6	-0.7769	3.25
N1	D1	DERUX Max	2.2	0	0.000227	1	5.6	-0.7769	3.25
N1	D1	DERUY Max	0	1.7	0	1	5.6	-0.7769	3.25
N1	D1	COMB1	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	COMB2	0	-2	0	1	5.6	-0.7769	3.25
N1	D1	COMB3	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	COMB4	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	COMB5 Max	3.3	-1	0.00036	1	5.6	-0.7769	3.25
N1	D1	COMB5 Min	-3.3	-2.6	-0.00036	1	5.6	-0.7769	3.25
N1	D1	COMB6 Max	1	0.8	0.000108	1	5.6	-0.7769	3.25
N1	D1	COMB6 Min	-1	-4.4	-0.000108	1	5.6	-0.7769	3.25
N1	D1	COMB7 Max	1	1.4	0.000108	1	5.6	-0.7769	3.25
N1	D1	COMB7 Min	-1	-3.8	-0.000108	1	5.6	-0.7769	3.25
N1	D1	COMB8 Max	3.3	-0.4	0.00036	1	5.6	-0.7769	3.25
N1	D1	COMB8 Min	-3.3	-2	-0.00036	1	5.6	-0.7769	3.25
N1	D1	ENVE Max	3.3	1.4	0.00036	1	5.6	-0.7769	3.25



Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	ENVE Min	-3.3	-4.4	-0.00036	1	5.6	-0.7769	3.25
N1	D1	CIM01	0	-1.3	0	1	5.6	-0.7769	3.25
N1	D1	CIM02	0	-1.6	0	1	5.6	-0.7769	3.25
N1	D1	CIM03	0	-1.3	0	1	5.6	-0.7769	3.25
N1	D1	CIM04	0	-1.5	0	1	5.6	-0.7769	3.25
N1	D1	CIM05 Max	2.3	-0.8	0.000252	1	5.6	-0.7769	3.25
N1	D1	CIM05 Min	-2.3	-1.8	-0.000252	1	5.6	-0.7769	3.25
N1	D1	CIM06 Max	0.7	0.5	7.6E-05	1	5.6	-0.7769	3.25
N1	D1	CIM06 Min	-0.7	-3.1	-7.6E-05	1	5.6	-0.7769	3.25
N1	D1	CIM07 Max	1.8	-1.1	0.000191	1	5.6	-0.7769	3.25
N1	D1	CIM07 Min	-1.8	-1.9	-0.000191	1	5.6	-0.7769	3.25
N1	D1	CIM08 Max	0.5	-0.1	5.8E-05	1	5.6	-0.7769	3.25
N1	D1	CIM08 Min	-0.5	-2.9	-5.8E-05	1	5.6	-0.7769	3.25
N1	D1	DER01	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	DER02	0	-2	0	1	5.6	-0.7769	3.25
N1	D1	DER03	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	DER04	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	DER05 Max	15	-1.8	0.001614	1	5.6	-0.7769	3.25
N1	D1	DER05 Min	-15	-1.8	-0.001614	1	5.6	-0.7769	3.25
N1	D1	DER06 Max	0	9.9	0	1	5.6	-0.7769	3.25
N1	D1	DER06 Min	0	-13.5	0	1	5.6	-0.7769	3.25
N1	D1	DER07 Max	15	-1.2	0.001614	1	5.6	-0.7769	3.25
N1	D1	DER07 Min	-15	-1.2	-0.001614	1	5.6	-0.7769	3.25
N1	D1	DER08 Max	0	10.5	0	1	5.6	-0.7769	3.25
N1	D1	DER08 Min	0	-12.8	0	1	5.6	-0.7769	3.25
N1	D1	DERUD01	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	DERUD02	0	-2	0	1	5.6	-0.7769	3.25
N1	D1	DERUD03	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	DERUD04	0	-1.8	0	1	5.6	-0.7769	3.25
N1	D1	DERUD05 Max	2.2	-1.8	0.000227	1	5.6	-0.7769	3.25
N1	D1	DERUD05 Min	-2.2	-1.8	-0.000227	1	5.6	-0.7769	3.25
N1	D1	DERUD06 Max	0	-0.1	0	1	5.6	-0.7769	3.25
N1	D1	DERUD06 Min	0	-3.5	0	1	5.6	-0.7769	3.25
N1	D1	DERUD07 Max	2.2	-1.2	0.000227	1	5.6	-0.7769	3.25
N1	D1	DERUD07 Min	-2.2	-1.2	-0.000227	1	5.6	-0.7769	3.25
N1	D1	DERUD08 Max	0	0.5	0	1	5.6	-0.7769	3.25
N1	D1	DERUD08 Min	0	-2.9	0	1	5.6	-0.7769	3.25
N1	D1	CIM09 Max	2.3	-0.2	0.000252	1	5.6	-0.7769	3.25
N1	D1	CIM09 Min	-2.3	-1.3	-0.000252	1	5.6	-0.7769	3.25
N1	D1	CIM010 Max	0.7	1	7.6E-05	1	5.6	-0.7769	3.25
N1	D1	CIM010 Min	-0.7	-2.6	-7.6E-05	1	5.6	-0.7769	3.25
N1	D1	CIM011	0	-1.4	0	1	5.6	-0.7769	3.25
N1	D1	CIM012	0	-1.6	0	1	5.6	-0.7769	3.25
N1	D1	CIM013 Max	1.8	-1.2	0.000191	1	5.6	-0.7769	3.25
N1	D1	CIM013 Min	-1.8	-2	-0.000191	1	5.6	-0.7769	3.25
N1	D1	CIM014 Max	0.5	-0.2	5.8E-05	1	5.6	-0.7769	3.25
N1	D1	CIM014 Min	-0.5	-3	-5.8E-05	1	5.6	-0.7769	3.25
N1	D1	CIM015	0	-0.8	0	1	5.6	-0.7769	3.25
N1	D1	COMB9	0	-1.9	0	1	5.6	-0.7769	3.25
N1	D1	COMB10	0	-2	0	1	5.6	-0.7769	3.25
N1	D1	COMB11	0	-1.9	0	1	5.6	-0.7769	3.25
N1	D1	DER09	0	-2	0	1	5.6	-0.7769	3.25
N1	D1	DER10	0	-2	0	1	5.6	-0.7769	3.25
N1	D1	DER11	0	-1.9	0	1	5.6	-0.7769	3.25
N1	D1	DERUD09	0	-2	0	1	5.6	-0.7769	3.25
N1	D1	DERUD10	0	-2	0	1	5.6	-0.7769	3.25
N1	D1	DERUD11	0	-1.9	0	1	5.6	-0.7769	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements  
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Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.3	1.3	1
N1	L	Y	0.3	0.3	1
N1	LR	Y	0.004565	0.004565	1
N1	EX Max	X	13.9	13.9	1
N1	EX Max	Y	9	4.5	2
N1	EY Max	Y	11.7	11.7	1
N1	DISX Max	X	3.1	3.1	1
N1	DISX Max	Y	2	1	2
N1	DISY Max	Y	2.6	2.6	1
N1	G	Y	0.1	0.1	1
N1	DERUX Max	X	2	2	1
N1	DERUX Max	Y	1.3	0.6	2
N1	DERUY Max	Y	1.7	1.7	1
N1	COMB1	Y	1.8	1.8	1
N1	COMB2	Y	2	2	1
N1	COMB3	Y	1.8	1.8	1
N1	COMB4	Y	1.8	1.8	1
N1	COMB5 Max	X	3.1	3.1	1
N1	COMB5 Min	X	3.1	3.1	1
N1	COMB5 Min	Y	4.6	3.6	1.28
N1	COMB6 Max	X	0.9	0.9	1
N1	COMB6 Max	Y	1.4	1.1	1.277
N1	COMB6 Min	X	0.9	0.9	1
N1	COMB6 Min	Y	5	4.7	1.064
N1	COMB7 Max	X	0.9	0.9	1
N1	COMB7 Max	Y	2	1.7	1.174
N1	COMB7 Min	X	0.9	0.9	1
N1	COMB7 Min	Y	4.4	4.1	1.074
N1	COMB8 Max	X	3.1	3.1	1
N1	COMB8 Max	Y	1.6	0.6	2.623
N1	COMB8 Min	X	3.1	3.1	1
N1	COMB8 Min	Y	4	3	1.341
N1	ENVE Max	X	3.1	3.1	1
N1	ENVE Max	Y	2	1.7	1.174
N1	ENVE Min	X	3.1	3.1	1
N1	ENVE Min	Y	5	4.7	1.064
N1	CIM01	Y	1.3	1.3	1
N1	CIM02	Y	1.6	1.6	1
N1	CIM03	Y	1.3	1.3	1
N1	CIM04	Y	1.5	1.5	1
N1	CIM05 Max	X	2.2	2.2	1
N1	CIM05 Min	X	2.2	2.2	1
N1	CIM05 Min	Y	3.3	2.6	1.277
N1	CIM06 Max	X	0.7	0.7	1
N1	CIM06 Max	Y	0.9	0.7	1.288
N1	CIM06 Min	X	0.7	0.7	1
N1	CIM06 Min	Y	3.5	3.3	1.064
N1	CIM07 Max	X	1.6	1.6	1
N1	CIM07 Max	Y	1.1	0.5	1.998
N1	CIM07 Min	X	1.6	1.6	1
N1	CIM07 Min	Y	3	2.4	1.219
N1	CIM08 Max	X	0.5	0.5	1
N1	CIM08 Max	Y	0.2	0.1	3.931
N1	CIM08 Min	X	0.5	0.5	1
N1	CIM08 Min	Y	3.2	3	1.053
N1	DER01	Y	1.8	1.8	1
N1	DER02	Y	2	2	1
N1	DER03	Y	1.8	1.8	1
N1	DER04	Y	1.8	1.8	1
N1	DER05 Max	X	13.9	13.9	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DER05 Max	Y	7.2	2.7	2.671
N1	DER05 Min	X	13.9	13.9	1
N1	DER05 Min	Y	10.9	6.3	1.714
N1	DER06 Max	Y	9.9	9.9	1
N1	DER06 Min	Y	13.5	13.5	1
N1	DER07 Max	X	13.9	13.9	1
N1	DER07 Max	Y	7.9	3.4	2.349
N1	DER07 Min	X	13.9	13.9	1
N1	DER07 Min	Y	10.2	5.7	1.794
N1	DER08 Max	Y	10.5	10.5	1
N1	DER08 Min	Y	12.8	12.8	1
N1	DERUD01	Y	1.8	1.8	1
N1	DERUD02	Y	2	2	1
N1	DERUD03	Y	1.8	1.8	1
N1	DERUD04	Y	1.8	1.8	1
N1	DERUD05 Max	X	2	2	1
N1	DERUD05 Max	Y	1.8	1.2	1.54
N1	DERUD05 Min	X	2	2	1
N1	DERUD05 Min	Y	3.1	2.5	1.26
N1	DERUD06 Max	Y	0.1	0.1	1
N1	DERUD06 Min	Y	3.5	3.5	1
N1	DERUD07 Max	X	2	2	1
N1	DERUD07 Max	Y	1.2	0.5	2.193
N1	DERUD07 Min	X	2	2	1
N1	DERUD07 Min	Y	2.4	1.8	1.352
N1	DERUD08 Max	Y	0.5	0.5	1
N1	DERUD08 Min	Y	2.9	2.9	1
N1	CIM09 Max	X	2.2	2.2	1
N1	CIM09 Max	Y	1.2	0.5	2.49
N1	CIM09 Min	X	2.2	2.2	1
N1	CIM09 Min	Y	2.7	2	1.347
N1	CIM010 Max	X	0.7	0.7	1
N1	CIM010 Max	Y	1.5	1.3	1.169
N1	CIM010 Min	X	0.7	0.7	1
N1	CIM010 Min	Y	3	2.8	1.075
N1	CIM011	Y	1.4	1.4	1
N1	CIM012	Y	1.6	1.6	1
N1	CIM013 Max	X	1.6	1.6	1
N1	CIM013 Max	Y	1.2	0.6	1.837
N1	CIM013 Min	X	1.6	1.6	1
N1	CIM013 Min	Y	3.1	2.5	1.21
N1	CIM014 Max	X	0.5	0.5	1
N1	CIM014 Min	X	0.5	0.5	1
N1	CIM014 Min	Y	3.3	3.1	1.052
N1	CIM015	Y	0.8	0.8	1
N1	COMB9	Y	1.9	1.9	1
N1	COMB10	Y	2	2	1
N1	COMB11	Y	1.9	1.9	1
N1	DER09	Y	2	2	1
N1	DER10	Y	2	2	1
N1	DER11	Y	1.9	1.9	1
N1	DERUD09	Y	2	2	1
N1	DERUD10	Y	2	2	1
N1	DERUD11	Y	1.9	1.9	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.0004	5	11.2	0	3.25
N1	L	Y	7.9E-05	5	11.2	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	LR	Y	2E-06	4	5.6	8.2	3.25
N1	EX Max	X	0.00428	5	11.2	0	3.25
N1	EX Max	Y	0.002781	5	11.2	0	3.25
N1	EY Max	Y	0.003592	5	11.2	0	3.25
N1	DISX Max	X	0.000955	5	11.2	0	3.25
N1	DISX Max	Y	0.000621	5	11.2	0	3.25
N1	DISY Max	Y	0.000802	5	11.2	0	3.25
N1	G	Y	4.7E-05	4	5.6	8.2	3.25
N1	DERUX Max	X	0.000618	5	11.2	0	3.25
N1	DERUX Max	Y	0.000391	5	11.2	0	3.25
N1	DERUY Max	Y	0.000523	5	11.2	0	3.25
N1	COMB1	Y	0.00056	5	11.2	0	3.25
N1	COMB2	Y	0.000605	5	11.2	0	3.25
N1	COMB3	Y	0.000558	4	5.6	8.2	3.25
N1	COMB4	Y	0.000558	5	11.2	0	3.25
N1	COMB5 Max	X	0.000955	5	11.2	0	3.25
N1	COMB5 Min	X	0.000955	5	11.2	0	3.25
N1	COMB5 Min	Y	0.00142	5	11.2	0	3.25
N1	COMB6 Max	X	0.000287	5	11.2	0	3.25
N1	COMB6 Max	Y	0.00043	5	11.2	0	3.25
N1	COMB6 Min	X	0.000287	5	11.2	0	3.25
N1	COMB6 Min	Y	0.001546	5	11.2	0	3.25
N1	COMB7 Max	X	0.000287	5	11.2	0	3.25
N1	COMB7 Max	Y	0.000628	5	11.2	0	3.25
N1	COMB7 Min	X	0.000287	5	11.2	0	3.25
N1	COMB7 Min	Y	0.001348	5	11.2	0	3.25
N1	COMB8 Max	X	0.000955	5	11.2	0	3.25
N1	COMB8 Max	Y	0.000502	5	11.2	0	3.25
N1	COMB8 Min	X	0.000955	5	11.2	0	3.25
N1	COMB8 Min	Y	0.001221	5	11.2	0	3.25
N1	ENVE Max	X	0.000955	5	11.2	0	3.25
N1	ENVE Max	Y	0.000628	5	11.2	0	3.25
N1	ENVE Min	X	0.000955	5	11.2	0	3.25
N1	ENVE Min	Y	0.001546	5	11.2	0	3.25
N1	CIM01	Y	0.0004	5	11.2	0	3.25
N1	CIM02	Y	0.000478	5	11.2	0	3.25
N1	CIM03	Y	0.000401	4	5.6	8.2	3.25
N1	CIM04	Y	0.000458	5	11.2	0	3.25
N1	CIM05 Max	X	0.000669	5	11.2	0	3.25
N1	CIM05 Min	X	0.000669	5	11.2	0	3.25
N1	CIM05 Min	Y	0.001003	5	11.2	0	3.25
N1	CIM06 Max	X	0.000201	5	11.2	0	3.25
N1	CIM06 Max	Y	0.000292	5	11.2	0	3.25
N1	CIM06 Min	X	0.000201	5	11.2	0	3.25
N1	CIM06 Min	Y	0.001091	5	11.2	0	3.25
N1	CIM07 Max	X	0.000506	5	11.2	0	3.25
N1	CIM07 Max	Y	0.000331	4	5.6	8.2	3.25
N1	CIM07 Min	X	0.000506	5	11.2	0	3.25
N1	CIM07 Min	Y	0.000915	5	11.2	0	3.25
N1	CIM08 Max	X	0.000153	5	11.2	0	3.25
N1	CIM08 Max	Y	6.7E-05	5	11.2	0	3.25
N1	CIM08 Min	X	0.000153	5	11.2	0	3.25
N1	CIM08 Min	Y	0.000982	5	11.2	0	3.25
N1	DER01	Y	0.00056	5	11.2	0	3.25
N1	DER02	Y	0.000605	5	11.2	0	3.25
N1	DER03	Y	0.000558	4	5.6	8.2	3.25
N1	DER04	Y	0.000558	5	11.2	0	3.25
N1	DER05 Max	X	0.00428	5	11.2	0	3.25
N1	DER05 Max	Y	0.002223	5	11.2	0	3.25
N1	DER05 Min	X	0.00428	5	11.2	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER05 Min	Y	0.00334	5	11.2	0	3.25
N1	DER06 Max	Y	0.003034	5	11.2	0	3.25
N1	DER06 Min	Y	0.004151	5	11.2	0	3.25
N1	DER07 Max	X	0.00428	5	11.2	0	3.25
N1	DER07 Max	Y	0.002422	5	11.2	0	3.25
N1	DER07 Min	X	0.00428	5	11.2	0	3.25
N1	DER07 Min	Y	0.003141	5	11.2	0	3.25
N1	DER08 Max	Y	0.003232	5	11.2	0	3.25
N1	DER08 Min	Y	0.003952	5	11.2	0	3.25
N1	DERUD01	Y	0.00056	5	11.2	0	3.25
N1	DERUD02	Y	0.000605	5	11.2	0	3.25
N1	DERUD03	Y	0.000558	4	5.6	8.2	3.25
N1	DERUD04	Y	0.000558	5	11.2	0	3.25
N1	DERUD05 Max	X	0.000618	5	11.2	0	3.25
N1	DERUD05 Max	Y	0.000558	3	5.6	0	3.25
N1	DERUD05 Min	X	0.000618	5	11.2	0	3.25
N1	DERUD05 Min	Y	0.00095	5	11.2	0	3.25
N1	DERUD06 Max	Y	3.8E-05	2	0	8.2	3.25
N1	DERUD06 Min	Y	0.001082	5	11.2	0	3.25
N1	DERUD07 Max	X	0.000618	5	11.2	0	3.25
N1	DERUD07 Max	Y	0.00036	3	5.6	0	3.25
N1	DERUD07 Min	X	0.000618	5	11.2	0	3.25
N1	DERUD07 Min	Y	0.000751	5	11.2	0	3.25
N1	DERUD08 Max	Y	0.000164	5	11.2	0	3.25
N1	DERUD08 Min	Y	0.000883	5	11.2	0	3.25
N1	CIM09 Max	X	0.000669	5	11.2	0	3.25
N1	CIM09 Max	Y	0.000363	5	11.2	0	3.25
N1	CIM09 Min	X	0.000669	5	11.2	0	3.25
N1	CIM09 Min	Y	0.000843	5	11.2	0	3.25
N1	CIM10 Max	X	0.000201	5	11.2	0	3.25
N1	CIM10 Max	Y	0.000452	5	11.2	0	3.25
N1	CIM10 Min	X	0.000201	5	11.2	0	3.25
N1	CIM10 Min	Y	0.000931	5	11.2	0	3.25
N1	CIM11	Y	0.000446	4	5.6	8.2	3.25
N1	CIM12	Y	0.000491	4	5.6	8.2	3.25
N1	CIM13 Max	X	0.000506	5	11.2	0	3.25
N1	CIM13 Max	Y	0.000364	4	5.6	8.2	3.25
N1	CIM13 Min	X	0.000506	5	11.2	0	3.25
N1	CIM13 Min	Y	0.000947	5	11.2	0	3.25
N1	CIM14 Max	X	0.000153	5	11.2	0	3.25
N1	CIM14 Max	Y	7E-05	4	5.6	8.2	3.25
N1	CIM14 Min	X	0.000153	5	11.2	0	3.25
N1	CIM14 Min	Y	0.001014	5	11.2	0	3.25
N1	CIM15	Y	0.00024	5	11.2	0	3.25
N1	COMB9	Y	0.000579	5	11.2	0	3.25
N1	COMB10	Y	0.00063	4	5.6	8.2	3.25
N1	COMB11	Y	0.000579	5	11.2	0	3.25
N1	DER09	Y	0.000626	5	11.2	0	3.25
N1	DER10	Y	0.00063	4	5.6	8.2	3.25
N1	DER11	Y	0.000579	5	11.2	0	3.25
N1	DERUD09	Y	0.000626	5	11.2	0	3.25
N1	DERUD10	Y	0.00063	4	5.6	8.2	3.25
N1	DERUD11	Y	0.000579	5	11.2	0	3.25

Table 5.6 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	518.396	0	0	0	713.6684	-2903.0176
N1	D	Bottom	591.9032	0	0	0	1014.3272	-3314.6579
N1	L	Top	48.384	0	0	0	-58.0607	-270.9504

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	L	Bottom	48.384	0	0	0	-58.2017	-270.9504
N1	LR	Top	45.92	0	0	0	188.272	-257.152
N1	LR	Bottom	45.92	0	0	0	188.2734	-257.152
N1	EX Max	Top	0	788.4501	0	3948.0672	0	0.0003
N1	EX Max	Bottom	0	788.4501	0	3948.0672	0	2568.7317
N1	EY Max	Top	0	0	787.7495	4411.3972	0.0005	0
N1	EY Max	Bottom	0	0	787.7495	4411.3972	2566.6506	0
N1	DISX Max	Top	0	175.9903	0	881.2501	0	0.0001
N1	DISX Max	Bottom	0	175.9903	0	881.2501	0	573.3679
N1	DISY Max	Top	0	0	175.834	984.6702	0.0001	0
N1	DISY Max	Bottom	0	0	175.834	984.6702	572.9034	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	118.72	0	0	0	344.2881	-664.832
N1	G	Bottom	118.72	0	0	0	344.2126	-664.832
N1	DERUX Max	Top	0	108.6123	0	483.3241	0	4.043E-05
N1	DERUX Max	Bottom	0	108.6123	0	483.3241	0	353.8945
N1	DERUY Max	Top	0	0	114.7699	642.7112	0.0001	0
N1	DERUY Max	Bottom	0	0	114.7699	642.7112	373.9439	0
N1	COMB1	Top	725.7544	0	0	0	999.1358	-4064.2246
N1	COMB1	Bottom	828.6645	0	0	0	1420.0581	-4640.5211
N1	COMB2	Top	722.4496	0	0	0	857.641	-4045.7178
N1	COMB2	Bottom	810.6582	0	0	0	1218.2066	-4539.6861
N1	COMB3	Top	743.9312	0	0	0	1099.5766	-4166.0147
N1	COMB3	Bottom	832.1398	0	0	0	1460.2284	-4659.9831
N1	COMB4	Top	693.4192	0	0	0	892.4774	-3883.1475
N1	COMB4	Bottom	781.6278	0	0	0	1253.1276	-4377.1159
N1	COMB5 Max	Top	670.4592	175.9903	52.7502	1176.6511	798.3414	-3754.5715
N1	COMB5 Max	Bottom	758.6678	175.9903	52.7502	1176.6511	1330.8619	-3675.172
N1	COMB5 Min	Top	670.4592	-175.9903	-52.7502	-1176.6511	798.3413	-3754.5716
N1	COMB5 Min	Bottom	758.6678	-175.9903	-52.7502	-1176.6511	987.1199	-4821.9078
N1	COMB6 Max	Top	670.4592	52.7971	175.834	1249.0452	798.3415	-3754.5715
N1	COMB6 Max	Bottom	758.6678	52.7971	175.834	1249.0452	1731.8943	-4076.5295
N1	COMB6 Min	Top	670.4592	-52.7971	-175.834	-1249.0452	798.3413	-3754.5715
N1	COMB6 Min	Bottom	758.6678	-52.7971	-175.834	-1249.0452	586.0875	-4420.5503
N1	COMB7 Max	Top	466.5564	52.7971	175.834	1249.0452	642.3017	-2612.7158
N1	COMB7 Max	Bottom	532.7129	52.7971	175.834	1249.0452	1485.7979	-2811.1818
N1	COMB7 Min	Top	466.5564	-52.7971	-175.834	-1249.0452	642.3014	-2612.7159
N1	COMB7 Min	Bottom	532.7129	-52.7971	-175.834	-1249.0452	339.9911	-3155.2025
N1	COMB8 Max	Top	466.5564	175.9903	52.7502	1176.6511	642.3016	-2612.7158
N1	COMB8 Max	Bottom	532.7129	175.9903	52.7502	1176.6511	1084.7655	-2409.8242
N1	COMB8 Min	Top	466.5564	-175.9903	-52.7502	-1176.6511	642.3015	-2612.7159
N1	COMB8 Min	Bottom	532.7129	-175.9903	-52.7502	-1176.6511	741.0235	-3556.56
N1	ENVE Max	Top	743.9312	175.9903	175.834	1249.0452	1099.5766	-2612.7158
N1	ENVE Max	Bottom	832.1398	175.9903	175.834	1249.0452	1731.8943	-2409.8242
N1	ENVE Min	Top	466.5564	-175.9903	-175.834	-1249.0452	642.3014	-4166.0147
N1	ENVE Min	Bottom	532.7129	-175.9903	-175.834	-1249.0452	339.9911	-4821.9078
N1	CIM01	Top	518.396	0	0	0	713.6684	-2903.0176
N1	CIM01	Bottom	591.9032	0	0	0	1014.3272	-3314.6579
N1	CIM02	Top	566.78	0	0	0	655.6077	-3173.968
N1	CIM02	Bottom	640.2872	0	0	0	956.1255	-3585.6083
N1	CIM03	Top	564.316	0	0	0	901.9404	-3160.1696
N1	CIM03	Bottom	637.8232	0	0	0	1202.6006	-3571.8099
N1	CIM04	Top	589.124	0	0	0	811.3269	-3299.0944
N1	CIM04	Bottom	662.6312	0	0	0	1111.881	-3710.7347
N1	CIM05 Max	Top	518.396	123.1932	36.9251	823.6558	713.6684	-2903.0176
N1	CIM05 Max	Bottom	591.9032	123.1932	36.9251	823.6558	1134.6369	-2913.3004
N1	CIM05 Min	Top	518.396	-123.1932	-36.9251	-823.6558	713.6684	-2903.0176
N1	CIM05 Min	Bottom	591.9032	-123.1932	-36.9251	-823.6558	894.0175	-3716.0155
N1	CIM06 Max	Top	518.396	36.958	123.0838	874.3317	713.6685	-2903.0176

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM06 Max	Bottom	591.9032	36.958	123.0838	874.3317	1415.3596	-3194.2507
N1	CIM06 Min	Top	518.396	-36.958	-123.0838	-874.3317	713.6683	-2903.0176
N1	CIM06 Min	Bottom	591.9032	-36.958	-123.0838	-874.3317	613.2948	-3435.0652
N1	CIM07 Max	Top	589.124	93.2749	28.1334	624.6098	811.3269	-3299.0944
N1	CIM07 Max	Bottom	662.6312	93.2749	28.1334	624.6098	1203.5455	-3406.8497
N1	CIM07 Min	Top	589.124	-93.2749	-28.1334	-624.6098	811.3269	-3299.0944
N1	CIM07 Min	Bottom	662.6312	-93.2749	-28.1334	-624.6098	1020.2164	-4014.6197
N1	CIM08 Max	Top	589.124	28.1585	93.192	662.8752	811.3269	-3299.0944
N1	CIM08 Max	Bottom	662.6312	28.1585	93.192	662.8752	1415.5198	-3618.9959
N1	CIM08 Min	Top	589.124	-28.1585	-93.192	-662.8752	811.3268	-3299.0944
N1	CIM08 Min	Bottom	662.6312	-28.1585	-93.192	-662.8752	808.2422	-3802.4736
N1	DER01	Top	725.7544	0	0	0	999.1358	-4064.2246
N1	DER01	Bottom	828.6645	0	0	0	1420.0581	-4640.5211
N1	DER02	Top	722.4496	0	0	0	857.641	-4045.7178
N1	DER02	Bottom	810.6582	0	0	0	1218.2066	-4539.6861
N1	DER03	Top	743.9312	0	0	0	1099.5766	-4166.0147
N1	DER03	Bottom	832.1398	0	0	0	1460.2284	-4659.9831
N1	DER04	Top	693.4192	0	0	0	892.4774	-3883.1475
N1	DER04	Bottom	781.6278	0	0	0	1253.1276	-4377.1159
N1	DER05 Max	Top	670.4592	788.4501	0	3948.0672	798.3414	-3754.5715
N1	DER05 Max	Bottom	758.6678	788.4501	0	3948.0672	1158.9909	-1679.8082
N1	DER05 Min	Top	670.4592	-788.4501	0	-3948.0672	798.3414	-3754.5715
N1	DER05 Min	Bottom	758.6678	-788.4501	0	-3948.0672	1158.9909	-6817.2716
N1	DER06 Max	Top	670.4592	0	787.7495	4411.3972	798.3419	-3754.5715
N1	DER06 Max	Bottom	758.6678	0	787.7495	4411.3972	3725.6415	-4248.5399
N1	DER06 Min	Top	670.4592	0	-787.7495	-4411.3972	798.3409	-3754.5715
N1	DER06 Min	Bottom	758.6678	0	-787.7495	-4411.3972	-1407.6597	-4248.5399
N1	DER07 Max	Top	466.5564	788.4501	0	3948.0672	642.3016	-2612.7155
N1	DER07 Max	Bottom	532.7129	788.4501	0	3948.0672	912.8945	-414.4604
N1	DER07 Min	Top	466.5564	-788.4501	0	-3948.0672	642.3016	-2612.7161
N1	DER07 Min	Bottom	532.7129	-788.4501	0	-3948.0672	912.8945	-5551.9238
N1	DER08 Max	Top	466.5564	0	787.7495	4411.3972	642.3021	-2612.7158
N1	DER08 Max	Bottom	532.7129	0	787.7495	4411.3972	3479.5451	-2983.1921
N1	DER08 Min	Top	466.5564	0	-787.7495	-4411.3972	642.301	-2612.7158
N1	DER08 Min	Bottom	532.7129	0	-787.7495	-4411.3972	-1653.7561	-2983.1921
N1	DERUD01	Top	725.7544	0	0	0	999.1358	-4064.2246
N1	DERUD01	Bottom	828.6645	0	0	0	1420.0581	-4640.5211
N1	DERUD02	Top	722.4496	0	0	0	857.641	-4045.7178
N1	DERUD02	Bottom	810.6582	0	0	0	1218.2066	-4539.6861
N1	DERUD03	Top	743.9312	0	0	0	1099.5766	-4166.0147
N1	DERUD03	Bottom	832.1398	0	0	0	1460.2284	-4659.9831
N1	DERUD04	Top	693.4192	0	0	0	892.4774	-3883.1475
N1	DERUD04	Bottom	781.6278	0	0	0	1253.1276	-4377.1159
N1	DERUD05 Max	Top	670.4592	108.6123	0	483.3241	798.3414	-3754.5715
N1	DERUD05 Max	Bottom	758.6678	108.6123	0	483.3241	1158.9909	-3894.6454
N1	DERUD05 Min	Top	670.4592	-108.6123	0	-483.3241	798.3414	-3754.5716
N1	DERUD05 Min	Bottom	758.6678	-108.6123	0	-483.3241	1158.9909	-4602.4344
N1	DERUD06 Max	Top	670.4592	0	114.7699	642.7112	798.3415	-3754.5715
N1	DERUD06 Max	Bottom	758.6678	0	114.7699	642.7112	1532.9348	-4248.5399
N1	DERUD06 Min	Top	670.4592	0	-114.7699	-642.7112	798.3413	-3754.5715
N1	DERUD06 Min	Bottom	758.6678	0	-114.7699	-642.7112	785.047	-4248.5399
N1	DERUD07 Max	Top	466.5564	108.6123	0	483.3241	642.3016	-2612.7158
N1	DERUD07 Max	Bottom	532.7129	108.6123	0	483.3241	912.8945	-2629.2977
N1	DERUD07 Min	Top	466.5564	-108.6123	0	-483.3241	642.3016	-2612.7159
N1	DERUD07 Min	Bottom	532.7129	-108.6123	0	-483.3241	912.8945	-3337.0866
N1	DERUD08 Max	Top	466.5564	0	114.7699	642.7112	642.3016	-2612.7158
N1	DERUD08 Max	Bottom	532.7129	0	114.7699	642.7112	1286.8384	-2983.1921
N1	DERUD08 Min	Top	466.5564	0	-114.7699	-642.7112	642.3015	-2612.7158
N1	DERUD08 Min	Bottom	532.7129	0	-114.7699	-642.7112	538.9506	-2983.1921
N1	CIM09 Max	Top	311.0376	123.1932	36.9251	823.6558	428.2011	-1741.8105

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM09 Max	Bottom	355.1419	123.1932	36.9251	823.6558	728.906	-1587.4372
N1	CIM09 Min	Top	311.0376	-123.1932	-36.9251	-823.6558	428.201	-1741.8106
N1	CIM09 Min	Bottom	355.1419	-123.1932	-36.9251	-823.6558	488.2866	-2390.1523
N1	CIM010 Max	Top	311.0376	36.958	123.0838	874.3317	428.2011	-1741.8105
N1	CIM010 Max	Bottom	355.1419	36.958	123.0838	874.3317	1009.6287	-1868.3875
N1	CIM010 Min	Top	311.0376	-36.958	-123.0838	-874.3317	428.201	-1741.8106
N1	CIM010 Min	Bottom	355.1419	-36.958	-123.0838	-874.3317	207.564	-2109.202
N1	CIM011	Top	637.116	0	0	0	1057.9565	-3567.8496
N1	CIM011	Bottom	710.6232	0	0	0	1358.5398	-3979.4899
N1	CIM012	Top	643.724	0	0	0	928.3389	-3604.8544
N1	CIM012	Bottom	717.2312	0	0	0	1228.8353	-4016.4947
N1	CIM013 Max	Top	643.724	93.2749	28.1334	624.6098	928.3389	-3604.8544
N1	CIM013 Max	Bottom	717.2312	93.2749	28.1334	624.6098	1320.4999	-3712.6097
N1	CIM013 Min	Top	643.724	-93.2749	-28.1334	-624.6098	928.3389	-3604.8544
N1	CIM013 Min	Bottom	717.2312	-93.2749	-28.1334	-624.6098	1137.1708	-4320.3797
N1	CIM014 Max	Top	643.724	28.1585	93.192	662.8752	928.339	-3604.8544
N1	CIM014 Max	Bottom	717.2312	28.1585	93.192	662.8752	1532.4741	-3924.7559
N1	CIM014 Min	Top	643.724	-28.1585	-93.192	-662.8752	928.3389	-3604.8544
N1	CIM014 Min	Bottom	717.2312	-28.1585	-93.192	-662.8752	925.1966	-4108.2336
N1	CIM015	Top	311.0376	0	0	0	428.201	-1741.8106
N1	CIM015	Bottom	355.1419	0	0	0	608.5963	-1988.7948
N1	COMB9	Top	729.8192	0	0	0	970.4854	-4086.9875
N1	COMB9	Bottom	818.0278	0	0	0	1331.0972	-4580.9559
N1	COMB10	Top	860.4112	0	0	0	1349.2023	-4818.3027
N1	COMB10	Bottom	948.6198	0	0	0	1709.7311	-5312.2711
N1	COMB11	Top	729.8192	0	0	0	970.4854	-4086.9875
N1	COMB11	Bottom	818.0278	0	0	0	1331.0972	-4580.9559
N1	DER09	Top	758.8496	0	0	0	935.649	-4249.5578
N1	DER09	Bottom	847.0582	0	0	0	1296.1762	-4743.5261
N1	DER10	Top	860.4112	0	0	0	1349.2023	-4818.3027
N1	DER10	Bottom	948.6198	0	0	0	1709.7311	-5312.2711
N1	DER11	Top	729.8192	0	0	0	970.4854	-4086.9875
N1	DER11	Bottom	818.0278	0	0	0	1331.0972	-4580.9559
N1	DERUD09	Top	758.8496	0	0	0	935.649	-4249.5578
N1	DERUD09	Bottom	847.0582	0	0	0	1296.1762	-4743.5261
N1	DERUD10	Top	860.4112	0	0	0	1349.2023	-4818.3027
N1	DERUD10	Bottom	948.6198	0	0	0	1709.7311	-5312.2711
N1	DERUD11	Top	729.8192	0	0	0	970.4854	-4086.9875
N1	DERUD11	Bottom	818.0278	0	0	0	1331.0972	-4580.9559

5.3 Point Results

Table 5.7 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	13.9232	5.1619	121.4105	-16.8603	14.1922	0
Base	1	13	L	2.442	-2.0447	12.5542	-0.199	2.4892	0
Base	1	13	LR	-0.0307	3.3432	5.6381	-3.367	-0.0313	0
Base	1	13	EX Max	186.224	112.5204	65.9001	195.3874	313.9978	16.0699
Base	1	13	EY Max	0.0007	131.6743	46.4036	238.4528	0.0007	0
Base	1	13	DISX Max	41.5672	25.1157	14.7096	43.6125	70.0876	3.587
Base	1	13	DISY Max	0.0001	29.3911	10.3578	53.2252	0.0002	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	1.2952	5.5505	18.2507	-6.8447	1.3202	0
Base	1	13	DERUX Max	26.9145	15.8911	9.1879	27.5539	45.3659	2.2614
Base	1	13	DERUY Max	0.0001	19.1841	6.7607	34.741	0.0001	0
Base	1	13	COMB1	19.4924	7.2266	169.9748	-23.6045	19.8691	0
Base	1	13	COMB2	20.5996	4.5943	168.5984	-22.2344	20.9977	0
Base	1	13	COMB3	19.1006	9.4987	167.2678	-25.8187	19.4697	0
Base	1	13	COMB4	19.1344	5.8211	161.0659	-22.115	19.5042	0
Base	1	13	COMB5 Max	60.717	38.0826	176.0638	39.1486	89.6075	3.587



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB5 Min	-22.4174	-29.7835	140.4299	-80.0115	-50.5678	-3.587
Base	1	13	COMB6 Max	31.6201	41.0753	173.0175	45.8775	40.5463	1.0761
Base	1	13	COMB6 Min	6.6795	-32.7763	143.4762	-86.7404	-1.5066	-1.0761
Base	1	13	COMB7 Max	25.0012	41.5715	124.0401	51.1346	33.7994	1.0761
Base	1	13	COMB7 Min	0.0606	-32.2801	94.4988	-81.4832	-8.2535	-1.0761
Base	1	13	COMB8 Max	54.0981	38.5788	127.0864	44.4058	82.8606	3.587
Base	1	13	COMB8 Min	-29.0363	-29.2874	91.4526	-74.7544	-57.3147	-3.587
Base	1	13	ENVE Max	60.717	41.5715	176.0638	51.1346	89.6075	3.587
Base	1	13	ENVE Min	-29.0363	-32.7763	91.4526	-86.7404	-57.3147	-3.587
Base	1	13	CIM01	13.9232	5.1619	121.4105	-16.8603	14.1922	0
Base	1	13	CIM02	16.3652	3.1172	133.9648	-17.0594	16.6814	0
Base	1	13	CIM03	13.8924	8.5051	127.0486	-20.2274	14.1609	0
Base	1	13	CIM04	15.7316	6.1357	135.0548	-19.5349	16.0356	0
Base	1	13	CIM05 Max	43.0202	28.915	133.8824	24.8457	63.2536	2.5109
Base	1	13	CIM05 Min	-15.1739	-18.5913	108.9387	-58.5664	-34.8692	-2.5109
Base	1	13	CIM06 Max	22.6524	31.0099	131.75	29.5559	28.9107	0.7533
Base	1	13	CIM06 Min	5.194	-20.6862	111.0711	-63.2766	-0.5263	-0.7533
Base	1	13	CIM07 Max	37.7622	24.1497	144.5081	12.0958	53.1821	1.9011
Base	1	13	CIM07 Min	-6.299	-11.8782	125.6014	-51.1656	-21.1109	-1.9011
Base	1	13	CIM08 Max	22.3824	25.7315	142.8979	15.6524	27.2497	0.5739
Base	1	13	CIM08 Min	9.0808	-13.46	127.2116	-54.7222	4.8215	-0.5739
Base	1	13	DER01	19.4924	7.2266	169.9748	-23.6045	19.8691	0
Base	1	13	DER02	20.5996	4.5943	168.5984	-22.2344	20.9977	0
Base	1	13	DER03	19.1006	9.4987	167.2678	-25.8187	19.4697	0
Base	1	13	DER04	19.1344	5.8211	161.0659	-22.115	19.5042	0
Base	1	13	DER05 Max	205.3738	116.67	224.1469	174.956	333.5177	16.0699
Base	1	13	DER05 Min	-167.0742	-108.3709	92.3468	-215.8189	-294.478	-16.0699
Base	1	13	DER06 Max	19.1505	135.8238	204.6505	218.0213	19.5205	0
Base	1	13	DER06 Min	19.1491	-127.5247	111.8432	-258.8842	19.5191	0
Base	1	13	DER07 Max	198.7549	117.1661	175.1696	180.2131	326.7708	16.0699
Base	1	13	DER07 Min	-173.6932	-107.8748	43.3694	-210.5617	-301.2249	-16.0699
Base	1	13	DER08 Max	12.5315	136.3199	155.6731	223.2785	12.7737	0
Base	1	13	DER08 Min	12.5302	-127.0286	62.8658	-253.6271	12.7723	0
Base	1	13	DERUD01	19.4924	7.2266	169.9748	-23.6045	19.8691	0
Base	1	13	DERUD02	20.5996	4.5943	168.5984	-22.2344	20.9977	0
Base	1	13	DERUD03	19.1006	9.4987	167.2678	-25.8187	19.4697	0
Base	1	13	DERUD04	19.1344	5.8211	161.0659	-22.115	19.5042	0
Base	1	13	DERUD05 Max	46.0643	20.0406	167.4347	7.1224	64.8857	2.2614
Base	1	13	DERUD05 Min	-7.7647	-11.7415	149.059	-47.9853	-25.8461	-2.2614
Base	1	13	DERUD06 Max	19.1499	23.3336	165.0076	14.3095	19.5199	0
Base	1	13	DERUD06 Min	19.1497	-15.0345	151.4862	-55.1724	19.5197	0
Base	1	13	DERUD07 Max	39.4453	20.5368	118.4574	12.3796	58.1389	2.2614
Base	1	13	DERUD07 Min	-14.3836	-11.2454	100.0816	-42.7282	-32.5929	-2.2614
Base	1	13	DERUD08 Max	12.531	23.8298	116.0302	19.5667	12.7731	0
Base	1	13	DERUD08 Min	12.5308	-14.5384	102.5088	-49.9153	12.7729	0
Base	1	13	CIM09 Max	37.4509	26.8503	85.3182	31.5898	57.5767	2.5109
Base	1	13	CIM09 Min	-20.7431	-20.656	60.3745	-51.8223	-40.546	-2.5109
Base	1	13	CIM010 Max	17.0831	28.9452	83.1858	36.3	23.2338	0.7533
Base	1	13	CIM010 Min	-0.3753	-22.7509	62.5069	-56.5325	-6.2032	-0.7533
Base	1	13	CIM011	15.2184	10.7123	139.6613	-23.705	15.5124	0
Base	1	13	CIM012	16.7261	7.7912	144.5142	-22.1431	17.0493	0
Base	1	13	CIM013 Max	38.7567	25.8051	153.9676	9.4876	54.1957	1.9011
Base	1	13	CIM013 Min	-5.3046	-10.2227	135.0609	-53.7738	-20.0972	-1.9011
Base	1	13	CIM014 Max	23.3769	27.387	152.3574	13.0442	28.2634	0.5739
Base	1	13	CIM014 Min	10.0752	-11.8046	136.6711	-57.3305	5.8352	-0.5739
Base	1	13	CIM015	8.3539	3.0971	72.8463	-10.1162	8.5153	0
Base	1	13	COMB9	19.7974	6.9248	167.3722	-23.8538	20.1799	0
Base	1	13	COMB10	21.2221	13.0303	187.448	-31.3829	21.6322	0
Base	1	13	COMB11	19.7974	6.9248	167.3722	-23.8538	20.1799	0
Base	1	13	DER09	21.2626	5.6979	174.9048	-23.9732	21.6734	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	DER10	21.2221	13.0303	187.448	-31.3829	21.6322	0
Base	1	13	DER11	19.7974	6.9248	167.3722	-23.8538	20.1799	0
Base	1	13	DERUD09	21.2626	5.6979	174.9048	-23.9732	21.6734	0
Base	1	13	DERUD10	21.2221	13.0303	187.448	-31.3829	21.6322	0
Base	1	13	DERUD11	19.7974	6.9248	167.3722	-23.8538	20.1799	0
Base	2	15	D	3.0663	2.1424	38.599	-13.7197	3.0804	0.0073
Base	2	15	L	0.0409	3.5027	-1.6319	-5.7769	0.0397	-0.0006
Base	2	15	LR	0.0238	-3.2658	5.7795	3.3004	0.0248	0.0082
Base	2	15	EX Max	88.9433	103.6763	49.6824	184.9323	153.0766	14.904
Base	2	15	EY Max	0.0468	130.8156	46.4257	235.876	0.0833	0.1059
Base	2	15	DISX Max	19.8531	23.1416	11.0896	41.2788	34.1683	3.3267
Base	2	15	DISY Max	0.0104	29.1994	10.3627	52.65	0.0186	0.0236
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.0703	-4.5857	10.6525	3.3915	0.0716	0.0161
Base	2	15	DERUX Max	10.2881	14.5851	6.7404	26.0224	17.7287	2.1108
Base	2	15	DERUY Max	0.0068	19.059	6.7639	34.3656	0.0121	0.0154
Base	2	15	COMB1	4.2928	2.9993	54.0385	-19.2076	4.3126	0.0102
Base	2	15	COMB2	3.7569	6.5423	46.5975	-24.0564	3.7724	0.0119
Base	2	15	COMB3	3.7585	0.8482	53.9341	-16.9598	3.7758	0.0213
Base	2	15	COMB4	3.7324	4.4406	47.5767	-20.5903	3.7486	0.0123
Base	2	15	COMB5 Max	23.5767	37.975	58.8853	34.8333	37.9101	3.342
Base	2	15	COMB5 Min	-16.1357	-25.8279	30.4884	-79.3144	-30.4377	-3.3257
Base	2	15	COMB6 Max	9.6869	42.2155	58.3765	42.7931	14.0053	1.0298
Base	2	15	COMB6 Min	-2.2459	-30.0683	30.9973	-87.2742	-6.5329	-1.0135
Base	2	15	COMB7 Max	8.726	38.07	48.4287	52.6859	13.0414	1.0282
Base	2	15	COMB7 Min	-3.2067	-34.2138	21.0495	-77.3814	-7.4967	-1.0151
Base	2	15	COMB8 Max	22.6159	33.8296	48.9375	44.7261	36.9462	3.3404
Base	2	15	COMB8 Min	-17.0965	-29.9733	20.5406	-69.4216	-31.4015	-3.3273
Base	2	15	ENVE Max	23.5767	42.2155	58.8853	52.6859	37.9101	3.342
Base	2	15	ENVE Min	-17.0965	-34.2138	20.5406	-87.2742	-31.4015	-3.3273
Base	2	15	CIM01	3.0663	2.1424	38.599	-13.7197	3.0804	0.0073
Base	2	15	CIM02	3.1072	5.6451	36.9671	-19.4966	3.1201	0.0067
Base	2	15	CIM03	3.0901	-1.1235	44.3785	-10.4193	3.1052	0.0155
Base	2	15	CIM04	3.1148	2.32	41.7097	-15.577	3.1287	0.013
Base	2	15	CIM05 Max	16.9657	24.4734	48.5379	26.232	27.0021	2.341
Base	2	15	CIM05 Min	-10.833	-20.1887	28.6601	-53.6714	-20.8413	-2.3264
Base	2	15	CIM06 Max	7.2428	27.4417	48.1817	31.8039	10.2688	0.7225
Base	2	15	CIM06 Min	-1.1101	-23.157	29.0163	-59.2433	-4.108	-0.7079
Base	2	15	CIM07 Max	13.6386	19.257	49.2453	14.7248	21.2409	1.78
Base	2	15	CIM07 Min	-7.409	-14.6169	34.1742	-45.8788	-14.9834	-1.7539
Base	2	15	CIM08 Max	6.2969	21.4984	48.9763	18.9321	8.6055	0.5578
Base	2	15	CIM08 Min	-0.0672	-16.8583	34.4431	-50.0861	-2.348	-0.5318
Base	2	15	DER01	4.2928	2.9993	54.0385	-19.2076	4.3126	0.0102
Base	2	15	DER02	3.7569	6.5423	46.5975	-24.0564	3.7724	0.0119
Base	2	15	DER03	3.7585	0.8482	53.9341	-16.9598	3.7758	0.0213
Base	2	15	DER04	3.7324	4.4406	47.5767	-20.5903	3.7486	0.0123
Base	2	15	DER05 Max	92.6638	109.7498	94.3693	162.6918	156.8128	14.9122
Base	2	15	DER05 Min	-85.2228	-97.6027	-4.9955	-207.1729	-149.3405	-14.8958
Base	2	15	DER06 Max	3.7672	136.8892	91.1126	213.6355	3.8195	0.1141
Base	2	15	DER06 Min	3.6737	-124.7421	-1.7388	-258.1165	3.6529	-0.0978
Base	2	15	DER07 Max	91.703	105.6044	84.4215	172.5846	155.849	14.9106
Base	2	15	DER07 Min	-86.1836	-101.7482	-14.9433	-197.2801	-150.3043	-14.8974
Base	2	15	DER08 Max	2.8064	132.7437	81.1647	223.5283	2.8556	0.1125
Base	2	15	DER08 Min	2.7129	-128.8875	-11.6866	-248.2237	2.6891	-0.0994
Base	2	15	DERUD01	4.2928	2.9993	54.0385	-19.2076	4.3126	0.0102
Base	2	15	DERUD02	3.7569	6.5423	46.5975	-24.0564	3.7724	0.0119
Base	2	15	DERUD03	3.7585	0.8482	53.9341	-16.9598	3.7758	0.0213
Base	2	15	DERUD04	3.7324	4.4406	47.5767	-20.5903	3.7486	0.0123
Base	2	15	DERUD05 Max	14.0086	20.6587	51.4273	3.7819	21.4648	2.119
Base	2	15	DERUD05 Min	-6.5676	-8.5116	37.9465	-48.263	-13.9925	-2.1027

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DERUD06 Max	3.7273	25.1325	51.4508	12.125	3.7483	0.0236
Base	2	15	DERUD06 Min	3.7137	-12.9854	37.923	-56.6061	3.7241	-0.0073
Base	2	15	DERUD07 Max	13.0478	16.5133	41.4795	13.6747	20.501	2.1174
Base	2	15	DERUD07 Min	-7.5284	-12.657	27.9987	-38.3702	-14.9563	-2.1043
Base	2	15	DERUD08 Max	2.7665	20.9871	41.503	22.0178	2.7845	0.022
Base	2	15	DERUD08 Min	2.7529	-17.1308	27.9752	-46.7133	2.7602	-0.0089
Base	2	15	CIM09 Max	15.7391	23.6164	33.0983	31.7199	25.77	2.3381
Base	2	15	CIM09 Min	-12.0596	-21.0456	13.2205	-48.1835	-22.0735	-2.3293
Base	2	15	CIM010 Max	6.0162	26.5848	32.7421	37.2917	9.0366	0.7195
Base	2	15	CIM010 Min	-2.3367	-24.0139	13.5767	-53.7554	-5.3401	-0.7108
Base	2	15	CIM011	3.1366	-2.4434	49.2514	-10.3282	3.152	0.0234
Base	2	15	CIM012	3.1497	1.3301	45.3644	-15.5087	3.1639	0.0189
Base	2	15	CIM013 Max	13.6735	18.2671	52.9	14.793	21.2761	1.7859
Base	2	15	CIM013 Min	-7.3741	-15.6069	37.8289	-45.8105	-14.9483	-1.748
Base	2	15	CIM014 Max	6.3317	20.5085	52.631	19.0004	8.6407	0.5637
Base	2	15	CIM014 Min	-0.0323	-17.8482	38.0979	-50.0178	-2.3129	-0.5259
Base	2	15	CIM015	1.8398	1.2854	23.1594	-8.2318	1.8482	0.0044
Base	2	15	COMB9	3.7556	3.7807	50.0131	-20.5448	3.772	0.0162
Base	2	15	COMB10	3.833	-1.2636	61.7309	-16.8141	3.8507	0.0339
Base	2	15	COMB11	3.7556	3.7807	50.0131	-20.5448	3.772	0.0162
Base	2	15	DER09	3.7802	5.8823	49.034	-24.0109	3.7958	0.0159
Base	2	15	DER10	3.833	-1.2636	61.7309	-16.8141	3.8507	0.0339
Base	2	15	DER11	3.7556	3.7807	50.0131	-20.5448	3.772	0.0162
Base	2	15	DERUD09	3.7802	5.8823	49.034	-24.0109	3.7958	0.0159
Base	2	15	DERUD10	3.833	-1.2636	61.7309	-16.8141	3.8507	0.0339
Base	2	15	DERUD11	3.7556	3.7807	50.0131	-20.5448	3.772	0.0162
Base	3	16	D	0	-16.1274	216.9163	4.834	0	0
Base	3	16	L	0	-7.0091	28.7314	4.8629	0	0
Base	3	16	LR	0	5.8647	11.6823	-5.9417	0	0
Base	3	16	EX Max	258.8315	0	0	0	388.4101	16.0699
Base	3	16	EY Max	0	131.3892	46.5265	238.4291	0	0
Base	3	16	DISX Max	57.7739	0	0	0	86.6972	3.587
Base	3	16	DISY Max	0	29.3274	10.3852	53.2199	0	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	0	7.8355	39.3265	-9.1817	0	0
Base	3	16	DERUX Max	37.3865	0	0	0	56.098	2.2614
Base	3	16	DERUY Max	0	19.1425	6.7786	34.7375	0	0
Base	3	16	COMB1	0	-22.5784	303.6829	6.7675	0	0
Base	3	16	COMB2	0	-27.6351	312.1109	10.6106	0	0
Base	3	16	COMB3	0	-16.9785	307.7226	1.157	0	0
Base	3	16	COMB4	0	-23.4297	294.8721	7.6929	0	0
Base	3	16	COMB5 Max	57.7739	-17.5638	292.1465	26.6297	86.6972	3.587
Base	3	16	COMB5 Min	-57.7739	-35.1603	285.9154	-5.3023	-86.6972	-3.587
Base	3	16	COMB6 Max	17.3322	2.9654	299.4162	63.8836	26.0092	1.0761
Base	3	16	COMB6 Min	-17.3322	-55.6895	278.6457	-42.5562	-26.0092	-1.0761
Base	3	16	COMB7 Max	17.3322	14.8127	205.6099	57.5704	26.0092	1.0761
Base	3	16	COMB7 Min	-17.3322	-43.8421	184.8395	-48.8693	-26.0092	-1.0761
Base	3	16	COMB8 Max	57.7739	-5.7165	198.3403	20.3165	86.6972	3.587
Base	3	16	COMB8 Min	-57.7739	-23.3129	192.1091	-11.6154	-86.6972	-3.587
Base	3	16	ENVE Max	57.7739	14.8127	312.1109	63.8836	86.6972	3.587
Base	3	16	ENVE Min	-57.7739	-55.6895	184.8395	-48.8693	-86.6972	-3.587
Base	3	16	CIM01	0	-16.1274	216.9163	4.834	0	0
Base	3	16	CIM02	0	-23.1366	245.6477	9.6969	0	0
Base	3	16	CIM03	0	-10.2627	228.5986	-1.1077	0	0
Base	3	16	CIM04	0	-16.9857	247.2266	4.0249	0	0
Base	3	16	CIM05 Max	40.4417	-9.9687	219.0972	16.0101	60.688	2.5109
Base	3	16	CIM05 Min	-40.4417	-22.2862	214.7354	-6.3422	-60.688	-2.5109
Base	3	16	CIM06 Max	12.1325	4.4018	224.186	42.0879	18.2064	0.7533
Base	3	16	CIM06 Min	-12.1325	-36.6567	209.6467	-32.42	-18.2064	-0.7533
Base	3	16	CIM07 Max	30.6202	-12.2933	248.8882	12.5401	45.9495	1.9011

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	CIM07 Min	-30.6202	-21.6781	245.5649	-4.4903	-45.9495	-1.9011
Base	3	16	CIM08 Max	9.2438	-1.4422	252.7307	32.2314	13.8716	0.5739
Base	3	16	CIM08 Min	-9.2438	-32.5293	241.7224	-24.1816	-13.8716	-0.5739
Base	3	16	DER01	0	-22.5784	303.6829	6.7675	0	0
Base	3	16	DER02	0	-27.6351	312.1109	10.6106	0	0
Base	3	16	DER03	0	-16.9785	307.7226	1.157	0	0
Base	3	16	DER04	0	-23.4297	294.8721	7.6929	0	0
Base	3	16	DER05 Max	258.8315	-26.362	289.0309	10.6637	388.4101	16.0699
Base	3	16	DER05 Min	-258.8315	-26.362	289.0309	10.6637	-388.4101	-16.0699
Base	3	16	DER06 Max	0	105.0271	335.5575	249.0928	0	0
Base	3	16	DER06 Min	0	-157.7512	242.5044	-227.7654	0	0
Base	3	16	DER07 Max	258.8315	-14.5147	195.2247	4.3506	388.4101	16.0699
Base	3	16	DER07 Min	-258.8315	-14.5147	195.2247	4.3506	-388.4101	-16.0699
Base	3	16	DER08 Max	0	116.8745	241.7512	242.7796	0	0
Base	3	16	DER08 Min	0	-145.9039	148.6981	-234.0785	0	0
Base	3	16	DERUD01	0	-22.5784	303.6829	6.7675	0	0
Base	3	16	DERUD02	0	-27.6351	312.1109	10.6106	0	0
Base	3	16	DERUD03	0	-16.9785	307.7226	1.157	0	0
Base	3	16	DERUD04	0	-23.4297	294.8721	7.6929	0	0
Base	3	16	DERUD05 Max	37.3865	-26.362	289.0309	10.6637	56.098	2.2614
Base	3	16	DERUD05 Min	-37.3865	-26.362	289.0309	10.6637	-56.098	-2.2614
Base	3	16	DERUD06 Max	0	-7.2195	295.8095	45.4012	0	0
Base	3	16	DERUD06 Min	0	-45.5046	282.2523	-24.0738	0	0
Base	3	16	DERUD07 Max	37.3865	-14.5147	195.2247	4.3506	56.098	2.2614
Base	3	16	DERUD07 Min	-37.3865	-14.5147	195.2247	4.3506	-56.098	-2.2614
Base	3	16	DERUD08 Max	0	4.6278	202.0033	39.0881	0	0
Base	3	16	DERUD08 Min	0	-33.6572	188.4461	-30.387	0	0
Base	3	16	CIM09 Max	40.4417	-3.5177	132.3307	14.0765	60.688	2.5109
Base	3	16	CIM09 Min	-40.4417	-15.8352	127.9689	-8.2758	-60.688	-2.5109
Base	3	16	CIM010 Max	12.1325	10.8527	137.4194	40.1543	18.2064	0.7533
Base	3	16	CIM010 Min	-12.1325	-30.2057	122.8801	-34.3535	-18.2064	-0.7533
Base	3	16	CIM011	0	-8.2919	256.2428	-4.3478	0	0
Base	3	16	CIM012	0	-15.5076	267.9597	1.5949	0	0
Base	3	16	CIM013 Max	30.6202	-10.8153	269.6213	10.1101	45.9495	1.9011
Base	3	16	CIM013 Min	-30.6202	-20.2	266.298	-6.9203	-45.9495	-1.9011
Base	3	16	CIM014 Max	9.2438	0.0359	273.4638	29.8014	13.8716	0.5739
Base	3	16	CIM014 Min	-9.2438	-31.0512	262.4555	-26.6117	-13.8716	-0.5739
Base	3	16	CIM015	0	-9.6765	130.1498	2.9004	0	0
Base	3	16	COMB9	0	-22.4443	308.6942	6.0728	0	0
Base	3	16	COMB10	0	-13.8252	351.9533	-4.0271	0	0
Base	3	16	COMB11	0	-22.4443	308.6942	6.0728	0	0
Base	3	16	DER09	0	-26.6498	325.933	8.9906	0	0
Base	3	16	DER10	0	-13.8252	351.9533	-4.0271	0	0
Base	3	16	DER11	0	-22.4443	308.6942	6.0728	0	0
Base	3	16	DERUD09	0	-26.6498	325.933	8.9906	0	0
Base	3	16	DERUD10	0	-13.8252	351.9533	-4.0271	0	0
Base	3	16	DERUD11	0	-22.4443	308.6942	6.0728	0	0
Base	4	18	D	0	1.519	54.9679	-13.1062	0	0
Base	4	18	L	0	4.0931	-2.1921	-6.3754	0	0
Base	4	18	LR	0	-6.0194	11.4025	6.0636	0	0
Base	4	18	EX Max	128.9384	0	0	0	193.8983	15.8077
Base	4	18	EY Max	0	131.3806	46.4825	237.0265	0	0
Base	4	18	DISX Max	28.7804	0	0	0	43.2801	3.5284
Base	4	18	DISY Max	0	29.3255	10.3754	52.9068	0	0
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	0	-9.765	21.5871	8.5853	0	0
Base	4	18	DERUX Max	14.9552	0	0	0	22.493	2.2369
Base	4	18	DERUY Max	0	19.1413	6.7722	34.5332	0	0
Base	4	18	COMB1	0	2.1266	76.955	-18.3486	0	0
Base	4	18	COMB2	0	5.3619	68.1554	-22.8963	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	COMB3	0	-3.7153	82.0134	-12.401	0	0
Base	4	18	COMB4	0	2.9061	69.4706	-19.071	0	0
Base	4	18	COMB5 Max	28.7804	14.7135	66.882	-6.2308	43.2801	3.5284
Base	4	18	COMB5 Min	-28.7804	-2.8818	60.6568	-37.9749	-43.2801	-3.5284
Base	4	18	COMB6 Max	8.6341	35.2414	74.1448	30.804	12.984	1.0585
Base	4	18	COMB6 Min	-8.6341	-23.4097	53.394	-75.0096	-12.984	-1.0585
Base	4	18	COMB7 Max	8.6341	30.6926	59.8465	41.1113	12.984	1.0585
Base	4	18	COMB7 Min	-8.6341	-27.9584	39.0957	-64.7024	-12.984	-1.0585
Base	4	18	COMB8 Max	28.7804	10.1647	52.5837	4.0765	43.2801	3.5284
Base	4	18	COMB8 Min	-28.7804	-7.4306	46.3585	-27.6676	-43.2801	-3.5284
Base	4	18	ENVE Max	28.7804	35.2414	82.0134	41.1113	43.2801	3.5284
Base	4	18	ENVE Min	-28.7804	-27.9584	39.0957	-75.0096	-43.2801	-3.5284
Base	4	18	CIM01	0	1.519	54.9679	-13.1062	0	0
Base	4	18	CIM02	0	5.612	52.7758	-19.4816	0	0
Base	4	18	CIM03	0	-4.5005	66.3703	-7.0425	0	0
Base	4	18	CIM04	0	0.0742	61.8757	-13.34	0	0
Base	4	18	CIM05 Max	20.1463	7.6773	57.1467	-1.9957	30.2961	2.4699
Base	4	18	CIM05 Min	-20.1463	-4.6394	52.789	-24.2166	-30.2961	-2.4699
Base	4	18	CIM06 Max	6.0439	22.0468	62.2306	23.9286	9.0888	0.741
Base	4	18	CIM06 Min	-6.0439	-19.0089	47.7051	-50.1409	-9.0888	-0.741
Base	4	18	CIM07 Max	15.2536	4.7663	63.5357	-4.8749	22.9385	1.8701
Base	4	18	CIM07 Min	-15.2536	-4.6179	60.2156	-21.8051	-22.9385	-1.8701
Base	4	18	CIM08 Max	4.6049	15.6167	67.3746	14.7006	6.9248	0.5646
Base	4	18	CIM08 Min	-4.6049	-15.4683	56.3767	-41.3806	-6.9248	-0.5646
Base	4	18	DER01	0	2.1266	76.955	-18.3486	0	0
Base	4	18	DER02	0	5.3619	68.1554	-22.8963	0	0
Base	4	18	DER03	0	-3.7153	82.0134	-12.401	0	0
Base	4	18	DER04	0	2.9061	69.4706	-19.071	0	0
Base	4	18	DER05 Max	128.9384	5.9158	63.7694	-22.1028	193.8983	15.8077
Base	4	18	DER05 Min	-128.9384	5.9158	63.7694	-22.1028	-193.8983	-15.8077
Base	4	18	DER06 Max	0	137.2964	110.2519	214.9237	0	0
Base	4	18	DER06 Min	0	-125.4647	17.2869	-259.1293	0	0
Base	4	18	DER07 Max	128.9384	1.3671	49.4711	-11.7955	193.8983	15.8077
Base	4	18	DER07 Min	-128.9384	1.3671	49.4711	-11.7955	-193.8983	-15.8077
Base	4	18	DER08 Max	0	132.7476	95.9536	225.231	0	0
Base	4	18	DER08 Min	0	-130.0135	2.9886	-248.822	0	0
Base	4	18	DERUD01	0	2.1266	76.955	-18.3486	0	0
Base	4	18	DERUD02	0	5.3619	68.1554	-22.8963	0	0
Base	4	18	DERUD03	0	-3.7153	82.0134	-12.401	0	0
Base	4	18	DERUD04	0	2.9061	69.4706	-19.071	0	0
Base	4	18	DERUD05 Max	14.9552	5.9158	63.7694	-22.1028	22.493	2.2369
Base	4	18	DERUD05 Min	-14.9552	5.9158	63.7694	-22.1028	-22.493	-2.2369
Base	4	18	DERUD06 Max	0	25.0571	70.5416	12.4304	0	0
Base	4	18	DERUD06 Min	0	-13.2254	56.9972	-56.636	0	0
Base	4	18	DERUD07 Max	14.9552	1.3671	49.4711	-11.7955	22.493	2.2369
Base	4	18	DERUD07 Min	-14.9552	1.3671	49.4711	-11.7955	-22.493	-2.2369
Base	4	18	DERUD08 Max	0	20.5084	56.2433	22.7376	0	0
Base	4	18	DERUD08 Min	0	-17.7742	42.6989	-46.3287	0	0
Base	4	18	CIM09 Max	20.1463	7.0697	35.1596	3.2467	30.2961	2.4699
Base	4	18	CIM09 Min	-20.1463	-5.247	30.8019	-18.9741	-30.2961	-2.4699
Base	4	18	CIM010 Max	6.0439	21.4393	40.2435	29.1711	9.0888	0.741
Base	4	18	CIM010 Min	-6.0439	-19.6165	25.718	-44.8985	-9.0888	-0.741
Base	4	18	CIM011	0	-8.246	76.555	-4.5208	0	0
Base	4	18	CIM012	0	-2.7349	69.5142	-11.4487	0	0
Base	4	18	CIM013 Max	15.2536	1.9571	71.1742	-2.9836	22.9385	1.8701
Base	4	18	CIM013 Min	-15.2536	-7.427	67.8541	-19.9138	-22.9385	-1.8701
Base	4	18	CIM014 Max	4.6049	12.8076	75.0131	16.5919	6.9248	0.5646
Base	4	18	CIM014 Min	-4.6049	-18.2775	64.0152	-39.4893	-6.9248	-0.5646
Base	4	18	CIM015	0	0.9114	32.9807	-7.8637	0	0
Base	4	18	COMB9	0	1.0334	74.563	-17.8102	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	COMB10	0	-9.7081	98.3088	-8.3663	0	0
Base	4	18	COMB11	0	1.0334	74.563	-17.8102	0	0
Base	4	18	DER09	0	3.4892	73.2477	-21.6354	0	0
Base	4	18	DER10	0	-9.7081	98.3088	-8.3663	0	0
Base	4	18	DER11	0	1.0334	74.563	-17.8102	0	0
Base	4	18	DERUD09	0	3.4892	73.2477	-21.6354	0	0
Base	4	18	DERUD10	0	-9.7081	98.3088	-8.3663	0	0
Base	4	18	DERUD11	0	1.0334	74.563	-17.8102	0	0
Base	5	19	D	-13.9232	5.1619	121.4105	-16.8603	-14.1922	0
Base	5	19	L	-2.442	-2.0447	12.5542	-0.199	-2.4892	0
Base	5	19	LR	0.0307	3.3432	5.6381	-3.367	0.0313	0
Base	5	19	EX Max	186.224	112.5204	65.9001	195.3874	313.9978	16.0699
Base	5	19	EY Max	0.0007	131.6743	46.4036	238.4528	0.0007	0
Base	5	19	DISX Max	41.5672	25.1157	14.7096	43.6125	70.0876	3.587
Base	5	19	DISY Max	0.0001	29.3911	10.3578	53.2252	0.0002	0
Base	5	19	W	0	0	0	0	0	0
Base	5	19	G	-1.2952	5.5505	18.2507	-6.8447	-1.3202	0
Base	5	19	DERUX Max	26.9145	15.8911	9.1879	27.5539	45.3659	2.2614
Base	5	19	DERUY Max	0.0001	19.1841	6.7607	34.741	0.0001	0
Base	5	19	COMB1	-19.4924	7.2266	169.9748	-23.6045	-19.8691	0
Base	5	19	COMB2	-20.5996	4.5943	168.5984	-22.2344	-20.9977	0
Base	5	19	COMB3	-19.1006	9.4987	167.2678	-25.8187	-19.4697	0
Base	5	19	COMB4	-19.1344	5.8211	161.0659	-22.115	-19.5042	0
Base	5	19	COMB5 Max	22.4174	38.0826	176.0638	39.1486	50.5678	3.587
Base	5	19	COMB5 Min	-60.717	-29.7835	140.4299	-80.0115	-89.6075	-3.587
Base	5	19	COMB6 Max	-6.6795	41.0753	173.0175	45.8775	1.5066	1.0761
Base	5	19	COMB6 Min	-31.6201	-32.7763	143.4762	-86.7404	-40.5463	-1.0761
Base	5	19	COMB7 Max	-0.0606	41.5715	124.0401	51.1346	8.2535	1.0761
Base	5	19	COMB7 Min	-25.0012	-32.2801	94.4988	-81.4832	-33.7994	-1.0761
Base	5	19	COMB8 Max	29.0363	38.5788	127.0864	44.4058	57.3147	3.587
Base	5	19	COMB8 Min	-54.0981	-29.2874	91.4526	-74.7544	-82.8606	-3.587
Base	5	19	ENVE Max	29.0363	41.5715	176.0638	51.1346	57.3147	3.587
Base	5	19	ENVE Min	-60.717	-32.7763	91.4526	-86.7404	-89.6075	-3.587
Base	5	19	CIM01	-13.9232	5.1619	121.4105	-16.8603	-14.1922	0
Base	5	19	CIM02	-16.3652	3.1172	133.9648	-17.0594	-16.6814	0
Base	5	19	CIM03	-13.8924	8.5051	127.0486	-20.2274	-14.1609	0
Base	5	19	CIM04	-15.7316	6.1357	135.0548	-19.5349	-16.0356	0
Base	5	19	CIM05 Max	15.1739	28.915	133.8824	24.8457	34.8692	2.5109
Base	5	19	CIM05 Min	-43.0202	-18.5913	108.9387	-58.5664	-63.2536	-2.5109
Base	5	19	CIM06 Max	-5.194	31.0099	131.75	29.5559	0.5263	0.7533
Base	5	19	CIM06 Min	-22.6524	-20.6862	111.0711	-63.2766	-28.9107	-0.7533
Base	5	19	CIM07 Max	6.299	24.1497	144.5081	12.0958	21.1109	1.9011
Base	5	19	CIM07 Min	-37.7622	-11.8782	125.6014	-51.1656	-53.1821	-1.9011
Base	5	19	CIM08 Max	-9.0808	25.7315	142.8979	15.6524	-4.8215	0.5739
Base	5	19	CIM08 Min	-22.3824	-13.46	127.2116	-54.7222	-27.2497	-0.5739
Base	5	19	DER01	-19.4924	7.2266	169.9748	-23.6045	-19.8691	0
Base	5	19	DER02	-20.5996	4.5943	168.5984	-22.2344	-20.9977	0
Base	5	19	DER03	-19.1006	9.4987	167.2678	-25.8187	-19.4697	0
Base	5	19	DER04	-19.1344	5.8211	161.0659	-22.115	-19.5042	0
Base	5	19	DER05 Max	167.0742	116.67	224.1469	174.956	294.478	16.0699
Base	5	19	DER05 Min	-205.3738	-108.3709	92.3468	-215.8189	-333.5177	-16.0699
Base	5	19	DER06 Max	-19.1491	135.8238	204.6505	218.0213	-19.5191	0
Base	5	19	DER06 Min	-19.1505	-127.5247	111.8432	-258.8842	-19.5205	0
Base	5	19	DER07 Max	173.6932	117.1661	175.1696	180.2131	301.2249	16.0699
Base	5	19	DER07 Min	-198.7549	-107.8748	43.3694	-210.5617	-326.7708	-16.0699
Base	5	19	DER08 Max	-12.5302	136.3199	155.6731	223.2785	-12.7723	0
Base	5	19	DER08 Min	-12.5315	-127.0286	62.8658	-253.6271	-12.7737	0
Base	5	19	DERUD01	-19.4924	7.2266	169.9748	-23.6045	-19.8691	0
Base	5	19	DERUD02	-20.5996	4.5943	168.5984	-22.2344	-20.9977	0
Base	5	19	DERUD03	-19.1006	9.4987	167.2678	-25.8187	-19.4697	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	5	19	DERUD04	-19.1344	5.8211	161.0659	-22.115	-19.5042	0
Base	5	19	DERUD05 Max	7.7647	20.0406	167.4347	7.1224	25.8461	2.2614
Base	5	19	DERUD05 Min	-46.0643	-11.7415	149.059	-47.9853	-64.8857	-2.2614
Base	5	19	DERUD06 Max	-19.1497	23.3336	165.0076	14.3095	-19.5197	0
Base	5	19	DERUD06 Min	-19.1499	-15.0345	151.4862	-55.1724	-19.5199	0
Base	5	19	DERUD07 Max	14.3836	20.5368	118.4574	12.3796	32.5929	2.2614
Base	5	19	DERUD07 Min	-39.4453	-11.2454	100.0816	-42.7282	-58.1389	-2.2614
Base	5	19	DERUD08 Max	-12.5308	23.8298	116.0302	19.5667	-12.7729	0
Base	5	19	DERUD08 Min	-12.531	-14.5384	102.5088	-49.9153	-12.7731	0
Base	5	19	CIM09 Max	20.7431	26.8503	85.3182	31.5898	40.546	2.5109
Base	5	19	CIM09 Min	-37.4509	-20.656	60.3745	-51.8223	-57.5767	-2.5109
Base	5	19	CIM010 Max	0.3753	28.9452	83.1858	36.3	6.2032	0.7533
Base	5	19	CIM010 Min	-17.0831	-22.7509	62.5069	-56.5325	-23.2338	-0.7533
Base	5	19	CIM011	-15.2184	10.7123	139.6613	-23.705	-15.5124	0
Base	5	19	CIM012	-16.7261	7.7912	144.5142	-22.1431	-17.0493	0
Base	5	19	CIM013 Max	5.3046	25.8051	153.9676	9.4876	20.0972	1.9011
Base	5	19	CIM013 Min	-38.7567	-10.2227	135.0609	-53.7738	-54.1957	-1.9011
Base	5	19	CIM014 Max	-10.0752	27.387	152.3574	13.0442	-5.8352	0.5739
Base	5	19	CIM014 Min	-23.3769	-11.8046	136.6711	-57.3305	-28.2634	-0.5739
Base	5	19	CIM015	-8.3539	3.0971	72.8463	-10.1162	-8.5153	0
Base	5	19	COMB9	-19.7974	6.9248	167.3722	-23.8538	-20.1799	0
Base	5	19	COMB10	-21.2221	13.0303	187.448	-31.3829	-21.6322	0
Base	5	19	COMB11	-19.7974	6.9248	167.3722	-23.8538	-20.1799	0
Base	5	19	DER09	-21.2626	5.6979	174.9048	-23.9732	-21.6734	0
Base	5	19	DER10	-21.2221	13.0303	187.448	-31.3829	-21.6322	0
Base	5	19	DER11	-19.7974	6.9248	167.3722	-23.8538	-20.1799	0
Base	5	19	DERUD09	-21.2626	5.6979	174.9048	-23.9732	-21.6734	0
Base	5	19	DERUD10	-21.2221	13.0303	187.448	-31.3829	-21.6322	0
Base	5	19	DERUD11	-19.7974	6.9248	167.3722	-23.8538	-20.1799	0
Base	6	21	D	-3.0663	2.1424	38.599	-13.7197	-3.0804	-0.0073
Base	6	21	L	-0.0409	3.5027	-1.6319	-5.7769	-0.0397	0.0006
Base	6	21	LR	-0.0238	-3.2658	5.7795	3.3004	-0.0248	-0.0082
Base	6	21	EX Max	88.9433	103.6763	49.6824	184.9323	153.0766	14.904
Base	6	21	EY Max	0.0468	130.8156	46.4257	235.876	0.0833	0.1059
Base	6	21	DISX Max	19.8531	23.1416	11.0896	41.2788	34.1683	3.3267
Base	6	21	DISY Max	0.0104	29.1994	10.3627	52.65	0.0186	0.0236
Base	6	21	W	0	0	0	0	0	0
Base	6	21	G	-0.0703	-4.5857	10.6525	3.3915	-0.0716	-0.0161
Base	6	21	DERUX Max	10.2881	14.5851	6.7404	26.0224	17.7287	2.1108
Base	6	21	DERUY Max	0.0068	19.059	6.7639	34.3656	0.0121	0.0154
Base	6	21	COMB1	-4.2928	2.9993	54.0385	-19.2076	-4.3126	-0.0102
Base	6	21	COMB2	-3.7569	6.5423	46.5975	-24.0564	-3.7724	-0.0119
Base	6	21	COMB3	-3.7585	0.8482	53.9341	-16.9598	-3.7758	-0.0213
Base	6	21	COMB4	-3.7324	4.4406	47.5767	-20.5903	-3.7486	-0.0123
Base	6	21	COMB5 Max	16.1357	37.975	58.8853	34.8333	30.4377	3.3257
Base	6	21	COMB5 Min	-23.5767	-25.8279	30.4884	-79.3144	-37.9101	-3.342
Base	6	21	COMB6 Max	2.2459	42.2155	58.3765	42.7931	6.5329	1.0135
Base	6	21	COMB6 Min	-9.6869	-30.0683	30.9973	-87.2742	-14.0053	-1.0298
Base	6	21	COMB7 Max	3.2067	38.07	48.4287	52.6859	7.4967	1.0151
Base	6	21	COMB7 Min	-8.726	-34.2138	21.0495	-77.3814	-13.0414	-1.0282
Base	6	21	COMB8 Max	17.0965	33.8296	48.9375	44.7261	31.4015	3.3273
Base	6	21	COMB8 Min	-22.6159	-29.9733	20.5406	-69.4216	-36.9462	-3.3404
Base	6	21	ENVE Max	17.0965	42.2155	58.8853	52.6859	31.4015	3.3273
Base	6	21	ENVE Min	-23.5767	-34.2138	20.5406	-87.2742	-37.9101	-3.342
Base	6	21	CIM01	-3.0663	2.1424	38.599	-13.7197	-3.0804	-0.0073
Base	6	21	CIM02	-3.1072	5.6451	36.9671	-19.4966	-3.1201	-0.0067
Base	6	21	CIM03	-3.0901	-1.1235	44.3785	-10.4193	-3.1052	-0.0155
Base	6	21	CIM04	-3.1148	2.32	41.7097	-15.577	-3.1287	-0.013
Base	6	21	CIM05 Max	10.833	24.4734	48.5379	26.232	20.8413	2.3264
Base	6	21	CIM05 Min	-16.9657	-20.1887	28.6601	-53.6714	-27.0021	-2.341

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	6	21	CIM06 Max	1.1101	27.4417	48.1817	31.8039	4.108	0.7079
Base	6	21	CIM06 Min	-7.2428	-23.157	29.0163	-59.2433	-10.2688	-0.7225
Base	6	21	CIM07 Max	7.409	19.257	49.2453	14.7248	14.9834	1.7539
Base	6	21	CIM07 Min	-13.6386	-14.6169	34.1742	-45.8788	-21.2409	-1.78
Base	6	21	CIM08 Max	0.0672	21.4984	48.9763	18.9321	2.348	0.5318
Base	6	21	CIM08 Min	-6.2969	-16.8583	34.4431	-50.0861	-8.6055	-0.5578
Base	6	21	DER01	-4.2928	2.9993	54.0385	-19.2076	-4.3126	-0.0102
Base	6	21	DER02	-3.7569	6.5423	46.5975	-24.0564	-3.7724	-0.0119
Base	6	21	DER03	-3.7585	0.8482	53.9341	-16.9598	-3.7758	-0.0213
Base	6	21	DER04	-3.7324	4.4406	47.5767	-20.5903	-3.7486	-0.0123
Base	6	21	DER05 Max	85.2228	109.7498	94.3693	162.6918	149.3405	14.8958
Base	6	21	DER05 Min	-92.6638	-97.6027	-4.9955	-207.1729	-156.8128	-14.9122
Base	6	21	DER06 Max	-3.6737	136.8892	91.1126	213.6355	-3.6529	0.0978
Base	6	21	DER06 Min	-3.7672	-124.7421	-1.7388	-258.1165	-3.8195	-0.1141
Base	6	21	DER07 Max	86.1836	105.6044	84.4215	172.5846	150.3043	14.8974
Base	6	21	DER07 Min	-91.703	-101.7482	-14.9433	-197.2801	-155.849	-14.9106
Base	6	21	DER08 Max	-2.7129	132.7437	81.1647	223.5283	-2.6891	0.0994
Base	6	21	DER08 Min	-2.8064	-128.8875	-11.6866	-248.2237	-2.8556	-0.1125
Base	6	21	DERUD01	-4.2928	2.9993	54.0385	-19.2076	-4.3126	-0.0102
Base	6	21	DERUD02	-3.7569	6.5423	46.5975	-24.0564	-3.7724	-0.0119
Base	6	21	DERUD03	-3.7585	0.8482	53.9341	-16.9598	-3.7758	-0.0213
Base	6	21	DERUD04	-3.7324	4.4406	47.5767	-20.5903	-3.7486	-0.0123
Base	6	21	DERUD05 Max	6.5676	20.6587	51.4273	3.7819	13.9925	2.1027
Base	6	21	DERUD05 Min	-14.0086	-8.5116	37.9465	-48.263	-21.4648	-2.119
Base	6	21	DERUD06 Max	-3.7137	25.1325	51.4508	12.125	-3.7241	0.0073
Base	6	21	DERUD06 Min	-3.7273	-12.9854	37.923	-56.6061	-3.7483	-0.0236
Base	6	21	DERUD07 Max	7.5284	16.5133	41.4795	13.6747	14.9563	2.1043
Base	6	21	DERUD07 Min	-13.0478	-12.657	27.9987	-38.3702	-20.501	-2.1174
Base	6	21	DERUD08 Max	-2.7529	20.9871	41.503	22.0178	-2.7602	0.0089
Base	6	21	DERUD08 Min	-2.7665	-17.1308	27.9752	-46.7133	-2.7845	-0.022
Base	6	21	CIM09 Max	12.0596	23.6164	33.0983	31.7199	22.0735	2.3293
Base	6	21	CIM09 Min	-15.7391	-21.0456	13.2205	-48.1835	-25.77	-2.3381
Base	6	21	CIM010 Max	2.3367	26.5848	32.7421	37.2917	5.3401	0.7108
Base	6	21	CIM010 Min	-6.0162	-24.0139	13.5767	-53.7554	-9.0366	-0.7195
Base	6	21	CIM011	-3.1366	-2.4434	49.2514	-10.3282	-3.152	-0.0234
Base	6	21	CIM012	-3.1497	1.3301	45.3644	-15.5087	-3.1639	-0.0189
Base	6	21	CIM013 Max	7.3741	18.2671	52.9	14.793	14.9483	1.748
Base	6	21	CIM013 Min	-13.6735	-15.6069	37.8289	-45.8105	-21.2761	-1.7859
Base	6	21	CIM014 Max	0.0323	20.5085	52.631	19.0004	2.3129	0.5259
Base	6	21	CIM014 Min	-6.3317	-17.8482	38.0979	-50.0178	-8.6407	-0.5637
Base	6	21	CIM015	-1.8398	1.2854	23.1594	-8.2318	-1.8482	-0.0044
Base	6	21	COMB9	-3.7556	3.7807	50.0131	-20.5448	-3.772	-0.0162
Base	6	21	COMB10	-3.833	-1.2636	61.7309	-16.8141	-3.8507	-0.0339
Base	6	21	COMB11	-3.7556	3.7807	50.0131	-20.5448	-3.772	-0.0162
Base	6	21	DER09	-3.7802	5.8823	49.034	-24.0109	-3.7958	-0.0159
Base	6	21	DER10	-3.833	-1.2636	61.7309	-16.8141	-3.8507	-0.0339
Base	6	21	DER11	-3.7556	3.7807	50.0131	-20.5448	-3.772	-0.0162
Base	6	21	DERUD09	-3.7802	5.8823	49.034	-24.0109	-3.7958	-0.0159
Base	6	21	DERUD10	-3.833	-1.2636	61.7309	-16.8141	-3.8507	-0.0339
Base	6	21	DERUD11	-3.7556	3.7807	50.0131	-20.5448	-3.772	-0.0162

5.4 Modal Results

Table 5.8 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.198	5.055	31.7602	1008.7111
Modal	2	0.184	5.433	34.1339	1165.1251
Modal	3	0.13	7.678	48.2432	2327.4059
Modal	4	0.052	19.306	121.305	14714.9041



Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	5	0.021	47.913	301.0458	90628.5495
Modal	6	0.017	57.175	359.2431	129055.599
Modal	7	0.017	58.303	366.3313	134198.5867
Modal	8	0.016	62.419	392.1876	153811.1288
Modal	9	0.01	95.905	602.5915	363116.4583

Table 5.9 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.198	0.6299	0	0	0.6299	0	0
Modal	2	0.184	0	1	0	0.6299	1	0
Modal	3	0.13	0.3682	0	0	0.9982	1	0
Modal	4	0.052	0.0018	0	0	1	1	0
Modal	5	0.021	0	0	0	1	1	0
Modal	6	0.017	0	2.837E-05	0	1	1	0
Modal	7	0.017	0	0	0	1	1	0
Modal	8	0.016	0	5.491E-07	0	1	1	0
Modal	9	0.01	0	0	0	1	1	0

Table 5.9 - Modal Participating Mass Ratios (Part 2 of 2)

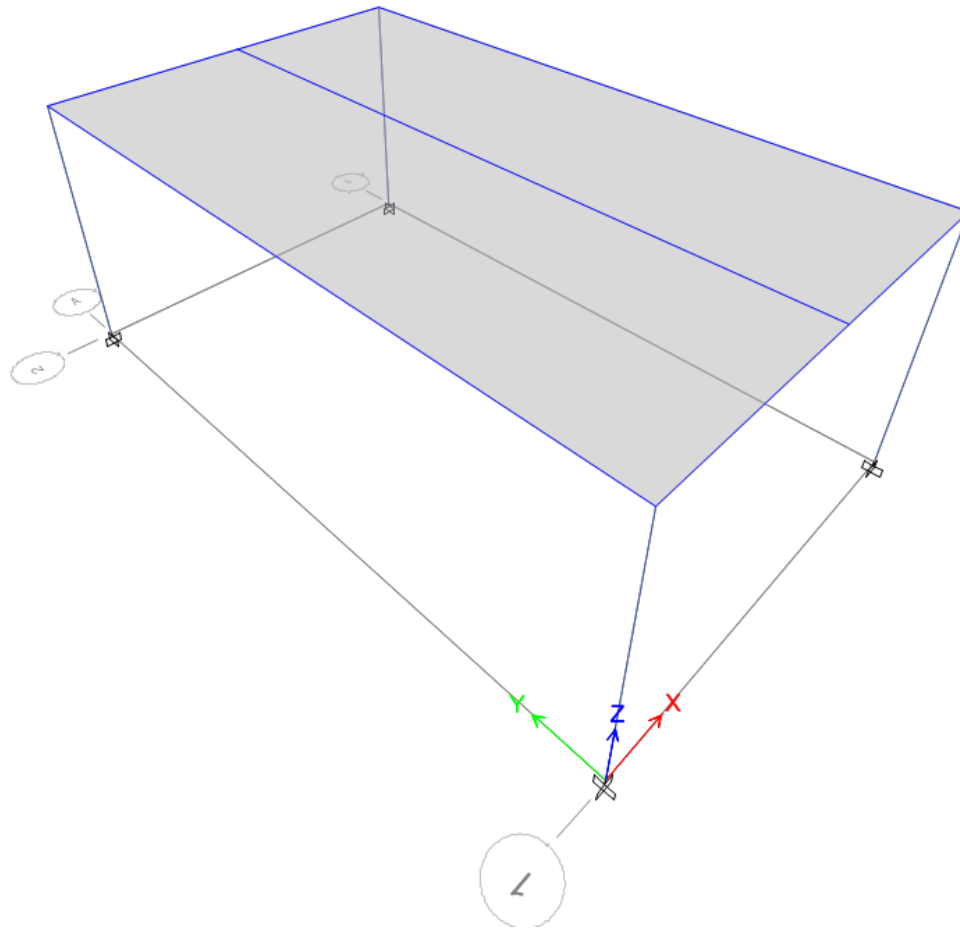
Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.6299	0.3965	0	0.6299	0.3965
Modal	2	1	0	0	1	0.6299	0.3965
Modal	3	0	0.3682	0.6015	1	0.9982	0.998
Modal	4	0	0.0018	0.002	1	1	1
Modal	5	0	0	0	1	1	1
Modal	6	2.837E-05	0	0	1	1	1
Modal	7	0	0	1.924E-05	1	1	1
Modal	8	5.491E-07	0	0	1	1	1
Modal	9	0	0	0	1	1	1

Table 5.10 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.11 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.198	0.642	0	0	0.358
Modal	2	0.184	0	1	0	0
Modal	3	0.13	0.368	0	0	0.632
Modal	4	0.052	0.027	0	0	0.973
Modal	5	0.021	0	1	0	0
Modal	6	0.017	0	1	0	0
Modal	7	0.017	0	0	0	1
Modal	8	0.016	0	1	0	0
Modal	9	0.01	0	0	0	1



## Project Report

Model File: 004 2017 PROTOTIPO EDUCACION MODULO 1B\_DES, Revision 0  
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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	600	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	4.9
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	4900	0	0
4	4900	8200	0
5	2500	0	0
7	2500	8200	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B3	5	7	None

### 1.5 Area Connectivity

**Table 1.7 - Floor Connectivity Data**

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

**1.6 Mass**

**Table 1.8 - Mass Source**

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

**Table 1.9 - Centers of Mass and Rigidity**

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	31936.65	31936.65	2.4546	4.1	31936.65	31936.65	2.4546	4.1	2.4511	4.1

**Table 1.10 - Mass Summary by Diaphragm**

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	31936.65	31936.65	657.97	2.4546	4.1

**Table 1.11 - Mass Summary by Story**

Story	UX kg	UY kg	UZ kg
N1	31936.65	31936.65	0
Base	2498.55	2498.55	0

**1.7 Groups**

**Table 1.12 - Group Definitions**

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	D1	
N1	3	6	D1	
N1	4	17	D1	
N1	5	4	D1	
N1	7	7	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	8200	V30X50	V30X50	11
N1	B2	14	Beam	8200	V30X50	V30X50	11
N1	B4	16	Beam	4900	V30X50	V30X50	11
N1	B6	18	Beam	4900	V30X50	V30X50	11
N1	B3	2	Beam	8200	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section
N1	F5	5	LOSA



## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Area Loads

**Table 4.2 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F5	5	D	Gravity	4.3
N1	F5	5	LR	Gravity	2
N1	F5	5	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.3 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
UMBRAL	0	0.1	2
UMBRAL	0.01	0.108	
UMBRAL	0.02	0.116	
UMBRAL	0.03	0.124	
UMBRAL	0.04	0.132	
UMBRAL	0.05	0.14	
UMBRAL	0.06	0.148	
UMBRAL	0.07	0.156	
UMBRAL	0.08	0.164	
UMBRAL	0.09	0.172	
UMBRAL	0.1	0.18	
UMBRAL	0.11	0.188	
UMBRAL	0.12	0.196	
UMBRAL	0.13	0.204	
UMBRAL	0.14	0.212	
UMBRAL	0.15	0.22	
UMBRAL	0.16	0.228	
UMBRAL	0.17	0.236	
UMBRAL	0.18	0.244	
UMBRAL	0.19	0.252	
UMBRAL	0.2	0.26	
UMBRAL	0.21	0.268	
UMBRAL	0.22	0.276	
UMBRAL	0.23	0.284	
UMBRAL	0.24	0.292	
UMBRAL	0.25	0.3	
UMBRAL	0.26	0.3	
UMBRAL	0.27	0.3	
UMBRAL	0.28	0.3	
UMBRAL	0.29	0.3	

Name	Period sec	Acceleration	Damping %
UMBRAL	0.3	0.3	
UMBRAL	0.31	0.3	
UMBRAL	0.32	0.3	
UMBRAL	0.33	0.3	
UMBRAL	0.34	0.3	
UMBRAL	0.35	0.3	
UMBRAL	0.36	0.3	
UMBRAL	0.37	0.3	
UMBRAL	0.38	0.3	
UMBRAL	0.39	0.3	
UMBRAL	0.4	0.3	
UMBRAL	0.41	0.3	
UMBRAL	0.42	0.3	
UMBRAL	0.43	0.3	
UMBRAL	0.44	0.3	
UMBRAL	0.45	0.3	
UMBRAL	0.46	0.3	
UMBRAL	0.47	0.3	
UMBRAL	0.48	0.3	
UMBRAL	0.49	0.3	
UMBRAL	0.5	0.3	
UMBRAL	0.51	0.3	
UMBRAL	0.52	0.3	
UMBRAL	0.53	0.3	
UMBRAL	0.54	0.3	
UMBRAL	0.55	0.3	
UMBRAL	0.56	0.3	
UMBRAL	0.57	0.3	
UMBRAL	0.58	0.3	
UMBRAL	0.59	0.3	
UMBRAL	0.6	0.3	
UMBRAL	0.61	0.3	
UMBRAL	0.62	0.3	
UMBRAL	0.63	0.3	
UMBRAL	0.64	0.3	
UMBRAL	0.65	0.3	
UMBRAL	0.66	0.3	
UMBRAL	0.67	0.3	
UMBRAL	0.68	0.3	
UMBRAL	0.69	0.3	
UMBRAL	0.7	0.3	
UMBRAL	0.71	0.3	
UMBRAL	0.72	0.3	
UMBRAL	0.73	0.3	
UMBRAL	0.74	0.3	
UMBRAL	0.75	0.3	
UMBRAL	0.76	0.3	
UMBRAL	0.77	0.3	
UMBRAL	0.78	0.3	
UMBRAL	0.79	0.3	
UMBRAL	0.8	0.3	
UMBRAL	0.81	0.3	
UMBRAL	0.82	0.3	
UMBRAL	0.83	0.3	
UMBRAL	0.84	0.3	
UMBRAL	0.85	0.3	
UMBRAL	0.86	0.3	
UMBRAL	0.87	0.3	
UMBRAL	0.88	0.3	
UMBRAL	0.89	0.3	

Name	Period sec	Acceleration	Damping %
UMBRAL	0.9	0.3	
UMBRAL	0.91	0.3	
UMBRAL	0.92	0.3	
UMBRAL	0.93	0.3	
UMBRAL	0.94	0.3	
UMBRAL	0.95	0.3	
UMBRAL	0.96	0.3	
UMBRAL	0.97	0.3	
UMBRAL	0.98	0.3	
UMBRAL	0.99	0.3	
UMBRAL	1	0.3	
UMBRAL	1.01	0.297	
UMBRAL	1.02	0.294	
UMBRAL	1.03	0.291	
UMBRAL	1.04	0.288	
UMBRAL	1.05	0.286	
UMBRAL	1.06	0.283	
UMBRAL	1.07	0.28	
UMBRAL	1.08	0.278	
UMBRAL	1.09	0.275	
UMBRAL	1.1	0.273	
UMBRAL	1.11	0.27	
UMBRAL	1.12	0.268	
UMBRAL	1.13	0.265	
UMBRAL	1.14	0.263	
UMBRAL	1.15	0.261	
UMBRAL	1.16	0.259	
UMBRAL	1.17	0.256	
UMBRAL	1.18	0.254	
UMBRAL	1.19	0.252	
UMBRAL	1.2	0.25	
UMBRAL	1.21	0.248	
UMBRAL	1.22	0.246	
UMBRAL	1.23	0.244	
UMBRAL	1.24	0.242	
UMBRAL	1.25	0.24	
UMBRAL	1.26	0.238	
UMBRAL	1.27	0.236	
UMBRAL	1.28	0.234	
UMBRAL	1.29	0.233	
UMBRAL	1.3	0.231	
UMBRAL	1.31	0.229	
UMBRAL	1.32	0.227	
UMBRAL	1.33	0.226	
UMBRAL	1.34	0.224	
UMBRAL	1.35	0.222	
UMBRAL	1.36	0.221	
UMBRAL	1.37	0.219	
UMBRAL	1.38	0.217	
UMBRAL	1.39	0.216	
UMBRAL	1.4	0.214	
UMBRAL	1.41	0.213	
UMBRAL	1.42	0.211	
UMBRAL	1.43	0.21	
UMBRAL	1.44	0.208	
UMBRAL	1.45	0.207	
UMBRAL	1.46	0.205	
UMBRAL	1.47	0.204	
UMBRAL	1.48	0.203	
UMBRAL	1.49	0.201	

Name	Period sec	Acceleration	Damping %
UMBRAL	1.5	0.2	
UMBRAL	1.51	0.199	
UMBRAL	1.52	0.197	
UMBRAL	1.53	0.196	
UMBRAL	1.54	0.195	
UMBRAL	1.55	0.194	
UMBRAL	1.56	0.192	
UMBRAL	1.57	0.191	
UMBRAL	1.58	0.19	
UMBRAL	1.59	0.189	
UMBRAL	1.6	0.188	
UMBRAL	1.61	0.186	
UMBRAL	1.62	0.185	
UMBRAL	1.63	0.184	
UMBRAL	1.64	0.183	
UMBRAL	1.65	0.182	
UMBRAL	1.66	0.181	
UMBRAL	1.67	0.18	
UMBRAL	1.68	0.179	
UMBRAL	1.69	0.178	
UMBRAL	1.7	0.176	
UMBRAL	1.71	0.175	
UMBRAL	1.72	0.174	
UMBRAL	1.73	0.173	
UMBRAL	1.74	0.172	
UMBRAL	1.75	0.171	
UMBRAL	1.76	0.17	
UMBRAL	1.77	0.169	
UMBRAL	1.78	0.169	
UMBRAL	1.79	0.168	
UMBRAL	1.8	0.167	
UMBRAL	1.81	0.166	
UMBRAL	1.82	0.165	
UMBRAL	1.83	0.164	
UMBRAL	1.84	0.163	
UMBRAL	1.85	0.162	
UMBRAL	1.86	0.161	
UMBRAL	1.87	0.16	
UMBRAL	1.88	0.16	
UMBRAL	1.89	0.159	
UMBRAL	1.9	0.158	
UMBRAL	1.91	0.157	
UMBRAL	1.92	0.156	
UMBRAL	1.93	0.155	
UMBRAL	1.94	0.155	
UMBRAL	1.95	0.154	
UMBRAL	1.96	0.153	
UMBRAL	1.97	0.152	
UMBRAL	1.98	0.152	
UMBRAL	1.99	0.151	
UMBRAL	2	0.15	
UMBRAL	2.01	0.149	
UMBRAL	2.02	0.149	
UMBRAL	2.03	0.148	
UMBRAL	2.04	0.147	
UMBRAL	2.05	0.146	
UMBRAL	2.06	0.146	
UMBRAL	2.07	0.145	
UMBRAL	2.08	0.144	
UMBRAL	2.09	0.144	

Name	Period sec	Acceleration	Damping %
UMBRAL	2.1	0.143	
UMBRAL	2.11	0.142	
UMBRAL	2.12	0.142	
UMBRAL	2.13	0.141	
UMBRAL	2.14	0.14	
UMBRAL	2.15	0.14	
UMBRAL	2.16	0.139	
UMBRAL	2.17	0.138	
UMBRAL	2.18	0.138	
UMBRAL	2.19	0.137	
UMBRAL	2.2	0.136	
UMBRAL	2.21	0.136	
UMBRAL	2.22	0.135	
UMBRAL	2.23	0.135	
UMBRAL	2.24	0.134	
UMBRAL	2.25	0.133	
UMBRAL	2.26	0.133	
UMBRAL	2.27	0.132	
UMBRAL	2.28	0.132	
UMBRAL	2.29	0.131	
UMBRAL	2.3	0.13	
UMBRAL	2.31	0.13	
UMBRAL	2.32	0.129	
UMBRAL	2.33	0.129	
UMBRAL	2.34	0.128	
UMBRAL	2.35	0.128	
UMBRAL	2.36	0.127	
UMBRAL	2.37	0.127	
UMBRAL	2.38	0.126	
UMBRAL	2.39	0.126	
UMBRAL	2.4	0.125	
UMBRAL	2.41	0.124	
UMBRAL	2.42	0.124	
UMBRAL	2.43	0.123	
UMBRAL	2.44	0.123	
UMBRAL	2.45	0.122	
UMBRAL	2.46	0.122	
UMBRAL	2.47	0.121	
UMBRAL	2.48	0.121	
UMBRAL	2.49	0.12	
UMBRAL	2.5	0.12	
UMBRAL	2.51	0.12	
UMBRAL	2.52	0.119	
UMBRAL	2.53	0.119	
UMBRAL	2.54	0.118	
UMBRAL	2.55	0.118	
UMBRAL	2.56	0.117	
UMBRAL	2.57	0.117	
UMBRAL	2.58	0.116	
UMBRAL	2.59	0.116	
UMBRAL	2.6	0.115	
UMBRAL	2.61	0.115	
UMBRAL	2.62	0.115	
UMBRAL	2.63	0.114	
UMBRAL	2.64	0.114	
UMBRAL	2.65	0.113	
UMBRAL	2.66	0.113	
UMBRAL	2.67	0.112	
UMBRAL	2.68	0.112	
UMBRAL	2.69	0.112	

Name	Period sec	Acceleration	Damping %
UMBRAL	2.7	0.111	
UMBRAL	2.71	0.111	
UMBRAL	2.72	0.11	
UMBRAL	2.73	0.11	
UMBRAL	2.74	0.109	
UMBRAL	2.75	0.109	
UMBRAL	2.76	0.109	
UMBRAL	2.77	0.108	
UMBRAL	2.78	0.108	
UMBRAL	2.79	0.108	
UMBRAL	2.8	0.107	
UMBRAL	2.81	0.107	
UMBRAL	2.82	0.106	
UMBRAL	2.83	0.106	
UMBRAL	2.84	0.106	
UMBRAL	2.85	0.105	
UMBRAL	2.86	0.105	
UMBRAL	2.87	0.105	
UMBRAL	2.88	0.104	
UMBRAL	2.89	0.104	
UMBRAL	2.9	0.103	
UMBRAL	2.91	0.103	
UMBRAL	2.92	0.103	
UMBRAL	2.93	0.102	
UMBRAL	2.94	0.102	
UMBRAL	2.95	0.102	
UMBRAL	2.96	0.101	
UMBRAL	2.97	0.101	
UMBRAL	2.98	0.101	
UMBRAL	2.99	0.1	
UMBRAL	3	0.1	
UMBRAL	3.01	0.1	
UMBRAL	3.02	0.099	
UMBRAL	3.03	0.099	
UMBRAL	3.04	0.099	
UMBRAL	3.05	0.098	
UMBRAL	3.06	0.098	
UMBRAL	3.07	0.098	
UMBRAL	3.08	0.097	
UMBRAL	3.09	0.097	
UMBRAL	3.1	0.097	
UMBRAL	3.11	0.096	
UMBRAL	3.12	0.096	
UMBRAL	3.13	0.096	
UMBRAL	3.14	0.096	
UMBRAL	3.15	0.095	
UMBRAL	3.16	0.095	
UMBRAL	3.17	0.095	
UMBRAL	3.18	0.094	
UMBRAL	3.19	0.094	
UMBRAL	3.2	0.094	
UMBRAL	3.21	0.093	
UMBRAL	3.22	0.093	
UMBRAL	3.23	0.093	
UMBRAL	3.24	0.093	
UMBRAL	3.25	0.092	
UMBRAL	3.26	0.092	
UMBRAL	3.27	0.092	
UMBRAL	3.28	0.091	
UMBRAL	3.29	0.091	

Name	Period sec	Acceleration	Damping %
UMBRAL	3.3	0.091	
UMBRAL	3.31	0.091	
UMBRAL	3.32	0.09	
UMBRAL	3.33	0.09	
UMBRAL	3.34	0.09	
UMBRAL	3.35	0.09	
UMBRAL	3.36	0.089	
UMBRAL	3.37	0.089	
UMBRAL	3.38	0.089	
UMBRAL	3.39	0.088	
UMBRAL	3.4	0.088	
UMBRAL	3.41	0.088	
UMBRAL	3.42	0.088	
UMBRAL	3.43	0.087	
UMBRAL	3.44	0.087	
UMBRAL	3.45	0.087	
UMBRAL	3.46	0.087	
UMBRAL	3.47	0.086	
UMBRAL	3.48	0.086	
UMBRAL	3.49	0.086	
UMBRAL	3.5	0.086	
UMBRAL	3.51	0.085	
UMBRAL	3.52	0.085	
UMBRAL	3.53	0.085	
UMBRAL	3.54	0.085	
UMBRAL	3.55	0.085	
UMBRAL	3.56	0.084	
UMBRAL	3.57	0.084	
UMBRAL	3.58	0.084	
UMBRAL	3.59	0.084	
UMBRAL	3.6	0.083	
UMBRAL	3.61	0.083	
UMBRAL	3.62	0.083	
UMBRAL	3.63	0.083	
UMBRAL	3.64	0.082	
UMBRAL	3.65	0.082	
UMBRAL	3.66	0.082	
UMBRAL	3.67	0.082	
UMBRAL	3.68	0.082	
UMBRAL	3.69	0.081	
UMBRAL	3.7	0.081	
UMBRAL	3.71	0.081	
UMBRAL	3.72	0.081	
UMBRAL	3.73	0.08	
UMBRAL	3.74	0.08	
UMBRAL	3.75	0.08	
UMBRAL	3.76	0.08	
UMBRAL	3.77	0.08	
UMBRAL	3.78	0.079	
UMBRAL	3.79	0.079	
UMBRAL	3.8	0.079	
UMBRAL	3.81	0.079	
UMBRAL	3.82	0.079	
UMBRAL	3.83	0.078	
UMBRAL	3.84	0.078	
UMBRAL	3.85	0.078	
UMBRAL	3.86	0.078	
UMBRAL	3.87	0.078	
UMBRAL	3.88	0.077	
UMBRAL	3.89	0.077	

Name	Period sec	Acceleration	Damping %
UMBRAL	3.9	0.077	
UMBRAL	3.91	0.077	
UMBRAL	3.92	0.077	
UMBRAL	3.93	0.076	
UMBRAL	3.94	0.076	
UMBRAL	3.95	0.076	
UMBRAL	3.96	0.076	
UMBRAL	3.97	0.076	
UMBRAL	3.98	0.075	
UMBRAL	3.99	0.075	
UMBRAL	4	0.075	
UMBRAL	4.01	0.075	
UMBRAL	4.02	0.075	
UMBRAL	4.03	0.074	
UMBRAL	4.04	0.074	
UMBRAL	4.05	0.074	
UMBRAL	4.06	0.074	
UMBRAL	4.07	0.074	
UMBRAL	4.08	0.074	
UMBRAL	4.09	0.073	
UMBRAL	4.1	0.073	
UMBRAL	4.11	0.073	
UMBRAL	4.12	0.073	
UMBRAL	4.13	0.073	
UMBRAL	4.14	0.072	
UMBRAL	4.15	0.072	
UMBRAL	4.16	0.072	
UMBRAL	4.17	0.072	
UMBRAL	4.18	0.072	
UMBRAL	4.19	0.072	
UMBRAL	4.2	0.071	
UMBRAL	4.21	0.071	
UMBRAL	4.22	0.071	
UMBRAL	4.23	0.071	
UMBRAL	4.24	0.071	
UMBRAL	4.25	0.071	
UMBRAL	4.26	0.07	
UMBRAL	4.27	0.07	
UMBRAL	4.28	0.07	
UMBRAL	4.29	0.07	
UMBRAL	4.3	0.07	
UMBRAL	4.31	0.07	
UMBRAL	4.32	0.069	
UMBRAL	4.33	0.069	
UMBRAL	4.34	0.069	
UMBRAL	4.35	0.069	
UMBRAL	4.36	0.069	
UMBRAL	4.37	0.069	
UMBRAL	4.38	0.068	
UMBRAL	4.39	0.068	
UMBRAL	4.4	0.068	
UMBRAL	4.41	0.068	
UMBRAL	4.42	0.068	
UMBRAL	4.43	0.068	
UMBRAL	4.44	0.068	
UMBRAL	4.45	0.067	
UMBRAL	4.46	0.067	
UMBRAL	4.47	0.067	
UMBRAL	4.48	0.067	
UMBRAL	4.49	0.067	



Name	Period sec	Acceleration	Damping %
UMBRAL	4.5	0.067	
UMBRAL	4.51	0.067	
UMBRAL	4.52	0.066	
UMBRAL	4.53	0.066	
UMBRAL	4.54	0.066	
UMBRAL	4.55	0.066	
UMBRAL	4.56	0.066	
UMBRAL	4.57	0.066	
UMBRAL	4.58	0.066	
UMBRAL	4.59	0.065	
UMBRAL	4.6	0.065	
UMBRAL	4.61	0.065	
UMBRAL	4.62	0.065	
UMBRAL	4.63	0.065	
UMBRAL	4.64	0.065	
UMBRAL	4.65	0.065	
UMBRAL	4.66	0.064	
UMBRAL	4.67	0.064	
UMBRAL	4.68	0.064	
UMBRAL	4.69	0.064	
UMBRAL	4.7	0.064	
UMBRAL	4.71	0.064	
UMBRAL	4.72	0.064	
UMBRAL	4.73	0.063	
UMBRAL	4.74	0.063	
UMBRAL	4.75	0.063	
UMBRAL	4.76	0.063	
UMBRAL	4.77	0.063	
UMBRAL	4.78	0.063	
UMBRAL	4.79	0.063	
UMBRAL	4.8	0.063	
UMBRAL	4.81	0.062	
UMBRAL	4.82	0.062	
UMBRAL	4.83	0.062	
UMBRAL	4.84	0.061	
UMBRAL	4.85	0.061	
UMBRAL	4.86	0.061	
UMBRAL	4.87	0.061	
UMBRAL	4.88	0.06	
UMBRAL	4.89	0.06	
UMBRAL	4.9	0.06	
UMBRAL	4.91	0.06	
UMBRAL	4.92	0.059	
UMBRAL	4.93	0.059	
UMBRAL	4.94	0.059	
UMBRAL	4.95	0.059	
UMBRAL	4.96	0.059	
UMBRAL	4.97	0.058	
UMBRAL	4.98	0.058	
UMBRAL	4.99	0.058	
UMBRAL	5	0.058	
UMBRAL	5.01	0.057	
UMBRAL	5.02	0.057	
UMBRAL	5.03	0.057	
UMBRAL	5.04	0.057	
UMBRAL	5.05	0.056	
UMBRAL	5.06	0.056	
UMBRAL	5.07	0.056	
UMBRAL	5.08	0.056	
UMBRAL	5.09	0.056	

Name	Period sec	Acceleration	Damping %
UMBRAL	5.1	0.055	
UMBRAL	5.11	0.055	
UMBRAL	5.12	0.055	
UMBRAL	5.13	0.055	
UMBRAL	5.14	0.055	
UMBRAL	5.15	0.054	
UMBRAL	5.16	0.054	
UMBRAL	5.17	0.054	
UMBRAL	5.18	0.054	
UMBRAL	5.19	0.053	
UMBRAL	5.2	0.053	
UMBRAL	5.21	0.053	
UMBRAL	5.22	0.053	
UMBRAL	5.23	0.053	
UMBRAL	5.24	0.052	
UMBRAL	5.25	0.052	
UMBRAL	5.26	0.052	
UMBRAL	5.27	0.052	
UMBRAL	5.28	0.052	
UMBRAL	5.29	0.051	
UMBRAL	5.3	0.051	
UMBRAL	5.31	0.051	
UMBRAL	5.32	0.051	
UMBRAL	5.33	0.051	
UMBRAL	5.34	0.05	
UMBRAL	5.35	0.05	
UMBRAL	5.36	0.05	
UMBRAL	5.37	0.05	
UMBRAL	5.38	0.05	
UMBRAL	5.39	0.05	
UMBRAL	5.4	0.049	
UMBRAL	5.41	0.049	
UMBRAL	5.42	0.049	
UMBRAL	5.43	0.049	
UMBRAL	5.44	0.049	
UMBRAL	5.45	0.048	
UMBRAL	5.46	0.048	
UMBRAL	5.47	0.048	
UMBRAL	5.48	0.048	
UMBRAL	5.49	0.048	
UMBRAL	5.5	0.048	
UMBRAL	5.51	0.047	
UMBRAL	5.52	0.047	
UMBRAL	5.53	0.047	
UMBRAL	5.54	0.047	
UMBRAL	5.55	0.047	
UMBRAL	5.56	0.047	
UMBRAL	5.57	0.046	
UMBRAL	5.58	0.046	
UMBRAL	5.59	0.046	
UMBRAL	5.6	0.046	
UMBRAL	5.61	0.046	
UMBRAL	5.62	0.046	
UMBRAL	5.63	0.045	
UMBRAL	5.64	0.045	
UMBRAL	5.65	0.045	
UMBRAL	5.66	0.045	
UMBRAL	5.67	0.045	
UMBRAL	5.68	0.045	
UMBRAL	5.69	0.044	

Name	Period sec	Acceleration	Damping %
UMBRAL	5.7	0.044	
UMBRAL	5.71	0.044	
UMBRAL	5.72	0.044	
UMBRAL	5.73	0.044	
UMBRAL	5.74	0.044	
UMBRAL	5.75	0.044	
UMBRAL	5.76	0.043	
UMBRAL	5.77	0.043	
UMBRAL	5.78	0.043	
UMBRAL	5.79	0.043	
UMBRAL	5.8	0.043	
UMBRAL	5.81	0.043	
UMBRAL	5.82	0.043	
UMBRAL	5.83	0.042	
UMBRAL	5.84	0.042	
UMBRAL	5.85	0.042	
UMBRAL	5.86	0.042	
UMBRAL	5.87	0.042	
UMBRAL	5.88	0.042	
UMBRAL	5.89	0.042	
UMBRAL	5.9	0.041	
UMBRAL	5.91	0.041	
UMBRAL	5.92	0.041	
UMBRAL	5.93	0.041	
UMBRAL	5.94	0.041	
UMBRAL	5.95	0.041	
UMBRAL	5.96	0.041	
UMBRAL	5.97	0.04	
UMBRAL	5.98	0.04	
UMBRAL	5.99	0.04	
UMBRAL	6	0.04	
UMBRAL	6.01	0.04	
UMBRAL	6.02	0.04	
UMBRAL	6.03	0.04	
UMBRAL	6.04	0.039	
UMBRAL	6.05	0.039	
UMBRAL	6.06	0.039	
UMBRAL	6.07	0.039	
UMBRAL	6.08	0.039	
UMBRAL	6.09	0.039	
UMBRAL	6.1	0.039	
UMBRAL	6.11	0.039	
UMBRAL	6.12	0.038	
UMBRAL	6.13	0.038	
UMBRAL	6.14	0.038	
UMBRAL	6.15	0.038	
UMBRAL	6.16	0.038	
UMBRAL	6.17	0.038	
UMBRAL	6.18	0.038	
UMBRAL	6.19	0.038	
UMBRAL	6.2	0.037	
UMBRAL	6.21	0.037	
UMBRAL	6.22	0.037	
UMBRAL	6.23	0.037	
UMBRAL	6.24	0.037	
UMBRAL	6.25	0.037	
UMBRAL	6.26	0.037	
UMBRAL	6.27	0.037	
UMBRAL	6.28	0.037	
UMBRAL	6.29	0.036	

Name	Period sec	Acceleration	Damping %
UMBRAL	6.3	0.036	
UMBRAL	6.31	0.036	
UMBRAL	6.32	0.036	
UMBRAL	6.33	0.036	
UMBRAL	6.34	0.036	
UMBRAL	6.35	0.036	
UMBRAL	6.36	0.036	
UMBRAL	6.37	0.035	
UMBRAL	6.38	0.035	
UMBRAL	6.39	0.035	
UMBRAL	6.4	0.035	
UMBRAL	6.41	0.035	
UMBRAL	6.42	0.035	
UMBRAL	6.43	0.035	
UMBRAL	6.44	0.035	
UMBRAL	6.45	0.035	
UMBRAL	6.46	0.035	
UMBRAL	6.47	0.034	
UMBRAL	6.48	0.034	
UMBRAL	6.49	0.034	
UMBRAL	6.5	0.034	
UMBRAL	6.51	0.034	
UMBRAL	6.52	0.034	
UMBRAL	6.53	0.034	
UMBRAL	6.54	0.034	
UMBRAL	6.55	0.034	
UMBRAL	6.56	0.033	
UMBRAL	6.57	0.033	
UMBRAL	6.58	0.033	
UMBRAL	6.59	0.033	
UMBRAL	6.6	0.033	
UMBRAL	6.61	0.033	
UMBRAL	6.62	0.033	
UMBRAL	6.63	0.033	
UMBRAL	6.64	0.033	
UMBRAL	6.65	0.033	
UMBRAL	6.66	0.032	
UMBRAL	6.67	0.032	
UMBRAL	6.68	0.032	
UMBRAL	6.69	0.032	
UMBRAL	6.7	0.032	
UMBRAL	6.71	0.032	
UMBRAL	6.72	0.032	
UMBRAL	6.73	0.032	
UMBRAL	6.74	0.032	
UMBRAL	6.75	0.032	
UMBRAL	6.76	0.032	
UMBRAL	6.77	0.031	
UMBRAL	6.78	0.031	
UMBRAL	6.79	0.031	
UMBRAL	6.8	0.031	
UMBRAL	6.81	0.031	
UMBRAL	6.82	0.031	
UMBRAL	6.83	0.031	
UMBRAL	6.84	0.031	
UMBRAL	6.85	0.031	
UMBRAL	6.86	0.031	
UMBRAL	6.87	0.031	
UMBRAL	6.88	0.03	
UMBRAL	6.89	0.03	

Name	Period sec	Acceleration	Damping %
UMBRAL	6.9	0.03	
UMBRAL	6.91	0.03	
UMBRAL	6.92	0.03	
UMBRAL	6.93	0.03	
UMBRAL	6.94	0.03	
UMBRAL	6.95	0.03	
UMBRAL	6.96	0.03	
UMBRAL	6.97	0.03	
UMBRAL	6.98	0.03	
UMBRAL	6.99	0.029	
UMBRAL	7	0.029	
UMBRAL	7.01	0.029	
UMBRAL	7.02	0.029	
UMBRAL	7.03	0.029	
UMBRAL	7.04	0.029	
UMBRAL	7.05	0.029	
UMBRAL	7.06	0.029	
UMBRAL	7.07	0.029	
UMBRAL	7.08	0.029	
UMBRAL	7.09	0.029	
UMBRAL	7.1	0.029	
UMBRAL	7.11	0.028	
UMBRAL	7.12	0.028	
UMBRAL	7.13	0.028	
UMBRAL	7.14	0.028	
UMBRAL	7.15	0.028	
UMBRAL	7.16	0.028	
UMBRAL	7.17	0.028	
UMBRAL	7.18	0.028	
UMBRAL	7.19	0.028	
UMBRAL	7.2	0.028	
UMBRAL	7.21	0.028	
UMBRAL	7.22	0.028	
UMBRAL	7.23	0.028	
UMBRAL	7.24	0.027	
UMBRAL	7.25	0.027	
UMBRAL	7.26	0.027	
UMBRAL	7.27	0.027	
UMBRAL	7.28	0.027	
UMBRAL	7.29	0.027	
UMBRAL	7.3	0.027	
UMBRAL	7.31	0.027	
UMBRAL	7.32	0.027	
UMBRAL	7.33	0.027	
UMBRAL	7.34	0.027	
UMBRAL	7.35	0.027	
UMBRAL	7.36	0.027	
UMBRAL	7.37	0.027	
UMBRAL	7.38	0.026	
UMBRAL	7.39	0.026	
UMBRAL	7.4	0.026	
UMBRAL	7.41	0.026	
UMBRAL	7.42	0.026	
UMBRAL	7.43	0.026	
UMBRAL	7.44	0.026	
UMBRAL	7.45	0.026	
UMBRAL	7.46	0.026	
UMBRAL	7.47	0.026	
UMBRAL	7.48	0.026	
UMBRAL	7.49	0.026	

Name	Period sec	Acceleration	Damping %
UMBRAL	7.5	0.026	

4.4 Load Cases

Table 4.4 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.5 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
CIM09	D	1	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	1	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	L	0.75		No
CIM12	G	0.75		No
CIM13	D	1	Linear Add	No
CIM13	L	0.75		No
CIM13	G	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	L	0.75		No
CIM14	G	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER010	D	1.2	Linear Add	No
DER010	L	1		No
DER010	G	1.6		No
DER011	D	1.2	Linear Add	No
DER011	L	1		No
DER011	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No



## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	337.694	1384.5454	-828.7955	0	0	0	0
L	0	0	0	0	0	0	0	0	0
LR	0	0	80.36	329.476	-196.8807	0	0	0	0
EX Max	447.7978	0	0	0	1458.6231	1835.971	0	0	0
EY Max	0	447.7955	0	1458.9496	0	1102.6672	0	0	0
DISX Max	106.5736	0	0	0	347.1449	436.9518	0	0	0
DISY Max	0	106.5731	0	347.2226	0	262.4292	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	40.18	164.738	-98.4403	0	0	0	0
DERUX Max	61.752	0	0	0	201.1464	253.1833	0	0	0
DERUY Max	0	62.3194	0	203.041	0	153.4801	0	0	0
COMB1	0	0	472.7716	1938.3636	-1160.3137	0	0	0	0
COMB2	0	0	445.4128	1826.1925	-1092.9949	0	0	0	0
COMB3	0	0	533.8088	2188.6161	-1309.5637	0	0	0	0
COMB4	0	0	445.4128	1826.1925	-1092.9949	0	0	0	0
COMB5 Max	106.5736	31.9719	405.2328	1765.6213	-647.4097	515.6806	0	0	0
COMB5 Min	-106.5736	-31.9719	405.2328	1557.2877	-1341.6995	-515.6806	0	0	0
COMB6 Max	31.9721	106.5731	405.2328	2008.6771	-890.4111	393.5148	0	0	0
COMB6 Min	-31.9721	-106.5731	405.2328	1314.2319	-1098.6981	-393.5148	0	0	0
COMB7 Max	31.9721	106.5731	303.9246	1593.3135	-641.7725	393.5148	0	0	0
COMB7 Min	-31.9721	-106.5731	303.9246	898.8682	-850.0594	-393.5148	0	0	0
COMB8 Max	106.5736	31.9719	303.9246	1350.2576	-398.771	515.6806	0	0	0
COMB8 Min	-106.5736	-31.9719	303.9246	1141.9241	-1093.0609	-515.6806	0	0	0
ENVE Max	106.5736	106.5731	533.8088	2188.6161	-398.771	515.6806	0	0	0
ENVE Min	-106.5736	-106.5731	303.9246	898.8682	-1341.6995	-515.6806	0	0	0
CIM01	0	0	337.694	1384.5454	-828.7955	0	0	0	0
CIM02	0	0	337.694	1384.5454	-828.7955	0	0	0	0
CIM03	0	0	418.054	1714.0214	-1025.6762	0	0	0	0
CIM04	0	0	397.964	1631.6524	-976.456	0	0	0	0
CIM05 Max	74.6015	22.3803	337.694	1457.4622	-585.794	360.9764	0	0	0
CIM05 Min	-74.6015	-22.3803	337.694	1311.6286	-1071.7969	-360.9764	0	0	0
CIM06 Max	22.3805	74.6012	337.694	1627.6012	-755.895	275.4603	0	0	0
CIM06 Min	-22.3805	-74.6012	337.694	1141.4896	-901.6959	-275.4603	0	0	0
CIM07 Max	56.484	17.0517	397.964	1687.208	-792.4692	273.5731	0	0	0
CIM07 Min	-56.484	-17.0517	397.964	1576.0968	-1160.4428	-273.5731	0	0	0
CIM08 Max	17.0518	56.4837	397.964	1815.6804	-920.9128	208.9998	0	0	0
CIM08 Min	-17.0518	-56.4837	397.964	1447.6244	-1031.9992	-208.9998	0	0	0
DER01	0	0	472.7716	1938.3636	-1160.3137	0	0	0	0
DER02	0	0	445.4128	1826.1925	-1092.9949	0	0	0	0
DER03	0	0	533.8088	2188.6161	-1309.5637	0	0	0	0
DER04	0	0	445.4128	1826.1925	-1092.9949	0	0	0	0
DER05 Max	447.7978	0	405.2328	1661.4545	464.0685	1835.971	0	0	0
DER05 Min	-447.7978	0	405.2328	1661.4545	-2453.1777	-1835.971	0	0	0
DER06 Max	0	447.7955	405.2328	3120.4041	-994.5546	1102.6672	0	0	0
DER06 Min	0	-447.7955	405.2328	202.5049	-994.5546	-1102.6672	0	0	0
DER07 Max	447.7978	0	303.9246	1246.0909	712.7072	1835.971	0	0	0
DER07 Min	-447.7978	0	303.9246	1246.0909	-2204.539	-1835.971	0	0	0
DER08 Max	0	447.7955	303.9246	2705.0405	-745.9159	1102.6672	0	0	0
DER08 Min	0	-447.7955	303.9246	-212.8587	-745.9159	-1102.6672	0	0	0
DERUD01	0	0	472.7716	1938.3636	-1160.3137	0	0	0	0
DERUD02	0	0	445.4128	1826.1925	-1092.9949	0	0	0	0
DERUD03	0	0	533.8088	2188.6161	-1309.5637	0	0	0	0
DERUD04	0	0	445.4128	1826.1925	-1092.9949	0	0	0	0
DERUD05 Max	61.752	0	405.2328	1661.4545	-793.4081	253.1833	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-61.752	0	405.2328	1661.4545	-1195.701	-253.1833	0	0	0
DERUD06 Max	0	62.3194	405.2328	1864.4955	-994.5546	153.4801	0	0	0
DERUD06 Min	0	-62.3194	405.2328	1458.4135	-994.5546	-153.4801	0	0	0
DERUD07 Max	61.752	0	303.9246	1246.0909	-544.7695	253.1833	0	0	0
DERUD07 Min	-61.752	0	303.9246	1246.0909	-947.0624	-253.1833	0	0	0
DERUD08 Max	0	62.3194	303.9246	1449.1319	-745.9159	153.4801	0	0	0
DERUD08 Min	0	-62.3194	303.9246	1043.0498	-745.9159	-153.4801	0	0	0
CIM09 Max	74.6015	22.3803	337.694	1457.4622	-585.794	360.9764	0	0	0
CIM09 Min	-74.6015	-22.3803	337.694	1311.6286	-1071.7969	-360.9764	0	0	0
CIM10 Max	22.3805	74.6012	337.694	1627.6012	-755.895	275.4603	0	0	0
CIM10 Min	-22.3805	-74.6012	337.694	1141.4896	-901.6959	-275.4603	0	0	0
CIM11	0	0	377.874	1549.2834	-927.2358	0	0	0	0
CIM12	0	0	367.829	1508.0989	-902.6257	0	0	0	0
CIM13 Max	56.484	17.0517	367.829	1563.6545	-718.6389	273.5731	0	0	0
CIM13 Min	-56.484	-17.0517	367.829	1452.5433	-1086.6125	-273.5731	0	0	0
CIM14 Max	17.0518	56.4837	367.829	1692.1269	-847.0825	208.9998	0	0	0
CIM14 Min	-17.0518	-56.4837	367.829	1324.0709	-958.1689	-208.9998	0	0	0
CIM15	0	0	202.6164	830.7272	-497.2773	0	0	0	0
COMB9	0	0	425.3228	1743.8235	-1043.7747	0	0	0	0
COMB10	0	0	469.5208	1925.0353	-1152.0591	0	0	0	0
COMB11	0	0	425.3228	1743.8235	-1043.7747	0	0	0	0
DER09	0	0	425.3228	1743.8235	-1043.7747	0	0	0	0
DER010	0	0	469.5208	1925.0353	-1152.0591	0	0	0	0
DER011	0	0	425.3228	1743.8235	-1043.7747	0	0	0	0
DERUD09	0	0	425.3228	1743.8235	-1043.7747	0	0	0	0
DERUD10	0	0	469.5208	1925.0353	-1152.0591	0	0	0	0
DERUD11	0	0	425.3228	1743.8235	-1043.7747	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	31936.65	31936.65	2.4546	4.1	31936.65	31936.65	2.4546	4.1	2.4511	4.1

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	-0.01201	0	0	1	2.4546	4.1	3.25
N1	D1	L	0	0	0	1	2.4546	4.1	3.25
N1	D1	LR	-0.004209	0	0	1	2.4546	4.1	3.25
N1	D1	EX Max	10.5	0	0	1	2.4546	4.1	3.25
N1	D1	EY Max	0	11.5	7E-06	1	2.4546	4.1	3.25
N1	D1	DISX Max	2.5	0	0	1	2.4546	4.1	3.25
N1	D1	DISY Max	0	2.7	2E-06	1	2.4546	4.1	3.25
N1	D1	W	0	0	0	1	2.4546	4.1	3.25
N1	D1	G	-0.002104	0	0	1	2.4546	4.1	3.25
N1	D1	DERUX Max	1.4	0	0	1	2.4546	4.1	3.25
N1	D1	DERUY Max	0	1.6	1E-06	1	2.4546	4.1	3.25
N1	D1	COMB1	-0.01681	0	0	1	2.4546	4.1	3.25
N1	D1	COMB2	-0.01651	0	0	1	2.4546	4.1	3.25
N1	D1	COMB3	-0.02114	0	0	1	2.4546	4.1	3.25
N1	D1	COMB4	-0.01651	0	0	1	2.4546	4.1	3.25
N1	D1	COMB5 Max	2.5	0.8	1E-06	1	2.4546	4.1	3.25
N1	D1	COMB5 Min	-2.5	-0.8	-1E-06	1	2.4546	4.1	3.25
N1	D1	COMB6 Max	0.7	2.7	2E-06	1	2.4546	4.1	3.25
N1	D1	COMB6 Min	-0.8	-2.7	-2E-06	1	2.4546	4.1	3.25
N1	D1	COMB7 Max	0.7	2.7	2E-06	1	2.4546	4.1	3.25
N1	D1	COMB7 Min	-0.8	-2.7	-2E-06	1	2.4546	4.1	3.25
N1	D1	COMB8 Max	2.5	0.8	1E-06	1	2.4546	4.1	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	COMB8 Min	-2.5	-0.8	-1E-06	1	2.4546	4.1	3.25
N1	D1	ENVE Max	2.5	2.7	2E-06	1	2.4546	4.1	3.25
N1	D1	ENVE Min	-2.5	-2.7	-2E-06	1	2.4546	4.1	3.25
N1	D1	CIM01	-0.01201	0	0	1	2.4546	4.1	3.25
N1	D1	CIM02	-0.01201	0	0	1	2.4546	4.1	3.25
N1	D1	CIM03	-0.01621	0	0	1	2.4546	4.1	3.25
N1	D1	CIM04	-0.01516	0	0	1	2.4546	4.1	3.25
N1	D1	CIM05 Max	1.7	0.6	3.675E-07	1	2.4546	4.1	3.25
N1	D1	CIM05 Min	-1.8	-0.6	-3.675E-07	1	2.4546	4.1	3.25
N1	D1	CIM06 Max	0.5	1.9	1E-06	1	2.4546	4.1	3.25
N1	D1	CIM06 Min	-0.5	-1.9	-1E-06	1	2.4546	4.1	3.25
N1	D1	CIM07 Max	1.3	0.4	2.8E-07	1	2.4546	4.1	3.25
N1	D1	CIM07 Min	-1.3	-0.4	-2.8E-07	1	2.4546	4.1	3.25
N1	D1	CIM08 Max	0.4	1.5	1E-06	1	2.4546	4.1	3.25
N1	D1	CIM08 Min	-0.4	-1.5	-1E-06	1	2.4546	4.1	3.25
N1	D1	DER01	-0.01681	0	0	1	2.4546	4.1	3.25
N1	D1	DER02	-0.01651	0	0	1	2.4546	4.1	3.25
N1	D1	DER03	-0.02114	0	0	1	2.4546	4.1	3.25
N1	D1	DER04	-0.01651	0	0	1	2.4546	4.1	3.25
N1	D1	DER05 Max	10.5	0	0	1	2.4546	4.1	3.25
N1	D1	DER05 Min	-10.5	0	0	1	2.4546	4.1	3.25
N1	D1	DER06 Max	-0.01441	11.5	7E-06	1	2.4546	4.1	3.25
N1	D1	DER06 Min	-0.01441	-11.5	-7E-06	1	2.4546	4.1	3.25
N1	D1	DER07 Max	10.5	0	0	1	2.4546	4.1	3.25
N1	D1	DER07 Min	-10.5	0	0	1	2.4546	4.1	3.25
N1	D1	DER08 Max	-0.0108	11.5	7E-06	1	2.4546	4.1	3.25
N1	D1	DER08 Min	-0.0108	-11.5	-7E-06	1	2.4546	4.1	3.25
N1	D1	DERUD01	-0.01681	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD02	-0.01651	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD03	-0.02114	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD04	-0.01651	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD05 Max	1.4	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD05 Min	-1.5	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD06 Max	-0.01441	1.6	1E-06	1	2.4546	4.1	3.25
N1	D1	DERUD06 Min	-0.01441	-1.6	-1E-06	1	2.4546	4.1	3.25
N1	D1	DERUD07 Max	1.4	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD07 Min	-1.5	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD08 Max	-0.0108	1.6	1E-06	1	2.4546	4.1	3.25
N1	D1	DERUD08 Min	-0.0108	-1.6	-1E-06	1	2.4546	4.1	3.25
N1	D1	CIM09 Max	1.7	0.6	3.675E-07	1	2.4546	4.1	3.25
N1	D1	CIM09 Min	-1.8	-0.6	-3.675E-07	1	2.4546	4.1	3.25
N1	D1	CIM10 Max	0.5	1.9	1E-06	1	2.4546	4.1	3.25
N1	D1	CIM10 Min	-0.5	-1.9	-1E-06	1	2.4546	4.1	3.25
N1	D1	CIM11	-0.01411	0	0	1	2.4546	4.1	3.25
N1	D1	CIM12	-0.01358	0	0	1	2.4546	4.1	3.25
N1	D1	CIM13 Max	1.3	0.4	2.8E-07	1	2.4546	4.1	3.25
N1	D1	CIM13 Min	-1.3	-0.4	-2.8E-07	1	2.4546	4.1	3.25
N1	D1	CIM14 Max	0.4	1.5	1E-06	1	2.4546	4.1	3.25
N1	D1	CIM14 Min	-0.4	-1.5	-1E-06	1	2.4546	4.1	3.25
N1	D1	CIM15	-0.007203	0	0	1	2.4546	4.1	3.25
N1	D1	COMB9	-0.01546	0	0	1	2.4546	4.1	3.25
N1	D1	COMB10	-0.01777	0	0	1	2.4546	4.1	3.25
N1	D1	COMB11	-0.01546	0	0	1	2.4546	4.1	3.25
N1	D1	DER09	-0.01546	0	0	1	2.4546	4.1	3.25
N1	D1	DER010	-0.01777	0	0	1	2.4546	4.1	3.25
N1	D1	DER011	-0.01546	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD09	-0.01546	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD10	-0.01777	0	0	1	2.4546	4.1	3.25
N1	D1	DERUD11	-0.01546	0	0	1	2.4546	4.1	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	X	0.01201	0.01201	1
N1	LR	X	0.004209	0.004209	1
N1	EX Max	X	10.5	10.5	1
N1	EY Max	Y	11.6	11.5	1.001
N1	DISX Max	X	2.5	2.5	1
N1	DISY Max	Y	2.7	2.7	1.001
N1	G	X	0.002104	0.002104	1
N1	DERUX Max	X	1.4	1.4	1
N1	DERUY Max	Y	1.6	1.6	1.001
N1	COMB1	X	0.01681	0.01681	1
N1	COMB2	X	0.01651	0.01651	1
N1	COMB3	X	0.02114	0.02114	1
N1	COMB4	X	0.01651	0.01651	1
N1	COMB5 Max	X	2.5	2.5	1
N1	COMB5 Max	Y	0.8	0.8	1.001
N1	COMB5 Min	X	2.5	2.5	1
N1	COMB5 Min	Y	0.8	0.8	1.001
N1	COMB6 Max	X	0.7	0.7	1
N1	COMB6 Max	Y	2.7	2.7	1.001
N1	COMB6 Min	X	0.8	0.8	1
N1	COMB6 Min	Y	2.7	2.7	1.001
N1	COMB7 Max	X	0.7	0.7	1
N1	COMB7 Max	Y	2.7	2.7	1.001
N1	COMB7 Min	X	0.8	0.8	1
N1	COMB7 Min	Y	2.7	2.7	1.001
N1	COMB8 Max	X	2.5	2.5	1
N1	COMB8 Max	Y	0.8	0.8	1.001
N1	COMB8 Min	X	2.5	2.5	1
N1	COMB8 Min	Y	0.8	0.8	1.001
N1	ENVE Max	X	2.5	2.5	1
N1	ENVE Max	Y	2.7	2.7	1.001
N1	ENVE Min	X	2.5	2.5	1
N1	ENVE Min	Y	2.7	2.7	1.001
N1	CIM01	X	0.01201	0.01201	1
N1	CIM02	X	0.01201	0.01201	1
N1	CIM03	X	0.01621	0.01621	1
N1	CIM04	X	0.01516	0.01516	1
N1	CIM05 Max	X	1.7	1.7	1
N1	CIM05 Max	Y	0.6	0.6	1.001
N1	CIM05 Min	X	1.8	1.8	1
N1	CIM05 Min	Y	0.6	0.6	1.001
N1	CIM06 Max	X	0.5	0.5	1
N1	CIM06 Max	Y	1.9	1.9	1.001
N1	CIM06 Min	X	0.5	0.5	1
N1	CIM06 Min	Y	1.9	1.9	1.001
N1	CIM07 Max	X	1.3	1.3	1
N1	CIM07 Max	Y	0.4	0.4	1.001
N1	CIM07 Min	X	1.3	1.3	1
N1	CIM07 Min	Y	0.4	0.4	1.001
N1	CIM08 Max	X	0.4	0.4	1
N1	CIM08 Max	Y	1.5	1.5	1.001
N1	CIM08 Min	X	0.4	0.4	1
N1	CIM08 Min	Y	1.5	1.5	1.001
N1	DER01	X	0.01681	0.01681	1
N1	DER02	X	0.01651	0.01651	1
N1	DER03	X	0.02114	0.02114	1
N1	DER04	X	0.01651	0.01651	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DER05 Max	X	10.5	10.5	1
N1	DER05 Min	X	10.5	10.5	1
N1	DER06 Max	Y	11.6	11.5	1.001
N1	DER06 Min	Y	11.6	11.5	1.001
N1	DER07 Max	X	10.5	10.5	1
N1	DER07 Min	X	10.5	10.5	1
N1	DER08 Max	Y	11.6	11.5	1.001
N1	DER08 Min	Y	11.6	11.5	1.001
N1	DERUD01	X	0.01681	0.01681	1
N1	DERUD02	X	0.01651	0.01651	1
N1	DERUD03	X	0.02114	0.02114	1
N1	DERUD04	X	0.01651	0.01651	1
N1	DERUD05 Max	X	1.4	1.4	1
N1	DERUD05 Min	X	1.5	1.5	1
N1	DERUD06 Max	Y	1.6	1.6	1.001
N1	DERUD06 Min	Y	1.6	1.6	1.001
N1	DERUD07 Max	X	1.4	1.4	1
N1	DERUD07 Min	X	1.5	1.5	1
N1	DERUD08 Max	Y	1.6	1.6	1.001
N1	DERUD08 Min	Y	1.6	1.6	1.001
N1	CIM09 Max	X	1.7	1.7	1
N1	CIM09 Max	Y	0.6	0.6	1.001
N1	CIM09 Min	X	1.8	1.8	1
N1	CIM09 Min	Y	0.6	0.6	1.001
N1	CIM10 Max	X	0.5	0.5	1
N1	CIM10 Max	Y	1.9	1.9	1.001
N1	CIM10 Min	X	0.5	0.5	1
N1	CIM10 Min	Y	1.9	1.9	1.001
N1	CIM11	X	0.01411	0.01411	1
N1	CIM12	X	0.01358	0.01358	1
N1	CIM13 Max	X	1.3	1.3	1
N1	CIM13 Max	Y	0.4	0.4	1.001
N1	CIM13 Min	X	1.3	1.3	1
N1	CIM13 Min	Y	0.4	0.4	1.001
N1	CIM14 Max	X	0.4	0.4	1
N1	CIM14 Max	Y	1.5	1.5	1.001
N1	CIM14 Min	X	0.4	0.4	1
N1	CIM14 Min	Y	1.5	1.5	1.001
N1	CIM15	X	0.007203	0.007203	1
N1	COMB9	X	0.01546	0.01546	1
N1	COMB10	X	0.01777	0.01777	1
N1	COMB11	X	0.01546	0.01546	1
N1	DER09	X	0.01546	0.01546	1
N1	DER010	X	0.01777	0.01777	1
N1	DER011	X	0.01546	0.01546	1
N1	DERUD09	X	0.01546	0.01546	1
N1	DERUD10	X	0.01777	0.01777	1
N1	DERUD11	X	0.01546	0.01546	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	X	4E-06	3	4.9	0	3.25
N1	LR	X	1E-06	3	4.9	0	3.25
N1	EX Max	X	0.003223	4	4.9	8.2	3.25
N1	EY Max	Y	0.003554	4	4.9	8.2	3.25
N1	DISX Max	X	0.000767	4	4.9	8.2	3.25
N1	DISY Max	Y	0.000846	4	4.9	8.2	3.25
N1	G	X	1E-06	3	4.9	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DERUX Max	X	0.000444	4	4.9	8.2	3.25
N1	DERUY Max	Y	0.000495	4	4.9	8.2	3.25
N1	COMB1	X	5E-06	3	4.9	0	3.25
N1	COMB2	X	5E-06	3	4.9	0	3.25
N1	COMB3	X	7E-06	3	4.9	0	3.25
N1	COMB4	X	5E-06	3	4.9	0	3.25
N1	COMB5 Max	X	0.000763	4	4.9	8.2	3.25
N1	COMB5 Max	Y	0.000254	4	4.9	8.2	3.25
N1	COMB5 Min	X	0.000772	4	4.9	8.2	3.25
N1	COMB5 Min	Y	0.000254	4	4.9	8.2	3.25
N1	COMB6 Max	X	0.000228	3	4.9	0	3.25
N1	COMB6 Max	Y	0.000846	4	4.9	8.2	3.25
N1	COMB6 Min	X	0.000237	3	4.9	0	3.25
N1	COMB6 Min	Y	0.000846	4	4.9	8.2	3.25
N1	COMB7 Max	X	0.000229	3	4.9	0	3.25
N1	COMB7 Max	Y	0.000846	4	4.9	8.2	3.25
N1	COMB7 Min	X	0.000236	3	4.9	0	3.25
N1	COMB7 Min	Y	0.000846	4	4.9	8.2	3.25
N1	COMB8 Max	X	0.000764	4	4.9	8.2	3.25
N1	COMB8 Max	Y	0.000254	4	4.9	8.2	3.25
N1	COMB8 Min	X	0.000771	4	4.9	8.2	3.25
N1	COMB8 Min	Y	0.000254	4	4.9	8.2	3.25
N1	ENVE Max	X	0.000764	4	4.9	8.2	3.25
N1	ENVE Max	Y	0.000846	4	4.9	8.2	3.25
N1	ENVE Min	X	0.000772	4	4.9	8.2	3.25
N1	ENVE Min	Y	0.000846	4	4.9	8.2	3.25
N1	CIM01	X	4E-06	3	4.9	0	3.25
N1	CIM02	X	4E-06	3	4.9	0	3.25
N1	CIM03	X	5E-06	3	4.9	0	3.25
N1	CIM04	X	5E-06	3	4.9	0	3.25
N1	CIM05 Max	X	0.000534	4	4.9	8.2	3.25
N1	CIM05 Max	Y	0.000178	4	4.9	8.2	3.25
N1	CIM05 Min	X	0.000541	4	4.9	8.2	3.25
N1	CIM05 Min	Y	0.000178	4	4.9	8.2	3.25
N1	CIM06 Max	X	0.000159	3	4.9	0	3.25
N1	CIM06 Max	Y	0.000592	4	4.9	8.2	3.25
N1	CIM06 Min	X	0.000166	3	4.9	0	3.25
N1	CIM06 Min	Y	0.000592	4	4.9	8.2	3.25
N1	CIM07 Max	X	0.000402	4	4.9	8.2	3.25
N1	CIM07 Max	Y	0.000135	4	4.9	8.2	3.25
N1	CIM07 Min	X	0.000412	4	4.9	8.2	3.25
N1	CIM07 Min	Y	0.000135	4	4.9	8.2	3.25
N1	CIM08 Max	X	0.000119	3	4.9	0	3.25
N1	CIM08 Max	Y	0.000448	4	4.9	8.2	3.25
N1	CIM08 Min	X	0.000129	3	4.9	0	3.25
N1	CIM08 Min	Y	0.000448	4	4.9	8.2	3.25
N1	DER01	X	5E-06	3	4.9	0	3.25
N1	DER02	X	5E-06	3	4.9	0	3.25
N1	DER03	X	7E-06	3	4.9	0	3.25
N1	DER04	X	5E-06	3	4.9	0	3.25
N1	DER05 Max	X	0.003218	4	4.9	8.2	3.25
N1	DER05 Min	X	0.003227	4	4.9	8.2	3.25
N1	DER06 Max	Y	0.003554	4	4.9	8.2	3.25
N1	DER06 Min	Y	0.003554	4	4.9	8.2	3.25
N1	DER07 Max	X	0.003219	4	4.9	8.2	3.25
N1	DER07 Min	X	0.003226	4	4.9	8.2	3.25
N1	DER08 Max	Y	0.003554	4	4.9	8.2	3.25
N1	DER08 Min	Y	0.003554	4	4.9	8.2	3.25
N1	DERUD01	X	5E-06	3	4.9	0	3.25
N1	DERUD02	X	5E-06	3	4.9	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DERUD03	X	7E-06	3	4.9	0	3.25
N1	DERUD04	X	5E-06	3	4.9	0	3.25
N1	DERUD05 Max	X	0.00044	4	4.9	8.2	3.25
N1	DERUD05 Min	X	0.000449	4	4.9	8.2	3.25
N1	DERUD06 Max	Y	0.000495	4	4.9	8.2	3.25
N1	DERUD06 Min	Y	0.000495	4	4.9	8.2	3.25
N1	DERUD07 Max	X	0.000441	4	4.9	8.2	3.25
N1	DERUD07 Min	X	0.000448	4	4.9	8.2	3.25
N1	DERUD08 Max	Y	0.000495	4	4.9	8.2	3.25
N1	DERUD08 Min	Y	0.000495	4	4.9	8.2	3.25
N1	CIM09 Max	X	0.000534	4	4.9	8.2	3.25
N1	CIM09 Max	Y	0.000178	4	4.9	8.2	3.25
N1	CIM09 Min	X	0.000541	4	4.9	8.2	3.25
N1	CIM09 Min	Y	0.000178	4	4.9	8.2	3.25
N1	CIM10 Max	X	0.000159	3	4.9	0	3.25
N1	CIM10 Max	Y	0.000592	4	4.9	8.2	3.25
N1	CIM10 Min	X	0.000166	3	4.9	0	3.25
N1	CIM10 Min	Y	0.000592	4	4.9	8.2	3.25
N1	CIM11	X	4E-06	3	4.9	0	3.25
N1	CIM12	X	4E-06	3	4.9	0	3.25
N1	CIM13 Max	X	0.000403	4	4.9	8.2	3.25
N1	CIM13 Max	Y	0.000135	4	4.9	8.2	3.25
N1	CIM13 Min	X	0.000411	4	4.9	8.2	3.25
N1	CIM13 Min	Y	0.000135	4	4.9	8.2	3.25
N1	CIM14 Max	X	0.00012	3	4.9	0	3.25
N1	CIM14 Max	Y	0.000448	4	4.9	8.2	3.25
N1	CIM14 Min	X	0.000128	3	4.9	0	3.25
N1	CIM14 Min	Y	0.000448	4	4.9	8.2	3.25
N1	CIM15	X	2E-06	3	4.9	0	3.25
N1	COMB9	X	5E-06	3	4.9	0	3.25
N1	COMB10	X	5E-06	3	4.9	0	3.25
N1	COMB11	X	5E-06	3	4.9	0	3.25
N1	DER09	X	5E-06	3	4.9	0	3.25
N1	DER010	X	5E-06	3	4.9	0	3.25
N1	DER011	X	5E-06	3	4.9	0	3.25
N1	DERUD09	X	5E-06	3	4.9	0	3.25
N1	DERUD10	X	5E-06	3	4.9	0	3.25
N1	DERUD11	X	5E-06	3	4.9	0	3.25

Table 5.6 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	288.6892	0	0	0	1183.6257	-708.7375
N1	D	Bottom	337.694	0	0	0	1384.5454	-828.7955
N1	L	Top	0	0	0	0	0	0
N1	L	Bottom	0	0	0	0	0	0
N1	LR	Top	80.36	0	0	0	329.476	-196.882
N1	LR	Bottom	80.36	0	0	0	329.476	-196.8807
N1	EX Max	Top	0	447.7978	0	1835.971	0	0
N1	EX Max	Bottom	0	447.7978	0	1835.971	0	1458.6231
N1	EY Max	Top	0	0	447.7955	1102.6672	0	0
N1	EY Max	Bottom	0	0	447.7955	1102.6672	1458.9496	0
N1	DISX Max	Top	0	106.5736	0	436.9518	0	0
N1	DISX Max	Bottom	0	106.5736	0	436.9518	0	347.1449
N1	DISY Max	Top	0	0	106.5731	262.4292	0	0
N1	DISY Max	Bottom	0	0	106.5731	262.4292	347.2226	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	40.18	0	0	0	164.738	-98.441

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	G	Bottom	40.18	0	0	0	164.738	-98.4403
N1	DERUX Max	Top	0	61.752	0	253.1833	0	0
N1	DERUX Max	Bottom	0	61.752	0	253.1833	0	201.1464
N1	DERUY Max	Top	0	0	62.3194	153.4801	0	0
N1	DERUY Max	Bottom	0	0	62.3194	153.4801	203.041	0
N1	COMB1	Top	404.1649	0	0	0	1657.076	-992.2325
N1	COMB1	Bottom	472.7716	0	0	0	1938.3636	-1160.3137
N1	COMB2	Top	386.607	0	0	0	1585.0889	-948.926
N1	COMB2	Bottom	445.4128	0	0	0	1826.1925	-1092.9949
N1	COMB3	Top	475.003	0	0	0	1947.5125	-1165.4962
N1	COMB3	Bottom	533.8088	0	0	0	2188.6161	-1309.5637
N1	COMB4	Top	386.607	0	0	0	1585.0889	-948.926
N1	COMB4	Bottom	445.4128	0	0	0	1826.1925	-1092.9949
N1	COMB5 Max	Top	346.427	106.5736	31.9719	515.6806	1420.3509	-850.485
N1	COMB5 Max	Bottom	405.2328	106.5736	31.9719	515.6806	1765.6213	-647.4097
N1	COMB5 Min	Top	346.427	-106.5736	-31.9719	-515.6806	1420.3509	-850.485
N1	COMB5 Min	Bottom	405.2328	-106.5736	-31.9719	-515.6806	1557.2877	-1341.6995
N1	COMB6 Max	Top	346.427	31.9721	106.5731	393.5148	1420.3509	-850.485
N1	COMB6 Max	Bottom	405.2328	31.9721	106.5731	393.5148	2008.6771	-890.4111
N1	COMB6 Min	Top	346.427	-31.9721	-106.5731	-393.5148	1420.3509	-850.485
N1	COMB6 Min	Bottom	405.2328	-31.9721	-106.5731	-393.5148	1314.2319	-1098.6981
N1	COMB7 Max	Top	259.8203	31.9721	106.5731	393.5148	1065.2631	-637.8637
N1	COMB7 Max	Bottom	303.9246	31.9721	106.5731	393.5148	1593.3135	-641.7725
N1	COMB7 Min	Top	259.8203	-31.9721	-106.5731	-393.5148	1065.2631	-637.8637
N1	COMB7 Min	Bottom	303.9246	-31.9721	-106.5731	-393.5148	898.8682	-850.0594
N1	COMB8 Max	Top	259.8203	106.5736	31.9719	515.6806	1065.2631	-637.8637
N1	COMB8 Max	Bottom	303.9246	106.5736	31.9719	515.6806	1350.2576	-398.771
N1	COMB8 Min	Top	259.8203	-106.5736	-31.9719	-515.6806	1065.2631	-637.8637
N1	COMB8 Min	Bottom	303.9246	-106.5736	-31.9719	-515.6806	1141.9241	-1093.0609
N1	ENVE Max	Top	475.003	106.5736	106.5731	515.6806	1947.5125	-637.8637
N1	ENVE Max	Bottom	533.8088	106.5736	106.5731	515.6806	2188.6161	-398.771
N1	ENVE Min	Top	259.8203	-106.5736	-106.5731	-515.6806	1065.2631	-1165.4962
N1	ENVE Min	Bottom	303.9246	-106.5736	-106.5731	-515.6806	898.8682	-1341.6995
N1	CIM01	Top	288.6892	0	0	0	1183.6257	-708.7375
N1	CIM01	Bottom	337.694	0	0	0	1384.5454	-828.7955
N1	CIM02	Top	288.6892	0	0	0	1183.6257	-708.7375
N1	CIM02	Bottom	337.694	0	0	0	1384.5454	-828.7955
N1	CIM03	Top	369.0492	0	0	0	1513.1017	-905.6195
N1	CIM03	Bottom	418.054	0	0	0	1714.0214	-1025.6762
N1	CIM04	Top	348.9592	0	0	0	1430.7327	-856.399
N1	CIM04	Bottom	397.964	0	0	0	1631.6524	-976.456
N1	CIM05 Max	Top	288.6892	74.6015	22.3803	360.9764	1183.6257	-708.7375
N1	CIM05 Max	Bottom	337.694	74.6015	22.3803	360.9764	1457.4622	-585.794
N1	CIM05 Min	Top	288.6892	-74.6015	-22.3803	-360.9764	1183.6257	-708.7375
N1	CIM05 Min	Bottom	337.694	-74.6015	-22.3803	-360.9764	1311.6286	-1071.7969
N1	CIM06 Max	Top	288.6892	22.3805	74.6012	275.4603	1183.6257	-708.7375
N1	CIM06 Max	Bottom	337.694	22.3805	74.6012	275.4603	1627.6012	-755.895
N1	CIM06 Min	Top	288.6892	-22.3805	-74.6012	-275.4603	1183.6257	-708.7375
N1	CIM06 Min	Bottom	337.694	-22.3805	-74.6012	-275.4603	1141.4896	-901.6959
N1	CIM07 Max	Top	348.9592	56.484	17.0517	273.5731	1430.7327	-856.399
N1	CIM07 Max	Bottom	397.964	56.484	17.0517	273.5731	1687.208	-792.4692
N1	CIM07 Min	Top	348.9592	-56.484	-17.0517	-273.5731	1430.7327	-856.399
N1	CIM07 Min	Bottom	397.964	-56.484	-17.0517	-273.5731	1576.0968	-1160.4428
N1	CIM08 Max	Top	348.9592	17.0518	56.4837	208.9998	1430.7327	-856.399
N1	CIM08 Max	Bottom	397.964	17.0518	56.4837	208.9998	1815.6804	-920.9128
N1	CIM08 Min	Top	348.9592	-17.0518	-56.4837	-208.9998	1430.7327	-856.399
N1	CIM08 Min	Bottom	397.964	-17.0518	-56.4837	-208.9998	1447.6244	-1031.9992
N1	DER01	Top	404.1649	0	0	0	1657.076	-992.2325
N1	DER01	Bottom	472.7716	0	0	0	1938.3636	-1160.3137
N1	DER02	Top	386.607	0	0	0	1585.0889	-948.926



Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DER02	Bottom	445.4128	0	0	0	1826.1925	-1092.9949
N1	DER03	Top	475.003	0	0	0	1947.5125	-1165.4962
N1	DER03	Bottom	533.8088	0	0	0	2188.6161	-1309.5637
N1	DER04	Top	386.607	0	0	0	1585.0889	-948.926
N1	DER04	Bottom	445.4128	0	0	0	1826.1925	-1092.9949
N1	DER05 Max	Top	346.427	447.7978	0	1835.971	1420.3509	-850.485
N1	DER05 Max	Bottom	405.2328	447.7978	0	1835.971	1661.4545	464.0685
N1	DER05 Min	Top	346.427	-447.7978	0	-1835.971	1420.3509	-850.485
N1	DER05 Min	Bottom	405.2328	-447.7978	0	-1835.971	1661.4545	-2453.1777
N1	DER06 Max	Top	346.427	0	447.7955	1102.6672	1420.3509	-850.485
N1	DER06 Max	Bottom	405.2328	0	447.7955	1102.6672	3120.4041	-994.5546
N1	DER06 Min	Top	346.427	0	-447.7955	-1102.6672	1420.3509	-850.485
N1	DER06 Min	Bottom	405.2328	0	-447.7955	-1102.6672	202.5049	-994.5546
N1	DER07 Max	Top	259.8203	447.7978	0	1835.971	1065.2631	-637.8637
N1	DER07 Max	Bottom	303.9246	447.7978	0	1835.971	1246.0909	712.7072
N1	DER07 Min	Top	259.8203	-447.7978	0	-1835.971	1065.2631	-637.8637
N1	DER07 Min	Bottom	303.9246	-447.7978	0	-1835.971	1246.0909	-2204.539
N1	DER08 Max	Top	259.8203	0	447.7955	1102.6672	1065.2631	-637.8637
N1	DER08 Max	Bottom	303.9246	0	447.7955	1102.6672	2705.0405	-745.9159
N1	DER08 Min	Top	259.8203	0	-447.7955	-1102.6672	1065.2631	-637.8637
N1	DER08 Min	Bottom	303.9246	0	-447.7955	-1102.6672	-212.8587	-745.9159
N1	DERUD01	Top	404.1649	0	0	0	1657.076	-992.2325
N1	DERUD01	Bottom	472.7716	0	0	0	1938.3636	-1160.3137
N1	DERUD02	Top	386.607	0	0	0	1585.0889	-948.926
N1	DERUD02	Bottom	445.4128	0	0	0	1826.1925	-1092.9949
N1	DERUD03	Top	475.003	0	0	0	1947.5125	-1165.4962
N1	DERUD03	Bottom	533.8088	0	0	0	2188.6161	-1309.5637
N1	DERUD04	Top	386.607	0	0	0	1585.0889	-948.926
N1	DERUD04	Bottom	445.4128	0	0	0	1826.1925	-1092.9949
N1	DERUD05 Max	Top	346.427	61.752	0	253.1833	1420.3509	-850.485
N1	DERUD05 Max	Bottom	405.2328	61.752	0	253.1833	1661.4545	-793.4081
N1	DERUD05 Min	Top	346.427	-61.752	0	-253.1833	1420.3509	-850.485
N1	DERUD05 Min	Bottom	405.2328	-61.752	0	-253.1833	1661.4545	-1195.701
N1	DERUD06 Max	Top	346.427	0	62.3194	153.4801	1420.3509	-850.485
N1	DERUD06 Max	Bottom	405.2328	0	62.3194	153.4801	1864.4955	-994.5546
N1	DERUD06 Min	Top	346.427	0	-62.3194	-153.4801	1420.3509	-850.485
N1	DERUD06 Min	Bottom	405.2328	0	-62.3194	-153.4801	1458.4135	-994.5546
N1	DERUD07 Max	Top	259.8203	61.752	0	253.1833	1065.2631	-637.8637
N1	DERUD07 Max	Bottom	303.9246	61.752	0	253.1833	1246.0909	-544.7695
N1	DERUD07 Min	Top	259.8203	-61.752	0	-253.1833	1065.2631	-637.8637
N1	DERUD07 Min	Bottom	303.9246	-61.752	0	-253.1833	1246.0909	-947.0624
N1	DERUD08 Max	Top	259.8203	0	62.3194	153.4801	1065.2631	-637.8637
N1	DERUD08 Max	Bottom	303.9246	0	62.3194	153.4801	1449.1319	-745.9159
N1	DERUD08 Min	Top	259.8203	0	-62.3194	-153.4801	1065.2631	-637.8637
N1	DERUD08 Min	Bottom	303.9246	0	-62.3194	-153.4801	1043.0498	-745.9159
N1	CIM09 Max	Top	288.6892	74.6015	22.3803	360.9764	1183.6257	-708.7375
N1	CIM09 Max	Bottom	337.694	74.6015	22.3803	360.9764	1457.4622	-585.794
N1	CIM09 Min	Top	288.6892	-74.6015	-22.3803	-360.9764	1183.6257	-708.7375
N1	CIM09 Min	Bottom	337.694	-74.6015	-22.3803	-360.9764	1311.6286	-1071.7969
N1	CIM10 Max	Top	288.6892	22.3805	74.6012	275.4603	1183.6257	-708.7375
N1	CIM10 Max	Bottom	337.694	22.3805	74.6012	275.4603	1627.6012	-755.895
N1	CIM10 Min	Top	288.6892	-22.3805	-74.6012	-275.4603	1183.6257	-708.7375
N1	CIM10 Min	Bottom	337.694	-22.3805	-74.6012	-275.4603	1141.4896	-901.6959
N1	CIM11	Top	328.8692	0	0	0	1348.3637	-807.1785
N1	CIM11	Bottom	377.874	0	0	0	1549.2834	-927.2358
N1	CIM12	Top	318.8242	0	0	0	1307.1792	-782.5682
N1	CIM12	Bottom	367.829	0	0	0	1508.0989	-902.6257
N1	CIM13 Max	Top	318.8242	56.484	17.0517	273.5731	1307.1792	-782.5682
N1	CIM13 Max	Bottom	367.829	56.484	17.0517	273.5731	1563.6545	-718.6389
N1	CIM13 Min	Top	318.8242	-56.484	-17.0517	-273.5731	1307.1792	-782.5682

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM13 Min	Bottom	367.829	-56.484	-17.0517	-273.5731	1452.5433	-1086.6125
N1	CIM14 Max	Top	318.8242	17.0518	56.4837	208.9998	1307.1792	-782.5682
N1	CIM14 Max	Bottom	367.829	17.0518	56.4837	208.9998	1692.1269	-847.0825
N1	CIM14 Min	Top	318.8242	-17.0518	-56.4837	-208.9998	1307.1792	-782.5682
N1	CIM14 Min	Bottom	367.829	-17.0518	-56.4837	-208.9998	1324.0709	-958.1689
N1	CIM15	Top	173.2135	0	0	0	710.1754	-425.2425
N1	CIM15	Bottom	202.6164	0	0	0	830.7272	-497.2773
N1	COMB9	Top	366.517	0	0	0	1502.7199	-899.7055
N1	COMB9	Bottom	425.3228	0	0	0	1743.8235	-1043.7747
N1	COMB10	Top	410.715	0	0	0	1683.9317	-1007.9906
N1	COMB10	Bottom	469.5208	0	0	0	1925.0353	-1152.0591
N1	COMB11	Top	366.517	0	0	0	1502.7199	-899.7055
N1	COMB11	Bottom	425.3228	0	0	0	1743.8235	-1043.7747
N1	DER09	Top	366.517	0	0	0	1502.7199	-899.7055
N1	DER09	Bottom	425.3228	0	0	0	1743.8235	-1043.7747
N1	DER010	Top	410.715	0	0	0	1683.9317	-1007.9906
N1	DER010	Bottom	469.5208	0	0	0	1925.0353	-1152.0591
N1	DER011	Top	366.517	0	0	0	1502.7199	-899.7055
N1	DER011	Bottom	425.3228	0	0	0	1743.8235	-1043.7747
N1	DERUD09	Top	366.517	0	0	0	1502.7199	-899.7055
N1	DERUD09	Bottom	425.3228	0	0	0	1743.8235	-1043.7747
N1	DERUD10	Top	410.715	0	0	0	1683.9317	-1007.9906
N1	DERUD10	Bottom	469.5208	0	0	0	1925.0353	-1152.0591
N1	DERUD11	Top	366.517	0	0	0	1502.7199	-899.7055
N1	DERUD11	Bottom	425.3228	0	0	0	1743.8235	-1043.7747

5.3 Point Results

Table 5.7 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	12.869	23.582	84.2333	-25.006	13.7507	0
Base	1	13	L	0	0	0	0	0	0
Base	1	13	LR	3.7404	7.1031	20.0752	-7.5321	4.003	0
Base	1	13	EX Max	111.9501	0	63.1402	0	209.9624	0
Base	1	13	EY Max	1.7912	111.7451	35.4979	218.9253	2.1092	0.0732
Base	1	13	DISX Max	26.6436	0	15.0271	0	49.97	0
Base	1	13	DISY Max	0.4263	26.5948	8.4483	52.1031	0.502	0.0174
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	1.8702	3.5516	10.0376	-3.766	2.0015	0
Base	1	13	DERUX Max	15.4381	0	8.7071	0	28.9542	0
Base	1	13	DERUY Max	0.25	15.5509	4.9406	30.4666	0.2945	0.01
Base	1	13	COMB1	18.0166	33.0148	117.9267	-35.0085	19.251	0
Base	1	13	COMB2	17.313	31.85	111.1176	-33.7733	18.5023	0
Base	1	13	COMB3	21.4275	39.6634	133.2003	-42.0585	22.9056	0
Base	1	13	COMB4	17.313	31.85	111.1176	-33.7733	18.5023	0
Base	1	13	COMB5 Max	42.2142	36.2768	118.6416	-14.3763	66.6214	0.0052
Base	1	13	COMB5 Min	-11.3287	20.32	83.5185	-45.6382	-33.6198	-0.0052
Base	1	13	COMB6 Max	23.8621	54.8932	114.0365	22.0958	31.9938	0.0174
Base	1	13	COMB6 Min	7.0234	1.7036	88.1236	-82.1104	1.0079	-0.0174
Base	1	13	COMB7 Max	20.0014	47.8186	88.7665	29.5977	27.8686	0.0174
Base	1	13	COMB7 Min	3.1627	-5.371	62.8536	-74.6085	-3.1173	-0.0174
Base	1	13	COMB8 Max	38.3535	29.2022	93.3716	-6.8745	62.4962	0.0052
Base	1	13	COMB8 Min	-15.1894	13.2454	58.2485	-38.1364	-37.745	-0.0052
Base	1	13	ENVE Max	42.2142	54.8932	133.2003	29.5977	66.6214	0.0174
Base	1	13	ENVE Min	-15.1894	-5.371	58.2485	-82.1104	-37.745	-0.0174
Base	1	13	CIM01	12.869	23.582	84.2333	-25.006	13.7507	0
Base	1	13	CIM02	12.869	23.582	84.2333	-25.006	13.7507	0
Base	1	13	CIM03	16.6094	30.6851	104.3085	-32.5381	17.7537	0
Base	1	13	CIM04	15.6743	28.9094	99.2897	-30.6551	16.7529	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	CIM05 Max	31.609	29.1669	96.5264	-14.0644	48.8351	0.0037
Base	1	13	CIM05 Min	-5.871	17.9971	71.9403	-35.9477	-21.3337	-0.0037
Base	1	13	CIM06 Max	18.7625	42.1984	93.3029	11.4661	24.5958	0.0122
Base	1	13	CIM06 Min	6.9754	4.9657	75.1638	-61.4782	2.9056	-0.0122
Base	1	13	CIM07 Max	29.8636	33.1645	108.6058	-22.3186	43.3173	0.0028
Base	1	13	CIM07 Min	1.485	24.6542	89.9737	-38.9916	-9.8115	-0.0028
Base	1	13	CIM08 Max	20.1632	43.0046	106.1717	-3.0404	25.0142	0.0092
Base	1	13	CIM08 Min	11.1854	14.8141	92.4078	-58.2697	8.4917	-0.0092
Base	1	13	DER01	18.0166	33.0148	117.9267	-35.0085	19.251	0
Base	1	13	DER02	17.313	31.85	111.1176	-33.7733	18.5023	0
Base	1	13	DER03	21.4275	39.6634	133.2003	-42.0585	22.9056	0
Base	1	13	DER04	17.313	31.85	111.1176	-33.7733	18.5023	0
Base	1	13	DER05 Max	127.3929	28.2984	164.2203	-30.0073	226.4632	0
Base	1	13	DER05 Min	-96.5074	28.2984	37.9398	-30.0073	-193.4616	0
Base	1	13	DER06 Max	17.2339	140.0435	136.578	188.918	18.61	0.0732
Base	1	13	DER06 Min	13.6516	-83.4467	65.5821	-248.9325	14.3916	-0.0732
Base	1	13	DER07 Max	123.5322	21.2238	138.9503	-22.5054	222.338	0
Base	1	13	DER07 Min	-100.368	21.2238	12.6698	-22.5054	-197.5868	0
Base	1	13	DER08 Max	13.3732	132.9689	111.308	196.4198	14.4848	0.0732
Base	1	13	DER08 Min	9.7909	-90.5213	40.3121	-241.4307	10.2664	-0.0732
Base	1	13	DERUD01	18.0166	33.0148	117.9267	-35.0085	19.251	0
Base	1	13	DERUD02	17.313	31.85	111.1176	-33.7733	18.5023	0
Base	1	13	DERUD03	21.4275	39.6634	133.2003	-42.0585	22.9056	0
Base	1	13	DERUD04	17.313	31.85	111.1176	-33.7733	18.5023	0
Base	1	13	DERUD05 Max	30.8809	28.2984	109.7872	-30.0073	45.455	0
Base	1	13	DERUD05 Min	0.0047	28.2984	92.3729	-30.0073	-12.4533	0
Base	1	13	DERUD06 Max	15.6928	43.8494	106.0206	0.4594	16.7954	0.01
Base	1	13	DERUD06 Min	15.1928	12.7475	96.1394	-60.4739	16.2063	-0.01
Base	1	13	DERUD07 Max	27.0202	21.2238	84.5172	-22.5054	41.3298	0
Base	1	13	DERUD07 Min	-3.856	21.2238	67.1029	-22.5054	-16.5785	0
Base	1	13	DERUD08 Max	11.8321	36.7748	80.7506	7.9612	12.6702	0.01
Base	1	13	DERUD08 Min	11.3321	5.6729	70.8694	-52.9721	12.0811	-0.01
Base	1	13	CIM09 Max	31.609	29.1669	96.5264	-14.0644	48.8351	0.0037
Base	1	13	CIM09 Min	-5.871	17.9971	71.9403	-35.9477	-21.3337	-0.0037
Base	1	13	CIM10 Max	18.7625	42.1984	93.3029	11.4661	24.5958	0.0122
Base	1	13	CIM10 Min	6.9754	4.9657	75.1638	-61.4782	2.9056	-0.0122
Base	1	13	CIM11	14.7392	27.1336	94.2709	-28.7721	15.7522	0
Base	1	13	CIM12	14.2716	26.2457	91.7615	-27.8306	15.2518	0
Base	1	13	CIM13 Max	28.4609	30.5008	101.0776	-19.4941	41.8162	0.0028
Base	1	13	CIM13 Min	0.0823	21.9905	82.4455	-36.1671	-11.3126	-0.0028
Base	1	13	CIM14 Max	18.7605	40.3409	98.6435	-0.2159	23.5131	0.0092
Base	1	13	CIM14 Min	9.7827	12.1505	84.8796	-55.4452	6.9906	-0.0092
Base	1	13	CIM15	7.7214	14.1492	50.54	-15.0036	8.2504	0
Base	1	13	COMB9	16.3779	30.0742	106.0988	-31.8903	17.5016	0
Base	1	13	COMB10	18.4351	33.9809	117.1402	-36.0329	19.7032	0
Base	1	13	COMB11	16.3779	30.0742	106.0988	-31.8903	17.5016	0
Base	1	13	DER09	16.3779	30.0742	106.0988	-31.8903	17.5016	0
Base	1	13	DER010	18.4351	33.9809	117.1402	-36.0329	19.7032	0
Base	1	13	DER011	16.3779	30.0742	106.0988	-31.8903	17.5016	0
Base	1	13	DERUD09	16.3779	30.0742	106.0988	-31.8903	17.5016	0
Base	1	13	DERUD10	18.4351	33.9809	117.1402	-36.0329	19.7032	0
Base	1	13	DERUD11	16.3779	30.0742	106.0988	-31.8903	17.5016	0
Base	2	15	D	12.869	-23.582	84.2333	25.006	13.7507	0
Base	2	15	L	0	0	0	0	0	0
Base	2	15	LR	3.7404	-7.1031	20.0752	7.5321	4.003	0
Base	2	15	EX Max	111.9501	0	63.1402	0	209.9624	0
Base	2	15	EY Max	1.7912	111.7451	35.4979	218.9253	2.1092	0.0732
Base	2	15	DISX Max	26.6436	0	15.0271	0	49.97	0
Base	2	15	DISY Max	0.4263	26.5948	8.4483	52.1031	0.502	0.0174
Base	2	15	W	0	0	0	0	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	G	1.8702	-3.5516	10.0376	3.766	2.0015	0
Base	2	15	DERUX Max	15.4381	0	8.7071	0	28.9542	0
Base	2	15	DERUY Max	0.25	15.5509	4.9406	30.4666	0.2945	0.01
Base	2	15	COMB1	18.0166	-33.0148	117.9267	35.0085	19.251	0
Base	2	15	COMB2	17.313	-31.85	111.1176	33.7733	18.5023	0
Base	2	15	COMB3	21.4275	-39.6634	133.2003	42.0585	22.9056	0
Base	2	15	COMB4	17.313	-31.85	111.1176	33.7733	18.5023	0
Base	2	15	COMB5 Max	42.2142	-20.32	118.6416	45.6382	66.6214	0.0052
Base	2	15	COMB5 Min	-11.3287	-36.2768	83.5185	14.3763	-33.6198	-0.0052
Base	2	15	COMB6 Max	23.8621	-1.7036	114.0365	82.1104	31.9938	0.0174
Base	2	15	COMB6 Min	7.0234	-54.8932	88.1236	-22.0958	1.0079	-0.0174
Base	2	15	COMB7 Max	20.0014	5.371	88.7665	74.6085	27.8686	0.0174
Base	2	15	COMB7 Min	3.1627	-47.8186	62.8536	-29.5977	-3.1173	-0.0174
Base	2	15	COMB8 Max	38.3535	-13.2454	93.3716	38.1364	62.4962	0.0052
Base	2	15	COMB8 Min	-15.1894	-29.2022	58.2485	6.8745	-37.745	-0.0052
Base	2	15	ENVE Max	42.2142	5.371	133.2003	82.1104	66.6214	0.0174
Base	2	15	ENVE Min	-15.1894	-54.8932	58.2485	-29.5977	-37.745	-0.0174
Base	2	15	CIM01	12.869	-23.582	84.2333	25.006	13.7507	0
Base	2	15	CIM02	12.869	-23.582	84.2333	25.006	13.7507	0
Base	2	15	CIM03	16.6094	-30.6851	104.3085	32.5381	17.7537	0
Base	2	15	CIM04	15.6743	-28.9094	99.2897	30.6551	16.7529	0
Base	2	15	CIM05 Max	31.609	-17.9971	96.5264	35.9477	48.8351	0.0037
Base	2	15	CIM05 Min	-5.871	-29.1669	71.9403	14.0644	-21.3337	-0.0037
Base	2	15	CIM06 Max	18.7625	-4.9657	93.3029	61.4782	24.5958	0.0122
Base	2	15	CIM06 Min	6.9754	-42.1984	75.1638	-11.4661	2.9056	-0.0122
Base	2	15	CIM07 Max	29.8636	-24.6542	108.6058	38.9916	43.3173	0.0028
Base	2	15	CIM07 Min	1.485	-33.1645	89.9737	22.3186	-9.8115	-0.0028
Base	2	15	CIM08 Max	20.1632	-14.8141	106.1717	58.2697	25.0142	0.0092
Base	2	15	CIM08 Min	11.1854	-43.0046	92.4078	3.0404	8.4917	-0.0092
Base	2	15	DER01	18.0166	-33.0148	117.9267	35.0085	19.251	0
Base	2	15	DER02	17.313	-31.85	111.1176	33.7733	18.5023	0
Base	2	15	DER03	21.4275	-39.6634	133.2003	42.0585	22.9056	0
Base	2	15	DER04	17.313	-31.85	111.1176	33.7733	18.5023	0
Base	2	15	DER05 Max	127.3929	-28.2984	164.2203	30.0073	226.4632	0
Base	2	15	DER05 Min	-96.5074	-28.2984	37.9398	30.0073	-193.4616	0
Base	2	15	DER06 Max	17.2339	83.4467	136.578	248.9325	18.61	0.0732
Base	2	15	DER06 Min	13.6516	-140.0435	65.5821	-188.918	14.3916	-0.0732
Base	2	15	DER07 Max	123.5322	-21.2238	138.9503	22.5054	222.338	0
Base	2	15	DER07 Min	-100.368	-21.2238	12.6698	22.5054	-197.5868	0
Base	2	15	DER08 Max	13.3732	90.5213	111.308	241.4307	14.4848	0.0732
Base	2	15	DER08 Min	9.7909	-132.9689	40.3121	-196.4198	10.2664	-0.0732
Base	2	15	DERUD01	18.0166	-33.0148	117.9267	35.0085	19.251	0
Base	2	15	DERUD02	17.313	-31.85	111.1176	33.7733	18.5023	0
Base	2	15	DERUD03	21.4275	-39.6634	133.2003	42.0585	22.9056	0
Base	2	15	DERUD04	17.313	-31.85	111.1176	33.7733	18.5023	0
Base	2	15	DERUD05 Max	30.8809	-28.2984	109.7872	30.0073	45.455	0
Base	2	15	DERUD05 Min	0.0047	-28.2984	92.3729	30.0073	-12.4533	0
Base	2	15	DERUD06 Max	15.6928	-12.7475	106.0206	60.4739	16.7954	0.01
Base	2	15	DERUD06 Min	15.1928	-43.8494	96.1394	-0.4594	16.2063	-0.01
Base	2	15	DERUD07 Max	27.0202	-21.2238	84.5172	22.5054	41.3298	0
Base	2	15	DERUD07 Min	-3.856	-21.2238	67.1029	22.5054	-16.5785	0
Base	2	15	DERUD08 Max	11.8321	-5.6729	80.7506	52.9721	12.6702	0.01
Base	2	15	DERUD08 Min	11.3321	-36.7748	70.8694	-7.9612	12.0811	-0.01
Base	2	15	CIM09 Max	31.609	-17.9971	96.5264	35.9477	48.8351	0.0037
Base	2	15	CIM09 Min	-5.871	-29.1669	71.9403	14.0644	-21.3337	-0.0037
Base	2	15	CIM10 Max	18.7625	-4.9657	93.3029	61.4782	24.5958	0.0122
Base	2	15	CIM10 Min	6.9754	-42.1984	75.1638	-11.4661	2.9056	-0.0122
Base	2	15	CIM11	14.7392	-27.1336	94.2709	28.7721	15.7522	0
Base	2	15	CIM12	14.2716	-26.2457	91.7615	27.8306	15.2518	0
Base	2	15	CIM13 Max	28.4609	-21.9905	101.0776	36.1671	41.8162	0.0028

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	CIM13 Min	0.0823	-30.5008	82.4455	19.4941	-11.3126	-0.0028
Base	2	15	CIM14 Max	18.7605	-12.1505	98.6435	55.4452	23.5131	0.0092
Base	2	15	CIM14 Min	9.7827	-40.3409	84.8796	0.2159	6.9906	-0.0092
Base	2	15	CIM15	7.7214	-14.1492	50.54	15.0036	8.2504	0
Base	2	15	COMB9	16.3779	-30.0742	106.0988	31.8903	17.5016	0
Base	2	15	COMB10	18.4351	-33.9809	117.1402	36.0329	19.7032	0
Base	2	15	COMB11	16.3779	-30.0742	106.0988	31.8903	17.5016	0
Base	2	15	DER09	16.3779	-30.0742	106.0988	31.8903	17.5016	0
Base	2	15	DER010	18.4351	-33.9809	117.1402	36.0329	19.7032	0
Base	2	15	DER011	16.3779	-30.0742	106.0988	31.8903	17.5016	0
Base	2	15	DERUD09	16.3779	-30.0742	106.0988	31.8903	17.5016	0
Base	2	15	DERUD10	18.4351	-33.9809	117.1402	36.0329	19.7032	0
Base	2	15	DERUD11	16.3779	-30.0742	106.0988	31.8903	17.5016	0
Base	3	16	D	-12.869	23.4335	84.6137	-24.8487	-13.5415	0
Base	3	16	L	0	0	0	0	0	0
Base	3	16	LR	-3.7404	7.0108	20.1048	-7.4342	-3.9296	0
Base	3	16	EX Max	111.9488	0	63.1402	0	209.962	0
Base	3	16	EY Max	1.3865	112.1528	35.4724	219.5727	1.3454	0.0732
Base	3	16	DISX Max	26.6432	0	15.0271	0	49.9699	0
Base	3	16	DISY Max	0.33	26.6918	8.4422	52.2572	0.3202	0.0174
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	-1.8702	3.5054	10.0524	-3.7171	-1.9648	0
Base	3	16	DERUX Max	15.4379	0	8.7071	0	28.9541	0
Base	3	16	DERUY Max	0.1916	15.6088	4.9363	30.5588	0.1841	0.01
Base	3	16	COMB1	-18.0166	32.807	118.4591	-34.7882	-18.9582	0
Base	3	16	COMB2	-17.313	31.6256	111.5888	-33.5355	-18.2147	0
Base	3	16	COMB3	-21.4275	39.3375	133.7041	-41.7131	-22.5373	0
Base	3	16	COMB4	-17.313	31.6256	111.5888	-33.5355	-18.2147	0
Base	3	16	COMB5 Max	11.2995	36.1278	119.0961	-14.1413	33.8161	0.0052
Base	3	16	COMB5 Min	-42.185	20.1127	83.9767	-45.4956	-66.3158	-0.0052
Base	3	16	COMB6 Max	-7.1198	54.812	114.4867	22.4388	-0.9387	0.0174
Base	3	16	COMB6 Min	-23.7657	1.4284	88.586	-82.0756	-31.561	-0.0174
Base	3	16	COMB7 Max	-3.2591	47.782	89.1026	29.8934	3.1238	0.0174
Base	3	16	COMB7 Min	-19.905	-5.6016	63.2019	-74.621	-27.4985	-0.0174
Base	3	16	COMB8 Max	15.1602	29.0977	93.712	-6.6867	37.8786	0.0052
Base	3	16	COMB8 Min	-38.3243	13.0826	58.5926	-38.041	-62.2533	-0.0052
Base	3	16	ENVE Max	15.1602	54.812	133.7041	29.8934	37.8786	0.0174
Base	3	16	ENVE Min	-42.185	-5.6016	58.5926	-82.0756	-66.3158	-0.0174
Base	3	16	CIM01	-12.869	23.4335	84.6137	-24.8487	-13.5415	0
Base	3	16	CIM02	-12.869	23.4335	84.6137	-24.8487	-13.5415	0
Base	3	16	CIM03	-16.6094	30.4443	104.7185	-32.2829	-17.4712	0
Base	3	16	CIM04	-15.6743	28.6916	99.6923	-30.4243	-16.4888	0
Base	3	16	CIM05 Max	5.8506	29.0388	96.9055	-13.8747	21.5046	0.0037
Base	3	16	CIM05 Min	-31.5885	17.8283	72.3218	-35.8227	-48.5877	-0.0037
Base	3	16	CIM06 Max	-7.0429	42.1178	93.6789	11.7313	-2.8237	0.0122
Base	3	16	CIM06 Min	-18.6951	4.7493	75.5484	-61.4287	-24.2594	-0.0122
Base	3	16	CIM07 Max	-1.5006	32.9623	109.0074	-22.0632	10.0465	0.0028
Base	3	16	CIM07 Min	-29.848	24.421	90.3772	-38.7855	-43.024	-0.0028
Base	3	16	CIM08 Max	-11.2365	42.8383	106.571	-2.728	-8.3239	0.0092
Base	3	16	CIM08 Min	-20.1121	14.545	92.8136	-58.1206	-24.6537	-0.0092
Base	3	16	DER01	-18.0166	32.807	118.4591	-34.7882	-18.9582	0
Base	3	16	DER02	-17.313	31.6256	111.5888	-33.5355	-18.2147	0
Base	3	16	DER03	-21.4275	39.3375	133.7041	-41.7131	-22.5373	0
Base	3	16	DER04	-17.313	31.6256	111.5888	-33.5355	-18.2147	0
Base	3	16	DER05 Max	96.506	28.1202	164.6766	-29.8184	193.7121	0
Base	3	16	DER05 Min	-127.3915	28.1202	38.3961	-29.8184	-226.2118	0
Base	3	16	DER06 Max	-14.0563	140.273	137.0087	189.7543	-14.9045	0.0732
Base	3	16	DER06 Min	-16.8293	-84.0326	66.064	-249.3911	-17.5952	-0.0732
Base	3	16	DER07 Max	100.3667	21.0902	139.2925	-22.3638	197.7746	0
Base	3	16	DER07 Min	-123.5309	21.0902	13.012	-22.3638	-222.1494	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	DER08 Max	-10.1956	133.243	111.6246	197.2089	-10.842	0.0732
Base	3	16	DER08 Min	-12.9686	-91.0626	40.6799	-241.9365	-13.5328	-0.0732
Base	3	16	DERUD01	-18.0166	32.807	118.4591	-34.7882	-18.9582	0
Base	3	16	DERUD02	-17.313	31.6256	111.5888	-33.5355	-18.2147	0
Base	3	16	DERUD03	-21.4275	39.3375	133.7041	-41.7131	-22.5373	0
Base	3	16	DERUD04	-17.313	31.6256	111.5888	-33.5355	-18.2147	0
Base	3	16	DERUD05 Max	-0.0049	28.1202	110.2435	-29.8184	12.7042	0
Base	3	16	DERUD05 Min	-30.8807	28.1202	92.8292	-29.8184	-45.2039	0
Base	3	16	DERUD06 Max	-15.2512	43.729	106.4726	0.7404	-16.0657	0.01
Base	3	16	DERUD06 Min	-15.6344	12.5115	96.6001	-60.3773	-16.434	-0.01
Base	3	16	DERUD07 Max	3.8558	21.0902	84.8594	-22.3638	16.7667	0
Base	3	16	DERUD07 Min	-27.02	21.0902	67.4451	-22.3638	-41.1415	0
Base	3	16	DERUD08 Max	-11.3905	36.699	81.0885	8.195	-12.0033	0.01
Base	3	16	DERUD08 Min	-11.7737	5.4814	71.216	-52.9227	-12.3715	-0.01
Base	3	16	CIM09 Max	5.8506	29.0388	96.9055	-13.8747	21.5046	0.0037
Base	3	16	CIM09 Min	-31.5885	17.8283	72.3218	-35.8227	-48.5877	-0.0037
Base	3	16	CIM10 Max	-7.0429	42.1178	93.6789	11.7313	-2.8237	0.0122
Base	3	16	CIM10 Min	-18.6951	4.7493	75.5484	-61.4287	-24.2594	-0.0122
Base	3	16	CIM11	-14.7392	26.9389	94.6661	-28.5658	-15.5064	0
Base	3	16	CIM12	-14.2716	26.0626	92.153	-27.6365	-15.0152	0
Base	3	16	CIM13 Max	-0.0979	30.3333	101.4681	-19.2754	11.5201	0.0028
Base	3	16	CIM13 Min	-28.4454	21.7919	82.8379	-35.9977	-41.5504	-0.0028
Base	3	16	CIM14 Max	-9.8338	40.2092	99.0317	0.0598	-6.8503	0.0092
Base	3	16	CIM14 Min	-18.7095	11.9159	85.2742	-55.3328	-23.18	-0.0092
Base	3	16	CIM15	-7.7214	14.0601	50.7682	-14.9092	-8.1249	0
Base	3	16	COMB9	-16.3779	29.8729	106.5626	-31.677	-17.2323	0
Base	3	16	COMB10	-18.4351	33.7289	117.6202	-35.7658	-19.3936	0
Base	3	16	COMB11	-16.3779	29.8729	106.5626	-31.677	-17.2323	0
Base	3	16	DER09	-16.3779	29.8729	106.5626	-31.677	-17.2323	0
Base	3	16	DER010	-18.4351	33.7289	117.6202	-35.7658	-19.3936	0
Base	3	16	DER011	-16.3779	29.8729	106.5626	-31.677	-17.2323	0
Base	3	16	DERUD09	-16.3779	29.8729	106.5626	-31.677	-17.2323	0
Base	3	16	DERUD10	-18.4351	33.7289	117.6202	-35.7658	-19.3936	0
Base	3	16	DERUD11	-16.3779	29.8729	106.5626	-31.677	-17.2323	0
Base	4	18	D	-12.869	-23.4335	84.6137	24.8487	-13.5415	0
Base	4	18	L	0	0	0	0	0	0
Base	4	18	LR	-3.7404	-7.0108	20.1048	7.4342	-3.9296	0
Base	4	18	EX Max	111.9488	0	63.1402	0	209.962	0
Base	4	18	EY Max	1.3865	112.1528	35.4724	219.5727	1.3454	0.0732
Base	4	18	DISX Max	26.6432	0	15.0271	0	49.9699	0
Base	4	18	DISY Max	0.33	26.6918	8.4422	52.2572	0.3202	0.0174
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	-1.8702	-3.5054	10.0524	3.7171	-1.9648	0
Base	4	18	DERUX Max	15.4379	0	8.7071	0	28.9541	0
Base	4	18	DERUY Max	0.1916	15.6088	4.9363	30.5588	0.1841	0.01
Base	4	18	COMB1	-18.0166	-32.807	118.4591	34.7882	-18.9582	0
Base	4	18	COMB2	-17.313	-31.6256	111.5888	33.5355	-18.2147	0
Base	4	18	COMB3	-21.4275	-39.3375	133.7041	41.7131	-22.5373	0
Base	4	18	COMB4	-17.313	-31.6256	111.5888	33.5355	-18.2147	0
Base	4	18	COMB5 Max	11.2995	-20.1127	119.0961	45.4956	33.8161	0.0052
Base	4	18	COMB5 Min	-42.185	-36.1278	83.9767	14.1413	-66.3158	-0.0052
Base	4	18	COMB6 Max	-7.1198	-1.4284	114.4867	82.0756	-0.9387	0.0174
Base	4	18	COMB6 Min	-23.7657	-54.812	88.586	-22.4388	-31.561	-0.0174
Base	4	18	COMB7 Max	-3.2591	5.6016	89.1026	74.621	3.1238	0.0174
Base	4	18	COMB7 Min	-19.905	-47.782	63.2019	-29.8934	-27.4985	-0.0174
Base	4	18	COMB8 Max	15.1602	-13.0826	93.712	38.041	37.8786	0.0052
Base	4	18	COMB8 Min	-38.3243	-29.0977	58.5926	6.6867	-62.2533	-0.0052
Base	4	18	ENVE Max	15.1602	5.6016	133.7041	82.0756	37.8786	0.0174
Base	4	18	ENVE Min	-42.185	-54.812	58.5926	-29.8934	-66.3158	-0.0174
Base	4	18	CIM01	-12.869	-23.4335	84.6137	24.8487	-13.5415	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	CIM02	-12.869	-23.4335	84.6137	24.8487	-13.5415	0
Base	4	18	CIM03	-16.6094	-30.4443	104.7185	32.2829	-17.4712	0
Base	4	18	CIM04	-15.6743	-28.6916	99.6923	30.4243	-16.4888	0
Base	4	18	CIM05 Max	5.8506	-17.8283	96.9055	35.8227	21.5046	0.0037
Base	4	18	CIM05 Min	-31.5885	-29.0388	72.3218	13.8747	-48.5877	-0.0037
Base	4	18	CIM06 Max	-7.0429	-4.7493	93.6789	61.4287	-2.8237	0.0122
Base	4	18	CIM06 Min	-18.6951	-42.1178	75.5484	-11.7313	-24.2594	-0.0122
Base	4	18	CIM07 Max	-1.5006	-24.421	109.0074	38.7855	10.0465	0.0028
Base	4	18	CIM07 Min	-29.848	-32.9623	90.3772	22.0632	-43.024	-0.0028
Base	4	18	CIM08 Max	-11.2365	-14.545	106.571	58.1206	-8.3239	0.0092
Base	4	18	CIM08 Min	-20.1121	-42.8383	92.8136	2.728	-24.6537	-0.0092
Base	4	18	DER01	-18.0166	-32.807	118.4591	34.7882	-18.9582	0
Base	4	18	DER02	-17.313	-31.6256	111.5888	33.5355	-18.2147	0
Base	4	18	DER03	-21.4275	-39.3375	133.7041	41.7131	-22.5373	0
Base	4	18	DER04	-17.313	-31.6256	111.5888	33.5355	-18.2147	0
Base	4	18	DER05 Max	96.506	-28.1202	164.6766	29.8184	193.7121	0
Base	4	18	DER05 Min	-127.3915	-28.1202	38.3961	29.8184	-226.2118	0
Base	4	18	DER06 Max	-14.0563	84.0326	137.0087	249.3911	-14.9045	0.0732
Base	4	18	DER06 Min	-16.8293	-140.273	66.064	-189.7543	-17.5952	-0.0732
Base	4	18	DER07 Max	100.3667	-21.0902	139.2925	22.3638	197.7746	0
Base	4	18	DER07 Min	-123.5309	-21.0902	13.012	22.3638	-222.1494	0
Base	4	18	DER08 Max	-10.1956	91.0626	111.6246	241.9365	-10.842	0.0732
Base	4	18	DER08 Min	-12.9686	-133.243	40.6799	-197.2089	-13.5328	-0.0732
Base	4	18	DERUD01	-18.0166	-32.807	118.4591	34.7882	-18.9582	0
Base	4	18	DERUD02	-17.313	-31.6256	111.5888	33.5355	-18.2147	0
Base	4	18	DERUD03	-21.4275	-39.3375	133.7041	41.7131	-22.5373	0
Base	4	18	DERUD04	-17.313	-31.6256	111.5888	33.5355	-18.2147	0
Base	4	18	DERUD05 Max	-0.0049	-28.1202	110.2435	29.8184	12.7042	0
Base	4	18	DERUD05 Min	-30.8807	-28.1202	92.8292	29.8184	-45.2039	0
Base	4	18	DERUD06 Max	-15.2512	-12.5115	106.4726	60.3773	-16.0657	0.01
Base	4	18	DERUD06 Min	-15.6344	-43.729	96.6001	-0.7404	-16.434	-0.01
Base	4	18	DERUD07 Max	3.8558	-21.0902	84.8594	22.3638	16.7667	0
Base	4	18	DERUD07 Min	-27.02	-21.0902	67.4451	22.3638	-41.1415	0
Base	4	18	DERUD08 Max	-11.3905	-5.4814	81.0885	52.9227	-12.0033	0.01
Base	4	18	DERUD08 Min	-11.7737	-36.699	71.216	-8.195	-12.3715	-0.01
Base	4	18	CIM09 Max	5.8506	-17.8283	96.9055	35.8227	21.5046	0.0037
Base	4	18	CIM09 Min	-31.5885	-29.0388	72.3218	13.8747	-48.5877	-0.0037
Base	4	18	CIM10 Max	-7.0429	-4.7493	93.6789	61.4287	-2.8237	0.0122
Base	4	18	CIM10 Min	-18.6951	-42.1178	75.5484	-11.7313	-24.2594	-0.0122
Base	4	18	CIM11	-14.7392	-26.9389	94.6661	28.5658	-15.5064	0
Base	4	18	CIM12	-14.2716	-26.0626	92.153	27.6365	-15.0152	0
Base	4	18	CIM13 Max	-0.0979	-21.7919	101.4681	35.9977	11.5201	0.0028
Base	4	18	CIM13 Min	-28.4454	-30.3333	82.8379	19.2754	-41.5504	-0.0028
Base	4	18	CIM14 Max	-9.8338	-11.9159	99.0317	55.3328	-6.8503	0.0092
Base	4	18	CIM14 Min	-18.7095	-40.2092	85.2742	-0.0598	-23.18	-0.0092
Base	4	18	CIM15	-7.7214	-14.0601	50.7682	14.9092	-8.1249	0
Base	4	18	COMB9	-16.3779	-29.8729	106.5626	31.677	-17.2323	0
Base	4	18	COMB10	-18.4351	-33.7289	117.6202	35.7658	-19.3936	0
Base	4	18	COMB11	-16.3779	-29.8729	106.5626	31.677	-17.2323	0
Base	4	18	DER09	-16.3779	-29.8729	106.5626	31.677	-17.2323	0
Base	4	18	DER010	-18.4351	-33.7289	117.6202	35.7658	-19.3936	0
Base	4	18	DER011	-16.3779	-29.8729	106.5626	31.677	-17.2323	0
Base	4	18	DERUD09	-16.3779	-29.8729	106.5626	31.677	-17.2323	0
Base	4	18	DERUD10	-18.4351	-33.7289	117.6202	35.7658	-19.3936	0
Base	4	18	DERUD11	-16.3779	-29.8729	106.5626	31.677	-17.2323	0

## 5.4 Modal Results

Table 5.8 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.18	5.548	34.8579	1215.0746
Modal	2	0.172	5.823	36.5889	1338.7498
Modal	3	0.16	6.24	39.2097	1537.3995

Table 5.9 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.18	0	1	0	0	1	0
Modal	2	0.172	1	0	0	1	1	0
Modal	3	0.16	0	8.683E-06	0	1	1	0

Table 5.9 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	1	0	9.125E-06	1	0	9.125E-06
Modal	2	0	1	0	1	1	9.125E-06
Modal	3	8.683E-06	0	1	1	1	1

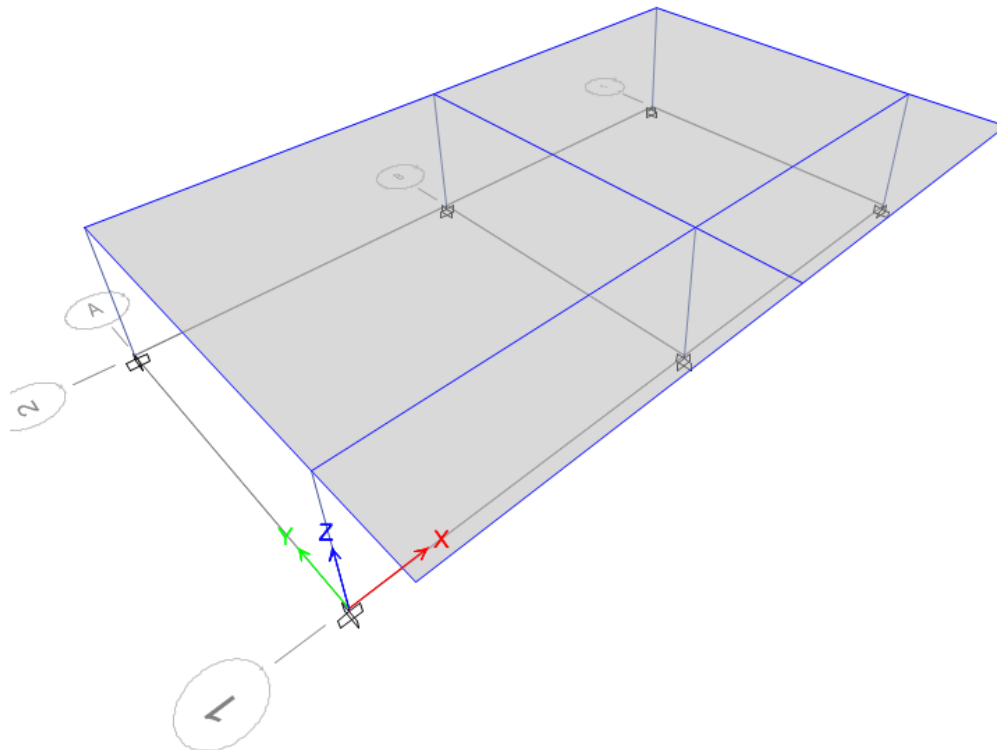
Table 5.10 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.11 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.18	0	1	0	0
Modal	2	0.172	1	0	0	0
Modal	3	0.16	0	0	0	1





## Project Report

Model File: 004 2017 PROTOTIPO EDUCACION MODULO 2A\_DES, Revision 0  
04/04/2017

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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	8.2
G1	X	C	Yes	End	16.4
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	8200	0	0
4	8200	8200	0
5	16400	0	0
6	16400	8200	0
10	0	-2400	0
8	16400	-2400	0
9	8200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below
C5	5	5	Below
C6	6	6	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None

Beam	I-End Point	J-End Point	Curve Type
B3	5	6	None
B4	1	3	None
B5	3	5	None
B6	2	4	None
B7	4	6	None
B8	10	1	None
B14	8	5	None
B15	10	9	None
B16	9	8	None
B17	9	3	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F2	4	1	1	5	None
		2	5	6	None
		3	6	2	None
		4	2	1	None
F3	4	1	10	8	None
		2	8	5	None
		3	5	1	None
		4	1	10	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	55898.74	55898.74	8.2	-0.8133	55898.74	55898.74	8.2	-0.8133	8.2	3.2895

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	55898.74	55898.74	2087.5871	8.2	-0.8133

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	73838.47	73838.47	0
Base	3747.82	3747.82	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow



## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	5	10	D1	
N1	6	20	Disconnected	
N1	10	25	D1	
N1	8	27	D1	
N1	9	26	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	5	19	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	6	21	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	C5	11	Column	3250	C40X40	C40X40	11
N1	C6	12	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	8200	V30X50	V30X50	11
N1	B2	14	Beam	8200	V30X50	V30X50	11
N1	B3	15	Beam	8200	V30X50	V30X50	11
N1	B4	16	Beam	8200	V30X50	V30X50	11
N1	B5	17	Beam	8200	V30X50	V30X50	11
N1	B6	18	Beam	8200	V30X50	V30X50	11
N1	B7	19	Beam	8200	V30X50	V30X50	11
N1	B8	2	Beam	2400	V30X50	V30X50	11
N1	B14	6	Beam	2400	V30X50	V30X50	11
N1	B15	22	Beam	8200	VB20X50	VB20X50	11
N1	B16	23	Beam	8200	VB20X50	VB20X50	11
N1	B17	4	Beam	2400	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F2	2	CUB	
N1	F3	1	LOSA	90



## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200
N1	B3	15	Beam	D	Force	Gravity	0	1	0	8200
N1	B4	16	Beam	D	Force	Gravity	0	1	0	8200
N1	B5	17	Beam	D	Force	Gravity	0	1	0	8200
N1	B15	22	Beam	D	Force	Gravity	0	1	0	8200
N1	B16	23	Beam	D	Force	Gravity	0	1	0	8200

**Table 4.2 - Frame Loads - Distributed (Part 2 of 2)**

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N1	B1	13	4.4	0
N1	B2	14	4.4	0
N1	B3	15	4.4	0
N1	B4	16	4.4	4.4
N1	B5	17	4.4	4.4
N1	B15	22	3.1	3.1
N1	B16	23	3.1	3.1

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F2	2	D	Gravity	0.64
N1	F3	1	D	Gravity	4.3
N1	F2	2	LR	Gravity	0.5
N1	F3	1	LR	Gravity	2
N1	F2	2	G	Gravity	1
N1	F3	1	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0	1.1813	5
NSR10DERIVA	0.1	1.1813	
NSR10DERIVA	0.2	1.1813	
NSR10DERIVA	0.3	1.1813	
NSR10DERIVA	0.4	1.1813	
NSR10DERIVA	0.5	1.1813	
NSR10DERIVA	0.6	1.1813	
NSR10DERIVA	0.7	1.0971	
NSR10DERIVA	0.8	0.96	
NSR10DERIVA	0.9	0.8533	
NSR10DERIVA	1	0.768	
NSR10DERIVA	1.2	0.64	
NSR10DERIVA	1.5	0.512	
NSR10DERIVA	1.7	0.4518	
NSR10DERIVA	2	0.384	
NSR10DERIVA	2.5	0.3072	
NSR10DERIVA	3	0.256	
NSR10DERIVA	3.5	0.2194	
NSR10DERIVA	4	0.1843	
NSR10DERIVA	5	0.118	
NSR10DERIVA	8	0.0461	
NSR10DERIVA	11	0.0244	
NSR10DERIVA	15	0.0131	
disNSR10	0	1.4766	5
disNSR10	0.1	1.4766	
disNSR10	0.2	1.4766	
disNSR10	0.3	1.4766	
disNSR10	0.4	1.4766	
disNSR10	0.5	1.4766	
disNSR10	0.6	1.4766	
disNSR10	0.7	1.3714	
disNSR10	0.8	1.2	
disNSR10	0.9	1.0667	
disNSR10	1	0.96	
disNSR10	1.2	0.8	
disNSR10	1.5	0.64	
disNSR10	1.7	0.5647	
disNSR10	2	0.48	
disNSR10	2.5	0.384	
disNSR10	3	0.32	
disNSR10	3.5	0.2743	
disNSR10	4	0.2304	
disNSR10	5	0.1475	
disNSR10	8	0.0576	
disNSR10	11	0.0305	
disNSR10	15	0.0164	
UMBRAL	0	0.1	2
UMBRAL	0.01	0.108	
UMBRAL	0.02	0.116	
UMBRAL	0.03	0.124	
UMBRAL	0.04	0.132	
UMBRAL	0.05	0.14	
UMBRAL	0.06	0.148	
UMBRAL	0.07	0.156	
UMBRAL	0.08	0.164	
UMBRAL	0.09	0.172	
UMBRAL	0.1	0.18	
UMBRAL	0.11	0.188	
UMBRAL	0.12	0.196	
UMBRAL	0.13	0.204	

Name	Period sec	Acceleration	Damping %
UMBRAL	0.14	0.212	
UMBRAL	0.15	0.22	
UMBRAL	0.16	0.228	
UMBRAL	0.17	0.236	
UMBRAL	0.18	0.244	
UMBRAL	0.19	0.252	
UMBRAL	0.2	0.26	
UMBRAL	0.21	0.268	
UMBRAL	0.22	0.276	
UMBRAL	0.23	0.284	
UMBRAL	0.24	0.292	
UMBRAL	0.25	0.3	
UMBRAL	0.26	0.3	
UMBRAL	0.27	0.3	
UMBRAL	0.28	0.3	
UMBRAL	0.29	0.3	
UMBRAL	0.3	0.3	
UMBRAL	0.31	0.3	
UMBRAL	0.32	0.3	
UMBRAL	0.33	0.3	
UMBRAL	0.34	0.3	
UMBRAL	0.35	0.3	
UMBRAL	0.36	0.3	
UMBRAL	0.37	0.3	
UMBRAL	0.38	0.3	
UMBRAL	0.39	0.3	
UMBRAL	0.4	0.3	
UMBRAL	0.41	0.3	
UMBRAL	0.42	0.3	
UMBRAL	0.43	0.3	
UMBRAL	0.44	0.3	
UMBRAL	0.45	0.3	
UMBRAL	0.46	0.3	
UMBRAL	0.47	0.3	
UMBRAL	0.48	0.3	
UMBRAL	0.49	0.3	
UMBRAL	0.5	0.3	
UMBRAL	0.51	0.3	
UMBRAL	0.52	0.3	
UMBRAL	0.53	0.3	
UMBRAL	0.54	0.3	
UMBRAL	0.55	0.3	
UMBRAL	0.56	0.3	
UMBRAL	0.57	0.3	
UMBRAL	0.58	0.3	
UMBRAL	0.59	0.3	
UMBRAL	0.6	0.3	
UMBRAL	0.61	0.3	
UMBRAL	0.62	0.3	
UMBRAL	0.63	0.3	
UMBRAL	0.64	0.3	
UMBRAL	0.65	0.3	
UMBRAL	0.66	0.3	
UMBRAL	0.67	0.3	
UMBRAL	0.68	0.3	
UMBRAL	0.69	0.3	
UMBRAL	0.7	0.3	
UMBRAL	0.71	0.3	
UMBRAL	0.72	0.3	
UMBRAL	0.73	0.3	

Name	Period sec	Acceleration	Damping %
UMBRAL	0.74	0.3	
UMBRAL	0.75	0.3	
UMBRAL	0.76	0.3	
UMBRAL	0.77	0.3	
UMBRAL	0.78	0.3	
UMBRAL	0.79	0.3	
UMBRAL	0.8	0.3	
UMBRAL	0.81	0.3	
UMBRAL	0.82	0.3	
UMBRAL	0.83	0.3	
UMBRAL	0.84	0.3	
UMBRAL	0.85	0.3	
UMBRAL	0.86	0.3	
UMBRAL	0.87	0.3	
UMBRAL	0.88	0.3	
UMBRAL	0.89	0.3	
UMBRAL	0.9	0.3	
UMBRAL	0.91	0.3	
UMBRAL	0.92	0.3	
UMBRAL	0.93	0.3	
UMBRAL	0.94	0.3	
UMBRAL	0.95	0.3	
UMBRAL	0.96	0.3	
UMBRAL	0.97	0.3	
UMBRAL	0.98	0.3	
UMBRAL	0.99	0.3	
UMBRAL	1	0.3	
UMBRAL	1.01	0.297	
UMBRAL	1.02	0.294	
UMBRAL	1.03	0.291	
UMBRAL	1.04	0.288	
UMBRAL	1.05	0.286	
UMBRAL	1.06	0.283	
UMBRAL	1.07	0.28	
UMBRAL	1.08	0.278	
UMBRAL	1.09	0.275	
UMBRAL	1.1	0.273	
UMBRAL	1.11	0.27	
UMBRAL	1.12	0.268	
UMBRAL	1.13	0.265	
UMBRAL	1.14	0.263	
UMBRAL	1.15	0.261	
UMBRAL	1.16	0.259	
UMBRAL	1.17	0.256	
UMBRAL	1.18	0.254	
UMBRAL	1.19	0.252	
UMBRAL	1.2	0.25	
UMBRAL	1.21	0.248	
UMBRAL	1.22	0.246	
UMBRAL	1.23	0.244	
UMBRAL	1.24	0.242	
UMBRAL	1.25	0.24	
UMBRAL	1.26	0.238	
UMBRAL	1.27	0.236	
UMBRAL	1.28	0.234	
UMBRAL	1.29	0.233	
UMBRAL	1.3	0.231	
UMBRAL	1.31	0.229	
UMBRAL	1.32	0.227	
UMBRAL	1.33	0.226	

Name	Period sec	Acceleration	Damping %
UMBRAL	1.34	0.224	
UMBRAL	1.35	0.222	
UMBRAL	1.36	0.221	
UMBRAL	1.37	0.219	
UMBRAL	1.38	0.217	
UMBRAL	1.39	0.216	
UMBRAL	1.4	0.214	
UMBRAL	1.41	0.213	
UMBRAL	1.42	0.211	
UMBRAL	1.43	0.21	
UMBRAL	1.44	0.208	
UMBRAL	1.45	0.207	
UMBRAL	1.46	0.205	
UMBRAL	1.47	0.204	
UMBRAL	1.48	0.203	
UMBRAL	1.49	0.201	
UMBRAL	1.5	0.2	
UMBRAL	1.51	0.199	
UMBRAL	1.52	0.197	
UMBRAL	1.53	0.196	
UMBRAL	1.54	0.195	
UMBRAL	1.55	0.194	
UMBRAL	1.56	0.192	
UMBRAL	1.57	0.191	
UMBRAL	1.58	0.19	
UMBRAL	1.59	0.189	
UMBRAL	1.6	0.188	
UMBRAL	1.61	0.186	
UMBRAL	1.62	0.185	
UMBRAL	1.63	0.184	
UMBRAL	1.64	0.183	
UMBRAL	1.65	0.182	
UMBRAL	1.66	0.181	
UMBRAL	1.67	0.18	
UMBRAL	1.68	0.179	
UMBRAL	1.69	0.178	
UMBRAL	1.7	0.176	
UMBRAL	1.71	0.175	
UMBRAL	1.72	0.174	
UMBRAL	1.73	0.173	
UMBRAL	1.74	0.172	
UMBRAL	1.75	0.171	
UMBRAL	1.76	0.17	
UMBRAL	1.77	0.169	
UMBRAL	1.78	0.169	
UMBRAL	1.79	0.168	
UMBRAL	1.8	0.167	
UMBRAL	1.81	0.166	
UMBRAL	1.82	0.165	
UMBRAL	1.83	0.164	
UMBRAL	1.84	0.163	
UMBRAL	1.85	0.162	
UMBRAL	1.86	0.161	
UMBRAL	1.87	0.16	
UMBRAL	1.88	0.16	
UMBRAL	1.89	0.159	
UMBRAL	1.9	0.158	
UMBRAL	1.91	0.157	
UMBRAL	1.92	0.156	
UMBRAL	1.93	0.155	

Name	Period sec	Acceleration	Damping %
UMBRAL	1.94	0.155	
UMBRAL	1.95	0.154	
UMBRAL	1.96	0.153	
UMBRAL	1.97	0.152	
UMBRAL	1.98	0.152	
UMBRAL	1.99	0.151	
UMBRAL	2	0.15	
UMBRAL	2.01	0.149	
UMBRAL	2.02	0.149	
UMBRAL	2.03	0.148	
UMBRAL	2.04	0.147	
UMBRAL	2.05	0.146	
UMBRAL	2.06	0.146	
UMBRAL	2.07	0.145	
UMBRAL	2.08	0.144	
UMBRAL	2.09	0.144	
UMBRAL	2.1	0.143	
UMBRAL	2.11	0.142	
UMBRAL	2.12	0.142	
UMBRAL	2.13	0.141	
UMBRAL	2.14	0.14	
UMBRAL	2.15	0.14	
UMBRAL	2.16	0.139	
UMBRAL	2.17	0.138	
UMBRAL	2.18	0.138	
UMBRAL	2.19	0.137	
UMBRAL	2.2	0.136	
UMBRAL	2.21	0.136	
UMBRAL	2.22	0.135	
UMBRAL	2.23	0.135	
UMBRAL	2.24	0.134	
UMBRAL	2.25	0.133	
UMBRAL	2.26	0.133	
UMBRAL	2.27	0.132	
UMBRAL	2.28	0.132	
UMBRAL	2.29	0.131	
UMBRAL	2.3	0.13	
UMBRAL	2.31	0.13	
UMBRAL	2.32	0.129	
UMBRAL	2.33	0.129	
UMBRAL	2.34	0.128	
UMBRAL	2.35	0.128	
UMBRAL	2.36	0.127	
UMBRAL	2.37	0.127	
UMBRAL	2.38	0.126	
UMBRAL	2.39	0.126	
UMBRAL	2.4	0.125	
UMBRAL	2.41	0.124	
UMBRAL	2.42	0.124	
UMBRAL	2.43	0.123	
UMBRAL	2.44	0.123	
UMBRAL	2.45	0.122	
UMBRAL	2.46	0.122	
UMBRAL	2.47	0.121	
UMBRAL	2.48	0.121	
UMBRAL	2.49	0.12	
UMBRAL	2.5	0.12	
UMBRAL	2.51	0.12	
UMBRAL	2.52	0.119	
UMBRAL	2.53	0.119	

Name	Period sec	Acceleration	Damping %
UMBRAL	2.54	0.118	
UMBRAL	2.55	0.118	
UMBRAL	2.56	0.117	
UMBRAL	2.57	0.117	
UMBRAL	2.58	0.116	
UMBRAL	2.59	0.116	
UMBRAL	2.6	0.115	
UMBRAL	2.61	0.115	
UMBRAL	2.62	0.115	
UMBRAL	2.63	0.114	
UMBRAL	2.64	0.114	
UMBRAL	2.65	0.113	
UMBRAL	2.66	0.113	
UMBRAL	2.67	0.112	
UMBRAL	2.68	0.112	
UMBRAL	2.69	0.112	
UMBRAL	2.7	0.111	
UMBRAL	2.71	0.111	
UMBRAL	2.72	0.11	
UMBRAL	2.73	0.11	
UMBRAL	2.74	0.109	
UMBRAL	2.75	0.109	
UMBRAL	2.76	0.109	
UMBRAL	2.77	0.108	
UMBRAL	2.78	0.108	
UMBRAL	2.79	0.108	
UMBRAL	2.8	0.107	
UMBRAL	2.81	0.107	
UMBRAL	2.82	0.106	
UMBRAL	2.83	0.106	
UMBRAL	2.84	0.106	
UMBRAL	2.85	0.105	
UMBRAL	2.86	0.105	
UMBRAL	2.87	0.105	
UMBRAL	2.88	0.104	
UMBRAL	2.89	0.104	
UMBRAL	2.9	0.103	
UMBRAL	2.91	0.103	
UMBRAL	2.92	0.103	
UMBRAL	2.93	0.102	
UMBRAL	2.94	0.102	
UMBRAL	2.95	0.102	
UMBRAL	2.96	0.101	
UMBRAL	2.97	0.101	
UMBRAL	2.98	0.101	
UMBRAL	2.99	0.1	
UMBRAL	3	0.1	
UMBRAL	3.01	0.1	
UMBRAL	3.02	0.099	
UMBRAL	3.03	0.099	
UMBRAL	3.04	0.099	
UMBRAL	3.05	0.098	
UMBRAL	3.06	0.098	
UMBRAL	3.07	0.098	
UMBRAL	3.08	0.097	
UMBRAL	3.09	0.097	
UMBRAL	3.1	0.097	
UMBRAL	3.11	0.096	
UMBRAL	3.12	0.096	
UMBRAL	3.13	0.096	

Name	Period sec	Acceleration	Damping %
UMBRAL	3.14	0.096	
UMBRAL	3.15	0.095	
UMBRAL	3.16	0.095	
UMBRAL	3.17	0.095	
UMBRAL	3.18	0.094	
UMBRAL	3.19	0.094	
UMBRAL	3.2	0.094	
UMBRAL	3.21	0.093	
UMBRAL	3.22	0.093	
UMBRAL	3.23	0.093	
UMBRAL	3.24	0.093	
UMBRAL	3.25	0.092	
UMBRAL	3.26	0.092	
UMBRAL	3.27	0.092	
UMBRAL	3.28	0.091	
UMBRAL	3.29	0.091	
UMBRAL	3.3	0.091	
UMBRAL	3.31	0.091	
UMBRAL	3.32	0.09	
UMBRAL	3.33	0.09	
UMBRAL	3.34	0.09	
UMBRAL	3.35	0.09	
UMBRAL	3.36	0.089	
UMBRAL	3.37	0.089	
UMBRAL	3.38	0.089	
UMBRAL	3.39	0.088	
UMBRAL	3.4	0.088	
UMBRAL	3.41	0.088	
UMBRAL	3.42	0.088	
UMBRAL	3.43	0.087	
UMBRAL	3.44	0.087	
UMBRAL	3.45	0.087	
UMBRAL	3.46	0.087	
UMBRAL	3.47	0.086	
UMBRAL	3.48	0.086	
UMBRAL	3.49	0.086	
UMBRAL	3.5	0.086	
UMBRAL	3.51	0.085	
UMBRAL	3.52	0.085	
UMBRAL	3.53	0.085	
UMBRAL	3.54	0.085	
UMBRAL	3.55	0.085	
UMBRAL	3.56	0.084	
UMBRAL	3.57	0.084	
UMBRAL	3.58	0.084	
UMBRAL	3.59	0.084	
UMBRAL	3.6	0.083	
UMBRAL	3.61	0.083	
UMBRAL	3.62	0.083	
UMBRAL	3.63	0.083	
UMBRAL	3.64	0.082	
UMBRAL	3.65	0.082	
UMBRAL	3.66	0.082	
UMBRAL	3.67	0.082	
UMBRAL	3.68	0.082	
UMBRAL	3.69	0.081	
UMBRAL	3.7	0.081	
UMBRAL	3.71	0.081	
UMBRAL	3.72	0.081	
UMBRAL	3.73	0.08	



Name	Period sec	Acceleration	Damping %
UMBRAL	3.74	0.08	
UMBRAL	3.75	0.08	
UMBRAL	3.76	0.08	
UMBRAL	3.77	0.08	
UMBRAL	3.78	0.079	
UMBRAL	3.79	0.079	
UMBRAL	3.8	0.079	
UMBRAL	3.81	0.079	
UMBRAL	3.82	0.079	
UMBRAL	3.83	0.078	
UMBRAL	3.84	0.078	
UMBRAL	3.85	0.078	
UMBRAL	3.86	0.078	
UMBRAL	3.87	0.078	
UMBRAL	3.88	0.077	
UMBRAL	3.89	0.077	
UMBRAL	3.9	0.077	
UMBRAL	3.91	0.077	
UMBRAL	3.92	0.077	
UMBRAL	3.93	0.076	
UMBRAL	3.94	0.076	
UMBRAL	3.95	0.076	
UMBRAL	3.96	0.076	
UMBRAL	3.97	0.076	
UMBRAL	3.98	0.075	
UMBRAL	3.99	0.075	
UMBRAL	4	0.075	
UMBRAL	4.01	0.075	
UMBRAL	4.02	0.075	
UMBRAL	4.03	0.074	
UMBRAL	4.04	0.074	
UMBRAL	4.05	0.074	
UMBRAL	4.06	0.074	
UMBRAL	4.07	0.074	
UMBRAL	4.08	0.074	
UMBRAL	4.09	0.073	
UMBRAL	4.1	0.073	
UMBRAL	4.11	0.073	
UMBRAL	4.12	0.073	
UMBRAL	4.13	0.073	
UMBRAL	4.14	0.072	
UMBRAL	4.15	0.072	
UMBRAL	4.16	0.072	
UMBRAL	4.17	0.072	
UMBRAL	4.18	0.072	
UMBRAL	4.19	0.072	
UMBRAL	4.2	0.071	
UMBRAL	4.21	0.071	
UMBRAL	4.22	0.071	
UMBRAL	4.23	0.071	
UMBRAL	4.24	0.071	
UMBRAL	4.25	0.071	
UMBRAL	4.26	0.07	
UMBRAL	4.27	0.07	
UMBRAL	4.28	0.07	
UMBRAL	4.29	0.07	
UMBRAL	4.3	0.07	
UMBRAL	4.31	0.07	
UMBRAL	4.32	0.069	
UMBRAL	4.33	0.069	

Name	Period sec	Acceleration	Damping %
UMBRAL	4.34	0.069	
UMBRAL	4.35	0.069	
UMBRAL	4.36	0.069	
UMBRAL	4.37	0.069	
UMBRAL	4.38	0.068	
UMBRAL	4.39	0.068	
UMBRAL	4.4	0.068	
UMBRAL	4.41	0.068	
UMBRAL	4.42	0.068	
UMBRAL	4.43	0.068	
UMBRAL	4.44	0.068	
UMBRAL	4.45	0.067	
UMBRAL	4.46	0.067	
UMBRAL	4.47	0.067	
UMBRAL	4.48	0.067	
UMBRAL	4.49	0.067	
UMBRAL	4.5	0.067	
UMBRAL	4.51	0.067	
UMBRAL	4.52	0.066	
UMBRAL	4.53	0.066	
UMBRAL	4.54	0.066	
UMBRAL	4.55	0.066	
UMBRAL	4.56	0.066	
UMBRAL	4.57	0.066	
UMBRAL	4.58	0.066	
UMBRAL	4.59	0.065	
UMBRAL	4.6	0.065	
UMBRAL	4.61	0.065	
UMBRAL	4.62	0.065	
UMBRAL	4.63	0.065	
UMBRAL	4.64	0.065	
UMBRAL	4.65	0.065	
UMBRAL	4.66	0.064	
UMBRAL	4.67	0.064	
UMBRAL	4.68	0.064	
UMBRAL	4.69	0.064	
UMBRAL	4.7	0.064	
UMBRAL	4.71	0.064	
UMBRAL	4.72	0.064	
UMBRAL	4.73	0.063	
UMBRAL	4.74	0.063	
UMBRAL	4.75	0.063	
UMBRAL	4.76	0.063	
UMBRAL	4.77	0.063	
UMBRAL	4.78	0.063	
UMBRAL	4.79	0.063	
UMBRAL	4.8	0.063	
UMBRAL	4.81	0.062	
UMBRAL	4.82	0.062	
UMBRAL	4.83	0.062	
UMBRAL	4.84	0.061	
UMBRAL	4.85	0.061	
UMBRAL	4.86	0.061	
UMBRAL	4.87	0.061	
UMBRAL	4.88	0.06	
UMBRAL	4.89	0.06	
UMBRAL	4.9	0.06	
UMBRAL	4.91	0.06	
UMBRAL	4.92	0.059	
UMBRAL	4.93	0.059	

Name	Period sec	Acceleration	Damping %
UMBRAL	4.94	0.059	
UMBRAL	4.95	0.059	
UMBRAL	4.96	0.059	
UMBRAL	4.97	0.058	
UMBRAL	4.98	0.058	
UMBRAL	4.99	0.058	
UMBRAL	5	0.058	
UMBRAL	5.01	0.057	
UMBRAL	5.02	0.057	
UMBRAL	5.03	0.057	
UMBRAL	5.04	0.057	
UMBRAL	5.05	0.056	
UMBRAL	5.06	0.056	
UMBRAL	5.07	0.056	
UMBRAL	5.08	0.056	
UMBRAL	5.09	0.056	
UMBRAL	5.1	0.055	
UMBRAL	5.11	0.055	
UMBRAL	5.12	0.055	
UMBRAL	5.13	0.055	
UMBRAL	5.14	0.055	
UMBRAL	5.15	0.054	
UMBRAL	5.16	0.054	
UMBRAL	5.17	0.054	
UMBRAL	5.18	0.054	
UMBRAL	5.19	0.053	
UMBRAL	5.2	0.053	
UMBRAL	5.21	0.053	
UMBRAL	5.22	0.053	
UMBRAL	5.23	0.053	
UMBRAL	5.24	0.052	
UMBRAL	5.25	0.052	
UMBRAL	5.26	0.052	
UMBRAL	5.27	0.052	
UMBRAL	5.28	0.052	
UMBRAL	5.29	0.051	
UMBRAL	5.3	0.051	
UMBRAL	5.31	0.051	
UMBRAL	5.32	0.051	
UMBRAL	5.33	0.051	
UMBRAL	5.34	0.05	
UMBRAL	5.35	0.05	
UMBRAL	5.36	0.05	
UMBRAL	5.37	0.05	
UMBRAL	5.38	0.05	
UMBRAL	5.39	0.05	
UMBRAL	5.4	0.049	
UMBRAL	5.41	0.049	
UMBRAL	5.42	0.049	
UMBRAL	5.43	0.049	
UMBRAL	5.44	0.049	
UMBRAL	5.45	0.048	
UMBRAL	5.46	0.048	
UMBRAL	5.47	0.048	
UMBRAL	5.48	0.048	
UMBRAL	5.49	0.048	
UMBRAL	5.5	0.048	
UMBRAL	5.51	0.047	
UMBRAL	5.52	0.047	
UMBRAL	5.53	0.047	

Name	Period sec	Acceleration	Damping %
UMBRAL	5.54	0.047	
UMBRAL	5.55	0.047	
UMBRAL	5.56	0.047	
UMBRAL	5.57	0.046	
UMBRAL	5.58	0.046	
UMBRAL	5.59	0.046	
UMBRAL	5.6	0.046	
UMBRAL	5.61	0.046	
UMBRAL	5.62	0.046	
UMBRAL	5.63	0.045	
UMBRAL	5.64	0.045	
UMBRAL	5.65	0.045	
UMBRAL	5.66	0.045	
UMBRAL	5.67	0.045	
UMBRAL	5.68	0.045	
UMBRAL	5.69	0.044	
UMBRAL	5.7	0.044	
UMBRAL	5.71	0.044	
UMBRAL	5.72	0.044	
UMBRAL	5.73	0.044	
UMBRAL	5.74	0.044	
UMBRAL	5.75	0.044	
UMBRAL	5.76	0.043	
UMBRAL	5.77	0.043	
UMBRAL	5.78	0.043	
UMBRAL	5.79	0.043	
UMBRAL	5.8	0.043	
UMBRAL	5.81	0.043	
UMBRAL	5.82	0.043	
UMBRAL	5.83	0.042	
UMBRAL	5.84	0.042	
UMBRAL	5.85	0.042	
UMBRAL	5.86	0.042	
UMBRAL	5.87	0.042	
UMBRAL	5.88	0.042	
UMBRAL	5.89	0.042	
UMBRAL	5.9	0.041	
UMBRAL	5.91	0.041	
UMBRAL	5.92	0.041	
UMBRAL	5.93	0.041	
UMBRAL	5.94	0.041	
UMBRAL	5.95	0.041	
UMBRAL	5.96	0.041	
UMBRAL	5.97	0.04	
UMBRAL	5.98	0.04	
UMBRAL	5.99	0.04	
UMBRAL	6	0.04	
UMBRAL	6.01	0.04	
UMBRAL	6.02	0.04	
UMBRAL	6.03	0.04	
UMBRAL	6.04	0.039	
UMBRAL	6.05	0.039	
UMBRAL	6.06	0.039	
UMBRAL	6.07	0.039	
UMBRAL	6.08	0.039	
UMBRAL	6.09	0.039	
UMBRAL	6.1	0.039	
UMBRAL	6.11	0.039	
UMBRAL	6.12	0.038	
UMBRAL	6.13	0.038	

Name	Period sec	Acceleration	Damping %
UMBRAL	6.14	0.038	
UMBRAL	6.15	0.038	
UMBRAL	6.16	0.038	
UMBRAL	6.17	0.038	
UMBRAL	6.18	0.038	
UMBRAL	6.19	0.038	
UMBRAL	6.2	0.037	
UMBRAL	6.21	0.037	
UMBRAL	6.22	0.037	
UMBRAL	6.23	0.037	
UMBRAL	6.24	0.037	
UMBRAL	6.25	0.037	
UMBRAL	6.26	0.037	
UMBRAL	6.27	0.037	
UMBRAL	6.28	0.037	
UMBRAL	6.29	0.036	
UMBRAL	6.3	0.036	
UMBRAL	6.31	0.036	
UMBRAL	6.32	0.036	
UMBRAL	6.33	0.036	
UMBRAL	6.34	0.036	
UMBRAL	6.35	0.036	
UMBRAL	6.36	0.036	
UMBRAL	6.37	0.035	
UMBRAL	6.38	0.035	
UMBRAL	6.39	0.035	
UMBRAL	6.4	0.035	
UMBRAL	6.41	0.035	
UMBRAL	6.42	0.035	
UMBRAL	6.43	0.035	
UMBRAL	6.44	0.035	
UMBRAL	6.45	0.035	
UMBRAL	6.46	0.035	
UMBRAL	6.47	0.034	
UMBRAL	6.48	0.034	
UMBRAL	6.49	0.034	
UMBRAL	6.5	0.034	
UMBRAL	6.51	0.034	
UMBRAL	6.52	0.034	
UMBRAL	6.53	0.034	
UMBRAL	6.54	0.034	
UMBRAL	6.55	0.034	
UMBRAL	6.56	0.033	
UMBRAL	6.57	0.033	
UMBRAL	6.58	0.033	
UMBRAL	6.59	0.033	
UMBRAL	6.6	0.033	
UMBRAL	6.61	0.033	
UMBRAL	6.62	0.033	
UMBRAL	6.63	0.033	
UMBRAL	6.64	0.033	
UMBRAL	6.65	0.033	
UMBRAL	6.66	0.032	
UMBRAL	6.67	0.032	
UMBRAL	6.68	0.032	
UMBRAL	6.69	0.032	
UMBRAL	6.7	0.032	
UMBRAL	6.71	0.032	
UMBRAL	6.72	0.032	
UMBRAL	6.73	0.032	

Name	Period sec	Acceleration	Damping %
UMBRAL	6.74	0.032	
UMBRAL	6.75	0.032	
UMBRAL	6.76	0.032	
UMBRAL	6.77	0.031	
UMBRAL	6.78	0.031	
UMBRAL	6.79	0.031	
UMBRAL	6.8	0.031	
UMBRAL	6.81	0.031	
UMBRAL	6.82	0.031	
UMBRAL	6.83	0.031	
UMBRAL	6.84	0.031	
UMBRAL	6.85	0.031	
UMBRAL	6.86	0.031	
UMBRAL	6.87	0.031	
UMBRAL	6.88	0.03	
UMBRAL	6.89	0.03	
UMBRAL	6.9	0.03	
UMBRAL	6.91	0.03	
UMBRAL	6.92	0.03	
UMBRAL	6.93	0.03	
UMBRAL	6.94	0.03	
UMBRAL	6.95	0.03	
UMBRAL	6.96	0.03	
UMBRAL	6.97	0.03	
UMBRAL	6.98	0.03	
UMBRAL	6.99	0.029	
UMBRAL	7	0.029	
UMBRAL	7.01	0.029	
UMBRAL	7.02	0.029	
UMBRAL	7.03	0.029	
UMBRAL	7.04	0.029	
UMBRAL	7.05	0.029	
UMBRAL	7.06	0.029	
UMBRAL	7.07	0.029	
UMBRAL	7.08	0.029	
UMBRAL	7.09	0.029	
UMBRAL	7.1	0.029	
UMBRAL	7.11	0.028	
UMBRAL	7.12	0.028	
UMBRAL	7.13	0.028	
UMBRAL	7.14	0.028	
UMBRAL	7.15	0.028	
UMBRAL	7.16	0.028	
UMBRAL	7.17	0.028	
UMBRAL	7.18	0.028	
UMBRAL	7.19	0.028	
UMBRAL	7.2	0.028	
UMBRAL	7.21	0.028	
UMBRAL	7.22	0.028	
UMBRAL	7.23	0.028	
UMBRAL	7.24	0.027	
UMBRAL	7.25	0.027	
UMBRAL	7.26	0.027	
UMBRAL	7.27	0.027	
UMBRAL	7.28	0.027	
UMBRAL	7.29	0.027	
UMBRAL	7.3	0.027	
UMBRAL	7.31	0.027	
UMBRAL	7.32	0.027	
UMBRAL	7.33	0.027	

Name	Period sec	Acceleration	Damping %
UMBRAL	7.34	0.027	
UMBRAL	7.35	0.027	
UMBRAL	7.36	0.027	
UMBRAL	7.37	0.027	
UMBRAL	7.38	0.026	
UMBRAL	7.39	0.026	
UMBRAL	7.4	0.026	
UMBRAL	7.41	0.026	
UMBRAL	7.42	0.026	
UMBRAL	7.43	0.026	
UMBRAL	7.44	0.026	
UMBRAL	7.45	0.026	
UMBRAL	7.46	0.026	
UMBRAL	7.47	0.026	
UMBRAL	7.48	0.026	
UMBRAL	7.49	0.026	
UMBRAL	7.5	0.026	

4.4 Load Cases

Table 4.5 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.6 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER05	EY	0.3		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EX	0.3		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER07	EY	0.3		No
DER08	D	0.9	Linear Add	No
DER08	EX	0.3		No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No



Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD09	D	1.2	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	760.8616	1143.7805	-6239.0651	0	0	0	0
L	0	0	0	0	0	0	0	0	0
LR	0	0	145.96	180.9239	-1196.872	0	0	0	0
EX Max	1013.2899	0	0	0	3304.8527	5693.9096	0	0	0
EY Max	0	1010.042	0	3293.4577	0	8282.3441	0	0	0
DISX Max	226.1468	0	0	0	737.5795	1270.7711	0	0	0
DISY Max	0	225.6856	0	735.8962	0	1850.622	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	173.84	503.9921	-1425.488	0	0	0	0
DERUX Max	140.2207	0	0	0	457.3749	708.0693	0	0	0
DERUY Max	0	157.0037	0	511.944	0	1287.43	0	0	0
COMB1	0	0	1065.2062	1601.2926	-8734.6912	0	0	0	0
COMB2	0	0	986.0139	1462.9985	-8085.3141	0	0	0	0
COMB3	0	0	1146.5699	1662.0148	-9401.8733	0	0	0	0
COMB4	0	0	986.0139	1462.9985	-8085.3141	0	0	0	0
COMB5 Max	226.1468	67.7057	913.0339	1593.3054	-6749.2986	1825.9577	0	0	0
COMB5 Min	-226.1468	-67.7057	913.0339	1151.7677	-8224.4577	-1825.9577	0	0	0
COMB6 Max	67.844	225.6856	913.0339	2108.4327	-7265.6043	2231.8533	0	0	0
COMB6 Min	-67.844	-225.6856	913.0339	636.6404	-7708.152	-2231.8533	0	0	0
COMB7 Max	67.844	225.6856	684.7754	1765.2986	-5393.8847	2231.8533	0	0	0
COMB7 Min	-67.844	-225.6856	684.7754	293.5063	-5836.4325	-2231.8533	0	0	0
COMB8 Max	226.1468	67.7057	684.7754	1250.1713	-4877.5791	1825.9577	0	0	0
COMB8 Min	-226.1468	-67.7057	684.7754	808.6336	-6352.7382	-1825.9577	0	0	0
ENVE Max	226.1468	225.6856	1146.5699	2108.4327	-4877.5791	2231.8533	0	0	0
ENVE Min	-226.1468	-225.6856	684.7754	293.5063	-9401.8733	-2231.8533	0	0	0
CIM01	0	0	760.8616	1143.7805	-6239.0651	0	0	0	0
CIM02	0	0	760.8616	1143.7805	-6239.0651	0	0	0	0
CIM03	0	0	906.8216	1324.7044	-7435.9371	0	0	0	0
CIM04	0	0	870.3316	1279.4734	-7136.7191	0	0	0	0
CIM05 Max	158.3028	47.394	760.8616	1298.3187	-5722.7594	1278.1704	0	0	0
CIM05 Min	-158.3028	-47.394	760.8616	989.2423	-6755.3708	-1278.1704	0	0	0
CIM06 Max	47.4908	157.9799	760.8616	1658.9078	-6084.1734	1562.2973	0	0	0
CIM06 Min	-47.4908	-157.9799	760.8616	628.6532	-6393.9568	-1562.2973	0	0	0
CIM07 Max	119.8578	36.1097	870.3316	1397.2168	-6745.802	969.6082	0	0	0
CIM07 Min	-119.8578	-36.1097	870.3316	1161.73	-7527.6363	-969.6082	0	0	0
CIM08 Max	36.1835	119.6134	870.3316	1669.4984	-7018.7064	1184.153	0	0	0
CIM08 Min	-36.1835	-119.6134	870.3316	889.4484	-7254.7318	-1184.153	0	0	0
DER01	0	0	1065.2062	1601.2926	-8734.6912	0	0	0	0
DER02	0	0	986.0139	1462.9985	-8085.3141	0	0	0	0
DER03	0	0	1146.5699	1662.0148	-9401.8733	0	0	0	0
DER04	0	0	986.0139	1462.9985	-8085.3141	0	0	0	0
DER05 Max	1013.2899	303.0126	913.0339	2360.5739	-4182.0255	8178.6128	0	0	0
DER05 Min	-1013.2899	-303.0126	913.0339	384.4992	-10791.7308	-8178.6128	0	0	0
DER06 Max	303.987	1010.042	913.0339	4665.9942	-6495.4223	9990.517	0	0	0
DER06 Min	-303.987	-1010.042	913.0339	-1920.9211	-8478.3339	-9990.517	0	0	0
DER07 Max	1013.2899	303.0126	684.7754	2017.4397	-2310.3059	8178.6128	0	0	0
DER07 Min	-1013.2899	-303.0126	684.7754	41.3651	-8920.0113	-8178.6128	0	0	0
DER08 Max	303.987	1010.042	684.7754	4322.8601	-4623.7028	9990.517	0	0	0
DER08 Min	-303.987	-1010.042	684.7754	-2264.0553	-6606.6144	-9990.517	0	0	0
DERUD01	0	0	1065.2062	1601.2926	-8734.6912	0	0	0	0
DERUD02	0	0	986.0139	1462.9985	-8085.3141	0	0	0	0
DERUD03	0	0	1146.5699	1662.0148	-9401.8733	0	0	0	0
DERUD04	0	0	986.0139	1462.9985	-8085.3141	0	0	0	0
DERUD05 Max	140.2207	0	913.0339	1372.5366	-7029.5033	708.0693	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-140.2207	0	913.0339	1372.5366	-7944.253	-708.0693	0	0	0
DERUD06 Max	0	157.0037	913.0339	1884.4805	-7486.8781	1287.43	0	0	0
DERUD06 Min	0	-157.0037	913.0339	860.5926	-7486.8781	-1287.43	0	0	0
DERUD07 Max	140.2207	0	684.7754	1029.4024	-5157.7837	708.0693	0	0	0
DERUD07 Min	-140.2207	0	684.7754	1029.4024	-6072.5335	-708.0693	0	0	0
DERUD08 Max	0	157.0037	684.7754	1541.3464	-5615.1586	1287.43	0	0	0
DERUD08 Min	0	-157.0037	684.7754	517.4584	-5615.1586	-1287.43	0	0	0
CIM09 Max	158.3028	47.394	456.517	840.8065	-3227.1334	1278.1704	0	0	0
CIM09 Min	-158.3028	-47.394	456.517	531.7301	-4259.7448	-1278.1704	0	0	0
CIM10 Max	47.4908	157.9799	456.517	1201.3956	-3588.5474	1562.2973	0	0	0
CIM10 Min	-47.4908	-157.9799	456.517	171.141	-3898.3308	-1562.2973	0	0	0
CIM11	0	0	934.7016	1647.7726	-7664.5531	0	0	0	0
CIM12	0	0	891.2416	1521.7745	-7308.1811	0	0	0	0
CIM13 Max	119.8578	36.1097	891.2416	1639.5179	-6917.264	969.6082	0	0	0
CIM13 Min	-119.8578	-36.1097	891.2416	1404.0311	-7699.0983	-969.6082	0	0	0
CIM14 Max	36.1835	119.6134	891.2416	1911.7995	-7190.1684	1184.153	0	0	0
CIM14 Min	-36.1835	-119.6134	891.2416	1131.7496	-7426.1938	-1184.153	0	0	0
CIM15	0	0	456.517	686.2683	-3743.4391	0	0	0	0
COMB9	0	0	999.9539	1624.5326	-8199.6221	0	0	0	0
COMB10	0	0	1191.1779	2178.9239	-9767.6589	0	0	0	0
COMB11	0	0	999.9539	1624.5326	-8199.6221	0	0	0	0
DER09	0	0	999.9539	1624.5326	-8199.6221	0	0	0	0
DER10	0	0	1191.1779	2178.9239	-9767.6589	0	0	0	0
DER11	0	0	999.9539	1624.5326	-8199.6221	0	0	0	0
DERUD09	0	0	999.9539	1624.5326	-8199.6221	0	0	0	0
DERUD10	0	0	1191.1779	2178.9239	-9767.6589	0	0	0	0
DERUD11	0	0	999.9539	1624.5326	-8199.6221	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	55898.74	55898.74	8.2	-0.8133	55898.74	55898.74	8.2	-0.8133	8.2	3.2895

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.9	0	1	8.2	-0.8133	3.25
N1	D1	L	0	0	0	1	8.2	-0.8133	3.25
N1	D1	LR	0	-0.4	0	1	8.2	-0.8133	3.25
N1	D1	EX Max	19.5	0	0.001592	1	8.2	-0.8133	3.25
N1	D1	EY Max	0	15	0	1	8.2	-0.8133	3.25
N1	D1	DISX Max	4.3	0	0.000355	1	8.2	-0.8133	3.25
N1	D1	DISY Max	0	3.3	0	1	8.2	-0.8133	3.25
N1	D1	W	0	0	0	1	8.2	-0.8133	3.25
N1	D1	G	0	-0.2	0	1	8.2	-0.8133	3.25
N1	D1	DERUX Max	2.8	0	0.00022	1	8.2	-0.8133	3.25
N1	D1	DERUY Max	0	2.3	0	1	8.2	-0.8133	3.25
N1	D1	COMB1	0	-2.6	0	1	8.2	-0.8133	3.25
N1	D1	COMB2	0	-2.5	0	1	8.2	-0.8133	3.25
N1	D1	COMB3	0	-2.9	0	1	8.2	-0.8133	3.25
N1	D1	COMB4	0	-2.5	0	1	8.2	-0.8133	3.25
N1	D1	COMB5 Max	4.3	-1.3	0.000355	1	8.2	-0.8133	3.25
N1	D1	COMB5 Min	-4.3	-3.3	-0.000355	1	8.2	-0.8133	3.25
N1	D1	COMB6 Max	1.3	1.1	0.000107	1	8.2	-0.8133	3.25
N1	D1	COMB6 Min	-1.3	-5.6	-0.000107	1	8.2	-0.8133	3.25
N1	D1	COMB7 Max	1.3	1.7	0.000107	1	8.2	-0.8133	3.25
N1	D1	COMB7 Min	-1.3	-5	-0.000107	1	8.2	-0.8133	3.25
N1	D1	COMB8 Max	4.3	-0.7	0.000355	1	8.2	-0.8133	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	COMB8 Min	-4.3	-2.7	-0.000355	1	8.2	-0.8133	3.25
N1	D1	ENVE Max	4.3	1.7	0.000355	1	8.2	-0.8133	3.25
N1	D1	ENVE Min	-4.3	-5.6	-0.000355	1	8.2	-0.8133	3.25
N1	D1	CIM01	0	-1.9	0	1	8.2	-0.8133	3.25
N1	D1	CIM02	0	-1.9	0	1	8.2	-0.8133	3.25
N1	D1	CIM03	0	-2.3	0	1	8.2	-0.8133	3.25
N1	D1	CIM04	0	-2.2	0	1	8.2	-0.8133	3.25
N1	D1	CIM05 Max	3	-1.2	0.000249	1	8.2	-0.8133	3.25
N1	D1	CIM05 Min	-3	-2.6	-0.000249	1	8.2	-0.8133	3.25
N1	D1	CIM06 Max	0.9	0.5	7.5E-05	1	8.2	-0.8133	3.25
N1	D1	CIM06 Min	-0.9	-4.2	-7.5E-05	1	8.2	-0.8133	3.25
N1	D1	CIM07 Max	2.3	-1.7	0.000188	1	8.2	-0.8133	3.25
N1	D1	CIM07 Min	-2.3	-2.7	-0.000188	1	8.2	-0.8133	3.25
N1	D1	CIM08 Max	0.7	-0.4	5.7E-05	1	8.2	-0.8133	3.25
N1	D1	CIM08 Min	-0.7	-4	-5.7E-05	1	8.2	-0.8133	3.25
N1	D1	DER01	0	-2.6	0	1	8.2	-0.8133	3.25
N1	D1	DER02	0	-2.5	0	1	8.2	-0.8133	3.25
N1	D1	DER03	0	-2.9	0	1	8.2	-0.8133	3.25
N1	D1	DER04	0	-2.5	0	1	8.2	-0.8133	3.25
N1	D1	DER05 Max	19.5	2.2	0.001592	1	8.2	-0.8133	3.25
N1	D1	DER05 Min	-19.5	-6.8	-0.001592	1	8.2	-0.8133	3.25
N1	D1	DER06 Max	5.8	12.7	0.000478	1	8.2	-0.8133	3.25
N1	D1	DER06 Min	-5.8	-17.2	-0.000478	1	8.2	-0.8133	3.25
N1	D1	DER07 Max	19.5	2.8	0.001592	1	8.2	-0.8133	3.25
N1	D1	DER07 Min	-19.5	-6.2	-0.001592	1	8.2	-0.8133	3.25
N1	D1	DER08 Max	5.8	13.3	0.000478	1	8.2	-0.8133	3.25
N1	D1	DER08 Min	-5.8	-16.7	-0.000478	1	8.2	-0.8133	3.25
N1	D1	DERUD01	0	-2.6	0	1	8.2	-0.8133	3.25
N1	D1	DERUD02	0	-2.5	0	1	8.2	-0.8133	3.25
N1	D1	DERUD03	0	-2.9	0	1	8.2	-0.8133	3.25
N1	D1	DERUD04	0	-2.5	0	1	8.2	-0.8133	3.25
N1	D1	DERUD05 Max	2.8	-2.3	0.00022	1	8.2	-0.8133	3.25
N1	D1	DERUD05 Min	-2.8	-2.3	-0.00022	1	8.2	-0.8133	3.25
N1	D1	DERUD06 Max	0	0.1	0	1	8.2	-0.8133	3.25
N1	D1	DERUD06 Min	0	-4.6	0	1	8.2	-0.8133	3.25
N1	D1	DERUD07 Max	2.8	-1.7	0.00022	1	8.2	-0.8133	3.25
N1	D1	DERUD07 Min	-2.8	-1.7	-0.00022	1	8.2	-0.8133	3.25
N1	D1	DERUD08 Max	0	0.6	0	1	8.2	-0.8133	3.25
N1	D1	DERUD08 Min	0	-4	0	1	8.2	-0.8133	3.25
N1	D1	CIM09 Max	3	-0.4	0.000249	1	8.2	-0.8133	3.25
N1	D1	CIM09 Min	-3	-1.8	-0.000249	1	8.2	-0.8133	3.25
N1	D1	CIM10 Max	0.9	1.2	7.5E-05	1	8.2	-0.8133	3.25
N1	D1	CIM10 Min	-0.9	-3.5	-7.5E-05	1	8.2	-0.8133	3.25
N1	D1	CIM11	0	-2.1	0	1	8.2	-0.8133	3.25
N1	D1	CIM12	0	-2	0	1	8.2	-0.8133	3.25
N1	D1	CIM13 Max	2.3	-1.5	0.000188	1	8.2	-0.8133	3.25
N1	D1	CIM13 Min	-2.3	-2.6	-0.000188	1	8.2	-0.8133	3.25
N1	D1	CIM14 Max	0.7	-0.3	5.7E-05	1	8.2	-0.8133	3.25
N1	D1	CIM14 Min	-0.7	-3.8	-5.7E-05	1	8.2	-0.8133	3.25
N1	D1	CIM15	0	-1.1	0	1	8.2	-0.8133	3.25
N1	D1	COMB9	0	-2.4	0	1	8.2	-0.8133	3.25
N1	D1	COMB10	0	-2.6	0	1	8.2	-0.8133	3.25
N1	D1	COMB11	0	-2.4	0	1	8.2	-0.8133	3.25
N1	D1	DER09	0	-2.4	0	1	8.2	-0.8133	3.25
N1	D1	DER10	0	-2.6	0	1	8.2	-0.8133	3.25
N1	D1	DER11	0	-2.4	0	1	8.2	-0.8133	3.25
N1	D1	DERUD09	0	-2.4	0	1	8.2	-0.8133	3.25
N1	D1	DERUD10	0	-2.6	0	1	8.2	-0.8133	3.25
N1	D1	DERUD11	0	-2.4	0	1	8.2	-0.8133	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.9	1.9	1
N1	LR	Y	0.4	0.4	1
N1	EX Max	X	18.4	18.4	1
N1	EX Max	Y	13.1	6.5	2
N1	EY Max	Y	15	15	1
N1	DISX Max	X	4.1	4.1	1
N1	DISX Max	Y	2.9	1.5	2
N1	DISY Max	Y	3.3	3.3	1
N1	G	Y	0.2	0.2	1
N1	DERUX Max	X	2.6	2.6	1
N1	DERUX Max	Y	1.8	0.9	2
N1	DERUY Max	Y	2.3	2.3	1
N1	COMB1	Y	2.6	2.6	1
N1	COMB2	Y	2.5	2.5	1
N1	COMB3	Y	2.9	2.9	1
N1	COMB4	Y	2.5	2.5	1
N1	COMB5 Max	X	4.1	4.1	1
N1	COMB5 Min	X	4.1	4.1	1
N1	COMB5 Min	Y	6.2	4.7	1.309
N1	COMB6 Max	X	1.2	1.2	1
N1	COMB6 Max	Y	2	1.5	1.286
N1	COMB6 Min	X	1.2	1.2	1
N1	COMB6 Min	Y	6.5	6	1.072
N1	COMB7 Max	X	1.2	1.2	1
N1	COMB7 Max	Y	2.5	2.1	1.209
N1	COMB7 Min	X	1.2	1.2	1
N1	COMB7 Min	Y	5.9	5.5	1.08
N1	COMB8 Max	X	4.1	4.1	1
N1	COMB8 Max	Y	2.2	0.8	2.896
N1	COMB8 Min	X	4.1	4.1	1
N1	COMB8 Min	Y	5.6	4.2	1.351
N1	ENVE Max	X	4.1	4.1	1
N1	ENVE Max	Y	2.5	2.1	1.209
N1	ENVE Min	X	4.1	4.1	1
N1	ENVE Min	Y	6.5	6	1.072
N1	CIM01	Y	1.9	1.9	1
N1	CIM02	Y	1.9	1.9	1
N1	CIM03	Y	2.3	2.3	1
N1	CIM04	Y	2.2	2.2	1
N1	CIM05 Max	X	2.9	2.9	1
N1	CIM05 Min	X	2.9	2.9	1
N1	CIM05 Min	Y	4.6	3.6	1.283
N1	CIM06 Max	X	0.9	0.9	1
N1	CIM06 Max	Y	1.1	0.8	1.398
N1	CIM06 Min	X	0.9	0.9	1
N1	CIM06 Min	Y	4.8	4.5	1.068
N1	CIM07 Max	X	2.2	2.2	1
N1	CIM07 Max	Y	1.7	0.9	1.877
N1	CIM07 Min	X	2.2	2.2	1
N1	CIM07 Min	Y	4.3	3.5	1.221
N1	CIM08 Max	X	0.7	0.7	1
N1	CIM08 Max	Y	0.4	0.2	2.288
N1	CIM08 Min	X	0.7	0.7	1
N1	CIM08 Min	Y	4.4	4.2	1.056
N1	DER01	Y	2.6	2.6	1
N1	DER02	Y	2.5	2.5	1
N1	DER03	Y	2.9	2.9	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DER04	Y	2.5	2.5	1
N1	DER05 Max	X	18.4	18.4	1
N1	DER05 Max	Y	15.3	8.8	1.745
N1	DER05 Min	X	18.4	18.4	1
N1	DER05 Min	Y	19.8	13.3	1.492
N1	DER06 Max	X	5.5	5.5	1
N1	DER06 Max	Y	16.6	14.7	1.133
N1	DER06 Min	X	5.5	5.5	1
N1	DER06 Min	Y	21.2	19.2	1.102
N1	DER07 Max	X	18.4	18.4	1
N1	DER07 Max	Y	15.9	9.3	1.7
N1	DER07 Min	X	18.4	18.4	1
N1	DER07 Min	Y	19.2	12.7	1.513
N1	DER08 Max	X	5.5	5.5	1
N1	DER08 Max	Y	17.2	15.2	1.128
N1	DER08 Min	X	5.5	5.5	1
N1	DER08 Min	Y	20.6	18.6	1.105
N1	DERUD01	Y	2.6	2.6	1
N1	DERUD02	Y	2.5	2.5	1
N1	DERUD03	Y	2.9	2.9	1
N1	DERUD04	Y	2.5	2.5	1
N1	DERUD05 Max	X	2.6	2.6	1
N1	DERUD05 Max	Y	2.3	1.4	1.667
N1	DERUD05 Min	X	2.6	2.6	1
N1	DERUD05 Min	Y	4.1	3.2	1.286
N1	DERUD06 Max	Y	0.1	0.1	1
N1	DERUD06 Min	Y	4.6	4.6	1
N1	DERUD07 Max	X	2.6	2.6	1
N1	DERUD07 Max	Y	1.7	0.8	2.144
N1	DERUD07 Min	X	2.6	2.6	1
N1	DERUD07 Min	Y	3.5	2.6	1.348
N1	DERUD08 Max	Y	0.6	0.6	1
N1	DERUD08 Min	Y	4	4	1
N1	CIM09 Max	X	2.9	2.9	1
N1	CIM09 Max	Y	1.6	0.6	2.716
N1	CIM09 Min	X	2.9	2.9	1
N1	CIM09 Min	Y	3.9	2.9	1.358
N1	CIM10 Max	X	0.9	0.9	1
N1	CIM10 Max	Y	1.8	1.5	1.201
N1	CIM10 Min	X	0.9	0.9	1
N1	CIM10 Min	Y	4.1	3.8	1.081
N1	CIM11	Y	2.1	2.1	1
N1	CIM12	Y	2	2	1
N1	CIM13 Max	X	2.2	2.2	1
N1	CIM13 Max	Y	1.5	0.7	2.073
N1	CIM13 Min	X	2.2	2.2	1
N1	CIM13 Min	Y	4.1	3.3	1.232
N1	CIM14 Max	X	0.7	0.7	1
N1	CIM14 Min	X	0.7	0.7	1
N1	CIM14 Min	Y	4.3	4	1.058
N1	CIM15	Y	1.1	1.1	1
N1	COMB9	Y	2.4	2.4	1
N1	COMB10	Y	2.6	2.6	1
N1	COMB11	Y	2.4	2.4	1
N1	DER09	Y	2.4	2.4	1
N1	DER10	Y	2.6	2.6	1
N1	DER11	Y	2.4	2.4	1
N1	DERUD09	Y	2.4	2.4	1
N1	DERUD10	Y	2.6	2.6	1
N1	DERUD11	Y	2.4	2.4	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.000579	1	0	0	3.25
N1	LR	Y	0.000127	4	8.2	8.2	3.25
N1	EX Max	X	0.005673	5	16.4	0	3.25
N1	EX Max	Y	0.004017	1	0	0	3.25
N1	EY Max	Y	0.004609	5	16.4	0	3.25
N1	DISX Max	X	0.001266	5	16.4	0	3.25
N1	DISX Max	Y	0.000897	1	0	0	3.25
N1	DISY Max	Y	0.00103	5	16.4	0	3.25
N1	G	Y	6.9E-05	4	8.2	8.2	3.25
N1	DERUX Max	X	0.000808	5	16.4	0	3.25
N1	DERUX Max	Y	0.000556	1	0	0	3.25
N1	DERUY Max	Y	0.000716	5	16.4	0	3.25
N1	COMB1	Y	0.00081	1	0	0	3.25
N1	COMB2	Y	0.000757	1	0	0	3.25
N1	COMB3	Y	0.000896	1	0	0	3.25
N1	COMB4	Y	0.000757	1	0	0	3.25
N1	COMB5 Max	X	0.001266	5	16.4	0	3.25
N1	COMB5 Min	X	0.001266	5	16.4	0	3.25
N1	COMB5 Min	Y	0.0019	1	0	0	3.25
N1	COMB6 Max	X	0.00038	5	16.4	0	3.25
N1	COMB6 Max	Y	0.000604	1	0	0	3.25
N1	COMB6 Min	X	0.00038	5	16.4	0	3.25
N1	COMB6 Min	Y	0.001993	1	0	0	3.25
N1	COMB7 Max	X	0.00038	5	16.4	0	3.25
N1	COMB7 Max	Y	0.000778	1	0	0	3.25
N1	COMB7 Min	X	0.00038	5	16.4	0	3.25
N1	COMB7 Min	Y	0.00182	1	0	0	3.25
N1	COMB8 Max	X	0.001266	5	16.4	0	3.25
N1	COMB8 Max	Y	0.000685	1	0	0	3.25
N1	COMB8 Min	X	0.001266	5	16.4	0	3.25
N1	COMB8 Min	Y	0.001726	1	0	0	3.25
N1	ENVE Max	X	0.001266	5	16.4	0	3.25
N1	ENVE Max	Y	0.000778	1	0	0	3.25
N1	ENVE Min	X	0.001266	5	16.4	0	3.25
N1	ENVE Min	Y	0.001993	1	0	0	3.25
N1	CIM01	Y	0.000579	1	0	0	3.25
N1	CIM02	Y	0.000579	1	0	0	3.25
N1	CIM03	Y	0.000705	1	0	0	3.25
N1	CIM04	Y	0.000673	1	0	0	3.25
N1	CIM05 Max	X	0.000886	5	16.4	0	3.25
N1	CIM05 Min	X	0.000886	5	16.4	0	3.25
N1	CIM05 Min	Y	0.001423	1	0	0	3.25
N1	CIM06 Max	X	0.000266	5	16.4	0	3.25
N1	CIM06 Max	Y	0.000331	5	16.4	0	3.25
N1	CIM06 Min	X	0.000266	5	16.4	0	3.25
N1	CIM06 Min	Y	0.001488	1	0	0	3.25
N1	CIM07 Max	X	0.000671	5	16.4	0	3.25
N1	CIM07 Max	Y	0.000508	3	8.2	0	3.25
N1	CIM07 Min	X	0.000671	5	16.4	0	3.25
N1	CIM07 Min	Y	0.001313	1	0	0	3.25
N1	CIM08 Max	X	0.000203	5	16.4	0	3.25
N1	CIM08 Max	Y	0.000128	4	8.2	8.2	3.25
N1	CIM08 Min	X	0.000203	5	16.4	0	3.25
N1	CIM08 Min	Y	0.001363	1	0	0	3.25
N1	DER01	Y	0.00081	1	0	0	3.25
N1	DER02	Y	0.000757	1	0	0	3.25
N1	DER03	Y	0.000896	1	0	0	3.25
N1	DER04	Y	0.000757	1	0	0	3.25



Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER05 Max	X	0.005673	5	16.4	0	3.25
N1	DER05 Max	Y	0.004706	1	0	0	3.25
N1	DER05 Min	X	0.005673	5	16.4	0	3.25
N1	DER05 Min	Y	0.006095	1	0	0	3.25
N1	DER06 Max	X	0.001702	5	16.4	0	3.25
N1	DER06 Max	Y	0.00512	1	0	0	3.25
N1	DER06 Min	X	0.001702	5	16.4	0	3.25
N1	DER06 Min	Y	0.006509	1	0	0	3.25
N1	DER07 Max	X	0.005673	5	16.4	0	3.25
N1	DER07 Max	Y	0.004879	1	0	0	3.25
N1	DER07 Min	X	0.005673	5	16.4	0	3.25
N1	DER07 Min	Y	0.005921	1	0	0	3.25
N1	DER08 Max	X	0.001702	5	16.4	0	3.25
N1	DER08 Max	Y	0.005294	1	0	0	3.25
N1	DER08 Min	X	0.001702	5	16.4	0	3.25
N1	DER08 Min	Y	0.006335	1	0	0	3.25
N1	DERUD01	Y	0.00081	1	0	0	3.25
N1	DERUD02	Y	0.000757	1	0	0	3.25
N1	DERUD03	Y	0.000896	1	0	0	3.25
N1	DERUD04	Y	0.000757	1	0	0	3.25
N1	DERUD05 Max	X	0.000808	5	16.4	0	3.25
N1	DERUD05 Max	Y	0.000694	3	8.2	0	3.25
N1	DERUD05 Min	X	0.000808	5	16.4	0	3.25
N1	DERUD05 Min	Y	0.00125	1	0	0	3.25
N1	DERUD06 Max	Y	2.2E-05	5	16.4	0	3.25
N1	DERUD06 Min	Y	0.001411	1	0	0	3.25
N1	DERUD07 Max	X	0.000808	5	16.4	0	3.25
N1	DERUD07 Max	Y	0.000521	3	8.2	0	3.25
N1	DERUD07 Min	X	0.000808	5	16.4	0	3.25
N1	DERUD07 Min	Y	0.001077	1	0	0	3.25
N1	DERUD08 Max	Y	0.000196	5	16.4	0	3.25
N1	DERUD08 Min	Y	0.001237	5	16.4	0	3.25
N1	CIM09 Max	X	0.000886	5	16.4	0	3.25
N1	CIM09 Max	Y	0.000497	1	0	0	3.25
N1	CIM09 Min	X	0.000886	5	16.4	0	3.25
N1	CIM09 Min	Y	0.001191	1	0	0	3.25
N1	CIM10 Max	X	0.000266	5	16.4	0	3.25
N1	CIM10 Max	Y	0.000562	1	0	0	3.25
N1	CIM10 Min	X	0.000266	5	16.4	0	3.25
N1	CIM10 Min	Y	0.001256	1	0	0	3.25
N1	CIM11	Y	0.000643	4	8.2	8.2	3.25
N1	CIM12	Y	0.000626	4	8.2	8.2	3.25
N1	CIM13 Max	X	0.000671	5	16.4	0	3.25
N1	CIM13 Max	Y	0.000462	4	8.2	8.2	3.25
N1	CIM13 Min	X	0.000671	5	16.4	0	3.25
N1	CIM13 Min	Y	0.001264	1	0	0	3.25
N1	CIM14 Max	X	0.000203	5	16.4	0	3.25
N1	CIM14 Min	X	0.000203	5	16.4	0	3.25
N1	CIM14 Min	Y	0.001313	1	0	0	3.25
N1	CIM15	Y	0.000347	1	0	0	3.25
N1	COMB9	Y	0.000724	1	0	0	3.25
N1	COMB10	Y	0.000799	4	8.2	8.2	3.25
N1	COMB11	Y	0.000724	1	0	0	3.25
N1	DER09	Y	0.000724	1	0	0	3.25
N1	DER10	Y	0.000799	4	8.2	8.2	3.25
N1	DER11	Y	0.000724	1	0	0	3.25
N1	DERUD09	Y	0.000724	1	0	0	3.25
N1	DERUD10	Y	0.000799	4	8.2	8.2	3.25
N1	DERUD11	Y	0.000724	1	0	0	3.25

Table 5.6 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	687.3544	0	0	0	843.7606	-5636.3061
N1	D	Bottom	760.8616	0	0	0	1143.7805	-6239.0651
N1	L	Top	0	0	0	0	0	0
N1	L	Bottom	0	0	0	0	0	0
N1	LR	Top	145.96	0	0	0	181.2207	-1196.872
N1	LR	Bottom	145.96	0	0	0	180.9239	-1196.872
N1	EX Max	Top	0	1013.2899	0	5693.9096	0	0.0009
N1	EX Max	Bottom	0	1013.2899	0	5693.9096	0	3304.8527
N1	EY Max	Top	0	0	1010.042	8282.3441	0.0027	0
N1	EY Max	Bottom	0	0	1010.042	8282.3441	3293.4577	0
N1	DISX Max	Top	0	226.1468	0	1270.7711	0	0.0002
N1	DISX Max	Bottom	0	226.1468	0	1270.7711	0	737.5795
N1	DISY Max	Top	0	0	225.6856	1850.622	0.0006	0
N1	DISY Max	Bottom	0	0	225.6856	1850.622	735.8962	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	173.84	0	0	0	504.1363	-1425.488
N1	G	Bottom	173.84	0	0	0	503.9921	-1425.488
N1	DERUX Max	Top	0	140.2207	0	708.0693	0	0.0001
N1	DERUX Max	Bottom	0	140.2207	0	708.0693	0	457.3749
N1	DERUY Max	Top	0	0	157.0037	1287.43	0.0004	0
N1	DERUY Max	Bottom	0	0	157.0037	1287.43	511.944	0
N1	COMB1	Top	962.2962	0	0	0	1181.2648	-7890.8285
N1	COMB1	Bottom	1065.2062	0	0	0	1601.2926	-8734.6912
N1	COMB2	Top	897.8053	0	0	0	1103.1231	-7362.0033
N1	COMB2	Bottom	986.0139	0	0	0	1462.9985	-8085.3141
N1	COMB3	Top	1058.3613	0	0	0	1302.4658	-8678.5625
N1	COMB3	Bottom	1146.5699	0	0	0	1662.0148	-9401.8733
N1	COMB4	Top	897.8053	0	0	0	1103.1231	-7362.0033
N1	COMB4	Bottom	986.0139	0	0	0	1462.9985	-8085.3141
N1	COMB5 Max	Top	824.8253	226.1468	67.7057	1825.9577	1012.5129	-6763.5671
N1	COMB5 Max	Bottom	913.0339	226.1468	67.7057	1825.9577	1593.3054	-6749.2986
N1	COMB5 Min	Top	824.8253	-226.1468	-67.7057	-1825.9577	1012.5125	-6763.5675
N1	COMB5 Min	Bottom	913.0339	-226.1468	-67.7057	-1825.9577	1151.7677	-8224.4577
N1	COMB6 Max	Top	824.8253	67.844	225.6856	2231.8533	1012.5133	-6763.5672
N1	COMB6 Max	Bottom	913.0339	67.844	225.6856	2231.8533	2108.4327	-7265.6043
N1	COMB6 Min	Top	824.8253	-67.844	-225.6856	-2231.8533	1012.5121	-6763.5674
N1	COMB6 Min	Bottom	913.0339	-67.844	-225.6856	-2231.8533	636.6404	-7708.152
N1	COMB7 Max	Top	618.619	67.844	225.6856	2231.8533	759.3851	-5072.6754
N1	COMB7 Max	Bottom	684.7754	67.844	225.6856	2231.8533	1765.2986	-5393.8847
N1	COMB7 Min	Top	618.619	-67.844	-225.6856	-2231.8533	759.3839	-5072.6755
N1	COMB7 Min	Bottom	684.7754	-67.844	-225.6856	-2231.8533	293.5063	-5836.4325
N1	COMB8 Max	Top	618.619	226.1468	67.7057	1825.9577	759.3847	-5072.6753
N1	COMB8 Max	Bottom	684.7754	226.1468	67.7057	1825.9577	1250.1713	-4877.5791
N1	COMB8 Min	Top	618.619	-226.1468	-67.7057	-1825.9577	759.3844	-5072.6757
N1	COMB8 Min	Bottom	684.7754	-226.1468	-67.7057	-1825.9577	808.6336	-6352.7382
N1	ENVE Max	Top	1058.3613	226.1468	225.6856	2231.8533	1302.4658	-5072.6753
N1	ENVE Max	Bottom	1146.5699	226.1468	225.6856	2231.8533	2108.4327	-4877.5791
N1	ENVE Min	Top	618.619	-226.1468	-225.6856	-2231.8533	759.3839	-8678.5625
N1	ENVE Min	Bottom	684.7754	-226.1468	-225.6856	-2231.8533	293.5063	-9401.8733
N1	CIM01	Top	687.3544	0	0	0	843.7606	-5636.3061
N1	CIM01	Bottom	760.8616	0	0	0	1143.7805	-6239.0651
N1	CIM02	Top	687.3544	0	0	0	843.7606	-5636.3061
N1	CIM02	Bottom	760.8616	0	0	0	1143.7805	-6239.0651
N1	CIM03	Top	833.3144	0	0	0	1024.9813	-6833.1781
N1	CIM03	Bottom	906.8216	0	0	0	1324.7044	-7435.9371
N1	CIM04	Top	796.8244	0	0	0	979.6761	-6533.9601
N1	CIM04	Bottom	870.3316	0	0	0	1279.4734	-7136.7191
N1	CIM05 Max	Top	687.3544	158.3028	47.394	1278.1704	843.7607	-5636.3059

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM05 Max	Bottom	760.8616	158.3028	47.394	1278.1704	1298.3187	-5722.7594
N1	CIM05 Min	Top	687.3544	-158.3028	-47.394	-1278.1704	843.7605	-5636.3062
N1	CIM05 Min	Bottom	760.8616	-158.3028	-47.394	-1278.1704	989.2423	-6755.3708
N1	CIM06 Max	Top	687.3544	47.4908	157.9799	1562.2973	843.761	-5636.306
N1	CIM06 Max	Bottom	760.8616	47.4908	157.9799	1562.2973	1658.9078	-6084.1734
N1	CIM06 Min	Top	687.3544	-47.4908	-157.9799	-1562.2973	843.7602	-5636.3061
N1	CIM06 Min	Bottom	760.8616	-47.4908	-157.9799	-1562.2973	628.6532	-6393.9568
N1	CIM07 Max	Top	796.8244	119.8578	36.1097	969.6082	979.6762	-6533.96
N1	CIM07 Max	Bottom	870.3316	119.8578	36.1097	969.6082	1397.2168	-6745.802
N1	CIM07 Min	Top	796.8244	-119.8578	-36.1097	-969.6082	979.676	-6533.9602
N1	CIM07 Min	Bottom	870.3316	-119.8578	-36.1097	-969.6082	1161.73	-7527.6363
N1	CIM08 Max	Top	796.8244	36.1835	119.6134	1184.153	979.6764	-6533.96
N1	CIM08 Max	Bottom	870.3316	36.1835	119.6134	1184.153	1669.4984	-7018.7064
N1	CIM08 Min	Top	796.8244	-36.1835	-119.6134	-1184.153	979.6758	-6533.9601
N1	CIM08 Min	Bottom	870.3316	-36.1835	-119.6134	-1184.153	889.4484	-7254.7318
N1	DER01	Top	962.2962	0	0	0	1181.2648	-7890.8285
N1	DER01	Bottom	1065.2062	0	0	0	1601.2926	-8734.6912
N1	DER02	Top	897.8053	0	0	0	1103.1231	-7362.0033
N1	DER02	Bottom	986.0139	0	0	0	1462.9985	-8085.3141
N1	DER03	Top	1058.3613	0	0	0	1302.4658	-8678.5625
N1	DER03	Bottom	1146.5699	0	0	0	1662.0148	-9401.8733
N1	DER04	Top	897.8053	0	0	0	1103.1231	-7362.0033
N1	DER04	Bottom	986.0139	0	0	0	1462.9985	-8085.3141
N1	DER05 Max	Top	824.8253	1013.2899	303.0126	8178.6128	1012.5135	-6763.5664
N1	DER05 Max	Bottom	913.0339	1013.2899	303.0126	8178.6128	2360.5739	-4182.0255
N1	DER05 Min	Top	824.8253	-1013.2899	-303.0126	-8178.6128	1012.5119	-6763.5682
N1	DER05 Min	Bottom	913.0339	-1013.2899	-303.0126	-8178.6128	384.4992	-10791.7308
N1	DER06 Max	Top	824.8253	303.987	1010.042	9990.517	1012.5154	-6763.567
N1	DER06 Max	Bottom	913.0339	303.987	1010.042	9990.517	4665.9942	-6495.4223
N1	DER06 Min	Top	824.8253	-303.987	-1010.042	-9990.517	1012.51	-6763.5676
N1	DER06 Min	Bottom	913.0339	-303.987	-1010.042	-9990.517	-1920.9211	-8478.3339
N1	DER07 Max	Top	618.619	1013.2899	303.0126	8178.6128	759.3853	-5072.6746
N1	DER07 Max	Bottom	684.7754	1013.2899	303.0126	8178.6128	2017.4397	-2310.3059
N1	DER07 Min	Top	618.619	-1013.2899	-303.0126	-8178.6128	759.3837	-5072.6764
N1	DER07 Min	Bottom	684.7754	-1013.2899	-303.0126	-8178.6128	41.3651	-8920.0113
N1	DER08 Max	Top	618.619	303.987	1010.042	9990.517	759.3872	-5072.6752
N1	DER08 Max	Bottom	684.7754	303.987	1010.042	9990.517	4322.8601	-4623.7028
N1	DER08 Min	Top	618.619	-303.987	-1010.042	-9990.517	759.3819	-5072.6757
N1	DER08 Min	Bottom	684.7754	-303.987	-1010.042	-9990.517	-2264.0553	-6606.6144
N1	DERUD01	Top	962.2962	0	0	0	1181.2648	-7890.8285
N1	DERUD01	Bottom	1065.2062	0	0	0	1601.2926	-8734.6912
N1	DERUD02	Top	897.8053	0	0	0	1103.1231	-7362.0033
N1	DERUD02	Bottom	986.0139	0	0	0	1462.9985	-8085.3141
N1	DERUD03	Top	1058.3613	0	0	0	1302.4658	-8678.5625
N1	DERUD03	Bottom	1146.5699	0	0	0	1662.0148	-9401.8733
N1	DERUD04	Top	897.8053	0	0	0	1103.1231	-7362.0033
N1	DERUD04	Bottom	986.0139	0	0	0	1462.9985	-8085.3141
N1	DERUD05 Max	Top	824.8253	140.2207	0	708.0693	1012.5127	-6763.5672
N1	DERUD05 Max	Bottom	913.0339	140.2207	0	708.0693	1372.5366	-7029.5033
N1	DERUD05 Min	Top	824.8253	-140.2207	0	-708.0693	1012.5127	-6763.5674
N1	DERUD05 Min	Bottom	913.0339	-140.2207	0	-708.0693	1372.5366	-7944.253
N1	DERUD06 Max	Top	824.8253	0	157.0037	1287.43	1012.5131	-6763.5673
N1	DERUD06 Max	Bottom	913.0339	0	157.0037	1287.43	1884.4805	-7486.8781
N1	DERUD06 Min	Top	824.8253	0	-157.0037	-1287.43	1012.5123	-6763.5673
N1	DERUD06 Min	Bottom	913.0339	0	-157.0037	-1287.43	860.5926	-7486.8781
N1	DERUD07 Max	Top	618.619	140.2207	0	708.0693	759.3845	-5072.6753
N1	DERUD07 Max	Bottom	684.7754	140.2207	0	708.0693	1029.4024	-5157.7837
N1	DERUD07 Min	Top	618.619	-140.2207	0	-708.0693	759.3845	-5072.6756
N1	DERUD07 Min	Bottom	684.7754	-140.2207	0	-708.0693	1029.4024	-5072.5335
N1	DERUD08 Max	Top	618.619	0	157.0037	1287.43	759.385	-5072.6755

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD08 Max	Bottom	684.7754	0	157.0037	1287.43	1541.3464	-5615.1586
N1	DERUD08 Min	Top	618.619	0	-157.0037	-1287.43	759.3841	-5072.6755
N1	DERUD08 Min	Bottom	684.7754	0	-157.0037	-1287.43	517.4584	-5615.1586
N1	CIM09 Max	Top	412.4126	158.3028	47.394	1278.1704	506.2565	-3381.7835
N1	CIM09 Max	Bottom	456.517	158.3028	47.394	1278.1704	840.8065	-3227.1334
N1	CIM09 Min	Top	412.4126	-158.3028	-47.394	-1278.1704	506.2562	-3381.7838
N1	CIM09 Min	Bottom	456.517	-158.3028	-47.394	-1278.1704	531.7301	-4259.7448
N1	CIM10 Max	Top	412.4126	47.4908	157.9799	1562.2973	506.2568	-3381.7836
N1	CIM10 Max	Bottom	456.517	47.4908	157.9799	1562.2973	1201.3956	-3588.5474
N1	CIM10 Min	Top	412.4126	-47.4908	-157.9799	-1562.2973	506.2559	-3381.7837
N1	CIM10 Min	Bottom	456.517	-47.4908	-157.9799	-1562.2973	171.141	-3898.3308
N1	CIM11	Top	861.1944	0	0	0	1347.8969	-7061.7941
N1	CIM11	Bottom	934.7016	0	0	0	1647.7726	-7664.5531
N1	CIM12	Top	817.7344	0	0	0	1221.8629	-6705.4221
N1	CIM12	Bottom	891.2416	0	0	0	1521.7745	-7308.1811
N1	CIM13 Max	Top	817.7344	119.8578	36.1097	969.6082	1221.8629	-6705.422
N1	CIM13 Max	Bottom	891.2416	119.8578	36.1097	969.6082	1639.5179	-6917.264
N1	CIM13 Min	Top	817.7344	-119.8578	-36.1097	-969.6082	1221.8628	-6705.4222
N1	CIM13 Min	Bottom	891.2416	-119.8578	-36.1097	-969.6082	1404.0311	-7699.0983
N1	CIM14 Max	Top	817.7344	36.1835	119.6134	1184.153	1221.8632	-6705.422
N1	CIM14 Max	Bottom	891.2416	36.1835	119.6134	1184.153	1911.7995	-7190.1684
N1	CIM14 Min	Top	817.7344	-36.1835	-119.6134	-1184.153	1221.8625	-6705.4221
N1	CIM14 Min	Bottom	891.2416	-36.1835	-119.6134	-1184.153	1131.7496	-7426.1938
N1	CIM15	Top	412.4126	0	0	0	506.2564	-3381.7836
N1	CIM15	Bottom	456.517	0	0	0	686.2683	-3743.4391
N1	COMB9	Top	911.7453	0	0	0	1264.5809	-7476.3113
N1	COMB9	Bottom	999.9539	0	0	0	1624.5326	-8199.6221
N1	COMB10	Top	1102.9693	0	0	0	1819.1309	-9044.3481
N1	COMB10	Bottom	1191.1779	0	0	0	2178.9239	-9767.6589
N1	COMB11	Top	911.7453	0	0	0	1264.5809	-7476.3113
N1	COMB11	Bottom	999.9539	0	0	0	1624.5326	-8199.6221
N1	DER09	Top	911.7453	0	0	0	1264.5809	-7476.3113
N1	DER09	Bottom	999.9539	0	0	0	1624.5326	-8199.6221
N1	DER10	Top	1102.9693	0	0	0	1819.1309	-9044.3481
N1	DER10	Bottom	1191.1779	0	0	0	2178.9239	-9767.6589
N1	DER11	Top	911.7453	0	0	0	1264.5809	-7476.3113
N1	DER11	Bottom	999.9539	0	0	0	1624.5326	-8199.6221
N1	DERUD09	Top	911.7453	0	0	0	1264.5809	-7476.3113
N1	DERUD09	Bottom	999.9539	0	0	0	1624.5326	-8199.6221
N1	DERUD10	Top	1102.9693	0	0	0	1819.1309	-9044.3481
N1	DERUD10	Bottom	1191.1779	0	0	0	2178.9239	-9767.6589
N1	DERUD11	Top	911.7453	0	0	0	1264.5809	-7476.3113
N1	DERUD11	Bottom	999.9539	0	0	0	1624.5326	-8199.6221

5.3 Point Results

Table 5.7 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	32.2153	4.8034	155.2101	-21.6987	32.8464	0
Base	1	13	L	0	0	0	0	0	0
Base	1	13	LR	6.1925	2.0004	28.4355	-5.7	6.3138	0
Base	1	13	EX Max	213.1136	157.1736	41.447	276.8789	381.9814	15.8517
Base	1	13	EY Max	0.0003	168.7768	59.5387	305.904	0.0003	0
Base	1	13	DISX Max	47.5629	35.0781	9.2502	61.794	85.2509	3.5378
Base	1	13	DISY Max	0.0001	37.7118	13.3034	68.3518	0.0001	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	3.016	8.1676	26.7075	-10.0738	3.075	0
Base	1	13	DERUX Max	30.3719	21.8113	5.1446	38.376	54.4158	2.1933
Base	1	13	DERUY Max	3.792E-05	26.2351	9.2549	47.5506	3.866E-05	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB1	45.1014	6.7247	217.2941	-30.3782	45.985	0
Base	1	13	COMB2	41.7546	6.7642	200.4698	-28.8884	42.5726	0
Base	1	13	COMB3	48.5664	8.9647	231.7489	-35.1584	49.5178	0
Base	1	13	COMB4	41.7546	6.7642	200.4698	-28.8884	42.5726	0
Base	1	13	COMB5 Max	86.2212	52.1557	199.4933	56.2611	124.6666	3.5378
Base	1	13	COMB5 Min	-8.9045	-40.6276	173.0108	-108.338	-45.8352	-3.5378
Base	1	13	COMB6 Max	52.9273	53.9993	202.3306	60.8515	64.991	1.0613
Base	1	13	COMB6 Min	24.3895	-42.4712	170.1736	-112.9284	13.8404	-1.0613
Base	1	13	COMB7 Max	43.2627	52.5583	155.7675	67.3611	55.1371	1.0613
Base	1	13	COMB7 Min	14.7249	-43.9122	123.6105	-106.4188	3.9865	-1.0613
Base	1	13	COMB8 Max	76.5566	50.7147	152.9303	62.7707	114.8127	3.5378
Base	1	13	COMB8 Min	-18.5691	-42.0686	126.4478	-101.8284	-55.6891	-3.5378
Base	1	13	ENVE Max	86.2212	53.9993	231.7489	67.3611	124.6666	3.5378
Base	1	13	ENVE Min	-18.5691	-43.9122	123.6105	-112.9284	-55.6891	-3.5378
Base	1	13	CIM01	32.2153	4.8034	155.2101	-21.6987	32.8464	0
Base	1	13	CIM02	32.2153	4.8034	155.2101	-21.6987	32.8464	0
Base	1	13	CIM03	38.4078	6.8038	183.6456	-27.3987	39.1603	0
Base	1	13	CIM04	36.8597	6.3037	176.5367	-25.9737	37.5818	0
Base	1	13	CIM05 Max	65.5093	37.2775	164.4789	35.911	92.5221	2.4765
Base	1	13	CIM05 Min	-1.0787	-27.6708	145.9412	-79.3084	-26.8292	-2.4765
Base	1	13	CIM06 Max	42.2035	38.568	166.465	39.1243	50.7492	0.7429
Base	1	13	CIM06 Min	22.2271	-28.9613	143.9551	-82.5217	14.9437	-0.7429
Base	1	13	CIM07 Max	62.068	30.929	183.5678	17.7135	82.7648	1.875
Base	1	13	CIM07 Min	11.6514	-18.3216	169.5056	-69.6608	-7.6012	-1.875
Base	1	13	CIM08 Max	44.4698	31.9034	185.0676	20.1398	51.222	0.566
Base	1	13	CIM08 Min	29.2496	-19.2961	168.0058	-72.0871	23.9416	-0.566
Base	1	13	DER01	45.1014	6.7247	217.2941	-30.3782	45.985	0
Base	1	13	DER02	41.7546	6.7642	200.4698	-28.8884	42.5726	0
Base	1	13	DER03	48.5664	8.9647	231.7489	-35.1584	49.5178	0
Base	1	13	DER04	41.7546	6.7642	200.4698	-28.8884	42.5726	0
Base	1	13	DER05 Max	251.772	213.5707	245.5607	342.6116	421.3972	15.8517
Base	1	13	DER05 Min	-174.4553	-202.0426	126.9434	-394.6885	-342.5658	-15.8517
Base	1	13	DER06 Max	102.5927	221.693	258.2249	362.9293	154.0104	4.7555
Base	1	13	DER06 Min	-25.276	-210.1648	114.2792	-415.0061	-75.179	-4.7555
Base	1	13	DER07 Max	242.1074	212.1297	198.9977	349.1212	411.5433	15.8517
Base	1	13	DER07 Min	-184.1199	-203.4836	80.3804	-388.1789	-352.4197	-15.8517
Base	1	13	DER08 Max	92.9281	220.2519	211.6619	369.4389	144.1565	4.7555
Base	1	13	DER08 Min	-34.9406	-211.6059	67.7162	-408.4965	-85.0329	-4.7555
Base	1	13	DERUD01	45.1014	6.7247	217.2941	-30.3782	45.985	0
Base	1	13	DERUD02	41.7546	6.7642	200.4698	-28.8884	42.5726	0
Base	1	13	DERUD03	48.5664	8.9647	231.7489	-35.1584	49.5178	0
Base	1	13	DERUD04	41.7546	6.7642	200.4698	-28.8884	42.5726	0
Base	1	13	DERUD05 Max	69.0303	27.5753	191.3967	12.3375	93.8315	2.1933
Base	1	13	DERUD05 Min	8.2865	-16.0472	181.1074	-64.4144	-15.0001	-2.1933
Base	1	13	DERUD06 Max	38.6584	31.9992	195.5069	21.5121	39.4158	0
Base	1	13	DERUD06 Min	38.6583	-20.4711	176.9972	-73.589	39.4157	0
Base	1	13	DERUD07 Max	59.3657	26.1343	144.8337	18.8471	83.9776	2.1933
Base	1	13	DERUD07 Min	-1.3781	-17.4882	134.5444	-57.9048	-24.854	-2.1933
Base	1	13	DERUD08 Max	28.9938	30.5582	148.9439	28.0217	29.5618	0
Base	1	13	DERUD08 Min	28.9937	-21.9121	130.4342	-67.0794	29.5618	0
Base	1	13	CIM09 Max	52.6232	35.3562	102.3949	44.5905	79.3835	2.4765
Base	1	13	CIM09 Min	-13.9648	-29.5921	83.8572	-70.6289	-39.9678	-2.4765
Base	1	13	CIM10 Max	29.3174	36.6467	104.381	47.8038	37.6106	0.7429
Base	1	13	CIM10 Min	9.3409	-30.8826	81.8711	-73.8422	1.8051	-0.7429
Base	1	13	CIM11	35.2313	12.971	181.9176	-31.7725	35.9215	0
Base	1	13	CIM12	34.4773	10.9291	175.2407	-29.254	35.1527	0
Base	1	13	CIM13 Max	59.6856	35.5544	182.2718	14.4331	80.3357	1.875
Base	1	13	CIM13 Min	9.2689	-13.6962	168.2096	-72.9411	-10.0303	-1.875
Base	1	13	CIM14 Max	42.0874	36.5289	183.7716	16.8594	48.7929	0.566
Base	1	13	CIM14 Min	26.8672	-14.6707	166.7098	-75.3675	21.5125	-0.566

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	CIM15	19.3292	2.882	93.126	-13.0192	19.7079	0
Base	1	13	COMB9	40.1663	9.8479	199.6058	-31.0753	40.9532	0
Base	1	13	COMB10	43.4839	18.8323	228.9841	-42.1565	44.3358	0
Base	1	13	COMB11	40.1663	9.8479	199.6058	-31.0753	40.9532	0
Base	1	13	DER09	40.1663	9.8479	199.6058	-31.0753	40.9532	0
Base	1	13	DER10	43.4839	18.8323	228.9841	-42.1565	44.3358	0
Base	1	13	DER11	40.1663	9.8479	199.6058	-31.0753	40.9532	0
Base	1	13	DERUD09	40.1663	9.8479	199.6058	-31.0753	40.9532	0
Base	1	13	DERUD10	43.4839	18.8323	228.9841	-42.1565	44.3358	0
Base	1	13	DERUD11	40.1663	9.8479	199.6058	-31.0753	40.9532	0
Base	2	15	D	7.2738	7.9216	43.1061	-24.6784	7.2612	0.0207
Base	2	15	L	0	0	0	0	0	0
Base	2	15	LR	0.1427	0.8948	5.852	-4.5466	0.141	0.0069
Base	2	15	EX Max	107.3241	148.9389	64.4841	266.6231	198.9793	15.4528
Base	2	15	EY Max	0.0768	167.8046	59.5597	302.5897	0.148	0.1053
Base	2	15	DISX Max	23.9527	33.2403	14.3916	59.5051	44.4083	3.4488
Base	2	15	DISY Max	0.0172	37.4946	13.3081	67.6112	0.0331	0.0235
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.098	-6.6471	15.5744	4.9017	0.0995	0.0139
Base	2	15	DERUX Max	13.2947	20.6039	9.2237	36.8913	24.7256	2.1556
Base	2	15	DERUY Max	0.0119	26.084	9.2581	47.0354	0.023	0.0164
Base	2	15	COMB1	10.1834	11.0902	60.3486	-34.5498	10.1657	0.0289
Base	2	15	COMB2	8.7999	9.9533	54.6533	-31.8874	8.7839	0.0282
Base	2	15	COMB3	8.9569	10.9375	61.0906	-36.8886	8.9391	0.0358
Base	2	15	COMB4	8.7999	9.9533	54.6533	-31.8874	8.7839	0.0282
Base	2	15	COMB5 Max	32.6864	53.9945	70.1114	50.1744	53.1317	3.4806
Base	2	15	COMB5 Min	-15.2292	-34.9828	33.3433	-109.4026	-35.7048	-3.431
Base	2	15	COMB6 Max	15.9316	56.9725	69.3529	55.8486	22.069	1.083
Base	2	15	COMB6 Min	1.5256	-37.9608	34.1017	-115.0769	-4.6422	-1.0334
Base	2	15	COMB7 Max	13.7494	54.5961	56.4211	63.2522	19.8906	1.0768
Base	2	15	COMB7 Min	-0.6565	-40.3373	21.1699	-107.6733	-6.8205	-1.0396
Base	2	15	COMB8 Max	30.5043	51.6181	57.1795	57.5779	50.9533	3.4744
Base	2	15	COMB8 Min	-17.4114	-37.3593	20.4115	-101.9991	-37.8832	-3.4372
Base	2	15	ENVE Max	32.6864	56.9725	70.1114	63.2522	53.1317	3.4806
Base	2	15	ENVE Min	-17.4114	-40.3373	20.4115	-115.0769	-37.8832	-3.4372
Base	2	15	CIM01	7.2738	7.9216	43.1061	-24.6784	7.2612	0.0207
Base	2	15	CIM02	7.2738	7.9216	43.1061	-24.6784	7.2612	0.0207
Base	2	15	CIM03	7.4165	8.8163	48.9581	-29.225	7.4022	0.0275
Base	2	15	CIM04	7.3808	8.5926	47.4951	-28.0883	7.367	0.0258
Base	2	15	CIM05 Max	24.0443	39.0636	55.9749	31.1735	38.354	2.4398
Base	2	15	CIM05 Min	-9.4966	-23.2205	30.2373	-80.5304	-23.8316	-2.3984
Base	2	15	CIM06 Max	12.3159	41.1482	55.444	35.1455	16.6101	0.7614
Base	2	15	CIM06 Min	2.2318	-25.3051	30.7682	-84.5024	-2.0877	-0.72
Base	2	15	CIM07 Max	20.0785	32.2091	57.252	14.2672	30.9087	1.8574
Base	2	15	CIM07 Min	-5.3168	-15.0238	37.7383	-70.4439	-16.1748	-1.8058
Base	2	15	CIM08 Max	11.2224	33.7832	56.8511	17.2664	14.4898	0.5901
Base	2	15	CIM08 Min	3.5393	-16.5979	38.1392	-73.4431	0.2441	-0.5385
Base	2	15	DER01	10.1834	11.0902	60.3486	-34.5498	10.1657	0.0289
Base	2	15	DER02	8.7999	9.9533	54.6533	-31.8874	8.7839	0.0282
Base	2	15	DER03	8.9569	10.9375	61.0906	-36.8886	8.9391	0.0358
Base	2	15	DER04	8.7999	9.9533	54.6533	-31.8874	8.7839	0.0282
Base	2	15	DER05 Max	116.0758	208.7861	134.0793	327.7859	207.7371	15.5092
Base	2	15	DER05 Min	-98.6185	-189.7744	-30.6246	-387.0141	-190.3102	-15.4596
Base	2	15	DER06 Max	41.0027	221.9922	130.6322	352.9625	68.5552	4.766
Base	2	15	DER06 Min	-23.5454	-202.9804	-27.1775	-412.1908	-51.1284	-4.7164
Base	2	15	DER07 Max	113.8936	206.4097	121.1475	335.1894	205.5587	15.503
Base	2	15	DER07 Min	-100.8007	-192.1509	-43.5565	-379.6106	-192.4886	-15.4658
Base	2	15	DER08 Max	38.8205	219.6157	117.7004	360.3661	66.3768	4.7598
Base	2	15	DER08 Min	-25.7276	-205.3569	-40.1094	-404.7872	-53.3067	-4.7226
Base	2	15	DERUD01	10.1834	11.0902	60.3486	-34.5498	10.1657	0.0289

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DERUD02	8.7999	9.9533	54.6533	-31.8874	8.7839	0.0282
Base	2	15	DERUD03	8.9569	10.9375	61.0906	-36.8886	8.9391	0.0358
Base	2	15	DERUD04	8.7999	9.9533	54.6533	-31.8874	8.7839	0.0282
Base	2	15	DERUD05 Max	22.0233	30.1097	60.9511	7.2772	33.4391	2.1804
Base	2	15	DERUD05 Min	-4.566	-11.098	42.5036	-66.5054	-16.0122	-2.1308
Base	2	15	DERUD06 Max	8.7405	35.5899	60.9855	17.4212	8.7364	0.0412
Base	2	15	DERUD06 Min	8.7167	-16.5781	42.4692	-76.6495	8.6904	0.0084
Base	2	15	DERUD07 Max	19.8411	27.7333	48.0192	14.6807	31.2607	2.1742
Base	2	15	DERUD07 Min	-6.7482	-13.4745	29.5718	-59.1019	-18.1906	-2.137
Base	2	15	DERUD08 Max	6.5584	33.2134	48.0536	24.8248	6.558	0.035
Base	2	15	DERUD08 Min	6.5345	-18.9546	29.5374	-69.246	6.5121	0.0022
Base	2	15	CIM09 Max	21.1348	35.895	38.7325	41.0449	35.4495	2.4315
Base	2	15	CIM09 Min	-12.4062	-26.3891	12.9948	-70.659	-26.7361	-2.4067
Base	2	15	CIM10 Max	9.4064	37.9796	38.2016	45.0169	13.7056	0.7531
Base	2	15	CIM10 Min	-0.6778	-28.4737	13.5257	-74.631	-4.9922	-0.7283
Base	2	15	CIM11	7.3718	1.2745	58.6805	-19.7768	7.3607	0.0346
Base	2	15	CIM12	7.3473	2.9363	54.7869	-21.0022	7.3358	0.0311
Base	2	15	CIM13 Max	20.045	26.5527	64.5438	21.3533	30.8775	1.8627
Base	2	15	CIM13 Min	-5.3503	-20.6802	45.0301	-63.3577	-16.2059	-1.8005
Base	2	15	CIM14 Max	11.1888	28.1268	64.1429	24.3526	14.4587	0.5954
Base	2	15	CIM14 Min	3.5058	-22.2543	45.431	-66.3569	0.2129	-0.5332
Base	2	15	CIM15	4.3643	4.7529	25.8637	-14.8071	4.3567	0.0124
Base	2	15	COMB9	8.7776	6.1823	59.5146	-27.1633	8.7632	0.0318
Base	2	15	COMB10	8.8854	-1.1294	76.6464	-21.7715	8.8726	0.0471
Base	2	15	COMB11	8.7776	6.1823	59.5146	-27.1633	8.7632	0.0318
Base	2	15	DER09	8.7776	6.1823	59.5146	-27.1633	8.7632	0.0318
Base	2	15	DER10	8.8854	-1.1294	76.6464	-21.7715	8.8726	0.0471
Base	2	15	DER11	8.7776	6.1823	59.5146	-27.1633	8.7632	0.0318
Base	2	15	DERUD09	8.7776	6.1823	59.5146	-27.1633	8.7632	0.0318
Base	2	15	DERUD10	8.8854	-1.1294	76.6464	-21.7715	8.8726	0.0471
Base	2	15	DERUD11	8.7776	6.1823	59.5146	-27.1633	8.7632	0.0318
Base	3	16	D	0	-33.3312	298.7303	17.1805	0	0
Base	3	16	L	0	0	0	0	0	0
Base	3	16	LR	0	-3.6887	64.3484	0.0959	0	0
Base	3	16	EX Max	299.2666	0	0	0	470.5701	15.8517
Base	3	16	EY Max	0	168.2157	59.7305	305.8468	0	0
Base	3	16	DISX Max	66.7906	0	0	0	105.0222	3.5378
Base	3	16	DISY Max	0	37.5864	13.3463	68.339	0	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	0	11.402	57.6199	-13.3887	0	0
Base	3	16	DERUX Max	42.6267	0	0	0	67.0167	2.1933
Base	3	16	DERUY Max	0	26.1479	9.2847	47.5417	0	0
Base	3	16	COMB1	0	-46.6637	418.2224	24.0526	0	0
Base	3	16	COMB2	0	-41.8418	390.6506	20.6645	0	0
Base	3	16	COMB3	0	-45.8994	461.4338	20.77	0	0
Base	3	16	COMB4	0	-41.8418	390.6506	20.6645	0	0
Base	3	16	COMB5 Max	66.7906	-28.7216	362.4802	41.1182	105.0222	3.5378
Base	3	16	COMB5 Min	-66.7906	-51.2734	354.4725	0.1149	-105.0222	-3.5378
Base	3	16	COMB6 Max	20.0372	-2.4111	371.8226	88.9555	31.5067	1.0613
Base	3	16	COMB6 Min	-20.0372	-77.5839	345.1301	-47.7224	-31.5067	-1.0613
Base	3	16	COMB7 Max	20.0372	7.5883	282.2036	83.8014	31.5067	1.0613
Base	3	16	COMB7 Min	-20.0372	-67.5845	255.511	-52.8765	-31.5067	-1.0613
Base	3	16	COMB8 Max	66.7906	-18.7222	272.8612	35.9641	105.0222	3.5378
Base	3	16	COMB8 Min	-66.7906	-41.274	264.8534	-5.0393	-105.0222	-3.5378
Base	3	16	ENVE Max	66.7906	7.5883	461.4338	88.9555	105.0222	3.5378
Base	3	16	ENVE Min	-66.7906	-77.5839	255.511	-52.8765	-105.0222	-3.5378
Base	3	16	CIM01	0	-33.3312	298.7303	17.1805	0	0
Base	3	16	CIM02	0	-33.3312	298.7303	17.1805	0	0
Base	3	16	CIM03	0	-37.0199	363.0787	17.2764	0	0
Base	3	16	CIM04	0	-36.0977	346.9916	17.2524	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	CIM05 Max	46.7534	-25.4381	301.533	31.5316	73.5155	2.4765
Base	3	16	CIM05 Min	-46.7534	-41.2244	295.9276	2.8293	-73.5155	-2.4765
Base	3	16	CIM06 Max	14.026	-7.0208	308.0727	65.0177	22.0547	0.7429
Base	3	16	CIM06 Min	-14.026	-59.6417	289.3879	-30.6568	-22.0547	-0.7429
Base	3	16	CIM07 Max	35.399	-30.0839	349.127	28.1866	55.6618	1.875
Base	3	16	CIM07 Min	-35.399	-42.1116	344.8562	6.3181	-55.6618	-1.875
Base	3	16	CIM08 Max	10.6865	-16.1769	354.0652	53.472	16.8036	0.566
Base	3	16	CIM08 Min	-10.6865	-56.0185	339.9181	-18.9673	-16.8036	-0.566
Base	3	16	DER01	0	-46.6637	418.2224	24.0526	0	0
Base	3	16	DER02	0	-41.8418	390.6506	20.6645	0	0
Base	3	16	DER03	0	-45.8994	461.4338	20.77	0	0
Base	3	16	DER04	0	-41.8418	390.6506	20.6645	0	0
Base	3	16	DER05 Max	299.2666	10.4672	376.3955	112.3706	470.5701	15.8517
Base	3	16	DER05 Min	-299.2666	-90.4622	340.5572	-71.1375	-470.5701	-15.8517
Base	3	16	DER06 Max	89.78	128.2182	418.2068	326.4634	141.171	4.7555
Base	3	16	DER06 Min	-89.78	-208.2132	298.7459	-285.2302	-141.171	-4.7555
Base	3	16	DER07 Max	299.2666	20.4666	286.7764	107.2165	470.5701	15.8517
Base	3	16	DER07 Min	-299.2666	-80.4628	250.9381	-76.2916	-470.5701	-15.8517
Base	3	16	DER08 Max	89.78	138.2176	328.5878	321.3092	141.171	4.7555
Base	3	16	DER08 Min	-89.78	-198.2138	209.1268	-290.3844	-141.171	-4.7555
Base	3	16	DERUD01	0	-46.6637	418.2224	24.0526	0	0
Base	3	16	DERUD02	0	-41.8418	390.6506	20.6645	0	0
Base	3	16	DERUD03	0	-45.8994	461.4338	20.77	0	0
Base	3	16	DERUD04	0	-41.8418	390.6506	20.6645	0	0
Base	3	16	DERUD05 Max	42.6267	-39.9975	358.4764	20.6166	67.0167	2.1933
Base	3	16	DERUD05 Min	-42.6267	-39.9975	358.4764	20.6166	-67.0167	-2.1933
Base	3	16	DERUD06 Max	0	-13.8496	367.761	68.1582	0	0
Base	3	16	DERUD06 Min	0	-66.1454	349.1917	-26.9251	0	0
Base	3	16	DERUD07 Max	42.6267	-29.9981	268.8573	15.4624	67.0167	2.1933
Base	3	16	DERUD07 Min	-42.6267	-29.9981	268.8573	15.4624	-67.0167	-2.1933
Base	3	16	DERUD08 Max	0	-3.8502	278.1419	63.0041	0	0
Base	3	16	DERUD08 Min	0	-56.146	259.5726	-32.0792	0	0
Base	3	16	CIM09 Max	46.7534	-12.1056	182.0409	24.6595	73.5155	2.4765
Base	3	16	CIM09 Min	-46.7534	-27.8919	176.4355	-4.0429	-73.5155	-2.4765
Base	3	16	CIM10 Max	14.026	6.3117	188.5806	58.1456	22.0547	0.7429
Base	3	16	CIM10 Min	-14.026	-46.3092	169.8958	-37.529	-22.0547	-0.7429
Base	3	16	CIM11	0	-21.9292	356.3502	3.7917	0	0
Base	3	16	CIM12	0	-24.7797	341.9452	7.1389	0	0
Base	3	16	CIM13 Max	35.399	-18.7659	344.0806	18.0731	55.6618	1.875
Base	3	16	CIM13 Min	-35.399	-30.7936	339.8098	-3.7953	-55.6618	-1.875
Base	3	16	CIM14 Max	10.6865	-4.8589	349.0187	43.3586	16.8036	0.566
Base	3	16	CIM14 Min	-10.6865	-44.7005	334.8717	-29.0808	-16.8036	-0.566
Base	3	16	CIM15	0	-19.9987	179.2382	10.3083	0	0
Base	3	16	COMB9	0	-34.2965	387.2863	13.9222	0	0
Base	3	16	COMB10	0	-21.7543	450.6682	-0.8054	0	0
Base	3	16	COMB11	0	-34.2965	387.2863	13.9222	0	0
Base	3	16	DER09	0	-34.2965	387.2863	13.9222	0	0
Base	3	16	DER10	0	-21.7543	450.6682	-0.8054	0	0
Base	3	16	DER11	0	-34.2965	387.2863	13.9222	0	0
Base	3	16	DERUD09	0	-34.2965	387.2863	13.9222	0	0
Base	3	16	DERUD10	0	-21.7543	450.6682	-0.8054	0	0
Base	3	16	DERUD11	0	-34.2965	387.2863	13.9222	0	0
Base	4	18	D	0	7.8814	65.499	-24.6776	0	0
Base	4	18	L	0	0	0	0	0	0
Base	4	18	LR	0	-2.1017	13.0365	-1.551	0	0
Base	4	18	EX Max	158.7244	0	0	0	251.5347	16.0026
Base	4	18	EY Max	0	168.6633	59.6887	304.398	0	0
Base	4	18	DISX Max	35.4242	0	0	0	56.1377	3.5715
Base	4	18	DISY Max	0	37.6864	13.3369	68.0152	0	0
Base	4	18	W	0	0	0	0	0	0



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	G	0	-14.4431	31.6562	12.7236	0	0
Base	4	18	DERUX Max	19.7655	0	0	0	31.3416	2.2307
Base	4	18	DERUY Max	0	26.2175	9.2782	47.3164	0	0
Base	4	18	COMB1	0	11.0339	91.6986	-34.5487	0	0
Base	4	18	COMB2	0	8.4068	85.117	-30.3887	0	0
Base	4	18	COMB3	0	6.095	99.4571	-32.0948	0	0
Base	4	18	COMB4	0	8.4068	85.117	-30.3887	0	0
Base	4	18	COMB5 Max	35.4242	20.7636	82.5999	-9.2086	56.1377	3.5715
Base	4	18	COMB5 Min	-35.4242	-1.8483	74.5977	-50.0177	-56.1377	-3.5715
Base	4	18	COMB6 Max	10.6273	47.1441	91.9357	38.4021	16.8413	1.0714
Base	4	18	COMB6 Min	-10.6273	-28.2288	65.2618	-97.6284	-16.8413	-1.0714
Base	4	18	COMB7 Max	10.6273	44.7797	72.286	45.8054	16.8413	1.0714
Base	4	18	COMB7 Min	-10.6273	-30.5932	45.6121	-90.2251	-16.8413	-1.0714
Base	4	18	COMB8 Max	35.4242	18.3992	62.9502	-1.8053	56.1377	3.5715
Base	4	18	COMB8 Min	-35.4242	-4.2127	54.948	-42.6144	-56.1377	-3.5715
Base	4	18	ENVE Max	35.4242	47.1441	99.4571	45.8054	56.1377	3.5715
Base	4	18	ENVE Min	-35.4242	-30.5932	45.6121	-97.6284	-56.1377	-3.5715
Base	4	18	CIM01	0	7.8814	65.499	-24.6776	0	0
Base	4	18	CIM02	0	7.8814	65.499	-24.6776	0	0
Base	4	18	CIM03	0	5.7797	78.5355	-26.2286	0	0
Base	4	18	CIM04	0	6.3051	75.2763	-25.8409	0	0
Base	4	18	CIM05 Max	24.797	15.7955	68.2997	-10.3944	39.2964	2.5
Base	4	18	CIM05 Min	-24.797	-0.0328	62.6982	-38.9608	-39.2964	-2.5
Base	4	18	CIM06 Max	7.4391	34.2619	74.8348	22.933	11.7889	0.75
Base	4	18	CIM06 Min	-7.4391	-18.4991	56.1631	-72.2883	-11.7889	-0.75
Base	4	18	CIM07 Max	18.7748	12.335	77.4102	-14.9585	29.753	1.8929
Base	4	18	CIM07 Min	-18.7748	0.2753	73.1424	-36.7233	-29.753	-1.8929
Base	4	18	CIM08 Max	5.6679	26.279	82.3449	10.2072	8.982	0.5714
Base	4	18	CIM08 Min	-5.6679	-13.6687	68.2078	-61.889	-8.982	-0.5714
Base	4	18	DER01	0	11.0339	91.6986	-34.5487	0	0
Base	4	18	DER02	0	8.4068	85.117	-30.3887	0	0
Base	4	18	DER03	0	6.095	99.4571	-32.0948	0	0
Base	4	18	DER04	0	8.4068	85.117	-30.3887	0	0
Base	4	18	DER05 Max	158.7244	60.0567	96.5054	61.7062	251.5347	16.0026
Base	4	18	DER05 Min	-158.7244	-41.1413	60.6922	-120.9326	-251.5347	-16.0026
Base	4	18	DER06 Max	47.6173	178.121	138.2874	274.7848	75.4604	4.8008
Base	4	18	DER06 Min	-47.6173	-159.2057	18.9101	-334.0111	-75.4604	-4.8008
Base	4	18	DER07 Max	158.7244	57.6922	76.8557	69.1095	251.5347	16.0026
Base	4	18	DER07 Min	-158.7244	-43.5058	41.0425	-113.5293	-251.5347	-16.0026
Base	4	18	DER08 Max	47.6173	175.7566	118.6377	282.1881	75.4604	4.8008
Base	4	18	DER08 Min	-47.6173	-161.5701	-0.7396	-326.6078	-75.4604	-4.8008
Base	4	18	DERUD01	0	11.0339	91.6986	-34.5487	0	0
Base	4	18	DERUD02	0	8.4068	85.117	-30.3887	0	0
Base	4	18	DERUD03	0	6.095	99.4571	-32.0948	0	0
Base	4	18	DERUD04	0	8.4068	85.117	-30.3887	0	0
Base	4	18	DERUD05 Max	19.7655	9.4577	78.5988	-29.6132	31.3416	2.2307
Base	4	18	DERUD05 Min	-19.7655	9.4577	78.5988	-29.6132	-31.3416	-2.2307
Base	4	18	DERUD06 Max	0	35.6751	87.8769	17.7033	0	0
Base	4	18	DERUD06 Min	0	-16.7598	69.3206	-76.9296	0	0
Base	4	18	DERUD07 Max	19.7655	7.0932	58.9491	-22.2099	31.3416	2.2307
Base	4	18	DERUD07 Min	-19.7655	7.0932	58.9491	-22.2099	-31.3416	-2.2307
Base	4	18	DERUD08 Max	0	33.3107	68.2272	25.1066	0	0
Base	4	18	DERUD08 Min	0	-19.1242	49.6709	-69.5263	0	0
Base	4	18	CIM09 Max	24.797	12.643	42.1001	-0.5234	39.2964	2.5
Base	4	18	CIM09 Min	-24.797	-3.1853	36.4986	-29.0898	-39.2964	-2.5
Base	4	18	CIM10 Max	7.4391	31.1093	48.6352	32.8041	11.7889	0.75
Base	4	18	CIM10 Min	-7.4391	-21.6517	29.9635	-62.4172	-11.7889	-0.75
Base	4	18	CIM11	0	-6.5617	97.1552	-11.9541	0	0
Base	4	18	CIM12	0	-2.951	89.2411	-15.135	0	0
Base	4	18	CIM13 Max	18.7748	3.0789	91.375	-4.2525	29.753	1.8929

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	CIM13 Min	-18.7748	-8.9808	87.1072	-26.0174	-29.753	-1.8929
Base	4	18	CIM14 Max	5.6679	17.0229	96.3097	20.9131	8.982	0.5714
Base	4	18	CIM14 Min	-5.6679	-22.9248	82.1726	-51.183	-8.982	-0.5714
Base	4	18	CIM15	0	4.7288	39.2994	-14.8066	0	0
Base	4	18	COMB9	0	2.2361	94.4269	-23.2514	0	0
Base	4	18	COMB10	0	-13.6513	129.2487	-9.2555	0	0
Base	4	18	COMB11	0	2.2361	94.4269	-23.2514	0	0
Base	4	18	DER09	0	2.2361	94.4269	-23.2514	0	0
Base	4	18	DER10	0	-13.6513	129.2487	-9.2555	0	0
Base	4	18	DER11	0	2.2361	94.4269	-23.2514	0	0
Base	4	18	DERUD09	0	2.2361	94.4269	-23.2514	0	0
Base	4	18	DERUD10	0	-13.6513	129.2487	-9.2555	0	0
Base	4	18	DERUD11	0	2.2361	94.4269	-23.2514	0	0
Base	5	19	D	-32.2153	4.8034	155.2101	-21.6987	-32.8464	0
Base	5	19	L	0	0	0	0	0	0
Base	5	19	LR	-6.1925	2.0004	28.4355	-5.7	-6.3138	0
Base	5	19	EX Max	213.1136	157.1736	41.447	276.8789	381.9814	15.8517
Base	5	19	EY Max	0.0003	168.7768	59.5387	305.904	0.0003	0
Base	5	19	DISX Max	47.5629	35.0781	9.2502	61.794	85.2509	3.5378
Base	5	19	DISY Max	0.0001	37.7118	13.3034	68.3518	0.0001	0
Base	5	19	W	0	0	0	0	0	0
Base	5	19	G	-3.016	8.1676	26.7075	-10.0738	-3.075	0
Base	5	19	DERUX Max	30.3719	21.8113	5.1446	38.376	54.4158	2.1933
Base	5	19	DERUY Max	3.792E-05	26.2351	9.2549	47.5506	3.866E-05	0
Base	5	19	COMB1	-45.1014	6.7247	217.2941	-30.3782	-45.985	0
Base	5	19	COMB2	-41.7546	6.7642	200.4698	-28.8884	-42.5726	0
Base	5	19	COMB3	-48.5664	8.9647	231.7489	-35.1584	-49.5178	0
Base	5	19	COMB4	-41.7546	6.7642	200.4698	-28.8884	-42.5726	0
Base	5	19	COMB5 Max	8.9045	52.1557	199.4933	56.2611	45.8352	3.5378
Base	5	19	COMB5 Min	-86.2212	-40.6276	173.0108	-108.338	-124.6666	-3.5378
Base	5	19	COMB6 Max	-24.3895	53.9993	202.3306	60.8515	-13.8404	1.0613
Base	5	19	COMB6 Min	-52.9273	-42.4712	170.1736	-112.9284	-64.991	-1.0613
Base	5	19	COMB7 Max	-14.7249	52.5583	155.7675	67.3611	-3.9865	1.0613
Base	5	19	COMB7 Min	-43.2627	-43.9122	123.6105	-106.4188	-55.1371	-1.0613
Base	5	19	COMB8 Max	18.5691	50.7147	152.9303	62.7707	55.6891	3.5378
Base	5	19	COMB8 Min	-76.5566	-42.0686	126.4478	-101.8284	-114.8127	-3.5378
Base	5	19	ENVE Max	18.5691	53.9993	231.7489	67.3611	55.6891	3.5378
Base	5	19	ENVE Min	-86.2212	-43.9122	123.6105	-112.9284	-124.6666	-3.5378
Base	5	19	CIM01	-32.2153	4.8034	155.2101	-21.6987	-32.8464	0
Base	5	19	CIM02	-32.2153	4.8034	155.2101	-21.6987	-32.8464	0
Base	5	19	CIM03	-38.4078	6.8038	183.6456	-27.3987	-39.1603	0
Base	5	19	CIM04	-36.8597	6.3037	176.5367	-25.9737	-37.5818	0
Base	5	19	CIM05 Max	1.0787	37.2775	164.4789	35.911	26.8292	2.4765
Base	5	19	CIM05 Min	-65.5093	-27.6708	145.9412	-79.3084	-92.5221	-2.4765
Base	5	19	CIM06 Max	-22.2271	38.568	166.465	39.1243	-14.9437	0.7429
Base	5	19	CIM06 Min	-42.2035	-28.9613	143.9551	-82.5217	-50.7492	-0.7429
Base	5	19	CIM07 Max	-11.6514	30.929	183.5678	17.7135	7.6012	1.875
Base	5	19	CIM07 Min	-62.068	-18.3216	169.5056	-69.6608	-82.7648	-1.875
Base	5	19	CIM08 Max	-29.2496	31.9034	185.0676	20.1398	-23.9416	0.566
Base	5	19	CIM08 Min	-44.4698	-19.2961	168.0058	-72.0871	-51.222	-0.566
Base	5	19	DER01	-45.1014	6.7247	217.2941	-30.3782	-45.985	0
Base	5	19	DER02	-41.7546	6.7642	200.4698	-28.8884	-42.5726	0
Base	5	19	DER03	-48.5664	8.9647	231.7489	-35.1584	-49.5178	0
Base	5	19	DER04	-41.7546	6.7642	200.4698	-28.8884	-42.5726	0
Base	5	19	DER05 Max	174.4553	213.5707	245.5607	342.6116	342.5658	15.8517
Base	5	19	DER05 Min	-251.772	-202.0426	126.9434	-394.6885	-421.3972	-15.8517
Base	5	19	DER06 Max	25.276	221.693	258.2249	362.9293	75.179	4.7555
Base	5	19	DER06 Min	-102.5927	-210.1648	114.2792	-415.0061	-154.0104	-4.7555
Base	5	19	DER07 Max	184.1199	212.1297	198.9977	349.1212	352.4197	15.8517
Base	5	19	DER07 Min	-242.1074	-203.4836	80.3804	-388.1789	-411.5433	-15.8517

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	5	19	DER08 Max	34.9406	220.2519	211.6619	369.4389	85.0329	4.7555
Base	5	19	DER08 Min	-92.9281	-211.6059	67.7162	-408.4965	-144.1565	-4.7555
Base	5	19	DERUD01	-45.1014	6.7247	217.2941	-30.3782	-45.985	0
Base	5	19	DERUD02	-41.7546	6.7642	200.4698	-28.8884	-42.5726	0
Base	5	19	DERUD03	-48.5664	8.9647	231.7489	-35.1584	-49.5178	0
Base	5	19	DERUD04	-41.7546	6.7642	200.4698	-28.8884	-42.5726	0
Base	5	19	DERUD05 Max	-8.2865	27.5753	191.3967	12.3375	15.0001	2.1933
Base	5	19	DERUD05 Min	-69.0303	-16.0472	181.1074	-64.4144	-93.8315	-2.1933
Base	5	19	DERUD06 Max	-38.6583	31.9992	195.5069	21.5121	-39.4157	0
Base	5	19	DERUD06 Min	-38.6584	-20.4711	176.9972	-73.589	-39.4158	0
Base	5	19	DERUD07 Max	1.3781	26.1343	144.8337	18.8471	24.854	2.1933
Base	5	19	DERUD07 Min	-59.3657	-17.4882	134.5444	-57.9048	-83.9776	-2.1933
Base	5	19	DERUD08 Max	-28.9937	30.5582	148.9439	28.0217	-29.5618	0
Base	5	19	DERUD08 Min	-28.9938	-21.9121	130.4342	-67.0794	-29.5618	0
Base	5	19	CIM09 Max	13.9648	35.3562	102.3949	44.5905	39.9678	2.4765
Base	5	19	CIM09 Min	-52.6232	-29.5921	83.8572	-70.6289	-79.3835	-2.4765
Base	5	19	CIM10 Max	-9.3409	36.6467	104.381	47.8038	-1.8051	0.7429
Base	5	19	CIM10 Min	-29.3174	-30.8826	81.8711	-73.8422	-37.6106	-0.7429
Base	5	19	CIM11	-35.2313	12.971	181.9176	-31.7725	-35.9215	0
Base	5	19	CIM12	-34.4773	10.9291	175.2407	-29.254	-35.1527	0
Base	5	19	CIM13 Max	-9.2689	35.5544	182.2718	14.4331	10.0303	1.875
Base	5	19	CIM13 Min	-59.6856	-13.6962	168.2096	-72.9411	-80.3357	-1.875
Base	5	19	CIM14 Max	-26.8672	36.5289	183.7716	16.8594	-21.5125	0.566
Base	5	19	CIM14 Min	-42.0874	-14.6707	166.7098	-75.3675	-48.7929	-0.566
Base	5	19	CIM15	-19.3292	2.882	93.126	-13.0192	-19.7079	0
Base	5	19	COMB9	-40.1663	9.8479	199.6058	-31.0753	-40.9532	0
Base	5	19	COMB10	-43.4839	18.8323	228.9841	-42.1565	-44.3358	0
Base	5	19	COMB11	-40.1663	9.8479	199.6058	-31.0753	-40.9532	0
Base	5	19	DER09	-40.1663	9.8479	199.6058	-31.0753	-40.9532	0
Base	5	19	DER10	-43.4839	18.8323	228.9841	-42.1565	-44.3358	0
Base	5	19	DER11	-40.1663	9.8479	199.6058	-31.0753	-40.9532	0
Base	5	19	DERUD09	-40.1663	9.8479	199.6058	-31.0753	-40.9532	0
Base	5	19	DERUD10	-43.4839	18.8323	228.9841	-42.1565	-44.3358	0
Base	5	19	DERUD11	-40.1663	9.8479	199.6058	-31.0753	-40.9532	0
Base	6	21	D	-7.2738	7.9216	43.1061	-24.6784	-7.2612	-0.0207
Base	6	21	L	0	0	0	0	0	0
Base	6	21	LR	-0.1427	0.8948	5.852	-4.5466	-0.141	-0.0069
Base	6	21	EX Max	107.3241	148.9389	64.4841	266.6231	198.9793	15.4528
Base	6	21	EY Max	0.0768	167.8046	59.5597	302.5897	0.148	0.1053
Base	6	21	DISX Max	23.9527	33.2403	14.3916	59.5051	44.4083	3.4488
Base	6	21	DISY Max	0.0172	37.4946	13.3081	67.6112	0.0331	0.0235
Base	6	21	W	0	0	0	0	0	0
Base	6	21	G	-0.098	-6.6471	15.5744	4.9017	-0.0995	-0.0139
Base	6	21	DERUX Max	13.2947	20.6039	9.2237	36.8913	24.7256	2.1556
Base	6	21	DERUY Max	0.0119	26.084	9.2581	47.0354	0.023	0.0164
Base	6	21	COMB1	-10.1834	11.0902	60.3486	-34.5498	-10.1657	-0.0289
Base	6	21	COMB2	-8.7999	9.9533	54.6533	-31.8874	-8.7839	-0.0282
Base	6	21	COMB3	-8.9569	10.9375	61.0906	-36.8886	-8.9391	-0.0358
Base	6	21	COMB4	-8.7999	9.9533	54.6533	-31.8874	-8.7839	-0.0282
Base	6	21	COMB5 Max	15.2292	53.9945	70.1114	50.1744	35.7048	3.431
Base	6	21	COMB5 Min	-32.6864	-34.9828	33.3433	-109.4026	-53.1317	-3.4806
Base	6	21	COMB6 Max	-1.5256	56.9725	69.3529	55.8486	4.6422	1.0334
Base	6	21	COMB6 Min	-15.9316	-37.9608	34.1017	-115.0769	-22.069	-1.083
Base	6	21	COMB7 Max	0.6565	54.5961	56.4211	63.2522	6.8205	1.0396
Base	6	21	COMB7 Min	-13.7494	-40.3373	21.1699	-107.6733	-19.8906	-1.0768
Base	6	21	COMB8 Max	17.4114	51.6181	57.1795	57.5779	37.8832	3.4372
Base	6	21	COMB8 Min	-30.5043	-37.3593	20.4115	-101.9991	-50.9533	-3.4744
Base	6	21	ENVE Max	17.4114	56.9725	70.1114	63.2522	37.8832	3.4372
Base	6	21	ENVE Min	-32.6864	-40.3373	20.4115	-115.0769	-53.1317	-3.4806
Base	6	21	CIM01	-7.2738	7.9216	43.1061	-24.6784	-7.2612	-0.0207

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	6	21	CIM02	-7.2738	7.9216	43.1061	-24.6784	-7.2612	-0.0207
Base	6	21	CIM03	-7.4165	8.8163	48.9581	-29.225	-7.4022	-0.0275
Base	6	21	CIM04	-7.3808	8.5926	47.4951	-28.0883	-7.367	-0.0258
Base	6	21	CIM05 Max	9.4966	39.0636	55.9749	31.1735	23.8316	2.3984
Base	6	21	CIM05 Min	-24.0443	-23.2205	30.2373	-80.5304	-38.354	-2.4398
Base	6	21	CIM06 Max	-2.2318	41.1482	55.444	35.1455	2.0877	0.72
Base	6	21	CIM06 Min	-12.3159	-25.3051	30.7682	-84.5024	-16.6101	-0.7614
Base	6	21	CIM07 Max	5.3168	32.2091	57.252	14.2672	16.1748	1.8058
Base	6	21	CIM07 Min	-20.0785	-15.0238	37.7383	-70.4439	-30.9087	-1.8574
Base	6	21	CIM08 Max	-3.5393	33.7832	56.8511	17.2664	-0.2441	0.5385
Base	6	21	CIM08 Min	-11.2224	-16.5979	38.1392	-73.4431	-14.4898	-0.5901
Base	6	21	DER01	-10.1834	11.0902	60.3486	-34.5498	-10.1657	-0.0289
Base	6	21	DER02	-8.7999	9.9533	54.6533	-31.8874	-8.7839	-0.0282
Base	6	21	DER03	-8.9569	10.9375	61.0906	-36.8886	-8.9391	-0.0358
Base	6	21	DER04	-8.7999	9.9533	54.6533	-31.8874	-8.7839	-0.0282
Base	6	21	DER05 Max	98.6185	208.7861	134.0793	327.7859	190.3102	15.4596
Base	6	21	DER05 Min	-116.0758	-189.7744	-30.6246	-387.0141	-207.7371	-15.5092
Base	6	21	DER06 Max	23.5454	221.9922	130.6322	352.9625	51.1284	4.7164
Base	6	21	DER06 Min	-41.0027	-202.9804	-27.1775	-412.1908	-68.5552	-4.766
Base	6	21	DER07 Max	100.8007	206.4097	121.1475	335.1894	192.4886	15.4658
Base	6	21	DER07 Min	-113.8936	-192.1509	-43.5565	-379.6106	-205.5587	-15.503
Base	6	21	DER08 Max	25.7276	219.6157	117.7004	360.3661	53.3067	4.7226
Base	6	21	DER08 Min	-38.8205	-205.3569	-40.1094	-404.7872	-66.3768	-4.7598
Base	6	21	DERUD01	-10.1834	11.0902	60.3486	-34.5498	-10.1657	-0.0289
Base	6	21	DERUD02	-8.7999	9.9533	54.6533	-31.8874	-8.7839	-0.0282
Base	6	21	DERUD03	-8.9569	10.9375	61.0906	-36.8886	-8.9391	-0.0358
Base	6	21	DERUD04	-8.7999	9.9533	54.6533	-31.8874	-8.7839	-0.0282
Base	6	21	DERUD05 Max	4.566	30.1097	60.9511	7.2772	16.0122	2.1308
Base	6	21	DERUD05 Min	-22.0233	-11.098	42.5036	-66.5054	-33.4391	-2.1804
Base	6	21	DERUD06 Max	-8.7167	35.5899	60.9855	17.4212	-8.6904	-0.0084
Base	6	21	DERUD06 Min	-8.7405	-16.5781	42.4692	-76.6495	-8.7364	-0.0412
Base	6	21	DERUD07 Max	6.7482	27.7333	48.0192	14.6807	18.1906	2.137
Base	6	21	DERUD07 Min	-19.8411	-13.4745	29.5718	-59.1019	-31.2607	-2.1742
Base	6	21	DERUD08 Max	-6.5345	33.2134	48.0536	24.8248	-6.5121	-0.0022
Base	6	21	DERUD08 Min	-6.5584	-18.9546	29.5374	-69.246	-6.558	-0.035
Base	6	21	CIM09 Max	12.4062	35.895	38.7325	41.0449	26.7361	2.4067
Base	6	21	CIM09 Min	-21.1348	-26.3891	12.9948	-70.659	-35.4495	-2.4315
Base	6	21	CIM10 Max	0.6778	37.9796	38.2016	45.0169	4.9922	0.7283
Base	6	21	CIM10 Min	-9.4064	-28.4737	13.5257	-74.631	-13.7056	-0.7531
Base	6	21	CIM11	-7.3718	1.2745	58.6805	-19.7768	-7.3607	-0.0346
Base	6	21	CIM12	-7.3473	2.9363	54.7869	-21.0022	-7.3358	-0.0311
Base	6	21	CIM13 Max	5.3503	26.5527	64.5438	21.3533	16.2059	1.8005
Base	6	21	CIM13 Min	-20.045	-20.6802	45.0301	-63.3577	-30.8775	-1.8627
Base	6	21	CIM14 Max	-3.5058	28.1268	64.1429	24.3526	-0.2129	0.5332
Base	6	21	CIM14 Min	-11.1888	-22.2543	45.431	-66.3569	-14.4587	-0.5954
Base	6	21	CIM15	-4.3643	4.7529	25.8637	-14.8071	-4.3567	-0.0124
Base	6	21	COMB9	-8.7776	6.1823	59.5146	-27.1633	-8.7632	-0.0318
Base	6	21	COMB10	-8.8854	-1.1294	76.6464	-21.7715	-8.8726	-0.0471
Base	6	21	COMB11	-8.7776	6.1823	59.5146	-27.1633	-8.7632	-0.0318
Base	6	21	DER09	-8.7776	6.1823	59.5146	-27.1633	-8.7632	-0.0318
Base	6	21	DER10	-8.8854	-1.1294	76.6464	-21.7715	-8.8726	-0.0471
Base	6	21	DER11	-8.7776	6.1823	59.5146	-27.1633	-8.7632	-0.0318
Base	6	21	DERUD09	-8.7776	6.1823	59.5146	-27.1633	-8.7632	-0.0318
Base	6	21	DERUD10	-8.8854	-1.1294	76.6464	-21.7715	-8.8726	-0.0471
Base	6	21	DERUD11	-8.7776	6.1823	59.5146	-27.1633	-8.7632	-0.0318

5.4 Modal Results

Table 5.8 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.227	4.41	27.7093	767.8054
Modal	2	0.208	4.816	30.2616	915.7617
Modal	3	0.16	6.233	39.1613	1533.6051
Modal	4	0.055	18.107	113.7726	12944.2072
Modal	5	0.024	42.444	266.6815	71119.0401
Modal	6	0.021	47.68	299.5816	89749.1619
Modal	7	0.019	53.266	334.6783	112009.552
Modal	8	0.019	54.047	339.5884	115320.2869
Modal	9	0.014	71.36	448.3694	201035.1373

**Table 5.9 - Modal Participating Mass Ratios (Part 1 of 2)**

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.227	0.6839	0	0	0.6839	0	0
Modal	2	0.208	0	1	0	0.6839	1	0
Modal	3	0.16	0.3145	0	0	0.9984	1	0
Modal	4	0.055	0.0016	0	0	1	1	0
Modal	5	0.024	0	0	0	1	1	0
Modal	6	0.021	0	9.985E-07	0	1	1	0
Modal	7	0.019	0	2.666E-05	0	1	1	0
Modal	8	0.019	0	0	0	1	1	0
Modal	9	0.014	0	0	0	1	1	0

**Table 5.9 - Modal Participating Mass Ratios (Part 2 of 2)**

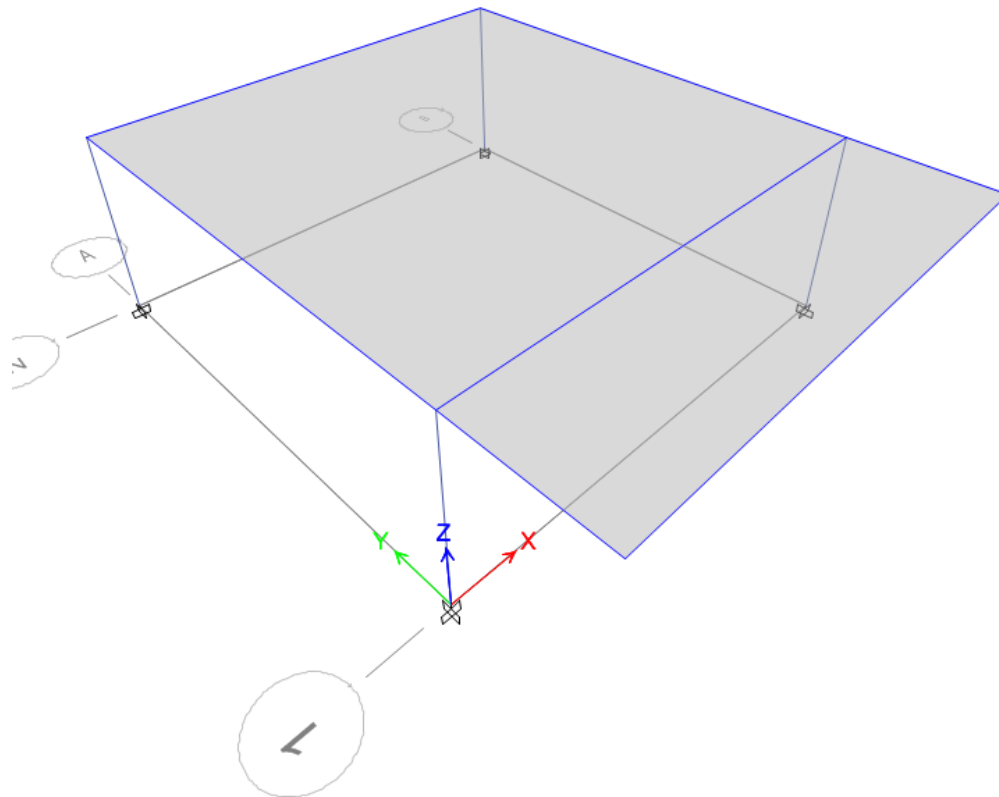
Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.6839	0.3328	0	0.6839	0.3328
Modal	2	1	0	0	1	0.6839	0.3328
Modal	3	0	0.3145	0.6665	1	0.9984	0.9993
Modal	4	0	0.0016	0.0007	1	1	1
Modal	5	0	0	0	1	1	1
Modal	6	9.985E-07	0	0	1	1	1
Modal	7	2.666E-05	0	0	1	1	1
Modal	8	0	0	2.336E-05	1	1	1
Modal	9	0	0	0	1	1	1

**Table 5.10 - Modal Load Participation Ratios**

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

**Table 5.11 - Modal Direction Factors**

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.227	0.69	0	0	0.31
Modal	2	0.208	0	1	0	0
Modal	3	0.16	0.32	0	0	0.68
Modal	4	0.055	0.977	0	0	0.023
Modal	5	0.024	0	1	0	0
Modal	6	0.021	0	1	0	0
Modal	7	0.019	0	1	0	0
Modal	8	0.019	0	0	0	1
Modal	9	0.014	0	0	0	1



## Project Report

Model File: 004 2017 PROTOTIPO EDUCACION MODULO 2B DES, Revision 0  
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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	8.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	8200	0	0
4	8200	8200	0
10	0	-2400	0
9	8200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B8	10	1	None
B15	10	9	None
B17	9	3	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	9	3	None
		2	3	1	None
		3	1	10	None
		4	10	9	None
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	29974	29974	4.1	-0.7742	29974	29974	4.1	-0.7742	4.1	3.1246

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	29974	29974	541.592	4.1	-0.7742

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	40265.49	40265.49	0
Base	2498.55	2498.55	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	10	25	D1	
N1	9	26	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	8200	V30X50	V30X50	11
N1	B2	14	Beam	8200	V30X50	V30X50	11
N1	B4	16	Beam	8200	V30X50	V30X50	11
N1	B6	18	Beam	8200	V30X50	V30X50	11
N1	B8	2	Beam	2400	V30X50	V30X50	11
N1	B15	22	Beam	8200	VB20X50	VB20X50	11
N1	B17	4	Beam	2400	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F1	3	LOSA	90
N1	F5	5	CUB	

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200
N1	B4	16	Beam	D	Force	Gravity	0	1	0	8200
N1	B15	22	Beam	D	Force	Gravity	0	1	0	8200

**Table 4.2 - Frame Loads - Distributed (Part 2 of 2)**

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N1	B1	13	4.4	0
N1	B2	14	4.4	0
N1	B4	16	4.4	4.4
N1	B15	22	3.1	3.1

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	3	D	Gravity	4.3
N1	F5	5	D	Gravity	0.64
N1	F1	3	LR	Gravity	2
N1	F5	5	LR	Gravity	0.5
N1	F1	3	G	Gravity	1
N1	F5	5	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0	1.1813	5
NSR10DERIVA	0.1	1.1813	
NSR10DERIVA	0.2	1.1813	
NSR10DERIVA	0.3	1.1813	
NSR10DERIVA	0.4	1.1813	

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0.5	1.1813	
NSR10DERIVA	0.6	1.1813	
NSR10DERIVA	0.7	1.0971	
NSR10DERIVA	0.8	0.96	
NSR10DERIVA	0.9	0.8533	
NSR10DERIVA	1	0.768	
NSR10DERIVA	1.2	0.64	
NSR10DERIVA	1.5	0.512	
NSR10DERIVA	1.7	0.4518	
NSR10DERIVA	2	0.384	
NSR10DERIVA	2.5	0.3072	
NSR10DERIVA	3	0.256	
NSR10DERIVA	3.5	0.2194	
NSR10DERIVA	4	0.1843	
NSR10DERIVA	5	0.118	
NSR10DERIVA	8	0.0461	
NSR10DERIVA	11	0.0244	
NSR10DERIVA	15	0.0131	
disNSR10	0	1.4766	5
disNSR10	0.1	1.4766	
disNSR10	0.2	1.4766	
disNSR10	0.3	1.4766	
disNSR10	0.4	1.4766	
disNSR10	0.5	1.4766	
disNSR10	0.6	1.4766	
disNSR10	0.7	1.3714	
disNSR10	0.8	1.2	
disNSR10	0.9	1.0667	
disNSR10	1	0.96	
disNSR10	1.2	0.8	
disNSR10	1.5	0.64	
disNSR10	1.7	0.5647	
disNSR10	2	0.48	
disNSR10	2.5	0.384	
disNSR10	3	0.32	
disNSR10	3.5	0.2743	
disNSR10	4	0.2304	
disNSR10	5	0.1475	
disNSR10	8	0.0576	
disNSR10	11	0.0305	
disNSR10	15	0.0164	
UMBRAL1	0	0.1	2
UMBRAL1	0.01	0.108	
UMBRAL1	0.02	0.116	
UMBRAL1	0.03	0.124	
UMBRAL1	0.04	0.132	
UMBRAL1	0.05	0.14	
UMBRAL1	0.06	0.148	
UMBRAL1	0.07	0.156	
UMBRAL1	0.08	0.164	
UMBRAL1	0.09	0.172	
UMBRAL1	0.1	0.18	
UMBRAL1	0.11	0.188	
UMBRAL1	0.12	0.196	
UMBRAL1	0.13	0.204	
UMBRAL1	0.14	0.212	
UMBRAL1	0.15	0.22	
UMBRAL1	0.16	0.228	
UMBRAL1	0.17	0.236	
UMBRAL1	0.18	0.244	

Name	Period sec	Acceleration	Damping %
UMBRAL1	0.19	0.252	
UMBRAL1	0.2	0.26	
UMBRAL1	0.21	0.268	
UMBRAL1	0.22	0.276	
UMBRAL1	0.23	0.284	
UMBRAL1	0.24	0.292	
UMBRAL1	0.25	0.3	
UMBRAL1	0.26	0.3	
UMBRAL1	0.27	0.3	
UMBRAL1	0.28	0.3	
UMBRAL1	0.29	0.3	
UMBRAL1	0.3	0.3	
UMBRAL1	0.31	0.3	
UMBRAL1	0.32	0.3	
UMBRAL1	0.33	0.3	
UMBRAL1	0.34	0.3	
UMBRAL1	0.35	0.3	
UMBRAL1	0.36	0.3	
UMBRAL1	0.37	0.3	
UMBRAL1	0.38	0.3	
UMBRAL1	0.39	0.3	
UMBRAL1	0.4	0.3	
UMBRAL1	0.41	0.3	
UMBRAL1	0.42	0.3	
UMBRAL1	0.43	0.3	
UMBRAL1	0.44	0.3	
UMBRAL1	0.45	0.3	
UMBRAL1	0.46	0.3	
UMBRAL1	0.47	0.3	
UMBRAL1	0.48	0.3	
UMBRAL1	0.49	0.3	
UMBRAL1	0.5	0.3	
UMBRAL1	0.51	0.3	
UMBRAL1	0.52	0.3	
UMBRAL1	0.53	0.3	
UMBRAL1	0.54	0.3	
UMBRAL1	0.55	0.3	
UMBRAL1	0.56	0.3	
UMBRAL1	0.57	0.3	
UMBRAL1	0.58	0.3	
UMBRAL1	0.59	0.3	
UMBRAL1	0.6	0.3	
UMBRAL1	0.61	0.3	
UMBRAL1	0.62	0.3	
UMBRAL1	0.63	0.3	
UMBRAL1	0.64	0.3	
UMBRAL1	0.65	0.3	
UMBRAL1	0.66	0.3	
UMBRAL1	0.67	0.3	
UMBRAL1	0.68	0.3	
UMBRAL1	0.69	0.3	
UMBRAL1	0.7	0.3	
UMBRAL1	0.71	0.3	
UMBRAL1	0.72	0.3	
UMBRAL1	0.73	0.3	
UMBRAL1	0.74	0.3	
UMBRAL1	0.75	0.3	
UMBRAL1	0.76	0.3	
UMBRAL1	0.77	0.3	
UMBRAL1	0.78	0.3	



Name	Period sec	Acceleration	Damping %
UMBRAL1	0.79	0.3	
UMBRAL1	0.8	0.3	
UMBRAL1	0.81	0.3	
UMBRAL1	0.82	0.3	
UMBRAL1	0.83	0.3	
UMBRAL1	0.84	0.3	
UMBRAL1	0.85	0.3	
UMBRAL1	0.86	0.3	
UMBRAL1	0.87	0.3	
UMBRAL1	0.88	0.3	
UMBRAL1	0.89	0.3	
UMBRAL1	0.9	0.3	
UMBRAL1	0.91	0.3	
UMBRAL1	0.92	0.3	
UMBRAL1	0.93	0.3	
UMBRAL1	0.94	0.3	
UMBRAL1	0.95	0.3	
UMBRAL1	0.96	0.3	
UMBRAL1	0.97	0.3	
UMBRAL1	0.98	0.3	
UMBRAL1	0.99	0.3	
UMBRAL1	1	0.3	
UMBRAL1	1.01	0.297	
UMBRAL1	1.02	0.294	
UMBRAL1	1.03	0.291	
UMBRAL1	1.04	0.288	
UMBRAL1	1.05	0.286	
UMBRAL1	1.06	0.283	
UMBRAL1	1.07	0.28	
UMBRAL1	1.08	0.278	
UMBRAL1	1.09	0.275	
UMBRAL1	1.1	0.273	
UMBRAL1	1.11	0.27	
UMBRAL1	1.12	0.268	
UMBRAL1	1.13	0.265	
UMBRAL1	1.14	0.263	
UMBRAL1	1.15	0.261	
UMBRAL1	1.16	0.259	
UMBRAL1	1.17	0.256	
UMBRAL1	1.18	0.254	
UMBRAL1	1.19	0.252	
UMBRAL1	1.2	0.25	
UMBRAL1	1.21	0.248	
UMBRAL1	1.22	0.246	
UMBRAL1	1.23	0.244	
UMBRAL1	1.24	0.242	
UMBRAL1	1.25	0.24	
UMBRAL1	1.26	0.238	
UMBRAL1	1.27	0.236	
UMBRAL1	1.28	0.234	
UMBRAL1	1.29	0.233	
UMBRAL1	1.3	0.231	
UMBRAL1	1.31	0.229	
UMBRAL1	1.32	0.227	
UMBRAL1	1.33	0.226	
UMBRAL1	1.34	0.224	
UMBRAL1	1.35	0.222	
UMBRAL1	1.36	0.221	
UMBRAL1	1.37	0.219	
UMBRAL1	1.38	0.217	

Name	Period sec	Acceleration	Damping %
UMBRAL1	1.39	0.216	
UMBRAL1	1.4	0.214	
UMBRAL1	1.41	0.213	
UMBRAL1	1.42	0.211	
UMBRAL1	1.43	0.21	
UMBRAL1	1.44	0.208	
UMBRAL1	1.45	0.207	
UMBRAL1	1.46	0.205	
UMBRAL1	1.47	0.204	
UMBRAL1	1.48	0.203	
UMBRAL1	1.49	0.201	
UMBRAL1	1.5	0.2	
UMBRAL1	1.51	0.199	
UMBRAL1	1.52	0.197	
UMBRAL1	1.53	0.196	
UMBRAL1	1.54	0.195	
UMBRAL1	1.55	0.194	
UMBRAL1	1.56	0.192	
UMBRAL1	1.57	0.191	
UMBRAL1	1.58	0.19	
UMBRAL1	1.59	0.189	
UMBRAL1	1.6	0.188	
UMBRAL1	1.61	0.186	
UMBRAL1	1.62	0.185	
UMBRAL1	1.63	0.184	
UMBRAL1	1.64	0.183	
UMBRAL1	1.65	0.182	
UMBRAL1	1.66	0.181	
UMBRAL1	1.67	0.18	
UMBRAL1	1.68	0.179	
UMBRAL1	1.69	0.178	
UMBRAL1	1.7	0.176	
UMBRAL1	1.71	0.175	
UMBRAL1	1.72	0.174	
UMBRAL1	1.73	0.173	
UMBRAL1	1.74	0.172	
UMBRAL1	1.75	0.171	
UMBRAL1	1.76	0.17	
UMBRAL1	1.77	0.169	
UMBRAL1	1.78	0.169	
UMBRAL1	1.79	0.168	
UMBRAL1	1.8	0.167	
UMBRAL1	1.81	0.166	
UMBRAL1	1.82	0.165	
UMBRAL1	1.83	0.164	
UMBRAL1	1.84	0.163	
UMBRAL1	1.85	0.162	
UMBRAL1	1.86	0.161	
UMBRAL1	1.87	0.16	
UMBRAL1	1.88	0.16	
UMBRAL1	1.89	0.159	
UMBRAL1	1.9	0.158	
UMBRAL1	1.91	0.157	
UMBRAL1	1.92	0.156	
UMBRAL1	1.93	0.155	
UMBRAL1	1.94	0.155	
UMBRAL1	1.95	0.154	
UMBRAL1	1.96	0.153	
UMBRAL1	1.97	0.152	
UMBRAL1	1.98	0.152	

Name	Period sec	Acceleration	Damping %
UMBRAL1	1.99	0.151	
UMBRAL1	2	0.15	
UMBRAL1	2.01	0.149	
UMBRAL1	2.02	0.149	
UMBRAL1	2.03	0.148	
UMBRAL1	2.04	0.147	
UMBRAL1	2.05	0.146	
UMBRAL1	2.06	0.146	
UMBRAL1	2.07	0.145	
UMBRAL1	2.08	0.144	
UMBRAL1	2.09	0.144	
UMBRAL1	2.1	0.143	
UMBRAL1	2.11	0.142	
UMBRAL1	2.12	0.142	
UMBRAL1	2.13	0.141	
UMBRAL1	2.14	0.14	
UMBRAL1	2.15	0.14	
UMBRAL1	2.16	0.139	
UMBRAL1	2.17	0.138	
UMBRAL1	2.18	0.138	
UMBRAL1	2.19	0.137	
UMBRAL1	2.2	0.136	
UMBRAL1	2.21	0.136	
UMBRAL1	2.22	0.135	
UMBRAL1	2.23	0.135	
UMBRAL1	2.24	0.134	
UMBRAL1	2.25	0.133	
UMBRAL1	2.26	0.133	
UMBRAL1	2.27	0.132	
UMBRAL1	2.28	0.132	
UMBRAL1	2.29	0.131	
UMBRAL1	2.3	0.13	
UMBRAL1	2.31	0.13	
UMBRAL1	2.32	0.129	
UMBRAL1	2.33	0.129	
UMBRAL1	2.34	0.128	
UMBRAL1	2.35	0.128	
UMBRAL1	2.36	0.127	
UMBRAL1	2.37	0.127	
UMBRAL1	2.38	0.126	
UMBRAL1	2.39	0.126	
UMBRAL1	2.4	0.125	
UMBRAL1	2.41	0.124	
UMBRAL1	2.42	0.124	
UMBRAL1	2.43	0.123	
UMBRAL1	2.44	0.123	
UMBRAL1	2.45	0.122	
UMBRAL1	2.46	0.122	
UMBRAL1	2.47	0.121	
UMBRAL1	2.48	0.121	
UMBRAL1	2.49	0.12	
UMBRAL1	2.5	0.12	
UMBRAL1	2.51	0.12	
UMBRAL1	2.52	0.119	
UMBRAL1	2.53	0.119	
UMBRAL1	2.54	0.118	
UMBRAL1	2.55	0.118	
UMBRAL1	2.56	0.117	
UMBRAL1	2.57	0.117	
UMBRAL1	2.58	0.116	

Name	Period sec	Acceleration	Damping %
UMBRAL1	2.59	0.116	
UMBRAL1	2.6	0.115	
UMBRAL1	2.61	0.115	
UMBRAL1	2.62	0.115	
UMBRAL1	2.63	0.114	
UMBRAL1	2.64	0.114	
UMBRAL1	2.65	0.113	
UMBRAL1	2.66	0.113	
UMBRAL1	2.67	0.112	
UMBRAL1	2.68	0.112	
UMBRAL1	2.69	0.112	
UMBRAL1	2.7	0.111	
UMBRAL1	2.71	0.111	
UMBRAL1	2.72	0.11	
UMBRAL1	2.73	0.11	
UMBRAL1	2.74	0.109	
UMBRAL1	2.75	0.109	
UMBRAL1	2.76	0.109	
UMBRAL1	2.77	0.108	
UMBRAL1	2.78	0.108	
UMBRAL1	2.79	0.108	
UMBRAL1	2.8	0.107	
UMBRAL1	2.81	0.107	
UMBRAL1	2.82	0.106	
UMBRAL1	2.83	0.106	
UMBRAL1	2.84	0.106	
UMBRAL1	2.85	0.105	
UMBRAL1	2.86	0.105	
UMBRAL1	2.87	0.105	
UMBRAL1	2.88	0.104	
UMBRAL1	2.89	0.104	
UMBRAL1	2.9	0.103	
UMBRAL1	2.91	0.103	
UMBRAL1	2.92	0.103	
UMBRAL1	2.93	0.102	
UMBRAL1	2.94	0.102	
UMBRAL1	2.95	0.102	
UMBRAL1	2.96	0.101	
UMBRAL1	2.97	0.101	
UMBRAL1	2.98	0.101	
UMBRAL1	2.99	0.1	
UMBRAL1	3	0.1	
UMBRAL1	3.01	0.1	
UMBRAL1	3.02	0.099	
UMBRAL1	3.03	0.099	
UMBRAL1	3.04	0.099	
UMBRAL1	3.05	0.098	
UMBRAL1	3.06	0.098	
UMBRAL1	3.07	0.098	
UMBRAL1	3.08	0.097	
UMBRAL1	3.09	0.097	
UMBRAL1	3.1	0.097	
UMBRAL1	3.11	0.096	
UMBRAL1	3.12	0.096	
UMBRAL1	3.13	0.096	
UMBRAL1	3.14	0.096	
UMBRAL1	3.15	0.095	
UMBRAL1	3.16	0.095	
UMBRAL1	3.17	0.095	
UMBRAL1	3.18	0.094	

Name	Period sec	Acceleration	Damping %
UMBRAL1	3.19	0.094	
UMBRAL1	3.2	0.094	
UMBRAL1	3.21	0.093	
UMBRAL1	3.22	0.093	
UMBRAL1	3.23	0.093	
UMBRAL1	3.24	0.093	
UMBRAL1	3.25	0.092	
UMBRAL1	3.26	0.092	
UMBRAL1	3.27	0.092	
UMBRAL1	3.28	0.091	
UMBRAL1	3.29	0.091	
UMBRAL1	3.3	0.091	
UMBRAL1	3.31	0.091	
UMBRAL1	3.32	0.09	
UMBRAL1	3.33	0.09	
UMBRAL1	3.34	0.09	
UMBRAL1	3.35	0.09	
UMBRAL1	3.36	0.089	
UMBRAL1	3.37	0.089	
UMBRAL1	3.38	0.089	
UMBRAL1	3.39	0.088	
UMBRAL1	3.4	0.088	
UMBRAL1	3.41	0.088	
UMBRAL1	3.42	0.088	
UMBRAL1	3.43	0.087	
UMBRAL1	3.44	0.087	
UMBRAL1	3.45	0.087	
UMBRAL1	3.46	0.087	
UMBRAL1	3.47	0.086	
UMBRAL1	3.48	0.086	
UMBRAL1	3.49	0.086	
UMBRAL1	3.5	0.086	
UMBRAL1	3.51	0.085	
UMBRAL1	3.52	0.085	
UMBRAL1	3.53	0.085	
UMBRAL1	3.54	0.085	
UMBRAL1	3.55	0.085	
UMBRAL1	3.56	0.084	
UMBRAL1	3.57	0.084	
UMBRAL1	3.58	0.084	
UMBRAL1	3.59	0.084	
UMBRAL1	3.6	0.083	
UMBRAL1	3.61	0.083	
UMBRAL1	3.62	0.083	
UMBRAL1	3.63	0.083	
UMBRAL1	3.64	0.082	
UMBRAL1	3.65	0.082	
UMBRAL1	3.66	0.082	
UMBRAL1	3.67	0.082	
UMBRAL1	3.68	0.082	
UMBRAL1	3.69	0.081	
UMBRAL1	3.7	0.081	
UMBRAL1	3.71	0.081	
UMBRAL1	3.72	0.081	
UMBRAL1	3.73	0.08	
UMBRAL1	3.74	0.08	
UMBRAL1	3.75	0.08	
UMBRAL1	3.76	0.08	
UMBRAL1	3.77	0.08	
UMBRAL1	3.78	0.079	

Name	Period sec	Acceleration	Damping %
UMBRAL1	3.79	0.079	
UMBRAL1	3.8	0.079	
UMBRAL1	3.81	0.079	
UMBRAL1	3.82	0.079	
UMBRAL1	3.83	0.078	
UMBRAL1	3.84	0.078	
UMBRAL1	3.85	0.078	
UMBRAL1	3.86	0.078	
UMBRAL1	3.87	0.078	
UMBRAL1	3.88	0.077	
UMBRAL1	3.89	0.077	
UMBRAL1	3.9	0.077	
UMBRAL1	3.91	0.077	
UMBRAL1	3.92	0.077	
UMBRAL1	3.93	0.076	
UMBRAL1	3.94	0.076	
UMBRAL1	3.95	0.076	
UMBRAL1	3.96	0.076	
UMBRAL1	3.97	0.076	
UMBRAL1	3.98	0.075	
UMBRAL1	3.99	0.075	
UMBRAL1	4	0.075	
UMBRAL1	4.01	0.075	
UMBRAL1	4.02	0.075	
UMBRAL1	4.03	0.074	
UMBRAL1	4.04	0.074	
UMBRAL1	4.05	0.074	
UMBRAL1	4.06	0.074	
UMBRAL1	4.07	0.074	
UMBRAL1	4.08	0.074	
UMBRAL1	4.09	0.073	
UMBRAL1	4.1	0.073	
UMBRAL1	4.11	0.073	
UMBRAL1	4.12	0.073	
UMBRAL1	4.13	0.073	
UMBRAL1	4.14	0.072	
UMBRAL1	4.15	0.072	
UMBRAL1	4.16	0.072	
UMBRAL1	4.17	0.072	
UMBRAL1	4.18	0.072	
UMBRAL1	4.19	0.072	
UMBRAL1	4.2	0.071	
UMBRAL1	4.21	0.071	
UMBRAL1	4.22	0.071	
UMBRAL1	4.23	0.071	
UMBRAL1	4.24	0.071	
UMBRAL1	4.25	0.071	
UMBRAL1	4.26	0.07	
UMBRAL1	4.27	0.07	
UMBRAL1	4.28	0.07	
UMBRAL1	4.29	0.07	
UMBRAL1	4.3	0.07	
UMBRAL1	4.31	0.07	
UMBRAL1	4.32	0.069	
UMBRAL1	4.33	0.069	
UMBRAL1	4.34	0.069	
UMBRAL1	4.35	0.069	
UMBRAL1	4.36	0.069	
UMBRAL1	4.37	0.069	
UMBRAL1	4.38	0.068	

Name	Period sec	Acceleration	Damping %
UMBRAL1	4.39	0.068	
UMBRAL1	4.4	0.068	
UMBRAL1	4.41	0.068	
UMBRAL1	4.42	0.068	
UMBRAL1	4.43	0.068	
UMBRAL1	4.44	0.068	
UMBRAL1	4.45	0.067	
UMBRAL1	4.46	0.067	
UMBRAL1	4.47	0.067	
UMBRAL1	4.48	0.067	
UMBRAL1	4.49	0.067	
UMBRAL1	4.5	0.067	
UMBRAL1	4.51	0.067	
UMBRAL1	4.52	0.066	
UMBRAL1	4.53	0.066	
UMBRAL1	4.54	0.066	
UMBRAL1	4.55	0.066	
UMBRAL1	4.56	0.066	
UMBRAL1	4.57	0.066	
UMBRAL1	4.58	0.066	
UMBRAL1	4.59	0.065	
UMBRAL1	4.6	0.065	
UMBRAL1	4.61	0.065	
UMBRAL1	4.62	0.065	
UMBRAL1	4.63	0.065	
UMBRAL1	4.64	0.065	
UMBRAL1	4.65	0.065	
UMBRAL1	4.66	0.064	
UMBRAL1	4.67	0.064	
UMBRAL1	4.68	0.064	
UMBRAL1	4.69	0.064	
UMBRAL1	4.7	0.064	
UMBRAL1	4.71	0.064	
UMBRAL1	4.72	0.064	
UMBRAL1	4.73	0.063	
UMBRAL1	4.74	0.063	
UMBRAL1	4.75	0.063	
UMBRAL1	4.76	0.063	
UMBRAL1	4.77	0.063	
UMBRAL1	4.78	0.063	
UMBRAL1	4.79	0.063	
UMBRAL1	4.8	0.063	
UMBRAL1	4.81	0.062	
UMBRAL1	4.82	0.062	
UMBRAL1	4.83	0.062	
UMBRAL1	4.84	0.061	
UMBRAL1	4.85	0.061	
UMBRAL1	4.86	0.061	
UMBRAL1	4.87	0.061	
UMBRAL1	4.88	0.06	
UMBRAL1	4.89	0.06	
UMBRAL1	4.9	0.06	
UMBRAL1	4.91	0.06	
UMBRAL1	4.92	0.059	
UMBRAL1	4.93	0.059	
UMBRAL1	4.94	0.059	
UMBRAL1	4.95	0.059	
UMBRAL1	4.96	0.059	
UMBRAL1	4.97	0.058	
UMBRAL1	4.98	0.058	

Name	Period sec	Acceleration	Damping %
UMBRAL1	4.99	0.058	
UMBRAL1	5	0.058	
UMBRAL1	5.01	0.057	
UMBRAL1	5.02	0.057	
UMBRAL1	5.03	0.057	
UMBRAL1	5.04	0.057	
UMBRAL1	5.05	0.056	
UMBRAL1	5.06	0.056	
UMBRAL1	5.07	0.056	
UMBRAL1	5.08	0.056	
UMBRAL1	5.09	0.056	
UMBRAL1	5.1	0.055	
UMBRAL1	5.11	0.055	
UMBRAL1	5.12	0.055	
UMBRAL1	5.13	0.055	
UMBRAL1	5.14	0.055	
UMBRAL1	5.15	0.054	
UMBRAL1	5.16	0.054	
UMBRAL1	5.17	0.054	
UMBRAL1	5.18	0.054	
UMBRAL1	5.19	0.053	
UMBRAL1	5.2	0.053	
UMBRAL1	5.21	0.053	
UMBRAL1	5.22	0.053	
UMBRAL1	5.23	0.053	
UMBRAL1	5.24	0.052	
UMBRAL1	5.25	0.052	
UMBRAL1	5.26	0.052	
UMBRAL1	5.27	0.052	
UMBRAL1	5.28	0.052	
UMBRAL1	5.29	0.051	
UMBRAL1	5.3	0.051	
UMBRAL1	5.31	0.051	
UMBRAL1	5.32	0.051	
UMBRAL1	5.33	0.051	
UMBRAL1	5.34	0.05	
UMBRAL1	5.35	0.05	
UMBRAL1	5.36	0.05	
UMBRAL1	5.37	0.05	
UMBRAL1	5.38	0.05	
UMBRAL1	5.39	0.05	
UMBRAL1	5.4	0.049	
UMBRAL1	5.41	0.049	
UMBRAL1	5.42	0.049	
UMBRAL1	5.43	0.049	
UMBRAL1	5.44	0.049	
UMBRAL1	5.45	0.048	
UMBRAL1	5.46	0.048	
UMBRAL1	5.47	0.048	
UMBRAL1	5.48	0.048	
UMBRAL1	5.49	0.048	
UMBRAL1	5.5	0.048	
UMBRAL1	5.51	0.047	
UMBRAL1	5.52	0.047	
UMBRAL1	5.53	0.047	
UMBRAL1	5.54	0.047	
UMBRAL1	5.55	0.047	
UMBRAL1	5.56	0.047	
UMBRAL1	5.57	0.046	
UMBRAL1	5.58	0.046	



Name	Period sec	Acceleration	Damping %
UMBRAL1	5.59	0.046	
UMBRAL1	5.6	0.046	
UMBRAL1	5.61	0.046	
UMBRAL1	5.62	0.046	
UMBRAL1	5.63	0.045	
UMBRAL1	5.64	0.045	
UMBRAL1	5.65	0.045	
UMBRAL1	5.66	0.045	
UMBRAL1	5.67	0.045	
UMBRAL1	5.68	0.045	
UMBRAL1	5.69	0.044	
UMBRAL1	5.7	0.044	
UMBRAL1	5.71	0.044	
UMBRAL1	5.72	0.044	
UMBRAL1	5.73	0.044	
UMBRAL1	5.74	0.044	
UMBRAL1	5.75	0.044	
UMBRAL1	5.76	0.043	
UMBRAL1	5.77	0.043	
UMBRAL1	5.78	0.043	
UMBRAL1	5.79	0.043	
UMBRAL1	5.8	0.043	
UMBRAL1	5.81	0.043	
UMBRAL1	5.82	0.043	
UMBRAL1	5.83	0.042	
UMBRAL1	5.84	0.042	
UMBRAL1	5.85	0.042	
UMBRAL1	5.86	0.042	
UMBRAL1	5.87	0.042	
UMBRAL1	5.88	0.042	
UMBRAL1	5.89	0.042	
UMBRAL1	5.9	0.041	
UMBRAL1	5.91	0.041	
UMBRAL1	5.92	0.041	
UMBRAL1	5.93	0.041	
UMBRAL1	5.94	0.041	
UMBRAL1	5.95	0.041	
UMBRAL1	5.96	0.041	
UMBRAL1	5.97	0.04	
UMBRAL1	5.98	0.04	
UMBRAL1	5.99	0.04	
UMBRAL1	6	0.04	
UMBRAL1	6.01	0.04	
UMBRAL1	6.02	0.04	
UMBRAL1	6.03	0.04	
UMBRAL1	6.04	0.039	
UMBRAL1	6.05	0.039	
UMBRAL1	6.06	0.039	
UMBRAL1	6.07	0.039	
UMBRAL1	6.08	0.039	
UMBRAL1	6.09	0.039	
UMBRAL1	6.1	0.039	
UMBRAL1	6.11	0.039	
UMBRAL1	6.12	0.038	
UMBRAL1	6.13	0.038	
UMBRAL1	6.14	0.038	
UMBRAL1	6.15	0.038	
UMBRAL1	6.16	0.038	
UMBRAL1	6.17	0.038	
UMBRAL1	6.18	0.038	

Name	Period sec	Acceleration	Damping %
UMBRAL1	6.19	0.038	
UMBRAL1	6.2	0.037	
UMBRAL1	6.21	0.037	
UMBRAL1	6.22	0.037	
UMBRAL1	6.23	0.037	
UMBRAL1	6.24	0.037	
UMBRAL1	6.25	0.037	
UMBRAL1	6.26	0.037	
UMBRAL1	6.27	0.037	
UMBRAL1	6.28	0.037	
UMBRAL1	6.29	0.036	
UMBRAL1	6.3	0.036	
UMBRAL1	6.31	0.036	
UMBRAL1	6.32	0.036	
UMBRAL1	6.33	0.036	
UMBRAL1	6.34	0.036	
UMBRAL1	6.35	0.036	
UMBRAL1	6.36	0.036	
UMBRAL1	6.37	0.035	
UMBRAL1	6.38	0.035	
UMBRAL1	6.39	0.035	
UMBRAL1	6.4	0.035	
UMBRAL1	6.41	0.035	
UMBRAL1	6.42	0.035	
UMBRAL1	6.43	0.035	
UMBRAL1	6.44	0.035	
UMBRAL1	6.45	0.035	
UMBRAL1	6.46	0.035	
UMBRAL1	6.47	0.034	
UMBRAL1	6.48	0.034	
UMBRAL1	6.49	0.034	
UMBRAL1	6.5	0.034	
UMBRAL1	6.51	0.034	
UMBRAL1	6.52	0.034	
UMBRAL1	6.53	0.034	
UMBRAL1	6.54	0.034	
UMBRAL1	6.55	0.034	
UMBRAL1	6.56	0.033	
UMBRAL1	6.57	0.033	
UMBRAL1	6.58	0.033	
UMBRAL1	6.59	0.033	
UMBRAL1	6.6	0.033	
UMBRAL1	6.61	0.033	
UMBRAL1	6.62	0.033	
UMBRAL1	6.63	0.033	
UMBRAL1	6.64	0.033	
UMBRAL1	6.65	0.033	
UMBRAL1	6.66	0.032	
UMBRAL1	6.67	0.032	
UMBRAL1	6.68	0.032	
UMBRAL1	6.69	0.032	
UMBRAL1	6.7	0.032	
UMBRAL1	6.71	0.032	
UMBRAL1	6.72	0.032	
UMBRAL1	6.73	0.032	
UMBRAL1	6.74	0.032	
UMBRAL1	6.75	0.032	
UMBRAL1	6.76	0.032	
UMBRAL1	6.77	0.031	
UMBRAL1	6.78	0.031	

Name	Period sec	Acceleration	Damping %
UMBRAL1	6.79	0.031	
UMBRAL1	6.8	0.031	
UMBRAL1	6.81	0.031	
UMBRAL1	6.82	0.031	
UMBRAL1	6.83	0.031	
UMBRAL1	6.84	0.031	
UMBRAL1	6.85	0.031	
UMBRAL1	6.86	0.031	
UMBRAL1	6.87	0.031	
UMBRAL1	6.88	0.03	
UMBRAL1	6.89	0.03	
UMBRAL1	6.9	0.03	
UMBRAL1	6.91	0.03	
UMBRAL1	6.92	0.03	
UMBRAL1	6.93	0.03	
UMBRAL1	6.94	0.03	
UMBRAL1	6.95	0.03	
UMBRAL1	6.96	0.03	
UMBRAL1	6.97	0.03	
UMBRAL1	6.98	0.03	
UMBRAL1	6.99	0.029	
UMBRAL1	7	0.029	
UMBRAL1	7.01	0.029	
UMBRAL1	7.02	0.029	
UMBRAL1	7.03	0.029	
UMBRAL1	7.04	0.029	
UMBRAL1	7.05	0.029	
UMBRAL1	7.06	0.029	
UMBRAL1	7.07	0.029	
UMBRAL1	7.08	0.029	
UMBRAL1	7.09	0.029	
UMBRAL1	7.1	0.029	
UMBRAL1	7.11	0.028	
UMBRAL1	7.12	0.028	
UMBRAL1	7.13	0.028	
UMBRAL1	7.14	0.028	
UMBRAL1	7.15	0.028	
UMBRAL1	7.16	0.028	
UMBRAL1	7.17	0.028	
UMBRAL1	7.18	0.028	
UMBRAL1	7.19	0.028	
UMBRAL1	7.2	0.028	
UMBRAL1	7.21	0.028	
UMBRAL1	7.22	0.028	
UMBRAL1	7.23	0.028	
UMBRAL1	7.24	0.027	
UMBRAL1	7.25	0.027	
UMBRAL1	7.26	0.027	
UMBRAL1	7.27	0.027	
UMBRAL1	7.28	0.027	
UMBRAL1	7.29	0.027	
UMBRAL1	7.3	0.027	
UMBRAL1	7.31	0.027	
UMBRAL1	7.32	0.027	
UMBRAL1	7.33	0.027	
UMBRAL1	7.34	0.027	
UMBRAL1	7.35	0.027	
UMBRAL1	7.36	0.027	
UMBRAL1	7.37	0.027	
UMBRAL1	7.38	0.026	

Name	Period sec	Acceleration	Damping %
UMBRAL1	7.39	0.026	
UMBRAL1	7.4	0.026	
UMBRAL1	7.41	0.026	
UMBRAL1	7.42	0.026	
UMBRAL1	7.43	0.026	
UMBRAL1	7.44	0.026	
UMBRAL1	7.45	0.026	
UMBRAL1	7.46	0.026	
UMBRAL1	7.47	0.026	
UMBRAL1	7.48	0.026	
UMBRAL1	7.49	0.026	
UMBRAL1	7.5	0.026	

4.4 Load Cases

Table 4.5 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.6 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER05	EY	0.3		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EX	0.3		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER07	EY	0.3		No
DER08	D	0.9	Linear Add	No
DER08	EX	0.3		No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	L	0.75		No
CIM12	G	0.75		No
CIM13	D	1	Linear Add	No
CIM13	L	0.75		No
CIM13	G	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	L	0.75		No
CIM14	G	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	419.372	698.3477	-1719.4252	0	0	0	0
L	0	0	0	0	0	0	0	0	0
LR	0	0	72.98	90.4889	-299.218	0	0	0	0
EX Max	557.7992	0	0	0	1818.7838	2655.0225	0	0	0
EY Max	0	555.0755	0	1808.8554	0	2275.8095	0	0	0
DISX Max	165.9874	0	0	0	541.2257	790.0699	0	0	0
DISY Max	0	165.2832	0	538.6175	0	677.661	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	86.92	252.0092	-356.372	0	0	0	0
DERUX Max	76.8427	0	0	0	250.5909	320.2972	0	0	0
DERUY Max	0	80.485	0	262.281	0	329.9886	0	0	0
COMB1	0	0	587.1208	977.6868	-2407.1953	0	0	0	0
COMB2	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
COMB3	0	0	620.0144	982.7995	-2542.059	0	0	0	0
COMB4	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
COMB5 Max	165.9874	49.585	503.2464	999.6025	-1522.0846	993.3682	0	0	0
COMB5 Min	-165.9874	-49.585	503.2464	676.432	-2604.5359	-993.3682	0	0	0
COMB6 Max	49.7962	165.2832	503.2464	1376.6348	-1900.9425	914.682	0	0	0
COMB6 Min	-49.7962	-165.2832	503.2464	299.3998	-2225.6779	-914.682	0	0	0
COMB7 Max	49.7962	165.2832	377.4348	1167.1304	-1385.115	914.682	0	0	0
COMB7 Min	-49.7962	-165.2832	377.4348	89.8955	-1709.8504	-914.682	0	0	0
COMB8 Max	165.9874	49.585	377.4348	790.0982	-1006.257	993.3682	0	0	0
COMB8 Min	-165.9874	-49.585	377.4348	466.9277	-2088.7084	-993.3682	0	0	0
ENVE Max	165.9874	165.2832	620.0144	1376.6348	-1006.257	993.3682	0	0	0
ENVE Min	-165.9874	-165.2832	377.4348	89.8955	-2604.5359	-993.3682	0	0	0
CIM01	0	0	419.372	698.3477	-1719.4252	0	0	0	0
CIM02	0	0	419.372	698.3477	-1719.4252	0	0	0	0
CIM03	0	0	492.352	788.8366	-2018.6432	0	0	0	0
CIM04	0	0	474.107	766.2144	-1943.8387	0	0	0	0
CIM05 Max	116.1912	34.7095	419.372	811.4574	-1340.5672	695.3578	0	0	0
CIM05 Min	-116.1912	-34.7095	419.372	585.2381	-2098.2832	-695.3578	0	0	0
CIM06 Max	34.8574	115.6982	419.372	1075.38	-1605.7678	640.2774	0	0	0
CIM06 Min	-34.8574	-115.6982	419.372	321.3155	-1833.0826	-640.2774	0	0	0
CIM07 Max	87.9733	26.4453	474.107	852.3932	-1656.9891	527.1628	0	0	0
CIM07 Min	-87.9733	-26.4453	474.107	680.0356	-2230.6883	-527.1628	0	0	0
CIM08 Max	26.558	87.6001	474.107	1051.6817	-1857.2426	485.5715	0	0	0
CIM08 Min	-26.558	-87.6001	474.107	480.7471	-2030.4348	-485.5715	0	0	0
DER01	0	0	587.1208	977.6868	-2407.1953	0	0	0	0
DER02	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
DER03	0	0	620.0144	982.7995	-2542.059	0	0	0	0
DER04	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
DER05 Max	557.7992	166.5226	503.2464	1380.6739	-244.5265	3337.7653	0	0	0
DER05 Min	-557.7992	-166.5226	503.2464	295.3607	-3882.094	-3337.7653	0	0	0
DER06 Max	167.3398	555.0755	503.2464	2646.8727	-1517.6751	3072.3163	0	0	0
DER06 Min	-167.3398	-555.0755	503.2464	-970.8381	-2608.9454	-3072.3163	0	0	0
DER07 Max	557.7992	166.5226	377.4348	1171.1696	271.3011	3337.7653	0	0	0
DER07 Min	-557.7992	-166.5226	377.4348	85.8564	-3366.2664	-3337.7653	0	0	0
DER08 Max	167.3398	555.0755	377.4348	2437.3683	-1001.8476	3072.3163	0	0	0
DER08 Min	-167.3398	-555.0755	377.4348	-1180.3424	-2093.1178	-3072.3163	0	0	0
DERUD01	0	0	587.1208	977.6868	-2407.1953	0	0	0	0
DERUD02	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
DERUD03	0	0	620.0144	982.7995	-2542.059	0	0	0	0
DERUD04	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
DERUD05 Max	76.8427	0	503.2464	838.0173	-1812.7193	320.2972	0	0	0



Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-76.8427	0	503.2464	838.0173	-2313.9012	-320.2972	0	0	0
DERUD06 Max	0	80.485	503.2464	1100.2983	-2063.3102	329.9886	0	0	0
DERUD06 Min	0	-80.485	503.2464	575.7363	-2063.3102	-329.9886	0	0	0
DERUD07 Max	76.8427	0	377.4348	628.513	-1296.8917	320.2972	0	0	0
DERUD07 Min	-76.8427	0	377.4348	628.513	-1798.0736	-320.2972	0	0	0
DERUD08 Max	0	80.485	377.4348	890.794	-1547.4827	329.9886	0	0	0
DERUD08 Min	0	-80.485	377.4348	366.2319	-1547.4827	-329.9886	0	0	0
CIM09 Max	116.1912	34.7095	251.6232	532.1183	-652.7971	695.3578	0	0	0
CIM09 Min	-116.1912	-34.7095	251.6232	305.899	-1410.5131	-695.3578	0	0	0
CIM10 Max	34.8574	115.6982	251.6232	796.0409	-917.9977	640.2774	0	0	0
CIM10 Min	-34.8574	-115.6982	251.6232	41.9764	-1145.3125	-640.2774	0	0	0
CIM11	0	0	506.292	950.357	-2075.7972	0	0	0	0
CIM12	0	0	484.562	887.3547	-1986.7042	0	0	0	0
CIM13 Max	87.9733	26.4453	484.562	973.5335	-1699.8546	527.1628	0	0	0
CIM13 Min	-87.9733	-26.4453	484.562	801.1759	-2273.5538	-527.1628	0	0	0
CIM14 Max	26.558	87.6001	484.562	1172.8219	-1900.1081	485.5715	0	0	0
CIM14 Min	-26.558	-87.6001	484.562	601.8874	-2073.3003	-485.5715	0	0	0
CIM15	0	0	251.6232	419.0086	-1031.6551	0	0	0	0
COMB9	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
COMB10	0	0	642.3184	1241.2321	-2633.5054	0	0	0	0
COMB11	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
DER09	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
DER10	0	0	642.3184	1241.2321	-2633.5054	0	0	0	0
DER11	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
DERUD09	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
DERUD10	0	0	642.3184	1241.2321	-2633.5054	0	0	0	0
DERUD11	0	0	546.7064	964.0219	-2241.4962	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	29974	29974	4.1	-0.7742	29974	29974	4.1	-0.7742	4.1	3.1246

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.4	0	1	4.1	-0.7742	3.25
N1	D1	L	0	0	0	1	4.1	-0.7742	3.25
N1	D1	LR	0	-0.3	0	1	4.1	-0.7742	3.25
N1	D1	EX Max	19.6	0	0.002038	1	4.1	-0.7742	3.25
N1	D1	EY Max	0	12.3	0	1	4.1	-0.7742	3.25
N1	D1	DISX Max	5.8	0	0.000606	1	4.1	-0.7742	3.25
N1	D1	DISY Max	0	3.7	0	1	4.1	-0.7742	3.25
N1	D1	W	0	0	0	1	4.1	-0.7742	3.25
N1	D1	G	0	-0.1	0	1	4.1	-0.7742	3.25
N1	D1	DERUX Max	2.8	0	0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUY Max	0	1.8	0	1	4.1	-0.7742	3.25
N1	D1	COMB1	0	-2	0	1	4.1	-0.7742	3.25
N1	D1	COMB2	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	COMB3	0	-2.2	0	1	4.1	-0.7742	3.25
N1	D1	COMB4	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	COMB5 Max	5.8	-0.6	0.000606	1	4.1	-0.7742	3.25
N1	D1	COMB5 Min	-5.8	-2.8	-0.000606	1	4.1	-0.7742	3.25
N1	D1	COMB6 Max	1.7	2	0.000182	1	4.1	-0.7742	3.25
N1	D1	COMB6 Min	-1.7	-5.4	-0.000182	1	4.1	-0.7742	3.25
N1	D1	COMB7 Max	1.7	2.4	0.000182	1	4.1	-0.7742	3.25
N1	D1	COMB7 Min	-1.7	-5	-0.000182	1	4.1	-0.7742	3.25
N1	D1	COMB8 Max	5.8	-0.2	0.000606	1	4.1	-0.7742	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	COMB8 Min	-5.8	-2.4	-0.000606	1	4.1	-0.7742	3.25
N1	D1	ENVE Max	5.8	2.4	0.000606	1	4.1	-0.7742	3.25
N1	D1	ENVE Min	-5.8	-5.4	-0.000606	1	4.1	-0.7742	3.25
N1	D1	CIM01	0	-1.4	0	1	4.1	-0.7742	3.25
N1	D1	CIM02	0	-1.4	0	1	4.1	-0.7742	3.25
N1	D1	CIM03	0	-1.7	0	1	4.1	-0.7742	3.25
N1	D1	CIM04	0	-1.7	0	1	4.1	-0.7742	3.25
N1	D1	CIM05 Max	4.1	-0.7	0.000425	1	4.1	-0.7742	3.25
N1	D1	CIM05 Min	-4.1	-2.2	-0.000425	1	4.1	-0.7742	3.25
N1	D1	CIM06 Max	1.2	1.1	0.000127	1	4.1	-0.7742	3.25
N1	D1	CIM06 Min	-1.2	-4	-0.000127	1	4.1	-0.7742	3.25
N1	D1	CIM07 Max	3.1	-1.1	0.000321	1	4.1	-0.7742	3.25
N1	D1	CIM07 Min	-3.1	-2.2	-0.000321	1	4.1	-0.7742	3.25
N1	D1	CIM08 Max	0.9	0.3	9.7E-05	1	4.1	-0.7742	3.25
N1	D1	CIM08 Min	-0.9	-3.6	-9.7E-05	1	4.1	-0.7742	3.25
N1	D1	DER01	0	-2	0	1	4.1	-0.7742	3.25
N1	D1	DER02	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DER03	0	-2.2	0	1	4.1	-0.7742	3.25
N1	D1	DER04	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DER05 Max	19.6	2	0.002038	1	4.1	-0.7742	3.25
N1	D1	DER05 Min	-19.6	-5.4	-0.002038	1	4.1	-0.7742	3.25
N1	D1	DER06 Max	5.9	10.6	0.000611	1	4.1	-0.7742	3.25
N1	D1	DER06 Min	-5.9	-14	-0.000611	1	4.1	-0.7742	3.25
N1	D1	DER07 Max	19.6	2.4	0.002038	1	4.1	-0.7742	3.25
N1	D1	DER07 Min	-19.6	-5	-0.002038	1	4.1	-0.7742	3.25
N1	D1	DER08 Max	5.9	11.1	0.000611	1	4.1	-0.7742	3.25
N1	D1	DER08 Min	-5.9	-13.6	-0.000611	1	4.1	-0.7742	3.25
N1	D1	DERUD01	0	-2	0	1	4.1	-0.7742	3.25
N1	D1	DERUD02	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DERUD03	0	-2.2	0	1	4.1	-0.7742	3.25
N1	D1	DERUD04	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DERUD05 Max	2.8	-1.7	0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUD05 Min	-2.8	-1.7	-0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUD06 Max	0	0.1	0	1	4.1	-0.7742	3.25
N1	D1	DERUD06 Min	0	-3.5	0	1	4.1	-0.7742	3.25
N1	D1	DERUD07 Max	2.8	-1.3	0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUD07 Min	-2.8	-1.3	-0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUD08 Max	0	0.5	0	1	4.1	-0.7742	3.25
N1	D1	DERUD08 Min	0	-3.1	0	1	4.1	-0.7742	3.25
N1	D1	CIM09 Max	4.1	-0.1	0.000425	1	4.1	-0.7742	3.25
N1	D1	CIM09 Min	-4.1	-1.6	-0.000425	1	4.1	-0.7742	3.25
N1	D1	CIM10 Max	1.2	1.7	0.000127	1	4.1	-0.7742	3.25
N1	D1	CIM10 Min	-1.2	-3.4	-0.000127	1	4.1	-0.7742	3.25
N1	D1	CIM11	0	-1.6	0	1	4.1	-0.7742	3.25
N1	D1	CIM12	0	-1.5	0	1	4.1	-0.7742	3.25
N1	D1	CIM13 Max	3.1	-0.9	0.000321	1	4.1	-0.7742	3.25
N1	D1	CIM13 Min	-3.1	-2.1	-0.000321	1	4.1	-0.7742	3.25
N1	D1	CIM14 Max	0.9	0.4	9.7E-05	1	4.1	-0.7742	3.25
N1	D1	CIM14 Min	-0.9	-3.5	-9.7E-05	1	4.1	-0.7742	3.25
N1	D1	CIM15	0	-0.9	0	1	4.1	-0.7742	3.25
N1	D1	COMB9	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	COMB10	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	COMB11	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	DER09	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	DER10	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DER11	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	DERUD09	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	DERUD10	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DERUD11	0	-1.8	0	1	4.1	-0.7742	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.4	1.4	1
N1	LR	Y	0.3	0.3	1
N1	EX Max	X	18.2	18.2	1
N1	EX Max	Y	8.4	8.4	1
N1	EY Max	Y	12.3	12.3	1
N1	DISX Max	X	5.4	5.4	1
N1	DISX Max	Y	2.5	2.5	1
N1	DISY Max	Y	3.7	3.7	1
N1	G	Y	0.1	0.1	1
N1	DERUX Max	X	2.6	2.6	1
N1	DERUX Max	Y	1.2	1.2	1
N1	DERUY Max	Y	1.8	1.8	1
N1	COMB1	Y	2	2	1
N1	COMB2	Y	1.9	1.9	1
N1	COMB3	Y	2.2	2.2	1
N1	COMB4	Y	1.9	1.9	1
N1	COMB5 Max	X	5.4	5.4	1
N1	COMB5 Max	Y	1.9	1.9	1
N1	COMB5 Min	X	5.4	5.4	1
N1	COMB5 Min	Y	5.3	5.3	1
N1	COMB6 Max	X	1.6	1.6	1
N1	COMB6 Max	Y	2.7	2.7	1
N1	COMB6 Min	X	1.6	1.6	1
N1	COMB6 Min	Y	6.1	6.1	1
N1	COMB7 Max	X	1.6	1.6	1
N1	COMB7 Max	Y	3.1	3.1	1
N1	COMB7 Min	X	1.6	1.6	1
N1	COMB7 Min	Y	5.7	5.7	1
N1	COMB8 Max	X	5.4	5.4	1
N1	COMB8 Max	Y	2.3	2.3	1
N1	COMB8 Min	X	5.4	5.4	1
N1	COMB8 Min	Y	4.9	4.9	1
N1	ENVE Max	X	5.4	5.4	1
N1	ENVE Max	Y	3.1	3.1	1
N1	ENVE Min	X	5.4	5.4	1
N1	ENVE Min	Y	6.1	6.1	1
N1	CIM01	Y	1.4	1.4	1
N1	CIM02	Y	1.4	1.4	1
N1	CIM03	Y	1.7	1.7	1
N1	CIM04	Y	1.7	1.7	1
N1	CIM05 Max	X	3.8	3.8	1
N1	CIM05 Max	Y	1.1	1.1	1
N1	CIM05 Min	X	3.8	3.8	1
N1	CIM05 Min	Y	3.9	3.9	1
N1	CIM06 Max	X	1.1	1.1	1
N1	CIM06 Max	Y	1.7	1.7	1
N1	CIM06 Min	X	1.1	1.1	1
N1	CIM06 Min	Y	4.5	4.5	1
N1	CIM07 Max	X	2.9	2.9	1
N1	CIM07 Min	X	2.9	2.9	1
N1	CIM07 Min	Y	3.6	3.6	1
N1	CIM08 Max	X	0.9	0.9	1
N1	CIM08 Max	Y	0.7	0.7	1
N1	CIM08 Min	X	0.9	0.9	1
N1	CIM08 Min	Y	4	4	1
N1	DER01	Y	2	2	1
N1	DER02	Y	1.9	1.9	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DER03	Y	2.2	2.2	1
N1	DER04	Y	1.9	1.9	1
N1	DER05 Max	X	18.2	18.2	1
N1	DER05 Max	Y	10.4	10.4	1
N1	DER05 Min	X	18.2	18.2	1
N1	DER05 Min	Y	13.8	13.8	1
N1	DER06 Max	X	5.5	5.5	1
N1	DER06 Max	Y	13.1	13.1	1
N1	DER06 Min	X	5.5	5.5	1
N1	DER06 Min	Y	16.6	16.6	1
N1	DER07 Max	X	18.2	18.2	1
N1	DER07 Max	Y	10.8	10.8	1
N1	DER07 Min	X	18.2	18.2	1
N1	DER07 Min	Y	13.3	13.3	1
N1	DER08 Max	X	5.5	5.5	1
N1	DER08 Max	Y	13.6	13.6	1
N1	DER08 Min	X	5.5	5.5	1
N1	DER08 Min	Y	16.1	16.1	1
N1	DERUD01	Y	2	2	1
N1	DERUD02	Y	1.9	1.9	1
N1	DERUD03	Y	2.2	2.2	1
N1	DERUD04	Y	1.9	1.9	1
N1	DERUD05 Max	X	2.6	2.6	1
N1	DERUD05 Max	Y	0.5	0.5	1
N1	DERUD05 Min	X	2.6	2.6	1
N1	DERUD05 Min	Y	2.9	2.9	1
N1	DERUD06 Max	Y	0.1	0.1	1
N1	DERUD06 Min	Y	3.5	3.5	1
N1	DERUD07 Max	X	2.6	2.6	1
N1	DERUD07 Min	X	2.6	2.6	1
N1	DERUD07 Min	Y	2.4	2.4	1
N1	DERUD08 Max	Y	0.5	0.5	1
N1	DERUD08 Min	Y	3.1	3.1	1
N1	CIM09 Max	X	3.8	3.8	1
N1	CIM09 Max	Y	1.7	1.7	1
N1	CIM09 Min	X	3.8	3.8	1
N1	CIM09 Min	Y	3.4	3.4	1
N1	CIM10 Max	X	1.1	1.1	1
N1	CIM10 Max	Y	2.2	2.2	1
N1	CIM10 Min	X	1.1	1.1	1
N1	CIM10 Min	Y	3.9	3.9	1
N1	CIM11	Y	1.6	1.6	1
N1	CIM12	Y	1.5	1.5	1
N1	CIM13 Max	X	2.9	2.9	1
N1	CIM13 Max	Y	0.4	0.4	1
N1	CIM13 Min	X	2.9	2.9	1
N1	CIM13 Min	Y	3.4	3.4	1
N1	CIM14 Max	X	0.9	0.9	1
N1	CIM14 Max	Y	0.8	0.8	1
N1	CIM14 Min	X	0.9	0.9	1
N1	CIM14 Min	Y	3.9	3.9	1
N1	CIM15	Y	0.9	0.9	1
N1	COMB9	Y	1.8	1.8	1
N1	COMB10	Y	1.9	1.9	1
N1	COMB11	Y	1.8	1.8	1
N1	DER09	Y	1.8	1.8	1
N1	DER10	Y	1.9	1.9	1
N1	DER11	Y	1.8	1.8	1
N1	DERUD09	Y	1.8	1.8	1
N1	DERUD10	Y	1.9	1.9	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD11	Y	1.8	1.8	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.000438	3	8.2	0	3.25
N1	LR	Y	9.5E-05	4	8.2	8.2	3.25
N1	EX Max	X	0.005613	3	8.2	0	3.25
N1	EX Max	Y	0.002571	3	8.2	0	3.25
N1	EY Max	Y	0.003797	3	8.2	0	3.25
N1	DISX Max	X	0.00167	3	8.2	0	3.25
N1	DISX Max	Y	0.000765	3	8.2	0	3.25
N1	DISY Max	Y	0.001131	3	8.2	0	3.25
N1	G	Y	5E-05	4	8.2	8.2	3.25
N1	DERUX Max	X	0.000806	3	8.2	0	3.25
N1	DERUX Max	Y	0.000359	3	8.2	0	3.25
N1	DERUY Max	Y	0.000551	3	8.2	0	3.25
N1	COMB1	Y	0.000613	3	8.2	0	3.25
N1	COMB2	Y	0.000572	3	8.2	0	3.25
N1	COMB3	Y	0.000676	3	8.2	0	3.25
N1	COMB4	Y	0.000572	3	8.2	0	3.25
N1	COMB5 Max	X	0.00167	3	8.2	0	3.25
N1	COMB5 Max	Y	0.000579	3	8.2	0	3.25
N1	COMB5 Min	X	0.00167	3	8.2	0	3.25
N1	COMB5 Min	Y	0.001629	3	8.2	0	3.25
N1	COMB6 Max	X	0.000501	3	8.2	0	3.25
N1	COMB6 Max	Y	0.000835	3	8.2	0	3.25
N1	COMB6 Min	X	0.000501	3	8.2	0	3.25
N1	COMB6 Min	Y	0.001885	3	8.2	0	3.25
N1	COMB7 Max	X	0.000501	3	8.2	0	3.25
N1	COMB7 Max	Y	0.000966	3	8.2	0	3.25
N1	COMB7 Min	X	0.000501	3	8.2	0	3.25
N1	COMB7 Min	Y	0.001754	3	8.2	0	3.25
N1	COMB8 Max	X	0.00167	3	8.2	0	3.25
N1	COMB8 Max	Y	0.00071	3	8.2	0	3.25
N1	COMB8 Min	X	0.00167	3	8.2	0	3.25
N1	COMB8 Min	Y	0.001498	3	8.2	0	3.25
N1	ENVE Max	X	0.00167	3	8.2	0	3.25
N1	ENVE Max	Y	0.000966	3	8.2	0	3.25
N1	ENVE Min	X	0.00167	3	8.2	0	3.25
N1	ENVE Min	Y	0.001885	3	8.2	0	3.25
N1	CIM01	Y	0.000438	3	8.2	0	3.25
N1	CIM02	Y	0.000438	3	8.2	0	3.25
N1	CIM03	Y	0.000532	3	8.2	0	3.25
N1	CIM04	Y	0.000508	3	8.2	0	3.25
N1	CIM05 Max	X	0.001169	3	8.2	0	3.25
N1	CIM05 Max	Y	0.000335	3	8.2	0	3.25
N1	CIM05 Min	X	0.001169	3	8.2	0	3.25
N1	CIM05 Min	Y	0.001211	3	8.2	0	3.25
N1	CIM06 Max	X	0.000351	3	8.2	0	3.25
N1	CIM06 Max	Y	0.000514	3	8.2	0	3.25
N1	CIM06 Min	X	0.000351	3	8.2	0	3.25
N1	CIM06 Min	Y	0.00139	3	8.2	0	3.25
N1	CIM07 Max	X	0.000885	3	8.2	0	3.25
N1	CIM07 Max	Y	7.8E-05	3	8.2	0	3.25
N1	CIM07 Min	X	0.000885	3	8.2	0	3.25
N1	CIM07 Min	Y	0.001095	3	8.2	0	3.25
N1	CIM08 Max	X	0.000267	3	8.2	0	3.25
N1	CIM08 Max	Y	0.000213	1	0	0	3.25
N1	CIM08 Min	X	0.000267	3	8.2	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM08 Min	Y	0.00123	3	8.2	0	3.25
N1	DER01	Y	0.000613	3	8.2	0	3.25
N1	DER02	Y	0.000572	3	8.2	0	3.25
N1	DER03	Y	0.000676	3	8.2	0	3.25
N1	DER04	Y	0.000572	3	8.2	0	3.25
N1	DER05 Max	X	0.005613	3	8.2	0	3.25
N1	DER05 Max	Y	0.003185	3	8.2	0	3.25
N1	DER05 Min	X	0.005613	3	8.2	0	3.25
N1	DER05 Min	Y	0.004235	3	8.2	0	3.25
N1	DER06 Max	X	0.001684	3	8.2	0	3.25
N1	DER06 Max	Y	0.004043	3	8.2	0	3.25
N1	DER06 Min	X	0.001684	3	8.2	0	3.25
N1	DER06 Min	Y	0.005093	3	8.2	0	3.25
N1	DER07 Max	X	0.005613	3	8.2	0	3.25
N1	DER07 Max	Y	0.003316	3	8.2	0	3.25
N1	DER07 Min	X	0.005613	3	8.2	0	3.25
N1	DER07 Min	Y	0.004104	3	8.2	0	3.25
N1	DER08 Max	X	0.001684	3	8.2	0	3.25
N1	DER08 Max	Y	0.004174	3	8.2	0	3.25
N1	DER08 Min	X	0.001684	3	8.2	0	3.25
N1	DER08 Min	Y	0.004962	3	8.2	0	3.25
N1	DERUD01	Y	0.000613	3	8.2	0	3.25
N1	DERUD02	Y	0.000572	3	8.2	0	3.25
N1	DERUD03	Y	0.000676	3	8.2	0	3.25
N1	DERUD04	Y	0.000572	3	8.2	0	3.25
N1	DERUD05 Max	X	0.000806	3	8.2	0	3.25
N1	DERUD05 Max	Y	0.000169	2	0	8.2	3.25
N1	DERUD05 Min	X	0.000806	3	8.2	0	3.25
N1	DERUD05 Min	Y	0.000884	3	8.2	0	3.25
N1	DERUD06 Max	Y	2.5E-05	1	0	0	3.25
N1	DERUD06 Min	Y	0.001076	3	8.2	0	3.25
N1	DERUD07 Max	X	0.000806	3	8.2	0	3.25
N1	DERUD07 Min	X	0.000806	3	8.2	0	3.25
N1	DERUD07 Min	Y	0.000753	3	8.2	0	3.25
N1	DERUD08 Max	Y	0.000157	1	0	0	3.25
N1	DERUD08 Min	Y	0.000944	3	8.2	0	3.25
N1	CIM09 Max	X	0.001169	3	8.2	0	3.25
N1	CIM09 Max	Y	0.00051	3	8.2	0	3.25
N1	CIM09 Min	X	0.001169	3	8.2	0	3.25
N1	CIM09 Min	Y	0.001035	3	8.2	0	3.25
N1	CIM10 Max	X	0.000351	3	8.2	0	3.25
N1	CIM10 Max	Y	0.000689	3	8.2	0	3.25
N1	CIM10 Min	X	0.000351	3	8.2	0	3.25
N1	CIM10 Min	Y	0.001215	3	8.2	0	3.25
N1	CIM11	Y	0.000485	4	8.2	8.2	3.25
N1	CIM12	Y	0.000473	4	8.2	8.2	3.25
N1	CIM13 Max	X	0.000885	3	8.2	0	3.25
N1	CIM13 Max	Y	0.000115	3	8.2	0	3.25
N1	CIM13 Min	X	0.000885	3	8.2	0	3.25
N1	CIM13 Min	Y	0.001058	3	8.2	0	3.25
N1	CIM14 Max	X	0.000267	3	8.2	0	3.25
N1	CIM14 Max	Y	0.00025	1	0	0	3.25
N1	CIM14 Min	X	0.000267	3	8.2	0	3.25
N1	CIM14 Min	Y	0.001193	3	8.2	0	3.25
N1	CIM15	Y	0.000263	3	8.2	0	3.25
N1	COMB9	Y	0.000548	3	8.2	0	3.25
N1	COMB10	Y	0.000602	4	8.2	8.2	3.25
N1	COMB11	Y	0.000548	3	8.2	0	3.25
N1	DER09	Y	0.000548	3	8.2	0	3.25
N1	DER10	Y	0.000602	4	8.2	8.2	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER11	Y	0.000548	3	8.2	0	3.25
N1	DERUD09	Y	0.000548	3	8.2	0	3.25
N1	DERUD10	Y	0.000602	4	8.2	8.2	3.25
N1	DERUD11	Y	0.000548	3	8.2	0	3.25

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	D	Y	1.4	1.4	1.003
N1	LR	Y	0.3	0.3	1
N1	EX Max	X	18.2	13.7	1.329
N1	EX Max	Y	8.4	8.3	1.008
N1	EY Max	Y	12.3	12.3	1.006
N1	DISX Max	X	5.4	4.1	1.329
N1	DISX Max	Y	2.5	2.5	1.008
N1	DISY Max	Y	3.7	3.7	1.006
N1	G	Y	0.2	0.2	1.049
N1	DERUX Max	X	2.6	1.8	1.422
N1	DERUX Max	Y	1.2	1.2	1.008
N1	DERUY Max	Y	1.8	1.8	1.006
N1	COMB1	Y	2	2	1.003
N1	COMB2	Y	1.9	1.9	1.002
N1	COMB3	Y	2.2	2.2	1.002
N1	COMB4	Y	1.9	1.9	1.002
N1	COMB5 Max	X	5.4	4.1	1.331
N1	COMB5 Max	Y	1.9	1.9	1.012
N1	COMB5 Min	X	5.4	4.1	1.331
N1	COMB5 Min	Y	5.3	5.3	1.006
N1	COMB6 Max	X	1.6	1.2	1.336
N1	COMB6 Max	Y	2.7	2.7	1.009
N1	COMB6 Min	X	1.6	1.2	1.336
N1	COMB6 Min	Y	6.1	6.1	1.005
N1	COMB7 Max	X	1.6	1.2	1.334
N1	COMB7 Max	Y	3.1	3.1	1.008
N1	COMB7 Min	X	1.6	1.2	1.334
N1	COMB7 Min	Y	5.7	5.7	1.006
N1	COMB8 Max	X	5.4	4.1	1.331
N1	COMB8 Max	Y	2.3	2.3	1.01
N1	COMB8 Min	X	5.4	4.1	1.331
N1	COMB8 Min	Y	4.9	4.8	1.006
N1	ENVE Max	X	5.4	4.1	1.331
N1	ENVE Max	Y	3.1	3.1	1.008
N1	ENVE Min	X	5.4	4.1	1.331
N1	ENVE Min	Y	6.1	6.1	1.005
N1	CIM01	Y	1.4	1.4	1.003
N1	CIM02	Y	1.4	1.4	1.003
N1	CIM03	Y	1.7	1.7	1.002
N1	CIM04	Y	1.7	1.6	1.002
N1	CIM05 Max	X	3.8	2.9	1.332
N1	CIM05 Max	Y	1.1	1.1	1.014
N1	CIM05 Min	X	3.8	2.9	1.332
N1	CIM05 Min	Y	3.9	3.9	1.006
N1	CIM06 Max	X	1.1	0.9	1.337
N1	CIM06 Max	Y	1.7	1.7	1.01
N1	CIM06 Min	X	1.1	0.9	1.337
N1	CIM06 Min	Y	4.5	4.5	1.005
N1	CIM07 Max	X	2.9	2.2	1.333
N1	CIM07 Max	Y	0.3	0.2	1.044
N1	CIM07 Min	X	2.9	2.2	1.333

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM07 Min	Y	3.6	3.5	1.005
N1	CIM08 Max	X	0.9	0.6	1.339
N1	CIM08 Max	Y	0.7	0.7	1.017
N1	CIM08 Min	X	0.9	0.6	1.339
N1	CIM08 Min	Y	4	4	1.005
N1	DER01	Y	2	2	1.003
N1	DER02	Y	1.9	1.9	1.002
N1	DER03	Y	2.2	2.2	1.002
N1	DER04	Y	1.9	1.9	1.002
N1	DER05 Max	X	18.2	13.7	1.33
N1	DER05 Max	Y	10.4	10.3	1.008
N1	DER05 Min	X	18.2	13.7	1.33
N1	DER05 Min	Y	13.8	13.7	1.007
N1	DER06 Max	X	5.5	4.1	1.331
N1	DER06 Max	Y	13.1	13	1.007
N1	DER06 Min	X	5.5	4.1	1.331
N1	DER06 Min	Y	16.6	16.5	1.006
N1	DER07 Max	X	18.2	13.7	1.33
N1	DER07 Max	Y	10.8	10.7	1.008
N1	DER07 Min	X	18.2	13.7	1.33
N1	DER07 Min	Y	13.3	13.2	1.007
N1	DER08 Max	X	5.5	4.1	1.331
N1	DER08 Max	Y	13.6	13.5	1.007
N1	DER08 Min	X	5.5	4.1	1.331
N1	DER08 Min	Y	16.1	16	1.006
N1	DERUD01	Y	2	2	1.003
N1	DERUD02	Y	1.9	1.9	1.002
N1	DERUD03	Y	2.2	2.2	1.002
N1	DERUD04	Y	1.9	1.9	1.002
N1	DERUD05 Max	X	2.6	1.8	1.426
N1	DERUD05 Max	Y	0.5	0.5	1.009
N1	DERUD05 Min	X	2.6	1.8	1.426
N1	DERUD05 Min	Y	2.9	2.9	1.005
N1	DERUD06 Max	Y	0.1	0.1	1.084
N1	DERUD06 Min	Y	3.5	3.5	1.004
N1	DERUD07 Max	X	2.6	1.8	1.425
N1	DERUD07 Min	X	2.6	1.8	1.425
N1	DERUD07 Min	Y	2.4	2.4	1.005
N1	DERUD08 Max	Y	0.5	0.5	1.015
N1	DERUD08 Min	Y	3.1	3.1	1.005
N1	CIM09 Max	X	3.8	2.9	1.331
N1	CIM09 Max	Y	1.7	1.6	1.01
N1	CIM09 Min	X	3.8	2.9	1.331
N1	CIM09 Min	Y	3.4	3.3	1.006
N1	CIM10 Max	X	1.1	0.9	1.334
N1	CIM10 Max	Y	2.2	2.2	1.008
N1	CIM10 Min	X	1.1	0.9	1.334
N1	CIM10 Min	Y	3.9	3.9	1.006
N1	CIM11	Y	1.6	1.6	1.002
N1	CIM12	Y	1.5	1.5	1.001
N1	CIM13 Max	X	2.9	2.2	1.332
N1	CIM13 Max	Y	0.4	0.4	1.046
N1	CIM13 Min	X	2.9	2.2	1.332
N1	CIM13 Min	Y	3.4	3.4	1.004
N1	CIM14 Max	X	0.9	0.6	1.339
N1	CIM14 Max	Y	0.8	0.8	1.021
N1	CIM14 Min	X	0.9	0.6	1.339
N1	CIM14 Min	Y	3.9	3.9	1.003
N1	CIM15	Y	0.9	0.9	1.003



Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	COMB9	Y	1.8	1.8	1
N1	COMB10	Y	2	1.9	1.004
N1	COMB11	Y	1.8	1.8	1
N1	DER09	Y	1.8	1.8	1
N1	DER10	Y	2	1.9	1.004
N1	DER11	Y	1.8	1.8	1
N1	DERUD09	Y	1.8	1.8	1
N1	DERUD10	Y	2	1.9	1.004
N1	DERUD11	Y	1.8	1.8	1

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	370.3672	0	0	0	497.9891	-1518.5055
N1	D	Bottom	419.372	0	0	0	698.3477	-1719.4252
N1	L	Top	0	0	0	0	0	0
N1	L	Bottom	0	0	0	0	0	0
N1	LR	Top	72.98	0	0	0	90.6101	-299.218
N1	LR	Bottom	72.98	0	0	0	90.4889	-299.218
N1	EX Max	Top	0	557.7992	0	2655.0225	0	0.0008
N1	EX Max	Bottom	0	557.7992	0	2655.0225	0	1818.7838
N1	EY Max	Top	0	0	555.0755	2275.8095	0.0006	0
N1	EY Max	Bottom	0	0	555.0755	2275.8095	1808.8554	0
N1	DISX Max	Top	0	165.9874	0	790.0699	0	0.0002
N1	DISX Max	Bottom	0	165.9874	0	790.0699	0	541.2257
N1	DISY Max	Top	0	0	165.2832	677.661	0.0002	0
N1	DISY Max	Bottom	0	0	165.2832	677.661	538.6175	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	86.92	0	0	0	252.0681	-356.372
N1	G	Bottom	86.92	0	0	0	252.0092	-356.372
N1	DERUX Max	Top	0	76.8427	0	320.2972	0	0.0001
N1	DERUX Max	Bottom	0	76.8427	0	320.2972	0	250.5909
N1	DERUY Max	Top	0	0	80.485	329.9886	0.0001	0
N1	DERUY Max	Bottom	0	0	80.485	329.9886	262.281	0
N1	COMB1	Top	518.5141	0	0	0	697.1847	-2125.9077
N1	COMB1	Bottom	587.1208	0	0	0	977.6868	-2407.1953
N1	COMB2	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	COMB2	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	COMB3	Top	561.2086	0	0	0	742.5631	-2300.9554
N1	COMB3	Bottom	620.0144	0	0	0	982.7995	-2542.059
N1	COMB4	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	COMB4	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	COMB5 Max	Top	444.4406	165.9874	49.585	993.3682	597.5869	-1822.2064
N1	COMB5 Max	Bottom	503.2464	165.9874	49.585	993.3682	999.6025	-1522.0846
N1	COMB5 Min	Top	444.4406	-165.9874	-49.585	-993.3682	597.5868	-1822.2069
N1	COMB5 Min	Bottom	503.2464	-165.9874	-49.585	-993.3682	676.432	-2604.5359
N1	COMB6 Max	Top	444.4406	49.7962	165.2832	914.682	597.587	-1822.2066
N1	COMB6 Max	Bottom	503.2464	49.7962	165.2832	914.682	1376.6348	-1900.9425
N1	COMB6 Min	Top	444.4406	-49.7962	-165.2832	-914.682	597.5867	-1822.2067
N1	COMB6 Min	Bottom	503.2464	-49.7962	-165.2832	-914.682	299.3998	-2225.6779
N1	COMB7 Max	Top	333.3305	49.7962	165.2832	914.682	448.1903	-1366.6549
N1	COMB7 Max	Bottom	377.4348	49.7962	165.2832	914.682	1167.1304	-1385.115
N1	COMB7 Min	Top	333.3305	-49.7962	-165.2832	-914.682	448.19	-1366.655
N1	COMB7 Min	Bottom	377.4348	-49.7962	-165.2832	-914.682	89.8955	-1709.8504
N1	COMB8 Max	Top	333.3305	165.9874	49.585	993.3682	448.1902	-1366.6547
N1	COMB8 Max	Bottom	377.4348	165.9874	49.585	993.3682	790.0982	-1006.257
N1	COMB8 Min	Top	333.3305	-165.9874	-49.585	-993.3682	448.1901	-1366.6552
N1	COMB8 Min	Bottom	377.4348	-165.9874	-49.585	-993.3682	466.9277	-2088.7084

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	ENVE Max	Top	561.2086	165.9874	165.2832	993.3682	742.5631	-1366.6547
N1	ENVE Max	Bottom	620.0144	165.9874	165.2832	993.3682	1376.6348	-1006.257
N1	ENVE Min	Top	333.3305	-165.9874	-165.2832	-993.3682	448.19	-2300.9554
N1	ENVE Min	Bottom	377.4348	-165.9874	-165.2832	-993.3682	89.8955	-2604.5359
N1	CIM01	Top	370.3672	0	0	0	497.9891	-1518.5055
N1	CIM01	Bottom	419.372	0	0	0	698.3477	-1719.4252
N1	CIM02	Top	370.3672	0	0	0	497.9891	-1518.5055
N1	CIM02	Bottom	419.372	0	0	0	698.3477	-1719.4252
N1	CIM03	Top	443.3472	0	0	0	588.5992	-1817.7235
N1	CIM03	Bottom	492.352	0	0	0	788.8366	-2018.6432
N1	CIM04	Top	425.1022	0	0	0	565.9467	-1742.919
N1	CIM04	Bottom	474.107	0	0	0	766.2144	-1943.8387
N1	CIM05 Max	Top	370.3672	116.1912	34.7095	695.3578	497.9891	-1518.5054
N1	CIM05 Max	Bottom	419.372	116.1912	34.7095	695.3578	811.4574	-1340.5672
N1	CIM05 Min	Top	370.3672	-116.1912	-34.7095	-695.3578	497.989	-1518.5057
N1	CIM05 Min	Bottom	419.372	-116.1912	-34.7095	-695.3578	585.2381	-2098.2832
N1	CIM06 Max	Top	370.3672	34.8574	115.6982	640.2774	497.9892	-1518.5055
N1	CIM06 Max	Bottom	419.372	34.8574	115.6982	640.2774	1075.38	-1605.7678
N1	CIM06 Min	Top	370.3672	-34.8574	-115.6982	-640.2774	497.9889	-1518.5056
N1	CIM06 Min	Bottom	419.372	-34.8574	-115.6982	-640.2774	321.3155	-1833.0826
N1	CIM07 Max	Top	425.1022	87.9733	26.4453	527.1628	565.9467	-1742.9189
N1	CIM07 Max	Bottom	474.107	87.9733	26.4453	527.1628	852.3932	-1656.9891
N1	CIM07 Min	Top	425.1022	-87.9733	-26.4453	-527.1628	565.9466	-1742.9191
N1	CIM07 Min	Bottom	474.107	-87.9733	-26.4453	-527.1628	680.0356	-2230.6883
N1	CIM08 Max	Top	425.1022	26.558	87.6001	485.5715	565.9468	-1742.919
N1	CIM08 Max	Bottom	474.107	26.558	87.6001	485.5715	1051.6817	-1857.2426
N1	CIM08 Min	Top	425.1022	-26.558	-87.6001	-485.5715	565.9466	-1742.9191
N1	CIM08 Min	Bottom	474.107	-26.558	-87.6001	-485.5715	480.7471	-2030.4348
N1	DER01	Top	518.5141	0	0	0	697.1847	-2125.9077
N1	DER01	Bottom	587.1208	0	0	0	977.6868	-2407.1953
N1	DER02	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	DER02	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	DER03	Top	561.2086	0	0	0	742.5631	-2300.9554
N1	DER03	Bottom	620.0144	0	0	0	982.7995	-2542.059
N1	DER04	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	DER04	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	DER05 Max	Top	444.4406	557.7992	166.5226	3337.7653	597.587	-1822.2059
N1	DER05 Max	Bottom	503.2464	557.7992	166.5226	3337.7653	1380.6739	-244.5265
N1	DER05 Min	Top	444.4406	-557.7992	-166.5226	-3337.7653	597.5867	-1822.2074
N1	DER05 Min	Bottom	503.2464	-557.7992	-166.5226	-3337.7653	295.3607	-3882.094
N1	DER06 Max	Top	444.4406	167.3398	555.0755	3072.3163	597.5875	-1822.2064
N1	DER06 Max	Bottom	503.2464	167.3398	555.0755	3072.3163	2646.8727	-1517.6751
N1	DER06 Min	Top	444.4406	-167.3398	-555.0755	-3072.3163	597.5863	-1822.2069
N1	DER06 Min	Bottom	503.2464	-167.3398	-555.0755	-3072.3163	-970.8381	-2608.9454
N1	DER07 Max	Top	333.3305	557.7992	166.5226	3337.7653	448.1903	-1366.6542
N1	DER07 Max	Bottom	377.4348	557.7992	166.5226	3337.7653	1171.1696	271.3011
N1	DER07 Min	Top	333.3305	-557.7992	-166.5226	-3337.7653	448.19	-1366.6557
N1	DER07 Min	Bottom	377.4348	-557.7992	-166.5226	-3337.7653	85.8564	-3366.2664
N1	DER08 Max	Top	333.3305	167.3398	555.0755	3072.3163	448.1907	-1366.6547
N1	DER08 Max	Bottom	377.4348	167.3398	555.0755	3072.3163	2437.3683	-1001.8476
N1	DER08 Min	Top	333.3305	-167.3398	-555.0755	-3072.3163	448.1896	-1366.6552
N1	DER08 Min	Bottom	377.4348	-167.3398	-555.0755	-3072.3163	-1180.3424	-2093.1178
N1	DERUD01	Top	518.5141	0	0	0	697.1847	-2125.9077
N1	DERUD01	Bottom	587.1208	0	0	0	977.6868	-2407.1953
N1	DERUD02	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	DERUD02	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	DERUD03	Top	561.2086	0	0	0	742.5631	-2300.9554
N1	DERUD03	Bottom	620.0144	0	0	0	982.7995	-2542.059
N1	DERUD04	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	DERUD04	Bottom	539.7364	0	0	0	883.2617	-2212.9192

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD05 Max	Top	444.4406	76.8427	0	320.2972	597.5869	-1822.2065
N1	DERUD05 Max	Bottom	503.2464	76.8427	0	320.2972	838.0173	-1812.7193
N1	DERUD05 Min	Top	444.4406	-76.8427	0	-320.2972	597.5869	-1822.2067
N1	DERUD05 Min	Bottom	503.2464	-76.8427	0	-320.2972	838.0173	-2313.9012
N1	DERUD06 Max	Top	444.4406	0	80.485	329.9886	597.587	-1822.2066
N1	DERUD06 Max	Bottom	503.2464	0	80.485	329.9886	1100.2983	-2063.3102
N1	DERUD06 Min	Top	444.4406	0	-80.485	-329.9886	597.5868	-1822.2066
N1	DERUD06 Min	Bottom	503.2464	0	-80.485	-329.9886	575.7363	-2063.3102
N1	DERUD07 Max	Top	333.3305	76.8427	0	320.2972	448.1902	-1366.6549
N1	DERUD07 Max	Bottom	377.4348	76.8427	0	320.2972	628.513	-1296.8917
N1	DERUD07 Min	Top	333.3305	-76.8427	0	-320.2972	448.1902	-1366.6551
N1	DERUD07 Min	Bottom	377.4348	-76.8427	0	-320.2972	628.513	-1798.0736
N1	DERUD08 Max	Top	333.3305	0	80.485	329.9886	448.1902	-1366.655
N1	DERUD08 Max	Bottom	377.4348	0	80.485	329.9886	890.794	-1547.4827
N1	DERUD08 Min	Top	333.3305	0	-80.485	-329.9886	448.1901	-1366.655
N1	DERUD08 Min	Bottom	377.4348	0	-80.485	-329.9886	366.2319	-1547.4827
N1	CIM09 Max	Top	222.2203	116.1912	34.7095	695.3578	298.7935	-911.1032
N1	CIM09 Max	Bottom	251.6232	116.1912	34.7095	695.3578	532.1183	-652.7971
N1	CIM09 Min	Top	222.2203	-116.1912	-34.7095	-695.3578	298.7934	-911.1035
N1	CIM09 Min	Bottom	251.6232	-116.1912	-34.7095	-695.3578	305.899	-1410.5131
N1	CIM10 Max	Top	222.2203	34.8574	115.6982	640.2774	298.7936	-911.1033
N1	CIM10 Max	Bottom	251.6232	34.8574	115.6982	640.2774	796.0409	-917.9977
N1	CIM10 Min	Top	222.2203	-34.8574	-115.6982	-640.2774	298.7933	-911.1034
N1	CIM10 Min	Bottom	251.6232	-34.8574	-115.6982	-640.2774	41.9764	-1145.3125
N1	CIM11	Top	457.2872	0	0	0	750.0571	-1874.8775
N1	CIM11	Bottom	506.292	0	0	0	950.357	-2075.7972
N1	CIM12	Top	435.5572	0	0	0	687.0401	-1785.7845
N1	CIM12	Bottom	484.562	0	0	0	887.3547	-1986.7042
N1	CIM13 Max	Top	435.5572	87.9733	26.4453	527.1628	687.0401	-1785.7844
N1	CIM13 Max	Bottom	484.562	87.9733	26.4453	527.1628	973.5335	-1699.8546
N1	CIM13 Min	Top	435.5572	-87.9733	-26.4453	-527.1628	687.0401	-1785.7846
N1	CIM13 Min	Bottom	484.562	-87.9733	-26.4453	-527.1628	801.1759	-2273.5538
N1	CIM14 Max	Top	435.5572	26.558	87.6001	485.5715	687.0402	-1785.7845
N1	CIM14 Max	Bottom	484.562	26.558	87.6001	485.5715	1172.8219	-1900.1081
N1	CIM14 Min	Top	435.5572	-26.558	-87.6001	-485.5715	687.04	-1785.7846
N1	CIM14 Min	Bottom	484.562	-26.558	-87.6001	-485.5715	601.8874	-2073.3003
N1	CIM15	Top	222.2203	0	0	0	298.7934	-911.1033
N1	CIM15	Bottom	251.6232	0	0	0	419.0086	-1031.6551
N1	COMB9	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	COMB9	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	COMB10	Top	583.5126	0	0	0	1000.8958	-2392.4018
N1	COMB10	Bottom	642.3184	0	0	0	1241.2321	-2633.5054
N1	COMB11	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	COMB11	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	DER09	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	DER09	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	DER10	Top	583.5126	0	0	0	1000.8958	-2392.4018
N1	DER10	Bottom	642.3184	0	0	0	1241.2321	-2633.5054
N1	DER11	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	DER11	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	DERUD09	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	DERUD09	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	DERUD10	Top	583.5126	0	0	0	1000.8958	-2392.4018
N1	DERUD10	Bottom	642.3184	0	0	0	1241.2321	-2633.5054
N1	DERUD11	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	DERUD11	Bottom	546.7064	0	0	0	964.0219	-2241.4962

5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	38.3335	-3.196	164.016	-9.4477	39.0871	0
Base	1	13	L	0	0	0	0	0	0
Base	1	13	LR	7.4458	0.0795	30.3038	-2.8244	7.5922	0
Base	1	13	EX Max	222.9219	107.4964	56.3895	184.236	390.2915	20.2885
Base	1	13	EY Max	0.0009	139.036	49.0991	252.0159	0.0009	0
Base	1	13	DISX Max	66.3361	31.9883	16.7801	54.8242	116.1412	6.0374
Base	1	13	DISY Max	0.0003	41.4003	14.6201	75.042	0.0003	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	3.7228	6.9316	27.7585	-8.3725	3.796	0
Base	1	13	DERUX Max	32.0398	15.0959	7.8144	25.8194	56.0741	2.8343
Base	1	13	DERUY Max	0.0001	20.16	7.1193	36.5419	0.0001	0
Base	1	13	COMB1	53.6668	-4.4745	229.6223	-13.2268	54.722	0
Base	1	13	COMB2	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	COMB3	57.9134	-3.708	245.3051	-15.8564	59.052	0
Base	1	13	COMB4	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	COMB5 Max	112.3364	40.5732	217.9853	65.9995	163.0459	6.0374
Base	1	13	COMB5 Min	-20.336	-48.2436	175.653	-88.674	-69.2368	-6.0374
Base	1	13	COMB6 Max	65.9013	47.1616	216.4733	80.152	81.7472	1.8112
Base	1	13	COMB6 Min	26.099	-54.8321	177.165	-102.8266	12.0619	-1.8112
Base	1	13	COMB7 Max	54.4012	48.1204	167.2685	82.9863	70.0211	1.8112
Base	1	13	COMB7 Min	14.599	-53.8733	127.9602	-99.9922	0.3358	-1.8112
Base	1	13	COMB8 Max	100.8363	41.532	168.7805	68.8338	151.3197	6.0374
Base	1	13	COMB8 Min	-31.8361	-47.2848	126.4482	-85.8397	-80.9629	-6.0374
Base	1	13	ENVE Max	112.3364	48.1204	245.3051	82.9863	163.0459	6.0374
Base	1	13	ENVE Min	-31.8361	-54.8321	126.4482	-102.8266	-80.9629	-6.0374
Base	1	13	CIM01	38.3335	-3.196	164.016	-9.4477	39.0871	0
Base	1	13	CIM02	38.3335	-3.196	164.016	-9.4477	39.0871	0
Base	1	13	CIM03	45.7792	-3.1165	194.3197	-12.2722	46.6793	0
Base	1	13	CIM04	43.9178	-3.1364	186.7438	-11.5661	44.7813	0
Base	1	13	CIM05 Max	84.7688	27.8898	178.8323	44.688	120.386	4.2261
Base	1	13	CIM05 Min	-8.1019	-34.2819	149.1996	-63.5835	-42.2118	-4.2261
Base	1	13	CIM06 Max	52.2642	32.5017	177.7739	54.5947	63.477	1.2678
Base	1	13	CIM06 Min	24.4027	-38.8938	150.2581	-73.4902	14.6973	-1.2678
Base	1	13	CIM07 Max	79.076	20.4415	197.9765	29.4975	106.3361	3.1998
Base	1	13	CIM07 Min	8.7596	-26.7142	175.5111	-52.6296	-16.7736	-3.1998
Base	1	13	CIM08 Max	54.5317	23.9239	197.1772	36.9781	63.364	0.966
Base	1	13	CIM08 Min	33.3039	-30.1967	176.3103	-60.1102	26.1985	-0.966
Base	1	13	DER01	53.6668	-4.4745	229.6223	-13.2268	54.722	0
Base	1	13	DER02	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	DER03	57.9134	-3.708	245.3051	-15.8564	59.052	0
Base	1	13	DER04	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	DER05 Max	268.9223	145.3719	267.9384	248.5035	437.1963	20.2885
Base	1	13	DER05 Min	-176.922	-153.0424	125.6999	-271.1781	-343.3872	-20.2885
Base	1	13	DER06 Max	112.8777	167.4497	262.8351	295.9494	163.9929	6.0865
Base	1	13	DER06 Min	-20.8773	-175.1202	130.8032	-318.624	-70.1838	-6.0865
Base	1	13	DER07 Max	257.4223	146.3307	218.7336	251.3378	425.4702	20.2885
Base	1	13	DER07 Min	-188.4221	-152.0836	76.4951	-268.3438	-355.1133	-20.2885
Base	1	13	DER08 Max	101.3776	168.4085	213.6303	298.7837	152.2668	6.0865
Base	1	13	DER08 Min	-32.3774	-174.1614	81.5984	-315.7896	-81.91	-6.0865
Base	1	13	DERUD01	53.6668	-4.4745	229.6223	-13.2268	54.722	0
Base	1	13	DERUD02	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	DERUD03	57.9134	-3.708	245.3051	-15.8564	59.052	0
Base	1	13	DERUD04	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	DERUD05 Max	78.04	11.2607	204.6335	14.4821	102.9787	2.8343
Base	1	13	DERUD05 Min	13.9603	-18.9312	189.0048	-37.1567	-9.1696	-2.8343
Base	1	13	DERUD06 Max	46.0003	16.3247	203.9384	25.2046	46.9047	0
Base	1	13	DERUD06 Min	46	-23.9952	189.6999	-47.8792	46.9044	0
Base	1	13	DERUD07 Max	66.5399	12.2195	155.4287	17.3164	91.2525	2.8343
Base	1	13	DERUD07 Min	2.4603	-17.9724	139.8	-34.3223	-20.8957	-2.8343
Base	1	13	DERUD08 Max	34.5003	17.2836	154.7336	28.0389	35.1786	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	DERUD08 Min	34.5	-23.0364	140.4951	-45.0449	35.1783	0
Base	1	13	CIM09 Max	69.4354	29.1683	113.2259	48.4671	104.7512	4.2261
Base	1	13	CIM09 Min	-23.4353	-33.0035	83.5933	-59.8044	-57.8466	-4.2261
Base	1	13	CIM10 Max	36.9309	33.7802	112.1675	58.3738	47.8421	1.2678
Base	1	13	CIM10 Min	9.0693	-37.6154	84.6517	-69.7111	-0.9376	-1.2678
Base	1	13	CIM11	42.0563	3.7356	191.7745	-17.8202	42.8831	0
Base	1	13	CIM12	41.1256	2.0027	184.8348	-15.7271	41.9341	0
Base	1	13	CIM13 Max	76.2837	25.5805	196.0675	25.3364	103.489	3.1998
Base	1	13	CIM13 Min	5.9674	-21.5752	173.6022	-56.7906	-19.6208	-3.1998
Base	1	13	CIM14 Max	51.7395	29.063	195.2683	32.817	60.5169	0.966
Base	1	13	CIM14 Min	30.5116	-25.0576	174.4014	-64.2712	23.3514	-0.966
Base	1	13	CIM15	23.0001	-1.9176	98.4096	-5.6686	23.4523	0
Base	1	13	COMB9	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	COMB10	51.9566	7.2554	241.2328	-24.7332	52.9781	0
Base	1	13	COMB11	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	DER09	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	DER10	51.9566	7.2554	241.2328	-24.7332	52.9781	0
Base	1	13	DER11	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	DERUD09	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	DERUD10	51.9566	7.2554	241.2328	-24.7332	52.9781	0
Base	1	13	DERUD11	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	2	15	D	8.6305	3.196	45.67	-15.8728	8.7032	0.0169
Base	2	15	L	0	0	0	0	0	0
Base	2	15	LR	0.1825	-0.0795	6.1862	-2.6584	0.1841	0.0003
Base	2	15	EX Max	104.8607	96.5059	44.7105	171.6005	188.8334	19.4355
Base	2	15	EY Max	0.0165	138.5017	49.0991	249.7991	0.0366	0.0038
Base	2	15	DISX Max	31.204	28.7178	13.3048	51.0641	56.1922	5.7835
Base	2	15	DISY Max	0.0049	41.2412	14.6201	74.3819	0.0109	0.0011
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.0929	-6.9316	15.7015	5.625	0.0957	-0.0002
Base	2	15	DERUX Max	12.0828	13.475	6.141	23.9689	21.8089	2.7287
Base	2	15	DERUY Max	0.0024	20.0825	7.1193	36.2205	0.0053	0.0005
Base	2	15	COMB1	12.0827	4.4745	63.9381	-22.2219	12.1845	0.0237
Base	2	15	COMB2	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	COMB3	10.6486	3.708	64.7021	-23.3007	10.7384	0.0209
Base	2	15	COMB4	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	COMB5 Max	41.562	44.9254	72.4948	54.3314	66.6393	5.8042
Base	2	15	COMB5 Min	-20.8489	-37.2549	37.1133	-92.426	-45.7517	-5.7636
Base	2	15	COMB6 Max	19.7227	53.6918	73.4156	70.6539	27.3124	1.7565
Base	2	15	COMB6 Min	0.9905	-46.0213	36.1925	-108.7485	-6.4247	-1.7159
Base	2	15	COMB7 Max	17.1335	52.733	59.7146	75.4157	24.7015	1.7514
Base	2	15	COMB7 Min	-1.5987	-46.9802	22.4915	-103.9866	-9.0357	-1.721
Base	2	15	COMB8 Max	38.9729	43.9666	58.7938	59.0932	64.0284	5.7991
Base	2	15	COMB8 Min	-23.438	-38.2137	23.4123	-87.6642	-48.3626	-5.7687
Base	2	15	ENVE Max	41.562	53.6918	73.4156	75.4157	66.6393	5.8042
Base	2	15	ENVE Min	-23.438	-46.9802	22.4915	-108.7485	-48.3626	-5.7687
Base	2	15	CIM01	8.6305	3.196	45.67	-15.8728	8.7032	0.0169
Base	2	15	CIM02	8.6305	3.196	45.67	-15.8728	8.7032	0.0169
Base	2	15	CIM03	8.813	3.1165	51.8563	-18.5311	8.8873	0.0173
Base	2	15	CIM04	8.7674	3.1364	50.3097	-17.8665	8.8413	0.0172
Base	2	15	CIM05 Max	30.4743	31.9592	58.0536	35.4923	48.04	4.0656
Base	2	15	CIM05 Min	-13.2133	-25.5671	33.2865	-67.2378	-30.6336	-4.0318
Base	2	15	CIM06 Max	15.1868	38.0956	58.6981	46.9181	20.5112	1.2322
Base	2	15	CIM06 Min	2.0742	-31.7036	32.642	-78.6636	-3.1048	-1.1984
Base	2	15	CIM07 Max	25.3063	24.9554	59.7005	21.0986	38.6249	3.0826
Base	2	15	CIM07 Min	-7.7715	-18.6826	40.919	-56.8316	-20.9424	-3.0483
Base	2	15	CIM08 Max	13.7626	29.5891	60.1871	29.7262	17.8378	0.9431
Base	2	15	CIM08 Min	3.7721	-23.3163	40.4323	-65.4592	-0.1553	-0.9088
Base	2	15	DER01	12.0827	4.4745	63.9381	-22.2219	12.1845	0.0237
Base	2	15	DER02	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DER03	10.6486	3.708	64.7021	-23.3007	10.7384	0.0209
Base	2	15	DER04	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	DER05 Max	115.2222	141.8917	114.2443	227.4929	199.2882	19.457
Base	2	15	DER05 Min	-94.5091	-134.2212	-4.6362	-265.5875	-178.4006	-19.4164
Base	2	15	DER06 Max	41.8313	171.2887	117.3163	282.2319	67.1305	5.8547
Base	2	15	DER06 Min	-21.1181	-163.6182	-7.7082	-320.3265	-46.2428	-5.8141
Base	2	15	DER07 Max	112.6331	140.9328	100.5433	232.2547	196.6773	19.4519
Base	2	15	DER07 Min	-97.0982	-135.18	-18.3372	-260.8257	-181.0115	-19.4214
Base	2	15	DER08 Max	39.2421	170.3299	103.6153	286.9937	64.5195	5.8497
Base	2	15	DER08 Min	-23.7072	-164.5771	-21.4092	-315.5647	-48.8538	-5.8192
Base	2	15	DERUD01	12.0827	4.4745	63.9381	-22.2219	12.1845	0.0237
Base	2	15	DERUD02	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	DERUD03	10.6486	3.708	64.7021	-23.3007	10.7384	0.0209
Base	2	15	DERUD04	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	DERUD05 Max	22.4394	17.3103	60.945	4.9216	32.2527	2.749
Base	2	15	DERUD05 Min	-1.7263	-9.6398	48.6631	-43.0162	-11.365	-2.7084
Base	2	15	DERUD06 Max	10.359	23.9178	61.9233	17.1731	10.4491	0.0208
Base	2	15	DERUD06 Min	10.3542	-16.2473	47.6848	-55.2678	10.4385	0.0198
Base	2	15	DERUD07 Max	19.8503	16.3515	47.244	9.6834	29.6418	2.744
Base	2	15	DERUD07 Min	-4.3154	-10.5986	34.9621	-38.2544	-13.976	-2.7135
Base	2	15	DERUD08 Max	7.7698	22.959	48.2223	21.935	7.8382	0.0158
Base	2	15	DERUD08 Min	7.7651	-17.2061	33.9838	-50.5059	7.8276	0.0147
Base	2	15	CIM09 Max	27.0221	30.6807	39.7856	41.8414	44.5588	4.0589
Base	2	15	CIM09 Min	-16.6655	-26.8455	15.0185	-60.8887	-34.1149	-4.0386
Base	2	15	CIM10 Max	11.7346	36.8172	40.4301	53.2672	17.0299	1.2255
Base	2	15	CIM10 Min	-1.378	-32.982	14.374	-72.3145	-6.5861	-1.2052
Base	2	15	CIM11	8.7234	-3.7356	61.3715	-10.2478	8.7989	0.0167
Base	2	15	CIM12	8.7002	-2.0027	57.4462	-11.654	8.775	0.0168
Base	2	15	CIM13 Max	25.2391	19.8163	66.8369	27.3111	38.5586	3.0822
Base	2	15	CIM13 Min	-7.8387	-23.8217	48.0554	-50.6191	-21.0086	-3.0487
Base	2	15	CIM14 Max	13.6954	24.45	67.3236	35.9387	17.7715	0.9427
Base	2	15	CIM14 Min	3.7049	-28.4554	47.5687	-59.2467	-0.2216	-0.9092
Base	2	15	CIM15	5.1783	1.9176	27.402	-9.5237	5.2219	0.0102
Base	2	15	COMB9	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	COMB10	10.5052	-7.2554	79.9264	-10.0473	10.597	0.02
Base	2	15	COMB11	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	DER09	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	DER10	10.5052	-7.2554	79.9264	-10.0473	10.597	0.02
Base	2	15	DER11	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	DERUD09	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	DERUD10	10.5052	-7.2554	79.9264	-10.0473	10.597	0.02
Base	2	15	DERUD11	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	3	16	D	-38.3335	-3.196	164.016	-9.4477	-39.0871	0
Base	3	16	L	0	0	0	0	0	0
Base	3	16	LR	-7.4458	0.0795	30.3038	-2.8244	-7.5922	0
Base	3	16	EX Max	222.9219	107.4964	56.3895	184.236	390.2915	20.2885
Base	3	16	EY Max	0.0009	139.036	49.0991	252.0159	0.0009	0
Base	3	16	DISX Max	66.3361	31.9883	16.7801	54.8242	116.1412	6.0374
Base	3	16	DISY Max	0.0003	41.4003	14.6201	75.042	0.0003	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	-3.7228	6.9316	27.7585	-8.3725	-3.796	0
Base	3	16	DERUX Max	32.0398	15.0959	7.8144	25.8194	56.0741	2.8343
Base	3	16	DERUY Max	0.0001	20.16	7.1193	36.5419	0.0001	0
Base	3	16	COMB1	-53.6668	-4.4745	229.6223	-13.2268	-54.722	0
Base	3	16	COMB2	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	COMB3	-57.9134	-3.708	245.3051	-15.8564	-59.052	0
Base	3	16	COMB4	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	COMB5 Max	20.336	40.5732	217.9853	65.9995	69.2368	6.0374
Base	3	16	COMB5 Min	-112.3364	-48.2436	175.653	-88.674	-163.0459	-6.0374
Base	3	16	COMB6 Max	-26.099	47.1616	216.4733	80.152	-12.0619	1.8112

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	COMB6 Min	-65.9013	-54.8321	177.165	-102.8266	-81.7472	-1.8112
Base	3	16	COMB7 Max	-14.599	48.1204	167.2685	82.9863	-0.3358	1.8112
Base	3	16	COMB7 Min	-54.4012	-53.8733	127.9602	-99.9922	-70.0211	-1.8112
Base	3	16	COMB8 Max	31.8361	41.532	168.7805	68.8338	80.9629	6.0374
Base	3	16	COMB8 Min	-100.8363	-47.2848	126.4482	-85.8397	-151.3197	-6.0374
Base	3	16	ENVE Max	31.8361	48.1204	245.3051	82.9863	80.9629	6.0374
Base	3	16	ENVE Min	-112.3364	-54.8321	126.4482	-102.8266	-163.0459	-6.0374
Base	3	16	CIM01	-38.3335	-3.196	164.016	-9.4477	-39.0871	0
Base	3	16	CIM02	-38.3335	-3.196	164.016	-9.4477	-39.0871	0
Base	3	16	CIM03	-45.7792	-3.1165	194.3197	-12.2722	-46.6793	0
Base	3	16	CIM04	-43.9178	-3.1364	186.7438	-11.5661	-44.7813	0
Base	3	16	CIM05 Max	8.1019	27.8898	178.8323	44.688	42.2118	4.2261
Base	3	16	CIM05 Min	-84.7688	-34.2819	149.1996	-63.5835	-120.386	-4.2261
Base	3	16	CIM06 Max	-24.4027	32.5017	177.7739	54.5947	-14.6973	1.2678
Base	3	16	CIM06 Min	-52.2642	-38.8938	150.2581	-73.4902	-63.477	-1.2678
Base	3	16	CIM07 Max	-8.7596	20.4415	197.9765	29.4975	16.7736	3.1998
Base	3	16	CIM07 Min	-79.076	-26.7142	175.5111	-52.6296	-106.3361	-3.1998
Base	3	16	CIM08 Max	-33.3039	23.9239	197.1772	36.9781	-26.1985	0.966
Base	3	16	CIM08 Min	-54.5317	-30.1967	176.3103	-60.1102	-63.364	-0.966
Base	3	16	DER01	-53.6668	-4.4745	229.6223	-13.2268	-54.722	0
Base	3	16	DER02	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	DER03	-57.9134	-3.708	245.3051	-15.8564	-59.052	0
Base	3	16	DER04	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	DER05 Max	176.922	145.3719	267.9384	248.5035	343.3872	20.2885
Base	3	16	DER05 Min	-268.9223	-153.0424	125.6999	-271.1781	-437.1963	-20.2885
Base	3	16	DER06 Max	20.8773	167.4497	262.8351	295.9494	70.1838	6.0865
Base	3	16	DER06 Min	-112.8777	-175.1202	130.8032	-318.624	-163.9929	-6.0865
Base	3	16	DER07 Max	188.4221	146.3307	218.7336	251.3378	355.1133	20.2885
Base	3	16	DER07 Min	-257.4223	-152.0836	76.4951	-268.3438	-425.4702	-20.2885
Base	3	16	DER08 Max	32.3774	168.4085	213.6303	298.7837	81.91	6.0865
Base	3	16	DER08 Min	-101.3776	-174.1614	81.5984	-315.7896	-152.2668	-6.0865
Base	3	16	DERUD01	-53.6668	-4.4745	229.6223	-13.2268	-54.722	0
Base	3	16	DERUD02	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	DERUD03	-57.9134	-3.708	245.3051	-15.8564	-59.052	0
Base	3	16	DERUD04	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	DERUD05 Max	-13.9603	11.2607	204.6335	14.4821	9.1696	2.8343
Base	3	16	DERUD05 Min	-78.04	-18.9312	189.0048	-37.1567	-102.9787	-2.8343
Base	3	16	DERUD06 Max	-46	16.3247	203.9384	25.2046	-46.9044	0
Base	3	16	DERUD06 Min	-46.0003	-23.9952	189.6999	-47.8792	-46.9047	0
Base	3	16	DERUD07 Max	-2.4603	12.2195	155.4287	17.3164	20.8957	2.8343
Base	3	16	DERUD07 Min	-66.5399	-17.9724	139.8	-34.3223	-91.2525	-2.8343
Base	3	16	DERUD08 Max	-34.5	17.2836	154.7336	28.0389	-35.1783	0
Base	3	16	DERUD08 Min	-34.5003	-23.0364	140.4951	-45.0449	-35.1786	0
Base	3	16	CIM09 Max	23.4353	29.1683	113.2259	48.4671	57.8466	4.2261
Base	3	16	CIM09 Min	-69.4354	-33.0035	83.5933	-59.8044	-104.7512	-4.2261
Base	3	16	CIM10 Max	-9.0693	33.7802	112.1675	58.3738	0.9376	1.2678
Base	3	16	CIM10 Min	-36.9309	-37.6154	84.6517	-69.7111	-47.8421	-1.2678
Base	3	16	CIM11	-42.0563	3.7356	191.7745	-17.8202	-42.8831	0
Base	3	16	CIM12	-41.1256	2.0027	184.8348	-15.7271	-41.9341	0
Base	3	16	CIM13 Max	-5.9674	25.5805	196.0675	25.3364	19.6208	3.1998
Base	3	16	CIM13 Min	-76.2837	-21.5752	173.6022	-56.7906	-103.489	-3.1998
Base	3	16	CIM14 Max	-30.5116	29.063	195.2683	32.817	-23.3514	0.966
Base	3	16	CIM14 Min	-51.7395	-25.0576	174.4014	-64.2712	-60.5169	-0.966
Base	3	16	CIM15	-23.0001	-1.9176	98.4096	-5.6686	-23.4523	0
Base	3	16	COMB9	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	COMB10	-51.9566	7.2554	241.2328	-24.7332	-52.9781	0
Base	3	16	COMB11	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	DER09	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	DER10	-51.9566	7.2554	241.2328	-24.7332	-52.9781	0
Base	3	16	DER11	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	DERUD09	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	DERUD10	-51.9566	7.2554	241.2328	-24.7332	-52.9781	0
Base	3	16	DERUD11	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	4	18	D	-8.6305	3.196	45.67	-15.8728	-8.7032	-0.0169
Base	4	18	L	0	0	0	0	0	0
Base	4	18	LR	-0.1825	-0.0795	6.1862	-2.6584	-0.1841	-0.0003
Base	4	18	EX Max	104.8607	96.5059	44.7105	171.6005	188.8334	19.4355
Base	4	18	EY Max	0.0165	138.5017	49.0991	249.7991	0.0366	0.0038
Base	4	18	DISX Max	31.204	28.7178	13.3048	51.0641	56.1922	5.7835
Base	4	18	DISY Max	0.0049	41.2412	14.6201	74.3819	0.0109	0.0011
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	-0.0929	-6.9316	15.7015	5.625	-0.0957	0.0002
Base	4	18	DERUX Max	12.0828	13.475	6.141	23.9689	21.8089	2.7287
Base	4	18	DERUY Max	0.0024	20.0825	7.1193	36.2205	0.0053	0.0005
Base	4	18	COMB1	-12.0827	4.4745	63.9381	-22.2219	-12.1845	-0.0237
Base	4	18	COMB2	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	COMB3	-10.6486	3.708	64.7021	-23.3007	-10.7384	-0.0209
Base	4	18	COMB4	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	COMB5 Max	20.8489	44.9254	72.4948	54.3314	45.7517	5.7636
Base	4	18	COMB5 Min	-41.562	-37.2549	37.1133	-92.426	-66.6393	-5.8042
Base	4	18	COMB6 Max	-0.9905	53.6918	73.4156	70.6539	6.4247	1.7159
Base	4	18	COMB6 Min	-19.7227	-46.0213	36.1925	-108.7485	-27.3124	-1.7565
Base	4	18	COMB7 Max	1.5987	52.733	59.7146	75.4157	9.0357	1.721
Base	4	18	COMB7 Min	-17.1335	-46.9802	22.4915	-103.9866	-24.7015	-1.7514
Base	4	18	COMB8 Max	23.438	43.9666	58.7938	59.0932	48.3626	5.7687
Base	4	18	COMB8 Min	-38.9729	-38.2137	23.4123	-87.6642	-64.0284	-5.7991
Base	4	18	ENVE Max	23.438	53.6918	73.4156	75.4157	48.3626	5.7687
Base	4	18	ENVE Min	-41.562	-46.9802	22.4915	-108.7485	-66.6393	-5.8042
Base	4	18	CIM01	-8.6305	3.196	45.67	-15.8728	-8.7032	-0.0169
Base	4	18	CIM02	-8.6305	3.196	45.67	-15.8728	-8.7032	-0.0169
Base	4	18	CIM03	-8.813	3.1165	51.8563	-18.5311	-8.8873	-0.0173
Base	4	18	CIM04	-8.7674	3.1364	50.3097	-17.8665	-8.8413	-0.0172
Base	4	18	CIM05 Max	13.2133	31.9592	58.0536	35.4923	30.6336	4.0318
Base	4	18	CIM05 Min	-30.4743	-25.5671	33.2865	-67.2378	-48.04	-4.0656
Base	4	18	CIM06 Max	-2.0742	38.0956	58.6981	46.9181	3.1048	1.1984
Base	4	18	CIM06 Min	-15.1868	-31.7036	32.642	-78.6636	-20.5112	-1.2322
Base	4	18	CIM07 Max	7.7715	24.9554	59.7005	21.0986	20.9424	3.0483
Base	4	18	CIM07 Min	-25.3063	-18.6826	40.919	-56.8316	-38.6249	-3.0826
Base	4	18	CIM08 Max	-3.7721	29.5891	60.1871	29.7262	0.1553	0.9088
Base	4	18	CIM08 Min	-13.7626	-23.3163	40.4323	-65.4592	-17.8378	-0.9431
Base	4	18	DER01	-12.0827	4.4745	63.9381	-22.2219	-12.1845	-0.0237
Base	4	18	DER02	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	DER03	-10.6486	3.708	64.7021	-23.3007	-10.7384	-0.0209
Base	4	18	DER04	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	DER05 Max	94.5091	141.8917	114.2443	227.4929	178.4006	19.4164
Base	4	18	DER05 Min	-115.2222	-134.2212	-4.6362	-265.5875	-199.2882	-19.457
Base	4	18	DER06 Max	21.1181	171.2887	117.3163	282.2319	46.2428	5.8141
Base	4	18	DER06 Min	-41.8313	-163.6182	-7.7082	-320.3265	-67.1305	-5.8547
Base	4	18	DER07 Max	97.0982	140.9328	100.5433	232.2547	181.0115	19.4214
Base	4	18	DER07 Min	-112.6331	-135.18	-18.3372	-260.8257	-196.6773	-19.4519
Base	4	18	DER08 Max	23.7072	170.3299	103.6153	286.9937	48.8538	5.8192
Base	4	18	DER08 Min	-39.2421	-164.5771	-21.4092	-315.5647	-64.5195	-5.8497
Base	4	18	DERUD01	-12.0827	4.4745	63.9381	-22.2219	-12.1845	-0.0237
Base	4	18	DERUD02	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	DERUD03	-10.6486	3.708	64.7021	-23.3007	-10.7384	-0.0209
Base	4	18	DERUD04	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	DERUD05 Max	1.7263	17.3103	60.945	4.9216	11.365	2.7084
Base	4	18	DERUD05 Min	-22.4394	-9.6398	48.6631	-43.0162	-32.2527	-2.749
Base	4	18	DERUD06 Max	-10.3542	23.9178	61.9233	17.1731	-10.4385	-0.0198
Base	4	18	DERUD06 Min	-10.359	-16.2473	47.6848	-55.2678	-10.4491	-0.0208



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DERUD07 Max	4.3154	16.3515	47.244	9.6834	13.976	2.7135
Base	4	18	DERUD07 Min	-19.8503	-10.5986	34.9621	-38.2544	-29.6418	-2.744
Base	4	18	DERUD08 Max	-7.7651	22.959	48.2223	21.935	-7.8276	-0.0147
Base	4	18	DERUD08 Min	-7.7698	-17.2061	33.9838	-50.5059	-7.8382	-0.0158
Base	4	18	CIM09 Max	16.6655	30.6807	39.7856	41.8414	34.1149	4.0386
Base	4	18	CIM09 Min	-27.0221	-26.8455	15.0185	-60.8887	-44.5588	-4.0589
Base	4	18	CIM10 Max	1.378	36.8172	40.4301	53.2672	6.5861	1.2052
Base	4	18	CIM10 Min	-11.7346	-32.982	14.374	-72.3145	-17.0299	-1.2255
Base	4	18	CIM11	-8.7234	-3.7356	61.3715	-10.2478	-8.7989	-0.0167
Base	4	18	CIM12	-8.7002	-2.0027	57.4462	-11.654	-8.775	-0.0168
Base	4	18	CIM13 Max	7.8387	19.8163	66.8369	27.3111	21.0086	3.0487
Base	4	18	CIM13 Min	-25.2391	-23.8217	48.0554	-50.6191	-38.5586	-3.0822
Base	4	18	CIM14 Max	-3.7049	24.45	67.3236	35.9387	0.2216	0.9092
Base	4	18	CIM14 Min	-13.6954	-28.4554	47.5687	-59.2467	-17.7715	-0.9427
Base	4	18	CIM15	-5.1783	1.9176	27.402	-9.5237	-5.2219	-0.0102
Base	4	18	COMB9	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	COMB10	-10.5052	-7.2554	79.9264	-10.0473	-10.597	-0.02
Base	4	18	COMB11	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	DER09	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	DER10	-10.5052	-7.2554	79.9264	-10.0473	-10.597	-0.02
Base	4	18	DER11	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	DERUD09	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	DERUD10	-10.5052	-7.2554	79.9264	-10.0473	-10.597	-0.02
Base	4	18	DERUD11	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202

5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.222	4.497	28.2542	798.2973
Modal	2	0.188	5.328	33.4762	1120.6566
Modal	3	0.148	6.749	42.4074	1798.3852
Modal	4	0.051	19.421	122.0265	14890.4689
Modal	5	0.019	52.712	331.1984	109692.3484
Modal	6	0.018	55.39	348.0256	121121.7847
Modal	7	0.015	65.959	414.4325	171754.2665

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.222	0.655	0	0	0.655	0	0
Modal	2	0.188	0	1	0	0.655	1	0
Modal	3	0.148	0.3441	0	0	0.9992	1	0
Modal	4	0.051	0.0008	0	0	1	1	0
Modal	5	0.019	0	0	0	1	1	0
Modal	6	0.018	0	2.765E-05	0	1	1	0
Modal	7	0.015	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.655	0.3701	0	0.655	0.3701
Modal	2	1	0	0	1	0.655	0.3701
Modal	3	0	0.3441	0.629	1	0.9992	0.9991
Modal	4	0	0.0008	0.0009	1	1	1
Modal	5	0	0	2.07E-05	1	1	1
Modal	6	2.765E-05	0	0	1	1	1

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	7	0	0	0	1	1	1

**Table 5.11 - Modal Load Participation Ratios**

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

**Table 5.12 - Modal Direction Factors**

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.222	0.664	0	0	0.336
Modal	2	0.188	0	1	0	0
Modal	3	0.148	0.346	0	0	0.654
Modal	4	0.051	0.015	0	0	0.985
Modal	5	0.019	0	0	0	1
Modal	6	0.018	0	1	0	0
Modal	7	0.015	0	1	0	0

## 6 Design Data

This chapter provides design data and results.

### 6.1 Concrete Frame Design

**Table 6.1 - Concrete Frame Preferences - ACI 318-08**

Item	Value
Multi-Response Design	Step-by-Step
Seismic Design Category	D
# Interaction Curves	24
# Interaction Points	11
Minimum Eccentricity	Yes
Phi (Tension)	0.9
Phi (Compression Tied)	0.65
Phi (Compression Spiral)	0.7
Phi (Shear and Torsion)	0.85
Phi (Shear Seismic)	0.6
Phi (Shear Joint)	0.85
Pattern Live Load Factor	0.75
D/C Ratio Limit	0.95

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor	KMajor	KMinor	CmMajor	CmMinor
N1	C1	7	Column	Program Determined	0.880968	0.846154	0.846154	1	1	1	1
N1	C2	8	Column	Program Determined	0.984793	0.846154	0.846154	1	1	1	1
N1	C3	9	Column	Program Determined	0.880968	0.846154	0.846154	1	1	1	1
N1	C4	10	Column	Program Determined	0.984793	0.846154	0.846154	1	1	1	1

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 2 of 2)**

Story	Label	Unique Name	DnsMajor	DnsMinor	DsMajor	DsMinor
N1	C1	7	1	1	1	1
N1	C2	8	1	1	1	1
N1	C3	9	1	1	1	1
N1	C4	10	1	1	1	1

**Table 6.3 - Concrete Beam Overwrites - ACI 318-08**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor
N1	B1	13	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B2	14	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B4	16	Beam	Program Determined	1	0.95122	0.95122
N1	B6	18	Beam	Program Determined	1	0.95122	0.95122
N1	B8	2	Beam	Program Determined	1	0.916667	0.916667
N1	B15	22	Beam	Program Determined	1	1	1
N1	B17	4	Beam	Program Determined	1	0.916667	0.916667

**Table 6.4 - Concrete Column PMM Envelope**

Label	Story	Section	Location	P kN	M Major kN-m	M Minor kN-m	PMM Combo	PMM Ratio or Rebar %
C1	N1	C40X40	Top	163.2133	146.7045	-66.9848	COMB5	2.23 %
C1	N1	C40X40	Bottom	217.9853	-163.0459	-88.674	COMB5	2.87 %

Label	Story	Section	Location	P kN	M Major kN-m	M Minor kN-m	PMM Combo	PMM Ratio or Rebar %
C2	N1	C40X40	Top	50.2151	18.1207	-15.1671	COMB11	1 %
C2	N1	C40X40	Bottom	37.1133	-66.6393	-92.426	COMB5	1.45 %
C3	N1	C40X40	Top	163.2133	-146.7045	-66.9848	COMB5	2.23 %
C3	N1	C40X40	Bottom	217.9853	163.0459	-88.674	COMB5	2.87 %
C4	N1	C40X40	Top	50.2151	-18.1207	-15.1671	COMB11	1 %
C4	N1	C40X40	Bottom	37.1133	66.6393	-92.426	COMB5	1.45 %

Table 6.5 - Concrete Column Shear Envelope

Label	Story	Section	Location	V Major kN	Major Combo	At Major cm <sup>2</sup> /m	V Minor kN	Minor Combo	At Minor cm <sup>2</sup> /m
C1	N1	C40X40	Top	112.3364	COMB5	13.34	212.5666	COMB8	20.19
C1	N1	C40X40	Bottom	100.8363	COMB8	11.97	212.5666	COMB8	20.19
C2	N1	C40X40	Top	59.9729	COMB8	5.7	53.6918	COMB6	6.37
C2	N1	C40X40	Bottom	59.9729	COMB8	5.7	53.6918	COMB6	6.37
C3	N1	C40X40	Top	112.3364	COMB5	13.34	212.5666	COMB8	20.19
C3	N1	C40X40	Bottom	100.8363	COMB8	11.97	212.5666	COMB8	20.19
C4	N1	C40X40	Top	59.9729	COMB8	5.7	53.6918	COMB6	6.37
C4	N1	C40X40	Bottom	59.9729	COMB8	5.7	53.6918	COMB6	6.37

Table 6.6 - Concrete Beam Flexure Envelope

Label	Story	Section	Location	(-) Moment kN-m	(-) Combo	As Top cm <sup>2</sup>	(+) Moment kN-m	(+) Combo	As Bot cm <sup>2</sup>
B1	N1	V30X50	End-I	-170.5093	COMB6	12	85.2547	COMB6	6
B1	N1	V30X50	Middle	-42.6273	COMB6	4	49.4431	COMB7	4
B1	N1	V30X50	End-J	0	COMB6	5	67.8672	COMB6	5
B2	N1	V30X50	End-I	-170.5093	COMB6	12	85.2547	COMB6	6
B2	N1	V30X50	Middle	-42.6273	COMB6	4	49.4431	COMB7	4
B2	N1	V30X50	End-J	0	COMB6	5	67.8672	COMB6	5
B4	N1	V30X50	End-I	-141.7742	COMB5	9	70.8871	COMB5	4
B4	N1	V30X50	Middle	-35.4436	COMB5	3	78.6946	COMB3	5
B4	N1	V30X50	End-J	-141.7742	COMB5	9	70.8871	COMB5	4
B6	N1	V30X50	End-I	-55.7927	COMB8	4	29.6171	COMB8	2
B6	N1	V30X50	Middle	-15.0468	COMB5	1	26.5652	COMB5	2
B6	N1	V30X50	End-J	-55.7927	COMB8	4	29.6171	COMB8	2
B8	N1	V30X50	End-I	-39.9518	COMB3	3	39.9518	COMB3	3
B8	N1	V30X50	Middle	-109.7098	COMB3	7	39.9518	COMB3	3
B8	N1	V30X50	End-J	-159.8071	COMB3	10	79.9036	COMB3	5
B15	N1	VB20X50	End-I	-43.5304	COMB5	3	47.0678	COMB5	3
B15	N1	VB20X50	Middle	-10.8826	COMB5	1	101.5437	COMB3	6
B15	N1	VB20X50	End-J	-43.5304	COMB5	3	47.0678	COMB5	3
B17	N1	V30X50	End-I	-39.9518	COMB3	3	39.9518	COMB3	3
B17	N1	V30X50	Middle	-109.7098	COMB3	7	39.9518	COMB3	3
B17	N1	V30X50	End-J	-159.8071	COMB3	10	79.9036	COMB3	5

Table 6.7 - Concrete Beam Shear Envelope

Label	Story	Section	Location	V kN	V Combo	At cm <sup>2</sup> /m	T for At kN-m	T Combo At	At Torsion cm <sup>2</sup> /m	T for As kN-m	T Combo As	As Torsion cm <sup>2</sup>
B1	N1	V30X50	End-I	84.3491	COMB8	6.11	5.8001	COMB5	1.39	5.8001	COMB5	5
B1	N1	V30X50	Middle	63.6621	COMB8	4.61	5.8001	COMB5	1.39	5.8001	COMB5	5
B1	N1	V30X50	End-J	60.0572	COMB8	4.35	5.8001	COMB5	1.39	5.8001	COMB5	5
B2	N1	V30X50	End-I	84.3491	COMB8	6.11	5.8001	COMB5	1.39	5.8001	COMB5	5
B2	N1	V30X50	Middle	63.6621	COMB8	4.61	5.8001	COMB5	1.39	5.8001	COMB5	5
B2	N1	V30X50	End-J	60.0572	COMB8	4.35	5.8001	COMB5	1.39	5.8001	COMB5	5
B4	N1	V30X50	End-I	38.172	COMB11	2.5	0	COMB11	0	0	COMB11	0
B4	N1	V30X50	Middle	55.5694	COMB8	2.5	0	COMB11	0	0	COMB11	0
B4	N1	V30X50	End-J	63.6199	COMB11	2.5	0	COMB11	0	0	COMB11	0
B6	N1	V30X50	End-I	35.5928	COMB6	2.58	4.2601	COMB5	0.93	4.2601	COMB5	5

Label	Story	Section	Location	V kN	V Combo	At cm <sup>2</sup> /m	T for At kN-m	T Combo At	At Torsion cm <sup>2</sup> /m	T for As kN-m	T Combo As	As Torsion cm <sup>2</sup>
B6	N1	V30X50	Middle	24.0154	COMB7	2.5	4.2601	COMB5	0.93	4.2601	COMB5	5
B6	N1	V30X50	End-J	35.5928	COMB6	2.58	4.2601	COMB5	0.93	4.2601	COMB5	5
B8	N1	V30X50	End-I		O/S		43.5304	COMB5	9.51	43.5304	COMB5	12
B8	N1	V30X50	Middle		O/S		43.5304	COMB5	9.51	43.5304	COMB5	12
B8	N1	V30X50	End-J		O/S		43.5304	COMB5	9.51	43.5304	COMB5	12
B15	N1	VB20X50	End-I	32.8144	COMB11	1.67	0	COMB11	0	0	COMB11	0
B15	N1	VB20X50	Middle	30.2937	COMB8	1.67	0	COMB11	0	0	COMB11	0
B15	N1	VB20X50	End-J	54.6907	COMB11	1.67	0	COMB11	0	0	COMB11	0
B17	N1	V30X50	End-I		O/S		43.5304	COMB5	9.51	43.5304	COMB5	12
B17	N1	V30X50	Middle		O/S		43.5304	COMB5	9.51	43.5304	COMB5	12
B17	N1	V30X50	End-J		O/S		43.5304	COMB5	9.51	43.5304	COMB5	12

Table 6.8 - Concrete Joint Envelope

Label	Story	Section	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio
C1	N1	C40X40	COMB8	0.814	COMB5	1.427	COMB5	0.775	COMB5	1.397
C2	N1	C40X40	COMB7	0.876	COMB7	0.929	COMB5	0.371	COMB5	0.394
C3	N1	C40X40	COMB8	0.814	COMB5	1.427	COMB5	0.775	COMB5	1.397
C4	N1	C40X40	COMB7	0.876	COMB7	0.929	COMB5	0.371	COMB5	0.394

Table 6.9 - Concrete Column Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Station mm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm <sup>2</sup>	As cm <sup>2</sup>
N1	C1	7	0	C40X40	Design	No Message		COMB5	16	46
N1	C1	7	275	C40X40	Design	No Message		COMB5	16	34
N1	C1	7	550	C40X40	Design	No Message		COMB5	16	23
N1	C1	7	825	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1100	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1375	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1650	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1925	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2200	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2475	C40X40	Design	No Message		COMB5	16	24
N1	C1	7	2750	C40X40	Design	See Warnings		COMB5	16	36
N1	C2	8	0	C40X40	Design	No Message		COMB5	16	23
N1	C2	8	275	C40X40	Design	No Message		COMB6	16	18
N1	C2	8	550	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	825	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1100	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1375	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1650	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1925	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2200	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2475	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2750	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	0	C40X40	Design	No Message		COMB5	16	46
N1	C3	9	275	C40X40	Design	No Message		COMB5	16	34
N1	C3	9	550	C40X40	Design	No Message		COMB5	16	23
N1	C3	9	825	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1100	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1375	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1650	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1925	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	2200	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	2475	C40X40	Design	No Message		COMB5	16	24
N1	C3	9	2750	C40X40	Design	See Warnings		COMB5	16	36
N1	C4	10	0	C40X40	Design	No Message		COMB5	16	23
N1	C4	10	275	C40X40	Design	No Message		COMB6	16	18
N1	C4	10	550	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	825	C40X40	Design	No Message		COMB11	16	16

Story	Label	Unique Name	Station mm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm <sup>2</sup>	As cm <sup>2</sup>
N1	C4	10	1100	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1375	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1650	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1925	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2200	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2475	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2750	C40X40	Design	No Message		COMB11	16	16

Table 6.9 - Concrete Column Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	Station mm	Mid Bar As cm <sup>2</sup>	Corner Bar As cm <sup>2</sup>	V Major Combo	At V Major cm <sup>2</sup> /m	V Minor Combo	At V Minor cm <sup>2</sup> /m	Warnings	Errors
N1	C1	7	0	5	7	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C1	7	275	4	5	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C1	7	550	2	3	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C1	7	825	2	2	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C1	7	1100	2	2	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C1	7	1375	2	2	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C1	7	1650	2	2	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C1	7	1925	2	2	COMB5	13.34	COMB8	20.19	No Message	No Message
N1	C1	7	2200	2	2	COMB5	13.34	COMB8	20.19	No Message	No Message
N1	C1	7	2475	3	3	COMB5	13.34	COMB8	20.19	No Message	No Message
N1	C1	7	2750	4	5	COMB5	13.34	COMB8	20.19	-33	No Message
N1	C2	8	0	2	3	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	275	2	3	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	550	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	825	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	1100	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	1375	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	1650	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	1925	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	2200	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	2475	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C2	8	2750	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C3	9	0	5	7	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C3	9	275	4	5	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C3	9	550	2	3	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C3	9	825	2	2	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C3	9	1100	2	2	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C3	9	1375	2	2	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C3	9	1650	2	2	COMB8	11.97	COMB8	20.19	No Message	No Message
N1	C3	9	1925	2	2	COMB5	13.34	COMB8	20.19	No Message	No Message
N1	C3	9	2200	2	2	COMB5	13.34	COMB8	20.19	No Message	No Message
N1	C3	9	2475	3	3	COMB5	13.34	COMB8	20.19	No Message	No Message

Story	Label	Unique Name	Station mm	Mid Bar As cm <sup>2</sup>	Corner Bar As cm <sup>2</sup>	V Major Combo	At V Major cm <sup>2</sup> /m	V Minor Combo	At V Minor cm <sup>2</sup> /m	Warnings	Errors
N1	C3	9	2750	4	5	COMB5	13.34	COMB8	20.19	-33	No Message
N1	C4	10	0	2	3	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	275	2	3	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	550	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	825	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	1100	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	1375	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	1650	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	1925	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	2200	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	2475	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message
N1	C4	10	2750	2	2	COMB8	5.7	COMB6	6.37	No Message	No Message

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Station mm	Design Section	Status	As Top Combo	As,min Top cm <sup>2</sup>	As Top cm <sup>2</sup>	As Bottom Combo	As,min Bottom cm <sup>2</sup>	As Bottom cm <sup>2</sup>
N1	B1	13	200	V30X50	No Message	COMB6	4	12	COMB6	4	6
N1	B1	13	980	V30X50	No Message	COMB6	4	8	COMB6	4	4
N1	B1	13	1760	V30X50	No Message	COMB6	4	5	COMB6	4	4
N1	B1	13	2540	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B1	13	3320	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B1	13	4100	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B1	13	4880	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B1	13	5660	V30X50	No Message	COMB6	4	4	COMB7	4	4
N1	B1	13	6440	V30X50	No Message	COMB6	4	4	COMB8	4	4
N1	B1	13	7220	V30X50	No Message	COMB7	4	4	COMB6	4	5
N1	B1	13	8000	V30X50	No Message	COMB6	4	5	COMB7	4	4
N1	B2	14	200	V30X50	No Message	COMB6	4	12	COMB6	4	6
N1	B2	14	980	V30X50	No Message	COMB6	4	8	COMB6	4	4
N1	B2	14	1760	V30X50	No Message	COMB6	4	5	COMB6	4	4
N1	B2	14	2540	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B2	14	3320	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B2	14	4100	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B2	14	4880	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B2	14	5660	V30X50	No Message	COMB6	4	4	COMB7	4	4
N1	B2	14	6440	V30X50	No Message	COMB6	4	4	COMB8	4	4
N1	B2	14	7220	V30X50	No Message	COMB7	4	4	COMB6	4	5
N1	B2	14	8000	V30X50	No Message	COMB6	4	5	COMB7	4	4
N1	B4	16	200	V30X50	No Message	COMB5	4	9	COMB5	4	4
N1	B4	16	980	V30X50	No Message	COMB5	4	5	COMB8	4	4

Story	Label	Unique Name	Station mm	Design Section	Status	As Top Combo	As,min Top cm <sup>2</sup>	As Top cm <sup>2</sup>	As Bottom Combo	As,min Bottom cm <sup>2</sup>	As Bottom cm <sup>2</sup>
N1	B4	16	1760	V30X50	No Message	COMB8	3	3	COMB8	4	4
N1	B4	16	2540	V30X50	No Message	COMB5	3	3	COMB8	4	4
N1	B4	16	3320	V30X50	No Message	COMB5	3	3	COMB3	4	5
N1	B4	16	4100	V30X50	No Message	COMB5	3	3	COMB3	4	5
N1	B4	16	4880	V30X50	No Message	COMB5	3	3	COMB3	4	5
N1	B4	16	5660	V30X50	No Message	COMB5	3	3	COMB8	4	4
N1	B4	16	6440	V30X50	No Message	COMB8	3	3	COMB8	4	4
N1	B4	16	7220	V30X50	No Message	COMB5	4	5	COMB8	4	4
N1	B4	16	8000	V30X50	No Message	COMB5	4	9	COMB5	4	4
N1	B6	18	200	V30X50	No Message	COMB8	4	4	COMB5	2	2
N1	B6	18	980	V30X50	No Message	COMB5	3	3	COMB8	2	2
N1	B6	18	1760	V30X50	No Message	COMB8	2	2	COMB5	2	2
N1	B6	18	2540	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	3320	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	4100	V30X50	No Message	COMB5	1	1	COMB1	1	1
N1	B6	18	4880	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	5660	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	6440	V30X50	No Message	COMB8	2	2	COMB5	2	2
N1	B6	18	7220	V30X50	No Message	COMB5	3	3	COMB8	2	2
N1	B6	18	8000	V30X50	No Message	COMB8	4	4	COMB5	2	2
N1	B8	2	0	V30X50	See ErrMsg	COMB8	0.08717	0.08717	COMB8	0.08717	0.08717
N1	B8	2	220	V30X50	See ErrMsg	COMB3	3	3	COMB3	3	3
N1	B8	2	440	V30X50	See ErrMsg	COMB3	3	3	COMB3	3	3
N1	B8	2	660	V30X50	See ErrMsg	COMB3	4	4	COMB3	3	3
N1	B8	2	880	V30X50	See ErrMsg	COMB10	4	4	COMB3	3	3
N1	B8	2	1100	V30X50	See ErrMsg	COMB3	4	5	COMB3	3	3
N1	B8	2	1320	V30X50	See ErrMsg	COMB3	4	6	COMB3	3	3
N1	B8	2	1540	V30X50	See ErrMsg	COMB3	4	7	COMB3	3	3
N1	B8	2	1760	V30X50	See ErrMsg	COMB3	4	8	COMB3	3	3
N1	B8	2	1980	V30X50	See ErrMsg	COMB3	4	9	COMB3	3	3
N1	B8	2	2200	V30X50	See ErrMsg	COMB3	4	10	COMB3	4	5
N1	B15	22	0	VB20X50	No Message	COMB5	3	3	COMB5	2	2
N1	B15	22	820	VB20X50	No Message	COMB5	1	1	COMB5	1	1
N1	B15	22	1640	VB20X50	No Message	COMB5	1	1	COMB5	3	3
N1	B15	22	2460	VB20X50	No Message	COMB5	1	1	COMB3	3	5
N1	B15	22	3280	VB20X50	No Message	COMB5	1	1	COMB3	3	5
N1	B15	22	4100	VB20X50	No Message	COMB5	1	1	COMB3	3	6
N1	B15	22	4920	VB20X50	No Message	COMB5	1	1	COMB3	3	5
N1	B15	22	5740	VB20X50	No Message	COMB5	1	1	COMB3	3	5
N1	B15	22	6560	VB20X50	No Message	COMB5	1	1	COMB5	3	3
N1	B15	22	7380	VB20X50	No Message	COMB5	1	1	COMB5	1	1
N1	B15	22	8200	VB20X50	No Message	COMB5	3	3	COMB5	2	2
N1	B17	4	0	V30X50	See ErrMsg	COMB8	0.08717	0.08717	COMB8	0.08717	0.08717
N1	B17	4	220	V30X50	See ErrMsg	COMB3	3	3	COMB3	3	3



Story	Label	Unique Name	Station mm	Design Section	Status	As Top Combo	As,min Top cm <sup>2</sup>	As Top cm <sup>2</sup>	As Bottom Combo	As,min Bottom cm <sup>2</sup>	As Bottom cm <sup>2</sup>
N1	B17	4	440	V30X50	See ErrMsg	COMB3	3	3	COMB3	3	3
N1	B17	4	660	V30X50	See ErrMsg	COMB3	4	4	COMB3	3	3
N1	B17	4	880	V30X50	See ErrMsg	COMB10	4	4	COMB3	3	3
N1	B17	4	1100	V30X50	See ErrMsg	COMB3	4	5	COMB3	3	3
N1	B17	4	1320	V30X50	See ErrMsg	COMB3	4	6	COMB3	3	3
N1	B17	4	1540	V30X50	See ErrMsg	COMB3	4	7	COMB3	3	3
N1	B17	4	1760	V30X50	See ErrMsg	COMB3	4	8	COMB3	3	3
N1	B17	4	1980	V30X50	See ErrMsg	COMB3	4	9	COMB3	3	3
N1	B17	4	2200	V30X50	See ErrMsg	COMB3	4	10	COMB3	4	5

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	Station mm	V Combo	At Shear cm <sup>2</sup> /m	Torsion Long Combo	At Torsion cm <sup>2</sup>	Torsion Tran Combo	At Torsion cm <sup>2</sup> /m	Warnings
N1	B1	13	200	COMB8	6.11	COMB8	5	COMB5	1.39	No Message
N1	B1	13	980	COMB8	5.59	COMB8	5	COMB5	1.39	No Message
N1	B1	13	1760	COMB8	5.09	COMB8	5	COMB5	1.39	No Message
N1	B1	13	2540	COMB8	4.61	COMB8	5	COMB5	1.39	No Message
N1	B1	13	3320	COMB8	4.15	COMB8	5	COMB5	1.39	No Message
N1	B1	13	4100	COMB8	3.72	COMB8	5	COMB5	1.39	No Message
N1	B1	13	4880	COMB8	3.3	COMB8	5	COMB5	1.39	No Message
N1	B1	13	5660	COMB8	3.3	COMB8	5	COMB5	1.39	No Message
N1	B1	13	6440	COMB8	3.67	COMB8	5	COMB5	1.39	No Message
N1	B1	13	7220	COMB8	4.02	COMB8	5	COMB5	1.39	No Message
N1	B1	13	8000	COMB8	4.35	COMB8	5	COMB5	1.39	No Message
N1	B2	14	200	COMB8	6.11	COMB8	5	COMB5	1.39	No Message
N1	B2	14	980	COMB8	5.59	COMB8	5	COMB5	1.39	No Message
N1	B2	14	1760	COMB8	5.09	COMB8	5	COMB5	1.39	No Message
N1	B2	14	2540	COMB8	4.61	COMB8	5	COMB5	1.39	No Message
N1	B2	14	3320	COMB8	4.15	COMB8	5	COMB5	1.39	No Message
N1	B2	14	4100	COMB8	3.72	COMB8	5	COMB5	1.39	No Message
N1	B2	14	4880	COMB8	3.3	COMB8	5	COMB5	1.39	No Message
N1	B2	14	5660	COMB8	3.3	COMB8	5	COMB5	1.39	No Message
N1	B2	14	6440	COMB8	3.67	COMB8	5	COMB5	1.39	No Message
N1	B2	14	7220	COMB8	4.02	COMB8	5	COMB5	1.39	No Message
N1	B2	14	8000	COMB8	4.35	COMB8	5	COMB5	1.39	No Message
N1	B4	16	200	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	980	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	1760	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	2540	COMB8	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	3320	COMB8	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	4100	COMB8	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	4880	COMB8	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	5660	COMB8	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	6440	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	7220	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	8000	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B6	18	200	COMB6	2.58	COMB8	5	COMB5	0.93	No Message
N1	B6	18	980	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	1760	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	2540	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	3320	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	4100	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	4880	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	5660	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	6440	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	7220	COMB7	2.5	COMB8	5	COMB5	0.93	No Message
N1	B6	18	8000	COMB6	2.58	COMB8	5	COMB5	0.93	No Message
N1	B8	2	0	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	220	COMB1	0	COMB5	12	COMB5	9.51	No Message

Story	Label	Unique Name	Station mm	V Combo	At Shear cm <sup>2</sup> /m	Torsion Long Combo	AI Torsion cm <sup>2</sup>	Torsion Tran Combo	At Torsion cm <sup>2</sup> /m	Warnings
N1	B8	2	440	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	660	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	880	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	1100	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	1320	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	1540	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	1760	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	1980	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B8	2	2200	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B15	22	0	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	820	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	1640	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	2460	COMB8	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	3280	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B15	22	4100	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B15	22	4920	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B15	22	5740	COMB8	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	6560	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	7380	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	8200	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B17	4	0	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	220	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	440	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	660	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	880	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	1100	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	1320	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	1540	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	1760	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	1980	COMB1	0	COMB5	12	COMB5	9.51	No Message
N1	B17	4	2200	COMB1	0	COMB5	12	COMB5	9.51	No Message

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 3 of 2)

Story	Label	Unique Name	Station mm	Errors
N1	B1	13	200	No Message
N1	B1	13	980	No Message
N1	B1	13	1760	No Message
N1	B1	13	2540	No Message
N1	B1	13	3320	No Message
N1	B1	13	4100	No Message
N1	B1	13	4880	No Message
N1	B1	13	5660	No Message
N1	B1	13	6440	No Message
N1	B1	13	7220	No Message
N1	B1	13	8000	No Message
N1	B2	14	200	No Message
N1	B2	14	980	No Message
N1	B2	14	1760	No Message
N1	B2	14	2540	No Message
N1	B2	14	3320	No Message
N1	B2	14	4100	No Message
N1	B2	14	4880	No Message
N1	B2	14	5660	No Message
N1	B2	14	6440	No Message
N1	B2	14	7220	No Message
N1	B2	14	8000	No Message
N1	B4	16	200	No Message
N1	B4	16	980	No Message
N1	B4	16	1760	No Message

Story	Label	Unique Name	Station mm	Errors
N1	B4	16	2540	No Message
N1	B4	16	3320	No Message
N1	B4	16	4100	No Message
N1	B4	16	4880	No Message
N1	B4	16	5660	No Message
N1	B4	16	6440	No Message
N1	B4	16	7220	No Message
N1	B4	16	8000	No Message
N1	B6	18	200	No Message
N1	B6	18	980	No Message
N1	B6	18	1760	No Message
N1	B6	18	2540	No Message
N1	B6	18	3320	No Message
N1	B6	18	4100	No Message
N1	B6	18	4880	No Message
N1	B6	18	5660	No Message
N1	B6	18	6440	No Message
N1	B6	18	7220	No Message
N1	B6	18	8000	No Message
N1	B8	2	0	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	220	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	440	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	660	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	880	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1100	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1320	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1540	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1760	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1980	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	2200	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B15	22	0	No Message
N1	B15	22	820	No Message
N1	B15	22	1640	No Message
N1	B15	22	2460	No Message
N1	B15	22	3280	No Message
N1	B15	22	4100	No Message
N1	B15	22	4920	No Message
N1	B15	22	5740	No Message
N1	B15	22	6560	No Message
N1	B15	22	7380	No Message
N1	B15	22	8200	No Message
N1	B17	4	0	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	220	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	440	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	660	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	880	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1100	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1320	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1540	Shear stress due to shear force and torsion together exceeds maximum allowed

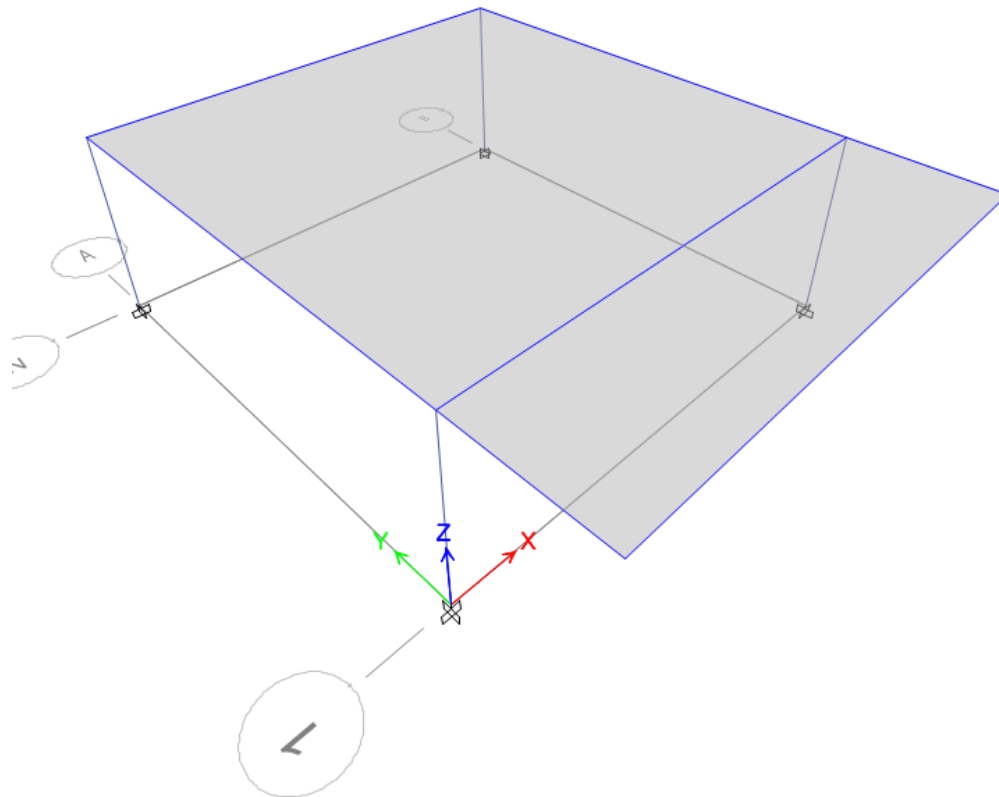
Story	Label	Unique Name	Station mm	Errors
N1	B17	4	1760	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1980	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	2200	Shear stress due to shear force and torsion together exceeds maximum allowed

Table 6.11 - Concrete Joint Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Design Section	Status	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio
N1	C1	7	C40X40	See ErrMsg/WarnMsg	COMB8	0.814	COMB5	1.427
N1	C2	8	C40X40	No Message	COMB7	0.876	COMB7	0.929
N1	C3	9	C40X40	See ErrMsg/WarnMsg	COMB8	0.814	COMB5	1.427
N1	C4	10	C40X40	No Message	COMB7	0.876	COMB7	0.929

Table 6.11 - Concrete Joint Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio	Warnings	Errors
N1	C1	7	COMB5	0.775	COMB5	1.397	Beam/Column capacity ratio exceeds limitJoint shear ratio exceeds limit	No Message
N1	C2	8	COMB5	0.371	COMB5	0.394	No Message	No Message
N1	C3	9	COMB5	0.775	COMB5	1.397	Beam/Column capacity ratio exceeds limitJoint shear ratio exceeds limit	No Message
N1	C4	10	COMB5	0.371	COMB5	0.394	No Message	No Message



## Project Report

Model File: 004 2017 PROTOTIPO EDUCACION MODULO 3 DES, Revision 0  
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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	8.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	8200	0	0
4	8200	8200	0
10	0	-2400	0
9	8200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B8	10	1	None
B15	10	9	None
B17	9	3	None



1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	9	3	None
		2	3	1	None
		3	1	10	None
		4	10	9	None
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	29974	29974	4.1	-0.7742	29974	29974	4.1	-0.7742	4.1	3.1246

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	29974	29974	541.592	4.1	-0.7742

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	40265.49	40265.49	0
Base	2498.55	2498.55	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	10	25	D1	
N1	9	26	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	8200	V30X50	V30X50	11
N1	B2	14	Beam	8200	V30X50	V30X50	11
N1	B4	16	Beam	8200	V30X50	V30X50	11
N1	B6	18	Beam	8200	V30X50	V30X50	11
N1	B8	2	Beam	2400	V30X50	V30X50	11
N1	B15	22	Beam	8200	VB20X50	VB20X50	11
N1	B17	4	Beam	2400	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F1	3	LOSA	90
N1	F5	5	CUB	

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200
N1	B4	16	Beam	D	Force	Gravity	0	1	0	8200
N1	B15	22	Beam	D	Force	Gravity	0	1	0	8200

**Table 4.2 - Frame Loads - Distributed (Part 2 of 2)**

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N1	B1	13	4.4	0
N1	B2	14	4.4	0
N1	B4	16	4.4	4.4
N1	B15	22	3.1	3.1

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	3	D	Gravity	4.3
N1	F5	5	D	Gravity	0.64
N1	F1	3	LR	Gravity	2
N1	F5	5	LR	Gravity	0.5
N1	F1	3	G	Gravity	1
N1	F5	5	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0	1.1813	5
NSR10DERIVA	0.1	1.1813	
NSR10DERIVA	0.2	1.1813	
NSR10DERIVA	0.3	1.1813	
NSR10DERIVA	0.4	1.1813	

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0.5	1.1813	
NSR10DERIVA	0.6	1.1813	
NSR10DERIVA	0.7	1.0971	
NSR10DERIVA	0.8	0.96	
NSR10DERIVA	0.9	0.8533	
NSR10DERIVA	1	0.768	
NSR10DERIVA	1.2	0.64	
NSR10DERIVA	1.5	0.512	
NSR10DERIVA	1.7	0.4518	
NSR10DERIVA	2	0.384	
NSR10DERIVA	2.5	0.3072	
NSR10DERIVA	3	0.256	
NSR10DERIVA	3.5	0.2194	
NSR10DERIVA	4	0.1843	
NSR10DERIVA	5	0.118	
NSR10DERIVA	8	0.0461	
NSR10DERIVA	11	0.0244	
NSR10DERIVA	15	0.0131	
disNSR10	0	1.4766	5
disNSR10	0.1	1.4766	
disNSR10	0.2	1.4766	
disNSR10	0.3	1.4766	
disNSR10	0.4	1.4766	
disNSR10	0.5	1.4766	
disNSR10	0.6	1.4766	
disNSR10	0.7	1.3714	
disNSR10	0.8	1.2	
disNSR10	0.9	1.0667	
disNSR10	1	0.96	
disNSR10	1.2	0.8	
disNSR10	1.5	0.64	
disNSR10	1.7	0.5647	
disNSR10	2	0.48	
disNSR10	2.5	0.384	
disNSR10	3	0.32	
disNSR10	3.5	0.2743	
disNSR10	4	0.2304	
disNSR10	5	0.1475	
disNSR10	8	0.0576	
disNSR10	11	0.0305	
disNSR10	15	0.0164	
UMBRAL1	0	0.1	2
UMBRAL1	0.01	0.108	
UMBRAL1	0.02	0.116	
UMBRAL1	0.03	0.124	
UMBRAL1	0.04	0.132	
UMBRAL1	0.05	0.14	
UMBRAL1	0.06	0.148	
UMBRAL1	0.07	0.156	
UMBRAL1	0.08	0.164	
UMBRAL1	0.09	0.172	
UMBRAL1	0.1	0.18	
UMBRAL1	0.11	0.188	
UMBRAL1	0.12	0.196	
UMBRAL1	0.13	0.204	
UMBRAL1	0.14	0.212	
UMBRAL1	0.15	0.22	
UMBRAL1	0.16	0.228	
UMBRAL1	0.17	0.236	
UMBRAL1	0.18	0.244	

Name	Period sec	Acceleration	Damping %
UMBRAL1	0.19	0.252	
UMBRAL1	0.2	0.26	
UMBRAL1	0.21	0.268	
UMBRAL1	0.22	0.276	
UMBRAL1	0.23	0.284	
UMBRAL1	0.24	0.292	
UMBRAL1	0.25	0.3	
UMBRAL1	0.26	0.3	
UMBRAL1	0.27	0.3	
UMBRAL1	0.28	0.3	
UMBRAL1	0.29	0.3	
UMBRAL1	0.3	0.3	
UMBRAL1	0.31	0.3	
UMBRAL1	0.32	0.3	
UMBRAL1	0.33	0.3	
UMBRAL1	0.34	0.3	
UMBRAL1	0.35	0.3	
UMBRAL1	0.36	0.3	
UMBRAL1	0.37	0.3	
UMBRAL1	0.38	0.3	
UMBRAL1	0.39	0.3	
UMBRAL1	0.4	0.3	
UMBRAL1	0.41	0.3	
UMBRAL1	0.42	0.3	
UMBRAL1	0.43	0.3	
UMBRAL1	0.44	0.3	
UMBRAL1	0.45	0.3	
UMBRAL1	0.46	0.3	
UMBRAL1	0.47	0.3	
UMBRAL1	0.48	0.3	
UMBRAL1	0.49	0.3	
UMBRAL1	0.5	0.3	
UMBRAL1	0.51	0.3	
UMBRAL1	0.52	0.3	
UMBRAL1	0.53	0.3	
UMBRAL1	0.54	0.3	
UMBRAL1	0.55	0.3	
UMBRAL1	0.56	0.3	
UMBRAL1	0.57	0.3	
UMBRAL1	0.58	0.3	
UMBRAL1	0.59	0.3	
UMBRAL1	0.6	0.3	
UMBRAL1	0.61	0.3	
UMBRAL1	0.62	0.3	
UMBRAL1	0.63	0.3	
UMBRAL1	0.64	0.3	
UMBRAL1	0.65	0.3	
UMBRAL1	0.66	0.3	
UMBRAL1	0.67	0.3	
UMBRAL1	0.68	0.3	
UMBRAL1	0.69	0.3	
UMBRAL1	0.7	0.3	
UMBRAL1	0.71	0.3	
UMBRAL1	0.72	0.3	
UMBRAL1	0.73	0.3	
UMBRAL1	0.74	0.3	
UMBRAL1	0.75	0.3	
UMBRAL1	0.76	0.3	
UMBRAL1	0.77	0.3	
UMBRAL1	0.78	0.3	

Name	Period sec	Acceleration	Damping %
UMBRAL1	0.79	0.3	
UMBRAL1	0.8	0.3	
UMBRAL1	0.81	0.3	
UMBRAL1	0.82	0.3	
UMBRAL1	0.83	0.3	
UMBRAL1	0.84	0.3	
UMBRAL1	0.85	0.3	
UMBRAL1	0.86	0.3	
UMBRAL1	0.87	0.3	
UMBRAL1	0.88	0.3	
UMBRAL1	0.89	0.3	
UMBRAL1	0.9	0.3	
UMBRAL1	0.91	0.3	
UMBRAL1	0.92	0.3	
UMBRAL1	0.93	0.3	
UMBRAL1	0.94	0.3	
UMBRAL1	0.95	0.3	
UMBRAL1	0.96	0.3	
UMBRAL1	0.97	0.3	
UMBRAL1	0.98	0.3	
UMBRAL1	0.99	0.3	
UMBRAL1	1	0.3	
UMBRAL1	1.01	0.297	
UMBRAL1	1.02	0.294	
UMBRAL1	1.03	0.291	
UMBRAL1	1.04	0.288	
UMBRAL1	1.05	0.286	
UMBRAL1	1.06	0.283	
UMBRAL1	1.07	0.28	
UMBRAL1	1.08	0.278	
UMBRAL1	1.09	0.275	
UMBRAL1	1.1	0.273	
UMBRAL1	1.11	0.27	
UMBRAL1	1.12	0.268	
UMBRAL1	1.13	0.265	
UMBRAL1	1.14	0.263	
UMBRAL1	1.15	0.261	
UMBRAL1	1.16	0.259	
UMBRAL1	1.17	0.256	
UMBRAL1	1.18	0.254	
UMBRAL1	1.19	0.252	
UMBRAL1	1.2	0.25	
UMBRAL1	1.21	0.248	
UMBRAL1	1.22	0.246	
UMBRAL1	1.23	0.244	
UMBRAL1	1.24	0.242	
UMBRAL1	1.25	0.24	
UMBRAL1	1.26	0.238	
UMBRAL1	1.27	0.236	
UMBRAL1	1.28	0.234	
UMBRAL1	1.29	0.233	
UMBRAL1	1.3	0.231	
UMBRAL1	1.31	0.229	
UMBRAL1	1.32	0.227	
UMBRAL1	1.33	0.226	
UMBRAL1	1.34	0.224	
UMBRAL1	1.35	0.222	
UMBRAL1	1.36	0.221	
UMBRAL1	1.37	0.219	
UMBRAL1	1.38	0.217	

Name	Period sec	Acceleration	Damping %
UMBRAL1	1.39	0.216	
UMBRAL1	1.4	0.214	
UMBRAL1	1.41	0.213	
UMBRAL1	1.42	0.211	
UMBRAL1	1.43	0.21	
UMBRAL1	1.44	0.208	
UMBRAL1	1.45	0.207	
UMBRAL1	1.46	0.205	
UMBRAL1	1.47	0.204	
UMBRAL1	1.48	0.203	
UMBRAL1	1.49	0.201	
UMBRAL1	1.5	0.2	
UMBRAL1	1.51	0.199	
UMBRAL1	1.52	0.197	
UMBRAL1	1.53	0.196	
UMBRAL1	1.54	0.195	
UMBRAL1	1.55	0.194	
UMBRAL1	1.56	0.192	
UMBRAL1	1.57	0.191	
UMBRAL1	1.58	0.19	
UMBRAL1	1.59	0.189	
UMBRAL1	1.6	0.188	
UMBRAL1	1.61	0.186	
UMBRAL1	1.62	0.185	
UMBRAL1	1.63	0.184	
UMBRAL1	1.64	0.183	
UMBRAL1	1.65	0.182	
UMBRAL1	1.66	0.181	
UMBRAL1	1.67	0.18	
UMBRAL1	1.68	0.179	
UMBRAL1	1.69	0.178	
UMBRAL1	1.7	0.176	
UMBRAL1	1.71	0.175	
UMBRAL1	1.72	0.174	
UMBRAL1	1.73	0.173	
UMBRAL1	1.74	0.172	
UMBRAL1	1.75	0.171	
UMBRAL1	1.76	0.17	
UMBRAL1	1.77	0.169	
UMBRAL1	1.78	0.169	
UMBRAL1	1.79	0.168	
UMBRAL1	1.8	0.167	
UMBRAL1	1.81	0.166	
UMBRAL1	1.82	0.165	
UMBRAL1	1.83	0.164	
UMBRAL1	1.84	0.163	
UMBRAL1	1.85	0.162	
UMBRAL1	1.86	0.161	
UMBRAL1	1.87	0.16	
UMBRAL1	1.88	0.16	
UMBRAL1	1.89	0.159	
UMBRAL1	1.9	0.158	
UMBRAL1	1.91	0.157	
UMBRAL1	1.92	0.156	
UMBRAL1	1.93	0.155	
UMBRAL1	1.94	0.155	
UMBRAL1	1.95	0.154	
UMBRAL1	1.96	0.153	
UMBRAL1	1.97	0.152	
UMBRAL1	1.98	0.152	



Name	Period sec	Acceleration	Damping %
UMBRAL1	1.99	0.151	
UMBRAL1	2	0.15	
UMBRAL1	2.01	0.149	
UMBRAL1	2.02	0.149	
UMBRAL1	2.03	0.148	
UMBRAL1	2.04	0.147	
UMBRAL1	2.05	0.146	
UMBRAL1	2.06	0.146	
UMBRAL1	2.07	0.145	
UMBRAL1	2.08	0.144	
UMBRAL1	2.09	0.144	
UMBRAL1	2.1	0.143	
UMBRAL1	2.11	0.142	
UMBRAL1	2.12	0.142	
UMBRAL1	2.13	0.141	
UMBRAL1	2.14	0.14	
UMBRAL1	2.15	0.14	
UMBRAL1	2.16	0.139	
UMBRAL1	2.17	0.138	
UMBRAL1	2.18	0.138	
UMBRAL1	2.19	0.137	
UMBRAL1	2.2	0.136	
UMBRAL1	2.21	0.136	
UMBRAL1	2.22	0.135	
UMBRAL1	2.23	0.135	
UMBRAL1	2.24	0.134	
UMBRAL1	2.25	0.133	
UMBRAL1	2.26	0.133	
UMBRAL1	2.27	0.132	
UMBRAL1	2.28	0.132	
UMBRAL1	2.29	0.131	
UMBRAL1	2.3	0.13	
UMBRAL1	2.31	0.13	
UMBRAL1	2.32	0.129	
UMBRAL1	2.33	0.129	
UMBRAL1	2.34	0.128	
UMBRAL1	2.35	0.128	
UMBRAL1	2.36	0.127	
UMBRAL1	2.37	0.127	
UMBRAL1	2.38	0.126	
UMBRAL1	2.39	0.126	
UMBRAL1	2.4	0.125	
UMBRAL1	2.41	0.124	
UMBRAL1	2.42	0.124	
UMBRAL1	2.43	0.123	
UMBRAL1	2.44	0.123	
UMBRAL1	2.45	0.122	
UMBRAL1	2.46	0.122	
UMBRAL1	2.47	0.121	
UMBRAL1	2.48	0.121	
UMBRAL1	2.49	0.12	
UMBRAL1	2.5	0.12	
UMBRAL1	2.51	0.12	
UMBRAL1	2.52	0.119	
UMBRAL1	2.53	0.119	
UMBRAL1	2.54	0.118	
UMBRAL1	2.55	0.118	
UMBRAL1	2.56	0.117	
UMBRAL1	2.57	0.117	
UMBRAL1	2.58	0.116	

Name	Period sec	Acceleration	Damping %
UMBRAL1	2.59	0.116	
UMBRAL1	2.6	0.115	
UMBRAL1	2.61	0.115	
UMBRAL1	2.62	0.115	
UMBRAL1	2.63	0.114	
UMBRAL1	2.64	0.114	
UMBRAL1	2.65	0.113	
UMBRAL1	2.66	0.113	
UMBRAL1	2.67	0.112	
UMBRAL1	2.68	0.112	
UMBRAL1	2.69	0.112	
UMBRAL1	2.7	0.111	
UMBRAL1	2.71	0.111	
UMBRAL1	2.72	0.11	
UMBRAL1	2.73	0.11	
UMBRAL1	2.74	0.109	
UMBRAL1	2.75	0.109	
UMBRAL1	2.76	0.109	
UMBRAL1	2.77	0.108	
UMBRAL1	2.78	0.108	
UMBRAL1	2.79	0.108	
UMBRAL1	2.8	0.107	
UMBRAL1	2.81	0.107	
UMBRAL1	2.82	0.106	
UMBRAL1	2.83	0.106	
UMBRAL1	2.84	0.106	
UMBRAL1	2.85	0.105	
UMBRAL1	2.86	0.105	
UMBRAL1	2.87	0.105	
UMBRAL1	2.88	0.104	
UMBRAL1	2.89	0.104	
UMBRAL1	2.9	0.103	
UMBRAL1	2.91	0.103	
UMBRAL1	2.92	0.103	
UMBRAL1	2.93	0.102	
UMBRAL1	2.94	0.102	
UMBRAL1	2.95	0.102	
UMBRAL1	2.96	0.101	
UMBRAL1	2.97	0.101	
UMBRAL1	2.98	0.101	
UMBRAL1	2.99	0.1	
UMBRAL1	3	0.1	
UMBRAL1	3.01	0.1	
UMBRAL1	3.02	0.099	
UMBRAL1	3.03	0.099	
UMBRAL1	3.04	0.099	
UMBRAL1	3.05	0.098	
UMBRAL1	3.06	0.098	
UMBRAL1	3.07	0.098	
UMBRAL1	3.08	0.097	
UMBRAL1	3.09	0.097	
UMBRAL1	3.1	0.097	
UMBRAL1	3.11	0.096	
UMBRAL1	3.12	0.096	
UMBRAL1	3.13	0.096	
UMBRAL1	3.14	0.096	
UMBRAL1	3.15	0.095	
UMBRAL1	3.16	0.095	
UMBRAL1	3.17	0.095	
UMBRAL1	3.18	0.094	

Name	Period sec	Acceleration	Damping %
UMBRAL1	3.19	0.094	
UMBRAL1	3.2	0.094	
UMBRAL1	3.21	0.093	
UMBRAL1	3.22	0.093	
UMBRAL1	3.23	0.093	
UMBRAL1	3.24	0.093	
UMBRAL1	3.25	0.092	
UMBRAL1	3.26	0.092	
UMBRAL1	3.27	0.092	
UMBRAL1	3.28	0.091	
UMBRAL1	3.29	0.091	
UMBRAL1	3.3	0.091	
UMBRAL1	3.31	0.091	
UMBRAL1	3.32	0.09	
UMBRAL1	3.33	0.09	
UMBRAL1	3.34	0.09	
UMBRAL1	3.35	0.09	
UMBRAL1	3.36	0.089	
UMBRAL1	3.37	0.089	
UMBRAL1	3.38	0.089	
UMBRAL1	3.39	0.088	
UMBRAL1	3.4	0.088	
UMBRAL1	3.41	0.088	
UMBRAL1	3.42	0.088	
UMBRAL1	3.43	0.087	
UMBRAL1	3.44	0.087	
UMBRAL1	3.45	0.087	
UMBRAL1	3.46	0.087	
UMBRAL1	3.47	0.086	
UMBRAL1	3.48	0.086	
UMBRAL1	3.49	0.086	
UMBRAL1	3.5	0.086	
UMBRAL1	3.51	0.085	
UMBRAL1	3.52	0.085	
UMBRAL1	3.53	0.085	
UMBRAL1	3.54	0.085	
UMBRAL1	3.55	0.085	
UMBRAL1	3.56	0.084	
UMBRAL1	3.57	0.084	
UMBRAL1	3.58	0.084	
UMBRAL1	3.59	0.084	
UMBRAL1	3.6	0.083	
UMBRAL1	3.61	0.083	
UMBRAL1	3.62	0.083	
UMBRAL1	3.63	0.083	
UMBRAL1	3.64	0.082	
UMBRAL1	3.65	0.082	
UMBRAL1	3.66	0.082	
UMBRAL1	3.67	0.082	
UMBRAL1	3.68	0.082	
UMBRAL1	3.69	0.081	
UMBRAL1	3.7	0.081	
UMBRAL1	3.71	0.081	
UMBRAL1	3.72	0.081	
UMBRAL1	3.73	0.08	
UMBRAL1	3.74	0.08	
UMBRAL1	3.75	0.08	
UMBRAL1	3.76	0.08	
UMBRAL1	3.77	0.08	
UMBRAL1	3.78	0.079	

Name	Period sec	Acceleration	Damping %
UMBRAL1	3.79	0.079	
UMBRAL1	3.8	0.079	
UMBRAL1	3.81	0.079	
UMBRAL1	3.82	0.079	
UMBRAL1	3.83	0.078	
UMBRAL1	3.84	0.078	
UMBRAL1	3.85	0.078	
UMBRAL1	3.86	0.078	
UMBRAL1	3.87	0.078	
UMBRAL1	3.88	0.077	
UMBRAL1	3.89	0.077	
UMBRAL1	3.9	0.077	
UMBRAL1	3.91	0.077	
UMBRAL1	3.92	0.077	
UMBRAL1	3.93	0.076	
UMBRAL1	3.94	0.076	
UMBRAL1	3.95	0.076	
UMBRAL1	3.96	0.076	
UMBRAL1	3.97	0.076	
UMBRAL1	3.98	0.075	
UMBRAL1	3.99	0.075	
UMBRAL1	4	0.075	
UMBRAL1	4.01	0.075	
UMBRAL1	4.02	0.075	
UMBRAL1	4.03	0.074	
UMBRAL1	4.04	0.074	
UMBRAL1	4.05	0.074	
UMBRAL1	4.06	0.074	
UMBRAL1	4.07	0.074	
UMBRAL1	4.08	0.074	
UMBRAL1	4.09	0.073	
UMBRAL1	4.1	0.073	
UMBRAL1	4.11	0.073	
UMBRAL1	4.12	0.073	
UMBRAL1	4.13	0.073	
UMBRAL1	4.14	0.072	
UMBRAL1	4.15	0.072	
UMBRAL1	4.16	0.072	
UMBRAL1	4.17	0.072	
UMBRAL1	4.18	0.072	
UMBRAL1	4.19	0.072	
UMBRAL1	4.2	0.071	
UMBRAL1	4.21	0.071	
UMBRAL1	4.22	0.071	
UMBRAL1	4.23	0.071	
UMBRAL1	4.24	0.071	
UMBRAL1	4.25	0.071	
UMBRAL1	4.26	0.07	
UMBRAL1	4.27	0.07	
UMBRAL1	4.28	0.07	
UMBRAL1	4.29	0.07	
UMBRAL1	4.3	0.07	
UMBRAL1	4.31	0.07	
UMBRAL1	4.32	0.069	
UMBRAL1	4.33	0.069	
UMBRAL1	4.34	0.069	
UMBRAL1	4.35	0.069	
UMBRAL1	4.36	0.069	
UMBRAL1	4.37	0.069	
UMBRAL1	4.38	0.068	

Name	Period sec	Acceleration	Damping %
UMBRAL1	4.39	0.068	
UMBRAL1	4.4	0.068	
UMBRAL1	4.41	0.068	
UMBRAL1	4.42	0.068	
UMBRAL1	4.43	0.068	
UMBRAL1	4.44	0.068	
UMBRAL1	4.45	0.067	
UMBRAL1	4.46	0.067	
UMBRAL1	4.47	0.067	
UMBRAL1	4.48	0.067	
UMBRAL1	4.49	0.067	
UMBRAL1	4.5	0.067	
UMBRAL1	4.51	0.067	
UMBRAL1	4.52	0.066	
UMBRAL1	4.53	0.066	
UMBRAL1	4.54	0.066	
UMBRAL1	4.55	0.066	
UMBRAL1	4.56	0.066	
UMBRAL1	4.57	0.066	
UMBRAL1	4.58	0.066	
UMBRAL1	4.59	0.065	
UMBRAL1	4.6	0.065	
UMBRAL1	4.61	0.065	
UMBRAL1	4.62	0.065	
UMBRAL1	4.63	0.065	
UMBRAL1	4.64	0.065	
UMBRAL1	4.65	0.065	
UMBRAL1	4.66	0.064	
UMBRAL1	4.67	0.064	
UMBRAL1	4.68	0.064	
UMBRAL1	4.69	0.064	
UMBRAL1	4.7	0.064	
UMBRAL1	4.71	0.064	
UMBRAL1	4.72	0.064	
UMBRAL1	4.73	0.063	
UMBRAL1	4.74	0.063	
UMBRAL1	4.75	0.063	
UMBRAL1	4.76	0.063	
UMBRAL1	4.77	0.063	
UMBRAL1	4.78	0.063	
UMBRAL1	4.79	0.063	
UMBRAL1	4.8	0.063	
UMBRAL1	4.81	0.062	
UMBRAL1	4.82	0.062	
UMBRAL1	4.83	0.062	
UMBRAL1	4.84	0.061	
UMBRAL1	4.85	0.061	
UMBRAL1	4.86	0.061	
UMBRAL1	4.87	0.061	
UMBRAL1	4.88	0.06	
UMBRAL1	4.89	0.06	
UMBRAL1	4.9	0.06	
UMBRAL1	4.91	0.06	
UMBRAL1	4.92	0.059	
UMBRAL1	4.93	0.059	
UMBRAL1	4.94	0.059	
UMBRAL1	4.95	0.059	
UMBRAL1	4.96	0.059	
UMBRAL1	4.97	0.058	
UMBRAL1	4.98	0.058	

Name	Period sec	Acceleration	Damping %
UMBRAL1	4.99	0.058	
UMBRAL1	5	0.058	
UMBRAL1	5.01	0.057	
UMBRAL1	5.02	0.057	
UMBRAL1	5.03	0.057	
UMBRAL1	5.04	0.057	
UMBRAL1	5.05	0.056	
UMBRAL1	5.06	0.056	
UMBRAL1	5.07	0.056	
UMBRAL1	5.08	0.056	
UMBRAL1	5.09	0.056	
UMBRAL1	5.1	0.055	
UMBRAL1	5.11	0.055	
UMBRAL1	5.12	0.055	
UMBRAL1	5.13	0.055	
UMBRAL1	5.14	0.055	
UMBRAL1	5.15	0.054	
UMBRAL1	5.16	0.054	
UMBRAL1	5.17	0.054	
UMBRAL1	5.18	0.054	
UMBRAL1	5.19	0.053	
UMBRAL1	5.2	0.053	
UMBRAL1	5.21	0.053	
UMBRAL1	5.22	0.053	
UMBRAL1	5.23	0.053	
UMBRAL1	5.24	0.052	
UMBRAL1	5.25	0.052	
UMBRAL1	5.26	0.052	
UMBRAL1	5.27	0.052	
UMBRAL1	5.28	0.052	
UMBRAL1	5.29	0.051	
UMBRAL1	5.3	0.051	
UMBRAL1	5.31	0.051	
UMBRAL1	5.32	0.051	
UMBRAL1	5.33	0.051	
UMBRAL1	5.34	0.05	
UMBRAL1	5.35	0.05	
UMBRAL1	5.36	0.05	
UMBRAL1	5.37	0.05	
UMBRAL1	5.38	0.05	
UMBRAL1	5.39	0.05	
UMBRAL1	5.4	0.049	
UMBRAL1	5.41	0.049	
UMBRAL1	5.42	0.049	
UMBRAL1	5.43	0.049	
UMBRAL1	5.44	0.049	
UMBRAL1	5.45	0.048	
UMBRAL1	5.46	0.048	
UMBRAL1	5.47	0.048	
UMBRAL1	5.48	0.048	
UMBRAL1	5.49	0.048	
UMBRAL1	5.5	0.048	
UMBRAL1	5.51	0.047	
UMBRAL1	5.52	0.047	
UMBRAL1	5.53	0.047	
UMBRAL1	5.54	0.047	
UMBRAL1	5.55	0.047	
UMBRAL1	5.56	0.047	
UMBRAL1	5.57	0.046	
UMBRAL1	5.58	0.046	

Name	Period sec	Acceleration	Damping %
UMBRAL1	5.59	0.046	
UMBRAL1	5.6	0.046	
UMBRAL1	5.61	0.046	
UMBRAL1	5.62	0.046	
UMBRAL1	5.63	0.045	
UMBRAL1	5.64	0.045	
UMBRAL1	5.65	0.045	
UMBRAL1	5.66	0.045	
UMBRAL1	5.67	0.045	
UMBRAL1	5.68	0.045	
UMBRAL1	5.69	0.044	
UMBRAL1	5.7	0.044	
UMBRAL1	5.71	0.044	
UMBRAL1	5.72	0.044	
UMBRAL1	5.73	0.044	
UMBRAL1	5.74	0.044	
UMBRAL1	5.75	0.044	
UMBRAL1	5.76	0.043	
UMBRAL1	5.77	0.043	
UMBRAL1	5.78	0.043	
UMBRAL1	5.79	0.043	
UMBRAL1	5.8	0.043	
UMBRAL1	5.81	0.043	
UMBRAL1	5.82	0.043	
UMBRAL1	5.83	0.042	
UMBRAL1	5.84	0.042	
UMBRAL1	5.85	0.042	
UMBRAL1	5.86	0.042	
UMBRAL1	5.87	0.042	
UMBRAL1	5.88	0.042	
UMBRAL1	5.89	0.042	
UMBRAL1	5.9	0.041	
UMBRAL1	5.91	0.041	
UMBRAL1	5.92	0.041	
UMBRAL1	5.93	0.041	
UMBRAL1	5.94	0.041	
UMBRAL1	5.95	0.041	
UMBRAL1	5.96	0.041	
UMBRAL1	5.97	0.04	
UMBRAL1	5.98	0.04	
UMBRAL1	5.99	0.04	
UMBRAL1	6	0.04	
UMBRAL1	6.01	0.04	
UMBRAL1	6.02	0.04	
UMBRAL1	6.03	0.04	
UMBRAL1	6.04	0.039	
UMBRAL1	6.05	0.039	
UMBRAL1	6.06	0.039	
UMBRAL1	6.07	0.039	
UMBRAL1	6.08	0.039	
UMBRAL1	6.09	0.039	
UMBRAL1	6.1	0.039	
UMBRAL1	6.11	0.039	
UMBRAL1	6.12	0.038	
UMBRAL1	6.13	0.038	
UMBRAL1	6.14	0.038	
UMBRAL1	6.15	0.038	
UMBRAL1	6.16	0.038	
UMBRAL1	6.17	0.038	
UMBRAL1	6.18	0.038	

Name	Period sec	Acceleration	Damping %
UMBRAL1	6.19	0.038	
UMBRAL1	6.2	0.037	
UMBRAL1	6.21	0.037	
UMBRAL1	6.22	0.037	
UMBRAL1	6.23	0.037	
UMBRAL1	6.24	0.037	
UMBRAL1	6.25	0.037	
UMBRAL1	6.26	0.037	
UMBRAL1	6.27	0.037	
UMBRAL1	6.28	0.037	
UMBRAL1	6.29	0.036	
UMBRAL1	6.3	0.036	
UMBRAL1	6.31	0.036	
UMBRAL1	6.32	0.036	
UMBRAL1	6.33	0.036	
UMBRAL1	6.34	0.036	
UMBRAL1	6.35	0.036	
UMBRAL1	6.36	0.036	
UMBRAL1	6.37	0.035	
UMBRAL1	6.38	0.035	
UMBRAL1	6.39	0.035	
UMBRAL1	6.4	0.035	
UMBRAL1	6.41	0.035	
UMBRAL1	6.42	0.035	
UMBRAL1	6.43	0.035	
UMBRAL1	6.44	0.035	
UMBRAL1	6.45	0.035	
UMBRAL1	6.46	0.035	
UMBRAL1	6.47	0.034	
UMBRAL1	6.48	0.034	
UMBRAL1	6.49	0.034	
UMBRAL1	6.5	0.034	
UMBRAL1	6.51	0.034	
UMBRAL1	6.52	0.034	
UMBRAL1	6.53	0.034	
UMBRAL1	6.54	0.034	
UMBRAL1	6.55	0.034	
UMBRAL1	6.56	0.033	
UMBRAL1	6.57	0.033	
UMBRAL1	6.58	0.033	
UMBRAL1	6.59	0.033	
UMBRAL1	6.6	0.033	
UMBRAL1	6.61	0.033	
UMBRAL1	6.62	0.033	
UMBRAL1	6.63	0.033	
UMBRAL1	6.64	0.033	
UMBRAL1	6.65	0.033	
UMBRAL1	6.66	0.032	
UMBRAL1	6.67	0.032	
UMBRAL1	6.68	0.032	
UMBRAL1	6.69	0.032	
UMBRAL1	6.7	0.032	
UMBRAL1	6.71	0.032	
UMBRAL1	6.72	0.032	
UMBRAL1	6.73	0.032	
UMBRAL1	6.74	0.032	
UMBRAL1	6.75	0.032	
UMBRAL1	6.76	0.032	
UMBRAL1	6.77	0.031	
UMBRAL1	6.78	0.031	



Name	Period sec	Acceleration	Damping %
UMBRAL1	6.79	0.031	
UMBRAL1	6.8	0.031	
UMBRAL1	6.81	0.031	
UMBRAL1	6.82	0.031	
UMBRAL1	6.83	0.031	
UMBRAL1	6.84	0.031	
UMBRAL1	6.85	0.031	
UMBRAL1	6.86	0.031	
UMBRAL1	6.87	0.031	
UMBRAL1	6.88	0.03	
UMBRAL1	6.89	0.03	
UMBRAL1	6.9	0.03	
UMBRAL1	6.91	0.03	
UMBRAL1	6.92	0.03	
UMBRAL1	6.93	0.03	
UMBRAL1	6.94	0.03	
UMBRAL1	6.95	0.03	
UMBRAL1	6.96	0.03	
UMBRAL1	6.97	0.03	
UMBRAL1	6.98	0.03	
UMBRAL1	6.99	0.029	
UMBRAL1	7	0.029	
UMBRAL1	7.01	0.029	
UMBRAL1	7.02	0.029	
UMBRAL1	7.03	0.029	
UMBRAL1	7.04	0.029	
UMBRAL1	7.05	0.029	
UMBRAL1	7.06	0.029	
UMBRAL1	7.07	0.029	
UMBRAL1	7.08	0.029	
UMBRAL1	7.09	0.029	
UMBRAL1	7.1	0.029	
UMBRAL1	7.11	0.028	
UMBRAL1	7.12	0.028	
UMBRAL1	7.13	0.028	
UMBRAL1	7.14	0.028	
UMBRAL1	7.15	0.028	
UMBRAL1	7.16	0.028	
UMBRAL1	7.17	0.028	
UMBRAL1	7.18	0.028	
UMBRAL1	7.19	0.028	
UMBRAL1	7.2	0.028	
UMBRAL1	7.21	0.028	
UMBRAL1	7.22	0.028	
UMBRAL1	7.23	0.028	
UMBRAL1	7.24	0.027	
UMBRAL1	7.25	0.027	
UMBRAL1	7.26	0.027	
UMBRAL1	7.27	0.027	
UMBRAL1	7.28	0.027	
UMBRAL1	7.29	0.027	
UMBRAL1	7.3	0.027	
UMBRAL1	7.31	0.027	
UMBRAL1	7.32	0.027	
UMBRAL1	7.33	0.027	
UMBRAL1	7.34	0.027	
UMBRAL1	7.35	0.027	
UMBRAL1	7.36	0.027	
UMBRAL1	7.37	0.027	
UMBRAL1	7.38	0.026	

Name	Period sec	Acceleration	Damping %
UMBRAL1	7.39	0.026	
UMBRAL1	7.4	0.026	
UMBRAL1	7.41	0.026	
UMBRAL1	7.42	0.026	
UMBRAL1	7.43	0.026	
UMBRAL1	7.44	0.026	
UMBRAL1	7.45	0.026	
UMBRAL1	7.46	0.026	
UMBRAL1	7.47	0.026	
UMBRAL1	7.48	0.026	
UMBRAL1	7.49	0.026	
UMBRAL1	7.5	0.026	

4.4 Load Cases

Table 4.5 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.6 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER05	EY	0.3		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EX	0.3		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER07	EY	0.3		No
DER08	D	0.9	Linear Add	No
DER08	EX	0.3		No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	L	0.75		No
CIM12	G	0.75		No
CIM13	D	1	Linear Add	No
CIM13	L	0.75		No
CIM13	G	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	L	0.75		No
CIM14	G	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	419.372	698.3477	-1719.4252	0	0	0	0
L	0	0	0	0	0	0	0	0	0
LR	0	0	72.98	90.4889	-299.218	0	0	0	0
EX Max	557.7992	0	0	0	1818.7838	2655.0225	0	0	0
EY Max	0	555.0755	0	1808.8554	0	2275.8095	0	0	0
DISX Max	165.9874	0	0	0	541.2257	790.0699	0	0	0
DISY Max	0	165.2832	0	538.6175	0	677.661	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	86.92	252.0092	-356.372	0	0	0	0
DERUX Max	76.8427	0	0	0	250.5909	320.2972	0	0	0
DERUY Max	0	80.485	0	262.281	0	329.9886	0	0	0
COMB1	0	0	587.1208	977.6868	-2407.1953	0	0	0	0
COMB2	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
COMB3	0	0	620.0144	982.7995	-2542.059	0	0	0	0
COMB4	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
COMB5 Max	165.9874	49.585	503.2464	999.6025	-1522.0846	993.3682	0	0	0
COMB5 Min	-165.9874	-49.585	503.2464	676.432	-2604.5359	-993.3682	0	0	0
COMB6 Max	49.7962	165.2832	503.2464	1376.6348	-1900.9425	914.682	0	0	0
COMB6 Min	-49.7962	-165.2832	503.2464	299.3998	-2225.6779	-914.682	0	0	0
COMB7 Max	49.7962	165.2832	377.4348	1167.1304	-1385.115	914.682	0	0	0
COMB7 Min	-49.7962	-165.2832	377.4348	89.8955	-1709.8504	-914.682	0	0	0
COMB8 Max	165.9874	49.585	377.4348	790.0982	-1006.257	993.3682	0	0	0
COMB8 Min	-165.9874	-49.585	377.4348	466.9277	-2088.7084	-993.3682	0	0	0
ENVE Max	165.9874	165.2832	620.0144	1376.6348	-1006.257	993.3682	0	0	0
ENVE Min	-165.9874	-165.2832	377.4348	89.8955	-2604.5359	-993.3682	0	0	0
CIM01	0	0	419.372	698.3477	-1719.4252	0	0	0	0
CIM02	0	0	419.372	698.3477	-1719.4252	0	0	0	0
CIM03	0	0	492.352	788.8366	-2018.6432	0	0	0	0
CIM04	0	0	474.107	766.2144	-1943.8387	0	0	0	0
CIM05 Max	116.1912	34.7095	419.372	811.4574	-1340.5672	695.3578	0	0	0
CIM05 Min	-116.1912	-34.7095	419.372	585.2381	-2098.2832	-695.3578	0	0	0
CIM06 Max	34.8574	115.6982	419.372	1075.38	-1605.7678	640.2774	0	0	0
CIM06 Min	-34.8574	-115.6982	419.372	321.3155	-1833.0826	-640.2774	0	0	0
CIM07 Max	87.9733	26.4453	474.107	852.3932	-1656.9891	527.1628	0	0	0
CIM07 Min	-87.9733	-26.4453	474.107	680.0356	-2230.6883	-527.1628	0	0	0
CIM08 Max	26.558	87.6001	474.107	1051.6817	-1857.2426	485.5715	0	0	0
CIM08 Min	-26.558	-87.6001	474.107	480.7471	-2030.4348	-485.5715	0	0	0
DER01	0	0	587.1208	977.6868	-2407.1953	0	0	0	0
DER02	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
DER03	0	0	620.0144	982.7995	-2542.059	0	0	0	0
DER04	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
DER05 Max	557.7992	166.5226	503.2464	1380.6739	-244.5265	3337.7653	0	0	0
DER05 Min	-557.7992	-166.5226	503.2464	295.3607	-3882.094	-3337.7653	0	0	0
DER06 Max	167.3398	555.0755	503.2464	2646.8727	-1517.6751	3072.3163	0	0	0
DER06 Min	-167.3398	-555.0755	503.2464	-970.8381	-2608.9454	-3072.3163	0	0	0
DER07 Max	557.7992	166.5226	377.4348	1171.1696	271.3011	3337.7653	0	0	0
DER07 Min	-557.7992	-166.5226	377.4348	85.8564	-3366.2664	-3337.7653	0	0	0
DER08 Max	167.3398	555.0755	377.4348	2437.3683	-1001.8476	3072.3163	0	0	0
DER08 Min	-167.3398	-555.0755	377.4348	-1180.3424	-2093.1178	-3072.3163	0	0	0
DERUD01	0	0	587.1208	977.6868	-2407.1953	0	0	0	0
DERUD02	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
DERUD03	0	0	620.0144	982.7995	-2542.059	0	0	0	0
DERUD04	0	0	539.7364	883.2617	-2212.9192	0	0	0	0
DERUD05 Max	76.8427	0	503.2464	838.0173	-1812.7193	320.2972	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-76.8427	0	503.2464	838.0173	-2313.9012	-320.2972	0	0	0
DERUD06 Max	0	80.485	503.2464	1100.2983	-2063.3102	329.9886	0	0	0
DERUD06 Min	0	-80.485	503.2464	575.7363	-2063.3102	-329.9886	0	0	0
DERUD07 Max	76.8427	0	377.4348	628.513	-1296.8917	320.2972	0	0	0
DERUD07 Min	-76.8427	0	377.4348	628.513	-1798.0736	-320.2972	0	0	0
DERUD08 Max	0	80.485	377.4348	890.794	-1547.4827	329.9886	0	0	0
DERUD08 Min	0	-80.485	377.4348	366.2319	-1547.4827	-329.9886	0	0	0
CIM09 Max	116.1912	34.7095	251.6232	532.1183	-652.7971	695.3578	0	0	0
CIM09 Min	-116.1912	-34.7095	251.6232	305.899	-1410.5131	-695.3578	0	0	0
CIM10 Max	34.8574	115.6982	251.6232	796.0409	-917.9977	640.2774	0	0	0
CIM10 Min	-34.8574	-115.6982	251.6232	41.9764	-1145.3125	-640.2774	0	0	0
CIM11	0	0	506.292	950.357	-2075.7972	0	0	0	0
CIM12	0	0	484.562	887.3547	-1986.7042	0	0	0	0
CIM13 Max	87.9733	26.4453	484.562	973.5335	-1699.8546	527.1628	0	0	0
CIM13 Min	-87.9733	-26.4453	484.562	801.1759	-2273.5538	-527.1628	0	0	0
CIM14 Max	26.558	87.6001	484.562	1172.8219	-1900.1081	485.5715	0	0	0
CIM14 Min	-26.558	-87.6001	484.562	601.8874	-2073.3003	-485.5715	0	0	0
CIM15	0	0	251.6232	419.0086	-1031.6551	0	0	0	0
COMB9	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
COMB10	0	0	642.3184	1241.2321	-2633.5054	0	0	0	0
COMB11	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
DER09	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
DER10	0	0	642.3184	1241.2321	-2633.5054	0	0	0	0
DER11	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
DERUD09	0	0	546.7064	964.0219	-2241.4962	0	0	0	0
DERUD10	0	0	642.3184	1241.2321	-2633.5054	0	0	0	0
DERUD11	0	0	546.7064	964.0219	-2241.4962	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	29974	29974	4.1	-0.7742	29974	29974	4.1	-0.7742	4.1	3.1246

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.4	0	1	4.1	-0.7742	3.25
N1	D1	L	0	0	0	1	4.1	-0.7742	3.25
N1	D1	LR	0	-0.3	0	1	4.1	-0.7742	3.25
N1	D1	EX Max	19.6	0	0.002038	1	4.1	-0.7742	3.25
N1	D1	EY Max	0	12.3	0	1	4.1	-0.7742	3.25
N1	D1	DISX Max	5.8	0	0.000606	1	4.1	-0.7742	3.25
N1	D1	DISY Max	0	3.7	0	1	4.1	-0.7742	3.25
N1	D1	W	0	0	0	1	4.1	-0.7742	3.25
N1	D1	G	0	-0.1	0	1	4.1	-0.7742	3.25
N1	D1	DERUX Max	2.8	0	0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUY Max	0	1.8	0	1	4.1	-0.7742	3.25
N1	D1	COMB1	0	-2	0	1	4.1	-0.7742	3.25
N1	D1	COMB2	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	COMB3	0	-2.2	0	1	4.1	-0.7742	3.25
N1	D1	COMB4	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	COMB5 Max	5.8	-0.6	0.000606	1	4.1	-0.7742	3.25
N1	D1	COMB5 Min	-5.8	-2.8	-0.000606	1	4.1	-0.7742	3.25
N1	D1	COMB6 Max	1.7	2	0.000182	1	4.1	-0.7742	3.25
N1	D1	COMB6 Min	-1.7	-5.4	-0.000182	1	4.1	-0.7742	3.25
N1	D1	COMB7 Max	1.7	2.4	0.000182	1	4.1	-0.7742	3.25
N1	D1	COMB7 Min	-1.7	-5	-0.000182	1	4.1	-0.7742	3.25
N1	D1	COMB8 Max	5.8	-0.2	0.000606	1	4.1	-0.7742	3.25
N1	D1	COMB8 Min	-5.8	-2.4	-0.000606	1	4.1	-0.7742	3.25
N1	D1	ENVE Max	5.8	2.4	0.000606	1	4.1	-0.7742	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	ENVE Min	-5.8	-5.4	-0.000606	1	4.1	-0.7742	3.25
N1	D1	CIM01	0	-1.4	0	1	4.1	-0.7742	3.25
N1	D1	CIM02	0	-1.4	0	1	4.1	-0.7742	3.25
N1	D1	CIM03	0	-1.7	0	1	4.1	-0.7742	3.25
N1	D1	CIM04	0	-1.7	0	1	4.1	-0.7742	3.25
N1	D1	CIM05 Max	4.1	-0.7	0.000425	1	4.1	-0.7742	3.25
N1	D1	CIM05 Min	-4.1	-2.2	-0.000425	1	4.1	-0.7742	3.25
N1	D1	CIM06 Max	1.2	1.1	0.000127	1	4.1	-0.7742	3.25
N1	D1	CIM06 Min	-1.2	-4	-0.000127	1	4.1	-0.7742	3.25
N1	D1	CIM07 Max	3.1	-1.1	0.000321	1	4.1	-0.7742	3.25
N1	D1	CIM07 Min	-3.1	-2.2	-0.000321	1	4.1	-0.7742	3.25
N1	D1	CIM08 Max	0.9	0.3	9.7E-05	1	4.1	-0.7742	3.25
N1	D1	CIM08 Min	-0.9	-3.6	-9.7E-05	1	4.1	-0.7742	3.25
N1	D1	DER01	0	-2	0	1	4.1	-0.7742	3.25
N1	D1	DER02	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DER03	0	-2.2	0	1	4.1	-0.7742	3.25
N1	D1	DER04	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DER05 Max	19.6	2	0.002038	1	4.1	-0.7742	3.25
N1	D1	DER05 Min	-19.6	-5.4	-0.002038	1	4.1	-0.7742	3.25
N1	D1	DER06 Max	5.9	10.6	0.000611	1	4.1	-0.7742	3.25
N1	D1	DER06 Min	-5.9	-14	-0.000611	1	4.1	-0.7742	3.25
N1	D1	DER07 Max	19.6	2.4	0.002038	1	4.1	-0.7742	3.25
N1	D1	DER07 Min	-19.6	-5	-0.002038	1	4.1	-0.7742	3.25
N1	D1	DER08 Max	5.9	11.1	0.000611	1	4.1	-0.7742	3.25
N1	D1	DER08 Min	-5.9	-13.6	-0.000611	1	4.1	-0.7742	3.25
N1	D1	DERUD01	0	-2	0	1	4.1	-0.7742	3.25
N1	D1	DERUD02	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DERUD03	0	-2.2	0	1	4.1	-0.7742	3.25
N1	D1	DERUD04	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DERUD05 Max	2.8	-1.7	0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUD05 Min	-2.8	-1.7	-0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUD06 Max	0	0.1	0	1	4.1	-0.7742	3.25
N1	D1	DERUD06 Min	0	-3.5	0	1	4.1	-0.7742	3.25
N1	D1	DERUD07 Max	2.8	-1.3	0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUD07 Min	-2.8	-1.3	-0.000285	1	4.1	-0.7742	3.25
N1	D1	DERUD08 Max	0	0.5	0	1	4.1	-0.7742	3.25
N1	D1	DERUD08 Min	0	-3.1	0	1	4.1	-0.7742	3.25
N1	D1	CIM09 Max	4.1	-0.1	0.000425	1	4.1	-0.7742	3.25
N1	D1	CIM09 Min	-4.1	-1.6	-0.000425	1	4.1	-0.7742	3.25
N1	D1	CIM10 Max	1.2	1.7	0.000127	1	4.1	-0.7742	3.25
N1	D1	CIM10 Min	-1.2	-3.4	-0.000127	1	4.1	-0.7742	3.25
N1	D1	CIM11	0	-1.6	0	1	4.1	-0.7742	3.25
N1	D1	CIM12	0	-1.5	0	1	4.1	-0.7742	3.25
N1	D1	CIM13 Max	3.1	-0.9	0.000321	1	4.1	-0.7742	3.25
N1	D1	CIM13 Min	-3.1	-2.1	-0.000321	1	4.1	-0.7742	3.25
N1	D1	CIM14 Max	0.9	0.4	9.7E-05	1	4.1	-0.7742	3.25
N1	D1	CIM14 Min	-0.9	-3.5	-9.7E-05	1	4.1	-0.7742	3.25
N1	D1	CIM15	0	-0.9	0	1	4.1	-0.7742	3.25
N1	D1	COMB9	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	COMB10	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	COMB11	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	DER09	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	DER10	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DER11	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	DERUD09	0	-1.8	0	1	4.1	-0.7742	3.25
N1	D1	DERUD10	0	-1.9	0	1	4.1	-0.7742	3.25
N1	D1	DERUD11	0	-1.8	0	1	4.1	-0.7742	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements  
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Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.4	1.4	1
N1	LR	Y	0.3	0.3	1
N1	EX Max	X	18.2	18.2	1
N1	EX Max	Y	8.4	8.4	1
N1	EY Max	Y	12.3	12.3	1
N1	DISX Max	X	5.4	5.4	1
N1	DISX Max	Y	2.5	2.5	1
N1	DISY Max	Y	3.7	3.7	1
N1	G	Y	0.1	0.1	1
N1	DERUX Max	X	2.6	2.6	1
N1	DERUX Max	Y	1.2	1.2	1
N1	DERUY Max	Y	1.8	1.8	1
N1	COMB1	Y	2	2	1
N1	COMB2	Y	1.9	1.9	1
N1	COMB3	Y	2.2	2.2	1
N1	COMB4	Y	1.9	1.9	1
N1	COMB5 Max	X	5.4	5.4	1
N1	COMB5 Max	Y	1.9	1.9	1
N1	COMB5 Min	X	5.4	5.4	1
N1	COMB5 Min	Y	5.3	5.3	1
N1	COMB6 Max	X	1.6	1.6	1
N1	COMB6 Max	Y	2.7	2.7	1
N1	COMB6 Min	X	1.6	1.6	1
N1	COMB6 Min	Y	6.1	6.1	1
N1	COMB7 Max	X	1.6	1.6	1
N1	COMB7 Max	Y	3.1	3.1	1
N1	COMB7 Min	X	1.6	1.6	1
N1	COMB7 Min	Y	5.7	5.7	1
N1	COMB8 Max	X	5.4	5.4	1
N1	COMB8 Max	Y	2.3	2.3	1
N1	COMB8 Min	X	5.4	5.4	1
N1	COMB8 Min	Y	4.9	4.9	1
N1	ENVE Max	X	5.4	5.4	1
N1	ENVE Max	Y	3.1	3.1	1
N1	ENVE Min	X	5.4	5.4	1
N1	ENVE Min	Y	6.1	6.1	1
N1	CIM01	Y	1.4	1.4	1
N1	CIM02	Y	1.4	1.4	1
N1	CIM03	Y	1.7	1.7	1
N1	CIM04	Y	1.7	1.7	1
N1	CIM05 Max	X	3.8	3.8	1
N1	CIM05 Max	Y	1.1	1.1	1
N1	CIM05 Min	X	3.8	3.8	1
N1	CIM05 Min	Y	3.9	3.9	1
N1	CIM06 Max	X	1.1	1.1	1
N1	CIM06 Max	Y	1.7	1.7	1
N1	CIM06 Min	X	1.1	1.1	1
N1	CIM06 Min	Y	4.5	4.5	1
N1	CIM07 Max	X	2.9	2.9	1
N1	CIM07 Min	X	2.9	2.9	1
N1	CIM07 Min	Y	3.6	3.6	1
N1	CIM08 Max	X	0.9	0.9	1
N1	CIM08 Max	Y	0.7	0.7	1
N1	CIM08 Min	X	0.9	0.9	1
N1	CIM08 Min	Y	4	4	1
N1	DER01	Y	2	2	1
N1	DER02	Y	1.9	1.9	1
N1	DER03	Y	2.2	2.2	1
N1	DER04	Y	1.9	1.9	1
N1	DER05 Max	X	18.2	18.2	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DER05 Max	Y	10.4	10.4	1
N1	DER05 Min	X	18.2	18.2	1
N1	DER05 Min	Y	13.8	13.8	1
N1	DER06 Max	X	5.5	5.5	1
N1	DER06 Max	Y	13.1	13.1	1
N1	DER06 Min	X	5.5	5.5	1
N1	DER06 Min	Y	16.6	16.6	1
N1	DER07 Max	X	18.2	18.2	1
N1	DER07 Max	Y	10.8	10.8	1
N1	DER07 Min	X	18.2	18.2	1
N1	DER07 Min	Y	13.3	13.3	1
N1	DER08 Max	X	5.5	5.5	1
N1	DER08 Max	Y	13.6	13.6	1
N1	DER08 Min	X	5.5	5.5	1
N1	DER08 Min	Y	16.1	16.1	1
N1	DERUD01	Y	2	2	1
N1	DERUD02	Y	1.9	1.9	1
N1	DERUD03	Y	2.2	2.2	1
N1	DERUD04	Y	1.9	1.9	1
N1	DERUD05 Max	X	2.6	2.6	1
N1	DERUD05 Max	Y	0.5	0.5	1
N1	DERUD05 Min	X	2.6	2.6	1
N1	DERUD05 Min	Y	2.9	2.9	1
N1	DERUD06 Max	Y	0.1	0.1	1
N1	DERUD06 Min	Y	3.5	3.5	1
N1	DERUD07 Max	X	2.6	2.6	1
N1	DERUD07 Min	X	2.6	2.6	1
N1	DERUD07 Min	Y	2.4	2.4	1
N1	DERUD08 Max	Y	0.5	0.5	1
N1	DERUD08 Min	Y	3.1	3.1	1
N1	CIM09 Max	X	3.8	3.8	1
N1	CIM09 Max	Y	1.7	1.7	1
N1	CIM09 Min	X	3.8	3.8	1
N1	CIM09 Min	Y	3.4	3.4	1
N1	CIM10 Max	X	1.1	1.1	1
N1	CIM10 Max	Y	2.2	2.2	1
N1	CIM10 Min	X	1.1	1.1	1
N1	CIM10 Min	Y	3.9	3.9	1
N1	CIM11	Y	1.6	1.6	1
N1	CIM12	Y	1.5	1.5	1
N1	CIM13 Max	X	2.9	2.9	1
N1	CIM13 Max	Y	0.4	0.4	1
N1	CIM13 Min	X	2.9	2.9	1
N1	CIM13 Min	Y	3.4	3.4	1
N1	CIM14 Max	X	0.9	0.9	1
N1	CIM14 Max	Y	0.8	0.8	1
N1	CIM14 Min	X	0.9	0.9	1
N1	CIM14 Min	Y	3.9	3.9	1
N1	CIM15	Y	0.9	0.9	1
N1	COMB9	Y	1.8	1.8	1
N1	COMB10	Y	1.9	1.9	1
N1	COMB11	Y	1.8	1.8	1
N1	DER09	Y	1.8	1.8	1
N1	DER10	Y	1.9	1.9	1
N1	DER11	Y	1.8	1.8	1
N1	DERUD09	Y	1.8	1.8	1
N1	DERUD10	Y	1.9	1.9	1
N1	DERUD11	Y	1.8	1.8	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.000438	3	8.2	0	3.25
N1	LR	Y	9.5E-05	4	8.2	8.2	3.25
N1	EX Max	X	0.005613	3	8.2	0	3.25
N1	EX Max	Y	0.002571	3	8.2	0	3.25
N1	EY Max	Y	0.003797	3	8.2	0	3.25
N1	DISX Max	X	0.00167	3	8.2	0	3.25
N1	DISX Max	Y	0.000765	3	8.2	0	3.25
N1	DISY Max	Y	0.001131	3	8.2	0	3.25
N1	G	Y	5E-05	4	8.2	8.2	3.25
N1	DERUX Max	X	0.000806	3	8.2	0	3.25
N1	DERUX Max	Y	0.000359	3	8.2	0	3.25
N1	DERUY Max	Y	0.000551	3	8.2	0	3.25
N1	COMB1	Y	0.000613	3	8.2	0	3.25
N1	COMB2	Y	0.000572	3	8.2	0	3.25
N1	COMB3	Y	0.000676	3	8.2	0	3.25
N1	COMB4	Y	0.000572	3	8.2	0	3.25
N1	COMB5 Max	X	0.00167	3	8.2	0	3.25
N1	COMB5 Max	Y	0.000579	3	8.2	0	3.25
N1	COMB5 Min	X	0.00167	3	8.2	0	3.25
N1	COMB5 Min	Y	0.001629	3	8.2	0	3.25
N1	COMB6 Max	X	0.000501	3	8.2	0	3.25
N1	COMB6 Max	Y	0.000835	3	8.2	0	3.25
N1	COMB6 Min	X	0.000501	3	8.2	0	3.25
N1	COMB6 Min	Y	0.001885	3	8.2	0	3.25
N1	COMB7 Max	X	0.000501	3	8.2	0	3.25
N1	COMB7 Max	Y	0.000966	3	8.2	0	3.25
N1	COMB7 Min	X	0.000501	3	8.2	0	3.25
N1	COMB7 Min	Y	0.001754	3	8.2	0	3.25
N1	COMB8 Max	X	0.00167	3	8.2	0	3.25
N1	COMB8 Max	Y	0.00071	3	8.2	0	3.25
N1	COMB8 Min	X	0.00167	3	8.2	0	3.25
N1	COMB8 Min	Y	0.001498	3	8.2	0	3.25
N1	ENVE Max	X	0.00167	3	8.2	0	3.25
N1	ENVE Max	Y	0.000966	3	8.2	0	3.25
N1	ENVE Min	X	0.00167	3	8.2	0	3.25
N1	ENVE Min	Y	0.001885	3	8.2	0	3.25
N1	CIM01	Y	0.000438	3	8.2	0	3.25
N1	CIM02	Y	0.000438	3	8.2	0	3.25
N1	CIM03	Y	0.000532	3	8.2	0	3.25
N1	CIM04	Y	0.000508	3	8.2	0	3.25
N1	CIM05 Max	X	0.001169	3	8.2	0	3.25
N1	CIM05 Max	Y	0.000335	3	8.2	0	3.25
N1	CIM05 Min	X	0.001169	3	8.2	0	3.25
N1	CIM05 Min	Y	0.001211	3	8.2	0	3.25
N1	CIM06 Max	X	0.000351	3	8.2	0	3.25
N1	CIM06 Max	Y	0.000514	3	8.2	0	3.25
N1	CIM06 Min	X	0.000351	3	8.2	0	3.25
N1	CIM06 Min	Y	0.00139	3	8.2	0	3.25
N1	CIM07 Max	X	0.000885	3	8.2	0	3.25
N1	CIM07 Max	Y	7.8E-05	3	8.2	0	3.25
N1	CIM07 Min	X	0.000885	3	8.2	0	3.25
N1	CIM07 Min	Y	0.001095	3	8.2	0	3.25
N1	CIM08 Max	X	0.000267	3	8.2	0	3.25
N1	CIM08 Max	Y	0.000213	1	0	0	3.25
N1	CIM08 Min	X	0.000267	3	8.2	0	3.25
N1	CIM08 Min	Y	0.00123	3	8.2	0	3.25
N1	DER01	Y	0.000613	3	8.2	0	3.25
N1	DER02	Y	0.000572	3	8.2	0	3.25
N1	DER03	Y	0.000676	3	8.2	0	3.25
N1	DER04	Y	0.000572	3	8.2	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER05 Max	X	0.005613	3	8.2	0	3.25
N1	DER05 Max	Y	0.003185	3	8.2	0	3.25
N1	DER05 Min	X	0.005613	3	8.2	0	3.25
N1	DER05 Min	Y	0.004235	3	8.2	0	3.25
N1	DER06 Max	X	0.001684	3	8.2	0	3.25
N1	DER06 Max	Y	0.004043	3	8.2	0	3.25
N1	DER06 Min	X	0.001684	3	8.2	0	3.25
N1	DER06 Min	Y	0.005093	3	8.2	0	3.25
N1	DER07 Max	X	0.005613	3	8.2	0	3.25
N1	DER07 Max	Y	0.003316	3	8.2	0	3.25
N1	DER07 Min	X	0.005613	3	8.2	0	3.25
N1	DER07 Min	Y	0.004104	3	8.2	0	3.25
N1	DER08 Max	X	0.001684	3	8.2	0	3.25
N1	DER08 Max	Y	0.004174	3	8.2	0	3.25
N1	DER08 Min	X	0.001684	3	8.2	0	3.25
N1	DER08 Min	Y	0.004962	3	8.2	0	3.25
N1	DERUD01	Y	0.000613	3	8.2	0	3.25
N1	DERUD02	Y	0.000572	3	8.2	0	3.25
N1	DERUD03	Y	0.000676	3	8.2	0	3.25
N1	DERUD04	Y	0.000572	3	8.2	0	3.25
N1	DERUD05 Max	X	0.000806	3	8.2	0	3.25
N1	DERUD05 Max	Y	0.000169	2	0	8.2	3.25
N1	DERUD05 Min	X	0.000806	3	8.2	0	3.25
N1	DERUD05 Min	Y	0.000884	3	8.2	0	3.25
N1	DERUD06 Max	Y	2.5E-05	1	0	0	3.25
N1	DERUD06 Min	Y	0.001076	3	8.2	0	3.25
N1	DERUD07 Max	X	0.000806	3	8.2	0	3.25
N1	DERUD07 Min	X	0.000806	3	8.2	0	3.25
N1	DERUD07 Min	Y	0.000753	3	8.2	0	3.25
N1	DERUD08 Max	Y	0.000157	1	0	0	3.25
N1	DERUD08 Min	Y	0.000944	3	8.2	0	3.25
N1	CIM09 Max	X	0.001169	3	8.2	0	3.25
N1	CIM09 Max	Y	0.00051	3	8.2	0	3.25
N1	CIM09 Min	X	0.001169	3	8.2	0	3.25
N1	CIM09 Min	Y	0.001035	3	8.2	0	3.25
N1	CIM10 Max	X	0.000351	3	8.2	0	3.25
N1	CIM10 Max	Y	0.000689	3	8.2	0	3.25
N1	CIM10 Min	X	0.000351	3	8.2	0	3.25
N1	CIM10 Min	Y	0.001215	3	8.2	0	3.25
N1	CIM11	Y	0.000485	4	8.2	8.2	3.25
N1	CIM12	Y	0.000473	4	8.2	8.2	3.25
N1	CIM13 Max	X	0.000885	3	8.2	0	3.25
N1	CIM13 Max	Y	0.000115	3	8.2	0	3.25
N1	CIM13 Min	X	0.000885	3	8.2	0	3.25
N1	CIM13 Min	Y	0.001058	3	8.2	0	3.25
N1	CIM14 Max	X	0.000267	3	8.2	0	3.25
N1	CIM14 Max	Y	0.00025	1	0	0	3.25
N1	CIM14 Min	X	0.000267	3	8.2	0	3.25
N1	CIM14 Min	Y	0.001193	3	8.2	0	3.25
N1	CIM15	Y	0.000263	3	8.2	0	3.25
N1	COMB9	Y	0.000548	3	8.2	0	3.25
N1	COMB10	Y	0.000602	4	8.2	8.2	3.25
N1	COMB11	Y	0.000548	3	8.2	0	3.25
N1	DER09	Y	0.000548	3	8.2	0	3.25
N1	DER10	Y	0.000602	4	8.2	8.2	3.25
N1	DER11	Y	0.000548	3	8.2	0	3.25
N1	DERUD09	Y	0.000548	3	8.2	0	3.25
N1	DERUD10	Y	0.000602	4	8.2	8.2	3.25
N1	DERUD11	Y	0.000548	3	8.2	0	3.25

Table 5.6 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	370.3672	0	0	0	497.9891	-1518.5055
N1	D	Bottom	419.372	0	0	0	698.3477	-1719.4252
N1	L	Top	0	0	0	0	0	0
N1	L	Bottom	0	0	0	0	0	0
N1	LR	Top	72.98	0	0	0	90.6101	-299.218
N1	LR	Bottom	72.98	0	0	0	90.4889	-299.218
N1	EX Max	Top	0	557.7992	0	2655.0225	0	0.0008
N1	EX Max	Bottom	0	557.7992	0	2655.0225	0	1818.7838
N1	EY Max	Top	0	0	555.0755	2275.8095	0.0006	0
N1	EY Max	Bottom	0	0	555.0755	2275.8095	1808.8554	0
N1	DISX Max	Top	0	165.9874	0	790.0699	0	0.0002
N1	DISX Max	Bottom	0	165.9874	0	790.0699	0	541.2257
N1	DISY Max	Top	0	0	165.2832	677.661	0.0002	0
N1	DISY Max	Bottom	0	0	165.2832	677.661	538.6175	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	86.92	0	0	0	252.0681	-356.372
N1	G	Bottom	86.92	0	0	0	252.0092	-356.372
N1	DERUX Max	Top	0	76.8427	0	320.2972	0	0.0001
N1	DERUX Max	Bottom	0	76.8427	0	320.2972	0	250.5909
N1	DERUY Max	Top	0	0	80.485	329.9886	0.0001	0
N1	DERUY Max	Bottom	0	0	80.485	329.9886	262.281	0
N1	COMB1	Top	518.5141	0	0	0	697.1847	-2125.9077
N1	COMB1	Bottom	587.1208	0	0	0	977.6868	-2407.1953
N1	COMB2	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	COMB2	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	COMB3	Top	561.2086	0	0	0	742.5631	-2300.9554
N1	COMB3	Bottom	620.0144	0	0	0	982.7995	-2542.059
N1	COMB4	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	COMB4	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	COMB5 Max	Top	444.4406	165.9874	49.585	993.3682	597.5869	-1822.2064
N1	COMB5 Max	Bottom	503.2464	165.9874	49.585	993.3682	999.6025	-1522.0846
N1	COMB5 Min	Top	444.4406	-165.9874	-49.585	-993.3682	597.5868	-1822.2069
N1	COMB5 Min	Bottom	503.2464	-165.9874	-49.585	-993.3682	676.432	-2604.5359
N1	COMB6 Max	Top	444.4406	49.7962	165.2832	914.682	597.587	-1822.2066
N1	COMB6 Max	Bottom	503.2464	49.7962	165.2832	914.682	1376.6348	-1900.9425
N1	COMB6 Min	Top	444.4406	-49.7962	-165.2832	-914.682	597.5867	-1822.2067
N1	COMB6 Min	Bottom	503.2464	-49.7962	-165.2832	-914.682	299.3998	-2225.6779
N1	COMB7 Max	Top	333.3305	49.7962	165.2832	914.682	448.1903	-1366.6549
N1	COMB7 Max	Bottom	377.4348	49.7962	165.2832	914.682	1167.1304	-1385.115
N1	COMB7 Min	Top	333.3305	-49.7962	-165.2832	-914.682	448.19	-1366.655
N1	COMB7 Min	Bottom	377.4348	-49.7962	-165.2832	-914.682	89.8955	-1709.8504
N1	COMB8 Max	Top	333.3305	165.9874	49.585	993.3682	448.1902	-1366.6547
N1	COMB8 Max	Bottom	377.4348	165.9874	49.585	993.3682	790.0982	-1006.257
N1	COMB8 Min	Top	333.3305	-165.9874	-49.585	-993.3682	448.1901	-1366.6552
N1	COMB8 Min	Bottom	377.4348	-165.9874	-49.585	-993.3682	466.9277	-2088.7084
N1	ENVE Max	Top	561.2086	165.9874	165.2832	993.3682	742.5631	-1366.6547
N1	ENVE Max	Bottom	620.0144	165.9874	165.2832	993.3682	1376.6348	-1006.257
N1	ENVE Min	Top	333.3305	-165.9874	-165.2832	-993.3682	448.19	-2300.9554
N1	ENVE Min	Bottom	377.4348	-165.9874	-165.2832	-993.3682	89.8955	-2604.5359
N1	CIM01	Top	370.3672	0	0	0	497.9891	-1518.5055
N1	CIM01	Bottom	419.372	0	0	0	698.3477	-1719.4252
N1	CIM02	Top	370.3672	0	0	0	497.9891	-1518.5055
N1	CIM02	Bottom	419.372	0	0	0	698.3477	-1719.4252
N1	CIM03	Top	443.3472	0	0	0	588.5992	-1817.7235
N1	CIM03	Bottom	492.352	0	0	0	788.8366	-2018.6432
N1	CIM04	Top	425.1022	0	0	0	565.9467	-1742.919
N1	CIM04	Bottom	474.107	0	0	0	766.2144	-1943.8387
N1	CIM05 Max	Top	370.3672	116.1912	34.7095	695.3578	497.9891	-1518.5054

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM05 Max	Bottom	419.372	116.1912	34.7095	695.3578	811.4574	-1340.5672
N1	CIM05 Min	Top	370.3672	-116.1912	-34.7095	-695.3578	497.989	-1518.5057
N1	CIM05 Max	Bottom	419.372	-116.1912	-34.7095	-695.3578	585.2381	-2098.2832
N1	CIM06 Max	Top	370.3672	34.8574	115.6982	640.2774	497.9892	-1518.5055
N1	CIM06 Max	Bottom	419.372	34.8574	115.6982	640.2774	1075.38	-1605.7678
N1	CIM06 Min	Top	370.3672	-34.8574	-115.6982	-640.2774	497.9889	-1518.5056
N1	CIM06 Min	Bottom	419.372	-34.8574	-115.6982	-640.2774	321.3155	-1833.0826
N1	CIM07 Max	Top	425.1022	87.9733	26.4453	527.1628	565.9467	-1742.9189
N1	CIM07 Max	Bottom	474.107	87.9733	26.4453	527.1628	852.3932	-1656.9891
N1	CIM07 Min	Top	425.1022	-87.9733	-26.4453	-527.1628	565.9466	-1742.9191
N1	CIM07 Min	Bottom	474.107	-87.9733	-26.4453	-527.1628	680.0356	-2230.6883
N1	CIM08 Max	Top	425.1022	26.558	87.6001	485.5715	565.9468	-1742.919
N1	CIM08 Max	Bottom	474.107	26.558	87.6001	485.5715	1051.6817	-1857.2426
N1	CIM08 Min	Top	425.1022	-26.558	-87.6001	-485.5715	565.9466	-1742.9191
N1	CIM08 Min	Bottom	474.107	-26.558	-87.6001	-485.5715	480.7471	-2030.4348
N1	DER01	Top	518.5141	0	0	0	697.1847	-2125.9077
N1	DER01	Bottom	587.1208	0	0	0	977.6868	-2407.1953
N1	DER02	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	DER02	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	DER03	Top	561.2086	0	0	0	742.5631	-2300.9554
N1	DER03	Bottom	620.0144	0	0	0	982.7995	-2542.059
N1	DER04	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	DER04	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	DER05 Max	Top	444.4406	557.7992	166.5226	3337.7653	597.587	-1822.2059
N1	DER05 Max	Bottom	503.2464	557.7992	166.5226	3337.7653	1380.6739	-244.5265
N1	DER05 Min	Top	444.4406	-557.7992	-166.5226	-3337.7653	597.5867	-1822.2074
N1	DER05 Min	Bottom	503.2464	-557.7992	-166.5226	-3337.7653	295.3607	-3882.094
N1	DER06 Max	Top	444.4406	167.3398	555.0755	3072.3163	597.5875	-1822.2064
N1	DER06 Max	Bottom	503.2464	167.3398	555.0755	3072.3163	2646.8727	-1517.6751
N1	DER06 Min	Top	444.4406	-167.3398	-555.0755	-3072.3163	597.5863	-1822.2069
N1	DER06 Min	Bottom	503.2464	-167.3398	-555.0755	-3072.3163	-970.8381	-2608.9454
N1	DER07 Max	Top	333.3305	557.7992	166.5226	3337.7653	448.1903	-1366.6542
N1	DER07 Max	Bottom	377.4348	557.7992	166.5226	3337.7653	1171.1696	271.3011
N1	DER07 Min	Top	333.3305	-557.7992	-166.5226	-3337.7653	448.19	-1366.6557
N1	DER07 Min	Bottom	377.4348	-557.7992	-166.5226	-3337.7653	85.8564	-3366.2664
N1	DER08 Max	Top	333.3305	167.3398	555.0755	3072.3163	448.1907	-1366.6547
N1	DER08 Max	Bottom	377.4348	167.3398	555.0755	3072.3163	2437.3683	-1001.8476
N1	DER08 Min	Top	333.3305	-167.3398	-555.0755	-3072.3163	448.1896	-1366.6552
N1	DER08 Min	Bottom	377.4348	-167.3398	-555.0755	-3072.3163	-1180.3424	-2093.1178
N1	DERUD01	Top	518.5141	0	0	0	697.1847	-2125.9077
N1	DERUD01	Bottom	587.1208	0	0	0	977.6868	-2407.1953
N1	DERUD02	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	DERUD02	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	DERUD03	Top	561.2086	0	0	0	742.5631	-2300.9554
N1	DERUD03	Bottom	620.0144	0	0	0	982.7995	-2542.059
N1	DERUD04	Top	480.9306	0	0	0	642.8919	-1971.8156
N1	DERUD04	Bottom	539.7364	0	0	0	883.2617	-2212.9192
N1	DERUD05 Max	Top	444.4406	76.8427	0	320.2972	597.5869	-1822.2065
N1	DERUD05 Max	Bottom	503.2464	76.8427	0	320.2972	838.0173	-1812.7193
N1	DERUD05 Min	Top	444.4406	-76.8427	0	-320.2972	597.5869	-1822.2067
N1	DERUD05 Min	Bottom	503.2464	-76.8427	0	-320.2972	838.0173	-2313.9012
N1	DERUD06 Max	Top	444.4406	0	80.485	329.9886	597.587	-1822.2066
N1	DERUD06 Max	Bottom	503.2464	0	80.485	329.9886	1100.2983	-2063.3102
N1	DERUD06 Min	Top	444.4406	0	-80.485	-329.9886	597.5868	-1822.2066
N1	DERUD06 Min	Bottom	503.2464	0	-80.485	-329.9886	575.7363	-2063.3102
N1	DERUD07 Max	Top	333.3305	76.8427	0	320.2972	448.1902	-1366.6549
N1	DERUD07 Max	Bottom	377.4348	76.8427	0	320.2972	628.513	-1296.8917
N1	DERUD07 Min	Top	333.3305	-76.8427	0	-320.2972	448.1902	-1366.6551
N1	DERUD07 Min	Bottom	377.4348	-76.8427	0	-320.2972	628.513	-1798.0736
N1	DERUD08 Max	Top	333.3305	0	80.485	329.9886	448.1902	-1366.655

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD08 Max	Bottom	377.4348	0	80.485	329.9886	890.794	-1547.4827
N1	DERUD08 Min	Top	333.3305	0	-80.485	-329.9886	448.1901	-1366.655
N1	DERUD08 Min	Bottom	377.4348	0	-80.485	-329.9886	366.2319	-1547.4827
N1	CIM09 Max	Top	222.2203	116.1912	34.7095	695.3578	298.7935	-911.1032
N1	CIM09 Max	Bottom	251.6232	116.1912	34.7095	695.3578	532.1183	-652.7971
N1	CIM09 Min	Top	222.2203	-116.1912	-34.7095	-695.3578	298.7934	-911.1035
N1	CIM09 Min	Bottom	251.6232	-116.1912	-34.7095	-695.3578	305.899	-1410.5131
N1	CIM10 Max	Top	222.2203	34.8574	115.6982	640.2774	298.7936	-911.1033
N1	CIM10 Max	Bottom	251.6232	34.8574	115.6982	640.2774	796.0409	-917.9977
N1	CIM10 Min	Top	222.2203	-34.8574	-115.6982	-640.2774	298.7933	-911.1034
N1	CIM10 Min	Bottom	251.6232	-34.8574	-115.6982	-640.2774	41.9764	-1145.3125
N1	CIM11	Top	457.2872	0	0	0	750.0571	-1874.8775
N1	CIM11	Bottom	506.292	0	0	0	950.357	-2075.7972
N1	CIM12	Top	435.5572	0	0	0	687.0401	-1785.7845
N1	CIM12	Bottom	484.562	0	0	0	887.3547	-1986.7042
N1	CIM13 Max	Top	435.5572	87.9733	26.4453	527.1628	687.0401	-1785.7844
N1	CIM13 Max	Bottom	484.562	87.9733	26.4453	527.1628	973.5335	-1699.8546
N1	CIM13 Min	Top	435.5572	-87.9733	-26.4453	-527.1628	687.0401	-1785.7846
N1	CIM13 Min	Bottom	484.562	-87.9733	-26.4453	-527.1628	801.1759	-2273.5538
N1	CIM14 Max	Top	435.5572	26.558	87.6001	485.5715	687.0402	-1785.7845
N1	CIM14 Max	Bottom	484.562	26.558	87.6001	485.5715	1172.8219	-1900.1081
N1	CIM14 Min	Top	435.5572	-26.558	-87.6001	-485.5715	687.04	-1785.7846
N1	CIM14 Min	Bottom	484.562	-26.558	-87.6001	-485.5715	601.8874	-2073.3003
N1	CIM15	Top	222.2203	0	0	0	298.7934	-911.1033
N1	CIM15	Bottom	251.6232	0	0	0	419.0086	-1031.6551
N1	COMB9	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	COMB9	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	COMB10	Top	583.5126	0	0	0	1000.8958	-2392.4018
N1	COMB10	Bottom	642.3184	0	0	0	1241.2321	-2633.5054
N1	COMB11	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	COMB11	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	DER09	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	DER09	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	DER10	Top	583.5126	0	0	0	1000.8958	-2392.4018
N1	DER10	Bottom	642.3184	0	0	0	1241.2321	-2633.5054
N1	DER11	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	DER11	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	DERUD09	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	DERUD09	Bottom	546.7064	0	0	0	964.0219	-2241.4962
N1	DERUD10	Top	583.5126	0	0	0	1000.8958	-2392.4018
N1	DERUD10	Bottom	642.3184	0	0	0	1241.2321	-2633.5054
N1	DERUD11	Top	487.9006	0	0	0	723.6209	-2000.3926
N1	DERUD11	Bottom	546.7064	0	0	0	964.0219	-2241.4962

## 5.3 Point Results

Table 5.7 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	38.3335	-3.196	164.016	-9.4477	39.0871	0
Base	1	13	L	0	0	0	0	0	0
Base	1	13	LR	7.4458	0.0795	30.3038	-2.8244	7.5922	0
Base	1	13	EX Max	222.9219	107.4964	56.3895	184.236	390.2915	20.2885
Base	1	13	EY Max	0.0009	139.036	49.0991	252.0159	0.0009	0
Base	1	13	DISX Max	66.3361	31.9883	16.7801	54.8242	116.1412	6.0374
Base	1	13	DISY Max	0.0003	41.4003	14.6201	75.042	0.0003	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	3.7228	6.9316	27.7585	-8.3725	3.796	0
Base	1	13	DERUX Max	32.0398	15.0959	7.8144	25.8194	56.0741	2.8343
Base	1	13	DERUY Max	0.0001	20.16	7.1193	36.5419	0.0001	0
Base	1	13	COMB1	53.6668	-4.4745	229.6223	-13.2268	54.722	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB2	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	COMB3	57.9134	-3.708	245.3051	-15.8564	59.052	0
Base	1	13	COMB4	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	COMB5 Max	112.3364	40.5732	217.9853	65.9995	163.0459	6.0374
Base	1	13	COMB5 Min	-20.336	-48.2436	175.653	-88.674	-69.2368	-6.0374
Base	1	13	COMB6 Max	65.9013	47.1616	216.4733	80.152	81.7472	1.8112
Base	1	13	COMB6 Min	26.099	-54.8321	177.165	-102.8266	12.0619	-1.8112
Base	1	13	COMB7 Max	54.4012	48.1204	167.2685	82.9863	70.0211	1.8112
Base	1	13	COMB7 Min	14.599	-53.8733	127.9602	-99.9922	0.3358	-1.8112
Base	1	13	COMB8 Max	100.8363	41.532	168.7805	68.8338	151.3197	6.0374
Base	1	13	COMB8 Min	-31.8361	-47.2848	126.4482	-85.8397	-80.9629	-6.0374
Base	1	13	ENVE Max	112.3364	48.1204	245.3051	82.9863	163.0459	6.0374
Base	1	13	ENVE Min	-31.8361	-54.8321	126.4482	-102.8266	-80.9629	-6.0374
Base	1	13	CIM01	38.3335	-3.196	164.016	-9.4477	39.0871	0
Base	1	13	CIM02	38.3335	-3.196	164.016	-9.4477	39.0871	0
Base	1	13	CIM03	45.7792	-3.1165	194.3197	-12.2722	46.6793	0
Base	1	13	CIM04	43.9178	-3.1364	186.7438	-11.5661	44.7813	0
Base	1	13	CIM05 Max	84.7688	27.8898	178.8323	44.688	120.386	4.2261
Base	1	13	CIM05 Min	-8.1019	-34.2819	149.1996	-63.5835	-42.2118	-4.2261
Base	1	13	CIM06 Max	52.2642	32.5017	177.7739	54.5947	63.477	1.2678
Base	1	13	CIM06 Min	24.4027	-38.8938	150.2581	-73.4902	14.6973	-1.2678
Base	1	13	CIM07 Max	79.076	20.4415	197.9765	29.4975	106.3361	3.1998
Base	1	13	CIM07 Min	8.7596	-26.7142	175.5111	-52.6296	-16.7736	-3.1998
Base	1	13	CIM08 Max	54.5317	23.9239	197.1772	36.9781	63.364	0.966
Base	1	13	CIM08 Min	33.3039	-30.1967	176.3103	-60.1102	26.1985	-0.966
Base	1	13	DER01	53.6668	-4.4745	229.6223	-13.2268	54.722	0
Base	1	13	DER02	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	DER03	57.9134	-3.708	245.3051	-15.8564	59.052	0
Base	1	13	DER04	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	DER05 Max	268.9223	145.3719	267.9384	248.5035	437.1963	20.2885
Base	1	13	DER05 Min	-176.922	-153.0424	125.6999	-271.1781	-343.3872	-20.2885
Base	1	13	DER06 Max	112.8777	167.4497	262.8351	295.9494	163.9929	6.0865
Base	1	13	DER06 Min	-20.8773	-175.1202	130.8032	-318.624	-70.1838	-6.0865
Base	1	13	DER07 Max	257.4223	146.3307	218.7336	251.3378	425.4702	20.2885
Base	1	13	DER07 Min	-188.4221	-152.0836	76.4951	-268.3438	-355.1133	-20.2885
Base	1	13	DER08 Max	101.3776	168.4085	213.6303	298.7837	152.2668	6.0865
Base	1	13	DER08 Min	-32.3774	-174.1614	81.5984	-315.7896	-81.91	-6.0865
Base	1	13	DERUD01	53.6668	-4.4745	229.6223	-13.2268	54.722	0
Base	1	13	DERUD02	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	DERUD03	57.9134	-3.708	245.3051	-15.8564	59.052	0
Base	1	13	DERUD04	49.723	-3.7955	211.971	-12.7495	50.7006	0
Base	1	13	DERUD05 Max	78.04	11.2607	204.6335	14.4821	102.9787	2.8343
Base	1	13	DERUD05 Min	13.9603	-18.9312	189.0048	-37.1567	-9.1696	-2.8343
Base	1	13	DERUD06 Max	46.0003	16.3247	203.9384	25.2046	46.9047	0
Base	1	13	DERUD06 Min	46	-23.9952	189.6999	-47.8792	46.9044	0
Base	1	13	DERUD07 Max	66.5399	12.2195	155.4287	17.3164	91.2525	2.8343
Base	1	13	DERUD07 Min	2.4603	-17.9724	139.8	-34.3223	-20.8957	-2.8343
Base	1	13	DERUD08 Max	34.5003	17.2836	154.7336	28.0389	35.1786	0
Base	1	13	DERUD08 Min	34.5	-23.0364	140.4951	-45.0449	35.1783	0
Base	1	13	CIM09 Max	69.4354	29.1683	113.2259	48.4671	104.7512	4.2261
Base	1	13	CIM09 Min	-23.4353	-33.0035	83.5933	-59.8044	-57.8466	-4.2261
Base	1	13	CIM10 Max	36.9309	33.7802	112.1675	58.3738	47.8421	1.2678
Base	1	13	CIM10 Min	9.0693	-37.6154	84.6517	-69.7111	-0.9376	-1.2678
Base	1	13	CIM11	42.0563	3.7356	191.7745	-17.8202	42.8831	0
Base	1	13	CIM12	41.1256	2.0027	184.8348	-15.7271	41.9341	0
Base	1	13	CIM13 Max	76.2837	25.5805	196.0675	25.3364	103.489	3.1998
Base	1	13	CIM13 Min	5.9674	-21.5752	173.6022	-56.7906	-19.6208	-3.1998
Base	1	13	CIM14 Max	51.7395	29.063	195.2683	32.817	60.5169	0.966
Base	1	13	CIM14 Min	30.5116	-25.0576	174.4014	-64.2712	23.3514	-0.966
Base	1	13	CIM15	23.0001	-1.9176	98.4096	-5.6686	23.4523	0



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB9	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	COMB10	51.9566	7.2554	241.2328	-24.7332	52.9781	0
Base	1	13	COMB11	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	DER09	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	DER10	51.9566	7.2554	241.2328	-24.7332	52.9781	0
Base	1	13	DER11	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	DERUD09	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	1	13	DERUD10	51.9566	7.2554	241.2328	-24.7332	52.9781	0
Base	1	13	DERUD11	47.8616	-0.3694	210.6984	-15.5235	48.8025	0
Base	2	15	D	8.6305	3.196	45.67	-15.8728	8.7032	0.0169
Base	2	15	L	0	0	0	0	0	0
Base	2	15	LR	0.1825	-0.0795	6.1862	-2.6584	0.1841	0.0003
Base	2	15	EX Max	104.8607	96.5059	44.7105	171.6005	188.8334	19.4355
Base	2	15	EY Max	0.0165	138.5017	49.0991	249.7991	0.0366	0.0038
Base	2	15	DISX Max	31.204	28.7178	13.3048	51.0641	56.1922	5.7835
Base	2	15	DISY Max	0.0049	41.2412	14.6201	74.3819	0.0109	0.0011
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.0929	-6.9316	15.7015	5.625	0.0957	-0.0002
Base	2	15	DERUX Max	12.0828	13.475	6.141	23.9689	21.8089	2.7287
Base	2	15	DERUY Max	0.0024	20.0825	7.1193	36.2205	0.0053	0.0005
Base	2	15	COMB1	12.0827	4.4745	63.9381	-22.2219	12.1845	0.0237
Base	2	15	COMB2	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	COMB3	10.6486	3.708	64.7021	-23.3007	10.7384	0.0209
Base	2	15	COMB4	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	COMB5 Max	41.562	44.9254	72.4948	54.3314	66.6393	5.8042
Base	2	15	COMB5 Min	-20.8489	-37.2549	37.1133	-92.426	-45.7517	-5.7636
Base	2	15	COMB6 Max	19.7227	53.6918	73.4156	70.6539	27.3124	1.7565
Base	2	15	COMB6 Min	0.9905	-46.0213	36.1925	-108.7485	-6.4247	-1.7159
Base	2	15	COMB7 Max	17.1335	52.733	59.7146	75.4157	24.7015	1.7514
Base	2	15	COMB7 Min	-1.5987	-46.9802	22.4915	-103.9866	-9.0357	-1.721
Base	2	15	COMB8 Max	38.9729	43.9666	58.7938	59.0932	64.0284	5.7991
Base	2	15	COMB8 Min	-23.438	-38.2137	23.4123	-87.6642	-48.3626	-5.7687
Base	2	15	ENVE Max	41.562	53.6918	73.4156	75.4157	66.6393	5.8042
Base	2	15	ENVE Min	-23.438	-46.9802	22.4915	-108.7485	-48.3626	-5.7687
Base	2	15	CIM01	8.6305	3.196	45.67	-15.8728	8.7032	0.0169
Base	2	15	CIM02	8.6305	3.196	45.67	-15.8728	8.7032	0.0169
Base	2	15	CIM03	8.813	3.1165	51.8563	-18.5311	8.8873	0.0173
Base	2	15	CIM04	8.7674	3.1364	50.3097	-17.8665	8.8413	0.0172
Base	2	15	CIM05 Max	30.4743	31.9592	58.0536	35.4923	48.04	4.0656
Base	2	15	CIM05 Min	-13.2133	-25.5671	33.2865	-67.2378	-30.6336	-4.0318
Base	2	15	CIM06 Max	15.1868	38.0956	58.6981	46.9181	20.5112	1.2322
Base	2	15	CIM06 Min	2.0742	-31.7036	32.642	-78.6636	-3.1048	-1.1984
Base	2	15	CIM07 Max	25.3063	24.9554	59.7005	21.0986	38.6249	3.0826
Base	2	15	CIM07 Min	-7.7715	-18.6826	40.919	-56.8316	-20.9424	-3.0483
Base	2	15	CIM08 Max	13.7626	29.5891	60.1871	29.7262	17.8378	0.9431
Base	2	15	CIM08 Min	3.7721	-23.3163	40.4323	-65.4592	-0.1553	-0.9088
Base	2	15	DER01	12.0827	4.4745	63.9381	-22.2219	12.1845	0.0237
Base	2	15	DER02	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	DER03	10.6486	3.708	64.7021	-23.3007	10.7384	0.0209
Base	2	15	DER04	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	DER05 Max	115.2222	141.8917	114.2443	227.4929	199.2882	19.457
Base	2	15	DER05 Min	-94.5091	-134.2212	-4.6362	-265.5875	-178.4006	-19.4164
Base	2	15	DER06 Max	41.8313	171.2887	117.3163	282.2319	67.1305	5.8547
Base	2	15	DER06 Min	-21.1181	-163.6182	-7.7082	-320.3265	-46.2428	-5.8141
Base	2	15	DER07 Max	112.6331	140.9328	100.5433	232.2547	196.6773	19.4519
Base	2	15	DER07 Min	-97.0982	-135.18	-18.3372	-260.8257	-181.0115	-19.4214
Base	2	15	DER08 Max	39.2421	170.3299	103.6153	286.9937	64.5195	5.8497
Base	2	15	DER08 Min	-23.7072	-164.5771	-21.4092	-315.5647	-48.8538	-5.8192
Base	2	15	DERUD01	12.0827	4.4745	63.9381	-22.2219	12.1845	0.0237
Base	2	15	DERUD02	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DERUD03	10.6486	3.708	64.7021	-23.3007	10.7384	0.0209
Base	2	15	DERUD04	10.4478	3.7955	57.8972	-20.3765	10.5359	0.0205
Base	2	15	DERUD05 Max	22.4394	17.3103	60.945	4.9216	32.2527	2.749
Base	2	15	DERUD05 Min	-1.7263	-9.6398	48.6631	-43.0162	-11.365	-2.7084
Base	2	15	DERUD06 Max	10.359	23.9178	61.9233	17.1731	10.4491	0.0208
Base	2	15	DERUD06 Min	10.3542	-16.2473	47.6848	-55.2678	10.4385	0.0198
Base	2	15	DERUD07 Max	19.8503	16.3515	47.244	9.6834	29.6418	2.744
Base	2	15	DERUD07 Min	-4.3154	-10.5986	34.9621	-38.2544	-13.976	-2.7135
Base	2	15	DERUD08 Max	7.7698	22.959	48.2223	21.935	7.8382	0.0158
Base	2	15	DERUD08 Min	7.7651	-17.2061	33.9838	-50.5059	7.8276	0.0147
Base	2	15	CIM09 Max	27.0221	30.6807	39.7856	41.8414	44.5588	4.0589
Base	2	15	CIM09 Min	-16.6655	-26.8455	15.0185	-60.8887	-34.1149	-4.0386
Base	2	15	CIM10 Max	11.7346	36.8172	40.4301	53.2672	17.0299	1.2255
Base	2	15	CIM10 Min	-1.378	-32.982	14.374	-72.3145	-6.5861	-1.2052
Base	2	15	CIM11	8.7234	-3.7356	61.3715	-10.2478	8.7989	0.0167
Base	2	15	CIM12	8.7002	-2.0027	57.4462	-11.654	8.775	0.0168
Base	2	15	CIM13 Max	25.2391	19.8163	66.8369	27.3111	38.5586	3.0822
Base	2	15	CIM13 Min	-7.8387	-23.8217	48.0554	-50.6191	-21.0086	-3.0487
Base	2	15	CIM14 Max	13.6954	24.45	67.3236	35.9387	17.7715	0.9427
Base	2	15	CIM14 Min	3.7049	-28.4554	47.5687	-59.2467	-0.2216	-0.9092
Base	2	15	CIM15	5.1783	1.9176	27.402	-9.5237	5.2219	0.0102
Base	2	15	COMB9	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	COMB10	10.5052	-7.2554	79.9264	-10.0473	10.597	0.02
Base	2	15	COMB11	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	DER09	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	DER10	10.5052	-7.2554	79.9264	-10.0473	10.597	0.02
Base	2	15	DER11	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	DERUD09	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	2	15	DERUD10	10.5052	-7.2554	79.9264	-10.0473	10.597	0.02
Base	2	15	DERUD11	10.403	0.3694	62.6548	-16.2348	10.4917	0.0202
Base	3	16	D	-38.3335	-3.196	164.016	-9.4477	-39.0871	0
Base	3	16	L	0	0	0	0	0	0
Base	3	16	LR	-7.4458	0.0795	30.3038	-2.8244	-7.5922	0
Base	3	16	EX Max	222.9219	107.4964	56.3895	184.236	390.2915	20.2885
Base	3	16	EY Max	0.0009	139.036	49.0991	252.0159	0.0009	0
Base	3	16	DISX Max	66.3361	31.9883	16.7801	54.8242	116.1412	6.0374
Base	3	16	DISY Max	0.0003	41.4003	14.6201	75.042	0.0003	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	-3.7228	6.9316	27.7585	-8.3725	-3.796	0
Base	3	16	DERUX Max	32.0398	15.0959	7.8144	25.8194	56.0741	2.8343
Base	3	16	DERUY Max	0.0001	20.16	7.1193	36.5419	0.0001	0
Base	3	16	COMB1	-53.6668	-4.4745	229.6223	-13.2268	-54.722	0
Base	3	16	COMB2	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	COMB3	-57.9134	-3.708	245.3051	-15.8564	-59.052	0
Base	3	16	COMB4	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	COMB5 Max	20.336	40.5732	217.9853	65.9995	69.2368	6.0374
Base	3	16	COMB5 Min	-112.3364	-48.2436	175.653	-88.674	-163.0459	-6.0374
Base	3	16	COMB6 Max	-26.099	47.1616	216.4733	80.152	-12.0619	1.8112
Base	3	16	COMB6 Min	-65.9013	-54.8321	177.165	-102.8266	-81.7472	-1.8112
Base	3	16	COMB7 Max	-14.599	48.1204	167.2685	82.9863	-0.3358	1.8112
Base	3	16	COMB7 Min	-54.4012	-53.8733	127.9602	-99.9922	-70.0211	-1.8112
Base	3	16	COMB8 Max	31.8361	41.532	168.7805	68.8338	80.9629	6.0374
Base	3	16	COMB8 Min	-100.8363	-47.2848	126.4482	-85.8397	-151.3197	-6.0374
Base	3	16	ENVE Max	31.8361	48.1204	245.3051	82.9863	80.9629	6.0374
Base	3	16	ENVE Min	-112.3364	-54.8321	126.4482	-102.8266	-163.0459	-6.0374
Base	3	16	CIM01	-38.3335	-3.196	164.016	-9.4477	-39.0871	0
Base	3	16	CIM02	-38.3335	-3.196	164.016	-9.4477	-39.0871	0
Base	3	16	CIM03	-45.7792	-3.1165	194.3197	-12.2722	-46.6793	0
Base	3	16	CIM04	-43.9178	-3.1364	186.7438	-11.5661	-44.7813	0
Base	3	16	CIM05 Max	8.1019	27.8898	178.8323	44.688	42.2118	4.2261

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	CIM05 Min	-84.7688	-34.2819	149.1996	-63.5835	-120.386	-4.2261
Base	3	16	CIM06 Max	-24.4027	32.5017	177.7739	54.5947	-14.6973	1.2678
Base	3	16	CIM06 Min	-52.2642	-38.8938	150.2581	-73.4902	-63.477	-1.2678
Base	3	16	CIM07 Max	-8.7596	20.4415	197.9765	29.4975	16.7736	3.1998
Base	3	16	CIM07 Min	-79.076	-26.7142	175.5111	-52.6296	-106.3361	-3.1998
Base	3	16	CIM08 Max	-33.3039	23.9239	197.1772	36.9781	-26.1985	0.966
Base	3	16	CIM08 Min	-54.5317	-30.1967	176.3103	-60.1102	-63.364	-0.966
Base	3	16	DER01	-53.6668	-4.4745	229.6223	-13.2268	-54.722	0
Base	3	16	DER02	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	DER03	-57.9134	-3.708	245.3051	-15.8564	-59.052	0
Base	3	16	DER04	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	DER05 Max	176.922	145.3719	267.9384	248.5035	343.3872	20.2885
Base	3	16	DER05 Min	-268.9223	-153.0424	125.6999	-271.1781	-437.1963	-20.2885
Base	3	16	DER06 Max	20.8773	167.4497	262.8351	295.9494	70.1838	6.0865
Base	3	16	DER06 Min	-112.8777	-175.1202	130.8032	-318.624	-163.9929	-6.0865
Base	3	16	DER07 Max	188.4221	146.3307	218.7336	251.3378	355.1133	20.2885
Base	3	16	DER07 Min	-257.4223	-152.0836	76.4951	-268.3438	-425.4702	-20.2885
Base	3	16	DER08 Max	32.3774	168.4085	213.6303	298.7837	81.91	6.0865
Base	3	16	DER08 Min	-101.3776	-174.1614	81.5984	-315.7896	-152.2668	-6.0865
Base	3	16	DERUD01	-53.6668	-4.4745	229.6223	-13.2268	-54.722	0
Base	3	16	DERUD02	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	DERUD03	-57.9134	-3.708	245.3051	-15.8564	-59.052	0
Base	3	16	DERUD04	-49.723	-3.7955	211.971	-12.7495	-50.7006	0
Base	3	16	DERUD05 Max	-13.9603	11.2607	204.6335	14.4821	9.1696	2.8343
Base	3	16	DERUD05 Min	-78.04	-18.9312	189.0048	-37.1567	-102.9787	-2.8343
Base	3	16	DERUD06 Max	-46	16.3247	203.9384	25.2046	-46.9044	0
Base	3	16	DERUD06 Min	-46.0003	-23.9952	189.6999	-47.8792	-46.9047	0
Base	3	16	DERUD07 Max	-2.4603	12.2195	155.4287	17.3164	20.8957	2.8343
Base	3	16	DERUD07 Min	-66.5399	-17.9724	139.8	-34.3223	-91.2525	-2.8343
Base	3	16	DERUD08 Max	-34.5	17.2836	154.7336	28.0389	-35.1783	0
Base	3	16	DERUD08 Min	-34.5003	-23.0364	140.4951	-45.0449	-35.1786	0
Base	3	16	CIM09 Max	23.4353	29.1683	113.2259	48.4671	57.8466	4.2261
Base	3	16	CIM09 Min	-69.4354	-33.0035	83.5933	-59.8044	-104.7512	-4.2261
Base	3	16	CIM10 Max	-9.0693	33.7802	112.1675	58.3738	0.9376	1.2678
Base	3	16	CIM10 Min	-36.9309	-37.6154	84.6517	-69.7111	-47.8421	-1.2678
Base	3	16	CIM11	-42.0563	3.7356	191.7745	-17.8202	-42.8831	0
Base	3	16	CIM12	-41.1256	2.0027	184.8348	-15.7271	-41.9341	0
Base	3	16	CIM13 Max	-5.9674	25.5805	196.0675	25.3364	19.6208	3.1998
Base	3	16	CIM13 Min	-76.2837	-21.5752	173.6022	-56.7906	-103.489	-3.1998
Base	3	16	CIM14 Max	-30.5116	29.063	195.2683	32.817	-23.3514	0.966
Base	3	16	CIM14 Min	-51.7395	-25.0576	174.4014	-64.2712	-60.5169	-0.966
Base	3	16	CIM15	-23.0001	-1.9176	98.4096	-5.6686	-23.4523	0
Base	3	16	COMB9	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	COMB10	-51.9566	7.2554	241.2328	-24.7332	-52.9781	0
Base	3	16	COMB11	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	DER09	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	DER10	-51.9566	7.2554	241.2328	-24.7332	-52.9781	0
Base	3	16	DER11	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	DERUD09	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	3	16	DERUD10	-51.9566	7.2554	241.2328	-24.7332	-52.9781	0
Base	3	16	DERUD11	-47.8616	-0.3694	210.6984	-15.5235	-48.8025	0
Base	4	18	D	-8.6305	3.196	45.67	-15.8728	-8.7032	-0.0169
Base	4	18	L	0	0	0	0	0	0
Base	4	18	LR	-0.1825	-0.0795	6.1862	-2.6584	-0.1841	-0.0003
Base	4	18	EX Max	104.8607	96.5059	44.7105	171.6005	188.8334	19.4355
Base	4	18	EY Max	0.0165	138.5017	49.0991	249.7991	0.0366	0.0038
Base	4	18	DISX Max	31.204	28.7178	13.3048	51.0641	56.1922	5.7835
Base	4	18	DISY Max	0.0049	41.2412	14.6201	74.3819	0.0109	0.0011
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	-0.0929	-6.9316	15.7015	5.625	-0.0957	0.0002

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DERUX Max	12.0828	13.475	6.141	23.9689	21.8089	2.7287
Base	4	18	DERUY Max	0.0024	20.0825	7.1193	36.2205	0.0053	0.0005
Base	4	18	COMB1	-12.0827	4.4745	63.9381	-22.2219	-12.1845	-0.0237
Base	4	18	COMB2	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	COMB3	-10.6486	3.708	64.7021	-23.3007	-10.7384	-0.0209
Base	4	18	COMB4	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	COMB5 Max	20.8489	44.9254	72.4948	54.3314	45.7517	5.7636
Base	4	18	COMB5 Min	-41.562	-37.2549	37.1133	-92.426	-66.6393	-5.8042
Base	4	18	COMB6 Max	-0.9905	53.6918	73.4156	70.6539	6.4247	1.7159
Base	4	18	COMB6 Min	-19.7227	-46.0213	36.1925	-108.7485	-27.3124	-1.7565
Base	4	18	COMB7 Max	1.5987	52.733	59.7146	75.4157	9.0357	1.721
Base	4	18	COMB7 Min	-17.1335	-46.9802	22.4915	-103.9866	-24.7015	-1.7514
Base	4	18	COMB8 Max	23.438	43.9666	58.7938	59.0932	48.3626	5.7687
Base	4	18	COMB8 Min	-38.9729	-38.2137	23.4123	-87.6642	-64.0284	-5.7991
Base	4	18	ENVE Max	23.438	53.6918	73.4156	75.4157	48.3626	5.7687
Base	4	18	ENVE Min	-41.562	-46.9802	22.4915	-108.7485	-66.6393	-5.8042
Base	4	18	CIM01	-8.6305	3.196	45.67	-15.8728	-8.7032	-0.0169
Base	4	18	CIM02	-8.6305	3.196	45.67	-15.8728	-8.7032	-0.0169
Base	4	18	CIM03	-8.813	3.1165	51.8563	-18.5311	-8.8873	-0.0173
Base	4	18	CIM04	-8.7674	3.1364	50.3097	-17.8665	-8.8413	-0.0172
Base	4	18	CIM05 Max	13.2133	31.9592	58.0536	35.4923	30.6336	4.0318
Base	4	18	CIM05 Min	-30.4743	-25.5671	33.2865	-67.2378	-48.04	-4.0656
Base	4	18	CIM06 Max	-2.0742	38.0956	58.6981	46.9181	3.1048	1.1984
Base	4	18	CIM06 Min	-15.1868	-31.7036	32.642	-78.6636	-20.5112	-1.2322
Base	4	18	CIM07 Max	7.7715	24.9554	59.7005	21.0986	20.9424	3.0483
Base	4	18	CIM07 Min	-25.3063	-18.6826	40.919	-56.8316	-38.6249	-3.0826
Base	4	18	CIM08 Max	-3.7721	29.5891	60.1871	29.7262	0.1553	0.9088
Base	4	18	CIM08 Min	-13.7626	-23.3163	40.4323	-65.4592	-17.8378	-0.9431
Base	4	18	DER01	-12.0827	4.4745	63.9381	-22.2219	-12.1845	-0.0237
Base	4	18	DER02	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	DER03	-10.6486	3.708	64.7021	-23.3007	-10.7384	-0.0209
Base	4	18	DER04	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	DER05 Max	94.5091	141.8917	114.2443	227.4929	178.4006	19.4164
Base	4	18	DER05 Min	-115.2222	-134.2212	-4.6362	-265.5875	-199.2882	-19.457
Base	4	18	DER06 Max	21.1181	171.2887	117.3163	282.2319	46.2428	5.8141
Base	4	18	DER06 Min	-41.8313	-163.6182	-7.7082	-320.3265	-67.1305	-5.8547
Base	4	18	DER07 Max	97.0982	140.9328	100.5433	232.2547	181.0115	19.4214
Base	4	18	DER07 Min	-112.6331	-135.18	-18.3372	-260.8257	-196.6773	-19.4519
Base	4	18	DER08 Max	23.7072	170.3299	103.6153	286.9937	48.8538	5.8192
Base	4	18	DER08 Min	-39.2421	-164.5771	-21.4092	-315.5647	-64.5195	-5.8497
Base	4	18	DERUD01	-12.0827	4.4745	63.9381	-22.2219	-12.1845	-0.0237
Base	4	18	DERUD02	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	DERUD03	-10.6486	3.708	64.7021	-23.3007	-10.7384	-0.0209
Base	4	18	DERUD04	-10.4478	3.7955	57.8972	-20.3765	-10.5359	-0.0205
Base	4	18	DERUD05 Max	1.7263	17.3103	60.945	4.9216	11.365	2.7084
Base	4	18	DERUD05 Min	-22.4394	-9.6398	48.6631	-43.0162	-32.2527	-2.749
Base	4	18	DERUD06 Max	-10.3542	23.9178	61.9233	17.1731	-10.4385	-0.0198
Base	4	18	DERUD06 Min	-10.359	-16.2473	47.6848	-55.2678	-10.4491	-0.0208
Base	4	18	DERUD07 Max	4.3154	16.3515	47.244	9.6834	13.976	2.7135
Base	4	18	DERUD07 Min	-19.8503	-10.5986	34.9621	-38.2544	-29.6418	-2.744
Base	4	18	DERUD08 Max	-7.7651	22.959	48.2223	21.935	-7.8276	-0.0147
Base	4	18	DERUD08 Min	-7.7698	-17.2061	33.9838	-50.5059	-7.8382	-0.0158
Base	4	18	CIM09 Max	16.6655	30.6807	39.7856	41.8414	34.1149	4.0386
Base	4	18	CIM09 Min	-27.0221	-26.8455	15.0185	-60.8887	-44.5588	-4.0589
Base	4	18	CIM10 Max	1.378	36.8172	40.4301	53.2672	6.5861	1.2052
Base	4	18	CIM10 Min	-11.7346	-32.982	14.374	-72.3145	-17.0299	-1.2255
Base	4	18	CIM11	-8.7234	-3.7356	61.3715	-10.2478	-8.7989	-0.0167
Base	4	18	CIM12	-8.7002	-2.0027	57.4462	-11.654	-8.775	-0.0168
Base	4	18	CIM13 Max	7.8387	19.8163	66.8369	27.3111	21.0086	3.0487
Base	4	18	CIM13 Min	-25.2391	-23.8217	48.0554	-50.6191	-38.5586	-3.0822

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	CIM14 Max	-3.7049	24.45	67.3236	35.9387	0.2216	0.9092
Base	4	18	CIM14 Min	-13.6954	-28.4554	47.5687	-59.2467	-17.7715	-0.9427
Base	4	18	CIM15	-5.1783	1.9176	27.402	-9.5237	-5.2219	-0.0102
Base	4	18	COMB9	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	COMB10	-10.5052	-7.2554	79.9264	-10.0473	-10.597	-0.02
Base	4	18	COMB11	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	DER09	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	DER10	-10.5052	-7.2554	79.9264	-10.0473	-10.597	-0.02
Base	4	18	DER11	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	DERUD09	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202
Base	4	18	DERUD10	-10.5052	-7.2554	79.9264	-10.0473	-10.597	-0.02
Base	4	18	DERUD11	-10.403	0.3694	62.6548	-16.2348	-10.4917	-0.0202

5.4 Modal Results

Table 5.8 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.222	4.497	28.2542	798.2973
Modal	2	0.188	5.328	33.4762	1120.6566
Modal	3	0.148	6.749	42.4074	1798.3852
Modal	4	0.051	19.421	122.0265	14890.4689
Modal	5	0.019	52.712	331.1984	109692.3484
Modal	6	0.018	55.39	348.0256	121121.7847
Modal	7	0.015	65.959	414.4325	171754.2665

Table 5.9 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.222	0.655	0	0	0.655	0	0
Modal	2	0.188	0	1	0	0.655	1	0
Modal	3	0.148	0.3441	0	0	0.9992	1	0
Modal	4	0.051	0.0008	0	0	1	1	0
Modal	5	0.019	0	0	0	1	1	0
Modal	6	0.018	0	2.765E-05	0	1	1	0
Modal	7	0.015	0	0	0	1	1	0

Table 5.9 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.655	0.3701	0	0.655	0.3701
Modal	2	1	0	0	1	0.655	0.3701
Modal	3	0	0.3441	0.629	1	0.9992	0.9991
Modal	4	0	0.0008	0.0009	1	1	1
Modal	5	0	0	2.07E-05	1	1	1
Modal	6	2.765E-05	0	0	1	1	1
Modal	7	0	0	0	1	1	1

Table 5.10 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.11 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.222	0.664	0	0	0.336
Modal	2	0.188	0	1	0	0
Modal	3	0.148	0.346	0	0	0.654

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	4	0.051	0.015	0	0	0.985
Modal	5	0.019	0	0	0	1
Modal	6	0.018	0	1	0	0
Modal	7	0.015	0	1	0	0

## 6 Design Data

This chapter provides design data and results.

### 6.1 Concrete Frame Design

**Table 6.1 - Concrete Frame Preferences - ACI 318-08**

Item	Value
Multi-Response Design	Step-by-Step
Seismic Design Category	D
# Interaction Curves	24
# Interaction Points	11
Minimum Eccentricity	Yes
Phi (Tension)	0.9
Phi (Compression Tied)	0.65
Phi (Compression Spiral)	0.7
Phi (Shear and Torsion)	0.85
Phi (Shear Seismic)	0.6
Phi (Shear Joint)	0.85
Pattern Live Load Factor	0.75
D/C Ratio Limit	0.95

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 1 of 2)**

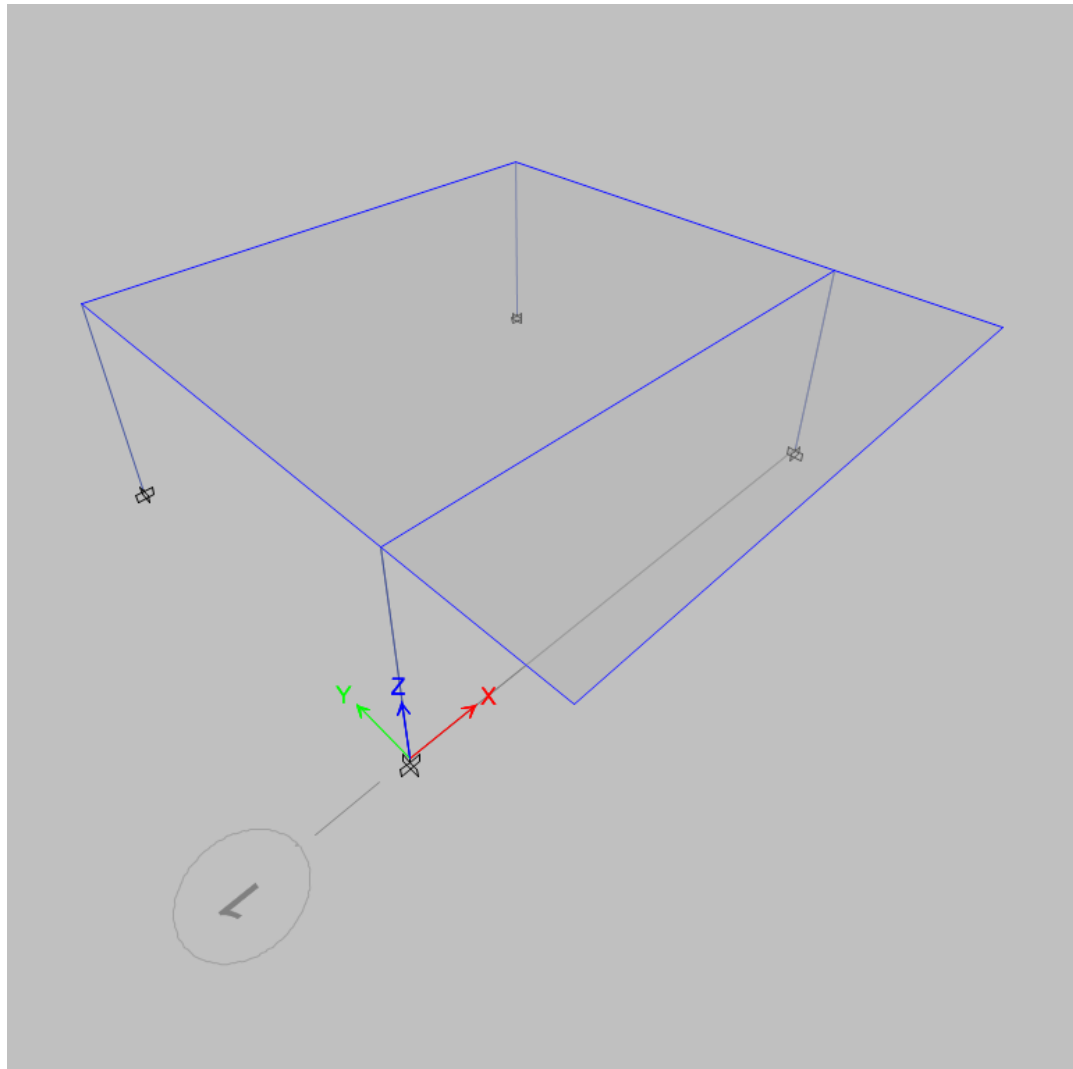
Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor	KMajor	KMinor	CmMajor	CmMinor
N1	C1	7	Column	Program Determined	0.880968	0.846154	0.846154	1	1	1	1
N1	C2	8	Column	Program Determined	0.984793	0.846154	0.846154	1	1	1	1
N1	C3	9	Column	Program Determined	0.880968	0.846154	0.846154	1	1	1	1
N1	C4	10	Column	Program Determined	0.984793	0.846154	0.846154	1	1	1	1

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 2 of 2)**

Story	Label	Unique Name	DnsMajor	DnsMinor	DsMajor	DsMinor
N1	C1	7	1	1	1	1
N1	C2	8	1	1	1	1
N1	C3	9	1	1	1	1
N1	C4	10	1	1	1	1

**Table 6.3 - Concrete Beam Overwrites - ACI 318-08**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor
N1	B1	13	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B2	14	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B4	16	Beam	Program Determined	1	0.95122	0.95122
N1	B6	18	Beam	Program Determined	1	0.95122	0.95122
N1	B8	2	Beam	Program Determined	1	0.916667	0.916667
N1	B15	22	Beam	Program Determined	1	1	1
N1	B17	4	Beam	Program Determined	1	0.916667	0.916667



## Project Report

Model File: 004\_2017\_M4ACD\_DES\_Project\_Report, Revision 0  
04/04/2017



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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	8.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	6.7

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	6700	0
3	8200	0	0
4	8200	6700	0
10	0	-2400	0
9	8200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B8	10	1	None
B15	10	9	None
B17	9	3	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	9	3	None
		2	3	1	None
		3	1	10	None
		4	10	9	None
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	30207.67	30207.67	4.1	-0.8161	30207.67	30207.67	4.1	-0.8161	4.1	2.7697

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	30207.67	30207.67	546.8375	4.1	-0.8161

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	39753.09	39753.09	0
Base	2498.55	2498.55	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A416Gr270	Tendon	196500.6	0	76.9729	Fy=1689.91 MPa, Fu=1861.58 MPa
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 2.5 Tendon Sections

**Table 2.5 - Tendon Section Properties**

Name	Material	StrandArea cm <sup>2</sup>	Color
Tendon1	A416Gr270	1	Yellow

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N1	B1	13	Beam	D	Force	Gravity	0	1	0	6700
N1	B2	14	Beam	D	Force	Gravity	0	1	0	6700
N1	B4	16	Beam	D	Force	Gravity	0	1	0	8200
N1	B15	22	Beam	D	Force	Gravity	0	1	0	8200

**Table 4.2 - Frame Loads - Distributed (Part 2 of 2)**

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N1	B1	13	4.4	0
N1	B2	14	4.4	0
N1	B4	16	4.4	4.4
N1	B15	22	3.1	3.1

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	3	D	Gravity	4.3
N1	F5	5	D	Gravity	0.64
N1	F1	3	L	Gravity	2
N1	F5	5	L	Gravity	0.5
N1	F1	3	G	Gravity	1
N1	F5	5	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0	1.1813	5
NSR10DERIVA	0.1	1.1813	
NSR10DERIVA	0.2	1.1813	
NSR10DERIVA	0.3	1.1813	
NSR10DERIVA	0.4	1.1813	

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0.5	1.1813	
NSR10DERIVA	0.6	1.1813	
NSR10DERIVA	0.7	1.0971	
NSR10DERIVA	0.8	0.96	
NSR10DERIVA	0.9	0.8533	
NSR10DERIVA	1	0.768	
NSR10DERIVA	1.2	0.64	
NSR10DERIVA	1.5	0.512	
NSR10DERIVA	1.7	0.4518	
NSR10DERIVA	2	0.384	
NSR10DERIVA	2.5	0.3072	
NSR10DERIVA	3	0.256	
NSR10DERIVA	3.5	0.2194	
NSR10DERIVA	4	0.1843	
NSR10DERIVA	5	0.118	
NSR10DERIVA	8	0.0461	
NSR10DERIVA	11	0.0244	
NSR10DERIVA	15	0.0131	
disNSR10	0	1.4766	5
disNSR10	0.1	1.4766	
disNSR10	0.2	1.4766	
disNSR10	0.3	1.4766	
disNSR10	0.4	1.4766	
disNSR10	0.5	1.4766	
disNSR10	0.6	1.4766	
disNSR10	0.7	1.3714	
disNSR10	0.8	1.2	
disNSR10	0.9	1.0667	
disNSR10	1	0.96	
disNSR10	1.2	0.8	
disNSR10	1.5	0.64	
disNSR10	1.7	0.5647	
disNSR10	2	0.48	
disNSR10	2.5	0.384	
disNSR10	3	0.32	
disNSR10	3.5	0.2743	
disNSR10	4	0.2304	
disNSR10	5	0.1475	
disNSR10	8	0.0576	
disNSR10	11	0.0305	
disNSR10	15	0.0164	
UMBRAL	0	0.1	2
UMBRAL	0.01	0.108	
UMBRAL	0.02	0.116	
UMBRAL	0.03	0.124	
UMBRAL	0.04	0.132	
UMBRAL	0.05	0.14	
UMBRAL	0.06	0.148	
UMBRAL	0.07	0.156	
UMBRAL	0.08	0.164	
UMBRAL	0.09	0.172	
UMBRAL	0.1	0.18	
UMBRAL	0.11	0.188	
UMBRAL	0.12	0.196	
UMBRAL	0.13	0.204	
UMBRAL	0.14	0.212	
UMBRAL	0.15	0.22	
UMBRAL	0.16	0.228	
UMBRAL	0.17	0.236	
UMBRAL	0.18	0.244	



Name	Period sec	Acceleration	Damping %
UMBRAL	0.19	0.252	
UMBRAL	0.2	0.26	
UMBRAL	0.21	0.268	
UMBRAL	0.22	0.276	
UMBRAL	0.23	0.284	
UMBRAL	0.24	0.292	
UMBRAL	0.25	0.3	
UMBRAL	0.26	0.3	
UMBRAL	0.27	0.3	
UMBRAL	0.28	0.3	
UMBRAL	0.29	0.3	
UMBRAL	0.3	0.3	
UMBRAL	0.31	0.3	
UMBRAL	0.32	0.3	
UMBRAL	0.33	0.3	
UMBRAL	0.34	0.3	
UMBRAL	0.35	0.3	
UMBRAL	0.36	0.3	
UMBRAL	0.37	0.3	
UMBRAL	0.38	0.3	
UMBRAL	0.39	0.3	
UMBRAL	0.4	0.3	
UMBRAL	0.41	0.3	
UMBRAL	0.42	0.3	
UMBRAL	0.43	0.3	
UMBRAL	0.44	0.3	
UMBRAL	0.45	0.3	
UMBRAL	0.46	0.3	
UMBRAL	0.47	0.3	
UMBRAL	0.48	0.3	
UMBRAL	0.49	0.3	
UMBRAL	0.5	0.3	
UMBRAL	0.51	0.3	
UMBRAL	0.52	0.3	
UMBRAL	0.53	0.3	
UMBRAL	0.54	0.3	
UMBRAL	0.55	0.3	
UMBRAL	0.56	0.3	
UMBRAL	0.57	0.3	
UMBRAL	0.58	0.3	
UMBRAL	0.59	0.3	
UMBRAL	0.6	0.3	
UMBRAL	0.61	0.3	
UMBRAL	0.62	0.3	
UMBRAL	0.63	0.3	
UMBRAL	0.64	0.3	
UMBRAL	0.65	0.3	
UMBRAL	0.66	0.3	
UMBRAL	0.67	0.3	
UMBRAL	0.68	0.3	
UMBRAL	0.69	0.3	
UMBRAL	0.7	0.3	
UMBRAL	0.71	0.3	
UMBRAL	0.72	0.3	
UMBRAL	0.73	0.3	
UMBRAL	0.74	0.3	
UMBRAL	0.75	0.3	
UMBRAL	0.76	0.3	
UMBRAL	0.77	0.3	
UMBRAL	0.78	0.3	

Name	Period sec	Acceleration	Damping %
UMBRAL	0.79	0.3	
UMBRAL	0.8	0.3	
UMBRAL	0.81	0.3	
UMBRAL	0.82	0.3	
UMBRAL	0.83	0.3	
UMBRAL	0.84	0.3	
UMBRAL	0.85	0.3	
UMBRAL	0.86	0.3	
UMBRAL	0.87	0.3	
UMBRAL	0.88	0.3	
UMBRAL	0.89	0.3	
UMBRAL	0.9	0.3	
UMBRAL	0.91	0.3	
UMBRAL	0.92	0.3	
UMBRAL	0.93	0.3	
UMBRAL	0.94	0.3	
UMBRAL	0.95	0.3	
UMBRAL	0.96	0.3	
UMBRAL	0.97	0.3	
UMBRAL	0.98	0.3	
UMBRAL	0.99	0.3	
UMBRAL	1	0.3	
UMBRAL	1.01	0.297	
UMBRAL	1.02	0.294	
UMBRAL	1.03	0.291	
UMBRAL	1.04	0.288	
UMBRAL	1.05	0.286	
UMBRAL	1.06	0.283	
UMBRAL	1.07	0.28	
UMBRAL	1.08	0.278	
UMBRAL	1.09	0.275	
UMBRAL	1.1	0.273	
UMBRAL	1.11	0.27	
UMBRAL	1.12	0.268	
UMBRAL	1.13	0.265	
UMBRAL	1.14	0.263	
UMBRAL	1.15	0.261	
UMBRAL	1.16	0.259	
UMBRAL	1.17	0.256	
UMBRAL	1.18	0.254	
UMBRAL	1.19	0.252	
UMBRAL	1.2	0.25	
UMBRAL	1.21	0.248	
UMBRAL	1.22	0.246	
UMBRAL	1.23	0.244	
UMBRAL	1.24	0.242	
UMBRAL	1.25	0.24	
UMBRAL	1.26	0.238	
UMBRAL	1.27	0.236	
UMBRAL	1.28	0.234	
UMBRAL	1.29	0.233	
UMBRAL	1.3	0.231	
UMBRAL	1.31	0.229	
UMBRAL	1.32	0.227	
UMBRAL	1.33	0.226	
UMBRAL	1.34	0.224	
UMBRAL	1.35	0.222	
UMBRAL	1.36	0.221	
UMBRAL	1.37	0.219	
UMBRAL	1.38	0.217	

Name	Period sec	Acceleration	Damping %
UMBRAL	1.39	0.216	
UMBRAL	1.4	0.214	
UMBRAL	1.41	0.213	
UMBRAL	1.42	0.211	
UMBRAL	1.43	0.21	
UMBRAL	1.44	0.208	
UMBRAL	1.45	0.207	
UMBRAL	1.46	0.205	
UMBRAL	1.47	0.204	
UMBRAL	1.48	0.203	
UMBRAL	1.49	0.201	
UMBRAL	1.5	0.2	
UMBRAL	1.51	0.199	
UMBRAL	1.52	0.197	
UMBRAL	1.53	0.196	
UMBRAL	1.54	0.195	
UMBRAL	1.55	0.194	
UMBRAL	1.56	0.192	
UMBRAL	1.57	0.191	
UMBRAL	1.58	0.19	
UMBRAL	1.59	0.189	
UMBRAL	1.6	0.188	
UMBRAL	1.61	0.186	
UMBRAL	1.62	0.185	
UMBRAL	1.63	0.184	
UMBRAL	1.64	0.183	
UMBRAL	1.65	0.182	
UMBRAL	1.66	0.181	
UMBRAL	1.67	0.18	
UMBRAL	1.68	0.179	
UMBRAL	1.69	0.178	
UMBRAL	1.7	0.176	
UMBRAL	1.71	0.175	
UMBRAL	1.72	0.174	
UMBRAL	1.73	0.173	
UMBRAL	1.74	0.172	
UMBRAL	1.75	0.171	
UMBRAL	1.76	0.17	
UMBRAL	1.77	0.169	
UMBRAL	1.78	0.169	
UMBRAL	1.79	0.168	
UMBRAL	1.8	0.167	
UMBRAL	1.81	0.166	
UMBRAL	1.82	0.165	
UMBRAL	1.83	0.164	
UMBRAL	1.84	0.163	
UMBRAL	1.85	0.162	
UMBRAL	1.86	0.161	
UMBRAL	1.87	0.16	
UMBRAL	1.88	0.16	
UMBRAL	1.89	0.159	
UMBRAL	1.9	0.158	
UMBRAL	1.91	0.157	
UMBRAL	1.92	0.156	
UMBRAL	1.93	0.155	
UMBRAL	1.94	0.155	
UMBRAL	1.95	0.154	
UMBRAL	1.96	0.153	
UMBRAL	1.97	0.152	
UMBRAL	1.98	0.152	

Name	Period sec	Acceleration	Damping %
UMBRAL	1.99	0.151	
UMBRAL	2	0.15	
UMBRAL	2.01	0.149	
UMBRAL	2.02	0.149	
UMBRAL	2.03	0.148	
UMBRAL	2.04	0.147	
UMBRAL	2.05	0.146	
UMBRAL	2.06	0.146	
UMBRAL	2.07	0.145	
UMBRAL	2.08	0.144	
UMBRAL	2.09	0.144	
UMBRAL	2.1	0.143	
UMBRAL	2.11	0.142	
UMBRAL	2.12	0.142	
UMBRAL	2.13	0.141	
UMBRAL	2.14	0.14	
UMBRAL	2.15	0.14	
UMBRAL	2.16	0.139	
UMBRAL	2.17	0.138	
UMBRAL	2.18	0.138	
UMBRAL	2.19	0.137	
UMBRAL	2.2	0.136	
UMBRAL	2.21	0.136	
UMBRAL	2.22	0.135	
UMBRAL	2.23	0.135	
UMBRAL	2.24	0.134	
UMBRAL	2.25	0.133	
UMBRAL	2.26	0.133	
UMBRAL	2.27	0.132	
UMBRAL	2.28	0.132	
UMBRAL	2.29	0.131	
UMBRAL	2.3	0.13	
UMBRAL	2.31	0.13	
UMBRAL	2.32	0.129	
UMBRAL	2.33	0.129	
UMBRAL	2.34	0.128	
UMBRAL	2.35	0.128	
UMBRAL	2.36	0.127	
UMBRAL	2.37	0.127	
UMBRAL	2.38	0.126	
UMBRAL	2.39	0.126	
UMBRAL	2.4	0.125	
UMBRAL	2.41	0.124	
UMBRAL	2.42	0.124	
UMBRAL	2.43	0.123	
UMBRAL	2.44	0.123	
UMBRAL	2.45	0.122	
UMBRAL	2.46	0.122	
UMBRAL	2.47	0.121	
UMBRAL	2.48	0.121	
UMBRAL	2.49	0.12	
UMBRAL	2.5	0.12	
UMBRAL	2.51	0.12	
UMBRAL	2.52	0.119	
UMBRAL	2.53	0.119	
UMBRAL	2.54	0.118	
UMBRAL	2.55	0.118	
UMBRAL	2.56	0.117	
UMBRAL	2.57	0.117	
UMBRAL	2.58	0.116	

Name	Period sec	Acceleration	Damping %
UMBRAL	2.59	0.116	
UMBRAL	2.6	0.115	
UMBRAL	2.61	0.115	
UMBRAL	2.62	0.115	
UMBRAL	2.63	0.114	
UMBRAL	2.64	0.114	
UMBRAL	2.65	0.113	
UMBRAL	2.66	0.113	
UMBRAL	2.67	0.112	
UMBRAL	2.68	0.112	
UMBRAL	2.69	0.112	
UMBRAL	2.7	0.111	
UMBRAL	2.71	0.111	
UMBRAL	2.72	0.11	
UMBRAL	2.73	0.11	
UMBRAL	2.74	0.109	
UMBRAL	2.75	0.109	
UMBRAL	2.76	0.109	
UMBRAL	2.77	0.108	
UMBRAL	2.78	0.108	
UMBRAL	2.79	0.108	
UMBRAL	2.8	0.107	
UMBRAL	2.81	0.107	
UMBRAL	2.82	0.106	
UMBRAL	2.83	0.106	
UMBRAL	2.84	0.106	
UMBRAL	2.85	0.105	
UMBRAL	2.86	0.105	
UMBRAL	2.87	0.105	
UMBRAL	2.88	0.104	
UMBRAL	2.89	0.104	
UMBRAL	2.9	0.103	
UMBRAL	2.91	0.103	
UMBRAL	2.92	0.103	
UMBRAL	2.93	0.102	
UMBRAL	2.94	0.102	
UMBRAL	2.95	0.102	
UMBRAL	2.96	0.101	
UMBRAL	2.97	0.101	
UMBRAL	2.98	0.101	
UMBRAL	2.99	0.1	
UMBRAL	3	0.1	
UMBRAL	3.01	0.1	
UMBRAL	3.02	0.099	
UMBRAL	3.03	0.099	
UMBRAL	3.04	0.099	
UMBRAL	3.05	0.098	
UMBRAL	3.06	0.098	
UMBRAL	3.07	0.098	
UMBRAL	3.08	0.097	
UMBRAL	3.09	0.097	
UMBRAL	3.1	0.097	
UMBRAL	3.11	0.096	
UMBRAL	3.12	0.096	
UMBRAL	3.13	0.096	
UMBRAL	3.14	0.096	
UMBRAL	3.15	0.095	
UMBRAL	3.16	0.095	
UMBRAL	3.17	0.095	
UMBRAL	3.18	0.094	

Name	Period sec	Acceleration	Damping %
UMBRAL	3.19	0.094	
UMBRAL	3.2	0.094	
UMBRAL	3.21	0.093	
UMBRAL	3.22	0.093	
UMBRAL	3.23	0.093	
UMBRAL	3.24	0.093	
UMBRAL	3.25	0.092	
UMBRAL	3.26	0.092	
UMBRAL	3.27	0.092	
UMBRAL	3.28	0.091	
UMBRAL	3.29	0.091	
UMBRAL	3.3	0.091	
UMBRAL	3.31	0.091	
UMBRAL	3.32	0.09	
UMBRAL	3.33	0.09	
UMBRAL	3.34	0.09	
UMBRAL	3.35	0.09	
UMBRAL	3.36	0.089	
UMBRAL	3.37	0.089	
UMBRAL	3.38	0.089	
UMBRAL	3.39	0.088	
UMBRAL	3.4	0.088	
UMBRAL	3.41	0.088	
UMBRAL	3.42	0.088	
UMBRAL	3.43	0.087	
UMBRAL	3.44	0.087	
UMBRAL	3.45	0.087	
UMBRAL	3.46	0.087	
UMBRAL	3.47	0.086	
UMBRAL	3.48	0.086	
UMBRAL	3.49	0.086	
UMBRAL	3.5	0.086	
UMBRAL	3.51	0.085	
UMBRAL	3.52	0.085	
UMBRAL	3.53	0.085	
UMBRAL	3.54	0.085	
UMBRAL	3.55	0.085	
UMBRAL	3.56	0.084	
UMBRAL	3.57	0.084	
UMBRAL	3.58	0.084	
UMBRAL	3.59	0.084	
UMBRAL	3.6	0.083	
UMBRAL	3.61	0.083	
UMBRAL	3.62	0.083	
UMBRAL	3.63	0.083	
UMBRAL	3.64	0.082	
UMBRAL	3.65	0.082	
UMBRAL	3.66	0.082	
UMBRAL	3.67	0.082	
UMBRAL	3.68	0.082	
UMBRAL	3.69	0.081	
UMBRAL	3.7	0.081	
UMBRAL	3.71	0.081	
UMBRAL	3.72	0.081	
UMBRAL	3.73	0.08	
UMBRAL	3.74	0.08	
UMBRAL	3.75	0.08	
UMBRAL	3.76	0.08	
UMBRAL	3.77	0.08	
UMBRAL	3.78	0.079	

Name	Period sec	Acceleration	Damping %
UMBRAL	3.79	0.079	
UMBRAL	3.8	0.079	
UMBRAL	3.81	0.079	
UMBRAL	3.82	0.079	
UMBRAL	3.83	0.078	
UMBRAL	3.84	0.078	
UMBRAL	3.85	0.078	
UMBRAL	3.86	0.078	
UMBRAL	3.87	0.078	
UMBRAL	3.88	0.077	
UMBRAL	3.89	0.077	
UMBRAL	3.9	0.077	
UMBRAL	3.91	0.077	
UMBRAL	3.92	0.077	
UMBRAL	3.93	0.076	
UMBRAL	3.94	0.076	
UMBRAL	3.95	0.076	
UMBRAL	3.96	0.076	
UMBRAL	3.97	0.076	
UMBRAL	3.98	0.075	
UMBRAL	3.99	0.075	
UMBRAL	4	0.075	
UMBRAL	4.01	0.075	
UMBRAL	4.02	0.075	
UMBRAL	4.03	0.074	
UMBRAL	4.04	0.074	
UMBRAL	4.05	0.074	
UMBRAL	4.06	0.074	
UMBRAL	4.07	0.074	
UMBRAL	4.08	0.074	
UMBRAL	4.09	0.073	
UMBRAL	4.1	0.073	
UMBRAL	4.11	0.073	
UMBRAL	4.12	0.073	
UMBRAL	4.13	0.073	
UMBRAL	4.14	0.072	
UMBRAL	4.15	0.072	
UMBRAL	4.16	0.072	
UMBRAL	4.17	0.072	
UMBRAL	4.18	0.072	
UMBRAL	4.19	0.072	
UMBRAL	4.2	0.071	
UMBRAL	4.21	0.071	
UMBRAL	4.22	0.071	
UMBRAL	4.23	0.071	
UMBRAL	4.24	0.071	
UMBRAL	4.25	0.071	
UMBRAL	4.26	0.07	
UMBRAL	4.27	0.07	
UMBRAL	4.28	0.07	
UMBRAL	4.29	0.07	
UMBRAL	4.3	0.07	
UMBRAL	4.31	0.07	
UMBRAL	4.32	0.069	
UMBRAL	4.33	0.069	
UMBRAL	4.34	0.069	
UMBRAL	4.35	0.069	
UMBRAL	4.36	0.069	
UMBRAL	4.37	0.069	
UMBRAL	4.38	0.068	

Name	Period sec	Acceleration	Damping %
UMBRAL	4.39	0.068	
UMBRAL	4.4	0.068	
UMBRAL	4.41	0.068	
UMBRAL	4.42	0.068	
UMBRAL	4.43	0.068	
UMBRAL	4.44	0.068	
UMBRAL	4.45	0.067	
UMBRAL	4.46	0.067	
UMBRAL	4.47	0.067	
UMBRAL	4.48	0.067	
UMBRAL	4.49	0.067	
UMBRAL	4.5	0.067	
UMBRAL	4.51	0.067	
UMBRAL	4.52	0.066	
UMBRAL	4.53	0.066	
UMBRAL	4.54	0.066	
UMBRAL	4.55	0.066	
UMBRAL	4.56	0.066	
UMBRAL	4.57	0.066	
UMBRAL	4.58	0.066	
UMBRAL	4.59	0.065	
UMBRAL	4.6	0.065	
UMBRAL	4.61	0.065	
UMBRAL	4.62	0.065	
UMBRAL	4.63	0.065	
UMBRAL	4.64	0.065	
UMBRAL	4.65	0.065	
UMBRAL	4.66	0.064	
UMBRAL	4.67	0.064	
UMBRAL	4.68	0.064	
UMBRAL	4.69	0.064	
UMBRAL	4.7	0.064	
UMBRAL	4.71	0.064	
UMBRAL	4.72	0.064	
UMBRAL	4.73	0.063	
UMBRAL	4.74	0.063	
UMBRAL	4.75	0.063	
UMBRAL	4.76	0.063	
UMBRAL	4.77	0.063	
UMBRAL	4.78	0.063	
UMBRAL	4.79	0.063	
UMBRAL	4.8	0.063	
UMBRAL	4.81	0.062	
UMBRAL	4.82	0.062	
UMBRAL	4.83	0.062	
UMBRAL	4.84	0.061	
UMBRAL	4.85	0.061	
UMBRAL	4.86	0.061	
UMBRAL	4.87	0.061	
UMBRAL	4.88	0.06	
UMBRAL	4.89	0.06	
UMBRAL	4.9	0.06	
UMBRAL	4.91	0.06	
UMBRAL	4.92	0.059	
UMBRAL	4.93	0.059	
UMBRAL	4.94	0.059	
UMBRAL	4.95	0.059	
UMBRAL	4.96	0.059	
UMBRAL	4.97	0.058	
UMBRAL	4.98	0.058	



Name	Period sec	Acceleration	Damping %
UMBRAL	4.99	0.058	
UMBRAL	5	0.058	
UMBRAL	5.01	0.057	
UMBRAL	5.02	0.057	
UMBRAL	5.03	0.057	
UMBRAL	5.04	0.057	
UMBRAL	5.05	0.056	
UMBRAL	5.06	0.056	
UMBRAL	5.07	0.056	
UMBRAL	5.08	0.056	
UMBRAL	5.09	0.056	
UMBRAL	5.1	0.055	
UMBRAL	5.11	0.055	
UMBRAL	5.12	0.055	
UMBRAL	5.13	0.055	
UMBRAL	5.14	0.055	
UMBRAL	5.15	0.054	
UMBRAL	5.16	0.054	
UMBRAL	5.17	0.054	
UMBRAL	5.18	0.054	
UMBRAL	5.19	0.053	
UMBRAL	5.2	0.053	
UMBRAL	5.21	0.053	
UMBRAL	5.22	0.053	
UMBRAL	5.23	0.053	
UMBRAL	5.24	0.052	
UMBRAL	5.25	0.052	
UMBRAL	5.26	0.052	
UMBRAL	5.27	0.052	
UMBRAL	5.28	0.052	
UMBRAL	5.29	0.051	
UMBRAL	5.3	0.051	
UMBRAL	5.31	0.051	
UMBRAL	5.32	0.051	
UMBRAL	5.33	0.051	
UMBRAL	5.34	0.05	
UMBRAL	5.35	0.05	
UMBRAL	5.36	0.05	
UMBRAL	5.37	0.05	
UMBRAL	5.38	0.05	
UMBRAL	5.39	0.05	
UMBRAL	5.4	0.049	
UMBRAL	5.41	0.049	
UMBRAL	5.42	0.049	
UMBRAL	5.43	0.049	
UMBRAL	5.44	0.049	
UMBRAL	5.45	0.048	
UMBRAL	5.46	0.048	
UMBRAL	5.47	0.048	
UMBRAL	5.48	0.048	
UMBRAL	5.49	0.048	
UMBRAL	5.5	0.048	
UMBRAL	5.51	0.047	
UMBRAL	5.52	0.047	
UMBRAL	5.53	0.047	
UMBRAL	5.54	0.047	
UMBRAL	5.55	0.047	
UMBRAL	5.56	0.047	
UMBRAL	5.57	0.046	
UMBRAL	5.58	0.046	

Name	Period sec	Acceleration	Damping %
UMBRAL	5.59	0.046	
UMBRAL	5.6	0.046	
UMBRAL	5.61	0.046	
UMBRAL	5.62	0.046	
UMBRAL	5.63	0.045	
UMBRAL	5.64	0.045	
UMBRAL	5.65	0.045	
UMBRAL	5.66	0.045	
UMBRAL	5.67	0.045	
UMBRAL	5.68	0.045	
UMBRAL	5.69	0.044	
UMBRAL	5.7	0.044	
UMBRAL	5.71	0.044	
UMBRAL	5.72	0.044	
UMBRAL	5.73	0.044	
UMBRAL	5.74	0.044	
UMBRAL	5.75	0.044	
UMBRAL	5.76	0.043	
UMBRAL	5.77	0.043	
UMBRAL	5.78	0.043	
UMBRAL	5.79	0.043	
UMBRAL	5.8	0.043	
UMBRAL	5.81	0.043	
UMBRAL	5.82	0.043	
UMBRAL	5.83	0.042	
UMBRAL	5.84	0.042	
UMBRAL	5.85	0.042	
UMBRAL	5.86	0.042	
UMBRAL	5.87	0.042	
UMBRAL	5.88	0.042	
UMBRAL	5.89	0.042	
UMBRAL	5.9	0.041	
UMBRAL	5.91	0.041	
UMBRAL	5.92	0.041	
UMBRAL	5.93	0.041	
UMBRAL	5.94	0.041	
UMBRAL	5.95	0.041	
UMBRAL	5.96	0.041	
UMBRAL	5.97	0.04	
UMBRAL	5.98	0.04	
UMBRAL	5.99	0.04	
UMBRAL	6	0.04	
UMBRAL	6.01	0.04	
UMBRAL	6.02	0.04	
UMBRAL	6.03	0.04	
UMBRAL	6.04	0.039	
UMBRAL	6.05	0.039	
UMBRAL	6.06	0.039	
UMBRAL	6.07	0.039	
UMBRAL	6.08	0.039	
UMBRAL	6.09	0.039	
UMBRAL	6.1	0.039	
UMBRAL	6.11	0.039	
UMBRAL	6.12	0.038	
UMBRAL	6.13	0.038	
UMBRAL	6.14	0.038	
UMBRAL	6.15	0.038	
UMBRAL	6.16	0.038	
UMBRAL	6.17	0.038	
UMBRAL	6.18	0.038	

Name	Period sec	Acceleration	Damping %
UMBRAL	6.19	0.038	
UMBRAL	6.2	0.037	
UMBRAL	6.21	0.037	
UMBRAL	6.22	0.037	
UMBRAL	6.23	0.037	
UMBRAL	6.24	0.037	
UMBRAL	6.25	0.037	
UMBRAL	6.26	0.037	
UMBRAL	6.27	0.037	
UMBRAL	6.28	0.037	
UMBRAL	6.29	0.036	
UMBRAL	6.3	0.036	
UMBRAL	6.31	0.036	
UMBRAL	6.32	0.036	
UMBRAL	6.33	0.036	
UMBRAL	6.34	0.036	
UMBRAL	6.35	0.036	
UMBRAL	6.36	0.036	
UMBRAL	6.37	0.035	
UMBRAL	6.38	0.035	
UMBRAL	6.39	0.035	
UMBRAL	6.4	0.035	
UMBRAL	6.41	0.035	
UMBRAL	6.42	0.035	
UMBRAL	6.43	0.035	
UMBRAL	6.44	0.035	
UMBRAL	6.45	0.035	
UMBRAL	6.46	0.035	
UMBRAL	6.47	0.034	
UMBRAL	6.48	0.034	
UMBRAL	6.49	0.034	
UMBRAL	6.5	0.034	
UMBRAL	6.51	0.034	
UMBRAL	6.52	0.034	
UMBRAL	6.53	0.034	
UMBRAL	6.54	0.034	
UMBRAL	6.55	0.034	
UMBRAL	6.56	0.033	
UMBRAL	6.57	0.033	
UMBRAL	6.58	0.033	
UMBRAL	6.59	0.033	
UMBRAL	6.6	0.033	
UMBRAL	6.61	0.033	
UMBRAL	6.62	0.033	
UMBRAL	6.63	0.033	
UMBRAL	6.64	0.033	
UMBRAL	6.65	0.033	
UMBRAL	6.66	0.032	
UMBRAL	6.67	0.032	
UMBRAL	6.68	0.032	
UMBRAL	6.69	0.032	
UMBRAL	6.7	0.032	
UMBRAL	6.71	0.032	
UMBRAL	6.72	0.032	
UMBRAL	6.73	0.032	
UMBRAL	6.74	0.032	
UMBRAL	6.75	0.032	
UMBRAL	6.76	0.032	
UMBRAL	6.77	0.031	
UMBRAL	6.78	0.031	

Name	Period sec	Acceleration	Damping %
UMBRAL	6.79	0.031	
UMBRAL	6.8	0.031	
UMBRAL	6.81	0.031	
UMBRAL	6.82	0.031	
UMBRAL	6.83	0.031	
UMBRAL	6.84	0.031	
UMBRAL	6.85	0.031	
UMBRAL	6.86	0.031	
UMBRAL	6.87	0.031	
UMBRAL	6.88	0.03	
UMBRAL	6.89	0.03	
UMBRAL	6.9	0.03	
UMBRAL	6.91	0.03	
UMBRAL	6.92	0.03	
UMBRAL	6.93	0.03	
UMBRAL	6.94	0.03	
UMBRAL	6.95	0.03	
UMBRAL	6.96	0.03	
UMBRAL	6.97	0.03	
UMBRAL	6.98	0.03	
UMBRAL	6.99	0.029	
UMBRAL	7	0.029	
UMBRAL	7.01	0.029	
UMBRAL	7.02	0.029	
UMBRAL	7.03	0.029	
UMBRAL	7.04	0.029	
UMBRAL	7.05	0.029	
UMBRAL	7.06	0.029	
UMBRAL	7.07	0.029	
UMBRAL	7.08	0.029	
UMBRAL	7.09	0.029	
UMBRAL	7.1	0.029	
UMBRAL	7.11	0.028	
UMBRAL	7.12	0.028	
UMBRAL	7.13	0.028	
UMBRAL	7.14	0.028	
UMBRAL	7.15	0.028	
UMBRAL	7.16	0.028	
UMBRAL	7.17	0.028	
UMBRAL	7.18	0.028	
UMBRAL	7.19	0.028	
UMBRAL	7.2	0.028	
UMBRAL	7.21	0.028	
UMBRAL	7.22	0.028	
UMBRAL	7.23	0.028	
UMBRAL	7.24	0.027	
UMBRAL	7.25	0.027	
UMBRAL	7.26	0.027	
UMBRAL	7.27	0.027	
UMBRAL	7.28	0.027	
UMBRAL	7.29	0.027	
UMBRAL	7.3	0.027	
UMBRAL	7.31	0.027	
UMBRAL	7.32	0.027	
UMBRAL	7.33	0.027	
UMBRAL	7.34	0.027	
UMBRAL	7.35	0.027	
UMBRAL	7.36	0.027	
UMBRAL	7.37	0.027	
UMBRAL	7.38	0.026	

Name	Period sec	Acceleration	Damping %
UMBRAL	7.39	0.026	
UMBRAL	7.4	0.026	
UMBRAL	7.41	0.026	
UMBRAL	7.42	0.026	
UMBRAL	7.43	0.026	
UMBRAL	7.44	0.026	
UMBRAL	7.45	0.026	
UMBRAL	7.46	0.026	
UMBRAL	7.47	0.026	
UMBRAL	7.48	0.026	
UMBRAL	7.49	0.026	
UMBRAL	7.5	0.026	

4.4 Load Cases

Table 4.5 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.6 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM08	D	1	Linear Add	No
CIM08	L	0.75		No
CIM08	LR	0.75		No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	L	0.75		No
CIM12	G	0.75		No
CIM13	D	1	Linear Add	No
CIM13	L	0.75		No
CIM13	G	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	L	0.75		No
CIM14	G	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	LR	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	LR	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	LR	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	394.298	452.0506	-1616.6218	0	0	0	0
L	0	0	66.83	44.694	-274.003	0	0	0	0
LR	0	0	0	0	0	0	0	0	0
EX Max	525.0018	0	0	0	1712.6788	2280.8296	0	0	0
EY Max	0	525.0084	0	1711.2117	0	2152.5344	0	0	0
DISX Max	138.6488	0	0	0	452.3048	602.3488	0	0	0
DISY Max	0	139.1155	0	453.4328	0	570.3734	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	74.62	160.3846	-305.942	0	0	0	0
DERUX Max	72.1713	0	0	0	235.4764	278.319	0	0	0
DERUY Max	0	82.5103	0	268.934	0	338.2923	0	0	0
COMB1	0	0	552.0172	632.8708	-2263.2705	0	0	0	0
COMB2	0	0	580.0856	613.9711	-2378.351	0	0	0	0
COMB3	0	0	539.9876	587.1547	-2213.9492	0	0	0	0
COMB4	0	0	539.9876	587.1547	-2213.9492	0	0	0	0
COMB5 Max	138.6488	41.7346	539.9876	723.1845	-1761.6444	773.4609	0	0	0
COMB5 Min	-138.6488	-41.7346	539.9876	451.1248	-2666.2539	-773.4609	0	0	0
COMB6 Max	41.5946	139.1155	539.9876	1040.5875	-2078.2577	751.0781	0	0	0
COMB6 Min	-41.5946	-139.1155	539.9876	133.7219	-2349.6406	-751.0781	0	0	0
COMB7 Max	41.5946	139.1155	354.8682	860.2783	-1319.2682	751.0781	0	0	0
COMB7 Min	-41.5946	-139.1155	354.8682	-46.5873	-1590.6511	-751.0781	0	0	0
COMB8 Max	138.6488	41.7346	354.8682	542.8754	-1002.6548	773.4609	0	0	0
COMB8 Min	-138.6488	-41.7346	354.8682	270.8157	-1907.2644	-773.4609	0	0	0
ENVE Max	138.6488	139.1155	580.0856	1040.5875	-1002.6548	773.4609	0	0	0
ENVE Min	-138.6488	-139.1155	354.8682	-46.5873	-2666.2539	-773.4609	0	0	0
CIM01	0	0	394.298	452.0506	-1616.6218	0	0	0	0
CIM02	0	0	461.128	496.7446	-1890.6248	0	0	0	0
CIM03	0	0	394.298	452.0506	-1616.6218	0	0	0	0
CIM04	0	0	444.4205	485.5711	-1822.1241	0	0	0	0
CIM05 Max	97.0541	29.2142	394.298	547.2715	-1300.0085	541.4226	0	0	0
CIM05 Min	-97.0541	-29.2142	394.298	356.8297	-1933.2351	-541.4226	0	0	0
CIM06 Max	29.1162	97.3808	394.298	769.4536	-1521.6378	525.7547	0	0	0
CIM06 Min	-29.1162	-97.3808	394.298	134.6476	-1711.6058	-525.7547	0	0	0
CIM07 Max	73.4838	22.2585	444.4205	558.1203	-1582.4025	410.5046	0	0	0
CIM07 Min	-73.4838	-22.2585	444.4205	413.0218	-2061.8456	-410.5046	0	0	0
CIM08 Max	22.1838	73.7312	444.4205	725.8905	-1749.7553	398.6737	0	0	0
CIM08 Min	-22.1838	-73.7312	444.4205	245.2517	-1894.4928	-398.6737	0	0	0
DER01	0	0	552.0172	632.8708	-2263.2705	0	0	0	0
DER02	0	0	580.0856	613.9711	-2378.351	0	0	0	0
DER03	0	0	539.9876	587.1547	-2213.9492	0	0	0	0
DER04	0	0	539.9876	587.1547	-2213.9492	0	0	0	0
DER05 Max	525.0018	0	539.9876	587.1547	-501.2703	2280.8296	0	0	0
DER05 Min	-525.0018	0	539.9876	587.1547	-3926.628	-2280.8296	0	0	0
DER06 Max	0	525.0084	539.9876	2298.3664	-2213.9492	2152.5344	0	0	0
DER06 Min	0	-525.0084	539.9876	-1124.057	-2213.9492	-2152.5344	0	0	0
DER07 Max	525.0018	0	354.8682	406.8455	257.7192	2280.8296	0	0	0
DER07 Min	-525.0018	0	354.8682	406.8455	-3167.6385	-2280.8296	0	0	0
DER08 Max	0	525.0084	354.8682	2118.0572	-1454.9596	2152.5344	0	0	0
DER08 Min	0	-525.0084	354.8682	-1304.3662	-1454.9596	-2152.5344	0	0	0
DERUD01	0	0	552.0172	632.8708	-2263.2705	0	0	0	0
DERUD02	0	0	580.0856	613.9711	-2378.351	0	0	0	0
DERUD03	0	0	539.9876	587.1547	-2213.9492	0	0	0	0
DERUD04	0	0	539.9876	587.1547	-2213.9492	0	0	0	0
DERUD05 Max	72.1713	0	539.9876	587.1547	-1978.4728	278.319	0	0	0



Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-72.1713	0	539.9876	587.1547	-2449.4255	-278.319	0	0	0
DERUD06 Max	0	82.5103	539.9876	856.0887	-2213.9492	338.2923	0	0	0
DERUD06 Min	0	-82.5103	539.9876	318.2207	-2213.9492	-338.2923	0	0	0
DERUD07 Max	72.1713	0	354.8682	406.8455	-1219.4832	278.319	0	0	0
DERUD07 Min	-72.1713	0	354.8682	406.8455	-1690.436	-278.319	0	0	0
DERUD08 Max	0	82.5103	354.8682	675.7795	-1454.9596	338.2923	0	0	0
DERUD08 Min	0	-82.5103	354.8682	137.9115	-1454.9596	-338.2923	0	0	0
CIM09 Max	97.0541	29.2142	236.5788	366.4512	-653.3597	541.4226	0	0	0
CIM09 Min	-97.0541	-29.2142	236.5788	176.0095	-1286.5864	-541.4226	0	0	0
CIM10 Max	29.1162	97.3808	236.5788	588.6333	-874.9891	525.7547	0	0	0
CIM10 Min	-29.1162	-97.3808	236.5788	-46.1726	-1064.9571	-525.7547	0	0	0
CIM11	0	0	468.918	612.4352	-1922.5638	0	0	0	0
CIM12	0	0	500.3855	605.8595	-2051.5806	0	0	0	0
CIM13 Max	73.4838	22.2585	500.3855	678.4088	-1811.859	410.5046	0	0	0
CIM13 Min	-73.4838	-22.2585	500.3855	533.3103	-2291.3021	-410.5046	0	0	0
CIM14 Max	22.1838	73.7312	500.3855	846.1789	-1979.2118	398.6737	0	0	0
CIM14 Min	-22.1838	-73.7312	500.3855	365.5401	-2123.9493	-398.6737	0	0	0
CIM15	0	0	236.5788	271.2304	-969.9731	0	0	0	0
COMB9	0	0	580.0856	613.9711	-2378.351	0	0	0	0
COMB10	0	0	539.9876	587.1547	-2213.9492	0	0	0	0
COMB11	0	0	539.9876	587.1547	-2213.9492	0	0	0	0
DER09	0	0	617.3956	694.1634	-2531.322	0	0	0	0
DER10	0	0	659.3796	843.77	-2703.4564	0	0	0	0
DER11	0	0	577.2976	667.347	-2366.9202	0	0	0	0
DERUD09	0	0	617.3956	694.1634	-2531.322	0	0	0	0
DERUD10	0	0	659.3796	843.77	-2703.4564	0	0	0	0
DERUD11	0	0	577.2976	667.347	-2366.9202	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	30207.67	30207.67	4.1	-0.8161	30207.67	30207.67	4.1	-0.8161	4.1	2.7697

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.3	0	1	4.1	-0.8161	3.25
N1	D1	L	0	-0.3	0	1	4.1	-0.8161	3.25
N1	D1	LR	0	0	0	1	4.1	-0.8161	3.25
N1	D1	EX Max	21.9	0	0.002502	1	4.1	-0.8161	3.25
N1	D1	EY Max	0	13.4	0	1	4.1	-0.8161	3.25
N1	D1	DISX Max	5.8	0	0.000661	1	4.1	-0.8161	3.25
N1	D1	DISY Max	0	3.5	0	1	4.1	-0.8161	3.25
N1	D1	W	0	0	0	1	4.1	-0.8161	3.25
N1	D1	G	0	-0.1	0	1	4.1	-0.8161	3.25
N1	D1	DERUX Max	3.1	0	0.000349	1	4.1	-0.8161	3.25
N1	D1	DERUY Max	0	2.1	0	1	4.1	-0.8161	3.25
N1	D1	COMB1	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	COMB2	0	-1.9	0	1	4.1	-0.8161	3.25
N1	D1	COMB3	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	COMB4	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	COMB5 Max	5.8	-0.7	0.000661	1	4.1	-0.8161	3.25
N1	D1	COMB5 Min	-5.8	-2.8	-0.000661	1	4.1	-0.8161	3.25
N1	D1	COMB6 Max	1.7	1.8	0.000198	1	4.1	-0.8161	3.25
N1	D1	COMB6 Min	-1.7	-5.3	-0.000198	1	4.1	-0.8161	3.25
N1	D1	COMB7 Max	1.7	2.4	0.000198	1	4.1	-0.8161	3.25
N1	D1	COMB7 Min	-1.7	-4.7	-0.000198	1	4.1	-0.8161	3.25
N1	D1	COMB8 Max	5.8	-0.1	0.000661	1	4.1	-0.8161	3.25
N1	D1	COMB8 Min	-5.8	-2.2	-0.000661	1	4.1	-0.8161	3.25
N1	D1	ENVE Max	5.8	2.4	0.000661	1	4.1	-0.8161	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	ENVE Min	-5.8	-5.3	-0.000661	1	4.1	-0.8161	3.25
N1	D1	CIM01	0	-1.3	0	1	4.1	-0.8161	3.25
N1	D1	CIM02	0	-1.5	0	1	4.1	-0.8161	3.25
N1	D1	CIM03	0	-1.3	0	1	4.1	-0.8161	3.25
N1	D1	CIM04	0	-1.5	0	1	4.1	-0.8161	3.25
N1	D1	CIM05 Max	4.1	-0.5	0.000462	1	4.1	-0.8161	3.25
N1	D1	CIM05 Min	-4.1	-2	-0.000462	1	4.1	-0.8161	3.25
N1	D1	CIM06 Max	1.2	1.2	0.000139	1	4.1	-0.8161	3.25
N1	D1	CIM06 Min	-1.2	-3.7	-0.000139	1	4.1	-0.8161	3.25
N1	D1	CIM07 Max	3.1	-0.9	0.00035	1	4.1	-0.8161	3.25
N1	D1	CIM07 Min	-3.1	-2	-0.00035	1	4.1	-0.8161	3.25
N1	D1	CIM08 Max	0.9	0.4	0.000106	1	4.1	-0.8161	3.25
N1	D1	CIM08 Min	-0.9	-3.3	-0.000106	1	4.1	-0.8161	3.25
N1	D1	DER01	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	DER02	0	-1.9	0	1	4.1	-0.8161	3.25
N1	D1	DER03	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	DER04	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	DER05 Max	21.9	-1.8	0.002502	1	4.1	-0.8161	3.25
N1	D1	DER05 Min	-21.9	-1.8	-0.002502	1	4.1	-0.8161	3.25
N1	D1	DER06 Max	0	11.6	0	1	4.1	-0.8161	3.25
N1	D1	DER06 Min	0	-15.2	0	1	4.1	-0.8161	3.25
N1	D1	DER07 Max	21.9	-1.1	0.002502	1	4.1	-0.8161	3.25
N1	D1	DER07 Min	-21.9	-1.1	-0.002502	1	4.1	-0.8161	3.25
N1	D1	DER08 Max	0	12.2	0	1	4.1	-0.8161	3.25
N1	D1	DER08 Min	0	-14.5	0	1	4.1	-0.8161	3.25
N1	D1	DERUD01	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	DERUD02	0	-1.9	0	1	4.1	-0.8161	3.25
N1	D1	DERUD03	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	DERUD04	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	DERUD05 Max	3.1	-1.8	0.000349	1	4.1	-0.8161	3.25
N1	D1	DERUD05 Min	-3.1	-1.8	-0.000349	1	4.1	-0.8161	3.25
N1	D1	DERUD06 Max	0	0.3	0	1	4.1	-0.8161	3.25
N1	D1	DERUD06 Min	0	-3.9	0	1	4.1	-0.8161	3.25
N1	D1	DERUD07 Max	3.1	-1.1	0.000349	1	4.1	-0.8161	3.25
N1	D1	DERUD07 Min	-3.1	-1.1	-0.000349	1	4.1	-0.8161	3.25
N1	D1	DERUD08 Max	0	1	0	1	4.1	-0.8161	3.25
N1	D1	DERUD08 Min	0	-3.2	0	1	4.1	-0.8161	3.25
N1	D1	CIM09 Max	4.1	-0.01563	0.000462	1	4.1	-0.8161	3.25
N1	D1	CIM09 Min	-4.1	-1.5	-0.000462	1	4.1	-0.8161	3.25
N1	D1	CIM10 Max	1.2	1.7	0.000139	1	4.1	-0.8161	3.25
N1	D1	CIM10 Min	-1.2	-3.2	-0.000139	1	4.1	-0.8161	3.25
N1	D1	CIM11	0	-1.4	0	1	4.1	-0.8161	3.25
N1	D1	CIM12	0	-1.6	0	1	4.1	-0.8161	3.25
N1	D1	CIM13 Max	3.1	-1	0.00035	1	4.1	-0.8161	3.25
N1	D1	CIM13 Min	-3.1	-2.1	-0.00035	1	4.1	-0.8161	3.25
N1	D1	CIM14 Max	0.9	0.3	0.000106	1	4.1	-0.8161	3.25
N1	D1	CIM14 Min	-0.9	-3.4	-0.000106	1	4.1	-0.8161	3.25
N1	D1	CIM15	0	-0.8	0	1	4.1	-0.8161	3.25
N1	D1	COMB9	0	-1.9	0	1	4.1	-0.8161	3.25
N1	D1	COMB10	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	COMB11	0	-1.8	0	1	4.1	-0.8161	3.25
N1	D1	DER09	0	-2	0	1	4.1	-0.8161	3.25
N1	D1	DER10	0	-2	0	1	4.1	-0.8161	3.25
N1	D1	DER11	0	-1.9	0	1	4.1	-0.8161	3.25
N1	D1	DERUD09	0	-2	0	1	4.1	-0.8161	3.25
N1	D1	DERUD10	0	-2	0	1	4.1	-0.8161	3.25
N1	D1	DERUD11	0	-1.9	0	1	4.1	-0.8161	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements  
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Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.3	1.3	1
N1	L	Y	0.3	0.3	1
N1	EX Max	X	20.2	20.2	1
N1	EX Max	Y	10.3	10.3	1
N1	EY Max	Y	13.4	13.4	1
N1	DISX Max	X	5.3	5.3	1
N1	DISX Max	Y	2.7	2.7	1
N1	DISY Max	Y	3.5	3.5	1
N1	G	Y	0.1	0.1	1
N1	DERUX Max	X	2.9	2.9	1
N1	DERUX Max	Y	1.4	1.4	1
N1	DERUY Max	Y	2.1	2.1	1
N1	COMB1	Y	1.8	1.8	1
N1	COMB2	Y	1.9	1.9	1
N1	COMB3	Y	1.8	1.8	1
N1	COMB4	Y	1.8	1.8	1
N1	COMB5 Max	X	5.3	5.3	1
N1	COMB5 Max	Y	2	2	1
N1	COMB5 Min	X	5.3	5.3	1
N1	COMB5 Min	Y	5.6	5.6	1
N1	COMB6 Max	X	1.6	1.6	1
N1	COMB6 Max	Y	2.6	2.6	1
N1	COMB6 Min	X	1.6	1.6	1
N1	COMB6 Min	Y	6.1	6.1	1
N1	COMB7 Max	X	1.6	1.6	1
N1	COMB7 Max	Y	3.2	3.2	1
N1	COMB7 Min	X	1.6	1.6	1
N1	COMB7 Min	Y	5.5	5.5	1
N1	COMB8 Max	X	5.3	5.3	1
N1	COMB8 Max	Y	2.6	2.6	1
N1	COMB8 Min	X	5.3	5.3	1
N1	COMB8 Min	Y	4.9	4.9	1
N1	ENVE Max	X	5.3	5.3	1
N1	ENVE Max	Y	3.2	3.2	1
N1	ENVE Min	X	5.3	5.3	1
N1	ENVE Min	Y	6.1	6.1	1
N1	CIM01	Y	1.3	1.3	1
N1	CIM02	Y	1.5	1.5	1
N1	CIM03	Y	1.3	1.3	1
N1	CIM04	Y	1.5	1.5	1
N1	CIM05 Max	X	3.7	3.7	1
N1	CIM05 Max	Y	1.4	1.4	1
N1	CIM05 Min	X	3.7	3.7	1
N1	CIM05 Min	Y	3.9	3.9	1
N1	CIM06 Max	X	1.1	1.1	1
N1	CIM06 Max	Y	1.8	1.8	1
N1	CIM06 Min	X	1.1	1.1	1
N1	CIM06 Min	Y	4.3	4.3	1
N1	CIM07 Max	X	2.8	2.8	1
N1	CIM07 Max	Y	0.5	0.5	1
N1	CIM07 Min	X	2.8	2.8	1
N1	CIM07 Min	Y	3.5	3.5	1
N1	CIM08 Max	X	0.9	0.9	1
N1	CIM08 Max	Y	0.8	0.8	1
N1	CIM08 Min	X	0.9	0.9	1
N1	CIM08 Min	Y	3.8	3.8	1
N1	DER01	Y	1.8	1.8	1
N1	DER02	Y	1.9	1.9	1
N1	DER03	Y	1.8	1.8	1
N1	DER04	Y	1.8	1.8	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DER05 Max	X	20.2	20.2	1
N1	DER05 Max	Y	8.5	8.5	1
N1	DER05 Min	X	20.2	20.2	1
N1	DER05 Min	Y	12	12	1
N1	DER06 Max	Y	11.6	11.6	1
N1	DER06 Min	Y	15.2	15.2	1
N1	DER07 Max	X	20.2	20.2	1
N1	DER07 Max	Y	9.1	9.1	1
N1	DER07 Min	X	20.2	20.2	1
N1	DER07 Min	Y	11.4	11.4	1
N1	DER08 Max	Y	12.2	12.2	1
N1	DER08 Min	Y	14.5	14.5	1
N1	DERUD01	Y	1.8	1.8	1
N1	DERUD02	Y	1.9	1.9	1
N1	DERUD03	Y	1.8	1.8	1
N1	DERUD04	Y	1.8	1.8	1
N1	DERUD05 Max	X	2.9	2.9	1
N1	DERUD05 Max	Y	0.4	0.4	1
N1	DERUD05 Min	X	2.9	2.9	1
N1	DERUD05 Min	Y	3.2	3.2	1
N1	DERUD06 Max	Y	0.3	0.3	1
N1	DERUD06 Min	Y	3.9	3.9	1
N1	DERUD07 Max	X	2.9	2.9	1
N1	DERUD07 Max	Y	0.3	0.3	1
N1	DERUD07 Min	X	2.9	2.9	1
N1	DERUD07 Min	Y	2.6	2.6	1
N1	DERUD08 Max	Y	1	1	1
N1	DERUD08 Min	Y	3.2	3.2	1
N1	CIM09 Max	X	3.7	3.7	1
N1	CIM09 Max	Y	1.9	1.9	1
N1	CIM09 Min	X	3.7	3.7	1
N1	CIM09 Min	Y	3.4	3.4	1
N1	CIM10 Max	X	1.1	1.1	1
N1	CIM10 Max	Y	2.3	2.3	1
N1	CIM10 Min	X	1.1	1.1	1
N1	CIM10 Min	Y	3.8	3.8	1
N1	CIM11	Y	1.4	1.4	1
N1	CIM12	Y	1.6	1.6	1
N1	CIM13 Max	X	2.8	2.8	1
N1	CIM13 Max	Y	0.4	0.4	1
N1	CIM13 Min	X	2.8	2.8	1
N1	CIM13 Min	Y	3.6	3.6	1
N1	CIM14 Max	X	0.9	0.9	1
N1	CIM14 Max	Y	0.7	0.7	1
N1	CIM14 Min	X	0.9	0.9	1
N1	CIM14 Min	Y	3.9	3.9	1
N1	CIM15	Y	0.8	0.8	1
N1	COMB9	Y	1.9	1.9	1
N1	COMB10	Y	1.8	1.8	1
N1	COMB11	Y	1.8	1.8	1
N1	DER09	Y	2	2	1
N1	DER10	Y	2	2	1
N1	DER11	Y	1.9	1.9	1
N1	DERUD09	Y	2	2	1
N1	DERUD10	Y	2	2	1
N1	DERUD11	Y	1.9	1.9	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
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Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.00039	1	0	0	3.25
N1	L	Y	8.2E-05	1	0	0	3.25
N1	EX Max	X	0.006214	3	8.2	0	3.25
N1	EX Max	Y	0.003156	1	0	0	3.25
N1	EY Max	Y	0.004113	1	0	0	3.25
N1	DISX Max	X	0.001641	3	8.2	0	3.25
N1	DISX Max	Y	0.000833	1	0	0	3.25
N1	DISY Max	Y	0.00109	1	0	0	3.25
N1	G	Y	4.2E-05	2	0	6.7	3.25
N1	DERUX Max	X	0.000888	3	8.2	0	3.25
N1	DERUX Max	Y	0.00044	1	0	0	3.25
N1	DERUY Max	Y	0.000646	1	0	0	3.25
N1	COMB1	Y	0.000545	1	0	0	3.25
N1	COMB2	Y	0.000599	1	0	0	3.25
N1	COMB3	Y	0.00055	1	0	0	3.25
N1	COMB4	Y	0.00055	1	0	0	3.25
N1	COMB5 Max	X	0.001641	3	8.2	0	3.25
N1	COMB5 Max	Y	0.000611	1	0	0	3.25
N1	COMB5 Min	X	0.001641	3	8.2	0	3.25
N1	COMB5 Min	Y	0.00171	1	0	0	3.25
N1	COMB6 Max	X	0.000492	3	8.2	0	3.25
N1	COMB6 Max	Y	0.00079	1	0	0	3.25
N1	COMB6 Min	X	0.000492	3	8.2	0	3.25
N1	COMB6 Min	Y	0.00189	1	0	0	3.25
N1	COMB7 Max	X	0.000492	3	8.2	0	3.25
N1	COMB7 Max	Y	0.000989	1	0	0	3.25
N1	COMB7 Min	X	0.000492	3	8.2	0	3.25
N1	COMB7 Min	Y	0.001691	1	0	0	3.25
N1	COMB8 Max	X	0.001641	3	8.2	0	3.25
N1	COMB8 Max	Y	0.00081	1	0	0	3.25
N1	COMB8 Min	X	0.001641	3	8.2	0	3.25
N1	COMB8 Min	Y	0.001511	1	0	0	3.25
N1	ENVE Max	X	0.001641	3	8.2	0	3.25
N1	ENVE Max	Y	0.000989	1	0	0	3.25
N1	ENVE Min	X	0.001641	3	8.2	0	3.25
N1	ENVE Min	Y	0.00189	1	0	0	3.25
N1	CIM01	Y	0.00039	1	0	0	3.25
N1	CIM02	Y	0.000472	1	0	0	3.25
N1	CIM03	Y	0.00039	1	0	0	3.25
N1	CIM04	Y	0.000451	1	0	0	3.25
N1	CIM05 Max	X	0.001149	3	8.2	0	3.25
N1	CIM05 Max	Y	0.000423	1	0	0	3.25
N1	CIM05 Min	X	0.001149	3	8.2	0	3.25
N1	CIM05 Min	Y	0.001202	1	0	0	3.25
N1	CIM06 Max	X	0.000345	3	8.2	0	3.25
N1	CIM06 Max	Y	0.000548	1	0	0	3.25
N1	CIM06 Min	X	0.000345	3	8.2	0	3.25
N1	CIM06 Min	Y	0.001328	1	0	0	3.25
N1	CIM07 Max	X	0.00087	3	8.2	0	3.25
N1	CIM07 Max	Y	0.000165	1	0	0	3.25
N1	CIM07 Min	X	0.00087	3	8.2	0	3.25
N1	CIM07 Min	Y	0.001067	1	0	0	3.25
N1	CIM08 Max	X	0.000263	3	8.2	0	3.25
N1	CIM08 Max	Y	0.00026	1	0	0	3.25
N1	CIM08 Min	X	0.000263	3	8.2	0	3.25
N1	CIM08 Min	Y	0.001162	1	0	0	3.25
N1	DER01	Y	0.000545	1	0	0	3.25
N1	DER02	Y	0.000599	1	0	0	3.25
N1	DER03	Y	0.00055	1	0	0	3.25
N1	DER04	Y	0.00055	1	0	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER05 Max	X	0.006214	3	8.2	0	3.25
N1	DER05 Max	Y	0.002606	1	0	0	3.25
N1	DER05 Min	X	0.006214	3	8.2	0	3.25
N1	DER05 Min	Y	0.003706	1	0	0	3.25
N1	DER06 Max	Y	0.003564	1	0	0	3.25
N1	DER06 Min	Y	0.004663	1	0	0	3.25
N1	DER07 Max	X	0.006214	3	8.2	0	3.25
N1	DER07 Max	Y	0.002805	1	0	0	3.25
N1	DER07 Min	X	0.006214	3	8.2	0	3.25
N1	DER07 Min	Y	0.003506	1	0	0	3.25
N1	DER08 Max	Y	0.003763	1	0	0	3.25
N1	DER08 Min	Y	0.004464	1	0	0	3.25
N1	DERUD01	Y	0.000545	1	0	0	3.25
N1	DERUD02	Y	0.000599	1	0	0	3.25
N1	DERUD03	Y	0.00055	1	0	0	3.25
N1	DERUD04	Y	0.00055	1	0	0	3.25
N1	DERUD05 Max	X	0.000888	3	8.2	0	3.25
N1	DERUD05 Max	Y	0.00011	3	8.2	0	3.25
N1	DERUD05 Min	X	0.000888	3	8.2	0	3.25
N1	DERUD05 Min	Y	0.00099	1	0	0	3.25
N1	DERUD06 Max	Y	9.7E-05	4	8.2	6.7	3.25
N1	DERUD06 Min	Y	0.001196	1	0	0	3.25
N1	DERUD07 Max	X	0.000888	3	8.2	0	3.25
N1	DERUD07 Max	Y	8.9E-05	1	0	0	3.25
N1	DERUD07 Min	X	0.000888	3	8.2	0	3.25
N1	DERUD07 Min	Y	0.00079	1	0	0	3.25
N1	DERUD08 Max	Y	0.000296	3	8.2	0	3.25
N1	DERUD08 Min	Y	0.000997	1	0	0	3.25
N1	CIM09 Max	X	0.001149	3	8.2	0	3.25
N1	CIM09 Max	Y	0.000579	1	0	0	3.25
N1	CIM09 Min	X	0.001149	3	8.2	0	3.25
N1	CIM09 Min	Y	0.001046	1	0	0	3.25
N1	CIM10 Max	X	0.000345	3	8.2	0	3.25
N1	CIM10 Max	Y	0.000704	1	0	0	3.25
N1	CIM10 Min	X	0.000345	3	8.2	0	3.25
N1	CIM10 Min	Y	0.001172	1	0	0	3.25
N1	CIM11	Y	0.00043	1	0	0	3.25
N1	CIM12	Y	0.000481	1	0	0	3.25
N1	CIM13 Max	X	0.00087	3	8.2	0	3.25
N1	CIM13 Max	Y	0.000135	1	0	0	3.25
N1	CIM13 Min	X	0.00087	3	8.2	0	3.25
N1	CIM13 Min	Y	0.001098	1	0	0	3.25
N1	CIM14 Max	X	0.000263	3	8.2	0	3.25
N1	CIM14 Max	Y	0.00023	1	0	0	3.25
N1	CIM14 Min	X	0.000263	3	8.2	0	3.25
N1	CIM14 Min	Y	0.001193	1	0	0	3.25
N1	CIM15	Y	0.000234	1	0	0	3.25
N1	COMB9	Y	0.000599	1	0	0	3.25
N1	COMB10	Y	0.00055	1	0	0	3.25
N1	COMB11	Y	0.00055	1	0	0	3.25
N1	DER09	Y	0.000619	1	0	0	3.25
N1	DER10	Y	0.000614	1	0	0	3.25
N1	DER11	Y	0.00057	1	0	0	3.25
N1	DERUD09	Y	0.000619	1	0	0	3.25
N1	DERUD10	Y	0.000614	1	0	0	3.25
N1	DERUD11	Y	0.00057	1	0	0	3.25

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
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Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	D	Y	1.3	1.3	1.006
N1	L	Y	0.3	0.3	1.005
N1	EX Max	X	20.2	15.3	1.322
N1	EX Max	Y	10.3	10.2	1.006
N1	EY Max	Y	13.4	13.3	1.005
N1	DISX Max	X	5.3	4	1.322
N1	DISX Max	Y	2.7	2.7	1.006
N1	DISY Max	Y	3.5	3.5	1.005
N1	G	Y	0.1	0.1	1.021
N1	DERUX Max	X	2.9	2.1	1.408
N1	DERUX Max	Y	1.4	1.4	1.006
N1	DERUY Max	Y	2.1	2.1	1.005
N1	COMB1	Y	1.8	1.8	1.006
N1	COMB2	Y	1.9	1.9	1.006
N1	COMB3	Y	1.8	1.8	1.006
N1	COMB4	Y	1.8	1.8	1.006
N1	COMB5 Max	X	5.3	4	1.324
N1	COMB5 Max	Y	2	2	1.005
N1	COMB5 Min	X	5.3	4	1.324
N1	COMB5 Min	Y	5.6	5.5	1.006
N1	COMB6 Max	X	1.6	1.2	1.329
N1	COMB6 Max	Y	2.6	2.6	1.004
N1	COMB6 Min	X	1.6	1.2	1.329
N1	COMB6 Min	Y	6.1	6.1	1.005
N1	COMB7 Max	X	1.6	1.2	1.327
N1	COMB7 Max	Y	3.2	3.2	1.004
N1	COMB7 Min	X	1.6	1.2	1.327
N1	COMB7 Min	Y	5.5	5.5	1.005
N1	COMB8 Max	X	5.3	4	1.324
N1	COMB8 Max	Y	2.6	2.6	1.005
N1	COMB8 Min	X	5.3	4	1.324
N1	COMB8 Min	Y	4.9	4.9	1.006
N1	ENVE Max	X	5.3	4	1.324
N1	ENVE Max	Y	3.2	3.2	1.004
N1	ENVE Min	X	5.3	4	1.324
N1	ENVE Min	Y	6.1	6.1	1.005
N1	CIM01	Y	1.3	1.3	1.006
N1	CIM02	Y	1.5	1.5	1.006
N1	CIM03	Y	1.3	1.3	1.006
N1	CIM04	Y	1.5	1.5	1.006
N1	CIM05 Max	X	3.7	2.8	1.325
N1	CIM05 Max	Y	1.4	1.4	1.005
N1	CIM05 Min	X	3.7	2.8	1.325
N1	CIM05 Min	Y	3.9	3.9	1.006
N1	CIM06 Max	X	1.1	0.8	1.33
N1	CIM06 Max	Y	1.8	1.8	1.004
N1	CIM06 Min	X	1.1	0.8	1.33
N1	CIM06 Min	Y	4.3	4.3	1.005
N1	CIM07 Max	X	2.8	2.1	1.325
N1	CIM07 Max	Y	0.5	0.5	1.004
N1	CIM07 Min	X	2.8	2.1	1.325
N1	CIM07 Min	Y	3.5	3.4	1.006
N1	CIM08 Max	X	0.9	0.6	1.332
N1	CIM08 Max	Y	0.8	0.8	1.003
N1	CIM08 Min	X	0.9	0.6	1.332
N1	CIM08 Min	Y	3.8	3.8	1.005
N1	DER01	Y	1.8	1.8	1.006
N1	DER02	Y	1.9	1.9	1.006
N1	DER03	Y	1.8	1.8	1.006
N1	DER04	Y	1.8	1.8	1.006

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	DER05 Max	X	20.2	15.3	1.323
N1	DER05 Max	Y	8.5	8.4	1.006
N1	DER05 Min	X	20.2	15.3	1.323
N1	DER05 Min	Y	12	12	1.006
N1	DER06 Max	Y	11.6	11.5	1.004
N1	DER06 Min	Y	15.2	15.1	1.005
N1	DER07 Max	X	20.2	15.3	1.323
N1	DER07 Max	Y	9.1	9.1	1.006
N1	DER07 Min	X	20.2	15.3	1.323
N1	DER07 Min	Y	11.4	11.3	1.006
N1	DER08 Max	Y	12.2	12.2	1.004
N1	DER08 Min	Y	14.5	14.4	1.005
N1	DERUD01	Y	1.8	1.8	1.006
N1	DERUD02	Y	1.9	1.9	1.006
N1	DERUD03	Y	1.8	1.8	1.006
N1	DERUD04	Y	1.8	1.8	1.006
N1	DERUD05 Max	X	2.9	2	1.413
N1	DERUD05 Max	Y	0.4	0.4	1.007
N1	DERUD05 Min	X	2.9	2	1.413
N1	DERUD05 Min	Y	3.2	3.2	1.006
N1	DERUD06 Max	Y	0.3	0.3	1.003
N1	DERUD06 Min	Y	3.9	3.9	1.005
N1	DERUD07 Max	X	2.9	2	1.411
N1	DERUD07 Max	Y	0.3	0.3	1.004
N1	DERUD07 Min	X	2.9	2	1.411
N1	DERUD07 Min	Y	2.6	2.6	1.006
N1	DERUD08 Max	Y	1	1	1.003
N1	DERUD08 Min	Y	3.2	3.2	1.005
N1	CIM09 Max	X	3.7	2.8	1.324
N1	CIM09 Max	Y	1.9	1.9	1.005
N1	CIM09 Min	X	3.7	2.8	1.324
N1	CIM09 Min	Y	3.4	3.4	1.006
N1	CIM10 Max	X	1.1	0.8	1.327
N1	CIM10 Max	Y	2.3	2.3	1.004
N1	CIM10 Min	X	1.1	0.8	1.327
N1	CIM10 Min	Y	3.8	3.8	1.005
N1	CIM11	Y	1.4	1.4	1.004
N1	CIM12	Y	1.6	1.6	1.004
N1	CIM13 Max	X	2.8	2.1	1.325
N1	CIM13 Max	Y	0.4	0.4	1.01
N1	CIM13 Min	X	2.8	2.1	1.325
N1	CIM13 Min	Y	3.6	3.5	1.005
N1	CIM14 Max	X	0.9	0.6	1.333
N1	CIM14 Max	Y	0.7	0.7	1.006
N1	CIM14 Min	X	0.9	0.6	1.333
N1	CIM14 Min	Y	3.9	3.9	1.005
N1	CIM15	Y	0.8	0.8	1.006
N1	COMB9	Y	1.9	1.9	1.006
N1	COMB10	Y	1.8	1.8	1.006
N1	COMB11	Y	1.8	1.8	1.006
N1	DER09	Y	2	2	1.005
N1	DER10	Y	2	2	1.003
N1	DER11	Y	1.9	1.8	1.005
N1	DERUD09	Y	2	2	1.005
N1	DERUD10	Y	2	2	1.003
N1	DERUD11	Y	1.9	1.8	1.005

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
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Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	345.2932	0	0	0	288.3517	-1415.7021
N1	D	Bottom	394.298	0	0	0	452.0506	-1616.6218
N1	L	Top	66.83	0	0	0	44.7929	-274.003
N1	L	Bottom	66.83	0	0	0	44.694	-274.003
N1	LR	Top	0	0	0	0	0	0
N1	LR	Bottom	0	0	0	0	0	0
N1	EX Max	Top	0	525.0018	0	2280.8296	0	0.0007
N1	EX Max	Bottom	0	525.0018	0	2280.8296	0	1712.6788
N1	EY Max	Top	0	0	525.0084	2152.5344	0.0017	0
N1	EY Max	Bottom	0	0	525.0084	2152.5344	1711.2117	0
N1	DISX Max	Top	0	138.6488	0	602.3488	0	0.0002
N1	DISX Max	Bottom	0	138.6488	0	602.3488	0	452.3048
N1	DISY Max	Top	0	0	139.1155	570.3734	0.0004	0
N1	DISY Max	Bottom	0	0	139.1155	570.3734	453.4328	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	74.62	0	0	0	160.4332	-305.942
N1	G	Bottom	74.62	0	0	0	160.3846	-305.942
N1	DERUX Max	Top	0	72.1713	0	278.319	0	0.0001
N1	DERUX Max	Bottom	0	72.1713	0	278.319	0	235.4764
N1	DERUY Max	Top	0	0	82.5103	338.2923	0.0003	0
N1	DERUY Max	Bottom	0	0	82.5103	338.2923	268.934	0
N1	COMB1	Top	483.4105	0	0	0	403.6923	-1981.983
N1	COMB1	Bottom	552.0172	0	0	0	632.8708	-2263.2705
N1	COMB2	Top	521.2798	0	0	0	417.6907	-2137.2473
N1	COMB2	Bottom	580.0856	0	0	0	613.9711	-2378.351
N1	COMB3	Top	481.1818	0	0	0	390.8149	-1972.8455
N1	COMB3	Bottom	539.9876	0	0	0	587.1547	-2213.9492
N1	COMB4	Top	481.1818	0	0	0	390.8149	-1972.8455
N1	COMB4	Bottom	539.9876	0	0	0	587.1547	-2213.9492
N1	COMB5 Max	Top	481.1818	138.6488	41.7346	773.4609	390.815	-1972.8454
N1	COMB5 Max	Bottom	539.9876	138.6488	41.7346	773.4609	723.1845	-1761.6444
N1	COMB5 Min	Top	481.1818	-138.6488	-41.7346	-773.4609	390.8148	-1972.8457
N1	COMB5 Min	Bottom	539.9876	-138.6488	-41.7346	-773.4609	451.1248	-2666.2539
N1	COMB6 Max	Top	481.1818	41.5946	139.1155	751.0781	390.8154	-1972.8455
N1	COMB6 Max	Bottom	539.9876	41.5946	139.1155	751.0781	1040.5875	-2078.2577
N1	COMB6 Min	Top	481.1818	-41.5946	-139.1155	-751.0781	390.8145	-1972.8456
N1	COMB6 Min	Bottom	539.9876	-41.5946	-139.1155	-751.0781	133.7219	-2349.6406
N1	COMB7 Max	Top	310.7639	41.5946	139.1155	751.0781	259.5169	-1274.1319
N1	COMB7 Max	Bottom	354.8682	41.5946	139.1155	751.0781	860.2783	-1319.2682
N1	COMB7 Min	Top	310.7639	-41.5946	-139.1155	-751.0781	259.5161	-1274.132
N1	COMB7 Min	Bottom	354.8682	-41.5946	-139.1155	-751.0781	-46.5873	-1590.6511
N1	COMB8 Max	Top	310.7639	138.6488	41.7346	773.4609	259.5166	-1274.1317
N1	COMB8 Max	Bottom	354.8682	138.6488	41.7346	773.4609	542.8754	-1002.6548
N1	COMB8 Min	Top	310.7639	-138.6488	-41.7346	-773.4609	259.5164	-1274.1321
N1	COMB8 Min	Bottom	354.8682	-138.6488	-41.7346	-773.4609	270.8157	-1907.2644
N1	ENVE Max	Top	521.2798	138.6488	139.1155	773.4609	417.6907	-1274.1317
N1	ENVE Max	Bottom	580.0856	138.6488	139.1155	773.4609	1040.5875	-1002.6548
N1	ENVE Min	Top	310.7639	-138.6488	-139.1155	-773.4609	259.5161	-2137.2473
N1	ENVE Min	Bottom	354.8682	-138.6488	-139.1155	-773.4609	-46.5873	-2666.2539
N1	CIM01	Top	345.2932	0	0	0	288.3517	-1415.7021
N1	CIM01	Bottom	394.298	0	0	0	452.0506	-1616.6218
N1	CIM02	Top	412.1232	0	0	0	333.1446	-1689.7051
N1	CIM02	Bottom	461.128	0	0	0	496.7446	-1890.6248
N1	CIM03	Top	345.2932	0	0	0	288.3517	-1415.7021
N1	CIM03	Bottom	394.298	0	0	0	452.0506	-1616.6218
N1	CIM04	Top	395.4157	0	0	0	321.9464	-1621.2044
N1	CIM04	Bottom	444.4205	0	0	0	485.5711	-1822.1241
N1	CIM05 Max	Top	345.2932	97.0541	29.2142	541.4226	288.3518	-1415.702
N1	CIM05 Max	Bottom	394.298	97.0541	29.2142	541.4226	547.2715	-1300.0085

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM05 Min	Top	345.2932	-97.0541	-29.2142	-541.4226	288.3516	-1415.7023
N1	CIM05 Min	Bottom	394.298	-97.0541	-29.2142	-541.4226	356.8297	-1933.2351
N1	CIM06 Max	Top	345.2932	29.1162	97.3808	525.7547	288.352	-1415.7021
N1	CIM06 Max	Bottom	394.298	29.1162	97.3808	525.7547	769.4536	-1521.6378
N1	CIM06 Min	Top	345.2932	-29.1162	-97.3808	-525.7547	288.3514	-1415.7022
N1	CIM06 Min	Bottom	394.298	-29.1162	-97.3808	-525.7547	134.6476	-1711.6058
N1	CIM07 Max	Top	395.4157	73.4838	22.2585	410.5046	321.9464	-1621.2043
N1	CIM07 Max	Bottom	444.4205	73.4838	22.2585	410.5046	558.1203	-1582.4025
N1	CIM07 Min	Top	395.4157	-73.4838	-22.2585	-410.5046	321.9463	-1621.2045
N1	CIM07 Min	Bottom	444.4205	-73.4838	-22.2585	-410.5046	413.0218	-2061.8456
N1	CIM08 Max	Top	395.4157	22.1838	73.7312	398.6737	321.9466	-1621.2043
N1	CIM08 Max	Bottom	444.4205	22.1838	73.7312	398.6737	725.8905	-1749.7553
N1	CIM08 Min	Top	395.4157	-22.1838	-73.7312	-398.6737	321.9461	-1621.2044
N1	CIM08 Min	Bottom	444.4205	-22.1838	-73.7312	-398.6737	245.2517	-1894.4928
N1	DER01	Top	483.4105	0	0	0	403.6923	-1981.983
N1	DER01	Bottom	552.0172	0	0	0	632.8708	-2263.2705
N1	DER02	Top	521.2798	0	0	0	417.6907	-2137.2473
N1	DER02	Bottom	580.0856	0	0	0	613.9711	-2378.351
N1	DER03	Top	481.1818	0	0	0	390.8149	-1972.8455
N1	DER03	Bottom	539.9876	0	0	0	587.1547	-2213.9492
N1	DER04	Top	481.1818	0	0	0	390.8149	-1972.8455
N1	DER04	Bottom	539.9876	0	0	0	587.1547	-2213.9492
N1	DER05 Max	Top	481.1818	525.0018	0	2280.8296	390.8149	-1972.8448
N1	DER05 Max	Bottom	539.9876	525.0018	0	2280.8296	587.1547	-501.2703
N1	DER05 Min	Top	481.1818	-525.0018	0	-2280.8296	390.8149	-1972.8463
N1	DER05 Min	Bottom	539.9876	-525.0018	0	-2280.8296	587.1547	-3926.628
N1	DER06 Max	Top	481.1818	0	525.0084	2152.5344	390.8166	-1972.8455
N1	DER06 Max	Bottom	539.9876	0	525.0084	2152.5344	2298.3664	-2213.9492
N1	DER06 Min	Top	481.1818	0	-525.0084	-2152.5344	390.8132	-1972.8455
N1	DER06 Min	Bottom	539.9876	0	-525.0084	-2152.5344	-1124.057	-2213.9492
N1	DER07 Max	Top	310.7639	525.0018	0	2280.8296	259.5165	-1274.1312
N1	DER07 Max	Bottom	354.8682	525.0018	0	2280.8296	406.8455	257.7192
N1	DER07 Min	Top	310.7639	-525.0018	0	-2280.8296	259.5165	-1274.1326
N1	DER07 Min	Bottom	354.8682	-525.0018	0	-2280.8296	406.8455	-3167.6385
N1	DER08 Max	Top	310.7639	0	525.0084	2152.5344	259.5182	-1274.1319
N1	DER08 Max	Bottom	354.8682	0	525.0084	2152.5344	2118.0572	-1454.9596
N1	DER08 Min	Top	310.7639	0	-525.0084	-2152.5344	259.5148	-1274.1319
N1	DER08 Min	Bottom	354.8682	0	-525.0084	-2152.5344	-1304.3662	-1454.9596
N1	DERUD01	Top	483.4105	0	0	0	403.6923	-1981.983
N1	DERUD01	Bottom	552.0172	0	0	0	632.8708	-2263.2705
N1	DERUD02	Top	521.2798	0	0	0	417.6907	-2137.2473
N1	DERUD02	Bottom	580.0856	0	0	0	613.9711	-2378.351
N1	DERUD03	Top	481.1818	0	0	0	390.8149	-1972.8455
N1	DERUD03	Bottom	539.9876	0	0	0	587.1547	-2213.9492
N1	DERUD04	Top	481.1818	0	0	0	390.8149	-1972.8455
N1	DERUD04	Bottom	539.9876	0	0	0	587.1547	-2213.9492
N1	DERUD05 Max	Top	481.1818	72.1713	0	278.319	390.8149	-1972.8454
N1	DERUD05 Max	Bottom	539.9876	72.1713	0	278.319	587.1547	-1978.4728
N1	DERUD05 Min	Top	481.1818	-72.1713	0	-278.319	390.8149	-1972.8456
N1	DERUD05 Min	Bottom	539.9876	-72.1713	0	-278.319	587.1547	-2449.4255
N1	DERUD06 Max	Top	481.1818	0	82.5103	338.2923	390.8152	-1972.8455
N1	DERUD06 Max	Bottom	539.9876	0	82.5103	338.2923	856.0887	-2213.9492
N1	DERUD06 Min	Top	481.1818	0	-82.5103	-338.2923	390.8146	-1972.8455
N1	DERUD06 Min	Bottom	539.9876	0	-82.5103	-338.2923	318.2207	-2213.9492
N1	DERUD07 Max	Top	310.7639	72.1713	0	278.319	259.5165	-1274.1318
N1	DERUD07 Max	Bottom	354.8682	72.1713	0	278.319	406.8455	-1219.4832
N1	DERUD07 Min	Top	310.7639	-72.1713	0	-278.319	259.5165	-1274.132
N1	DERUD07 Min	Bottom	354.8682	-72.1713	0	-278.319	406.8455	-1690.436
N1	DERUD08 Max	Top	310.7639	0	82.5103	338.2923	259.5168	-1274.1319
N1	DERUD08 Max	Bottom	354.8682	0	82.5103	338.2923	675.7795	-1454.9596

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD08 Min	Top	310.7639	0	-82.5103	-338.2923	259.5162	-1274.1319
N1	DERUD08 Min	Bottom	354.8682	0	-82.5103	-338.2923	137.9115	-1454.9596
N1	CIM09 Max	Top	207.1759	97.0541	29.2142	541.4226	173.0111	-849.4211
N1	CIM09 Max	Bottom	236.5788	97.0541	29.2142	541.4226	366.4512	-653.3597
N1	CIM09 Min	Top	207.1759	-97.0541	-29.2142	-541.4226	173.0109	-849.4214
N1	CIM09 Min	Bottom	236.5788	-97.0541	-29.2142	-541.4226	176.0095	-1286.5864
N1	CIM10 Max	Top	207.1759	29.1162	97.3808	525.7547	173.0113	-849.4212
N1	CIM10 Max	Bottom	236.5788	29.1162	97.3808	525.7547	588.6333	-874.9891
N1	CIM10 Min	Top	207.1759	-29.1162	-97.3808	-525.7547	173.0107	-849.4213
N1	CIM10 Min	Bottom	236.5788	-29.1162	-97.3808	-525.7547	-46.1726	-1064.9571
N1	CIM11	Top	419.9132	0	0	0	448.7849	-1721.6441
N1	CIM11	Bottom	468.918	0	0	0	612.4352	-1922.5638
N1	CIM12	Top	451.3807	0	0	0	442.2713	-1850.6609
N1	CIM12	Bottom	500.3855	0	0	0	605.8595	-2051.5806
N1	CIM13 Max	Top	451.3807	73.4838	22.2585	410.5046	442.2713	-1850.6608
N1	CIM13 Max	Bottom	500.3855	73.4838	22.2585	410.5046	678.4088	-1811.859
N1	CIM13 Min	Top	451.3807	-73.4838	-22.2585	-410.5046	442.2712	-1850.661
N1	CIM13 Min	Bottom	500.3855	-73.4838	-22.2585	-410.5046	533.3103	-2291.3021
N1	CIM14 Max	Top	451.3807	22.1838	73.7312	398.6737	442.2715	-1850.6608
N1	CIM14 Max	Bottom	500.3855	22.1838	73.7312	398.6737	846.1789	-1979.2118
N1	CIM14 Min	Top	451.3807	-22.1838	-73.7312	-398.6737	442.271	-1850.6609
N1	CIM14 Min	Bottom	500.3855	-22.1838	-73.7312	-398.6737	365.5401	-2123.9493
N1	CIM15	Top	207.1759	0	0	0	173.011	-849.4213
N1	CIM15	Bottom	236.5788	0	0	0	271.2304	-969.9731
N1	COMB9	Top	521.2798	0	0	0	417.6907	-2137.2473
N1	COMB9	Bottom	580.0856	0	0	0	613.9711	-2378.351
N1	COMB10	Top	481.1818	0	0	0	390.8149	-1972.8455
N1	COMB10	Bottom	539.9876	0	0	0	587.1547	-2213.9492
N1	COMB11	Top	481.1818	0	0	0	390.8149	-1972.8455
N1	COMB11	Bottom	539.9876	0	0	0	587.1547	-2213.9492
N1	DER09	Top	558.5898	0	0	0	497.9073	-2290.2183
N1	DER09	Bottom	617.3956	0	0	0	694.1634	-2531.322
N1	DER10	Top	600.5738	0	0	0	647.508	-2462.3527
N1	DER10	Bottom	659.3796	0	0	0	843.77	-2703.4564
N1	DER11	Top	518.4918	0	0	0	471.0315	-2125.8165
N1	DER11	Bottom	577.2976	0	0	0	667.347	-2366.9202
N1	DERUD09	Top	558.5898	0	0	0	497.9073	-2290.2183
N1	DERUD09	Bottom	617.3956	0	0	0	694.1634	-2531.322
N1	DERUD10	Top	600.5738	0	0	0	647.508	-2462.3527
N1	DERUD10	Bottom	659.3796	0	0	0	843.77	-2703.4564
N1	DERUD11	Top	518.4918	0	0	0	471.0315	-2125.8165
N1	DERUD11	Bottom	577.2976	0	0	0	667.347	-2366.9202

5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	32.2994	-8.6882	160.1425	-1.826	34.2713	0
Base	1	13	L	6.2564	-1.3801	29.386	-0.8735	6.6383	0
Base	1	13	LR	0	0	0	0	0	0
Base	1	13	EX Max	200.037	110.0379	38.5801	206.2283	388.4371	24.9048
Base	1	13	EY Max	0.0007	131.3967	51.5318	256.0572	0.0008	0
Base	1	13	DISX Max	52.8282	29.0601	10.1887	54.4632	102.5831	6.5772
Base	1	13	DISY Max	0.0002	34.8172	13.6548	67.8494	0.0002	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	3.1281	3.1289	24.9936	-4.4592	3.3191	0
Base	1	13	DERUX Max	28.6281	15.3871	5.0192	28.7921	55.5675	3.4696
Base	1	13	DERUY Max	0.0001	20.6503	8.0987	40.2419	0.0001	0
Base	1	13	COMB1	45.2191	-12.1635	224.1994	-2.5564	47.9798	0
Base	1	13	COMB2	48.7694	-12.634	239.1885	-3.5888	51.7468	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB3	45.0156	-11.806	221.5569	-3.0647	47.7638	0
Base	1	13	COMB4	45.0156	-11.806	221.5569	-3.0647	47.7638	0
Base	1	13	COMB5 Max	97.8438	27.6993	235.842	71.7534	150.347	6.5772
Base	1	13	COMB5 Min	-7.8127	-51.3112	207.2718	-77.8827	-54.8193	-6.5772
Base	1	13	COMB6 Max	60.8642	31.7292	238.2683	81.1237	78.539	1.9731
Base	1	13	COMB6 Min	29.1669	-55.3412	204.8455	-87.2531	16.9887	-1.9731
Base	1	13	COMB7 Max	44.9181	35.7158	160.8396	82.545	61.6193	1.9731
Base	1	13	COMB7 Min	13.2208	-51.3546	127.4168	-85.8318	0.069	-1.9731
Base	1	13	COMB8 Max	81.8976	31.6859	158.4133	73.1747	133.4273	6.5772
Base	1	13	COMB8 Min	-23.7588	-47.3247	129.8431	-76.4614	-71.739	-6.5772
Base	1	13	ENVE Max	97.8438	35.7158	239.1885	82.545	150.347	6.5772
Base	1	13	ENVE Min	-23.7588	-55.3412	127.4168	-87.2531	-71.739	-6.5772
Base	1	13	CIM01	32.2994	-8.6882	160.1425	-1.826	34.2713	0
Base	1	13	CIM02	38.5557	-10.0683	189.5284	-2.6995	40.9096	0
Base	1	13	CIM03	32.2994	-8.6882	160.1425	-1.826	34.2713	0
Base	1	13	CIM04	36.9916	-9.7233	182.1819	-2.4811	39.25	0
Base	1	13	CIM05 Max	69.2791	18.9655	170.1421	50.5467	106.0795	4.604
Base	1	13	CIM05 Min	-4.6804	-36.3419	150.1429	-54.1986	-37.5369	-4.604
Base	1	13	CIM06 Max	43.3934	21.7865	171.8404	57.1059	55.8139	1.3812
Base	1	13	CIM06 Min	21.2053	-39.1629	148.4445	-60.7579	12.7287	-1.3812
Base	1	13	CIM07 Max	64.9906	11.2493	189.7667	37.2403	93.6191	3.4859
Base	1	13	CIM07 Min	8.9927	-30.6959	174.5972	-42.2025	-15.1191	-3.4859
Base	1	13	CIM08 Max	45.4442	13.3794	191.0492	42.1932	55.6634	1.0523
Base	1	13	CIM08 Min	28.539	-32.826	173.3147	-47.1554	22.8366	-1.0523
Base	1	13	DER01	45.2191	-12.1635	224.1994	-2.5564	47.9798	0
Base	1	13	DER02	48.7694	-12.634	239.1885	-3.5888	51.7468	0
Base	1	13	DER03	45.0156	-11.806	221.5569	-3.0647	47.7638	0
Base	1	13	DER04	45.0156	-11.806	221.5569	-3.0647	47.7638	0
Base	1	13	DER05 Max	245.0526	98.2319	260.137	203.1636	436.2009	24.9048
Base	1	13	DER05 Min	-155.0214	-121.8439	182.9768	-209.2929	-340.6732	-24.9048
Base	1	13	DER06 Max	45.0163	119.5907	273.0887	252.9925	47.7646	0
Base	1	13	DER06 Min	45.0148	-143.2026	170.0251	-259.1219	47.7631	0
Base	1	13	DER07 Max	229.1064	102.2185	182.7083	204.5849	419.2812	24.9048
Base	1	13	DER07 Min	-170.9676	-117.8573	105.5481	-207.8717	-357.5929	-24.9048
Base	1	13	DER08 Max	29.0701	123.5773	195.66	254.4138	30.8449	0
Base	1	13	DER08 Min	29.0687	-139.2161	92.5964	-257.7006	30.8434	0
Base	1	13	DERUD01	45.2191	-12.1635	224.1994	-2.5564	47.9798	0
Base	1	13	DERUD02	48.7694	-12.634	239.1885	-3.5888	51.7468	0
Base	1	13	DERUD03	45.0156	-11.806	221.5569	-3.0647	47.7638	0
Base	1	13	DERUD04	45.0156	-11.806	221.5569	-3.0647	47.7638	0
Base	1	13	DERUD05 Max	73.6437	3.5811	226.5761	25.7274	103.3313	3.4696
Base	1	13	DERUD05 Min	16.3874	-27.1931	216.5378	-31.8567	-7.8036	-3.4696
Base	1	13	DERUD06 Max	45.0157	8.8443	229.6557	37.1773	47.764	0
Base	1	13	DERUD06 Min	45.0155	-32.4563	213.4582	-43.3066	47.7637	0
Base	1	13	DERUD07 Max	57.6976	7.5677	149.1474	27.1487	86.4116	3.4696
Base	1	13	DERUD07 Min	0.4413	-23.2065	139.1091	-30.4354	-24.7233	-3.4696
Base	1	13	DERUD08 Max	29.0695	12.8309	152.227	38.5986	30.8443	0
Base	1	13	DERUD08 Min	29.0693	-28.4697	136.0295	-41.8853	30.844	0
Base	1	13	CIM09 Max	56.3594	22.4408	106.0851	51.2771	92.371	4.604
Base	1	13	CIM09 Min	-17.6001	-32.8666	86.0859	-53.4682	-51.2455	-4.604
Base	1	13	CIM10 Max	30.4737	25.2617	107.7834	57.8363	42.1054	1.3812
Base	1	13	CIM10 Min	8.2856	-35.6876	84.3875	-60.0275	-0.9798	-1.3812
Base	1	13	CIM11	35.4275	-5.5593	185.136	-6.2852	37.5904	0
Base	1	13	CIM12	39.3377	-7.3766	200.9271	-5.8255	41.7393	0
Base	1	13	CIM13 Max	67.3367	13.596	208.5119	33.8959	96.1084	3.4859
Base	1	13	CIM13 Min	11.3388	-28.3492	193.3423	-45.5469	-12.6297	-3.4859
Base	1	13	CIM14 Max	47.7903	15.7261	209.7943	38.8488	58.1528	1.0523
Base	1	13	CIM14 Min	30.8851	-30.4793	192.0599	-50.4998	25.3259	-1.0523
Base	1	13	CIM15	19.3796	-5.2129	96.0855	-1.0956	20.5628	0
Base	1	13	COMB9	48.7694	-12.634	239.1885	-3.5888	51.7468	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB10	45.0156	-11.806	221.5569	-3.0647	47.7638	0
Base	1	13	COMB11	45.0156	-11.806	221.5569	-3.0647	47.7638	0
Base	1	13	DER09	50.3335	-11.0696	251.6853	-5.8183	53.4064	0
Base	1	13	DER10	50.0206	-6.7997	261.5466	-10.1994	53.0744	0
Base	1	13	DER11	46.5796	-10.2415	234.0537	-5.2943	49.4234	0
Base	1	13	DERUD09	50.3335	-11.0696	251.6853	-5.8183	53.4064	0
Base	1	13	DERUD10	50.0206	-6.7997	261.5466	-10.1994	53.0744	0
Base	1	13	DERUD11	46.5796	-10.2415	234.0537	-5.2943	49.4234	0
Base	2	15	D	8.143	8.6882	37.0065	-20.0926	8.5468	0.0214
Base	2	15	L	0.3123	1.3801	4.029	-3.7741	0.3276	0.0009
Base	2	15	LR	0	0	0	0	0	0
Base	2	15	EX Max	96.6076	102.0977	46.9206	196.4715	192.4593	23.9478
Base	2	15	EY Max	0.013	131.1075	51.5318	254.2855	0.03	0.0041
Base	2	15	DISX Max	25.5133	26.9632	12.3914	51.8865	50.827	6.3244
Base	2	15	DISY Max	0.0035	34.7406	13.6548	67.38	0.008	0.0011
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.1569	-3.1289	12.3164	2.1315	0.1655	0.0002
Base	2	15	DERUX Max	11.2432	14.2153	6.6648	27.3651	22.4714	3.3533
Base	2	15	DERUY Max	0.002	20.6049	8.0987	39.9635	0.0047	0.0006
Base	2	15	COMB1	11.4002	12.1635	51.8092	-28.1296	11.9655	0.03
Base	2	15	COMB2	10.2713	12.634	50.8543	-30.1496	10.7803	0.0271
Base	2	15	COMB3	10.0839	11.806	48.4369	-27.8851	10.5838	0.0266
Base	2	15	COMB4	10.0839	11.806	48.4369	-27.8851	10.5838	0.0266
Base	2	15	COMB5 Max	35.5982	49.1913	64.9247	44.2154	61.4131	6.3513
Base	2	15	COMB5 Min	-15.4304	-25.5794	31.9491	-99.9857	-40.2456	-6.2982
Base	2	15	COMB6 Max	17.7414	54.6355	65.8091	55.0608	25.8398	1.925
Base	2	15	COMB6 Min	2.4265	-31.0235	31.0647	-110.8311	-4.6723	-1.8719
Base	2	15	COMB7 Max	14.9861	50.6489	50.6781	64.8626	22.9482	1.9177
Base	2	15	COMB7 Min	-0.3288	-35.0101	15.9337	-101.0292	-7.5639	-1.8792
Base	2	15	COMB8 Max	32.843	45.2047	49.7937	54.0172	58.5215	6.344
Base	2	15	COMB8 Min	-18.1857	-29.566	16.8181	-90.1838	-43.1372	-6.3055
Base	2	15	ENVE Max	35.5982	54.6355	65.8091	64.8626	61.4131	6.3513
Base	2	15	ENVE Min	-18.1857	-35.0101	15.9337	-110.8311	-43.1372	-6.3055
Base	2	15	CIM01	8.143	8.6882	37.0065	-20.0926	8.5468	0.0214
Base	2	15	CIM02	8.4553	10.0683	41.0356	-23.8666	8.8744	0.0223
Base	2	15	CIM03	8.143	8.6882	37.0065	-20.0926	8.5468	0.0214
Base	2	15	CIM04	8.3772	9.7233	40.0283	-22.9231	8.7925	0.0221
Base	2	15	CIM05 Max	26.003	34.858	48.548	30.3778	44.1274	4.4487
Base	2	15	CIM05 Min	-9.7171	-17.4816	25.4651	-70.5629	-27.0337	-4.4059
Base	2	15	CIM06 Max	13.5032	38.6689	49.1671	37.9696	19.2261	1.3503
Base	2	15	CIM06 Min	2.7828	-21.2925	24.846	-78.1547	-2.1324	-1.3075
Base	2	15	CIM07 Max	21.8998	29.5723	48.7805	15.3576	35.7321	3.3742
Base	2	15	CIM07 Min	-5.1454	-10.1257	31.2761	-61.2038	-18.147	-3.3301
Base	2	15	CIM08 Max	12.4612	32.4499	49.248	21.0901	16.929	1.0345
Base	2	15	CIM08 Min	4.2933	-13.0033	30.8087	-66.9363	0.656	-0.9904
Base	2	15	DER01	11.4002	12.1635	51.8092	-28.1296	11.9655	0.03
Base	2	15	DER02	10.2713	12.634	50.8543	-30.1496	10.7803	0.0271
Base	2	15	DER03	10.0839	11.806	48.4369	-27.8851	10.5838	0.0266
Base	2	15	DER04	10.0839	11.806	48.4369	-27.8851	10.5838	0.0266
Base	2	15	DER05 Max	106.6915	113.9037	95.3575	168.5863	203.0431	23.9743
Base	2	15	DER05 Min	-86.5237	-90.2918	1.5163	-224.3566	-181.8755	-23.9212
Base	2	15	DER06 Max	10.097	142.9135	99.9687	226.4004	10.6138	0.0307
Base	2	15	DER06 Min	10.0709	-119.3015	-3.0949	-282.1707	10.5538	0.0225
Base	2	15	DER07 Max	103.9363	109.9171	80.2265	178.3882	200.1514	23.967
Base	2	15	DER07 Min	-89.2789	-94.2784	-13.6147	-214.5548	-184.7672	-23.9285
Base	2	15	DER08 Max	7.3417	138.9269	84.8377	236.2022	7.7222	0.0234
Base	2	15	DER08 Min	7.3156	-123.2881	-18.2259	-272.3688	7.6621	0.0152
Base	2	15	DERUD01	11.4002	12.1635	51.8092	-28.1296	11.9655	0.03
Base	2	15	DERUD02	10.2713	12.634	50.8543	-30.1496	10.7803	0.0271
Base	2	15	DERUD03	10.0839	11.806	48.4369	-27.8851	10.5838	0.0266

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DERUD04	10.0839	11.806	48.4369	-27.8851	10.5838	0.0266
Base	2	15	DERUD05 Max	21.3271	26.0213	55.1016	-0.52	33.0552	3.3799
Base	2	15	DERUD05 Min	-1.1593	-2.4093	41.7721	-55.2502	-11.8877	-3.3267
Base	2	15	DERUD06 Max	10.086	32.4108	56.5356	12.0784	10.5885	0.0272
Base	2	15	DERUD06 Min	10.0819	-8.7989	40.3381	-67.8487	10.5791	0.0259
Base	2	15	DERUD07 Max	18.5719	22.0347	39.9706	9.2818	30.1636	3.3725
Base	2	15	DERUD07 Min	-3.9145	-6.3959	26.6411	-45.4484	-14.7793	-3.334
Base	2	15	DERUD08 Max	7.3307	28.4242	41.4046	21.8802	7.6969	0.0199
Base	2	15	DERUD08 Min	7.3266	-12.7855	25.2071	-58.0468	7.6874	0.0186
Base	2	15	CIM09 Max	22.7458	31.3827	33.7454	38.4148	40.7086	4.4402
Base	2	15	CIM09 Min	-12.9743	-20.9568	10.6625	-62.5259	-30.4524	-4.4145
Base	2	15	CIM10 Max	10.246	35.1936	34.3645	46.0066	15.8073	1.3417
Base	2	15	CIM10 Min	-0.4744	-24.7677	10.0434	-70.1177	-5.5511	-1.316
Base	2	15	CIM11	8.2999	5.5593	49.323	-17.9611	8.7123	0.0216
Base	2	15	CIM12	8.4949	7.3766	49.2656	-21.3245	8.9166	0.0222
Base	2	15	CIM13 Max	22.0175	27.2256	58.0178	16.9562	35.8562	3.3743
Base	2	15	CIM13 Min	-5.0277	-12.4724	40.5135	-59.6052	-18.023	-3.3299
Base	2	15	CIM14 Max	12.5789	30.1032	58.4853	22.6887	17.0531	1.0347
Base	2	15	CIM14 Min	4.4109	-15.35	40.046	-65.3377	0.7801	-0.9903
Base	2	15	CIM15	4.8858	5.2129	22.2039	-12.0555	5.1281	0.0128
Base	2	15	COMB9	10.2713	12.634	50.8543	-30.1496	10.7803	0.0271
Base	2	15	COMB10	10.0839	11.806	48.4369	-27.8851	10.5838	0.0266
Base	2	15	COMB11	10.0839	11.806	48.4369	-27.8851	10.5838	0.0266
Base	2	15	DER09	10.3498	11.0696	57.0125	-29.0838	10.8631	0.0272
Base	2	15	DER10	10.3349	6.7997	68.1432	-24.4748	10.8485	0.0269
Base	2	15	DER11	10.1624	10.2415	54.5951	-26.8194	10.6665	0.0267
Base	2	15	DERUD09	10.3498	11.0696	57.0125	-29.0838	10.8631	0.0272
Base	2	15	DERUD10	10.3349	6.7997	68.1432	-24.4748	10.8485	0.0269
Base	2	15	DERUD11	10.1624	10.2415	54.5951	-26.8194	10.6665	0.0267
Base	3	16	D	-32.2994	-8.6882	160.1425	-1.826	-34.2713	0
Base	3	16	L	-6.2564	-1.3801	29.386	-0.8735	-6.6383	0
Base	3	16	LR	0	0	0	0	0	0
Base	3	16	EX Max	200.037	110.0379	38.5801	206.2283	388.4371	24.9048
Base	3	16	EY Max	0.0007	131.3967	51.5318	256.0572	0.0008	0
Base	3	16	DISX Max	52.8282	29.0601	10.1887	54.4632	102.5831	6.5772
Base	3	16	DISY Max	0.0002	34.8172	13.6548	67.8494	0.0002	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	-3.1281	3.1289	24.9936	-4.4592	-3.3191	0
Base	3	16	DERUX Max	28.6281	15.3871	5.0192	28.7921	55.5675	3.4696
Base	3	16	DERUY Max	0.0001	20.6503	8.0987	40.2419	0.0001	0
Base	3	16	COMB1	-45.2191	-12.1635	224.1994	-2.5564	-47.9798	0
Base	3	16	COMB2	-48.7694	-12.634	239.1885	-3.5888	-51.7468	0
Base	3	16	COMB3	-45.0156	-11.806	221.5569	-3.0647	-47.7638	0
Base	3	16	COMB4	-45.0156	-11.806	221.5569	-3.0647	-47.7638	0
Base	3	16	COMB5 Max	7.8127	27.6993	235.842	71.7534	54.8193	6.5772
Base	3	16	COMB5 Min	-97.8438	-51.3112	207.2718	-77.8827	-150.347	-6.5772
Base	3	16	COMB6 Max	-29.1669	31.7292	238.2683	81.1237	-16.9887	1.9731
Base	3	16	COMB6 Min	-60.8642	-55.3412	204.8455	-87.2531	-78.539	-1.9731
Base	3	16	COMB7 Max	-13.2208	35.7158	160.8396	82.545	-0.069	1.9731
Base	3	16	COMB7 Min	-44.9181	-51.3546	127.4168	-85.8318	-61.6193	-1.9731
Base	3	16	COMB8 Max	23.7588	31.6859	158.4133	73.1747	71.739	6.5772
Base	3	16	COMB8 Min	-81.8976	-47.3247	129.8431	-76.4614	-133.4273	-6.5772
Base	3	16	ENVE Max	23.7588	35.7158	239.1885	82.545	71.739	6.5772
Base	3	16	ENVE Min	-97.8438	-55.3412	127.4168	-87.2531	-150.347	-6.5772
Base	3	16	CIM01	-32.2994	-8.6882	160.1425	-1.826	-34.2713	0
Base	3	16	CIM02	-38.5557	-10.0683	189.5284	-2.6995	-40.9096	0
Base	3	16	CIM03	-32.2994	-8.6882	160.1425	-1.826	-34.2713	0
Base	3	16	CIM04	-36.9916	-9.7233	182.1819	-2.4811	-39.25	0
Base	3	16	CIM05 Max	4.6804	18.9655	170.1421	50.5467	37.5369	4.604
Base	3	16	CIM05 Min	-69.2791	-36.3419	150.1429	-54.1986	-106.0795	-4.604

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	CIM06 Max	-21.2053	21.7865	171.8404	57.1059	-12.7287	1.3812
Base	3	16	CIM06 Min	-43.3934	-39.1629	148.4445	-60.7579	-55.8139	-1.3812
Base	3	16	CIM07 Max	-8.9927	11.2493	189.7667	37.2403	15.1191	3.4859
Base	3	16	CIM07 Min	-64.9906	-30.6959	174.5972	-42.2025	-93.6191	-3.4859
Base	3	16	CIM08 Max	-28.539	13.3794	191.0492	42.1932	-22.8366	1.0523
Base	3	16	CIM08 Min	-45.4442	-32.826	173.3147	-47.1554	-55.6634	-1.0523
Base	3	16	DER01	-45.2191	-12.1635	224.1994	-2.5564	-47.9798	0
Base	3	16	DER02	-48.7694	-12.634	239.1885	-3.5888	-51.7468	0
Base	3	16	DER03	-45.0156	-11.806	221.5569	-3.0647	-47.7638	0
Base	3	16	DER04	-45.0156	-11.806	221.5569	-3.0647	-47.7638	0
Base	3	16	DER05 Max	155.0214	98.2319	260.137	203.1636	340.6732	24.9048
Base	3	16	DER05 Min	-245.0526	-121.8439	182.9768	-209.2929	-436.2009	-24.9048
Base	3	16	DER06 Max	-45.0148	119.5907	273.0887	252.9925	-47.7631	0
Base	3	16	DER06 Min	-45.0163	-143.2026	170.0251	-259.1219	-47.7646	0
Base	3	16	DER07 Max	170.9676	102.2185	182.7083	204.5849	357.5929	24.9048
Base	3	16	DER07 Min	-229.1064	-117.8573	105.5481	-207.8717	-419.2812	-24.9048
Base	3	16	DER08 Max	-29.0687	123.5773	195.66	254.4138	-30.8434	0
Base	3	16	DER08 Min	-29.0701	-139.2161	92.5964	-257.7006	-30.8449	0
Base	3	16	DERUD01	-45.2191	-12.1635	224.1994	-2.5564	-47.9798	0
Base	3	16	DERUD02	-48.7694	-12.634	239.1885	-3.5888	-51.7468	0
Base	3	16	DERUD03	-45.0156	-11.806	221.5569	-3.0647	-47.7638	0
Base	3	16	DERUD04	-45.0156	-11.806	221.5569	-3.0647	-47.7638	0
Base	3	16	DERUD05 Max	-16.3874	3.5811	226.5761	25.7274	7.8036	3.4696
Base	3	16	DERUD05 Min	-73.6437	-27.1931	216.5378	-31.8567	-103.3313	-3.4696
Base	3	16	DERUD06 Max	-45.0155	8.8443	229.6557	37.1773	-47.7637	0
Base	3	16	DERUD06 Min	-45.0157	-32.4563	213.4582	-43.3066	-47.764	0
Base	3	16	DERUD07 Max	-0.4413	7.5677	149.1474	27.1487	24.7233	3.4696
Base	3	16	DERUD07 Min	-57.6976	-23.2065	139.1091	-30.4354	-86.4116	-3.4696
Base	3	16	DERUD08 Max	-29.0693	12.8309	152.227	38.5986	-30.844	0
Base	3	16	DERUD08 Min	-29.0695	-28.4697	136.0295	-41.8853	-30.8443	0
Base	3	16	CIM09 Max	17.6001	22.4408	106.0851	51.2771	51.2455	4.604
Base	3	16	CIM09 Min	-56.3594	-32.8666	86.0859	-53.4682	-92.371	-4.604
Base	3	16	CIM10 Max	-8.2856	25.2617	107.7834	57.8363	0.9798	1.3812
Base	3	16	CIM10 Min	-30.4737	-35.6876	84.3875	-60.0275	-42.1054	-1.3812
Base	3	16	CIM11	-35.4275	-5.5593	185.136	-6.2852	-37.5904	0
Base	3	16	CIM12	-39.3377	-7.3766	200.9271	-5.8255	-41.7393	0
Base	3	16	CIM13 Max	-11.3388	13.596	208.5119	33.8959	12.6297	3.4859
Base	3	16	CIM13 Min	-67.3367	-28.3492	193.3423	-45.5469	-96.1084	-3.4859
Base	3	16	CIM14 Max	-30.8851	15.7261	209.7943	38.8488	-25.3259	1.0523
Base	3	16	CIM14 Min	-47.7903	-30.4793	192.0599	-50.4998	-58.1528	-1.0523
Base	3	16	CIM15	-19.3796	-5.2129	96.0855	-1.0956	-20.5628	0
Base	3	16	COMB9	-48.7694	-12.634	239.1885	-3.5888	-51.7468	0
Base	3	16	COMB10	-45.0156	-11.806	221.5569	-3.0647	-47.7638	0
Base	3	16	COMB11	-45.0156	-11.806	221.5569	-3.0647	-47.7638	0
Base	3	16	DER09	-50.3335	-11.0696	251.6853	-5.8183	-53.4064	0
Base	3	16	DER10	-50.0206	-6.7997	261.5466	-10.1994	-53.0744	0
Base	3	16	DER11	-46.5796	-10.2415	234.0537	-5.2943	-49.4234	0
Base	3	16	DERUD09	-50.3335	-11.0696	251.6853	-5.8183	-53.4064	0
Base	3	16	DERUD10	-50.0206	-6.7997	261.5466	-10.1994	-53.0744	0
Base	3	16	DERUD11	-46.5796	-10.2415	234.0537	-5.2943	-49.4234	0
Base	4	18	D	-8.143	8.6882	37.0065	-20.0926	-8.5468	-0.0214
Base	4	18	L	-0.3123	1.3801	4.029	-3.7741	-0.3276	-0.0009
Base	4	18	LR	0	0	0	0	0	0
Base	4	18	EX Max	96.6076	102.0977	46.9206	196.4715	192.4593	23.9478
Base	4	18	EY Max	0.013	131.1075	51.5318	254.2855	0.03	0.0041
Base	4	18	DISX Max	25.5133	26.9632	12.3914	51.8865	50.827	6.3244
Base	4	18	DISY Max	0.0035	34.7406	13.6548	67.38	0.008	0.0011
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	-0.1569	-3.1289	12.3164	2.1315	-0.1655	-0.0002
Base	4	18	DERUX Max	11.2432	14.2153	6.6648	27.3651	22.4714	3.3533

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DERUY Max	0.002	20.6049	8.0987	39.9635	0.0047	0.0006
Base	4	18	COMB1	-11.4002	12.1635	51.8092	-28.1296	-11.9655	-0.03
Base	4	18	COMB2	-10.2713	12.634	50.8543	-30.1496	-10.7803	-0.0271
Base	4	18	COMB3	-10.0839	11.806	48.4369	-27.8851	-10.5838	-0.0266
Base	4	18	COMB4	-10.0839	11.806	48.4369	-27.8851	-10.5838	-0.0266
Base	4	18	COMB5 Max	15.4304	49.1913	64.9247	44.2154	40.2456	6.2982
Base	4	18	COMB5 Min	-35.5982	-25.5794	31.9491	-99.9857	-61.4131	-6.3513
Base	4	18	COMB6 Max	-2.4265	54.6355	65.8091	55.0608	4.6723	1.8719
Base	4	18	COMB6 Min	-17.7414	-31.0235	31.0647	-110.8311	-25.8398	-1.925
Base	4	18	COMB7 Max	0.3288	50.6489	50.6781	64.8626	7.5639	1.8792
Base	4	18	COMB7 Min	-14.9861	-35.0101	15.9337	-101.0292	-22.9482	-1.9177
Base	4	18	COMB8 Max	18.1857	45.2047	49.7937	54.0172	43.1372	6.3055
Base	4	18	COMB8 Min	-32.843	-29.566	16.8181	-90.1838	-58.5215	-6.344
Base	4	18	ENVE Max	18.1857	54.6355	65.8091	64.8626	43.1372	6.3055
Base	4	18	ENVE Min	-35.5982	-35.0101	15.9337	-110.8311	-61.4131	-6.3513
Base	4	18	CIM01	-8.143	8.6882	37.0065	-20.0926	-8.5468	-0.0214
Base	4	18	CIM02	-8.4553	10.0683	41.0356	-23.8666	-8.8744	-0.0223
Base	4	18	CIM03	-8.143	8.6882	37.0065	-20.0926	-8.5468	-0.0214
Base	4	18	CIM04	-8.3772	9.7233	40.0283	-22.9231	-8.7925	-0.0221
Base	4	18	CIM05 Max	9.7171	34.858	48.548	30.3778	27.0337	4.4059
Base	4	18	CIM05 Min	-26.003	-17.4816	25.4651	-70.5629	-44.1274	-4.4487
Base	4	18	CIM06 Max	-2.7828	38.6689	49.1671	37.9696	2.1324	1.3075
Base	4	18	CIM06 Min	-13.5032	-21.2925	24.846	-78.1547	-19.2261	-1.3503
Base	4	18	CIM07 Max	5.1454	29.5723	48.7805	15.3576	18.147	3.3301
Base	4	18	CIM07 Min	-21.8998	-10.1257	31.2761	-61.2038	-35.7321	-3.3742
Base	4	18	CIM08 Max	-4.2933	32.4499	49.248	21.0901	-0.656	0.9904
Base	4	18	CIM08 Min	-12.4612	-13.0033	30.8087	-66.9363	-16.929	-1.0345
Base	4	18	DER01	-11.4002	12.1635	51.8092	-28.1296	-11.9655	-0.03
Base	4	18	DER02	-10.2713	12.634	50.8543	-30.1496	-10.7803	-0.0271
Base	4	18	DER03	-10.0839	11.806	48.4369	-27.8851	-10.5838	-0.0266
Base	4	18	DER04	-10.0839	11.806	48.4369	-27.8851	-10.5838	-0.0266
Base	4	18	DER05 Max	86.5237	113.9037	95.3575	168.5863	181.8755	23.9212
Base	4	18	DER05 Min	-106.6915	-90.2918	1.5163	-224.3566	-203.0431	-23.9743
Base	4	18	DER06 Max	-10.0709	142.9135	99.9687	226.4004	-10.5538	-0.0225
Base	4	18	DER06 Min	-10.097	-119.3015	-3.0949	-282.1707	-10.6138	-0.0307
Base	4	18	DER07 Max	89.2789	109.9171	80.2265	178.3882	184.7672	23.9285
Base	4	18	DER07 Min	-103.9363	-94.2784	-13.6147	-214.5548	-200.1514	-23.967
Base	4	18	DER08 Max	-7.3156	138.9269	84.8377	236.2022	-7.6621	-0.0152
Base	4	18	DER08 Min	-7.3417	-123.2881	-18.2259	-272.3688	-7.7222	-0.0234
Base	4	18	DERUD01	-11.4002	12.1635	51.8092	-28.1296	-11.9655	-0.03
Base	4	18	DERUD02	-10.2713	12.634	50.8543	-30.1496	-10.7803	-0.0271
Base	4	18	DERUD03	-10.0839	11.806	48.4369	-27.8851	-10.5838	-0.0266
Base	4	18	DERUD04	-10.0839	11.806	48.4369	-27.8851	-10.5838	-0.0266
Base	4	18	DERUD05 Max	1.1593	26.0213	55.1016	-0.52	11.8877	3.3267
Base	4	18	DERUD05 Min	-21.3271	-2.4093	41.7721	-55.2502	-33.0552	-3.3799
Base	4	18	DERUD06 Max	-10.0819	32.4108	56.5356	12.0784	-10.5791	-0.0259
Base	4	18	DERUD06 Min	-10.086	-8.7989	40.3381	-67.8487	-10.5885	-0.0272
Base	4	18	DERUD07 Max	3.9145	22.0347	39.9706	9.2818	14.7793	3.334
Base	4	18	DERUD07 Min	-18.5719	-6.3959	26.6411	-45.4484	-30.1636	-3.3725
Base	4	18	DERUD08 Max	-7.3266	28.4242	41.4046	21.8802	-7.6874	-0.0186
Base	4	18	DERUD08 Min	-7.3307	-12.7855	25.2071	-58.0468	-7.6969	-0.0199
Base	4	18	CIM09 Max	12.9743	31.3827	33.7454	38.4148	30.4524	4.4145
Base	4	18	CIM09 Min	-22.7458	-20.9568	10.6625	-62.5259	-40.7086	-4.4402
Base	4	18	CIM10 Max	0.4744	35.1936	34.3645	46.0066	5.5511	1.316
Base	4	18	CIM10 Min	-10.246	-24.7677	10.0434	-70.1177	-15.8073	-1.3417
Base	4	18	CIM11	-8.2999	5.5593	49.323	-17.9611	-8.7123	-0.0216
Base	4	18	CIM12	-8.4949	7.3766	49.2656	-21.3245	-8.9166	-0.0222
Base	4	18	CIM13 Max	5.0277	27.2256	58.0178	16.9562	18.023	3.3299
Base	4	18	CIM13 Min	-22.0175	-12.4724	40.5135	-59.6052	-35.8562	-3.3743
Base	4	18	CIM14 Max	-4.4109	30.1032	58.4853	22.6887	-0.7801	0.9903



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	CIM14 Min	-12.5789	-15.35	40.046	-65.3377	-17.0531	-1.0347
Base	4	18	CIM15	-4.8858	5.2129	22.2039	-12.0555	-5.1281	-0.0128
Base	4	18	COMB9	-10.2713	12.634	50.8543	-30.1496	-10.7803	-0.0271
Base	4	18	COMB10	-10.0839	11.806	48.4369	-27.8851	-10.5838	-0.0266
Base	4	18	COMB11	-10.0839	11.806	48.4369	-27.8851	-10.5838	-0.0266
Base	4	18	DER09	-10.3498	11.0696	57.0125	-29.0838	-10.8631	-0.0272
Base	4	18	DER10	-10.3349	6.7997	68.1432	-24.4748	-10.8485	-0.0269
Base	4	18	DER11	-10.1624	10.2415	54.5951	-26.8194	-10.6665	-0.0267
Base	4	18	DERUD09	-10.3498	11.0696	57.0125	-29.0838	-10.8631	-0.0272
Base	4	18	DERUD10	-10.3349	6.7997	68.1432	-24.4748	-10.8485	-0.0269
Base	4	18	DERUD11	-10.1624	10.2415	54.5951	-26.8194	-10.6665	-0.0267

5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.244	4.096	25.7378	662.4338
Modal	2	0.2	5.008	31.4651	990.0535
Modal	3	0.162	6.177	38.8111	1506.3007
Modal	4	0.049	20.211	126.9917	16126.8884
Modal	5	0.017	59.726	375.2665	140824.9371
Modal	6	0.016	62.883	395.1066	156109.2037
Modal	7	0.015	67.912	426.7027	182075.1784

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.244	0.6631	0	0	0.6631	0	0
Modal	2	0.2	0	1	0	0.6631	1	0
Modal	3	0.162	0.3362	0	0	0.9993	1	0
Modal	4	0.049	0.0007	0	0	1	1	0
Modal	5	0.017	0	0	0	1	1	0
Modal	6	0.016	0	1.505E-05	0	1	1	0
Modal	7	0.015	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.6631	0.362	0	0.6631	0.362
Modal	2	1	0	0	1	0.6631	0.362
Modal	3	0	0.3362	0.6375	1	0.9993	0.9994
Modal	4	0	0.0007	0.0005	1	1	1
Modal	5	0	0	1.321E-05	1	1	1
Modal	6	1.505E-05	0	0	1	1	1
Modal	7	0	0	0	1	1	1

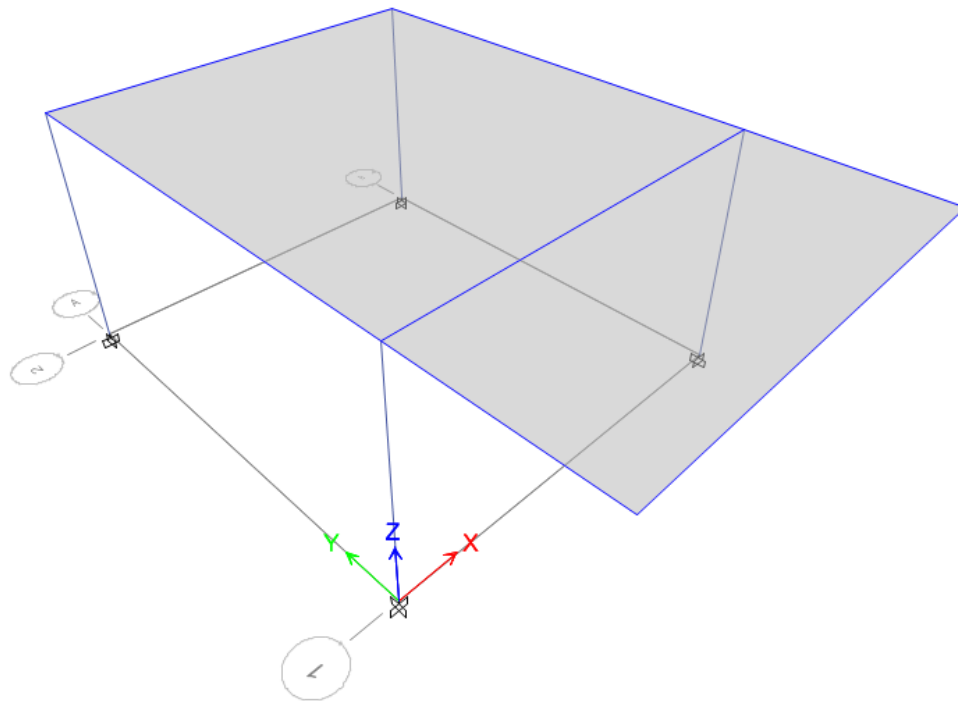
Table 5.11 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.12 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.244	0.671	0	0	0.329
Modal	2	0.2	0	1	0	0
Modal	3	0.162	0.342	0	0	0.658
Modal	4	0.049	0.076	0	0	0.924

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	5	0.017	0	0	0	1
Modal	6	0.016	0	1	0	0
Modal	7	0.015	0	1	0	0



## Project Report

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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	600	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	5.3
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	5.9

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	5900	0
3	5300	0	0
4	5300	5900	0
10	0	-2400	0
5	5275	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B8	10	1	None
B5	5	3	None
B3	10	5	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
F1	4	4	1	3	None
		2	3	1	None
		3	1	10	None
	4		10	5	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	18924.81	18924.81	2.646	-0.773	18924.81	18924.81	2.646	-0.773	2.65	2.3457

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	18924.81	18924.81	156.2988	2.646	-0.773

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	25075.11	25075.11	0
Base	2498.55	2498.55	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X40	CONC21	Concrete Rectangular
VB20X40	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2



### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	From Area	
N1	3	6	D1	
N1	4	17	From Area	
N1	10	25	D1	
N1	5	4	D1	
Base	1	13	From Area	UX; UY; UZ; RX; RY; RZ
Base	2	15	From Area	UX; UY; UZ; RX; RY; RZ
Base	3	16	From Area	UX; UY; UZ; RX; RY; RZ
Base	4	18	From Area	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	5900	V30X40	V30X40	11
N1	B2	14	Beam	5900	V30X40	V30X40	11
N1	B4	16	Beam	5300	V30X40	V30X40	11
N1	B6	18	Beam	5300	V30X40	V30X40	11
N1	B8	2	Beam	2400	V30X40	V30X40	11
N1	B5	4	Beam	2400.1	V30X40	V30X40	11
N1	B3	5	Beam	5275	VB20X40	VB20X40	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F5	5	CUB	
N1	F1	1	LOSA	90

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed**

Story	Label	Unique Name	Design Type	Load Pattern	Load Type	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm	Force at Start kN/m	Force at End kN/m
N1	B1	13	Beam	D	Force	Gravity	0	1	0	5900	4.4	0
N1	B2	14	Beam	D	Force	Gravity	0	1	0	5900	4.4	0
N1	B4	16	Beam	D	Force	Gravity	0	1	0	5300	4.4	4.4
N1	B3	5	Beam	D	Force	Gravity	0	1	0	5275	3.1	3.1

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F5	5	D	Gravity	0.64
N1	F1	1	D	Gravity	4.3
N1	F5	5	LR	Gravity	0.5
N1	F1	1	LR	Gravity	2
N1	F5	5	G	Gravity	1
N1	F1	1	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	0	1.1813	5
NSR10DERIVA	0.1	1.1813	
NSR10DERIVA	0.2	1.1813	
NSR10DERIVA	0.3	1.1813	
NSR10DERIVA	0.4	1.1813	
NSR10DERIVA	0.5	1.1813	
NSR10DERIVA	0.6	1.1813	
NSR10DERIVA	0.7	1.0971	
NSR10DERIVA	0.8	0.96	
NSR10DERIVA	0.9	0.8533	
NSR10DERIVA	1	0.768	
NSR10DERIVA	1.2	0.64	
NSR10DERIVA	1.5	0.512	
NSR10DERIVA	1.7	0.4518	
NSR10DERIVA	2	0.384	
NSR10DERIVA	2.5	0.3072	
NSR10DERIVA	3	0.256	

Name	Period sec	Acceleration	Damping %
NSR10DERIVA	3.5	0.2194	
NSR10DERIVA	4	0.1843	
NSR10DERIVA	5	0.118	
NSR10DERIVA	8	0.0461	
NSR10DERIVA	11	0.0244	
NSR10DERIVA	15	0.0131	
disNSR10	0	1.4766	5
disNSR10	0.1	1.4766	
disNSR10	0.2	1.4766	
disNSR10	0.3	1.4766	
disNSR10	0.4	1.4766	
disNSR10	0.5	1.4766	
disNSR10	0.6	1.4766	
disNSR10	0.7	1.3714	
disNSR10	0.8	1.2	
disNSR10	0.9	1.0667	
disNSR10	1	0.96	
disNSR10	1.2	0.8	
disNSR10	1.5	0.64	
disNSR10	1.7	0.5647	
disNSR10	2	0.48	
disNSR10	2.5	0.384	
disNSR10	3	0.32	
disNSR10	3.5	0.2743	
disNSR10	4	0.2304	
disNSR10	5	0.1475	
disNSR10	8	0.0576	
disNSR10	11	0.0305	
disNSR10	15	0.0164	
UMBRAL1	0	0.1	2
UMBRAL1	0.01	0.108	
UMBRAL1	0.02	0.116	
UMBRAL1	0.03	0.124	
UMBRAL1	0.04	0.132	
UMBRAL1	0.05	0.14	
UMBRAL1	0.06	0.148	
UMBRAL1	0.07	0.156	
UMBRAL1	0.08	0.164	
UMBRAL1	0.09	0.172	
UMBRAL1	0.1	0.18	
UMBRAL1	0.11	0.188	
UMBRAL1	0.12	0.196	
UMBRAL1	0.13	0.204	
UMBRAL1	0.14	0.212	
UMBRAL1	0.15	0.22	
UMBRAL1	0.16	0.228	
UMBRAL1	0.17	0.236	
UMBRAL1	0.18	0.244	
UMBRAL1	0.19	0.252	
UMBRAL1	0.2	0.26	
UMBRAL1	0.21	0.268	
UMBRAL1	0.22	0.276	
UMBRAL1	0.23	0.284	
UMBRAL1	0.24	0.292	
UMBRAL1	0.25	0.3	
UMBRAL1	0.26	0.3	
UMBRAL1	0.27	0.3	
UMBRAL1	0.28	0.3	
UMBRAL1	0.29	0.3	
UMBRAL1	0.3	0.3	

Name	Period sec	Acceleration	Damping %
UMBRAL1	0.31	0.3	
UMBRAL1	0.32	0.3	
UMBRAL1	0.33	0.3	
UMBRAL1	0.34	0.3	
UMBRAL1	0.35	0.3	
UMBRAL1	0.36	0.3	
UMBRAL1	0.37	0.3	
UMBRAL1	0.38	0.3	
UMBRAL1	0.39	0.3	
UMBRAL1	0.4	0.3	
UMBRAL1	0.41	0.3	
UMBRAL1	0.42	0.3	
UMBRAL1	0.43	0.3	
UMBRAL1	0.44	0.3	
UMBRAL1	0.45	0.3	
UMBRAL1	0.46	0.3	
UMBRAL1	0.47	0.3	
UMBRAL1	0.48	0.3	
UMBRAL1	0.49	0.3	
UMBRAL1	0.5	0.3	
UMBRAL1	0.51	0.3	
UMBRAL1	0.52	0.3	
UMBRAL1	0.53	0.3	
UMBRAL1	0.54	0.3	
UMBRAL1	0.55	0.3	
UMBRAL1	0.56	0.3	
UMBRAL1	0.57	0.3	
UMBRAL1	0.58	0.3	
UMBRAL1	0.59	0.3	
UMBRAL1	0.6	0.3	
UMBRAL1	0.61	0.3	
UMBRAL1	0.62	0.3	
UMBRAL1	0.63	0.3	
UMBRAL1	0.64	0.3	
UMBRAL1	0.65	0.3	
UMBRAL1	0.66	0.3	
UMBRAL1	0.67	0.3	
UMBRAL1	0.68	0.3	
UMBRAL1	0.69	0.3	
UMBRAL1	0.7	0.3	
UMBRAL1	0.71	0.3	
UMBRAL1	0.72	0.3	
UMBRAL1	0.73	0.3	
UMBRAL1	0.74	0.3	
UMBRAL1	0.75	0.3	
UMBRAL1	0.76	0.3	
UMBRAL1	0.77	0.3	
UMBRAL1	0.78	0.3	
UMBRAL1	0.79	0.3	
UMBRAL1	0.8	0.3	
UMBRAL1	0.81	0.3	
UMBRAL1	0.82	0.3	
UMBRAL1	0.83	0.3	
UMBRAL1	0.84	0.3	
UMBRAL1	0.85	0.3	
UMBRAL1	0.86	0.3	
UMBRAL1	0.87	0.3	
UMBRAL1	0.88	0.3	
UMBRAL1	0.89	0.3	
UMBRAL1	0.9	0.3	

Name	Period sec	Acceleration	Damping %
UMBRAL1	0.91	0.3	
UMBRAL1	0.92	0.3	
UMBRAL1	0.93	0.3	
UMBRAL1	0.94	0.3	
UMBRAL1	0.95	0.3	
UMBRAL1	0.96	0.3	
UMBRAL1	0.97	0.3	
UMBRAL1	0.98	0.3	
UMBRAL1	0.99	0.3	
UMBRAL1	1	0.3	
UMBRAL1	1.01	0.297	
UMBRAL1	1.02	0.294	
UMBRAL1	1.03	0.291	
UMBRAL1	1.04	0.288	
UMBRAL1	1.05	0.286	
UMBRAL1	1.06	0.283	
UMBRAL1	1.07	0.28	
UMBRAL1	1.08	0.278	
UMBRAL1	1.09	0.275	
UMBRAL1	1.1	0.273	
UMBRAL1	1.11	0.27	
UMBRAL1	1.12	0.268	
UMBRAL1	1.13	0.265	
UMBRAL1	1.14	0.263	
UMBRAL1	1.15	0.261	
UMBRAL1	1.16	0.259	
UMBRAL1	1.17	0.256	
UMBRAL1	1.18	0.254	
UMBRAL1	1.19	0.252	
UMBRAL1	1.2	0.25	
UMBRAL1	1.21	0.248	
UMBRAL1	1.22	0.246	
UMBRAL1	1.23	0.244	
UMBRAL1	1.24	0.242	
UMBRAL1	1.25	0.24	
UMBRAL1	1.26	0.238	
UMBRAL1	1.27	0.236	
UMBRAL1	1.28	0.234	
UMBRAL1	1.29	0.233	
UMBRAL1	1.3	0.231	
UMBRAL1	1.31	0.229	
UMBRAL1	1.32	0.227	
UMBRAL1	1.33	0.226	
UMBRAL1	1.34	0.224	
UMBRAL1	1.35	0.222	
UMBRAL1	1.36	0.221	
UMBRAL1	1.37	0.219	
UMBRAL1	1.38	0.217	
UMBRAL1	1.39	0.216	
UMBRAL1	1.4	0.214	
UMBRAL1	1.41	0.213	
UMBRAL1	1.42	0.211	
UMBRAL1	1.43	0.21	
UMBRAL1	1.44	0.208	
UMBRAL1	1.45	0.207	
UMBRAL1	1.46	0.205	
UMBRAL1	1.47	0.204	
UMBRAL1	1.48	0.203	
UMBRAL1	1.49	0.201	
UMBRAL1	1.5	0.2	

Name	Period sec	Acceleration	Damping %
UMBRAL1	1.51	0.199	
UMBRAL1	1.52	0.197	
UMBRAL1	1.53	0.196	
UMBRAL1	1.54	0.195	
UMBRAL1	1.55	0.194	
UMBRAL1	1.56	0.192	
UMBRAL1	1.57	0.191	
UMBRAL1	1.58	0.19	
UMBRAL1	1.59	0.189	
UMBRAL1	1.6	0.188	
UMBRAL1	1.61	0.186	
UMBRAL1	1.62	0.185	
UMBRAL1	1.63	0.184	
UMBRAL1	1.64	0.183	
UMBRAL1	1.65	0.182	
UMBRAL1	1.66	0.181	
UMBRAL1	1.67	0.18	
UMBRAL1	1.68	0.179	
UMBRAL1	1.69	0.178	
UMBRAL1	1.7	0.176	
UMBRAL1	1.71	0.175	
UMBRAL1	1.72	0.174	
UMBRAL1	1.73	0.173	
UMBRAL1	1.74	0.172	
UMBRAL1	1.75	0.171	
UMBRAL1	1.76	0.17	
UMBRAL1	1.77	0.169	
UMBRAL1	1.78	0.169	
UMBRAL1	1.79	0.168	
UMBRAL1	1.8	0.167	
UMBRAL1	1.81	0.166	
UMBRAL1	1.82	0.165	
UMBRAL1	1.83	0.164	
UMBRAL1	1.84	0.163	
UMBRAL1	1.85	0.162	
UMBRAL1	1.86	0.161	
UMBRAL1	1.87	0.16	
UMBRAL1	1.88	0.16	
UMBRAL1	1.89	0.159	
UMBRAL1	1.9	0.158	
UMBRAL1	1.91	0.157	
UMBRAL1	1.92	0.156	
UMBRAL1	1.93	0.155	
UMBRAL1	1.94	0.155	
UMBRAL1	1.95	0.154	
UMBRAL1	1.96	0.153	
UMBRAL1	1.97	0.152	
UMBRAL1	1.98	0.152	
UMBRAL1	1.99	0.151	
UMBRAL1	2	0.15	
UMBRAL1	2.01	0.149	
UMBRAL1	2.02	0.149	
UMBRAL1	2.03	0.148	
UMBRAL1	2.04	0.147	
UMBRAL1	2.05	0.146	
UMBRAL1	2.06	0.146	
UMBRAL1	2.07	0.145	
UMBRAL1	2.08	0.144	
UMBRAL1	2.09	0.144	
UMBRAL1	2.1	0.143	

Name	Period sec	Acceleration	Damping %
UMBRAL1	2.11	0.142	
UMBRAL1	2.12	0.142	
UMBRAL1	2.13	0.141	
UMBRAL1	2.14	0.14	
UMBRAL1	2.15	0.14	
UMBRAL1	2.16	0.139	
UMBRAL1	2.17	0.138	
UMBRAL1	2.18	0.138	
UMBRAL1	2.19	0.137	
UMBRAL1	2.2	0.136	
UMBRAL1	2.21	0.136	
UMBRAL1	2.22	0.135	
UMBRAL1	2.23	0.135	
UMBRAL1	2.24	0.134	
UMBRAL1	2.25	0.133	
UMBRAL1	2.26	0.133	
UMBRAL1	2.27	0.132	
UMBRAL1	2.28	0.132	
UMBRAL1	2.29	0.131	
UMBRAL1	2.3	0.13	
UMBRAL1	2.31	0.13	
UMBRAL1	2.32	0.129	
UMBRAL1	2.33	0.129	
UMBRAL1	2.34	0.128	
UMBRAL1	2.35	0.128	
UMBRAL1	2.36	0.127	
UMBRAL1	2.37	0.127	
UMBRAL1	2.38	0.126	
UMBRAL1	2.39	0.126	
UMBRAL1	2.4	0.125	
UMBRAL1	2.41	0.124	
UMBRAL1	2.42	0.124	
UMBRAL1	2.43	0.123	
UMBRAL1	2.44	0.123	
UMBRAL1	2.45	0.122	
UMBRAL1	2.46	0.122	
UMBRAL1	2.47	0.121	
UMBRAL1	2.48	0.121	
UMBRAL1	2.49	0.12	
UMBRAL1	2.5	0.12	
UMBRAL1	2.51	0.12	
UMBRAL1	2.52	0.119	
UMBRAL1	2.53	0.119	
UMBRAL1	2.54	0.118	
UMBRAL1	2.55	0.118	
UMBRAL1	2.56	0.117	
UMBRAL1	2.57	0.117	
UMBRAL1	2.58	0.116	
UMBRAL1	2.59	0.116	
UMBRAL1	2.6	0.115	
UMBRAL1	2.61	0.115	
UMBRAL1	2.62	0.115	
UMBRAL1	2.63	0.114	
UMBRAL1	2.64	0.114	
UMBRAL1	2.65	0.113	
UMBRAL1	2.66	0.113	
UMBRAL1	2.67	0.112	
UMBRAL1	2.68	0.112	
UMBRAL1	2.69	0.112	
UMBRAL1	2.7	0.111	

Name	Period sec	Acceleration	Damping %
UMBRAL1	2.71	0.111	
UMBRAL1	2.72	0.11	
UMBRAL1	2.73	0.11	
UMBRAL1	2.74	0.109	
UMBRAL1	2.75	0.109	
UMBRAL1	2.76	0.109	
UMBRAL1	2.77	0.108	
UMBRAL1	2.78	0.108	
UMBRAL1	2.79	0.108	
UMBRAL1	2.8	0.107	
UMBRAL1	2.81	0.107	
UMBRAL1	2.82	0.106	
UMBRAL1	2.83	0.106	
UMBRAL1	2.84	0.106	
UMBRAL1	2.85	0.105	
UMBRAL1	2.86	0.105	
UMBRAL1	2.87	0.105	
UMBRAL1	2.88	0.104	
UMBRAL1	2.89	0.104	
UMBRAL1	2.9	0.103	
UMBRAL1	2.91	0.103	
UMBRAL1	2.92	0.103	
UMBRAL1	2.93	0.102	
UMBRAL1	2.94	0.102	
UMBRAL1	2.95	0.102	
UMBRAL1	2.96	0.101	
UMBRAL1	2.97	0.101	
UMBRAL1	2.98	0.101	
UMBRAL1	2.99	0.1	
UMBRAL1	3	0.1	
UMBRAL1	3.01	0.1	
UMBRAL1	3.02	0.099	
UMBRAL1	3.03	0.099	
UMBRAL1	3.04	0.099	
UMBRAL1	3.05	0.098	
UMBRAL1	3.06	0.098	
UMBRAL1	3.07	0.098	
UMBRAL1	3.08	0.097	
UMBRAL1	3.09	0.097	
UMBRAL1	3.1	0.097	
UMBRAL1	3.11	0.096	
UMBRAL1	3.12	0.096	
UMBRAL1	3.13	0.096	
UMBRAL1	3.14	0.096	
UMBRAL1	3.15	0.095	
UMBRAL1	3.16	0.095	
UMBRAL1	3.17	0.095	
UMBRAL1	3.18	0.094	
UMBRAL1	3.19	0.094	
UMBRAL1	3.2	0.094	
UMBRAL1	3.21	0.093	
UMBRAL1	3.22	0.093	
UMBRAL1	3.23	0.093	
UMBRAL1	3.24	0.093	
UMBRAL1	3.25	0.092	
UMBRAL1	3.26	0.092	
UMBRAL1	3.27	0.092	
UMBRAL1	3.28	0.091	
UMBRAL1	3.29	0.091	
UMBRAL1	3.3	0.091	



Name	Period sec	Acceleration	Damping %
UMBRAL1	3.31	0.091	
UMBRAL1	3.32	0.09	
UMBRAL1	3.33	0.09	
UMBRAL1	3.34	0.09	
UMBRAL1	3.35	0.09	
UMBRAL1	3.36	0.089	
UMBRAL1	3.37	0.089	
UMBRAL1	3.38	0.089	
UMBRAL1	3.39	0.088	
UMBRAL1	3.4	0.088	
UMBRAL1	3.41	0.088	
UMBRAL1	3.42	0.088	
UMBRAL1	3.43	0.087	
UMBRAL1	3.44	0.087	
UMBRAL1	3.45	0.087	
UMBRAL1	3.46	0.087	
UMBRAL1	3.47	0.086	
UMBRAL1	3.48	0.086	
UMBRAL1	3.49	0.086	
UMBRAL1	3.5	0.086	
UMBRAL1	3.51	0.085	
UMBRAL1	3.52	0.085	
UMBRAL1	3.53	0.085	
UMBRAL1	3.54	0.085	
UMBRAL1	3.55	0.085	
UMBRAL1	3.56	0.084	
UMBRAL1	3.57	0.084	
UMBRAL1	3.58	0.084	
UMBRAL1	3.59	0.084	
UMBRAL1	3.6	0.083	
UMBRAL1	3.61	0.083	
UMBRAL1	3.62	0.083	
UMBRAL1	3.63	0.083	
UMBRAL1	3.64	0.082	
UMBRAL1	3.65	0.082	
UMBRAL1	3.66	0.082	
UMBRAL1	3.67	0.082	
UMBRAL1	3.68	0.082	
UMBRAL1	3.69	0.081	
UMBRAL1	3.7	0.081	
UMBRAL1	3.71	0.081	
UMBRAL1	3.72	0.081	
UMBRAL1	3.73	0.08	
UMBRAL1	3.74	0.08	
UMBRAL1	3.75	0.08	
UMBRAL1	3.76	0.08	
UMBRAL1	3.77	0.08	
UMBRAL1	3.78	0.079	
UMBRAL1	3.79	0.079	
UMBRAL1	3.8	0.079	
UMBRAL1	3.81	0.079	
UMBRAL1	3.82	0.079	
UMBRAL1	3.83	0.078	
UMBRAL1	3.84	0.078	
UMBRAL1	3.85	0.078	
UMBRAL1	3.86	0.078	
UMBRAL1	3.87	0.078	
UMBRAL1	3.88	0.077	
UMBRAL1	3.89	0.077	
UMBRAL1	3.9	0.077	

Name	Period sec	Acceleration	Damping %
UMBRAL1	3.91	0.077	
UMBRAL1	3.92	0.077	
UMBRAL1	3.93	0.076	
UMBRAL1	3.94	0.076	
UMBRAL1	3.95	0.076	
UMBRAL1	3.96	0.076	
UMBRAL1	3.97	0.076	
UMBRAL1	3.98	0.075	
UMBRAL1	3.99	0.075	
UMBRAL1	4	0.075	
UMBRAL1	4.01	0.075	
UMBRAL1	4.02	0.075	
UMBRAL1	4.03	0.074	
UMBRAL1	4.04	0.074	
UMBRAL1	4.05	0.074	
UMBRAL1	4.06	0.074	
UMBRAL1	4.07	0.074	
UMBRAL1	4.08	0.074	
UMBRAL1	4.09	0.073	
UMBRAL1	4.1	0.073	
UMBRAL1	4.11	0.073	
UMBRAL1	4.12	0.073	
UMBRAL1	4.13	0.073	
UMBRAL1	4.14	0.072	
UMBRAL1	4.15	0.072	
UMBRAL1	4.16	0.072	
UMBRAL1	4.17	0.072	
UMBRAL1	4.18	0.072	
UMBRAL1	4.19	0.072	
UMBRAL1	4.2	0.071	
UMBRAL1	4.21	0.071	
UMBRAL1	4.22	0.071	
UMBRAL1	4.23	0.071	
UMBRAL1	4.24	0.071	
UMBRAL1	4.25	0.071	
UMBRAL1	4.26	0.07	
UMBRAL1	4.27	0.07	
UMBRAL1	4.28	0.07	
UMBRAL1	4.29	0.07	
UMBRAL1	4.3	0.07	
UMBRAL1	4.31	0.07	
UMBRAL1	4.32	0.069	
UMBRAL1	4.33	0.069	
UMBRAL1	4.34	0.069	
UMBRAL1	4.35	0.069	
UMBRAL1	4.36	0.069	
UMBRAL1	4.37	0.069	
UMBRAL1	4.38	0.068	
UMBRAL1	4.39	0.068	
UMBRAL1	4.4	0.068	
UMBRAL1	4.41	0.068	
UMBRAL1	4.42	0.068	
UMBRAL1	4.43	0.068	
UMBRAL1	4.44	0.068	
UMBRAL1	4.45	0.067	
UMBRAL1	4.46	0.067	
UMBRAL1	4.47	0.067	
UMBRAL1	4.48	0.067	
UMBRAL1	4.49	0.067	
UMBRAL1	4.5	0.067	

Name	Period sec	Acceleration	Damping %
UMBRAL1	4.51	0.067	
UMBRAL1	4.52	0.066	
UMBRAL1	4.53	0.066	
UMBRAL1	4.54	0.066	
UMBRAL1	4.55	0.066	
UMBRAL1	4.56	0.066	
UMBRAL1	4.57	0.066	
UMBRAL1	4.58	0.066	
UMBRAL1	4.59	0.065	
UMBRAL1	4.6	0.065	
UMBRAL1	4.61	0.065	
UMBRAL1	4.62	0.065	
UMBRAL1	4.63	0.065	
UMBRAL1	4.64	0.065	
UMBRAL1	4.65	0.065	
UMBRAL1	4.66	0.064	
UMBRAL1	4.67	0.064	
UMBRAL1	4.68	0.064	
UMBRAL1	4.69	0.064	
UMBRAL1	4.7	0.064	
UMBRAL1	4.71	0.064	
UMBRAL1	4.72	0.064	
UMBRAL1	4.73	0.063	
UMBRAL1	4.74	0.063	
UMBRAL1	4.75	0.063	
UMBRAL1	4.76	0.063	
UMBRAL1	4.77	0.063	
UMBRAL1	4.78	0.063	
UMBRAL1	4.79	0.063	
UMBRAL1	4.8	0.063	
UMBRAL1	4.81	0.062	
UMBRAL1	4.82	0.062	
UMBRAL1	4.83	0.062	
UMBRAL1	4.84	0.061	
UMBRAL1	4.85	0.061	
UMBRAL1	4.86	0.061	
UMBRAL1	4.87	0.061	
UMBRAL1	4.88	0.06	
UMBRAL1	4.89	0.06	
UMBRAL1	4.9	0.06	
UMBRAL1	4.91	0.06	
UMBRAL1	4.92	0.059	
UMBRAL1	4.93	0.059	
UMBRAL1	4.94	0.059	
UMBRAL1	4.95	0.059	
UMBRAL1	4.96	0.059	
UMBRAL1	4.97	0.058	
UMBRAL1	4.98	0.058	
UMBRAL1	4.99	0.058	
UMBRAL1	5	0.058	
UMBRAL1	5.01	0.057	
UMBRAL1	5.02	0.057	
UMBRAL1	5.03	0.057	
UMBRAL1	5.04	0.057	
UMBRAL1	5.05	0.056	
UMBRAL1	5.06	0.056	
UMBRAL1	5.07	0.056	
UMBRAL1	5.08	0.056	
UMBRAL1	5.09	0.056	
UMBRAL1	5.1	0.055	

Name	Period sec	Acceleration	Damping %
UMBRAL1	5.11	0.055	
UMBRAL1	5.12	0.055	
UMBRAL1	5.13	0.055	
UMBRAL1	5.14	0.055	
UMBRAL1	5.15	0.054	
UMBRAL1	5.16	0.054	
UMBRAL1	5.17	0.054	
UMBRAL1	5.18	0.054	
UMBRAL1	5.19	0.053	
UMBRAL1	5.2	0.053	
UMBRAL1	5.21	0.053	
UMBRAL1	5.22	0.053	
UMBRAL1	5.23	0.053	
UMBRAL1	5.24	0.052	
UMBRAL1	5.25	0.052	
UMBRAL1	5.26	0.052	
UMBRAL1	5.27	0.052	
UMBRAL1	5.28	0.052	
UMBRAL1	5.29	0.051	
UMBRAL1	5.3	0.051	
UMBRAL1	5.31	0.051	
UMBRAL1	5.32	0.051	
UMBRAL1	5.33	0.051	
UMBRAL1	5.34	0.05	
UMBRAL1	5.35	0.05	
UMBRAL1	5.36	0.05	
UMBRAL1	5.37	0.05	
UMBRAL1	5.38	0.05	
UMBRAL1	5.39	0.05	
UMBRAL1	5.4	0.049	
UMBRAL1	5.41	0.049	
UMBRAL1	5.42	0.049	
UMBRAL1	5.43	0.049	
UMBRAL1	5.44	0.049	
UMBRAL1	5.45	0.048	
UMBRAL1	5.46	0.048	
UMBRAL1	5.47	0.048	
UMBRAL1	5.48	0.048	
UMBRAL1	5.49	0.048	
UMBRAL1	5.5	0.048	
UMBRAL1	5.51	0.047	
UMBRAL1	5.52	0.047	
UMBRAL1	5.53	0.047	
UMBRAL1	5.54	0.047	
UMBRAL1	5.55	0.047	
UMBRAL1	5.56	0.047	
UMBRAL1	5.57	0.046	
UMBRAL1	5.58	0.046	
UMBRAL1	5.59	0.046	
UMBRAL1	5.6	0.046	
UMBRAL1	5.61	0.046	
UMBRAL1	5.62	0.046	
UMBRAL1	5.63	0.045	
UMBRAL1	5.64	0.045	
UMBRAL1	5.65	0.045	
UMBRAL1	5.66	0.045	
UMBRAL1	5.67	0.045	
UMBRAL1	5.68	0.045	
UMBRAL1	5.69	0.044	
UMBRAL1	5.7	0.044	

Name	Period sec	Acceleration	Damping %
UMBRAL1	5.71	0.044	
UMBRAL1	5.72	0.044	
UMBRAL1	5.73	0.044	
UMBRAL1	5.74	0.044	
UMBRAL1	5.75	0.044	
UMBRAL1	5.76	0.043	
UMBRAL1	5.77	0.043	
UMBRAL1	5.78	0.043	
UMBRAL1	5.79	0.043	
UMBRAL1	5.8	0.043	
UMBRAL1	5.81	0.043	
UMBRAL1	5.82	0.043	
UMBRAL1	5.83	0.042	
UMBRAL1	5.84	0.042	
UMBRAL1	5.85	0.042	
UMBRAL1	5.86	0.042	
UMBRAL1	5.87	0.042	
UMBRAL1	5.88	0.042	
UMBRAL1	5.89	0.042	
UMBRAL1	5.9	0.041	
UMBRAL1	5.91	0.041	
UMBRAL1	5.92	0.041	
UMBRAL1	5.93	0.041	
UMBRAL1	5.94	0.041	
UMBRAL1	5.95	0.041	
UMBRAL1	5.96	0.041	
UMBRAL1	5.97	0.04	
UMBRAL1	5.98	0.04	
UMBRAL1	5.99	0.04	
UMBRAL1	6	0.04	
UMBRAL1	6.01	0.04	
UMBRAL1	6.02	0.04	
UMBRAL1	6.03	0.04	
UMBRAL1	6.04	0.039	
UMBRAL1	6.05	0.039	
UMBRAL1	6.06	0.039	
UMBRAL1	6.07	0.039	
UMBRAL1	6.08	0.039	
UMBRAL1	6.09	0.039	
UMBRAL1	6.1	0.039	
UMBRAL1	6.11	0.039	
UMBRAL1	6.12	0.038	
UMBRAL1	6.13	0.038	
UMBRAL1	6.14	0.038	
UMBRAL1	6.15	0.038	
UMBRAL1	6.16	0.038	
UMBRAL1	6.17	0.038	
UMBRAL1	6.18	0.038	
UMBRAL1	6.19	0.038	
UMBRAL1	6.2	0.037	
UMBRAL1	6.21	0.037	
UMBRAL1	6.22	0.037	
UMBRAL1	6.23	0.037	
UMBRAL1	6.24	0.037	
UMBRAL1	6.25	0.037	
UMBRAL1	6.26	0.037	
UMBRAL1	6.27	0.037	
UMBRAL1	6.28	0.037	
UMBRAL1	6.29	0.036	
UMBRAL1	6.3	0.036	

Name	Period sec	Acceleration	Damping %
UMBRAL1	6.31	0.036	
UMBRAL1	6.32	0.036	
UMBRAL1	6.33	0.036	
UMBRAL1	6.34	0.036	
UMBRAL1	6.35	0.036	
UMBRAL1	6.36	0.036	
UMBRAL1	6.37	0.035	
UMBRAL1	6.38	0.035	
UMBRAL1	6.39	0.035	
UMBRAL1	6.4	0.035	
UMBRAL1	6.41	0.035	
UMBRAL1	6.42	0.035	
UMBRAL1	6.43	0.035	
UMBRAL1	6.44	0.035	
UMBRAL1	6.45	0.035	
UMBRAL1	6.46	0.035	
UMBRAL1	6.47	0.034	
UMBRAL1	6.48	0.034	
UMBRAL1	6.49	0.034	
UMBRAL1	6.5	0.034	
UMBRAL1	6.51	0.034	
UMBRAL1	6.52	0.034	
UMBRAL1	6.53	0.034	
UMBRAL1	6.54	0.034	
UMBRAL1	6.55	0.034	
UMBRAL1	6.56	0.033	
UMBRAL1	6.57	0.033	
UMBRAL1	6.58	0.033	
UMBRAL1	6.59	0.033	
UMBRAL1	6.6	0.033	
UMBRAL1	6.61	0.033	
UMBRAL1	6.62	0.033	
UMBRAL1	6.63	0.033	
UMBRAL1	6.64	0.033	
UMBRAL1	6.65	0.033	
UMBRAL1	6.66	0.032	
UMBRAL1	6.67	0.032	
UMBRAL1	6.68	0.032	
UMBRAL1	6.69	0.032	
UMBRAL1	6.7	0.032	
UMBRAL1	6.71	0.032	
UMBRAL1	6.72	0.032	
UMBRAL1	6.73	0.032	
UMBRAL1	6.74	0.032	
UMBRAL1	6.75	0.032	
UMBRAL1	6.76	0.032	
UMBRAL1	6.77	0.031	
UMBRAL1	6.78	0.031	
UMBRAL1	6.79	0.031	
UMBRAL1	6.8	0.031	
UMBRAL1	6.81	0.031	
UMBRAL1	6.82	0.031	
UMBRAL1	6.83	0.031	
UMBRAL1	6.84	0.031	
UMBRAL1	6.85	0.031	
UMBRAL1	6.86	0.031	
UMBRAL1	6.87	0.031	
UMBRAL1	6.88	0.03	
UMBRAL1	6.89	0.03	
UMBRAL1	6.9	0.03	

Name	Period sec	Acceleration	Damping %
UMBRAL1	6.91	0.03	
UMBRAL1	6.92	0.03	
UMBRAL1	6.93	0.03	
UMBRAL1	6.94	0.03	
UMBRAL1	6.95	0.03	
UMBRAL1	6.96	0.03	
UMBRAL1	6.97	0.03	
UMBRAL1	6.98	0.03	
UMBRAL1	6.99	0.029	
UMBRAL1	7	0.029	
UMBRAL1	7.01	0.029	
UMBRAL1	7.02	0.029	
UMBRAL1	7.03	0.029	
UMBRAL1	7.04	0.029	
UMBRAL1	7.05	0.029	
UMBRAL1	7.06	0.029	
UMBRAL1	7.07	0.029	
UMBRAL1	7.08	0.029	
UMBRAL1	7.09	0.029	
UMBRAL1	7.1	0.029	
UMBRAL1	7.11	0.028	
UMBRAL1	7.12	0.028	
UMBRAL1	7.13	0.028	
UMBRAL1	7.14	0.028	
UMBRAL1	7.15	0.028	
UMBRAL1	7.16	0.028	
UMBRAL1	7.17	0.028	
UMBRAL1	7.18	0.028	
UMBRAL1	7.19	0.028	
UMBRAL1	7.2	0.028	
UMBRAL1	7.21	0.028	
UMBRAL1	7.22	0.028	
UMBRAL1	7.23	0.028	
UMBRAL1	7.24	0.027	
UMBRAL1	7.25	0.027	
UMBRAL1	7.26	0.027	
UMBRAL1	7.27	0.027	
UMBRAL1	7.28	0.027	
UMBRAL1	7.29	0.027	
UMBRAL1	7.3	0.027	
UMBRAL1	7.31	0.027	
UMBRAL1	7.32	0.027	
UMBRAL1	7.33	0.027	
UMBRAL1	7.34	0.027	
UMBRAL1	7.35	0.027	
UMBRAL1	7.36	0.027	
UMBRAL1	7.37	0.027	
UMBRAL1	7.38	0.026	
UMBRAL1	7.39	0.026	
UMBRAL1	7.4	0.026	
UMBRAL1	7.41	0.026	
UMBRAL1	7.42	0.026	
UMBRAL1	7.43	0.026	
UMBRAL1	7.44	0.026	
UMBRAL1	7.45	0.026	
UMBRAL1	7.46	0.026	
UMBRAL1	7.47	0.026	
UMBRAL1	7.48	0.026	
UMBRAL1	7.49	0.026	
UMBRAL1	7.5	0.026	

4.4 Load Cases

Table 4.5 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.6 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No



Name	Load Case/Combo	Scale Factor	Type	Auto
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER05	EY	0.3		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EX	0.3		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER07	EY	0.3		No
DER08	D	0.9	Linear Add	No
DER08	EX	0.3		No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	L	0.75		No
CIM12	G	0.75		No
CIM13	D	1	Linear Add	No
CIM13	L	0.75		No
CIM13	G	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	L	0.75		No
CIM14	G	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	270.4052	283.1344	-715.8198	-3.728E-05	0	0	0
L	0	0	0	0	0	0	0	0	0
LR	0	0	41.015	15.6279	-108.531	-8.711E-06	0	0	0
EX Max	359.2436	0.8515	0	2.7741	1170.8512	1205.336	0	0	0
EY Max	0.6435	360.1884	0	1173.2677	2.0966	953.0406	0	0	0
DISX Max	94.8887	0.2249	0	0.7327	309.2625	318.3711	0	0	0
DISY Max	0.17	95.1551	0	309.9555	0.5539	251.7756	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	43.96	76.9992	-116.4146	-4.491E-06	0	0	0
DERUX Max	49.5688	0.1131	0	0.3684	161.5782	145.1919	0	0	0
DERUY Max	0.0912	49.54	0	161.3702	0.2971	131.075	0	0	0
COMB1	0	0	378.5673	396.3881	-1002.1478	-0.0001	0	0	0
COMB2	0	0	344.9938	347.5752	-913.2493	-4.909E-05	0	0	0
COMB3	0	0	390.1103	364.7659	-1032.6334	-0.0001	0	0	0
COMB4	0	0	344.9938	347.5752	-913.2493	-4.909E-05	0	0	0
COMB5 Max	94.9397	28.7714	324.4863	433.4806	-549.5552	393.9037	0	0	0
COMB5 Min	-94.9397	-28.7714	324.4863	246.0419	-1168.4124	-393.9038	0	0	0
COMB6 Max	28.6366	95.2226	324.4863	649.9365	-765.6512	347.2869	0	0	0
COMB6 Min	-28.6366	-95.2226	324.4863	29.586	-952.3164	-347.287	0	0	0
COMB7 Max	28.6366	95.2226	243.3647	564.9962	-550.9052	347.2869	0	0	0
COMB7 Min	-28.6366	-95.2226	243.3647	-55.3544	-737.5705	-347.2869	0	0	0
COMB8 Max	94.9397	28.7714	243.3647	348.5403	-334.8092	393.9038	0	0	0
COMB8 Min	-94.9397	-28.7714	243.3647	161.1016	-953.6665	-393.9038	0	0	0
ENVE Max	94.9397	95.2226	390.1103	649.9365	-334.8092	393.9038	0	0	0
ENVE Min	-94.9397	-95.2226	243.3647	-55.3544	-1168.4124	-393.9038	0	0	0
CIM01	0	0	270.4052	283.1344	-715.8198	-3.728E-05	0	0	0
CIM02	0	0	270.4052	283.1344	-715.8198	-3.728E-05	0	0	0
CIM03	0	0	311.4202	298.7623	-824.3508	-4.599E-05	0	0	0
CIM04	0	0	301.1665	294.8553	-797.2181	-4.382E-05	0	0	0
CIM05 Max	66.4578	20.14	270.4052	348.7379	-499.2198	275.7326	0	0	0
CIM05 Min	-66.4578	-20.14	270.4052	217.5308	-932.4199	-275.7327	0	0	0
CIM06 Max	20.0456	66.6558	270.4052	500.2571	-650.487	243.1008	0	0	0
CIM06 Min	-20.0456	-66.6558	270.4052	66.0117	-781.1527	-243.1009	0	0	0
CIM07 Max	50.3182	15.344	301.1665	344.8365	-633.2203	209.0207	0	0	0
CIM07 Min	-50.3182	-15.344	301.1665	244.8741	-961.2158	-209.0208	0	0	0
CIM08 Max	15.2723	50.4682	301.1665	459.2489	-747.4425	184.3804	0	0	0
CIM08 Min	-15.2723	-50.4682	301.1665	130.4617	-846.9936	-184.3805	0	0	0
DER01	0	0	378.5673	396.3881	-1002.1478	-0.0001	0	0	0
DER02	0	0	344.9938	347.5752	-913.2493	-4.909E-05	0	0	0
DER03	0	0	390.1103	364.7659	-1032.6334	-0.0001	0	0	0
DER04	0	0	344.9938	347.5752	-913.2493	-4.909E-05	0	0	0
DER05 Max	359.4366	108.908	324.4863	694.5156	312.4963	1491.2481	0	0	0
DER05 Min	-359.4366	-108.908	324.4863	-14.9931	-2030.4639	-1491.2482	0	0	0
DER06 Max	108.4166	360.4439	324.4863	1513.8611	-505.6319	1314.6413	0	0	0
DER06 Min	-108.4166	-360.4439	324.4863	-834.3386	-1212.3357	-1314.6414	0	0	0
DER07 Max	359.4366	108.908	243.3647	609.5753	527.2423	1491.2481	0	0	0
DER07 Min	-359.4366	-108.908	243.3647	-99.9334	-1815.718	-1491.2482	0	0	0
DER08 Max	108.4166	360.4439	243.3647	1428.9208	-290.8859	1314.6413	0	0	0
DER08 Min	-108.4166	-360.4439	243.3647	-919.2789	-997.5898	-1314.6414	0	0	0
DERUD01	0	0	378.5673	396.3881	-1002.1478	-0.0001	0	0	0
DERUD02	0	0	344.9938	347.5752	-913.2493	-4.909E-05	0	0	0
DERUD03	0	0	390.1103	364.7659	-1032.6334	-0.0001	0	0	0
DERUD04	0	0	344.9938	347.5752	-913.2493	-4.909E-05	0	0	0
DERUD05 Max	49.5688	0.1131	324.4863	340.1296	-697.4056	145.1918	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-49.5688	-0.1131	324.4863	339.3929	-1020.562	-145.1919	0	0	0
DERUD06 Max	0.0912	49.54	324.4863	501.1314	-858.6868	131.0749	0	0	0
DERUD06 Min	-0.0912	-49.54	324.4863	178.3911	-859.2809	-131.075	0	0	0
DERUD07 Max	49.5688	0.1131	243.3647	255.1893	-482.6596	145.1919	0	0	0
DERUD07 Min	-49.5688	-0.1131	243.3647	254.4525	-805.8161	-145.1919	0	0	0
DERUD08 Max	0.0912	49.54	243.3647	416.1911	-643.9408	131.075	0	0	0
DERUD08 Min	-0.0912	-49.54	243.3647	93.4508	-644.5349	-131.075	0	0	0
CIM09 Max	66.4578	20.14	162.2431	235.4842	-212.8919	275.7326	0	0	0
CIM09 Min	-66.4578	-20.14	162.2431	104.2771	-646.0919	-275.7327	0	0	0
CIM10 Max	20.0456	66.6558	162.2431	387.0033	-364.1591	243.1008	0	0	0
CIM10 Min	-20.0456	-66.6558	162.2431	-47.2421	-494.8247	-243.1009	0	0	0
CIM11	0	0	314.3652	360.1336	-832.2345	-4.177E-05	0	0	0
CIM12	0	0	303.3752	340.8838	-803.1308	-4.065E-05	0	0	0
CIM13 Max	50.3182	15.344	303.3752	390.865	-639.1331	209.0207	0	0	0
CIM13 Min	-50.3182	-15.344	303.3752	290.9025	-967.1285	-209.0208	0	0	0
CIM14 Max	15.2723	50.4682	303.3752	505.2774	-753.3553	184.3804	0	0	0
CIM14 Min	-15.2723	-50.4682	303.3752	176.4901	-852.9063	-184.3805	0	0	0
CIM15	0	0	162.2431	169.8806	-429.4919	-2.237E-05	0	0	0
COMB9	0	0	346.4663	378.2608	-917.1911	-4.698E-05	0	0	0
COMB10	0	0	394.8223	462.9599	-1045.2472	-0.0001	0	0	0
COMB11	0	0	346.4663	378.2608	-917.1911	-4.698E-05	0	0	0
DER09	0	0	346.4663	378.2608	-917.1911	-4.698E-05	0	0	0
DER10	0	0	394.8223	462.9599	-1045.2472	-0.0001	0	0	0
DER11	0	0	346.4663	378.2608	-917.1911	-4.698E-05	0	0	0
DERUD09	0	0	346.4663	378.2608	-917.1911	-4.698E-05	0	0	0
DERUD10	0	0	394.8223	462.9599	-1045.2472	-0.0001	0	0	0
DERUD11	0	0	346.4663	378.2608	-917.1911	-4.698E-05	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	18924.81	18924.81	2.646	-0.773	18924.81	18924.81	2.646	-0.773	2.65	2.3457

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	-0.006303	-1.2	-4.987E-07	1	2.646	-0.773	3.25
N1	D1	L	0	0	0	1	2.646	-0.773	3.25
N1	D1	LR	-0.001352	-0.3	-1.262E-07	1	2.646	-0.773	3.25
N1	D1	EX Max	18	0.03091	0.002637	1	2.646	-0.773	3.25
N1	D1	EY Max	0.02616	10.8	3E-06	1	2.646	-0.773	3.25
N1	D1	DISX Max	4.8	0.008165	0.000697	1	2.646	-0.773	3.25
N1	D1	DISY Max	0.00691	2.9	1E-06	1	2.646	-0.773	3.25
N1	D1	W	0	0	0	1	2.646	-0.773	3.25
N1	D1	G	-0.0006762	-0.1	-6.309E-08	1	2.646	-0.773	3.25
N1	D1	DERUX Max	2.6	0.00428	0.000372	1	2.646	-0.773	3.25
N1	D1	DERUY Max	0.003894	1.5	1E-06	1	2.646	-0.773	3.25
N1	D1	COMB1	-0.008825	-1.7	-1E-06	1	2.646	-0.773	3.25
N1	D1	COMB2	-0.00824	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	COMB3	-0.009728	-1.8	-1E-06	1	2.646	-0.773	3.25
N1	D1	COMB4	-0.00824	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	COMB5 Max	4.8	-0.6	0.000696	1	2.646	-0.773	3.25
N1	D1	COMB5 Min	-4.8	-2.3	-0.000697	1	2.646	-0.773	3.25
N1	D1	COMB6 Max	1.4	1.4	0.000209	1	2.646	-0.773	3.25
N1	D1	COMB6 Min	-1.4	-4.3	-0.00021	1	2.646	-0.773	3.25
N1	D1	COMB7 Max	1.4	1.8	0.000209	1	2.646	-0.773	3.25
N1	D1	COMB7 Min	-1.4	-3.9	-0.00021	1	2.646	-0.773	3.25
N1	D1	COMB8 Max	4.8	-0.2	0.000696	1	2.646	-0.773	3.25
N1	D1	COMB8 Min	-4.8	-1.9	-0.000697	1	2.646	-0.773	3.25
N1	D1	ENVE Max	4.8	1.8	0.000696	1	2.646	-0.773	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	ENVE Min	-4.8	-4.3	-0.000697	1	2.646	-0.773	3.25
N1	D1	CIM01	-0.006303	-1.2	-4.987E-07	1	2.646	-0.773	3.25
N1	D1	CIM02	-0.006303	-1.2	-4.987E-07	1	2.646	-0.773	3.25
N1	D1	CIM03	-0.007656	-1.4	-1E-06	1	2.646	-0.773	3.25
N1	D1	CIM04	-0.007318	-1.4	-1E-06	1	2.646	-0.773	3.25
N1	D1	CIM05 Max	3.3	-0.6	0.000487	1	2.646	-0.773	3.25
N1	D1	CIM05 Min	-3.3	-1.8	-0.000488	1	2.646	-0.773	3.25
N1	D1	CIM06 Max	1	0.8	0.000146	1	2.646	-0.773	3.25
N1	D1	CIM06 Min	-1	-3.2	-0.000147	1	2.646	-0.773	3.25
N1	D1	CIM07 Max	2.5	-0.9	0.000369	1	2.646	-0.773	3.25
N1	D1	CIM07 Min	-2.5	-1.8	-0.00037	1	2.646	-0.773	3.25
N1	D1	CIM08 Max	0.8	0.1	0.000111	1	2.646	-0.773	3.25
N1	D1	CIM08 Min	-0.8	-2.9	-0.000112	1	2.646	-0.773	3.25
N1	D1	DER01	-0.008825	-1.7	-1E-06	1	2.646	-0.773	3.25
N1	D1	DER02	-0.00824	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	DER03	-0.009728	-1.8	-1E-06	1	2.646	-0.773	3.25
N1	D1	DER04	-0.00824	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	DER05 Max	18	1.8	0.002637	1	2.646	-0.773	3.25
N1	D1	DER05 Min	-18	-4.7	-0.002639	1	2.646	-0.773	3.25
N1	D1	DER06 Max	5.4	9.4	0.000794	1	2.646	-0.773	3.25
N1	D1	DER06 Min	-5.4	-12.3	-0.000795	1	2.646	-0.773	3.25
N1	D1	DER07 Max	18	2.2	0.002637	1	2.646	-0.773	3.25
N1	D1	DER07 Min	-18	-4.3	-0.002638	1	2.646	-0.773	3.25
N1	D1	DER08 Max	5.4	9.8	0.000794	1	2.646	-0.773	3.25
N1	D1	DER08 Min	-5.4	-11.9	-0.000795	1	2.646	-0.773	3.25
N1	D1	DERUD01	-0.008825	-1.7	-1E-06	1	2.646	-0.773	3.25
N1	D1	DERUD02	-0.00824	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	DERUD03	-0.009728	-1.8	-1E-06	1	2.646	-0.773	3.25
N1	D1	DERUD04	-0.00824	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	DERUD05 Max	2.6	-1.4	0.000371	1	2.646	-0.773	3.25
N1	D1	DERUD05 Min	-2.6	-1.4	-0.000372	1	2.646	-0.773	3.25
N1	D1	DERUD06 Max	-0.00367	0.1	-9.82E-08	1	2.646	-0.773	3.25
N1	D1	DERUD06 Min	-0.01146	-2.9	-1E-06	1	2.646	-0.773	3.25
N1	D1	DERUD07 Max	2.6	-1.1	0.000371	1	2.646	-0.773	3.25
N1	D1	DERUD07 Min	-2.6	-1.1	-0.000372	1	2.646	-0.773	3.25
N1	D1	DERUD08 Max	-0.001779	0.4	5.142E-08	1	2.646	-0.773	3.25
N1	D1	DERUD08 Min	-0.009567	-2.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	CIM09 Max	3.3	-0.1	0.000487	1	2.646	-0.773	3.25
N1	D1	CIM09 Min	-3.3	-1.3	-0.000488	1	2.646	-0.773	3.25
N1	D1	CIM10 Max	1	1.3	0.000147	1	2.646	-0.773	3.25
N1	D1	CIM10 Min	-1	-2.7	-0.000147	1	2.646	-0.773	3.25
N1	D1	CIM11	-0.006979	-1.3	-1E-06	1	2.646	-0.773	3.25
N1	D1	CIM12	-0.00681	-1.3	-1E-06	1	2.646	-0.773	3.25
N1	D1	CIM13 Max	2.5	-0.8	0.000369	1	2.646	-0.773	3.25
N1	D1	CIM13 Min	-2.5	-1.7	-0.00037	1	2.646	-0.773	3.25
N1	D1	CIM14 Max	0.8	0.2	0.000111	1	2.646	-0.773	3.25
N1	D1	CIM14 Min	-0.8	-2.8	-0.000112	1	2.646	-0.773	3.25
N1	D1	CIM15	-0.003782	-0.7	-2.992E-07	1	2.646	-0.773	3.25
N1	D1	COMB9	-0.007902	-1.5	-1E-06	1	2.646	-0.773	3.25
N1	D1	COMB10	-0.008646	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	COMB11	-0.007902	-1.5	-1E-06	1	2.646	-0.773	3.25
N1	D1	DER09	-0.007902	-1.5	-1E-06	1	2.646	-0.773	3.25
N1	D1	DER10	-0.008646	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	DER11	-0.007902	-1.5	-1E-06	1	2.646	-0.773	3.25
N1	D1	DERUD09	-0.007902	-1.5	-1E-06	1	2.646	-0.773	3.25
N1	D1	DERUD10	-0.008646	-1.6	-1E-06	1	2.646	-0.773	3.25
N1	D1	DERUD11	-0.007902	-1.5	-1E-06	1	2.646	-0.773	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements  
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Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.2	1.2	1.001
N1	LR	Y	0.3	0.3	1.001
N1	EX Max	X	16.2	16.2	1
N1	EX Max	Y	7	7	1.001
N1	EY Max	Y	10.8	10.8	1
N1	DISX Max	X	4.3	4.3	1
N1	DISX Max	Y	1.8	1.8	1.001
N1	DISY Max	Y	2.9	2.9	1
N1	G	Y	0.1	0.1	1.001
N1	DERUX Max	X	2.3	2.3	1
N1	DERUX Max	Y	1	1	1.002
N1	DERUY Max	Y	1.5	1.5	1
N1	COMB1	Y	1.7	1.7	1.001
N1	COMB2	Y	1.6	1.6	1.001
N1	COMB3	Y	1.8	1.8	1.001
N1	COMB4	Y	1.6	1.6	1.001
N1	COMB5 Max	X	4.3	4.3	1
N1	COMB5 Max	Y	1.3	1.3	1.003
N1	COMB5 Min	X	4.3	4.3	1
N1	COMB5 Min	Y	4.1	4.1	1
N1	COMB6 Max	X	1.3	1.3	1
N1	COMB6 Max	Y	2	2	1.001
N1	COMB6 Min	X	1.3	1.3	1
N1	COMB6 Min	Y	4.8	4.8	1
N1	COMB7 Max	X	1.3	1.3	1
N1	COMB7 Max	Y	2.3	2.3	1.001
N1	COMB7 Min	X	1.3	1.3	1
N1	COMB7 Min	Y	4.5	4.5	1
N1	COMB8 Max	X	4.3	4.3	1
N1	COMB8 Max	Y	1.6	1.6	1.002
N1	COMB8 Min	X	4.3	4.3	1
N1	COMB8 Min	Y	3.8	3.8	1
N1	ENVE Max	X	4.3	4.3	1
N1	ENVE Max	Y	2.3	2.3	1.001
N1	ENVE Min	X	4.3	4.3	1
N1	ENVE Min	Y	4.8	4.8	1
N1	CIM01	Y	1.2	1.2	1.001
N1	CIM02	Y	1.2	1.2	1.001
N1	CIM03	Y	1.4	1.4	1.001
N1	CIM04	Y	1.4	1.4	1.001
N1	CIM05 Max	X	3	3	1
N1	CIM05 Max	Y	0.7	0.7	1.004
N1	CIM05 Min	X	3	3	1
N1	CIM05 Min	Y	3.1	3.1	1
N1	CIM06 Max	X	0.9	0.9	1
N1	CIM06 Max	Y	1.2	1.2	1.002
N1	CIM06 Min	X	0.9	0.9	1
N1	CIM06 Min	Y	3.6	3.6	1
N1	CIM07 Max	X	2.3	2.3	1
N1	CIM07 Min	X	2.3	2.3	1
N1	CIM07 Min	Y	2.8	2.8	1
N1	CIM08 Max	X	0.7	0.7	1
N1	CIM08 Max	Y	0.4	0.4	1.005
N1	CIM08 Min	X	0.7	0.7	1
N1	CIM08 Min	Y	3.2	3.2	1
N1	DER01	Y	1.7	1.7	1.001
N1	DER02	Y	1.6	1.6	1.001
N1	DER03	Y	1.8	1.8	1.001
N1	DER04	Y	1.6	1.6	1.001
N1	DER05 Max	X	16.2	16.2	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DER05 Max	Y	8.8	8.8	1.001
N1	DER05 Min	X	16.2	16.2	1
N1	DER05 Min	Y	11.7	11.7	1.001
N1	DER06 Max	X	4.9	4.9	1
N1	DER06 Max	Y	11.5	11.5	1
N1	DER06 Min	X	4.9	4.9	1
N1	DER06 Min	Y	14.3	14.3	1
N1	DER07 Max	X	16.2	16.2	1
N1	DER07 Max	Y	9.2	9.2	1.001
N1	DER07 Min	X	16.2	16.2	1
N1	DER07 Min	Y	11.3	11.3	1.001
N1	DER08 Max	X	4.9	4.9	1
N1	DER08 Max	Y	11.8	11.8	1
N1	DER08 Min	X	4.9	4.9	1
N1	DER08 Min	Y	14	14	1
N1	DERUD01	Y	1.7	1.7	1.001
N1	DERUD02	Y	1.6	1.6	1.001
N1	DERUD03	Y	1.8	1.8	1.001
N1	DERUD04	Y	1.6	1.6	1.001
N1	DERUD05 Max	X	2.3	2.3	1
N1	DERUD05 Max	Y	0.4	0.4	1.007
N1	DERUD05 Min	X	2.3	2.3	1
N1	DERUD05 Min	Y	2.4	2.4	1
N1	DERUD06 Max	Y	0.1	0.1	1.029
N1	DERUD06 Min	Y	2.9	2.9	1
N1	DERUD07 Max	X	2.3	2.3	1
N1	DERUD07 Min	X	2.3	2.3	1
N1	DERUD07 Min	Y	2.1	2.1	1
N1	DERUD08 Max	Y	0.4	0.4	1.003
N1	DERUD08 Min	Y	2.6	2.6	1
N1	CIM09 Max	X	3	3	1
N1	CIM09 Max	Y	1.2	1.2	1.002
N1	CIM09 Min	X	3	3	1
N1	CIM09 Min	Y	2.6	2.6	1
N1	CIM10 Max	X	0.9	0.9	1
N1	CIM10 Max	Y	1.7	1.7	1.001
N1	CIM10 Min	X	0.9	0.9	1
N1	CIM10 Min	Y	3.1	3.1	1
N1	CIM11	Y	1.3	1.3	1.001
N1	CIM12	Y	1.3	1.3	1.001
N1	CIM13 Max	X	2.3	2.3	1
N1	CIM13 Min	X	2.3	2.3	1
N1	CIM13 Min	Y	2.7	2.7	1
N1	CIM14 Max	X	0.7	0.7	1
N1	CIM14 Max	Y	0.5	0.5	1.004
N1	CIM14 Min	X	0.7	0.7	1
N1	CIM14 Min	Y	3.1	3.1	1
N1	CIM15	Y	0.7	0.7	1.001
N1	COMB9	Y	1.5	1.5	1.001
N1	COMB10	Y	1.6	1.6	1.001
N1	COMB11	Y	1.5	1.5	1.001
N1	DER09	Y	1.5	1.5	1.001
N1	DER10	Y	1.6	1.6	1.001
N1	DER11	Y	1.5	1.5	1.001
N1	DERUD09	Y	1.5	1.5	1.001
N1	DERUD10	Y	1.6	1.6	1.001
N1	DERUD11	Y	1.5	1.5	1.001

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.000366	3	5.3	0	3.25
N1	LR	Y	8E-05	3	5.3	0	3.25
N1	EX Max	X	0.004992	3	5.3	0	3.25
N1	EX Max	Y	0.002153	1	0	0	3.25
N1	EY Max	Y	0.003329	1	0	0	3.25
N1	DISX Max	X	0.001319	3	5.3	0	3.25
N1	DISX Max	Y	0.000569	1	0	0	3.25
N1	DISY Max	Y	0.000879	1	0	0	3.25
N1	G	Y	4E-05	4	5.3	5.9	3.25
N1	DERUX Max	X	0.00072	3	5.3	0	3.25
N1	DERUX Max	Y	0.000304	1	0	0	3.25
N1	DERUY Max	Y	0.000458	1	0	0	3.25
N1	COMB1	Y	0.000513	3	5.3	0	3.25
N1	COMB2	Y	0.000479	3	5.3	0	3.25
N1	COMB3	Y	0.000567	3	5.3	0	3.25
N1	COMB4	Y	0.000479	3	5.3	0	3.25
N1	COMB5 Max	X	0.001317	3	5.3	0	3.25
N1	COMB5 Max	Y	0.000394	1	0	0	3.25
N1	COMB5 Min	X	0.001321	3	5.3	0	3.25
N1	COMB5 Min	Y	0.001271	1	0	0	3.25
N1	COMB6 Max	X	0.000395	3	5.3	0	3.25
N1	COMB6 Max	Y	0.000612	1	0	0	3.25
N1	COMB6 Min	X	0.0004	3	5.3	0	3.25
N1	COMB6 Min	Y	0.001489	3	5.3	0	3.25
N1	COMB7 Max	X	0.000396	3	5.3	0	3.25
N1	COMB7 Max	Y	0.000721	1	0	0	3.25
N1	COMB7 Min	X	0.000399	3	5.3	0	3.25
N1	COMB7 Min	Y	0.001379	3	5.3	0	3.25
N1	COMB8 Max	X	0.001318	3	5.3	0	3.25
N1	COMB8 Max	Y	0.000504	1	0	0	3.25
N1	COMB8 Min	X	0.001321	3	5.3	0	3.25
N1	COMB8 Min	Y	0.001161	1	0	0	3.25
N1	ENVE Max	X	0.001318	3	5.3	0	3.25
N1	ENVE Max	Y	0.000721	1	0	0	3.25
N1	ENVE Min	X	0.001321	3	5.3	0	3.25
N1	ENVE Min	Y	0.001489	3	5.3	0	3.25
N1	CIM01	Y	0.000366	3	5.3	0	3.25
N1	CIM02	Y	0.000366	3	5.3	0	3.25
N1	CIM03	Y	0.000446	3	5.3	0	3.25
N1	CIM04	Y	0.000426	3	5.3	0	3.25
N1	CIM05 Max	X	0.000922	3	5.3	0	3.25
N1	CIM05 Max	Y	0.000217	1	0	0	3.25
N1	CIM05 Min	X	0.000925	3	5.3	0	3.25
N1	CIM05 Min	Y	0.000948	1	0	0	3.25
N1	CIM06 Max	X	0.000276	3	5.3	0	3.25
N1	CIM06 Max	Y	0.00037	1	0	0	3.25
N1	CIM06 Min	X	0.00028	3	5.3	0	3.25
N1	CIM06 Min	Y	0.001101	3	5.3	0	3.25
N1	CIM07 Max	X	0.000697	3	5.3	0	3.25
N1	CIM07 Min	X	0.000701	3	5.3	0	3.25
N1	CIM07 Min	Y	0.000867	3	5.3	0	3.25
N1	CIM08 Max	X	0.00021	3	5.3	0	3.25
N1	CIM08 Max	Y	0.000132	1	0	0	3.25
N1	CIM08 Min	X	0.000214	3	5.3	0	3.25
N1	CIM08 Min	Y	0.000983	3	5.3	0	3.25
N1	DER01	Y	0.000513	3	5.3	0	3.25
N1	DER02	Y	0.000479	3	5.3	0	3.25
N1	DER03	Y	0.000567	3	5.3	0	3.25
N1	DER04	Y	0.000479	3	5.3	0	3.25
N1	DER05 Max	X	0.004992	3	5.3	0	3.25



Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER05 Max	Y	0.002713	1	0	0	3.25
N1	DER05 Min	X	0.004997	3	5.3	0	3.25
N1	DER05 Min	Y	0.00359	1	0	0	3.25
N1	DER06 Max	X	0.001503	3	5.3	0	3.25
N1	DER06 Max	Y	0.003536	1	0	0	3.25
N1	DER06 Min	X	0.001507	3	5.3	0	3.25
N1	DER06 Min	Y	0.004413	1	0	0	3.25
N1	DER07 Max	X	0.004993	3	5.3	0	3.25
N1	DER07 Max	Y	0.002823	1	0	0	3.25
N1	DER07 Min	X	0.004996	3	5.3	0	3.25
N1	DER07 Min	Y	0.00348	1	0	0	3.25
N1	DER08 Max	X	0.001504	3	5.3	0	3.25
N1	DER08 Max	Y	0.003646	1	0	0	3.25
N1	DER08 Min	X	0.001507	3	5.3	0	3.25
N1	DER08 Min	Y	0.004303	1	0	0	3.25
N1	DERUD01	Y	0.000513	3	5.3	0	3.25
N1	DERUD02	Y	0.000479	3	5.3	0	3.25
N1	DERUD03	Y	0.000567	3	5.3	0	3.25
N1	DERUD04	Y	0.000479	3	5.3	0	3.25
N1	DERUD05 Max	X	0.000718	3	5.3	0	3.25
N1	DERUD05 Max	Y	0.000137	3	5.3	0	3.25
N1	DERUD05 Min	X	0.000722	3	5.3	0	3.25
N1	DERUD05 Min	Y	0.000742	3	5.3	0	3.25
N1	DERUD06 Max	Y	2E-05	2	0	5.9	3.25
N1	DERUD06 Min	Y	0.000897	3	5.3	0	3.25
N1	DERUD07 Max	X	0.000719	3	5.3	0	3.25
N1	DERUD07 Min	X	0.000722	3	5.3	0	3.25
N1	DERUD07 Min	Y	0.000632	1	0	0	3.25
N1	DERUD08 Max	Y	0.000129	1	0	0	3.25
N1	DERUD08 Min	Y	0.000787	3	5.3	0	3.25
N1	CIM09 Max	X	0.000922	3	5.3	0	3.25
N1	CIM09 Max	Y	0.000364	1	0	0	3.25
N1	CIM09 Min	X	0.000925	3	5.3	0	3.25
N1	CIM09 Min	Y	0.000802	1	0	0	3.25
N1	CIM10 Max	X	0.000277	3	5.3	0	3.25
N1	CIM10 Max	Y	0.000516	1	0	0	3.25
N1	CIM10 Min	X	0.000279	3	5.3	0	3.25
N1	CIM10 Min	Y	0.000954	3	5.3	0	3.25
N1	CIM11	Y	0.000405	3	5.3	0	3.25
N1	CIM12	Y	0.000396	3	5.3	0	3.25
N1	CIM13 Max	X	0.000697	3	5.3	0	3.25
N1	CIM13 Min	X	0.000701	3	5.3	0	3.25
N1	CIM13 Min	Y	0.000837	3	5.3	0	3.25
N1	CIM14 Max	X	0.00021	3	5.3	0	3.25
N1	CIM14 Max	Y	0.000162	1	0	0	3.25
N1	CIM14 Min	X	0.000214	3	5.3	0	3.25
N1	CIM14 Min	Y	0.000952	3	5.3	0	3.25
N1	CIM15	Y	0.00022	3	5.3	0	3.25
N1	COMB9	Y	0.000459	3	5.3	0	3.25
N1	COMB10	Y	0.000502	3	5.3	0	3.25
N1	COMB11	Y	0.000459	3	5.3	0	3.25
N1	DER09	Y	0.000459	3	5.3	0	3.25
N1	DER10	Y	0.000502	3	5.3	0	3.25
N1	DER11	Y	0.000459	3	5.3	0	3.25
N1	DERUD09	Y	0.000459	3	5.3	0	3.25
N1	DERUD10	Y	0.000502	3	5.3	0	3.25
N1	DERUD11	Y	0.000459	3	5.3	0	3.25

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	D	Y	1.2	1.2	1.006
N1	LR	Y	0.3	0.3	1.007
N1	EX Max	X	16.2	11.9	1.366
N1	EX Max	Y	7	6.9	1.008
N1	EY Max	Y	10.8	10.8	1.004
N1	DISX Max	X	4.3	3.1	1.366
N1	DISX Max	Y	1.8	1.8	1.008
N1	DISY Max	Y	2.9	2.8	1.004
N1	G	Y	0.1	0.1	1.013
N1	DERUX Max	X	2.3	1.6	1.47
N1	DERUX Max	Y	1	1	1.009
N1	DERUY Max	Y	1.5	1.5	1.004
N1	COMB1	Y	1.7	1.7	1.006
N1	COMB2	Y	1.6	1.5	1.007
N1	COMB3	Y	1.8	1.8	1.007
N1	COMB4	Y	1.6	1.5	1.007
N1	COMB5 Max	X	4.3	3.1	1.366
N1	COMB5 Max	Y	1.3	1.3	1.01
N1	COMB5 Min	X	4.3	3.1	1.367
N1	COMB5 Min	Y	4.1	4.1	1.006
N1	COMB6 Max	X	1.3	0.9	1.367
N1	COMB6 Max	Y	2	2	1.006
N1	COMB6 Min	X	1.3	0.9	1.368
N1	COMB6 Min	Y	4.8	4.8	1.005
N1	COMB7 Max	X	1.3	0.9	1.366
N1	COMB7 Max	Y	2.3	2.3	1.005
N1	COMB7 Min	X	1.3	0.9	1.367
N1	COMB7 Min	Y	4.5	4.5	1.005
N1	COMB8 Max	X	4.3	3.1	1.366
N1	COMB8 Max	Y	1.6	1.6	1.009
N1	COMB8 Min	X	4.3	3.1	1.366
N1	COMB8 Min	Y	3.8	3.8	1.006
N1	ENVE Max	X	4.3	3.1	1.366
N1	ENVE Max	Y	2.3	2.3	1.005
N1	ENVE Min	X	4.3	3.1	1.367
N1	ENVE Min	Y	4.8	4.8	1.005
N1	CIM01	Y	1.2	1.2	1.006
N1	CIM02	Y	1.2	1.2	1.006
N1	CIM03	Y	1.4	1.4	1.007
N1	CIM04	Y	1.4	1.4	1.007
N1	CIM05 Max	X	3	2.2	1.366
N1	CIM05 Max	Y	0.7	0.7	1.012
N1	CIM05 Min	X	3	2.2	1.367
N1	CIM05 Min	Y	3.1	3.1	1.006
N1	CIM06 Max	X	0.9	0.7	1.367
N1	CIM06 Max	Y	1.2	1.2	1.006
N1	CIM06 Min	X	0.9	0.7	1.369
N1	CIM06 Min	Y	3.6	3.6	1.005
N1	CIM07 Max	X	2.3	1.7	1.367
N1	CIM07 Min	X	2.3	1.7	1.367
N1	CIM07 Min	Y	2.8	2.8	1.006
N1	CIM08 Max	X	0.7	0.5	1.368
N1	CIM08 Max	Y	0.4	0.4	1.008
N1	CIM08 Min	X	0.7	0.5	1.37
N1	CIM08 Min	Y	3.2	3.2	1.005
N1	DER01	Y	1.7	1.7	1.006
N1	DER02	Y	1.6	1.5	1.007
N1	DER03	Y	1.8	1.8	1.007
N1	DER04	Y	1.6	1.5	1.007
N1	DER05 Max	X	16.2	11.9	1.366

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	DER05 Max	Y	8.8	8.8	1.008
N1	DER05 Min	X	16.2	11.9	1.366
N1	DER05 Min	Y	11.7	11.6	1.007
N1	DER06 Max	X	4.9	3.6	1.365
N1	DER06 Max	Y	11.5	11.4	1.005
N1	DER06 Min	X	4.9	3.6	1.366
N1	DER06 Min	Y	14.3	14.3	1.005
N1	DER07 Max	X	16.2	11.9	1.366
N1	DER07 Max	Y	9.2	9.1	1.007
N1	DER07 Min	X	16.2	11.9	1.366
N1	DER07 Min	Y	11.3	11.2	1.007
N1	DER08 Max	X	4.9	3.6	1.365
N1	DER08 Max	Y	11.8	11.8	1.005
N1	DER08 Min	X	4.9	3.6	1.366
N1	DER08 Min	Y	14	13.9	1.005
N1	DERUD01	Y	1.7	1.7	1.006
N1	DERUD02	Y	1.6	1.5	1.007
N1	DERUD03	Y	1.8	1.8	1.007
N1	DERUD04	Y	1.6	1.5	1.007
N1	DERUD05 Max	X	2.3	1.6	1.472
N1	DERUD05 Max	Y	0.4	0.4	1.009
N1	DERUD05 Min	X	2.3	1.6	1.472
N1	DERUD05 Min	Y	2.4	2.4	1.006
N1	DERUD06 Max	Y	0.1	0.1	1.048
N1	DERUD06 Min	Y	2.9	2.9	1.005
N1	DERUD07 Max	X	2.3	1.6	1.471
N1	DERUD07 Min	X	2.3	1.6	1.471
N1	DERUD07 Min	Y	2.1	2	1.006
N1	DERUD08 Max	Y	0.4	0.4	1.005
N1	DERUD08 Min	Y	2.6	2.5	1.005
N1	CIM09 Max	X	3	2.2	1.366
N1	CIM09 Max	Y	1.2	1.2	1.009
N1	CIM09 Min	X	3	2.2	1.366
N1	CIM09 Min	Y	2.6	2.6	1.006
N1	CIM10 Max	X	0.9	0.7	1.366
N1	CIM10 Max	Y	1.7	1.7	1.005
N1	CIM10 Min	X	0.9	0.7	1.367
N1	CIM10 Min	Y	3.1	3.1	1.005
N1	CIM11	Y	1.3	1.3	1.005
N1	CIM12	Y	1.3	1.3	1.005
N1	CIM13 Max	X	2.3	1.7	1.367
N1	CIM13 Min	X	2.3	1.7	1.367
N1	CIM13 Min	Y	2.7	2.7	1.005
N1	CIM14 Max	X	0.7	0.5	1.368
N1	CIM14 Max	Y	0.5	0.5	1.01
N1	CIM14 Min	X	0.7	0.5	1.37
N1	CIM14 Min	Y	3.1	3.1	1.005
N1	CIM15	Y	0.7	0.7	1.006
N1	COMB9	Y	1.5	1.5	1.006
N1	COMB10	Y	1.6	1.6	1.004
N1	COMB11	Y	1.5	1.5	1.006
N1	DER09	Y	1.5	1.5	1.006
N1	DER10	Y	1.6	1.6	1.004
N1	DER11	Y	1.5	1.5	1.006
N1	DERUD09	Y	1.5	1.5	1.006
N1	DERUD10	Y	1.6	1.6	1.004
N1	DERUD11	Y	1.5	1.5	1.006

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	221.4004	0	0	-3.728E-05	138.862	-585.9584
N1	D	Bottom	270.4052	0	0	-3.728E-05	283.1344	-715.8198
N1	L	Top	0	0	0	0	0	0
N1	L	Bottom	0	0	0	0	0	0
N1	LR	Top	41.015	0	0	-8.711E-06	15.6914	-108.5313
N1	LR	Bottom	41.015	0	0	-8.711E-06	15.6279	-108.531
N1	EX Max	Top	0	359.2436	0.8515	1205.336	2.592E-06	0.0002
N1	EX Max	Bottom	0	359.2436	0.8515	1205.336	2.7741	1170.8512
N1	EY Max	Top	0	0.6435	360.1884	953.0406	0.0008	1.808E-06
N1	EY Max	Bottom	0	0.6435	360.1884	953.0406	1173.2677	2.0966
N1	DISX Max	Top	0	94.8887	0.2249	318.3711	6.847E-07	4.611E-05
N1	DISX Max	Bottom	0	94.8887	0.2249	318.3711	0.7327	309.2625
N1	DISY Max	Top	0	0.17	95.1551	251.7756	0.0002	0
N1	DISY Max	Bottom	0	0.17	95.1551	251.7756	309.9555	0.5539
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	43.96	0	0	-4.491E-06	77.0306	-116.4148
N1	G	Bottom	43.96	0	0	-4.491E-06	76.9992	-116.4146
N1	DERUX Max	Top	0	49.5688	0.1131	145.1919	0	2.308E-05
N1	DERUX Max	Bottom	0	49.5688	0.1131	145.1919	0.3684	161.5782
N1	DERUY Max	Top	0	0.0912	49.54	131.075	0.0001	0
N1	DERUY Max	Bottom	0	0.0912	49.54	131.075	161.3702	0.2971
N1	COMB1	Top	309.9606	0	0	-0.0001	194.4068	-820.3418
N1	COMB1	Bottom	378.5673	0	0	-0.0001	396.3881	-1002.1478
N1	COMB2	Top	286.188	0	0	-4.909E-05	174.4801	-757.4157
N1	COMB2	Bottom	344.9938	0	0	-4.909E-05	347.5752	-913.2493
N1	COMB3	Top	331.3045	0	0	-0.0001	191.7407	-876.8001
N1	COMB3	Bottom	390.1103	0	0	-0.0001	364.7659	-1032.6334
N1	COMB4	Top	286.188	0	0	-4.909E-05	174.4801	-757.4157
N1	COMB4	Bottom	344.9938	0	0	-4.909E-05	347.5752	-913.2493
N1	COMB5 Max	Top	265.6805	94.9397	28.7714	393.9037	166.6344	-703.1501
N1	COMB5 Max	Bottom	324.4863	94.9397	28.7714	393.9037	433.4806	-549.5552
N1	COMB5 Min	Top	265.6805	-94.9397	-28.7714	-393.9038	166.6343	-703.1502
N1	COMB5 Min	Bottom	324.4863	-94.9397	-28.7714	-393.9038	246.0419	-1168.4124
N1	COMB6 Max	Top	265.6805	28.6366	95.2226	347.2869	166.6346	-703.1501
N1	COMB6 Max	Bottom	324.4863	28.6366	95.2226	347.2869	649.9365	-765.6512
N1	COMB6 Min	Top	265.6805	-28.6366	-95.2226	-347.287	166.6341	-703.1501
N1	COMB6 Min	Bottom	324.4863	-28.6366	-95.2226	-347.287	29.586	-952.3164
N1	COMB7 Max	Top	199.2604	28.6366	95.2226	347.2869	124.976	-527.3626
N1	COMB7 Max	Bottom	243.3647	28.6366	95.2226	347.2869	564.9962	-550.9052
N1	COMB7 Min	Top	199.2604	-28.6366	-95.2226	-347.2869	124.9756	-527.3626
N1	COMB7 Min	Bottom	243.3647	-28.6366	-95.2226	-347.2869	-55.3544	-737.5705
N1	COMB8 Max	Top	199.2604	94.9397	28.7714	393.9038	124.9758	-527.3625
N1	COMB8 Max	Bottom	243.3647	94.9397	28.7714	393.9038	348.5403	-334.8092
N1	COMB8 Min	Top	199.2604	-94.9397	-28.7714	-393.9038	124.9757	-527.3626
N1	COMB8 Min	Bottom	243.3647	-94.9397	-28.7714	-393.9038	161.1016	-953.6665
N1	ENVE Max	Top	331.3045	94.9397	95.2226	393.9038	194.4068	-527.3625
N1	ENVE Max	Bottom	390.1103	94.9397	95.2226	393.9038	649.9365	-334.8092
N1	ENVE Min	Top	199.2604	-94.9397	-95.2226	-393.9038	124.9756	-876.8001
N1	ENVE Min	Bottom	243.3647	-94.9397	-95.2226	-393.9038	-55.3544	-1168.4124
N1	CIM01	Top	221.4004	0	0	-3.728E-05	138.862	-585.9584
N1	CIM01	Bottom	270.4052	0	0	-3.728E-05	283.1344	-715.8198
N1	CIM02	Top	221.4004	0	0	-3.728E-05	138.862	-585.9584
N1	CIM02	Bottom	270.4052	0	0	-3.728E-05	283.1344	-715.8198
N1	CIM03	Top	262.4154	0	0	-4.599E-05	154.5534	-694.4897
N1	CIM03	Bottom	311.4202	0	0	-4.599E-05	298.7623	-824.3508
N1	CIM04	Top	252.1617	0	0	-4.382E-05	150.6306	-667.3569
N1	CIM04	Bottom	301.1665	0	0	-4.382E-05	294.8553	-797.2181
N1	CIM05 Max	Top	221.4004	66.4578	20.14	275.7326	138.862	-585.9584
N1	CIM05 Max	Bottom	270.4052	66.4578	20.14	275.7326	348.7379	-499.2198

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM05 Min	Top	221.4004	-66.4578	-20.14	-275.7327	138.8619	-585.9585
N1	CIM05 Min	Bottom	270.4052	-66.4578	-20.14	-275.7327	217.5308	-932.4199
N1	CIM06 Max	Top	221.4004	20.0456	66.6558	243.1008	138.8621	-585.9584
N1	CIM06 Max	Bottom	270.4052	20.0456	66.6558	243.1008	500.2571	-650.487
N1	CIM06 Min	Top	221.4004	-20.0456	-66.6558	-243.1009	138.8618	-585.9584
N1	CIM06 Min	Bottom	270.4052	-20.0456	-66.6558	-243.1009	66.0117	-781.1527
N1	CIM07 Max	Top	252.1617	50.3182	15.344	209.0207	150.6306	-667.3568
N1	CIM07 Max	Bottom	301.1665	50.3182	15.344	209.0207	344.8365	-633.2203
N1	CIM07 Min	Top	252.1617	-50.3182	-15.344	-209.0208	150.6305	-667.3569
N1	CIM07 Min	Bottom	301.1665	-50.3182	-15.344	-209.0208	244.8741	-961.2158
N1	CIM08 Max	Top	252.1617	15.2723	50.4682	184.3804	150.6307	-667.3569
N1	CIM08 Max	Bottom	301.1665	15.2723	50.4682	184.3804	459.2489	-747.4425
N1	CIM08 Min	Top	252.1617	-15.2723	-50.4682	-184.3805	150.6304	-667.3569
N1	CIM08 Min	Bottom	301.1665	-15.2723	-50.4682	-184.3805	130.4617	-846.9936
N1	DER01	Top	309.9606	0	0	-0.0001	194.4068	-820.3418
N1	DER01	Bottom	378.5673	0	0	-0.0001	396.3881	-1002.1478
N1	DER02	Top	286.188	0	0	-4.909E-05	174.4801	-757.4157
N1	DER02	Bottom	344.9938	0	0	-4.909E-05	347.5752	-913.2493
N1	DER03	Top	331.3045	0	0	-0.0001	191.7407	-876.8001
N1	DER03	Bottom	390.1103	0	0	-0.0001	364.7659	-1032.6334
N1	DER04	Top	286.188	0	0	-4.909E-05	174.4801	-757.4157
N1	DER04	Bottom	344.9938	0	0	-4.909E-05	347.5752	-913.2493
N1	DER05 Max	Top	265.6805	359.4366	108.908	1491.2481	166.6346	-703.1499
N1	DER05 Max	Bottom	324.4863	359.4366	108.908	1491.2481	694.5156	312.4963
N1	DER05 Min	Top	265.6805	-359.4366	-108.908	-1491.2482	166.6341	-703.1503
N1	DER05 Min	Bottom	324.4863	-359.4366	-108.908	-1491.2482	-14.9931	-2030.4639
N1	DER06 Max	Top	265.6805	108.4166	360.4439	1314.6413	166.6352	-703.1501
N1	DER06 Max	Bottom	324.4863	108.4166	360.4439	1314.6413	1513.8611	-505.6319
N1	DER06 Min	Top	265.6805	-108.4166	-360.4439	-1314.6414	166.6335	-703.1502
N1	DER06 Min	Bottom	324.4863	-108.4166	-360.4439	-1314.6414	-834.3386	-1212.3357
N1	DER07 Max	Top	199.2604	359.4366	108.908	1491.2481	124.976	-527.3624
N1	DER07 Max	Bottom	243.3647	359.4366	108.908	1491.2481	609.5753	527.2423
N1	DER07 Min	Top	199.2604	-359.4366	-108.908	-1491.2482	124.9755	-527.3628
N1	DER07 Min	Bottom	243.3647	-359.4366	-108.908	-1491.2482	-99.9334	-1815.718
N1	DER08 Max	Top	199.2604	108.4166	360.4439	1314.6413	124.9766	-527.3625
N1	DER08 Max	Bottom	243.3647	108.4166	360.4439	1314.6413	1428.9208	-290.8859
N1	DER08 Min	Top	199.2604	-108.4166	-360.4439	-1314.6414	124.9749	-527.3626
N1	DER08 Min	Bottom	243.3647	-108.4166	-360.4439	-1314.6414	-919.2789	-997.5898
N1	DERUD01	Top	309.9606	0	0	-0.0001	194.4068	-820.3418
N1	DERUD01	Bottom	378.5673	0	0	-0.0001	396.3881	-1002.1478
N1	DERUD02	Top	286.188	0	0	-4.909E-05	174.4801	-757.4157
N1	DERUD02	Bottom	344.9938	0	0	-4.909E-05	347.5752	-913.2493
N1	DERUD03	Top	331.3045	0	0	-0.0001	191.7407	-876.8001
N1	DERUD03	Bottom	390.1103	0	0	-0.0001	364.7659	-1032.6334
N1	DERUD04	Top	286.188	0	0	-4.909E-05	174.4801	-757.4157
N1	DERUD04	Bottom	344.9938	0	0	-4.909E-05	347.5752	-913.2493
N1	DERUD05 Max	Top	265.6805	49.5688	0.1131	145.1918	166.6344	-703.1501
N1	DERUD05 Max	Bottom	324.4863	49.5688	0.1131	145.1918	340.1296	-697.4056
N1	DERUD05 Min	Top	265.6805	-49.5688	-0.1131	-145.1919	166.6344	-703.1501
N1	DERUD05 Min	Bottom	324.4863	-49.5688	-0.1131	-145.1919	339.3929	-1020.562
N1	DERUD06 Max	Top	265.6805	0.0912	49.54	131.0749	166.6345	-703.1501
N1	DERUD06 Max	Bottom	324.4863	0.0912	49.54	131.0749	501.1314	-858.6868
N1	DERUD06 Min	Top	265.6805	-0.0912	-49.54	-131.075	166.6343	-703.1501
N1	DERUD06 Min	Bottom	324.4863	-0.0912	-49.54	-131.075	178.3911	-859.2809
N1	DERUD07 Max	Top	199.2604	49.5688	0.1131	145.1919	124.9758	-527.3626
N1	DERUD07 Max	Bottom	243.3647	49.5688	0.1131	145.1919	255.1893	-482.6596
N1	DERUD07 Min	Top	199.2604	-49.5688	-0.1131	-145.1919	124.9758	-527.3626
N1	DERUD07 Min	Bottom	243.3647	-49.5688	-0.1131	-145.1919	254.4525	-805.8161
N1	DERUD08 Max	Top	199.2604	0.0912	49.54	131.075	124.9759	-527.3626
N1	DERUD08 Max	Bottom	243.3647	0.0912	49.54	131.075	416.1911	-643.9408

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD08 Min	Top	199.2604	-0.0912	-49.54	-131.075	124.9757	-527.3626
N1	DERUD08 Min	Bottom	243.3647	-0.0912	-49.54	-131.075	93.4508	-644.5349
N1	CIM09 Max	Top	132.8403	66.4578	20.14	275.7326	83.3172	-351.575
N1	CIM09 Max	Bottom	162.2431	66.4578	20.14	275.7326	235.4842	-212.8919
N1	CIM09 Min	Top	132.8403	-66.4578	-20.14	-275.7327	83.3171	-351.5751
N1	CIM09 Min	Bottom	162.2431	-66.4578	-20.14	-275.7327	104.2771	-646.0919
N1	CIM10 Max	Top	132.8403	20.0456	66.6558	243.1008	83.3173	-351.575
N1	CIM10 Max	Bottom	162.2431	20.0456	66.6558	243.1008	387.0033	-364.1591
N1	CIM10 Min	Top	132.8403	-20.0456	-66.6558	-243.1009	83.317	-351.5751
N1	CIM10 Min	Bottom	162.2431	-20.0456	-66.6558	-243.1009	-47.2421	-494.8247
N1	CIM11	Top	265.3604	0	0	-4.177E-05	215.8926	-702.3732
N1	CIM11	Bottom	314.3652	0	0	-4.177E-05	360.1336	-832.2345
N1	CIM12	Top	254.3704	0	0	-4.065E-05	196.6349	-673.2695
N1	CIM12	Bottom	303.3752	0	0	-4.065E-05	340.8838	-803.1308
N1	CIM13 Max	Top	254.3704	50.3182	15.344	209.0207	196.635	-673.2695
N1	CIM13 Max	Bottom	303.3752	50.3182	15.344	209.0207	390.865	-639.1331
N1	CIM13 Min	Top	254.3704	-50.3182	-15.344	-209.0208	196.6349	-673.2695
N1	CIM13 Min	Bottom	303.3752	-50.3182	-15.344	-209.0208	290.9025	-967.1285
N1	CIM14 Max	Top	254.3704	15.2723	50.4682	184.3804	196.635	-673.2695
N1	CIM14 Max	Bottom	303.3752	15.2723	50.4682	184.3804	505.2774	-753.3553
N1	CIM14 Min	Top	254.3704	-15.2723	-50.4682	-184.3805	196.6348	-673.2695
N1	CIM14 Min	Bottom	303.3752	-15.2723	-50.4682	-184.3805	176.4901	-852.9063
N1	CIM15	Top	132.8403	0	0	-2.237E-05	83.3172	-351.5751
N1	CIM15	Bottom	162.2431	0	0	-2.237E-05	169.8806	-429.4919
N1	COMB9	Top	287.6605	0	0	-4.698E-05	205.1497	-761.3575
N1	COMB9	Bottom	346.4663	0	0	-4.698E-05	378.2608	-917.1911
N1	COMB10	Top	336.0165	0	0	-0.0001	289.8833	-889.4137
N1	COMB10	Bottom	394.8223	0	0	-0.0001	462.9599	-1045.2472
N1	COMB11	Top	287.6605	0	0	-4.698E-05	205.1497	-761.3575
N1	COMB11	Bottom	346.4663	0	0	-4.698E-05	378.2608	-917.1911
N1	DER09	Top	287.6605	0	0	-4.698E-05	205.1497	-761.3575
N1	DER09	Bottom	346.4663	0	0	-4.698E-05	378.2608	-917.1911
N1	DER10	Top	336.0165	0	0	-0.0001	289.8833	-889.4137
N1	DER10	Bottom	394.8223	0	0	-0.0001	462.9599	-1045.2472
N1	DER11	Top	287.6605	0	0	-4.698E-05	205.1497	-761.3575
N1	DER11	Bottom	346.4663	0	0	-4.698E-05	378.2608	-917.1911
N1	DERUD09	Top	287.6605	0	0	-4.698E-05	205.1497	-761.3575
N1	DERUD09	Bottom	346.4663	0	0	-4.698E-05	378.2608	-917.1911
N1	DERUD10	Top	336.0165	0	0	-0.0001	289.8833	-889.4137
N1	DERUD10	Bottom	394.8223	0	0	-0.0001	462.9599	-1045.2472
N1	DERUD11	Top	287.6605	0	0	-4.698E-05	205.1497	-761.3575
N1	DERUD11	Bottom	346.4663	0	0	-4.698E-05	378.2608	-917.1911

5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	13.4818	-6.2996	107.8209	-3.6683	14.3503	0.005
Base	1	13	L	0	0	0	0	0	0
Base	1	13	LR	2.7535	-1.4144	18.4447	-0.753	2.9313	0.0013
Base	1	13	EX Max	149.5733	68.9718	51.2579	134.1165	300.0508	26.2516
Base	1	13	EY Max	0.2229	90.1782	35.3247	189.9401	0.4488	0.0329
Base	1	13	DISX Max	39.5075	18.2179	13.539	35.4248	79.2538	6.9339
Base	1	13	DISY Max	0.0589	23.8234	9.3321	50.1786	0.1186	0.0087
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	1.3767	1.4496	15.0852	-2.645	1.4656	0.0006
Base	1	13	DERUX Max	21.5955	9.7776	7.2447	18.9705	43.3038	3.7019
Base	1	13	DERUY Max	0.033	12.4034	4.8584	26.1249	0.0664	0.005
Base	1	13	COMB1	18.8745	-8.8194	150.9493	-5.1357	20.0904	0.007
Base	1	13	COMB2	17.5549	-8.2667	138.6074	-4.7785	18.686	0.0066

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB3	20.5837	-9.8226	158.8966	-5.6068	21.9104	0.008
Base	1	13	COMB4	17.5549	-8.2667	138.6074	-4.7785	18.686	0.0066
Base	1	13	COMB5 Max	55.7033	17.8054	145.7237	46.0764	96.5097	6.9425
Base	1	13	COMB5 Min	-23.347	-32.9244	113.0465	-54.8804	-62.0691	-6.9306
Base	1	13	COMB6 Max	28.0893	21.7293	142.7789	56.4041	41.1151	2.0948
Base	1	13	COMB6 Min	4.267	-36.8482	115.9913	-65.2081	-6.6744	-2.0829
Base	1	13	COMB7 Max	24.0447	23.6192	110.4326	57.5046	36.81	2.0933
Base	1	13	COMB7 Min	0.2225	-34.9584	83.645	-64.1076	-10.9795	-2.0844
Base	1	13	COMB8 Max	51.6588	19.6953	113.3774	47.1769	92.2047	6.941
Base	1	13	COMB8 Min	-27.3915	-31.0345	80.7002	-53.7799	-66.3742	-6.9321
Base	1	13	ENVE Max	55.7033	23.6192	158.8966	57.5046	96.5097	6.9425
Base	1	13	ENVE Min	-27.3915	-36.8482	80.7002	-65.2081	-66.3742	-6.9321
Base	1	13	CIM01	13.4818	-6.2996	107.8209	-3.6683	14.3503	0.005
Base	1	13	CIM02	13.4818	-6.2996	107.8209	-3.6683	14.3503	0.005
Base	1	13	CIM03	16.2353	-7.714	126.2656	-4.4213	17.2816	0.0062
Base	1	13	CIM04	15.5469	-7.3604	121.6544	-4.2331	16.5487	0.0059
Base	1	13	CIM05 Max	41.1494	11.4559	119.2579	31.6666	69.8529	4.8606
Base	1	13	CIM05 Min	-14.1858	-24.055	96.3839	-39.0032	-41.1523	-4.8506
Base	1	13	CIM06 Max	21.8196	14.2026	117.1966	38.8959	31.0766	1.4672
Base	1	13	CIM06 Min	5.144	-26.8017	98.4452	-46.2326	-2.376	-1.4572
Base	1	13	CIM07 Max	36.4953	6.1068	130.3232	22.5707	58.5722	3.6823
Base	1	13	CIM07 Min	-5.4015	-20.8276	112.9856	-31.0368	-25.4748	-3.6705
Base	1	13	CIM08 Max	21.8993	8.1809	128.7667	28.0296	29.2922	1.1199
Base	1	13	CIM08 Min	9.1945	-22.9017	114.5422	-36.4957	3.8053	-1.1081
Base	1	13	DER01	18.8745	-8.8194	150.9493	-5.1357	20.0904	0.007
Base	1	13	DER02	17.5549	-8.2667	138.6074	-4.7785	18.686	0.0066
Base	1	13	DER03	20.5837	-9.8226	158.8966	-5.6068	21.9104	0.008
Base	1	13	DER04	17.5549	-8.2667	138.6074	-4.7785	18.686	0.0066
Base	1	13	DER05 Max	165.8183	88.4658	191.2404	186.6965	317.4058	26.2674
Base	1	13	DER05 Min	-133.462	-103.5848	67.5298	-195.5005	-282.9651	-26.2555
Base	1	13	DER06 Max	61.273	103.3103	180.0872	225.773	107.6844	7.9143
Base	1	13	DER06 Min	-28.9167	-118.4293	78.683	-234.577	-73.2437	-7.9024
Base	1	13	DER07 Max	161.7737	90.3557	158.8941	187.797	313.1007	26.2659
Base	1	13	DER07 Min	-137.5065	-101.6949	35.1835	-194.4	-287.2702	-26.257
Base	1	13	DER08 Max	57.2285	105.2002	147.7409	226.8735	103.3793	7.9128
Base	1	13	DER08 Min	-32.9613	-116.5394	46.3367	-233.4765	-77.5488	-7.9039
Base	1	13	DERUD01	18.8745	-8.8194	150.9493	-5.1357	20.0904	0.007
Base	1	13	DERUD02	17.5549	-8.2667	138.6074	-4.7785	18.686	0.0066
Base	1	13	DERUD03	20.5837	-9.8226	158.8966	-5.6068	21.9104	0.008
Base	1	13	DERUD04	17.5549	-8.2667	138.6074	-4.7785	18.686	0.0066
Base	1	13	DERUD05 Max	37.7737	2.2181	136.6298	14.5685	60.5241	3.7078
Base	1	13	DERUD05 Min	-5.4174	-17.3371	122.1404	-23.3725	-26.0835	-3.6959
Base	1	13	DERUD06 Max	16.2111	4.8439	134.2434	21.7229	17.2867	0.0109
Base	1	13	DERUD06 Min	16.1452	-19.9629	124.5267	-30.5269	17.1539	0.001
Base	1	13	DERUD07 Max	33.7291	4.108	104.2835	15.669	56.219	3.7063
Base	1	13	DERUD07 Min	-9.4619	-15.4472	89.7941	-22.272	-30.3885	-3.6974
Base	1	13	DERUD08 Max	12.1666	6.7338	101.8972	22.8234	12.9816	0.0094
Base	1	13	DERUD08 Min	12.1006	-18.073	92.1805	-29.4264	12.8489	-0.0005
Base	1	13	CIM09 Max	35.7567	13.9757	76.1296	33.1339	64.1128	4.8586
Base	1	13	CIM09 Min	-19.5785	-21.5352	53.2555	-37.5359	-46.8924	-4.8526
Base	1	13	CIM10 Max	16.4269	16.7224	74.0682	40.3633	25.3365	1.4652
Base	1	13	CIM10 Min	-0.2487	-24.2819	55.3169	-44.7653	-8.1161	-1.4592
Base	1	13	CIM11	14.8585	-4.85	122.9061	-6.3133	15.8159	0.0056
Base	1	13	CIM12	14.5143	-5.2124	119.1348	-5.6521	15.4495	0.0054
Base	1	13	CIM13 Max	35.4627	8.2549	127.8036	21.1517	57.473	3.6818
Base	1	13	CIM13 Min	-6.4341	-18.6796	110.466	-32.4558	-26.574	-3.6709
Base	1	13	CIM14 Max	20.8667	10.3289	126.2471	26.6106	28.1929	1.1195
Base	1	13	CIM14 Min	8.1619	-20.7536	112.0226	-37.9147	2.706	-1.1086
Base	1	13	CIM15	8.0891	-3.7797	64.6925	-2.201	8.6102	0.003
Base	1	13	COMB9	16.8665	-6.8347	136.9277	-5.7245	17.9531	0.0063

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB10	18.3809	-5.2401	153.5215	-8.6339	19.5653	0.007
Base	1	13	COMB11	16.8665	-6.8347	136.9277	-5.7245	17.9531	0.0063
Base	1	13	DER09	16.8665	-6.8347	136.9277	-5.7245	17.9531	0.0063
Base	1	13	DER10	18.3809	-5.2401	153.5215	-8.6339	19.5653	0.007
Base	1	13	DER11	16.8665	-6.8347	136.9277	-5.7245	17.9531	0.0063
Base	1	13	DERUD09	16.8665	-6.8347	136.9277	-5.7245	17.9531	0.0063
Base	1	13	DERUD10	18.3809	-5.2401	153.5215	-8.6339	19.5653	0.007
Base	1	13	DERUD11	16.8665	-6.8347	136.9277	-5.7245	17.9531	0.0063
Base	2	15	D	2.8836	6.2654	27.4969	-16.8643	3.0517	0.0109
Base	2	15	L	0	0	0	0	0	0
Base	2	15	LR	0.1172	1.409	2.0873	-3.7184	0.1265	0.0016
Base	2	15	EX Max	65.7363	60.3105	32.8748	123.9663	135.2109	24.4123
Base	2	15	EY Max	0.1299	89.9308	35.2164	188.6679	0.266	0.0304
Base	2	15	DISX Max	17.3632	15.9301	8.6834	32.7438	35.7139	6.4481
Base	2	15	DISY Max	0.0343	23.758	9.3035	49.8425	0.0703	0.008
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.059	-1.4523	6.907	0.408	0.0641	0.0007
Base	2	15	DERUX Max	7.3191	8.5012	4.3541	17.481	15.0918	3.4528
Base	2	15	DERUY Max	0.0173	12.3693	4.8437	25.9499	0.0354	0.0046
Base	2	15	COMB1	4.037	8.7715	38.4957	-23.6101	4.2724	0.0153
Base	2	15	COMB2	3.5189	8.2229	34.04	-22.0964	3.7253	0.0139
Base	2	15	COMB3	3.6478	9.7728	36.336	-26.1867	3.8645	0.0156
Base	2	15	COMB4	3.5189	8.2229	34.04	-22.0964	3.7253	0.0139
Base	2	15	COMB5 Max	20.8338	30.576	44.4708	27.4594	39.3971	6.4636
Base	2	15	COMB5 Min	-13.9133	-15.5391	21.5219	-67.9338	-32.0729	-6.4375
Base	2	15	COMB6 Max	8.7036	36.0555	44.9049	39.4285	14.4465	1.9555
Base	2	15	COMB6 Min	-1.783	-21.0186	21.0878	-79.9029	-7.1224	-1.9294
Base	2	15	COMB7 Max	7.8385	34.1759	36.6558	44.4878	13.531	1.9523
Base	2	15	COMB7 Min	-2.6481	-22.8982	12.8387	-74.8436	-8.0379	-1.9327
Base	2	15	COMB8 Max	19.9688	28.6963	36.2217	32.5187	38.4815	6.4604
Base	2	15	COMB8 Min	-14.7783	-17.4187	13.2728	-62.8745	-32.9884	-6.4407
Base	2	15	ENVE Max	20.8338	36.0555	44.9049	44.4878	39.3971	6.4636
Base	2	15	ENVE Min	-14.7783	-22.8982	12.8387	-79.9029	-32.9884	-6.4407
Base	2	15	CIM01	2.8836	6.2654	27.4969	-16.8643	3.0517	0.0109
Base	2	15	CIM02	2.8836	6.2654	27.4969	-16.8643	3.0517	0.0109
Base	2	15	CIM03	3.0008	7.6744	29.5842	-20.5828	3.1783	0.0125
Base	2	15	CIM04	2.9715	7.3221	29.0624	-19.6532	3.1466	0.0121
Base	2	15	CIM05 Max	15.045	22.4056	35.529	16.5233	28.0662	4.5263
Base	2	15	CIM05 Min	-9.2779	-9.8749	19.4648	-50.2519	-21.9627	-4.5045
Base	2	15	CIM06 Max	6.5539	26.2413	35.8329	24.9016	10.6008	1.3706
Base	2	15	CIM06 Min	-0.7867	-13.7106	19.161	-58.6303	-4.4974	-1.3488
Base	2	15	CIM07 Max	12.1795	19.5663	35.1532	5.6759	22.0862	3.4309
Base	2	15	CIM07 Min	-6.2365	-4.9221	22.9717	-44.9822	-15.793	-3.4067
Base	2	15	CIM08 Max	5.7678	22.4627	35.3826	12.0024	8.8981	1.048
Base	2	15	CIM08 Min	0.1752	-7.8185	22.7422	-51.3087	-2.6048	-1.0239
Base	2	15	DER01	4.037	8.7715	38.4957	-23.6101	4.2724	0.0153
Base	2	15	DER02	3.5189	8.2229	34.04	-22.0964	3.7253	0.0139
Base	2	15	DER03	3.6478	9.7728	36.336	-26.1867	3.8645	0.0156
Base	2	15	DER04	3.5189	8.2229	34.04	-22.0964	3.7253	0.0139
Base	2	15	DER05 Max	69.2356	94.8082	76.4361	160.3294	138.9528	24.4345
Base	2	15	DER05 Min	-62.315	-79.7713	-10.4434	-200.8038	-131.6286	-24.4083
Base	2	15	DER06 Max	23.3111	115.5424	78.0752	205.6206	44.4914	7.3671
Base	2	15	DER06 Min	-16.3906	-100.5055	-12.0825	-246.095	-37.1672	-7.341
Base	2	15	DER07 Max	68.3705	92.9286	68.187	165.3887	138.0373	24.4312
Base	2	15	DER07 Min	-63.1801	-81.6509	-18.6925	-195.7445	-132.5441	-24.4116
Base	2	15	DER08 Max	22.446	113.6628	69.8261	210.6799	43.5758	7.3639
Base	2	15	DER08 Min	-17.2556	-102.3851	-20.3316	-241.0357	-38.0827	-7.3443
Base	2	15	DERUD01	4.037	8.7715	38.4957	-23.6101	4.2724	0.0153
Base	2	15	DERUD02	3.5189	8.2229	34.04	-22.0964	3.7253	0.0139
Base	2	15	DERUD03	3.6478	9.7728	36.336	-26.1867	3.8645	0.0156



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DERUD04	3.5189	8.2229	34.04	-22.0964	3.7253	0.0139
Base	2	15	DERUD05 Max	10.7794	16.0197	37.3504	-2.7562	18.7539	3.4659
Base	2	15	DERUD05 Min	-3.8588	-0.9828	28.6422	-37.7182	-11.4297	-3.4397
Base	2	15	DERUD06 Max	3.4776	19.8878	37.84	5.7127	3.6975	0.0177
Base	2	15	DERUD06 Min	3.443	-4.8509	28.1526	-46.1871	3.6267	0.0085
Base	2	15	DERUD07 Max	9.9143	14.14	29.1013	2.3031	17.8384	3.4626
Base	2	15	DERUD07 Min	-4.7239	-2.8624	20.3931	-32.6589	-12.3452	-3.443
Base	2	15	DERUD08 Max	2.6125	18.0081	29.5909	10.772	2.7819	0.0144
Base	2	15	DERUD08 Min	2.5779	-6.7305	19.9035	-41.1278	2.7112	0.0052
Base	2	15	CIM09 Max	13.8916	19.8995	24.5303	23.269	26.8455	4.5219
Base	2	15	CIM09 Min	-10.4313	-12.381	8.4661	-43.5062	-23.1834	-4.5088
Base	2	15	CIM10 Max	5.4005	23.7352	24.8341	31.6474	9.3802	1.3663
Base	2	15	CIM10 Min	-1.9402	-16.2167	8.1622	-51.8846	-5.7181	-1.3532
Base	2	15	CIM11	2.9425	4.813	34.4039	-16.4563	3.1158	0.0116
Base	2	15	CIM12	2.9278	5.1761	32.6772	-16.5583	3.0998	0.0114
Base	2	15	CIM13 Max	12.1358	17.4204	38.7679	8.7707	22.0394	3.4302
Base	2	15	CIM13 Min	-6.2802	-7.0681	26.5864	-41.8873	-15.8398	-3.4074
Base	2	15	CIM14 Max	5.7241	20.3167	38.9974	15.0972	8.8513	1.0474
Base	2	15	CIM14 Min	0.1315	-9.9645	26.357	-48.2139	-2.6517	-1.0246
Base	2	15	CIM15	1.7301	3.7592	16.4982	-10.1186	1.831	0.0065
Base	2	15	COMB9	3.4898	6.7923	36.4498	-20.0332	3.6941	0.0134
Base	2	15	COMB10	3.5546	5.1947	44.0475	-19.5844	3.7646	0.0142
Base	2	15	COMB11	3.4898	6.7923	36.4498	-20.0332	3.6941	0.0134
Base	2	15	DER09	3.4898	6.7923	36.4498	-20.0332	3.6941	0.0134
Base	2	15	DER10	3.5546	5.1947	44.0475	-19.5844	3.7646	0.0142
Base	2	15	DER11	3.4898	6.7923	36.4498	-20.0332	3.6941	0.0134
Base	2	15	DERUD09	3.4898	6.7923	36.4498	-20.0332	3.6941	0.0134
Base	2	15	DERUD10	3.5546	5.1947	44.0475	-19.5844	3.7646	0.0142
Base	2	15	DERUD11	3.4898	6.7923	36.4498	-20.0332	3.6941	0.0134
Base	3	16	D	-13.516	-6.2519	107.6151	-3.7419	-14.2834	0.005
Base	3	16	L	0	0	0	0	0	0
Base	3	16	LR	-2.7593	-1.4097	18.4018	-0.7639	-2.9155	0.0013
Base	3	16	EX Max	149.647	68.819	51.3386	133.7984	300.1281	26.2516
Base	3	16	EY Max	0.2226	90.167	35.2042	189.9079	0.4485	0.0329
Base	3	16	DISX Max	39.527	18.1775	13.5603	35.3408	79.2743	6.9339
Base	3	16	DISY Max	0.0588	23.8204	9.3003	50.1701	0.1185	0.0087
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	-1.3796	1.452	15.0638	-2.6504	-1.4577	0.0006
Base	3	16	DERUX Max	21.6062	9.7519	7.2564	18.9167	43.315	3.7019
Base	3	16	DERUY Max	0.033	12.4011	4.8421	26.1191	0.0663	0.005
Base	3	16	COMB1	-18.9224	-8.7526	150.6611	-5.2387	-19.9967	0.007
Base	3	16	COMB2	-17.5988	-8.2071	138.339	-4.8723	-18.5978	0.0066
Base	3	16	COMB3	-20.634	-9.7577	158.581	-5.7125	-21.8049	0.008
Base	3	16	COMB4	-17.5988	-8.2071	138.339	-4.8723	-18.5978	0.0066
Base	3	16	COMB5 Max	23.3254	17.8214	145.4885	45.9015	62.1698	6.9425
Base	3	16	COMB5 Min	-55.7638	-32.8258	112.7877	-54.8822	-96.4499	-6.9306
Base	3	16	COMB6 Max	-4.3023	21.7715	142.5065	56.2821	6.7607	2.0948
Base	3	16	COMB6 Min	-28.1361	-36.7759	115.7697	-65.2627	-41.0408	-2.0829
Base	3	16	COMB7 Max	-0.2475	23.647	110.222	57.4046	11.0457	2.0933
Base	3	16	COMB7 Min	-24.0813	-34.9004	83.4852	-64.1401	-36.7558	-2.0844
Base	3	16	COMB8 Max	27.3802	19.6969	113.204	47.0241	66.4548	6.941
Base	3	16	COMB8 Min	-51.709	-30.9503	80.5032	-53.7596	-92.1649	-6.9321
Base	3	16	ENVE Max	27.3802	23.647	158.581	57.4046	66.4548	6.9425
Base	3	16	ENVE Min	-55.7638	-36.7759	80.5032	-65.2627	-96.4499	-6.9321
Base	3	16	CIM01	-13.516	-6.2519	107.6151	-3.7419	-14.2834	0.005
Base	3	16	CIM02	-13.516	-6.2519	107.6151	-3.7419	-14.2834	0.005
Base	3	16	CIM03	-16.2753	-7.6615	126.0169	-4.5058	-17.1989	0.0062
Base	3	16	CIM04	-15.5855	-7.3091	121.4165	-4.3148	-16.47	0.0059
Base	3	16	CIM05 Max	14.1652	11.4747	119.0604	31.5324	41.2335	4.8606
Base	3	16	CIM05 Min	-41.1972	-23.9784	96.1698	-39.0162	-69.8003	-4.8506

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	CIM06 Max	-5.1742	14.2397	116.973	38.7987	2.4472	1.4672
Base	3	16	CIM06 Min	-21.8578	-26.7434	98.2572	-46.2826	-31.0139	-1.4572
Base	3	16	CIM07 Max	5.3733	6.1362	130.0915	22.443	25.5643	3.6823
Base	3	16	CIM07 Min	-36.5442	-20.7544	112.7414	-31.0727	-58.5043	-3.6705
Base	3	16	CIM08 Max	-9.23	8.2241	128.5153	27.9299	-3.7233	1.1199
Base	3	16	CIM08 Min	-21.9409	-22.8423	114.3177	-36.5595	-29.2167	-1.1081
Base	3	16	DER01	-18.9224	-8.7526	150.6611	-5.2387	-19.9967	0.007
Base	3	16	DER02	-17.5988	-8.2071	138.339	-4.8723	-18.5978	0.0066
Base	3	16	DER03	-20.634	-9.7577	158.581	-5.7125	-21.8049	0.008
Base	3	16	DER04	-17.5988	-8.2071	138.339	-4.8723	-18.5978	0.0066
Base	3	16	DER05 Max	133.4946	88.3668	191.038	186.2805	283.1226	26.2674
Base	3	16	DER05 Min	-165.933	-103.3713	67.2382	-195.2611	-317.4027	-26.2555
Base	3	16	DER06 Max	28.8975	103.3105	179.7439	225.5572	73.3469	7.9143
Base	3	16	DER06 Min	-61.3359	-118.3149	78.5323	-234.5378	-107.627	-7.9024
Base	3	16	DER07 Max	137.5494	90.2424	158.7535	187.4031	287.4076	26.2659
Base	3	16	DER07 Min	-161.8782	-101.4957	34.9537	-194.1385	-313.1177	-26.257
Base	3	16	DER08 Max	32.9523	105.186	147.4594	226.6797	77.6319	7.9128
Base	3	16	DER08 Min	-57.2811	-116.4394	46.2478	-233.4152	-103.342	-7.9039
Base	3	16	DERUD01	-18.9224	-8.7526	150.6611	-5.2387	-19.9967	0.007
Base	3	16	DERUD02	-17.5988	-8.2071	138.339	-4.8723	-18.5978	0.0066
Base	3	16	DERUD03	-20.634	-9.7577	158.581	-5.7125	-21.8049	0.008
Base	3	16	DERUD04	-17.5988	-8.2071	138.339	-4.8723	-18.5978	0.0066
Base	3	16	DERUD05 Max	5.387	2.2497	136.3945	14.4264	26.175	3.7078
Base	3	16	DERUD05 Min	-37.8254	-17.2542	121.8817	-23.407	-60.4551	-3.6959
Base	3	16	DERUD06 Max	-16.1863	4.8989	133.9802	21.6288	-17.0737	0.0109
Base	3	16	DERUD06 Min	-16.2522	-19.9034	124.296	-30.6094	-17.2064	0.001
Base	3	16	DERUD07 Max	9.4418	4.1253	104.11	15.5489	30.46	3.7063
Base	3	16	DERUD07 Min	-33.7706	-15.3786	89.5971	-22.2844	-56.1701	-3.6974
Base	3	16	DERUD08 Max	-12.1315	6.7745	101.6957	22.7513	-12.7887	0.0094
Base	3	16	DERUD08 Min	-12.1974	-18.0278	92.0114	-29.4868	-12.9214	-0.0005
Base	3	16	CIM09 Max	19.5716	13.9754	76.0143	33.0291	46.9468	4.8586
Base	3	16	CIM09 Min	-35.7908	-21.4776	53.1238	-37.5195	-64.0869	-4.8526
Base	3	16	CIM10 Max	0.2322	16.7405	73.9269	40.2955	8.1605	1.4652
Base	3	16	CIM10 Min	-16.4514	-24.2427	55.2112	-44.7858	-25.3006	-1.4592
Base	3	16	CIM11	-14.8956	-4.7999	122.6789	-6.3923	-15.7411	0.0056
Base	3	16	CIM12	-14.5507	-5.1629	118.9129	-5.7297	-15.3767	0.0054
Base	3	16	CIM13 Max	6.408	8.2825	127.588	21.0281	26.6576	3.6818
Base	3	16	CIM13 Min	-35.5094	-18.6082	110.2379	-32.4876	-57.411	-3.6709
Base	3	16	CIM14 Max	-8.1952	10.3704	126.0118	26.515	-2.63	1.1195
Base	3	16	CIM14 Min	-20.9062	-20.6961	111.8141	-37.9744	-28.1234	-1.1086
Base	3	16	CIM15	-8.1096	-3.7511	64.5691	-2.2452	-8.57	0.003
Base	3	16	COMB9	-16.909	-6.7762	136.67	-5.8155	-17.8689	0.0063
Base	3	16	COMB10	-18.4266	-5.179	153.2402	-8.731	-19.4724	0.007
Base	3	16	COMB11	-16.909	-6.7762	136.67	-5.8155	-17.8689	0.0063
Base	3	16	DER09	-16.909	-6.7762	136.67	-5.8155	-17.8689	0.0063
Base	3	16	DER10	-18.4266	-5.179	153.2402	-8.731	-19.4724	0.007
Base	3	16	DER11	-16.909	-6.7762	136.67	-5.8155	-17.8689	0.0063
Base	3	16	DERUD09	-16.909	-6.7762	136.67	-5.8155	-17.8689	0.0063
Base	3	16	DERUD10	-18.4266	-5.179	153.2402	-8.731	-19.4724	0.007
Base	3	16	DERUD11	-16.909	-6.7762	136.67	-5.8155	-17.8689	0.0063
Base	4	18	D	-2.8493	6.286	27.4723	-16.9095	-2.9753	-0.0002
Base	4	18	L	0	0	0	0	0	0
Base	4	18	LR	-0.1115	1.4151	2.0812	-3.7307	-0.1134	0.001
Base	4	18	EX Max	65.7369	60.164	32.7967	123.6582	135.2115	24.4123
Base	4	18	EY Max	0.1426	89.9126	35.3125	188.6319	0.2962	0.0305
Base	4	18	DISX Max	17.3634	15.8914	8.6628	32.6624	35.7141	6.4481
Base	4	18	DISY Max	0.0377	23.7532	9.3289	49.833	0.0783	0.0081
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	-0.0561	-1.4493	6.9039	0.4019	-0.0575	0.0006
Base	4	18	DERUX Max	7.3192	8.4761	4.3428	17.4283	15.0919	3.4528

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DERUY Max	0.0191	12.3662	4.8568	25.9436	0.0397	0.0046
Base	4	18	COMB1	-3.9891	8.8005	38.4612	-23.6733	-4.1654	-0.0002
Base	4	18	COMB2	-3.4749	8.2508	34.0073	-22.1568	-3.6271	0.0003
Base	4	18	COMB3	-3.5975	9.8074	36.2966	-26.2606	-3.7518	0.0014
Base	4	18	COMB4	-3.4749	8.2508	34.0073	-22.1568	-3.6271	0.0003
Base	4	18	COMB5 Max	13.9555	30.5606	44.4282	27.3209	32.1672	6.4504
Base	4	18	COMB5 Min	-20.7939	-15.4741	21.5053	-67.9037	-39.3079	-6.4508
Base	4	18	COMB6 Max	1.8275	36.0639	44.8945	39.3404	7.2221	1.9423
Base	4	18	COMB6 Min	-8.6659	-20.9774	21.039	-79.9231	-14.3628	-1.9427
Base	4	18	COMB7 Max	2.6823	34.1781	36.6528	44.4132	8.1147	1.9424
Base	4	18	COMB7 Min	-7.8111	-22.8632	12.7973	-74.8503	-13.4703	-1.9427
Base	4	18	COMB8 Max	14.8103	28.6748	36.1865	32.3938	33.0597	6.4504
Base	4	18	COMB8 Min	-19.9391	-17.3599	13.2636	-62.8309	-38.4153	-6.4507
Base	4	18	ENVE Max	14.8103	36.0639	44.8945	44.4132	33.0597	6.4504
Base	4	18	ENVE Min	-20.7939	-22.8632	12.7973	-79.9231	-39.3079	-6.4508
Base	4	18	CIM01	-2.8493	6.286	27.4723	-16.9095	-2.9753	-0.0002
Base	4	18	CIM02	-2.8493	6.286	27.4723	-16.9095	-2.9753	-0.0002
Base	4	18	CIM03	-2.9608	7.7012	29.5535	-20.6402	-3.0887	0.0008
Base	4	18	CIM04	-2.9329	7.3474	29.0332	-19.7075	-3.0604	0.0006
Base	4	18	CIM05 Max	9.3129	22.3982	35.4953	16.4191	22.041	4.5152
Base	4	18	CIM05 Min	-15.0116	-9.8261	19.4493	-50.2381	-27.9916	-4.5156
Base	4	18	CIM06 Max	0.8233	26.2505	35.8217	24.8327	4.5794	1.3596
Base	4	18	CIM06 Min	-6.522	-13.6784	19.1229	-58.6517	-10.53	-1.3599
Base	4	18	CIM07 Max	6.2757	19.5703	35.1171	5.5768	15.8806	3.4194
Base	4	18	CIM07 Min	-12.1416	-4.8756	22.9493	-44.9919	-22.0013	-3.4182
Base	4	18	CIM08 Max	-0.1348	22.4792	35.3635	11.93	2.6954	1.0366
Base	4	18	CIM08 Min	-5.731	-7.7845	22.7028	-51.345	-8.8161	-1.0354
Base	4	18	DER01	-3.9891	8.8005	38.4612	-23.6733	-4.1654	-0.0002
Base	4	18	DER02	-3.4749	8.2508	34.0073	-22.1568	-3.6271	0.0003
Base	4	18	DER03	-3.5975	9.8074	36.2966	-26.2606	-3.7518	0.0014
Base	4	18	DER04	-3.4749	8.2508	34.0073	-22.1568	-3.6271	0.0003
Base	4	18	DER05 Max	62.3604	94.6811	76.3572	159.9564	131.73	24.4213
Base	4	18	DER05 Min	-69.1989	-79.5945	-10.4237	-200.5392	-138.8707	-24.4217
Base	4	18	DER06 Max	16.4444	115.505	78.1182	205.4379	37.2893	7.354
Base	4	18	DER06 Min	-23.2828	-100.4185	-12.1847	-246.0207	-44.43	-7.3544
Base	4	18	DER07 Max	63.2152	92.7952	68.1155	165.0292	132.6226	24.4213
Base	4	18	DER07 Min	-68.3441	-81.4804	-18.6654	-195.4663	-137.9781	-24.4216
Base	4	18	DER08 Max	17.2992	113.6192	69.8765	210.5108	38.1819	7.3541
Base	4	18	DER08 Min	-22.428	-102.3043	-20.4264	-240.9479	-43.5375	-7.3544
Base	4	18	DERUD01	-3.9891	8.8005	38.4612	-23.6733	-4.1654	-0.0002
Base	4	18	DERUD02	-3.4749	8.2508	34.0073	-22.1568	-3.6271	0.0003
Base	4	18	DERUD03	-3.5975	9.8074	36.2966	-26.2606	-3.7518	0.0014
Base	4	18	DERUD04	-3.4749	8.2508	34.0073	-22.1568	-3.6271	0.0003
Base	4	18	DERUD05 Max	3.9	16.0194	37.3095	-2.863	11.5215	3.4526
Base	4	18	DERUD05 Min	-10.7384	-0.9329	28.624	-37.7197	-18.6623	-3.453
Base	4	18	DERUD06 Max	-3.4001	19.9094	37.8235	5.6522	-3.5307	0.0044
Base	4	18	DERUD06 Min	-3.4383	-4.8229	28.11	-46.235	-3.6101	-0.0048
Base	4	18	DERUD07 Max	4.7548	14.1336	29.0679	2.2098	12.4141	3.4527
Base	4	18	DERUD07 Min	-9.8836	-2.8187	20.3823	-32.6469	-17.7697	-3.453
Base	4	18	DERUD08 Max	-2.5453	18.0236	29.5818	10.7251	-2.6381	0.0045
Base	4	18	DERUD08 Min	-2.5835	-6.7087	19.8683	-41.1622	-2.7175	-0.0048
Base	4	18	CIM09 Max	10.4527	19.8838	24.5064	23.1829	23.2311	4.5153
Base	4	18	CIM09 Min	-13.8719	-12.3405	8.4604	-43.4743	-26.8015	-4.5155
Base	4	18	CIM10 Max	1.9631	23.7361	24.8328	31.5965	5.7695	1.3597
Base	4	18	CIM10 Min	-5.3823	-16.1928	8.134	-51.8879	-9.3399	-1.3599
Base	4	18	CIM11	-2.9054	4.8368	34.3762	-16.5076	-3.0328	0.0004
Base	4	18	CIM12	-2.8914	5.1991	32.6503	-16.6081	-3.0185	0.0003
Base	4	18	CIM13 Max	6.3172	17.4221	38.7341	8.6763	15.9225	3.4191
Base	4	18	CIM13 Min	-12.1	-7.0239	26.5664	-41.8925	-21.9594	-3.4185
Base	4	18	CIM14 Max	-0.0933	20.3309	38.9806	15.0294	2.7373	1.0363

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	CIM14 Min	-5.6895	-9.9327	26.3199	-48.2456	-8.7742	-1.0357
Base	4	18	CIM15	-1.7096	3.7716	16.4834	-10.1457	-1.7852	-0.0001
Base	4	18	COMB9	-3.4473	6.8186	36.4187	-20.0905	-3.5991	0.0001
Base	4	18	COMB10	-3.5089	5.2244	44.0131	-19.6484	-3.6624	0.0008
Base	4	18	COMB11	-3.4473	6.8186	36.4187	-20.0905	-3.5991	0.0001
Base	4	18	DER09	-3.4473	6.8186	36.4187	-20.0905	-3.5991	0.0001
Base	4	18	DER10	-3.5089	5.2244	44.0131	-19.6484	-3.6624	0.0008
Base	4	18	DER11	-3.4473	6.8186	36.4187	-20.0905	-3.5991	0.0001
Base	4	18	DERUD09	-3.4473	6.8186	36.4187	-20.0905	-3.5991	0.0001
Base	4	18	DERUD10	-3.5089	5.2244	44.0131	-19.6484	-3.6624	0.0008
Base	4	18	DERUD11	-3.4473	6.8186	36.4187	-20.0905	-3.5991	0.0001

5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.209	4.782	30.0485	902.9116
Modal	2	0.172	5.806	36.4788	1330.705
Modal	3	0.13	7.716	48.4805	2350.3549
Modal	4	0.041	24.579	154.436	23850.488
Modal	5	0.014	70.421	442.4707	195780.3067
Modal	6	0.014	73.933	464.5351	215792.8324
Modal	7	0.011	94.329	592.686	351276.685

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.209	0.6589	1.894E-06	0	0.6589	1.894E-06	0
Modal	2	0.172	2.579E-06	1	0	0.6589	1	0
Modal	3	0.13	0.3407	7.042E-07	0	0.9996	1	0
Modal	4	0.041	0.0004	0	0	1	1	0
Modal	5	0.014	0	0	0	1	1	0
Modal	6	0.014	0	1.363E-05	0	1	1	0
Modal	7	0.011	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	1.894E-06	0.6589	0.3863	1.894E-06	0.6589	0.3863
Modal	2	1	2.579E-06	0	1	0.6589	0.3863
Modal	3	7.042E-07	0.3407	0.6131	1	0.9996	0.9993
Modal	4	0	0.0004	0.0006	1	1	1
Modal	5	0	0	1.089E-05	1	1	1
Modal	6	1.363E-05	0	0	1	1	1
Modal	7	0	0	0	1	1	1

Table 5.11 - Modal Load Participation Ratios

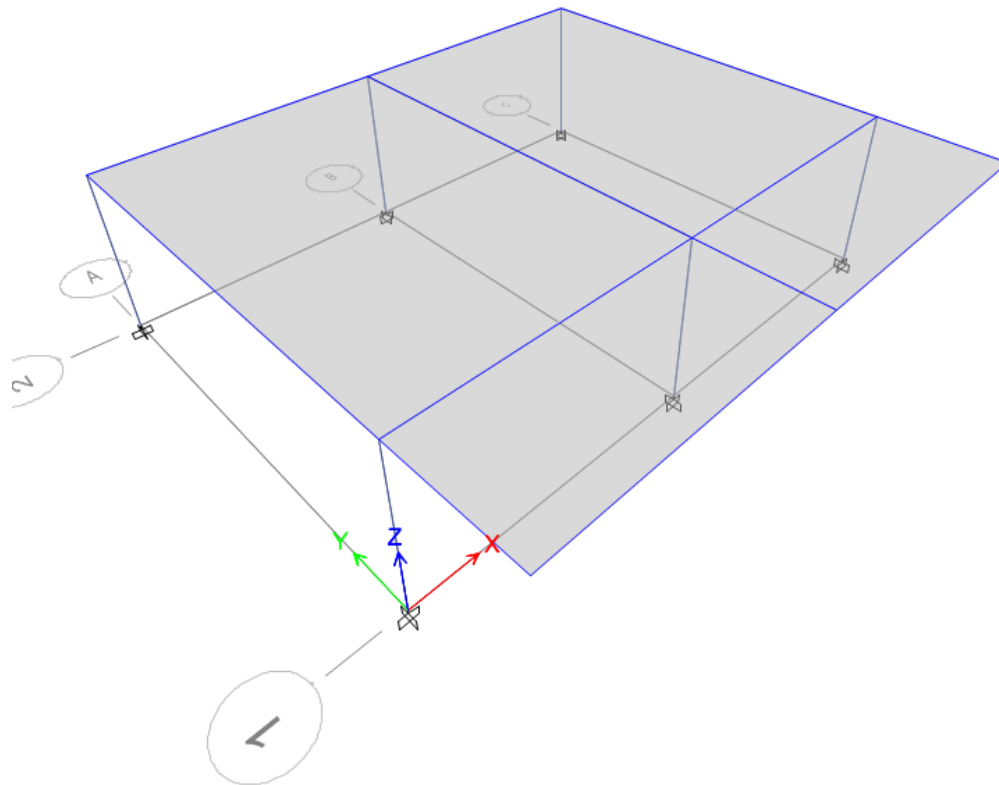
Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.12 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.209	0.672	0	0	0.328
Modal	2	0.172	0	1	0	0
Modal	3	0.13	0.348	0	0	0.652
Modal	4	0.041	0.004	0	0	0.996

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	5	0.014	0	0	0	1
Modal	6	0.014	0	0.912	0	0.088
Modal	7	0.011	0	0.041	0	0.959

# **ZONA DE AMENAZA SISMICA INTERMEDIA**



## Project Report

Model File: 004 2017 EDUCACION MODULO 1A DMO - E, Revision 0  
05/04/2017

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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	5.6
G1	X	C	Yes	End	11.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	5600	0	0
4	5600	8200	0
5	11200	0	0
6	11200	8200	0
10	0	-2400	0
11	5600	-2400	0
12	11200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below
C5	5	5	Below
C6	6	6	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B3	5	6	None
B4	1	3	None

Beam	I-End Point	J-End Point	Curve Type
B5	3	5	None
B6	2	4	None
B7	4	6	None
B10	10	11	None
B11	11	12	None
B8	10	1	None
B9	11	3	None
B12	12	5	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	10	12	None
		2	12	5	None
		3	5	1	None
		4	1	10	None
F2	4	1	1	5	None
		2	5	6	None
		3	6	2	None
		4	2	1	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	41809.44	41809.44	5.6	-0.7098	41809.44	41809.44	5.6	-0.7098	5.6	3.2149

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	41809.44	41809.44	769.2246	5.6	-0.7098

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	56483.87	56483.87	0
Base	3747.82	3747.82	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A416Gr270	Tendon	196500.6	0	76.9729	Fy=1689.91 MPa, Fu=1861.58 MPa
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 2.5 Tendon Sections

**Table 2.5 - Tendon Section Properties**

Name	Material	StrandArea cm <sup>2</sup>	Color
Tendon1	A416Gr270	1	Yellow

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	5	10	D1	
N1	6	20	Disconnected	
N1	10	25	D1	
N1	11	26	D1	
N1	12	27	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	5	19	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	6	21	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Max Station Spacing mm	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40		3
N1	C2	8	Column	3250	C40X40	C40X40		3
N1	C3	9	Column	3250	C40X40	C40X40		3
N1	C4	10	Column	3250	C40X40	C40X40		3
N1	C5	11	Column	3250	C40X40	C40X40		3
N1	C6	12	Column	3250	C40X40	C40X40		3
N1	B1	13	Beam	8200	V30X50	V30X50	500	
N1	B2	14	Beam	8200	V30X50	V30X50	500	
N1	B3	15	Beam	8200	V30X50	V30X50	500	
N1	B4	16	Beam	5600	V30X50	V30X50	500	
N1	B5	17	Beam	5600	V30X50	V30X50	500	
N1	B6	18	Beam	5600	V30X50	V30X50	500	
N1	B7	19	Beam	5600	V30X50	V30X50	500	
N1	B10	22	Beam	5600	VB20X50	VB20X50	500	
N1	B11	23	Beam	5600	VB20X50	VB20X50	500	
N1	B8	2	Beam	2400	V30X50	V30X50	500	
N1	B9	4	Beam	2400	V30X50	V30X50	500	
N1	B12	6	Beam	2400	V30X50	V30X50	500	

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F1	1	LOSA	90
N1	F2	2	CUB	

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

Table 4.1 - Load Patterns

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

Table 4.2 - Frame Loads - Distributed

Story	Label	Unique Name	Design Type	Load Pattern	Load Type	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm	Force at Start kN/m	Force at End kN/m
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B3	15	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B4	16	Beam	D	Force	Gravity	0	1	0	5600	4.4	4.4
N1	B5	17	Beam	D	Force	Gravity	0	1	0	5600	4.4	4.4
N1	B10	22	Beam	D	Force	Gravity	0	1	0	5600	1.55	1.55
N1	B11	23	Beam	D	Force	Gravity	0	1	0	5600	1.55	1.55

#### 4.2.2 Area Loads

Table 4.3 - Shell Loads - Uniform

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	1	D	Gravity	4.3
N1	F2	2	D	Gravity	0.64
N1	F1	1	L	Gravity	2
N1	F2	2	LR	Gravity	0.5
N1	F1	1	G	Gravity	1
N1	F2	2	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

Table 4.4 - Response Spectrum Function - User

Name	Period sec	Acceleration	Damping %
Umbral	0	0.08	2
Umbral	0.01	0.086	
Umbral	0.02	0.093	
Umbral	0.03	0.099	
Umbral	0.04	0.106	
Umbral	0.05	0.112	
Umbral	0.06	0.118	
Umbral	0.07	0.125	
Umbral	0.08	0.131	
Umbral	0.09	0.138	
Umbral	0.1	0.144	
Umbral	0.11	0.15	

Name	Period sec	Acceleration	Damping %
Umbral	0.12	0.157	
Umbral	0.13	0.163	
Umbral	0.14	0.17	
Umbral	0.15	0.176	
Umbral	0.16	0.182	
Umbral	0.17	0.189	
Umbral	0.18	0.195	
Umbral	0.19	0.202	
Umbral	0.2	0.208	
Umbral	0.21	0.214	
Umbral	0.22	0.221	
Umbral	0.23	0.227	
Umbral	0.24	0.234	
Umbral	0.25	0.24	
Umbral	0.26	0.24	
Umbral	0.27	0.24	
Umbral	0.28	0.24	
Umbral	0.29	0.24	
Umbral	0.3	0.24	
Umbral	0.31	0.24	
Umbral	0.32	0.24	
Umbral	0.33	0.24	
Umbral	0.34	0.24	
Umbral	0.35	0.24	
Umbral	0.36	0.24	
Umbral	0.37	0.24	
Umbral	0.38	0.24	
Umbral	0.39	0.24	
Umbral	0.4	0.24	
Umbral	0.41	0.24	
Umbral	0.42	0.24	
Umbral	0.43	0.24	
Umbral	0.44	0.24	
Umbral	0.45	0.24	
Umbral	0.46	0.24	
Umbral	0.47	0.24	
Umbral	0.48	0.24	
Umbral	0.49	0.24	
Umbral	0.5	0.24	
Umbral	0.51	0.24	
Umbral	0.52	0.24	
Umbral	0.53	0.24	
Umbral	0.54	0.24	
Umbral	0.55	0.24	
Umbral	0.56	0.24	
Umbral	0.57	0.24	
Umbral	0.58	0.24	
Umbral	0.59	0.24	
Umbral	0.6	0.24	
Umbral	0.61	0.24	
Umbral	0.62	0.24	
Umbral	0.63	0.24	
Umbral	0.64	0.24	
Umbral	0.65	0.24	
Umbral	0.66	0.24	
Umbral	0.67	0.24	
Umbral	0.68	0.24	
Umbral	0.69	0.24	
Umbral	0.7	0.24	
Umbral	0.71	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	0.72	0.24	
Umbral	0.73	0.24	
Umbral	0.74	0.24	
Umbral	0.75	0.24	
Umbral	0.76	0.24	
Umbral	0.77	0.24	
Umbral	0.78	0.24	
Umbral	0.79	0.24	
Umbral	0.8	0.24	
Umbral	0.81	0.24	
Umbral	0.82	0.24	
Umbral	0.83	0.24	
Umbral	0.84	0.24	
Umbral	0.85	0.24	
Umbral	0.86	0.24	
Umbral	0.87	0.24	
Umbral	0.88	0.24	
Umbral	0.89	0.24	
Umbral	0.9	0.24	
Umbral	0.91	0.24	
Umbral	0.92	0.24	
Umbral	0.93	0.24	
Umbral	0.94	0.24	
Umbral	0.95	0.24	
Umbral	0.96	0.24	
Umbral	0.97	0.24	
Umbral	0.98	0.24	
Umbral	0.99	0.24	
Umbral	1	0.24	
Umbral	1.01	0.24	
Umbral	1.02	0.24	
Umbral	1.03	0.24	
Umbral	1.04	0.24	
Umbral	1.05	0.24	
Umbral	1.06	0.24	
Umbral	1.07	0.24	
Umbral	1.08	0.24	
Umbral	1.09	0.24	
Umbral	1.1	0.24	
Umbral	1.11	0.24	
Umbral	1.12	0.24	
Umbral	1.13	0.24	
Umbral	1.14	0.24	
Umbral	1.15	0.24	
Umbral	1.16	0.24	
Umbral	1.17	0.24	
Umbral	1.18	0.24	
Umbral	1.19	0.24	
Umbral	1.2	0.24	
Umbral	1.21	0.24	
Umbral	1.22	0.24	
Umbral	1.23	0.24	
Umbral	1.24	0.24	
Umbral	1.25	0.24	
Umbral	1.26	0.24	
Umbral	1.27	0.24	
Umbral	1.28	0.24	
Umbral	1.29	0.24	
Umbral	1.3	0.24	
Umbral	1.31	0.24	



Name	Period sec	Acceleration	Damping %
Umbral	1.32	0.24	
Umbral	1.33	0.24	
Umbral	1.34	0.24	
Umbral	1.35	0.24	
Umbral	1.36	0.24	
Umbral	1.37	0.24	
Umbral	1.38	0.24	
Umbral	1.39	0.24	
Umbral	1.4	0.24	
Umbral	1.41	0.24	
Umbral	1.42	0.24	
Umbral	1.43	0.24	
Umbral	1.44	0.24	
Umbral	1.45	0.24	
Umbral	1.46	0.24	
Umbral	1.47	0.24	
Umbral	1.48	0.24	
Umbral	1.49	0.24	
Umbral	1.5	0.24	
Umbral	1.51	0.24	
Umbral	1.52	0.24	
Umbral	1.53	0.24	
Umbral	1.54	0.24	
Umbral	1.55	0.24	
Umbral	1.56	0.24	
Umbral	1.57	0.24	
Umbral	1.58	0.24	
Umbral	1.59	0.24	
Umbral	1.6	0.24	
Umbral	1.61	0.24	
Umbral	1.62	0.24	
Umbral	1.63	0.24	
Umbral	1.64	0.24	
Umbral	1.65	0.24	
Umbral	1.66	0.24	
Umbral	1.67	0.24	
Umbral	1.68	0.24	
Umbral	1.69	0.24	
Umbral	1.7	0.24	
Umbral	1.71	0.24	
Umbral	1.72	0.24	
Umbral	1.73	0.24	
Umbral	1.74	0.24	
Umbral	1.75	0.24	
Umbral	1.76	0.24	
Umbral	1.77	0.24	
Umbral	1.78	0.24	
Umbral	1.79	0.24	
Umbral	1.8	0.24	
Umbral	1.81	0.24	
Umbral	1.82	0.24	
Umbral	1.83	0.24	
Umbral	1.84	0.24	
Umbral	1.85	0.24	
Umbral	1.86	0.24	
Umbral	1.87	0.24	
Umbral	1.88	0.24	
Umbral	1.89	0.24	
Umbral	1.9	0.24	
Umbral	1.91	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.92	0.24	
Umbral	1.93	0.24	
Umbral	1.94	0.24	
Umbral	1.95	0.24	
Umbral	1.96	0.24	
Umbral	1.97	0.24	
Umbral	1.98	0.24	
Umbral	1.99	0.24	
Umbral	2	0.24	
Umbral	2.01	0.239	
Umbral	2.02	0.238	
Umbral	2.03	0.236	
Umbral	2.04	0.235	
Umbral	2.05	0.234	
Umbral	2.06	0.233	
Umbral	2.07	0.232	
Umbral	2.08	0.231	
Umbral	2.09	0.23	
Umbral	2.1	0.229	
Umbral	2.11	0.227	
Umbral	2.12	0.226	
Umbral	2.13	0.225	
Umbral	2.14	0.224	
Umbral	2.15	0.223	
Umbral	2.16	0.222	
Umbral	2.17	0.221	
Umbral	2.18	0.22	
Umbral	2.19	0.219	
Umbral	2.2	0.218	
Umbral	2.21	0.217	
Umbral	2.22	0.216	
Umbral	2.23	0.215	
Umbral	2.24	0.214	
Umbral	2.25	0.213	
Umbral	2.26	0.212	
Umbral	2.27	0.211	
Umbral	2.28	0.211	
Umbral	2.29	0.21	
Umbral	2.3	0.209	
Umbral	2.31	0.208	
Umbral	2.32	0.207	
Umbral	2.33	0.206	
Umbral	2.34	0.205	
Umbral	2.35	0.204	
Umbral	2.36	0.203	
Umbral	2.37	0.203	
Umbral	2.38	0.202	
Umbral	2.39	0.201	
Umbral	2.4	0.2	
Umbral	2.41	0.199	
Umbral	2.42	0.198	
Umbral	2.43	0.198	
Umbral	2.44	0.197	
Umbral	2.45	0.196	
Umbral	2.46	0.195	
Umbral	2.47	0.194	
Umbral	2.48	0.194	
Umbral	2.49	0.193	
Umbral	2.5	0.192	
Umbral	2.51	0.191	

Name	Period sec	Acceleration	Damping %
Umbral	2.52	0.19	
Umbral	2.53	0.19	
Umbral	2.54	0.189	
Umbral	2.55	0.188	
Umbral	2.56	0.188	
Umbral	2.57	0.187	
Umbral	2.58	0.186	
Umbral	2.59	0.185	
Umbral	2.6	0.185	
Umbral	2.61	0.184	
Umbral	2.62	0.183	
Umbral	2.63	0.183	
Umbral	2.64	0.182	
Umbral	2.65	0.181	
Umbral	2.66	0.18	
Umbral	2.67	0.18	
Umbral	2.68	0.179	
Umbral	2.69	0.178	
Umbral	2.7	0.178	
Umbral	2.71	0.177	
Umbral	2.72	0.176	
Umbral	2.73	0.176	
Umbral	2.74	0.175	
Umbral	2.75	0.175	
Umbral	2.76	0.174	
Umbral	2.77	0.173	
Umbral	2.78	0.173	
Umbral	2.79	0.172	
Umbral	2.8	0.171	
Umbral	2.81	0.171	
Umbral	2.82	0.17	
Umbral	2.83	0.17	
Umbral	2.84	0.169	
Umbral	2.85	0.168	
Umbral	2.86	0.168	
Umbral	2.87	0.167	
Umbral	2.88	0.167	
Umbral	2.89	0.166	
Umbral	2.9	0.166	
Umbral	2.91	0.165	
Umbral	2.92	0.164	
Umbral	2.93	0.164	
Umbral	2.94	0.163	
Umbral	2.95	0.163	
Umbral	2.96	0.162	
Umbral	2.97	0.162	
Umbral	2.98	0.161	
Umbral	2.99	0.161	
Umbral	3	0.16	
Umbral	3.01	0.159	
Umbral	3.02	0.159	
Umbral	3.03	0.158	
Umbral	3.04	0.158	
Umbral	3.05	0.157	
Umbral	3.06	0.157	
Umbral	3.07	0.156	
Umbral	3.08	0.156	
Umbral	3.09	0.155	
Umbral	3.1	0.155	
Umbral	3.11	0.154	

Name	Period sec	Acceleration	Damping %
Umbral	3.12	0.154	
Umbral	3.13	0.153	
Umbral	3.14	0.153	
Umbral	3.15	0.152	
Umbral	3.16	0.152	
Umbral	3.17	0.151	
Umbral	3.18	0.151	
Umbral	3.19	0.15	
Umbral	3.2	0.15	
Umbral	3.21	0.15	
Umbral	3.22	0.149	
Umbral	3.23	0.149	
Umbral	3.24	0.148	
Umbral	3.25	0.148	
Umbral	3.26	0.147	
Umbral	3.27	0.147	
Umbral	3.28	0.146	
Umbral	3.29	0.146	
Umbral	3.3	0.145	
Umbral	3.31	0.145	
Umbral	3.32	0.145	
Umbral	3.33	0.144	
Umbral	3.34	0.144	
Umbral	3.35	0.143	
Umbral	3.36	0.143	
Umbral	3.37	0.142	
Umbral	3.38	0.142	
Umbral	3.39	0.142	
Umbral	3.4	0.141	
Umbral	3.41	0.141	
Umbral	3.42	0.14	
Umbral	3.43	0.14	
Umbral	3.44	0.14	
Umbral	3.45	0.139	
Umbral	3.46	0.139	
Umbral	3.47	0.138	
Umbral	3.48	0.138	
Umbral	3.49	0.138	
Umbral	3.5	0.137	
Umbral	3.51	0.137	
Umbral	3.52	0.136	
Umbral	3.53	0.136	
Umbral	3.54	0.136	
Umbral	3.55	0.135	
Umbral	3.56	0.135	
Umbral	3.57	0.134	
Umbral	3.58	0.134	
Umbral	3.59	0.134	
Umbral	3.6	0.133	
Umbral	3.61	0.133	
Umbral	3.62	0.133	
Umbral	3.63	0.132	
Umbral	3.64	0.132	
Umbral	3.65	0.132	
Umbral	3.66	0.131	
Umbral	3.67	0.131	
Umbral	3.68	0.13	
Umbral	3.69	0.13	
Umbral	3.7	0.13	
Umbral	3.71	0.129	

Name	Period sec	Acceleration	Damping %
Umbral	3.72	0.129	
Umbral	3.73	0.129	
Umbral	3.74	0.128	
Umbral	3.75	0.128	
Umbral	3.76	0.128	
Umbral	3.77	0.127	
Umbral	3.78	0.127	
Umbral	3.79	0.127	
Umbral	3.8	0.126	
Umbral	3.81	0.126	
Umbral	3.82	0.126	
Umbral	3.83	0.125	
Umbral	3.84	0.125	
Umbral	3.85	0.125	
Umbral	3.86	0.124	
Umbral	3.87	0.124	
Umbral	3.88	0.124	
Umbral	3.89	0.123	
Umbral	3.9	0.123	
Umbral	3.91	0.123	
Umbral	3.92	0.122	
Umbral	3.93	0.122	
Umbral	3.94	0.122	
Umbral	3.95	0.122	
Umbral	3.96	0.121	
Umbral	3.97	0.121	
Umbral	3.98	0.121	
Umbral	3.99	0.12	
Umbral	4	0.12	
Umbral	4.01	0.12	
Umbral	4.02	0.119	
Umbral	4.03	0.119	
Umbral	4.04	0.119	
Umbral	4.05	0.119	
Umbral	4.06	0.118	
Umbral	4.07	0.118	
Umbral	4.08	0.118	
Umbral	4.09	0.117	
Umbral	4.1	0.117	
Umbral	4.11	0.117	
Umbral	4.12	0.117	
Umbral	4.13	0.116	
Umbral	4.14	0.116	
Umbral	4.15	0.116	
Umbral	4.16	0.115	
Umbral	4.17	0.115	
Umbral	4.18	0.115	
Umbral	4.19	0.115	
Umbral	4.2	0.114	
Umbral	4.21	0.114	
Umbral	4.22	0.114	
Umbral	4.23	0.113	
Umbral	4.24	0.113	
Umbral	4.25	0.113	
Umbral	4.26	0.113	
Umbral	4.27	0.112	
Umbral	4.28	0.112	
Umbral	4.29	0.112	
Umbral	4.3	0.112	
Umbral	4.31	0.111	

Name	Period sec	Acceleration	Damping %
Umbral	4.32	0.111	
Umbral	4.33	0.111	
Umbral	4.34	0.111	
Umbral	4.35	0.11	
Umbral	4.36	0.11	
Umbral	4.37	0.11	
Umbral	4.38	0.11	
Umbral	4.39	0.109	
Umbral	4.4	0.109	
Umbral	4.41	0.109	
Umbral	4.42	0.109	
Umbral	4.43	0.108	
Umbral	4.44	0.108	
Umbral	4.45	0.108	
Umbral	4.46	0.108	
Umbral	4.47	0.107	
Umbral	4.48	0.107	
Umbral	4.49	0.107	
Umbral	4.5	0.107	
Umbral	4.51	0.106	
Umbral	4.52	0.106	
Umbral	4.53	0.106	
Umbral	4.54	0.106	
Umbral	4.55	0.105	
Umbral	4.56	0.105	
Umbral	4.57	0.105	
Umbral	4.58	0.105	
Umbral	4.59	0.105	
Umbral	4.6	0.104	
Umbral	4.61	0.104	
Umbral	4.62	0.104	
Umbral	4.63	0.104	
Umbral	4.64	0.103	
Umbral	4.65	0.103	
Umbral	4.66	0.103	
Umbral	4.67	0.103	
Umbral	4.68	0.103	
Umbral	4.69	0.102	
Umbral	4.7	0.102	
Umbral	4.71	0.102	
Umbral	4.72	0.102	
Umbral	4.73	0.101	
Umbral	4.74	0.101	
Umbral	4.75	0.101	
Umbral	4.76	0.101	
Umbral	4.77	0.101	
Umbral	4.78	0.1	
Umbral	4.79	0.1	
Umbral	4.8	0.1	
Umbral	4.81	0.1	
Umbral	4.82	0.1	
Umbral	4.83	0.099	
Umbral	4.84	0.099	
Umbral	4.85	0.099	
Umbral	4.86	0.099	
Umbral	4.87	0.099	
Umbral	4.88	0.098	
Umbral	4.89	0.098	
Umbral	4.9	0.098	
Umbral	4.91	0.098	

Name	Period sec	Acceleration	Damping %
Umbral	4.92	0.098	
Umbral	4.93	0.097	
Umbral	4.94	0.097	
Umbral	4.95	0.097	
Umbral	4.96	0.097	
Umbral	4.97	0.097	
Umbral	4.98	0.096	
Umbral	4.99	0.096	
Umbral	5	0.096	
Umbral	5.01	0.096	
Umbral	5.02	0.096	
Umbral	5.03	0.095	
Umbral	5.04	0.095	
Umbral	5.05	0.095	
Umbral	5.06	0.095	
Umbral	5.07	0.095	
Umbral	5.08	0.094	
Umbral	5.09	0.094	
Umbral	5.1	0.094	
Umbral	5.11	0.094	
Umbral	5.12	0.094	
Umbral	5.13	0.094	
Umbral	5.14	0.093	
Umbral	5.15	0.093	
Umbral	5.16	0.093	
Umbral	5.17	0.093	
Umbral	5.18	0.093	
Umbral	5.19	0.092	
Umbral	5.2	0.092	
Umbral	5.21	0.092	
Umbral	5.22	0.092	
Umbral	5.23	0.092	
Umbral	5.24	0.092	
Umbral	5.25	0.091	
Umbral	5.26	0.091	
Umbral	5.27	0.091	
Umbral	5.28	0.091	
Umbral	5.29	0.091	
Umbral	5.3	0.091	
Umbral	5.31	0.09	
Umbral	5.32	0.09	
Umbral	5.33	0.09	
Umbral	5.34	0.09	
Umbral	5.35	0.09	
Umbral	5.36	0.09	
Umbral	5.37	0.089	
Umbral	5.38	0.089	
Umbral	5.39	0.089	
Umbral	5.4	0.089	
Umbral	5.41	0.089	
Umbral	5.42	0.089	
Umbral	5.43	0.088	
Umbral	5.44	0.088	
Umbral	5.45	0.088	
Umbral	5.46	0.088	
Umbral	5.47	0.088	
Umbral	5.48	0.088	
Umbral	5.49	0.087	
Umbral	5.5	0.087	
Umbral	5.51	0.087	

Name	Period sec	Acceleration	Damping %
Umbral	5.52	0.087	
Umbral	5.53	0.087	
Umbral	5.54	0.087	
Umbral	5.55	0.086	
Umbral	5.56	0.086	
Umbral	5.57	0.086	
Umbral	5.58	0.086	
Umbral	5.59	0.086	
Umbral	5.6	0.086	
Umbral	5.61	0.086	
Umbral	5.62	0.085	
Umbral	5.63	0.085	
Umbral	5.64	0.085	
Umbral	5.65	0.085	
Umbral	5.66	0.085	
Umbral	5.67	0.085	
Umbral	5.68	0.085	
Umbral	5.69	0.084	
Umbral	5.7	0.084	
Umbral	5.71	0.084	
Umbral	5.72	0.084	
Umbral	5.73	0.084	
Umbral	5.74	0.084	
Umbral	5.75	0.083	
Umbral	5.76	0.083	
Umbral	5.77	0.083	
Umbral	5.78	0.083	
Umbral	5.79	0.083	
Umbral	5.8	0.083	
Umbral	5.81	0.083	
Umbral	5.82	0.082	
Umbral	5.83	0.082	
Umbral	5.84	0.082	
Umbral	5.85	0.082	
Umbral	5.86	0.082	
Umbral	5.87	0.082	
Umbral	5.88	0.082	
Umbral	5.89	0.081	
Umbral	5.9	0.081	
Umbral	5.91	0.081	
Umbral	5.92	0.081	
Umbral	5.93	0.081	
Umbral	5.94	0.081	
Umbral	5.95	0.081	
Umbral	5.96	0.081	
Umbral	5.97	0.08	
Umbral	5.98	0.08	
Umbral	5.99	0.08	
Umbral	6	0.08	
Umbral	6.01	0.08	
Umbral	6.02	0.08	
Umbral	6.03	0.08	
Umbral	6.04	0.079	
Umbral	6.05	0.079	
Umbral	6.06	0.079	
Umbral	6.07	0.079	
Umbral	6.08	0.079	
Umbral	6.09	0.079	
Umbral	6.1	0.079	
Umbral	6.11	0.079	



Name	Period sec	Acceleration	Damping %
Umbral	6.12	0.078	
Umbral	6.13	0.078	
Umbral	6.14	0.078	
Umbral	6.15	0.078	
Umbral	6.16	0.078	
Umbral	6.17	0.078	
Umbral	6.18	0.078	
Umbral	6.19	0.078	
Umbral	6.2	0.077	
Umbral	6.21	0.077	
Umbral	6.22	0.077	
Umbral	6.23	0.077	
Umbral	6.24	0.077	
Umbral	6.25	0.077	
Umbral	6.26	0.077	
Umbral	6.27	0.077	
Umbral	6.28	0.076	
Umbral	6.29	0.076	
Umbral	6.3	0.076	
Umbral	6.31	0.076	
Umbral	6.32	0.076	
Umbral	6.33	0.076	
Umbral	6.34	0.076	
Umbral	6.35	0.076	
Umbral	6.36	0.075	
Umbral	6.37	0.075	
Umbral	6.38	0.075	
Umbral	6.39	0.075	
Umbral	6.4	0.075	
Umbral	6.41	0.075	
Umbral	6.42	0.075	
Umbral	6.43	0.075	
Umbral	6.44	0.075	
Umbral	6.45	0.074	
Umbral	6.46	0.074	
Umbral	6.47	0.074	
Umbral	6.48	0.074	
Umbral	6.49	0.074	
Umbral	6.5	0.074	
Umbral	6.51	0.074	
Umbral	6.52	0.074	
Umbral	6.53	0.074	
Umbral	6.54	0.073	
Umbral	6.55	0.073	
Umbral	6.56	0.073	
Umbral	6.57	0.073	
Umbral	6.58	0.073	
Umbral	6.59	0.073	
Umbral	6.6	0.073	
Umbral	6.61	0.073	
Umbral	6.62	0.073	
Umbral	6.63	0.072	
Umbral	6.64	0.072	
Umbral	6.65	0.072	
Umbral	6.66	0.072	
Umbral	6.67	0.072	
Umbral	6.68	0.072	
Umbral	6.69	0.072	
Umbral	6.7	0.072	
Umbral	6.71	0.072	

Name	Period sec	Acceleration	Damping %
Umbral	6.72	0.071	
Umbral	6.73	0.071	
Umbral	6.74	0.071	
Umbral	6.75	0.071	
Umbral	6.76	0.071	
Umbral	6.77	0.071	
Umbral	6.78	0.071	
Umbral	6.79	0.071	
Umbral	6.8	0.071	
Umbral	6.81	0.07	
Umbral	6.82	0.07	
Umbral	6.83	0.07	
Umbral	6.84	0.07	
Umbral	6.85	0.07	
Umbral	6.86	0.07	
Umbral	6.87	0.07	
Umbral	6.88	0.07	
Umbral	6.89	0.07	
Umbral	6.9	0.07	
Umbral	6.91	0.069	
Umbral	6.92	0.069	
Umbral	6.93	0.069	
Umbral	6.94	0.069	
Umbral	6.95	0.069	
Umbral	6.96	0.069	
Umbral	6.97	0.069	
Umbral	6.98	0.069	
Umbral	6.99	0.069	
Umbral	7	0.069	
Umbral	7.01	0.068	
Umbral	7.02	0.068	
Umbral	7.03	0.068	
Umbral	7.04	0.068	
Umbral	7.05	0.068	
Umbral	7.06	0.068	
Umbral	7.07	0.068	
Umbral	7.08	0.068	
Umbral	7.09	0.068	
Umbral	7.1	0.068	
Umbral	7.11	0.068	
Umbral	7.12	0.067	
Umbral	7.13	0.067	
Umbral	7.14	0.067	
Umbral	7.15	0.067	
Umbral	7.16	0.067	
Umbral	7.17	0.067	
Umbral	7.18	0.067	
Umbral	7.19	0.067	
Umbral	7.2	0.067	
Umbral	7.21	0.067	
Umbral	7.22	0.066	
Umbral	7.23	0.066	
Umbral	7.24	0.066	
Umbral	7.25	0.066	
Umbral	7.26	0.066	
Umbral	7.27	0.066	
Umbral	7.28	0.066	
Umbral	7.29	0.066	
Umbral	7.3	0.066	
Umbral	7.31	0.066	

Name	Period sec	Acceleration	Damping %
Umbral	7.32	0.066	
Umbral	7.33	0.065	
Umbral	7.34	0.065	
Umbral	7.35	0.065	
Umbral	7.36	0.065	
Umbral	7.37	0.065	
Umbral	7.38	0.065	
Umbral	7.39	0.065	
Umbral	7.4	0.065	
Umbral	7.41	0.065	
Umbral	7.42	0.065	
Umbral	7.43	0.065	
Umbral	7.44	0.065	
Umbral	7.45	0.064	
Umbral	7.46	0.064	
Umbral	7.47	0.064	
Umbral	7.48	0.064	
Umbral	7.49	0.064	
Umbral	7.5	0.064	

**4.4 Load Cases**

**Table 4.5 - Load Cases - Summary**

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

**4.5 Load Combinations**

**Table 4.6 - Load Combinations**

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
VIG01	D	1.2	Linear Add	No
VIG01	L	1		No
VIG01	DISX	2		No
VIG01	DISY	0.6		No
VIG02	D	1.2	Linear Add	No
VIG02	L	1		No
VIG02	DISX	0.6		No
VIG02	DISY	2		No
VIG03	D	0.9	Linear Add	No
VIG03	DISX	2		No
VIG03	DISY	0.6		No
VIG04	D	0.9	Linear Add	No
VIG04	DISX	0.6		No
VIG04	DISY	2		No
COL1	D	1.2	Linear Add	No
COL1	L	1		No
COL1	DISX	3		No
COL1	DISY	0.9		No
COL2	D	1.2	Linear Add	No
COL2	L	1		No
COL2	DISX	0.9		No
COL2	DISY	3		No
COL3	D	0.9	Linear Add	No
COL3	DISX	3		No
COL3	DISY	0.9		No
COL4	D	0.9	Linear Add	No
COL4	DISX	0.9		No
COL4	DISY	3		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No

### 5 Analysis Results

This chapter provides analysis results.

#### 5.1 Structure Results

**Table 5.1 - Base Reactions**

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	574.5432	1056.1004	-3217.4419	0	0	0	0
L	0	0	53.76	-64.6649	-301.056	0	0	0	0
LR	0	0	45.92	188.2732	-257.152	0	0	0	0
EX Max	548.781	0	0	0	1789.1262	2637.8352	0	0	0
EY Max	0	551.0487	0	1796.2297	0	3085.8729	0	0	0
DISX Max	171.4941	0	0	0	559.1019	824.3235	0	0	0
DISY Max	0	172.2027	0	561.3218	0	964.3353	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	118.72	344.2139	-664.832	0	0	0	0
DERUX Max	84.6295	0	0	0	275.9424	355.5259	0	0	0
DERUY Max	0	93.8951	0	306.0657	0	525.8124	0	0	0
COMB1	0	0	804.3605	1478.5406	-4504.4187	0	0	0	0
COMB2	0	0	798.4278	1257.9932	-4471.1959	0	0	0	0
COMB3	0	0	816.6838	1503.8927	-4573.4295	0	0	0	0
COMB4	0	0	766.1718	1296.7922	-4290.5623	0	0	0	0
COMB5 Max	171.4941	51.6608	743.2118	1371.0521	-3602.8844	1113.6241	0	0	0
COMB5 Min	-171.4941	-51.6608	743.2118	1034.2591	-4721.0882	-1113.6241	0	0	0
COMB6 Max	51.4482	172.2027	743.2118	1763.9774	-3994.2557	1211.6323	0	0	0
COMB6 Min	-51.4482	-172.2027	743.2118	641.3338	-4329.7169	-1211.6323	0	0	0
COMB7 Max	51.4482	172.2027	517.0889	1511.8122	-2727.9671	1211.6323	0	0	0
COMB7 Min	-51.4482	-172.2027	517.0889	389.1686	-3063.4283	-1211.6323	0	0	0
COMB8 Max	171.4941	51.6608	517.0889	1118.8869	-2336.5958	1113.6241	0	0	0
COMB8 Min	-171.4941	-51.6608	517.0889	782.0939	-3454.7997	-1113.6241	0	0	0
ENVE Max	171.4941	172.2027	816.6838	1763.9774	-2336.5958	1211.6323	0	0	0
ENVE Min	-171.4941	-172.2027	517.0889	389.1686	-4721.0882	-1211.6323	0	0	0
CIM01	0	0	574.5432	1056.1004	-3217.4419	0	0	0	0
CIM02	0	0	628.3032	991.4355	-3518.4979	0	0	0	0
CIM03	0	0	620.4632	1244.3736	-3474.5939	0	0	0	0
CIM04	0	0	649.3032	1148.8066	-3636.0979	0	0	0	0
CIM05 Max	120.0458	36.1626	574.5432	1173.978	-2826.0706	779.5369	0	0	0
CIM05 Min	-120.0458	-36.1626	574.5432	938.2229	-3608.8133	-779.5369	0	0	0
CIM06 Max	36.0138	120.5419	574.5432	1449.0257	-3100.0305	848.1426	0	0	0
CIM06 Min	-36.0138	-120.5419	574.5432	663.1752	-3334.8533	-848.1426	0	0	0
CIM07 Max	90.8919	27.5524	649.3032	1238.6181	-3339.7739	591.1851	0	0	0
CIM07 Min	-90.8919	-27.5524	649.3032	1058.9951	-3932.4219	-591.1851	0	0	0
CIM08 Max	27.4391	91.2674	649.3032	1446.3071	-3546.6416	642.9895	0	0	0
CIM08 Min	-27.4391	-91.2674	649.3032	851.3061	-3725.5542	-642.9895	0	0	0
DER01	0	0	804.3605	1478.5406	-4504.4187	0	0	0	0
DER02	0	0	798.4278	1257.9932	-4471.1959	0	0	0	0
DER03	0	0	816.6838	1503.8927	-4573.4295	0	0	0	0
DER04	0	0	766.1718	1296.7922	-4290.5623	0	0	0	0
DER05 Max	548.781	0	743.2118	1202.6556	-2372.8601	2637.8352	0	0	0
DER05 Min	-548.781	0	743.2118	1202.6556	-5951.1125	-2637.8352	0	0	0
DER06 Max	0	551.0487	743.2118	2998.8852	-4161.9863	3085.8729	0	0	0
DER06 Min	0	-551.0487	743.2118	-593.5741	-4161.9863	-3085.8729	0	0	0
DER07 Max	548.781	0	517.0889	950.4904	-1106.5716	2637.8352	0	0	0
DER07 Min	-548.781	0	517.0889	950.4904	-4684.8239	-2637.8352	0	0	0
DER08 Max	0	551.0487	517.0889	2746.7201	-2895.6977	3085.8729	0	0	0
DER08 Min	0	-551.0487	517.0889	-845.7393	-2895.6977	-3085.8729	0	0	0
DERUD01	0	0	804.3605	1478.5406	-4504.4187	0	0	0	0
DERUD02	0	0	798.4278	1257.9932	-4471.1959	0	0	0	0
DERUD03	0	0	816.6838	1503.8927	-4573.4295	0	0	0	0
DERUD04	0	0	766.1718	1296.7922	-4290.5623	0	0	0	0
DERUD05 Max	84.6295	0	743.2118	1202.6556	-3886.0439	355.5259	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-84.6295	0	743.2118	1202.6556	-4437.9287	-355.5259	0	0	0
DERUD06 Max	0	93.8951	743.2118	1508.7213	-4161.9863	525.8124	0	0	0
DERUD06 Min	0	-93.8951	743.2118	896.5899	-4161.9863	-525.8124	0	0	0
DERUD07 Max	84.6295	0	517.0889	950.4904	-2619.7553	355.5259	0	0	0
DERUD07 Min	-84.6295	0	517.0889	950.4904	-3171.6402	-355.5259	0	0	0
DERUD08 Max	0	93.8951	517.0889	1256.5561	-2895.6977	525.8124	0	0	0
DERUD08 Min	0	-93.8951	517.0889	644.4247	-2895.6977	-525.8124	0	0	0
VIG01 Max	342.9881	103.3216	743.2118	1539.4486	-3043.7824	2227.2482	0	0	0
VIG01 Min	-342.9881	-103.3216	743.2118	865.8625	-5280.1902	-2227.2482	0	0	0
VIG02 Max	102.8964	344.4055	743.2118	2325.2991	-3826.5251	2423.2647	0	0	0
VIG02 Min	-102.8964	-344.4055	743.2118	80.012	-4497.4475	-2423.2647	0	0	0
VIG03 Max	342.9881	103.3216	517.0889	1287.2835	-1777.4939	2227.2482	0	0	0
VIG03 Min	-342.9881	-103.3216	517.0889	613.6973	-4013.9016	-2227.2482	0	0	0
VIG04 Max	102.8964	344.4055	517.0889	2073.1339	-2560.2366	2423.2647	0	0	0
VIG04 Min	-102.8964	-344.4055	517.0889	-172.1531	-3231.1589	-2423.2647	0	0	0
COL1 Max	514.4822	154.9825	743.2118	1707.8452	-2484.6805	3340.8722	0	0	0
COL1 Min	-514.4822	-154.9825	743.2118	697.466	-5839.2921	-3340.8722	0	0	0
COL2 Max	154.3447	516.6082	743.2118	2886.6209	-3658.7946	3634.897	0	0	0
COL2 Min	-154.3447	-516.6082	743.2118	-481.3097	-4665.178	-3634.897	0	0	0
COL3 Max	514.4822	154.9825	517.0889	1455.68	-1218.3919	3340.8722	0	0	0
COL3 Min	-514.4822	-154.9825	517.0889	445.3008	-4573.0035	-3340.8722	0	0	0
COL4 Max	154.3447	516.6082	517.0889	2634.4557	-2392.506	3634.897	0	0	0
COL4 Min	-154.3447	-516.6082	517.0889	-733.4749	-3398.8895	-3634.897	0	0	0
CIM09 Max	120.0458	36.1626	344.7259	751.5378	-1539.0938	779.5369	0	0	0
CIM09 Min	-120.0458	-36.1626	344.7259	515.7827	-2321.8365	-779.5369	0	0	0
CIM10 Max	36.0138	120.5419	344.7259	1026.5855	-1813.0537	848.1426	0	0	0
CIM10 Min	-36.0138	-120.5419	344.7259	240.735	-2047.8766	-848.1426	0	0	0
COMB9	0	0	834.8278	1335.9636	-4675.0359	0	0	0	0
COMB10	0	0	933.1638	1753.3978	-5225.7175	0	0	0	0
COMB11	0	0	802.5718	1374.7625	-4494.4023	0	0	0	0
DER09	0	0	834.8278	1335.9636	-4675.0359	0	0	0	0
DER10	0	0	933.1638	1753.3978	-5225.7175	0	0	0	0
DER11	0	0	802.5718	1374.7625	-4494.4023	0	0	0	0
DERUD09	0	0	834.8278	1335.9636	-4675.0359	0	0	0	0
DERUD10	0	0	933.1638	1753.3978	-5225.7175	0	0	0	0
DERUD11	0	0	802.5718	1374.7625	-4494.4023	0	0	0	0
CIM11	0	0	693.2632	1400.3143	-3882.2739	0	0	0	0
CIM12	0	0	703.9032	1265.7621	-3941.8579	0	0	0	0
CIM13 Max	90.8919	27.5524	703.9032	1355.5736	-3645.5339	591.1851	0	0	0
CIM13 Min	-90.8919	-27.5524	703.9032	1175.9507	-4238.1819	-591.1851	0	0	0
CIM14 Max	27.4391	91.2674	703.9032	1563.2627	-3852.4016	642.9895	0	0	0
CIM14 Min	-27.4391	-91.2674	703.9032	968.2616	-4031.3142	-642.9895	0	0	0
CIM15	0	0	344.7259	633.6603	-1930.4652	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	41809.44	41809.44	5.6	-0.7098	41809.44	41809.44	5.6	-0.7098	5.6	3.2149

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.1	0	1	5.6	-0.7098	3.25
N1	D1	L	0	-0.3	0	1	5.6	-0.7098	3.25
N1	D1	LR	0	0.003994	0	1	5.6	-0.7098	3.25
N1	D1	EX Max	13.6	0	0.001397	1	5.6	-0.7098	3.25
N1	D1	EY Max	0	9.9	0	1	5.6	-0.7098	3.25
N1	D1	DISX Max	4.3	0	0.000437	1	5.6	-0.7098	3.25
N1	D1	DISY Max	0	3.1	0	1	5.6	-0.7098	3.25



Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	W	0	0	0	1	5.6	-0.7098	3.25
N1	D1	G	0	-0.1	0	1	5.6	-0.7098	3.25
N1	D1	DERUX Max	2.2	0	0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUY Max	0	1.7	0	1	5.6	-0.7098	3.25
N1	D1	COMB1	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	COMB2	0	-1.8	0	1	5.6	-0.7098	3.25
N1	D1	COMB3	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	COMB4	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	COMB5 Max	4.3	-0.7	0.000437	1	5.6	-0.7098	3.25
N1	D1	COMB5 Min	-4.3	-2.6	-0.000437	1	5.6	-0.7098	3.25
N1	D1	COMB6 Max	1.3	1.4	0.000131	1	5.6	-0.7098	3.25
N1	D1	COMB6 Min	-1.3	-4.7	-0.000131	1	5.6	-0.7098	3.25
N1	D1	COMB7 Max	1.3	2.1	0.000131	1	5.6	-0.7098	3.25
N1	D1	COMB7 Min	-1.3	-4.1	-0.000131	1	5.6	-0.7098	3.25
N1	D1	COMB8 Max	4.3	-0.1	0.000437	1	5.6	-0.7098	3.25
N1	D1	COMB8 Min	-4.3	-2	-0.000437	1	5.6	-0.7098	3.25
N1	D1	ENVE Max	4.3	2.1	0.000437	1	5.6	-0.7098	3.25
N1	D1	ENVE Min	-4.3	-4.7	-0.000437	1	5.6	-0.7098	3.25
N1	D1	CIM01	0	-1.1	0	1	5.6	-0.7098	3.25
N1	D1	CIM02	0	-1.4	0	1	5.6	-0.7098	3.25
N1	D1	CIM03	0	-1.1	0	1	5.6	-0.7098	3.25
N1	D1	CIM04	0	-1.3	0	1	5.6	-0.7098	3.25
N1	D1	CIM05 Max	3	-0.5	0.000306	1	5.6	-0.7098	3.25
N1	D1	CIM05 Min	-3	-1.8	-0.000306	1	5.6	-0.7098	3.25
N1	D1	CIM06 Max	0.9	1	9.2E-05	1	5.6	-0.7098	3.25
N1	D1	CIM06 Min	-0.9	-3.3	-9.2E-05	1	5.6	-0.7098	3.25
N1	D1	CIM07 Max	2.3	-0.9	0.000231	1	5.6	-0.7098	3.25
N1	D1	CIM07 Min	-2.3	-1.8	-0.000231	1	5.6	-0.7098	3.25
N1	D1	CIM08 Max	0.7	0.3	7E-05	1	5.6	-0.7098	3.25
N1	D1	CIM08 Min	-0.7	-3	-7E-05	1	5.6	-0.7098	3.25
N1	D1	DER01	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DER02	0	-1.8	0	1	5.6	-0.7098	3.25
N1	D1	DER03	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DER04	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DER05 Max	13.6	-1.6	0.001397	1	5.6	-0.7098	3.25
N1	D1	DER05 Min	-13.6	-1.6	-0.001397	1	5.6	-0.7098	3.25
N1	D1	DER06 Max	0	8.3	0	1	5.6	-0.7098	3.25
N1	D1	DER06 Min	0	-11.6	0	1	5.6	-0.7098	3.25
N1	D1	DER07 Max	13.6	-1	0.001397	1	5.6	-0.7098	3.25
N1	D1	DER07 Min	-13.6	-1	-0.001397	1	5.6	-0.7098	3.25
N1	D1	DER08 Max	0	8.9	0	1	5.6	-0.7098	3.25
N1	D1	DER08 Min	0	-10.9	0	1	5.6	-0.7098	3.25
N1	D1	DERUD01	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DERUD02	0	-1.8	0	1	5.6	-0.7098	3.25
N1	D1	DERUD03	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DERUD04	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DERUD05 Max	2.2	-1.6	0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUD05 Min	-2.2	-1.6	-0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUD06 Max	0	0.04009	0	1	5.6	-0.7098	3.25
N1	D1	DERUD06 Min	0	-3.3	0	1	5.6	-0.7098	3.25
N1	D1	DERUD07 Max	2.2	-1	0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUD07 Min	-2.2	-1	-0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUD08 Max	0	0.7	0	1	5.6	-0.7098	3.25
N1	D1	DERUD08 Min	0	-2.7	0	1	5.6	-0.7098	3.25
N1	D1	VIG01 Max	8.5	0.2	0.000873	1	5.6	-0.7098	3.25
N1	D1	VIG01 Min	-8.5	-3.5	-0.000873	1	5.6	-0.7098	3.25
N1	D1	VIG02 Max	2.6	4.5	0.000262	1	5.6	-0.7098	3.25
N1	D1	VIG02 Min	-2.6	-7.8	-0.000262	1	5.6	-0.7098	3.25
N1	D1	VIG03 Max	8.5	0.8	0.000873	1	5.6	-0.7098	3.25
N1	D1	VIG03 Min	-8.5	-2.9	-0.000873	1	5.6	-0.7098	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	VIG04 Max	2.6	5.2	0.000262	1	5.6	-0.7098	3.25
N1	D1	VIG04 Min	-2.6	-7.2	-0.000262	1	5.6	-0.7098	3.25
N1	D1	COL1 Max	12.8	1.1	0.00131	1	5.6	-0.7098	3.25
N1	D1	COL1 Min	-12.8	-4.4	-0.00131	1	5.6	-0.7098	3.25
N1	D1	COL2 Max	3.8	7.6	0.000393	1	5.6	-0.7098	3.25
N1	D1	COL2 Min	-3.8	-10.9	-0.000393	1	5.6	-0.7098	3.25
N1	D1	COL3 Max	12.8	1.8	0.00131	1	5.6	-0.7098	3.25
N1	D1	COL3 Min	-12.8	-3.8	-0.00131	1	5.6	-0.7098	3.25
N1	D1	COL4 Max	3.8	8.3	0.000393	1	5.6	-0.7098	3.25
N1	D1	COL4 Min	-3.8	-10.3	-0.000393	1	5.6	-0.7098	3.25
N1	D1	CIM09 Max	3	-0.03091	0.000306	1	5.6	-0.7098	3.25
N1	D1	CIM09 Min	-3	-1.3	-0.000306	1	5.6	-0.7098	3.25
N1	D1	CIM10 Max	0.9	1.5	9.2E-05	1	5.6	-0.7098	3.25
N1	D1	CIM10 Min	-0.9	-2.9	-9.2E-05	1	5.6	-0.7098	3.25
N1	D1	COMB9	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	COMB10	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	COMB11	0	-1.7	0	1	5.6	-0.7098	3.25
N1	D1	DER09	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	DER10	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	DER11	0	-1.7	0	1	5.6	-0.7098	3.25
N1	D1	DERUD09	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	DERUD10	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	DERUD11	0	-1.7	0	1	5.6	-0.7098	3.25
N1	D1	CIM11	0	-1.3	0	1	5.6	-0.7098	3.25
N1	D1	CIM12	0	-1.5	0	1	5.6	-0.7098	3.25
N1	D1	CIM13 Max	2.3	-1	0.000231	1	5.6	-0.7098	3.25
N1	D1	CIM13 Min	-2.3	-1.9	-0.000231	1	5.6	-0.7098	3.25
N1	D1	CIM14 Max	0.7	0.2	7E-05	1	5.6	-0.7098	3.25
N1	D1	CIM14 Min	-0.7	-3.1	-7E-05	1	5.6	-0.7098	3.25
N1	D1	CIM15	0	-0.7	0	1	5.6	-0.7098	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.1	1.1	1
N1	L	Y	0.3	0.3	1
N1	LR	Y	0.003994	0.003994	1
N1	EX Max	X	12.8	12.8	1
N1	EX Max	Y	7.8	3.9	2
N1	EY Max	Y	9.9	9.9	1
N1	DISX Max	X	4	4	1
N1	DISX Max	Y	2.4	1.2	2
N1	DISY Max	Y	3.1	3.1	1
N1	G	Y	0.1	0.1	1
N1	DERUX Max	X	2.1	2.1	1
N1	DERUX Max	Y	1.2	0.6	2
N1	DERUY Max	Y	1.7	1.7	1
N1	COMB1	Y	1.6	1.6	1
N1	COMB2	Y	1.8	1.8	1
N1	COMB3	Y	1.6	1.6	1
N1	COMB4	Y	1.6	1.6	1
N1	COMB5 Max	X	4	4	1
N1	COMB5 Max	Y	1.7	0.5	3.432
N1	COMB5 Min	X	4	4	1
N1	COMB5 Min	Y	5	3.8	1.322
N1	COMB6 Max	X	1.2	1.2	1
N1	COMB6 Max	Y	2.2	1.8	1.202
N1	COMB6 Min	X	1.2	1.2	1
N1	COMB6 Min	Y	5.5	5.1	1.072

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	COMB7 Max	X	1.2	1.2	1
N1	COMB7 Max	Y	2.8	2.4	1.15
N1	COMB7 Min	X	1.2	1.2	1
N1	COMB7 Min	Y	4.9	4.5	1.082
N1	COMB8 Max	X	4	4	1
N1	COMB8 Max	Y	2.4	1.1	2.082
N1	COMB8 Min	X	4	4	1
N1	COMB8 Min	Y	4.4	3.2	1.385
N1	ENVE Max	X	4	4	1
N1	ENVE Max	Y	2.8	2.4	1.15
N1	ENVE Min	X	4	4	1
N1	ENVE Min	Y	5.5	5.1	1.072
N1	CIM01	Y	1.1	1.1	1
N1	CIM02	Y	1.4	1.4	1
N1	CIM03	Y	1.1	1.1	1
N1	CIM04	Y	1.3	1.3	1
N1	CIM05 Max	X	2.8	2.8	1
N1	CIM05 Max	Y	1.2	0.4	3.31
N1	CIM05 Min	X	2.8	2.8	1
N1	CIM05 Min	Y	3.5	2.6	1.324
N1	CIM06 Max	X	0.8	0.8	1
N1	CIM06 Max	Y	1.5	1.3	1.199
N1	CIM06 Min	X	0.8	0.8	1
N1	CIM06 Min	Y	3.8	3.6	1.072
N1	CIM07 Max	X	2.1	2.1	1
N1	CIM07 Min	X	2.1	2.1	1
N1	CIM07 Min	Y	3.1	2.5	1.26
N1	CIM08 Max	X	0.6	0.6	1
N1	CIM08 Max	Y	0.7	0.5	1.399
N1	CIM08 Min	X	0.6	0.6	1
N1	CIM08 Min	Y	3.4	3.2	1.061
N1	DER01	Y	1.6	1.6	1
N1	DER02	Y	1.8	1.8	1
N1	DER03	Y	1.6	1.6	1
N1	DER04	Y	1.6	1.6	1
N1	DER05 Max	X	12.8	12.8	1
N1	DER05 Max	Y	6.2	2.3	2.729
N1	DER05 Min	X	12.8	12.8	1
N1	DER05 Min	Y	9.5	5.6	1.703
N1	DER06 Max	Y	8.3	8.3	1
N1	DER06 Min	Y	11.6	11.6	1
N1	DER07 Max	X	12.8	12.8	1
N1	DER07 Max	Y	6.8	2.9	2.354
N1	DER07 Min	X	12.8	12.8	1
N1	DER07 Min	Y	8.8	4.9	1.793
N1	DER08 Max	Y	8.9	8.9	1
N1	DER08 Min	Y	10.9	10.9	1
N1	DERUD01	Y	1.6	1.6	1
N1	DERUD02	Y	1.8	1.8	1
N1	DERUD03	Y	1.6	1.6	1
N1	DERUD04	Y	1.6	1.6	1
N1	DERUD05 Max	X	2.1	2.1	1
N1	DERUD05 Max	Y	1.6	1	1.589
N1	DERUD05 Min	X	2.1	2.1	1
N1	DERUD05 Min	Y	2.9	2.3	1.27
N1	DERUD06 Max	Y	0.04009	0.04009	1
N1	DERUD06 Min	Y	3.3	3.3	1
N1	DERUD07 Max	X	2.1	2.1	1
N1	DERUD07 Max	Y	1	0.4	2.488
N1	DERUD07 Min	X	2.1	2.1	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD07 Min	Y	2.2	1.6	1.374
N1	DERUD08 Max	Y	0.7	0.7	1
N1	DERUD08 Min	Y	2.7	2.7	1
N1	VIG01 Max	X	8	8	1
N1	VIG01 Max	Y	5.1	2.7	1.921
N1	VIG01 Min	X	8	8	1
N1	VIG01 Min	Y	8.4	6	1.411
N1	VIG02 Max	X	2.4	2.4	1
N1	VIG02 Max	Y	6	5.3	1.139
N1	VIG02 Min	X	2.4	2.4	1
N1	VIG02 Min	Y	9.3	8.6	1.085
N1	VIG03 Max	X	8	8	1
N1	VIG03 Max	Y	5.7	3.3	1.745
N1	VIG03 Min	X	8	8	1
N1	VIG03 Min	Y	7.8	5.3	1.459
N1	VIG04 Max	X	2.4	2.4	1
N1	VIG04 Max	Y	6.6	5.9	1.124
N1	VIG04 Min	X	2.4	2.4	1
N1	VIG04 Min	Y	8.7	8	1.092
N1	COL1 Max	X	12	12	1
N1	COL1 Max	Y	8.5	4.8	1.763
N1	COL1 Min	X	12	12	1
N1	COL1 Min	Y	11.8	8.1	1.452
N1	COL2 Max	X	3.6	3.6	1
N1	COL2 Max	Y	9.8	8.7	1.126
N1	COL2 Min	X	3.6	3.6	1
N1	COL2 Min	Y	13.1	12	1.091
N1	COL3 Max	X	12	12	1
N1	COL3 Max	Y	9.1	5.4	1.675
N1	COL3 Min	X	12	12	1
N1	COL3 Min	Y	11.1	7.5	1.49
N1	COL4 Max	X	3.6	3.6	1
N1	COL4 Max	Y	10.5	9.4	1.117
N1	COL4 Min	X	3.6	3.6	1
N1	COL4 Min	Y	12.5	11.4	1.096
N1	CIM09 Max	X	2.8	2.8	1
N1	CIM09 Max	Y	1.7	0.8	2.037
N1	CIM09 Min	X	2.8	2.8	1
N1	CIM09 Min	Y	3	2.2	1.391
N1	CIM10 Max	X	0.8	0.8	1
N1	CIM10 Max	Y	2	1.7	1.147
N1	CIM10 Min	X	0.8	0.8	1
N1	CIM10 Min	Y	3.4	3.1	1.083
N1	COMB9	Y	1.9	1.9	1
N1	COMB10	Y	1.9	1.9	1
N1	COMB11	Y	1.7	1.7	1
N1	DER09	Y	1.9	1.9	1
N1	DER10	Y	1.9	1.9	1
N1	DER11	Y	1.7	1.7	1
N1	DERUD09	Y	1.9	1.9	1
N1	DERUD10	Y	1.9	1.9	1
N1	DERUD11	Y	1.7	1.7	1
N1	CIM11	Y	1.3	1.3	1
N1	CIM12	Y	1.5	1.5	1
N1	CIM13 Max	X	2.1	2.1	1
N1	CIM13 Max	Y	1	0.3	3.102
N1	CIM13 Min	X	2.1	2.1	1
N1	CIM13 Min	Y	3.2	2.6	1.25
N1	CIM14 Max	X	0.6	0.6	1
N1	CIM14 Max	Y	0.6	0.4	1.507

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	CIM14 Min	X	0.6	0.6	1
N1	CIM14 Min	Y	3.5	3.3	1.059
N1	CIM15	Y	0.7	0.7	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.00035	4	5.6	8.2	3.25
N1	L	Y	8.8E-05	1	0	0	3.25
N1	LR	Y	2E-06	4	5.6	8.2	3.25
N1	EX Max	X	0.003931	5	11.2	0	3.25
N1	EX Max	Y	0.002407	1	0	0	3.25
N1	EY Max	Y	0.003051	5	11.2	0	3.25
N1	DISX Max	X	0.001229	5	11.2	0	3.25
N1	DISX Max	Y	0.000752	1	0	0	3.25
N1	DISY Max	Y	0.000953	5	11.2	0	3.25
N1	G	Y	4.7E-05	4	5.6	8.2	3.25
N1	DERUX Max	X	0.000632	5	11.2	0	3.25
N1	DERUX Max	Y	0.000376	1	0	0	3.25
N1	DERUY Max	Y	0.00052	5	11.2	0	3.25
N1	COMB1	Y	0.00049	4	5.6	8.2	3.25
N1	COMB2	Y	0.00056	1	0	0	3.25
N1	COMB3	Y	0.000508	4	5.6	8.2	3.25
N1	COMB4	Y	0.000507	1	0	0	3.25
N1	COMB5 Max	X	0.001229	5	11.2	0	3.25
N1	COMB5 Max	Y	0.000531	1	0	0	3.25
N1	COMB5 Min	X	0.001229	5	11.2	0	3.25
N1	COMB5 Min	Y	0.001546	1	0	0	3.25
N1	COMB6 Max	X	0.000369	5	11.2	0	3.25
N1	COMB6 Max	Y	0.000672	5	11.2	0	3.25
N1	COMB6 Min	X	0.000369	5	11.2	0	3.25
N1	COMB6 Min	Y	0.001687	1	0	0	3.25
N1	COMB7 Max	X	0.000369	5	11.2	0	3.25
N1	COMB7 Max	Y	0.000865	5	11.2	0	3.25
N1	COMB7 Min	X	0.000369	5	11.2	0	3.25
N1	COMB7 Min	Y	0.001494	1	0	0	3.25
N1	COMB8 Max	X	0.001229	5	11.2	0	3.25
N1	COMB8 Max	Y	0.000724	1	0	0	3.25
N1	COMB8 Min	X	0.001229	5	11.2	0	3.25
N1	COMB8 Min	Y	0.001353	1	0	0	3.25
N1	ENVE Max	X	0.001229	5	11.2	0	3.25
N1	ENVE Max	Y	0.000865	5	11.2	0	3.25
N1	ENVE Min	X	0.001229	5	11.2	0	3.25
N1	ENVE Min	Y	0.001687	1	0	0	3.25
N1	CIM01	Y	0.00035	4	5.6	8.2	3.25
N1	CIM02	Y	0.000438	1	0	0	3.25
N1	CIM03	Y	0.000352	4	5.6	8.2	3.25
N1	CIM04	Y	0.000415	4	5.6	8.2	3.25
N1	CIM05 Max	X	0.00086	5	11.2	0	3.25
N1	CIM05 Max	Y	0.000377	1	0	0	3.25
N1	CIM05 Min	X	0.00086	5	11.2	0	3.25
N1	CIM05 Min	Y	0.001076	1	0	0	3.25
N1	CIM06 Max	X	0.000258	5	11.2	0	3.25
N1	CIM06 Max	Y	0.000476	5	11.2	0	3.25
N1	CIM06 Min	X	0.000258	5	11.2	0	3.25
N1	CIM06 Min	Y	0.001175	1	0	0	3.25
N1	CIM07 Max	X	0.000651	5	11.2	0	3.25
N1	CIM07 Max	Y	0.000264	4	5.6	8.2	3.25
N1	CIM07 Min	X	0.000651	5	11.2	0	3.25
N1	CIM07 Min	Y	0.000966	1	0	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM08 Max	X	0.000197	5	11.2	0	3.25
N1	CIM08 Max	Y	0.000211	5	11.2	0	3.25
N1	CIM08 Min	X	0.000197	5	11.2	0	3.25
N1	CIM08 Min	Y	0.00104	1	0	0	3.25
N1	DER01	Y	0.00049	4	5.6	8.2	3.25
N1	DER02	Y	0.00056	1	0	0	3.25
N1	DER03	Y	0.000508	4	5.6	8.2	3.25
N1	DER04	Y	0.000507	1	0	0	3.25
N1	DER05 Max	X	0.003931	5	11.2	0	3.25
N1	DER05 Max	Y	0.0019	1	0	0	3.25
N1	DER05 Min	X	0.003931	5	11.2	0	3.25
N1	DER05 Min	Y	0.002915	1	0	0	3.25
N1	DER06 Max	Y	0.002543	5	11.2	0	3.25
N1	DER06 Min	Y	0.003558	5	11.2	0	3.25
N1	DER07 Max	X	0.003931	5	11.2	0	3.25
N1	DER07 Max	Y	0.002093	1	0	0	3.25
N1	DER07 Min	X	0.003931	5	11.2	0	3.25
N1	DER07 Min	Y	0.002722	1	0	0	3.25
N1	DER08 Max	Y	0.002736	5	11.2	0	3.25
N1	DER08 Min	Y	0.003365	5	11.2	0	3.25
N1	DERUD01	Y	0.00049	4	5.6	8.2	3.25
N1	DERUD02	Y	0.00056	1	0	0	3.25
N1	DERUD03	Y	0.000508	4	5.6	8.2	3.25
N1	DERUD04	Y	0.000507	1	0	0	3.25
N1	DERUD05 Max	X	0.000632	5	11.2	0	3.25
N1	DERUD05 Max	Y	0.000508	3	5.6	0	3.25
N1	DERUD05 Min	X	0.000632	5	11.2	0	3.25
N1	DERUD05 Min	Y	0.000884	1	0	0	3.25
N1	DERUD06 Max	Y	1.2E-05	5	11.2	0	3.25
N1	DERUD06 Min	Y	0.001027	5	11.2	0	3.25
N1	DERUD07 Max	X	0.000632	5	11.2	0	3.25
N1	DERUD07 Max	Y	0.000315	4	5.6	8.2	3.25
N1	DERUD07 Min	X	0.000632	5	11.2	0	3.25
N1	DERUD07 Min	Y	0.000691	1	0	0	3.25
N1	DERUD08 Max	Y	0.000205	5	11.2	0	3.25
N1	DERUD08 Min	Y	0.000834	5	11.2	0	3.25
N1	VIG01 Max	X	0.002457	5	11.2	0	3.25
N1	VIG01 Max	Y	0.001569	1	0	0	3.25
N1	VIG01 Min	X	0.002457	5	11.2	0	3.25
N1	VIG01 Min	Y	0.002584	1	0	0	3.25
N1	VIG02 Max	X	0.000737	5	11.2	0	3.25
N1	VIG02 Max	Y	0.001851	5	11.2	0	3.25
N1	VIG02 Min	X	0.000737	5	11.2	0	3.25
N1	VIG02 Min	Y	0.002866	1	0	0	3.25
N1	VIG03 Max	X	0.002457	5	11.2	0	3.25
N1	VIG03 Max	Y	0.001762	1	0	0	3.25
N1	VIG03 Min	X	0.002457	5	11.2	0	3.25
N1	VIG03 Min	Y	0.002391	1	0	0	3.25
N1	VIG04 Max	X	0.000737	5	11.2	0	3.25
N1	VIG04 Max	Y	0.002044	5	11.2	0	3.25
N1	VIG04 Min	X	0.000737	5	11.2	0	3.25
N1	VIG04 Min	Y	0.002673	1	0	0	3.25
N1	COL1 Max	X	0.003686	5	11.2	0	3.25
N1	COL1 Max	Y	0.002607	1	0	0	3.25
N1	COL1 Min	X	0.003686	5	11.2	0	3.25
N1	COL1 Min	Y	0.003623	1	0	0	3.25
N1	COL2 Max	X	0.001106	5	11.2	0	3.25
N1	COL2 Max	Y	0.00303	5	11.2	0	3.25
N1	COL2 Min	X	0.001106	5	11.2	0	3.25
N1	COL2 Min	Y	0.004045	1	0	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	COL3 Max	X	0.003686	5	11.2	0	3.25
N1	COL3 Max	Y	0.0028	1	0	0	3.25
N1	COL3 Min	X	0.003686	5	11.2	0	3.25
N1	COL3 Min	Y	0.00343	1	0	0	3.25
N1	COL4 Max	X	0.001106	5	11.2	0	3.25
N1	COL4 Max	Y	0.003223	5	11.2	0	3.25
N1	COL4 Min	X	0.001106	5	11.2	0	3.25
N1	COL4 Min	Y	0.003852	1	0	0	3.25
N1	CIM09 Max	X	0.00086	5	11.2	0	3.25
N1	CIM09 Max	Y	0.000517	1	0	0	3.25
N1	CIM09 Min	X	0.00086	5	11.2	0	3.25
N1	CIM09 Min	Y	0.000937	1	0	0	3.25
N1	CIM10 Max	X	0.000258	5	11.2	0	3.25
N1	CIM10 Max	Y	0.000616	5	11.2	0	3.25
N1	CIM10 Min	X	0.000258	5	11.2	0	3.25
N1	CIM10 Min	Y	0.001035	1	0	0	3.25
N1	COMB9	Y	0.000581	1	0	0	3.25
N1	COMB10	Y	0.00058	4	5.6	8.2	3.25
N1	COMB11	Y	0.000528	4	5.6	8.2	3.25
N1	DER09	Y	0.000581	1	0	0	3.25
N1	DER10	Y	0.00058	4	5.6	8.2	3.25
N1	DER11	Y	0.000528	4	5.6	8.2	3.25
N1	DERUD09	Y	0.000581	1	0	0	3.25
N1	DERUD10	Y	0.00058	4	5.6	8.2	3.25
N1	DERUD11	Y	0.000528	4	5.6	8.2	3.25
N1	CIM11	Y	0.000396	4	5.6	8.2	3.25
N1	CIM12	Y	0.000449	4	5.6	8.2	3.25
N1	CIM13 Max	X	0.000651	5	11.2	0	3.25
N1	CIM13 Max	Y	0.000297	4	5.6	8.2	3.25
N1	CIM13 Min	X	0.000651	5	11.2	0	3.25
N1	CIM13 Min	Y	0.000998	1	0	0	3.25
N1	CIM14 Max	X	0.000197	5	11.2	0	3.25
N1	CIM14 Max	Y	0.000179	5	11.2	0	3.25
N1	CIM14 Min	X	0.000197	5	11.2	0	3.25
N1	CIM14 Min	Y	0.001072	1	0	0	3.25
N1	CIM15	Y	0.00021	4	5.6	8.2	3.25

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	D	Y	1.1	1.1	1.001
N1	L	Y	0.3	0.3	1.015
N1	LR	Y	0.006497	0.001251	5.191
N1	EX Max	X	12.8	9.6	1.333
N1	EX Max	Y	7.8	3.9	2
N1	EY Max	Y	9.9	9.9	1.006
N1	DISX Max	X	4	3	1.333
N1	DISX Max	Y	2.4	1.2	2
N1	DISY Max	Y	3.1	3.1	1.006
N1	G	Y	0.2	0.1	1.058
N1	DERUX Max	X	2.1	1.4	1.423
N1	DERUX Max	Y	1.2	0.6	2
N1	DERUY Max	Y	1.7	1.7	1.006
N1	COMB1	Y	1.6	1.6	1.001
N1	COMB2	Y	1.8	1.8	1.003
N1	COMB3	Y	1.7	1.6	1.003
N1	COMB4	Y	1.6	1.6	1.002
N1	COMB5 Max	X	4	3	1.334
N1	COMB5 Max	Y	1.7	0.5	3.432
N1	COMB5 Min	X	4	3	1.334

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	COMB5 Min	Y	5	3.8	1.324
N1	COMB6 Max	X	1.2	0.9	1.336
N1	COMB6 Max	Y	2.2	1.8	1.207
N1	COMB6 Min	X	1.2	0.9	1.336
N1	COMB6 Min	Y	5.5	5.1	1.075
N1	COMB7 Max	X	1.2	0.9	1.335
N1	COMB7 Max	Y	2.8	2.4	1.155
N1	COMB7 Min	X	1.2	0.9	1.335
N1	COMB7 Min	Y	4.9	4.5	1.084
N1	COMB8 Max	X	4	3	1.334
N1	COMB8 Max	Y	2.4	1.1	2.089
N1	COMB8 Min	X	4	3	1.334
N1	COMB8 Min	Y	4.4	3.2	1.386
N1	ENVE Max	X	4	3	1.334
N1	ENVE Max	Y	2.8	2.4	1.155
N1	ENVE Min	X	4	3	1.334
N1	ENVE Min	Y	5.5	5.1	1.075
N1	CIM01	Y	1.1	1.1	1.001
N1	CIM02	Y	1.4	1.4	1.003
N1	CIM03	Y	1.1	1.1	1.005
N1	CIM04	Y	1.3	1.3	1.001
N1	CIM05 Max	X	2.8	2.1	1.334
N1	CIM05 Max	Y	1.2	0.4	3.333
N1	CIM05 Min	X	2.8	2.1	1.334
N1	CIM05 Min	Y	3.5	2.6	1.325
N1	CIM06 Max	X	0.8	0.6	1.337
N1	CIM06 Max	Y	1.5	1.3	1.206
N1	CIM06 Min	X	0.8	0.6	1.337
N1	CIM06 Min	Y	3.8	3.6	1.074
N1	CIM07 Max	X	2.1	1.6	1.335
N1	CIM07 Max	Y	0.9	0.2	4.148
N1	CIM07 Min	X	2.1	1.6	1.335
N1	CIM07 Min	Y	3.1	2.5	1.26
N1	CIM08 Max	X	0.6	0.5	1.338
N1	CIM08 Max	Y	0.7	0.5	1.419
N1	CIM08 Min	X	0.6	0.5	1.338
N1	CIM08 Min	Y	3.4	3.2	1.063
N1	DER01	Y	1.6	1.6	1.001
N1	DER02	Y	1.8	1.8	1.003
N1	DER03	Y	1.7	1.6	1.003
N1	DER04	Y	1.6	1.6	1.002
N1	DER05 Max	X	12.8	9.6	1.333
N1	DER05 Max	Y	6.2	2.3	2.729
N1	DER05 Min	X	12.8	9.6	1.333
N1	DER05 Min	Y	9.5	5.6	1.705
N1	DER06 Max	Y	8.3	8.2	1.006
N1	DER06 Min	Y	11.6	11.5	1.005
N1	DER07 Max	X	12.8	9.6	1.333
N1	DER07 Max	Y	6.8	2.9	2.354
N1	DER07 Min	X	12.8	9.6	1.333
N1	DER07 Min	Y	8.8	4.9	1.793
N1	DER08 Max	Y	8.9	8.8	1.006
N1	DER08 Min	Y	10.9	10.9	1.005
N1	DERUD01	Y	1.6	1.6	1.001
N1	DERUD02	Y	1.8	1.8	1.003
N1	DERUD03	Y	1.7	1.6	1.003
N1	DERUD04	Y	1.6	1.6	1.002
N1	DERUD05 Max	X	2.1	1.4	1.425
N1	DERUD05 Max	Y	1.6	1	1.589
N1	DERUD05 Min	X	2.1	1.4	1.425



Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	DERUD05 Min	Y	2.9	2.3	1.273
N1	DERUD06 Max	Y	0.04009	0.03496	1.147
N1	DERUD06 Min	Y	3.3	3.3	1.004
N1	DERUD07 Max	X	2.1	1.4	1.424
N1	DERUD07 Max	Y	1	0.4	2.488
N1	DERUD07 Min	X	2.1	1.4	1.424
N1	DERUD07 Min	Y	2.2	1.6	1.374
N1	DERUD08 Max	Y	0.7	0.7	1.014
N1	DERUD08 Min	Y	2.7	2.7	1.004
N1	VIG01 Max	X	8	6	1.334
N1	VIG01 Max	Y	5.1	2.7	1.923
N1	VIG01 Min	X	8	6	1.334
N1	VIG01 Min	Y	8.4	5.9	1.413
N1	VIG02 Max	X	2.4	1.8	1.334
N1	VIG02 Max	Y	6	5.3	1.143
N1	VIG02 Min	X	2.4	1.8	1.334
N1	VIG02 Min	Y	9.3	8.6	1.089
N1	VIG03 Max	X	8	6	1.333
N1	VIG03 Max	Y	5.7	3.3	1.749
N1	VIG03 Min	X	8	6	1.333
N1	VIG03 Min	Y	7.8	5.3	1.461
N1	VIG04 Max	X	2.4	1.8	1.334
N1	VIG04 Max	Y	6.6	5.9	1.128
N1	VIG04 Min	X	2.4	1.8	1.334
N1	VIG04 Min	Y	8.7	7.9	1.095
N1	COL1 Max	X	12	9	1.333
N1	COL1 Max	Y	8.5	4.8	1.765
N1	COL1 Min	X	12	9	1.333
N1	COL1 Min	Y	11.8	8.1	1.455
N1	COL2 Max	X	3.6	2.7	1.334
N1	COL2 Max	Y	9.8	8.7	1.13
N1	COL2 Min	X	3.6	2.7	1.334
N1	COL2 Min	Y	13.1	12	1.095
N1	COL3 Max	X	12	9	1.333
N1	COL3 Max	Y	9.1	5.4	1.678
N1	COL3 Min	X	12	9	1.333
N1	COL3 Min	Y	11.1	7.5	1.492
N1	COL4 Max	X	3.6	2.7	1.333
N1	COL4 Max	Y	10.5	9.3	1.121
N1	COL4 Min	X	3.6	2.7	1.333
N1	COL4 Min	Y	12.5	11.4	1.1
N1	CIM09 Max	X	2.8	2.1	1.334
N1	CIM09 Max	Y	1.7	0.8	2.044
N1	CIM09 Min	X	2.8	2.1	1.334
N1	CIM09 Min	Y	3	2.2	1.392
N1	CIM10 Max	X	0.8	0.6	1.335
N1	CIM10 Max	Y	2	1.7	1.152
N1	CIM10 Min	X	0.8	0.6	1.335
N1	CIM10 Min	Y	3.4	3.1	1.085
N1	COMB9	Y	1.9	1.9	1.002
N1	COMB10	Y	1.9	1.9	1.005
N1	COMB11	Y	1.7	1.7	1.001
N1	DER09	Y	1.9	1.9	1.002
N1	DER10	Y	1.9	1.9	1.005
N1	DER11	Y	1.7	1.7	1.001
N1	DERUD09	Y	1.9	1.9	1.002
N1	DERUD10	Y	1.9	1.9	1.005
N1	DERUD11	Y	1.7	1.7	1.001
N1	CIM11	Y	1.3	1.3	1.007
N1	CIM12	Y	1.5	1.5	1.002

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM13 Max	X	2.1	1.6	1.335
N1	CIM13 Max	Y	1	0.3	3.084
N1	CIM13 Min	X	2.1	1.6	1.335
N1	CIM13 Min	Y	3.2	2.6	1.25
N1	CIM14 Max	X	0.6	0.5	1.338
N1	CIM14 Max	Y	0.6	0.4	1.543
N1	CIM14 Min	X	0.6	0.5	1.338
N1	CIM14 Min	Y	3.5	3.3	1.06
N1	CIM15	Y	0.7	0.7	1.001

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	501.036	0	0	0	755.3318	-2805.8016
N1	D	Bottom	574.5432	0	0	0	1056.1004	-3217.4419
N1	L	Top	53.76	0	0	0	-64.512	-301.056
N1	L	Bottom	53.76	0	0	0	-64.6649	-301.056
N1	LR	Top	45.92	0	0	0	188.272	-257.152
N1	LR	Bottom	45.92	0	0	0	188.2732	-257.152
N1	EX Max	Top	0	548.781	0	2637.8352	0	0.0002
N1	EX Max	Bottom	0	548.781	0	2637.8352	0	1789.1262
N1	EY Max	Top	0	0	551.0487	3085.8729	1.563E-05	0
N1	EY Max	Bottom	0	0	551.0487	3085.8729	1796.2297	0
N1	DISX Max	Top	0	171.4941	0	824.3235	0	4.818E-05
N1	DISX Max	Bottom	0	171.4941	0	824.3235	0	559.1019
N1	DISY Max	Top	0	0	172.2027	964.3353	4.885E-06	0
N1	DISY Max	Bottom	0	0	172.2027	964.3353	561.3218	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	118.72	0	0	0	344.288	-664.832
N1	G	Bottom	118.72	0	0	0	344.2139	-664.832
N1	DERUX Max	Top	0	84.6295	0	355.5259	0	2.367E-05
N1	DERUX Max	Bottom	0	84.6295	0	355.5259	0	275.9424
N1	DERUY Max	Top	0	0	93.8951	525.8124	2.664E-06	0
N1	DERUY Max	Bottom	0	0	93.8951	525.8124	306.0657	0
N1	COMB1	Top	701.4504	0	0	0	1057.4646	-3928.1222
N1	COMB1	Bottom	804.3605	0	0	0	1478.5406	-4504.4187
N1	COMB2	Top	710.2192	0	0	0	897.315	-3977.2275
N1	COMB2	Bottom	798.4278	0	0	0	1257.9932	-4471.1959
N1	COMB3	Top	728.4752	0	0	0	1143.1214	-4079.4611
N1	COMB3	Bottom	816.6838	0	0	0	1503.8927	-4573.4295
N1	COMB4	Top	677.9632	0	0	0	936.0222	-3796.5939
N1	COMB4	Bottom	766.1718	0	0	0	1296.7922	-4290.5623
N1	COMB5 Max	Top	655.0032	171.4941	51.6608	1113.6241	841.8862	-3668.0179
N1	COMB5 Max	Bottom	743.2118	171.4941	51.6608	1113.6241	1371.0521	-3602.8844
N1	COMB5 Min	Top	655.0032	-171.4941	-51.6608	-1113.6241	841.8862	-3668.018
N1	COMB5 Min	Bottom	743.2118	-171.4941	-51.6608	-1113.6241	1034.2591	-4721.0882
N1	COMB6 Max	Top	655.0032	51.4482	172.2027	1211.6323	841.8862	-3668.0179
N1	COMB6 Max	Bottom	743.2118	51.4482	172.2027	1211.6323	1763.9774	-3994.2557
N1	COMB6 Min	Top	655.0032	-51.4482	-172.2027	-1211.6323	841.8862	-3668.0179
N1	COMB6 Min	Bottom	743.2118	-51.4482	-172.2027	-1211.6323	641.3338	-4329.7169
N1	COMB7 Max	Top	450.9324	51.4482	172.2027	1211.6323	679.7987	-2525.2214
N1	COMB7 Max	Bottom	517.0889	51.4482	172.2027	1211.6323	1511.8122	-2727.9671
N1	COMB7 Min	Top	450.9324	-51.4482	-172.2027	-1211.6323	679.7986	-2525.2215
N1	COMB7 Min	Bottom	517.0889	-51.4482	-172.2027	-1211.6323	389.1686	-3063.4283
N1	COMB8 Max	Top	450.9324	171.4941	51.6608	1113.6241	679.7987	-2525.2214
N1	COMB8 Max	Bottom	517.0889	171.4941	51.6608	1113.6241	1118.8869	-2336.5958
N1	COMB8 Min	Top	450.9324	-171.4941	-51.6608	-1113.6241	679.7987	-2525.2215
N1	COMB8 Min	Bottom	517.0889	-171.4941	-51.6608	-1113.6241	782.0939	-3454.7997
N1	ENVE Max	Top	728.4752	171.4941	172.2027	1211.6323	1143.1214	-2525.2214

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	ENVE Max	Bottom	816.6838	171.4941	172.2027	1211.6323	1763.9774	-2336.5958
N1	ENVE Min	Top	450.9324	-171.4941	-172.2027	-1211.6323	679.7986	-4079.4611
N1	ENVE Min	Bottom	517.0889	-171.4941	-172.2027	-1211.6323	389.1686	-4721.0882
N1	CIM01	Top	501.036	0	0	0	755.3318	-2805.8016
N1	CIM01	Bottom	574.5432	0	0	0	1056.1004	-3217.4419
N1	CIM02	Top	554.796	0	0	0	690.8198	-3106.8576
N1	CIM02	Bottom	628.3032	0	0	0	991.4355	-3518.4979
N1	CIM03	Top	546.956	0	0	0	943.6038	-3062.9536
N1	CIM03	Bottom	620.4632	0	0	0	1244.3736	-3474.5939
N1	CIM04	Top	575.796	0	0	0	848.1518	-3224.4576
N1	CIM04	Bottom	649.3032	0	0	0	1148.8066	-3636.0979
N1	CIM05 Max	Top	501.036	120.0458	36.1626	779.5369	755.3318	-2805.8016
N1	CIM05 Max	Bottom	574.5432	120.0458	36.1626	779.5369	1173.978	-2826.0706
N1	CIM05 Min	Top	501.036	-120.0458	-36.1626	-779.5369	755.3318	-2805.8016
N1	CIM05 Min	Bottom	574.5432	-120.0458	-36.1626	-779.5369	938.2229	-3608.8133
N1	CIM06 Max	Top	501.036	36.0138	120.5419	848.1426	755.3318	-2805.8016
N1	CIM06 Max	Bottom	574.5432	36.0138	120.5419	848.1426	1449.0257	-3100.0305
N1	CIM06 Min	Top	501.036	-36.0138	-120.5419	-848.1426	755.3318	-2805.8016
N1	CIM06 Min	Bottom	574.5432	-36.0138	-120.5419	-848.1426	663.1752	-3334.8533
N1	CIM07 Max	Top	575.796	90.8919	27.5524	591.1851	848.1518	-3224.4576
N1	CIM07 Max	Bottom	649.3032	90.8919	27.5524	591.1851	1238.6181	-3339.7739
N1	CIM07 Min	Top	575.796	-90.8919	-27.5524	-591.1851	848.1518	-3224.4576
N1	CIM07 Min	Bottom	649.3032	-90.8919	-27.5524	-591.1851	1058.9951	-3932.4219
N1	CIM08 Max	Top	575.796	27.4391	91.2674	642.9895	848.1518	-3224.4576
N1	CIM08 Max	Bottom	649.3032	27.4391	91.2674	642.9895	1446.3071	-3546.6416
N1	CIM08 Min	Top	575.796	-27.4391	-91.2674	-642.9895	848.1518	-3224.4576
N1	CIM08 Min	Bottom	649.3032	-27.4391	-91.2674	-642.9895	851.3061	-3725.5542
N1	DER01	Top	701.4504	0	0	0	1057.4646	-3928.1222
N1	DER01	Bottom	804.3605	0	0	0	1478.5406	-4504.4187
N1	DER02	Top	710.2192	0	0	0	897.315	-3977.2275
N1	DER02	Bottom	798.4278	0	0	0	1257.9932	-4471.1959
N1	DER03	Top	728.4752	0	0	0	1143.1214	-4079.4611
N1	DER03	Bottom	816.6838	0	0	0	1503.8927	-4573.4295
N1	DER04	Top	677.9632	0	0	0	936.0222	-3796.5939
N1	DER04	Bottom	766.1718	0	0	0	1296.7922	-4290.5623
N1	DER05 Max	Top	655.0032	548.781	0	2637.8352	841.8862	-3668.0178
N1	DER05 Max	Bottom	743.2118	548.781	0	2637.8352	1202.6556	-2372.8601
N1	DER05 Min	Top	655.0032	-548.781	0	-2637.8352	841.8862	-3668.0181
N1	DER05 Min	Bottom	743.2118	-548.781	0	-2637.8352	1202.6556	-5951.1125
N1	DER06 Max	Top	655.0032	0	551.0487	3085.8729	841.8862	-3668.0179
N1	DER06 Max	Bottom	743.2118	0	551.0487	3085.8729	2998.8852	-4161.9863
N1	DER06 Min	Top	655.0032	0	-551.0487	-3085.8729	841.8862	-3668.0179
N1	DER06 Min	Bottom	743.2118	0	-551.0487	-3085.8729	-593.5741	-4161.9863
N1	DER07 Max	Top	450.9324	548.781	0	2637.8352	679.7987	-2525.2213
N1	DER07 Max	Bottom	517.0889	548.781	0	2637.8352	950.4904	-1106.5716
N1	DER07 Min	Top	450.9324	-548.781	0	-2637.8352	679.7987	-2525.2216
N1	DER07 Min	Bottom	517.0889	-548.781	0	-2637.8352	950.4904	-4684.8239
N1	DER08 Max	Top	450.9324	0	551.0487	3085.8729	679.7987	-2525.2214
N1	DER08 Max	Bottom	517.0889	0	551.0487	3085.8729	2746.7201	-2895.6977
N1	DER08 Min	Top	450.9324	0	-551.0487	-3085.8729	679.7986	-2525.2214
N1	DER08 Min	Bottom	517.0889	0	-551.0487	-3085.8729	-845.7393	-2895.6977
N1	DERUD01	Top	701.4504	0	0	0	1057.4646	-3928.1222
N1	DERUD01	Bottom	804.3605	0	0	0	1478.5406	-4504.4187
N1	DERUD02	Top	710.2192	0	0	0	897.315	-3977.2275
N1	DERUD02	Bottom	798.4278	0	0	0	1257.9932	-4471.1959
N1	DERUD03	Top	728.4752	0	0	0	1143.1214	-4079.4611
N1	DERUD03	Bottom	816.6838	0	0	0	1503.8927	-4573.4295
N1	DERUD04	Top	677.9632	0	0	0	936.0222	-3796.5939
N1	DERUD04	Bottom	766.1718	0	0	0	1296.7922	-4290.5623
N1	DERUD05 Max	Top	655.0032	84.6295	0	355.5259	841.8862	-3668.0179

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD05 Max	Bottom	743.2118	84.6295	0	355.5259	1202.6556	-3886.0439
N1	DERUD05 Min	Top	655.0032	-84.6295	0	-355.5259	841.8862	-3668.0179
N1	DERUD05 Min	Bottom	743.2118	-84.6295	0	-355.5259	1202.6556	-4437.9287
N1	DERUD06 Max	Top	655.0032	0	93.8951	525.8124	841.8862	-3668.0179
N1	DERUD06 Max	Bottom	743.2118	0	93.8951	525.8124	1508.7213	-4161.9863
N1	DERUD06 Min	Top	655.0032	0	-93.8951	-525.8124	841.8862	-3668.0179
N1	DERUD06 Min	Bottom	743.2118	0	-93.8951	-525.8124	896.5899	-4161.9863
N1	DERUD07 Max	Top	450.9324	84.6295	0	355.5259	679.7987	-2525.2214
N1	DERUD07 Max	Bottom	517.0889	84.6295	0	355.5259	950.4904	-2619.7553
N1	DERUD07 Min	Top	450.9324	-84.6295	0	-355.5259	679.7987	-2525.2215
N1	DERUD07 Min	Bottom	517.0889	-84.6295	0	-355.5259	950.4904	-3171.6402
N1	DERUD08 Max	Top	450.9324	0	93.8951	525.8124	679.7987	-2525.2214
N1	DERUD08 Max	Bottom	517.0889	0	93.8951	525.8124	1256.5561	-2895.6977
N1	DERUD08 Min	Top	450.9324	0	-93.8951	-525.8124	679.7987	-2525.2214
N1	DERUD08 Min	Bottom	517.0889	0	-93.8951	-525.8124	644.4247	-2895.6977
N1	VIG01 Max	Top	655.0032	342.9881	103.3216	2227.2482	841.8862	-3668.0178
N1	VIG01 Max	Bottom	743.2118	342.9881	103.3216	2227.2482	1539.4486	-3043.7824
N1	VIG01 Min	Top	655.0032	-342.9881	-103.3216	-2227.2482	841.8862	-3668.018
N1	VIG01 Min	Bottom	743.2118	-342.9881	-103.3216	-2227.2482	865.8625	-5280.1902
N1	VIG02 Max	Top	655.0032	102.8964	344.4055	2423.2647	841.8862	-3668.0179
N1	VIG02 Max	Bottom	743.2118	102.8964	344.4055	2423.2647	2325.2991	-3826.5251
N1	VIG02 Min	Top	655.0032	-102.8964	-344.4055	-2423.2647	841.8862	-3668.0179
N1	VIG02 Min	Bottom	743.2118	-102.8964	-344.4055	-2423.2647	80.012	-4497.4475
N1	VIG03 Max	Top	450.9324	342.9881	103.3216	2227.2482	679.7987	-2525.2213
N1	VIG03 Max	Bottom	517.0889	342.9881	103.3216	2227.2482	1287.2835	-1777.4939
N1	VIG03 Min	Top	450.9324	-342.9881	-103.3216	-2227.2482	679.7987	-2525.2215
N1	VIG03 Min	Bottom	517.0889	-342.9881	-103.3216	-2227.2482	613.6973	-4013.9016
N1	VIG04 Max	Top	450.9324	102.8964	344.4055	2423.2647	679.7987	-2525.2214
N1	VIG04 Max	Bottom	517.0889	102.8964	344.4055	2423.2647	2073.1339	-2560.2366
N1	VIG04 Min	Top	450.9324	-102.8964	-344.4055	-2423.2647	679.7986	-2525.2215
N1	VIG04 Min	Bottom	517.0889	-102.8964	-344.4055	-2423.2647	-172.1531	-3231.1589
N1	COL1 Max	Top	655.0032	514.4822	154.9825	3340.8722	841.8862	-3668.0178
N1	COL1 Max	Bottom	743.2118	514.4822	154.9825	3340.8722	1707.8452	-2484.6805
N1	COL1 Min	Top	655.0032	-514.4822	-154.9825	-3340.8722	841.8862	-3668.0181
N1	COL1 Min	Bottom	743.2118	-514.4822	-154.9825	-3340.8722	697.466	-5839.2921
N1	COL2 Max	Top	655.0032	154.3447	516.6082	3634.897	841.8862	-3668.0179
N1	COL2 Max	Bottom	743.2118	154.3447	516.6082	3634.897	2886.6209	-3658.7946
N1	COL2 Min	Top	655.0032	-154.3447	-516.6082	-3634.897	841.8862	-3668.018
N1	COL2 Min	Bottom	743.2118	-154.3447	-516.6082	-3634.897	-481.3097	-4665.178
N1	COL3 Max	Top	450.9324	514.4822	154.9825	3340.8722	679.7987	-2525.2213
N1	COL3 Max	Bottom	517.0889	514.4822	154.9825	3340.8722	1455.68	-1218.3919
N1	COL3 Min	Top	450.9324	-514.4822	-154.9825	-3340.8722	679.7986	-2525.2216
N1	COL3 Min	Bottom	517.0889	-514.4822	-154.9825	-3340.8722	445.3008	-4573.0035
N1	COL4 Max	Top	450.9324	154.3447	516.6082	3634.897	679.7987	-2525.2214
N1	COL4 Max	Bottom	517.0889	154.3447	516.6082	3634.897	2634.4557	-2392.506
N1	COL4 Min	Top	450.9324	-154.3447	-516.6082	-3634.897	679.7986	-2525.2215
N1	COL4 Min	Bottom	517.0889	-154.3447	-516.6082	-3634.897	-733.4749	-3398.8895
N1	CIM09 Max	Top	300.6216	120.0458	36.1626	779.5369	453.1991	-1683.4809
N1	CIM09 Max	Bottom	344.7259	120.0458	36.1626	779.5369	751.5378	-1539.0938
N1	CIM09 Min	Top	300.6216	-120.0458	-36.1626	-779.5369	453.1991	-1683.481
N1	CIM09 Min	Bottom	344.7259	-120.0458	-36.1626	-779.5369	515.7827	-2321.8365
N1	CIM10 Max	Top	300.6216	36.0138	120.5419	848.1426	453.1991	-1683.4809
N1	CIM10 Max	Bottom	344.7259	36.0138	120.5419	848.1426	1026.5855	-1813.0537
N1	CIM10 Min	Top	300.6216	-36.0138	-120.5419	-848.1426	453.1991	-1683.481
N1	CIM10 Min	Bottom	344.7259	-36.0138	-120.5419	-848.1426	240.735	-2047.8766
N1	COMB9	Top	746.6192	0	0	0	975.323	-4181.0675
N1	COMB9	Bottom	834.8278	0	0	0	1335.9636	-4675.0359
N1	COMB10	Top	844.9552	0	0	0	1392.747	-4731.7491
N1	COMB10	Bottom	933.1638	0	0	0	1753.3978	-5225.7175
N1	COMB11	Top	714.3632	0	0	0	1014.0302	-4000.4339

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COMB11	Bottom	802.5718	0	0	0	1374.7625	-4494.4023
N1	DER09	Top	746.6192	0	0	0	975.323	-4181.0675
N1	DER09	Bottom	834.8278	0	0	0	1335.9636	-4675.0359
N1	DER10	Top	844.9552	0	0	0	1392.747	-4731.7491
N1	DER10	Bottom	933.1638	0	0	0	1753.3978	-5225.7175
N1	DER11	Top	714.3632	0	0	0	1014.0302	-4000.4339
N1	DER11	Bottom	802.5718	0	0	0	1374.7625	-4494.4023
N1	DERUD09	Top	746.6192	0	0	0	975.323	-4181.0675
N1	DERUD09	Bottom	834.8278	0	0	0	1335.9636	-4675.0359
N1	DERUD10	Top	844.9552	0	0	0	1392.747	-4731.7491
N1	DERUD10	Bottom	933.1638	0	0	0	1753.3978	-5225.7175
N1	DERUD11	Top	714.3632	0	0	0	1014.0302	-4000.4339
N1	DERUD11	Bottom	802.5718	0	0	0	1374.7625	-4494.4023
N1	CIM11	Top	619.756	0	0	0	1099.6198	-3470.6336
N1	CIM11	Bottom	693.2632	0	0	0	1400.3143	-3882.2739
N1	CIM12	Top	630.396	0	0	0	965.1638	-3530.2176
N1	CIM12	Bottom	703.9032	0	0	0	1265.7621	-3941.8579
N1	CIM13 Max	Top	630.396	90.8919	27.5524	591.1851	965.1638	-3530.2176
N1	CIM13 Max	Bottom	703.9032	90.8919	27.5524	591.1851	1355.5736	-3645.5339
N1	CIM13 Min	Top	630.396	-90.8919	-27.5524	-591.1851	965.1638	-3530.2176
N1	CIM13 Min	Bottom	703.9032	-90.8919	-27.5524	-591.1851	1175.9507	-4238.1819
N1	CIM14 Max	Top	630.396	27.4391	91.2674	642.9895	965.1638	-3530.2176
N1	CIM14 Max	Bottom	703.9032	27.4391	91.2674	642.9895	1563.2627	-3852.4016
N1	CIM14 Min	Top	630.396	-27.4391	-91.2674	-642.9895	965.1638	-3530.2176
N1	CIM14 Min	Bottom	703.9032	-27.4391	-91.2674	-642.9895	968.2616	-4031.3142
N1	CIM15	Top	300.6216	0	0	0	453.1991	-1683.481
N1	CIM15	Bottom	344.7259	0	0	0	633.6603	-1930.4652

5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	10.648	4.3805	115.7816	-14.5497	11.2939	0
Base	1	13	L	2.188	-2.37	13.8843	0.0187	2.3207	0
Base	1	13	LR	-0.0458	3.0012	5.5888	-3.1485	-0.0486	0
Base	1	13	EX Max	131.8304	78.9646	38.0169	151.9541	251.2077	13.9091
Base	1	13	EY Max	0.0005	92.0855	28.2707	184.111	0.0005	0
Base	1	13	DISX Max	41.197	24.6764	11.8803	47.4856	78.5024	4.3466
Base	1	13	DISY Max	0.0002	28.7767	8.8346	57.5347	0.0002	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	1.0023	4.8175	18.1199	-6.2876	1.0631	0
Base	1	13	DERUX Max	21.2054	12.3815	5.8971	23.7933	40.3963	2.1741
Base	1	13	DERUY Max	0.0001	15.6908	4.8171	31.3713	0.0001	0
Base	1	13	COMB1	14.9072	6.1327	162.0943	-20.3695	15.8115	0
Base	1	13	COMB2	16.2554	2.9651	163.9473	-19.0039	17.2415	0
Base	1	13	COMB3	14.8922	7.6885	161.7644	-22.4784	15.7956	0
Base	1	13	COMB4	14.9426	4.3871	155.6167	-19.0151	15.8491	0
Base	1	13	COMB5 Max	56.1626	36.196	167.3529	47.3052	94.3758	4.3466
Base	1	13	COMB5 Min	-26.2315	-30.4229	138.2916	-82.1869	-62.6291	-4.3466
Base	1	13	COMB6 Max	27.3248	39.0662	165.2209	54.3395	39.4243	1.304
Base	1	13	COMB6 Min	2.6063	-33.2931	140.4236	-89.2212	-7.6775	-1.304
Base	1	13	COMB7 Max	21.9424	40.1221	116.6021	58.6857	33.7154	1.304
Base	1	13	COMB7 Min	-2.7761	-32.2372	91.8048	-84.8751	-13.3864	-1.304
Base	1	13	COMB8 Max	50.7802	37.2519	118.7341	51.6514	88.667	4.3466
Base	1	13	COMB8 Min	-31.6139	-29.367	89.6728	-77.8407	-68.3379	-4.3466
Base	1	13	ENVE Max	56.1626	40.1221	167.3529	58.6857	94.3758	4.3466
Base	1	13	ENVE Min	-31.6139	-33.2931	89.6728	-89.2212	-68.3379	-4.3466
Base	1	13	CIM01	10.648	4.3805	115.7816	-14.5497	11.2939	0
Base	1	13	CIM02	12.8359	2.0104	129.6659	-14.5309	13.6146	0
Base	1	13	CIM03	10.6021	7.3817	121.3705	-17.6981	11.2453	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	CIM04	12.2546	4.8539	130.3865	-16.897	12.998	0
Base	1	13	CIM05 Max	39.4859	27.6971	125.9531	30.7726	66.2456	3.0426
Base	1	13	CIM05 Min	-18.19	-18.9362	105.6102	-59.8719	-43.6578	-3.0426
Base	1	13	CIM06 Max	19.2994	29.7062	124.4607	35.6966	27.7795	0.9128
Base	1	13	CIM06 Min	1.9965	-20.9453	107.1025	-64.7959	-5.1917	-0.9128
Base	1	13	CIM07 Max	34.089	22.5367	138.0966	17.476	54.6043	2.3037
Base	1	13	CIM07 Min	-9.5799	-12.8289	122.6764	-51.2699	-28.6083	-2.3037
Base	1	13	CIM08 Max	18.8462	24.0538	136.9697	21.1941	25.5584	0.6955
Base	1	13	CIM08 Min	5.663	-14.346	123.8033	-54.9881	0.4375	-0.6955
Base	1	13	DER01	14.9072	6.1327	162.0943	-20.3695	15.8115	0
Base	1	13	DER02	16.2554	2.9651	163.9473	-19.0039	17.2415	0
Base	1	13	DER03	14.8922	7.6885	161.7644	-22.4784	15.7956	0
Base	1	13	DER04	14.9426	4.3871	155.6167	-19.0151	15.8491	0
Base	1	13	DER05 Max	146.796	81.8512	190.8391	134.5132	267.081	13.9091
Base	1	13	DER05 Min	-116.8649	-76.0781	114.8054	-169.3949	-235.3343	-13.9091
Base	1	13	DER06 Max	14.966	94.972	181.093	166.6701	15.8739	0
Base	1	13	DER06 Min	14.965	-89.1989	124.5515	-201.5518	15.8729	0
Base	1	13	DER07 Max	141.4136	82.9071	142.2203	138.8594	261.3722	13.9091
Base	1	13	DER07 Min	-122.2473	-75.0222	66.1866	-165.0488	-241.0431	-13.9091
Base	1	13	DER08 Max	9.5837	96.0279	132.4742	171.0163	10.165	0
Base	1	13	DER08 Min	9.5827	-88.1431	75.9327	-197.2057	10.164	0
Base	1	13	DERUD01	14.9072	6.1327	162.0943	-20.3695	15.8115	0
Base	1	13	DERUD02	16.2554	2.9651	163.9473	-19.0039	17.2415	0
Base	1	13	DERUD03	14.8922	7.6885	161.7644	-22.4784	15.7956	0
Base	1	13	DERUD04	14.9426	4.3871	155.6167	-19.0151	15.8491	0
Base	1	13	DERUD05 Max	36.1709	15.2681	158.7193	6.3524	56.2697	2.1741
Base	1	13	DERUD05 Min	-6.2399	-9.495	146.9252	-41.2341	-24.5229	-2.1741
Base	1	13	DERUD06 Max	14.9656	18.5773	157.6394	13.9304	15.8735	0
Base	1	13	DERUD06 Min	14.9654	-12.8042	148.0051	-48.8122	15.8733	0
Base	1	13	DERUD07 Max	30.7886	16.324	110.1005	10.6986	50.5608	2.1741
Base	1	13	DERUD07 Min	-11.6222	-8.4391	98.3064	-36.888	-30.2318	-2.1741
Base	1	13	DERUD08 Max	9.5833	19.6332	109.0206	18.2766	10.1646	0
Base	1	13	DERUD08 Min	9.5831	-11.7483	99.3863	-44.466	10.1644	0
Base	1	13	VIG01 Max	97.3596	69.5055	181.8836	112.0513	172.8783	8.6932
Base	1	13	VIG01 Min	-67.4286	-63.7324	123.761	-146.933	-141.1315	-8.6932
Base	1	13	VIG02 Max	39.684	75.2458	177.6196	126.1199	62.9751	2.608
Base	1	13	VIG02 Min	-9.753	-69.4728	128.0249	-161.0016	-31.2284	-2.608
Base	1	13	VIG03 Max	91.9773	70.5613	133.2648	116.3974	167.1694	8.6932
Base	1	13	VIG03 Min	-72.8109	-62.6765	75.1422	-142.5868	-146.8404	-8.6932
Base	1	13	VIG04 Max	34.3017	76.3017	129.0008	130.4661	57.2663	2.608
Base	1	13	VIG04 Min	-15.1353	-68.4169	79.4061	-156.6554	-36.9372	-2.608
Base	1	13	COL1 Max	138.5567	102.8149	196.4142	176.7973	251.3807	13.0398
Base	1	13	COL1 Min	-108.6256	-97.0419	109.2303	-211.679	-219.6339	-13.0398
Base	1	13	COL2 Max	52.0433	111.4255	190.0183	197.9003	86.526	3.9119
Base	1	13	COL2 Min	-22.1122	-105.6524	115.6262	-232.782	-54.7793	-3.9119
Base	1	13	COL3 Max	133.1743	103.8708	147.7954	181.1435	245.6718	13.0398
Base	1	13	COL3 Min	-114.008	-95.986	60.6115	-207.3329	-225.3428	-13.0398
Base	1	13	COL4 Max	46.6609	112.4814	141.3995	202.2464	80.8172	3.9119
Base	1	13	COL4 Min	-27.4946	-104.5965	67.0074	-228.4358	-60.4881	-3.9119
Base	1	13	CIM09 Max	35.2267	25.9449	79.6404	36.5924	61.7281	3.0426
Base	1	13	CIM09 Min	-22.4492	-20.6883	59.2975	-54.052	-48.1754	-3.0426
Base	1	13	CIM10 Max	15.0403	27.954	78.1481	41.5165	23.262	0.9128
Base	1	13	CIM10 Min	-2.2627	-22.6975	60.7899	-58.9761	-9.7093	-0.9128
Base	1	13	COMB9	16.7795	3.8732	170.2128	-20.5734	17.7973	0
Base	1	13	COMB10	16.5692	10.5945	181.814	-27.501	17.5743	0
Base	1	13	COMB11	15.4667	5.2953	161.8822	-20.5847	16.4049	0
Base	1	13	DER09	16.7795	3.8732	170.2128	-20.5734	17.7973	0
Base	1	13	DER10	16.5692	10.5945	181.814	-27.501	17.5743	0
Base	1	13	DER11	15.4667	5.2953	161.8822	-20.5847	16.4049	0
Base	1	13	DERUD09	16.7795	3.8732	170.2128	-20.5734	17.7973	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	DERUD10	16.5692	10.5945	181.814	-27.501	17.5743	0
Base	1	13	DERUD11	15.4667	5.2953	161.8822	-20.5847	16.4049	0
Base	1	13	CIM11	11.6503	9.1979	133.9015	-20.8373	12.357	0
Base	1	13	CIM12	13.0407	6.216	139.7847	-19.2513	13.8317	0
Base	1	13	CIM13 Max	34.8751	23.8988	147.4948	15.1216	55.438	2.3037
Base	1	13	CIM13 Min	-8.7938	-11.4668	132.0747	-53.6242	-27.7745	-2.3037
Base	1	13	CIM14 Max	19.6323	25.4159	146.3679	18.8398	26.3922	0.6955
Base	1	13	CIM14 Min	6.4491	-12.9838	133.2016	-57.3424	1.2713	-0.6955
Base	1	13	CIM15	6.3888	2.6283	69.469	-8.7298	6.7763	0
Base	2	15	D	2.5046	0.2447	39.6785	-10.1427	2.6211	0.0051
Base	2	15	L	0.0599	3.5451	-1.7952	-6.1789	0.0613	-0.0007
Base	2	15	LR	0.0151	-2.9082	5.7834	3.0592	0.0166	0.0065
Base	2	15	EX Max	62.8754	73.5068	31.0692	145.2195	122.2897	13.0462
Base	2	15	EY Max	0.0261	91.5806	28.2816	182.4125	0.0516	0.0749
Base	2	15	DISX Max	19.6486	22.9709	9.7091	45.3811	38.2155	4.0769
Base	2	15	DISY Max	0.0081	28.6189	8.838	57.0039	0.0161	0.0234
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.0602	-4.0439	10.6693	3.0291	0.0639	0.0126
Base	2	15	DERUX Max	8.1622	11.4852	4.7679	22.6966	15.9049	2.0496
Base	2	15	DERUY Max	0.0044	15.6047	4.819	31.0819	0.0088	0.0128
Base	2	15	COMB1	3.5064	0.3425	55.5499	-14.1998	3.6695	0.0072
Base	2	15	COMB2	3.1089	4.5116	47.6336	-20.5278	3.2517	0.0083
Base	2	15	COMB3	3.0896	-0.8145	55.0725	-13.4553	3.2332	0.0158
Base	2	15	COMB4	3.0729	2.3845	48.7107	-16.8205	3.2149	0.0087
Base	2	15	COMB5 Max	22.7164	35.3952	58.1795	44.1322	41.427	4.0894
Base	2	15	COMB5 Min	-16.5856	-27.7179	33.4585	-80.8324	-35.0138	-4.0785
Base	2	15	COMB6 Max	8.9681	39.3489	57.5698	52.2681	14.6874	1.2519
Base	2	15	COMB6 Min	-2.8373	-31.6716	34.0683	-88.9683	-8.2742	-1.241
Base	2	15	COMB7 Max	8.1568	35.7304	47.4614	61.4898	13.8398	1.2511
Base	2	15	COMB7 Min	-3.6486	-35.29	23.9599	-79.7467	-9.1218	-1.2419
Base	2	15	COMB8 Max	21.9051	31.7767	48.0712	53.3538	40.5794	4.0886
Base	2	15	COMB8 Min	-17.3969	-31.3364	23.3501	-71.6107	-35.8614	-4.0794
Base	2	15	ENVE Max	22.7164	39.3489	58.1795	61.4898	41.427	4.0894
Base	2	15	ENVE Min	-17.3969	-35.29	23.3501	-88.9683	-35.8614	-4.0794
Base	2	15	CIM01	2.5046	0.2447	39.6785	-10.1427	2.6211	0.0051
Base	2	15	CIM02	2.5644	3.7897	37.8833	-16.3216	2.6824	0.0044
Base	2	15	CIM03	2.5197	-2.6636	45.4619	-7.0835	2.6377	0.0116
Base	2	15	CIM04	2.5608	0.7223	42.6697	-12.4824	2.6795	0.0095
Base	2	15	CIM05 Max	16.2603	22.3342	48.3309	33.5949	29.3753	2.8639
Base	2	15	CIM05 Min	-11.2511	-21.8449	31.0261	-53.8803	-24.1332	-2.8537
Base	2	15	CIM06 Max	6.6365	25.1018	47.904	39.2901	10.6576	0.8777
Base	2	15	CIM06 Min	-1.6273	-24.6125	31.453	-59.5755	-5.4155	-0.8674
Base	2	15	CIM07 Max	12.9759	17.4759	49.2296	20.6902	22.9363	2.174
Base	2	15	CIM07 Min	-7.8542	-16.0313	36.1098	-45.655	-17.5773	-2.1551
Base	2	15	CIM08 Max	5.7089	19.5657	48.9073	24.9906	8.8026	0.6742
Base	2	15	CIM08 Min	-0.5872	-18.1211	36.4321	-49.9555	-3.4435	-0.6553
Base	2	15	DER01	3.5064	0.3425	55.5499	-14.1998	3.6695	0.0072
Base	2	15	DER02	3.1089	4.5116	47.6336	-20.5278	3.2517	0.0083
Base	2	15	DER03	3.0896	-0.8145	55.0725	-13.4553	3.2332	0.0158
Base	2	15	DER04	3.0729	2.3845	48.7107	-16.8205	3.2149	0.0087
Base	2	15	DER05 Max	65.9408	77.3454	76.8882	126.8694	125.4963	13.0517
Base	2	15	DER05 Min	-59.81	-69.6681	14.7498	-163.5696	-119.0832	-13.0408
Base	2	15	DER06 Max	3.0914	95.4193	74.1007	164.0624	3.2582	0.0803
Base	2	15	DER06 Min	3.0393	-87.742	17.5374	-200.7626	3.155	-0.0694
Base	2	15	DER07 Max	65.1295	73.727	66.7798	136.091	124.6487	13.0508
Base	2	15	DER07 Min	-60.6213	-73.2866	4.6415	-154.3479	-119.9308	-13.0416
Base	2	15	DER08 Max	2.2802	91.8008	63.9923	173.2841	2.4106	0.0795
Base	2	15	DER08 Min	2.2281	-91.3604	7.429	-191.541	2.3074	-0.0703
Base	2	15	DERUD01	3.5064	0.3425	55.5499	-14.1998	3.6695	0.0072
Base	2	15	DERUD02	3.1089	4.5116	47.6336	-20.5278	3.2517	0.0083

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DERUD03	3.0896	-0.8145	55.0725	-13.4553	3.2332	0.0158
Base	2	15	DERUD04	3.0729	2.3845	48.7107	-16.8205	3.2149	0.0087
Base	2	15	DERUD05 Max	11.2276	15.3239	50.5869	4.3465	19.1115	2.0551
Base	2	15	DERUD05 Min	-5.0969	-7.6466	41.0511	-41.0467	-12.6983	-2.0442
Base	2	15	DERUD06 Max	3.0698	19.4434	50.638	12.7318	3.2154	0.0182
Base	2	15	DERUD06 Min	3.0609	-11.7661	41	-49.432	3.1978	-0.0073
Base	2	15	DERUD07 Max	10.4164	11.7054	40.4786	13.5681	18.2639	2.0543
Base	2	15	DERUD07 Min	-5.9081	-11.265	30.9427	-31.825	-13.5459	-2.045
Base	2	15	DERUD08 Max	2.2586	15.8249	40.5297	21.9535	2.3678	0.0174
Base	2	15	DERUD08 Min	2.2497	-15.3845	30.8916	-40.2103	2.3502	-0.0082
Base	2	15	VIG01 Max	42.3674	66.9518	70.5401	106.6144	79.6473	8.1734
Base	2	15	VIG01 Min	-36.2367	-59.2745	21.098	-143.3146	-73.2342	-8.1625
Base	2	15	VIG02 Max	14.8708	74.8591	69.3205	122.8864	26.1681	2.4984
Base	2	15	VIG02 Min	-8.7401	-67.1818	22.3175	-159.5866	-19.755	-2.4875
Base	2	15	VIG03 Max	41.5562	63.3333	60.4317	115.8361	78.7997	8.1725
Base	2	15	VIG03 Min	-37.0479	-62.8929	10.9896	-134.093	-74.0818	-8.1633
Base	2	15	VIG04 Max	14.0596	71.2406	59.2121	132.108	25.3206	2.4976
Base	2	15	VIG04 Min	-9.5513	-70.8002	12.2092	-150.3649	-20.6026	-2.4884
Base	2	15	COL1 Max	62.0184	98.5083	82.9006	169.0967	117.8677	12.2573
Base	2	15	COL1 Min	-55.8877	-90.831	8.7375	-205.7969	-111.4546	-12.2464
Base	2	15	COL2 Max	20.7735	110.3693	81.0713	193.5046	37.6489	3.7449
Base	2	15	COL2 Min	-14.6428	-102.692	10.5668	-230.2048	-31.2358	-3.734
Base	2	15	COL3 Max	61.2072	94.8899	72.7922	178.3183	117.0201	12.2565
Base	2	15	COL3 Min	-56.6989	-94.4495	-1.3709	-196.5752	-112.3022	-12.2473
Base	2	15	COL4 Max	19.9623	106.7508	70.9629	202.7263	36.8013	3.744
Base	2	15	COL4 Min	-15.454	-106.3104	0.4584	-220.9832	-32.0834	-3.7348
Base	2	15	CIM09 Max	15.2585	22.2364	32.4595	37.652	28.3269	2.8618
Base	2	15	CIM09 Min	-12.253	-21.9428	15.1547	-49.8232	-25.1816	-2.8557
Base	2	15	CIM10 Max	5.6347	25.0039	32.0326	43.3471	9.6092	0.8756
Base	2	15	CIM10 Min	-2.6291	-24.7104	15.5816	-55.5184	-6.4639	-0.8695
Base	2	15	COMB9	3.1314	3.9437	50.0766	-20.5429	3.2753	0.0113
Base	2	15	COMB10	3.1617	-2.6316	62.8899	-13.5036	3.3088	0.0256
Base	2	15	COMB11	3.0955	1.8167	51.1537	-16.8356	3.2385	0.0118
Base	2	15	DER09	3.1314	3.9437	50.0766	-20.5429	3.2753	0.0113
Base	2	15	DER10	3.1617	-2.6316	62.8899	-13.5036	3.3088	0.0256
Base	2	15	DER11	3.0955	1.8167	51.1537	-16.8356	3.2385	0.0118
Base	2	15	DERUD09	3.1314	3.9437	50.0766	-20.5429	3.2753	0.0113
Base	2	15	DERUD10	3.1617	-2.6316	62.8899	-13.5036	3.3088	0.0256
Base	2	15	DERUD11	3.0955	1.8167	51.1537	-16.8356	3.2385	0.0118
Base	2	15	CIM11	2.5648	-3.7993	50.3478	-7.1136	2.685	0.0177
Base	2	15	CIM12	2.5946	-0.1295	46.3341	-12.505	2.715	0.014
Base	2	15	CIM13 Max	13.0097	16.6241	52.894	20.6676	22.9718	2.1786
Base	2	15	CIM13 Min	-7.8204	-16.8831	39.7742	-45.6777	-17.5418	-2.1505
Base	2	15	CIM14 Max	5.7427	18.7139	52.5717	24.968	8.838	0.6788
Base	2	15	CIM14 Min	-0.5534	-18.9729	40.0965	-49.9781	-3.4081	-0.6507
Base	2	15	CIM15	1.5028	0.1468	23.8071	-6.0856	1.5727	0.0031
Base	3	16	D	0	-9.0547	206.9454	-0.3089	0	0
Base	3	16	L	0	-6.5276	32.0802	4.4296	0	0
Base	3	16	LR	0	4.9443	11.781	-5.2133	0	0
Base	3	16	EX Max	165.7159	0	0	0	287.4714	13.9091
Base	3	16	EY Max	0	91.8103	28.3339	184.0373	0	0
Base	3	16	DISX Max	51.7862	0	0	0	89.8348	4.3466
Base	3	16	DISY Max	0	28.6907	8.8544	57.5117	0	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	0	6.6247	39.6021	-8.2118	0	0
Base	3	16	DERUX Max	26.6434	0	0	0	46.2158	2.1741
Base	3	16	DERUY Max	0	15.6439	4.8279	31.3588	0	0
Base	3	16	COMB1	0	-12.6766	289.7235	-0.4324	0	0
Base	3	16	COMB2	0	-18.8377	305.5532	4.11	0	0
Base	3	16	COMB3	0	-9.4824	299.2642	-4.2823	0	0



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	COMB4	0	-14.9211	286.3051	1.4523	0	0
Base	3	16	COMB5 Max	51.7862	-8.786	283.0709	21.3124	89.8348	4.3466
Base	3	16	COMB5 Min	-51.7862	-26.0005	277.7583	-13.1946	-89.8348	-4.3466
Base	3	16	COMB6 Max	15.5359	11.2975	289.269	61.5706	26.9504	1.304
Base	3	16	COMB6 Min	-15.5359	-46.084	271.5602	-53.4527	-26.9504	-1.304
Base	3	16	COMB7 Max	15.5359	20.5415	195.1052	57.2337	26.9504	1.304
Base	3	16	COMB7 Min	-15.5359	-36.84	177.3965	-57.7896	-26.9504	-1.304
Base	3	16	COMB8 Max	51.7862	0.458	188.9071	16.9755	89.8348	4.3466
Base	3	16	COMB8 Min	-51.7862	-16.7564	183.5945	-17.5315	-89.8348	-4.3466
Base	3	16	ENVE Max	51.7862	20.5415	305.5532	61.5706	89.8348	4.3466
Base	3	16	ENVE Min	-51.7862	-46.084	177.3965	-57.7896	-89.8348	-4.3466
Base	3	16	CIM01	0	-9.0547	206.9454	-0.3089	0	0
Base	3	16	CIM02	0	-15.5823	239.0255	4.1207	0	0
Base	3	16	CIM03	0	-4.1104	218.7264	-5.5221	0	0
Base	3	16	CIM04	0	-10.2422	239.8412	-0.8966	0	0
Base	3	16	CIM05 Max	36.2503	-3.0296	208.8048	11.7686	62.8844	3.0426
Base	3	16	CIM05 Min	-36.2503	-15.0797	205.0859	-12.3863	-62.8844	-3.0426
Base	3	16	CIM06 Max	10.8751	11.0288	213.1434	39.9493	18.8653	0.9128
Base	3	16	CIM06 Min	-10.8751	-29.1382	200.7473	-40.567	-18.8653	-0.9128
Base	3	16	CIM07 Max	27.4467	-5.6517	241.2579	8.3052	47.6124	2.3037
Base	3	16	CIM07 Min	-27.4467	-14.8327	238.4245	-10.0985	-47.6124	-2.3037
Base	3	16	CIM08 Max	8.2858	4.9639	244.534	29.5846	14.3736	0.6955
Base	3	16	CIM08 Min	-8.2858	-25.4483	235.1484	-31.3778	-14.3736	-0.6955
Base	3	16	DER01	0	-12.6766	289.7235	-0.4324	0	0
Base	3	16	DER02	0	-18.8377	305.5532	4.11	0	0
Base	3	16	DER03	0	-9.4824	299.2642	-4.2823	0	0
Base	3	16	DER04	0	-14.9211	286.3051	1.4523	0	0
Base	3	16	DER05 Max	165.7159	-17.3932	280.4146	4.0589	287.4714	13.9091
Base	3	16	DER05 Min	-165.7159	-17.3932	280.4146	4.0589	-287.4714	-13.9091
Base	3	16	DER06 Max	0	74.4171	308.7485	188.0963	0	0
Base	3	16	DER06 Min	0	-109.2036	252.0806	-179.9784	0	0
Base	3	16	DER07 Max	165.7159	-8.1492	186.2508	-0.278	287.4714	13.9091
Base	3	16	DER07 Min	-165.7159	-8.1492	186.2508	-0.278	-287.4714	-13.9091
Base	3	16	DER08 Max	0	83.6611	214.5848	183.7594	0	0
Base	3	16	DER08 Min	0	-99.9596	157.9169	-184.3153	0	0
Base	3	16	DERUD01	0	-12.6766	289.7235	-0.4324	0	0
Base	3	16	DERUD02	0	-18.8377	305.5532	4.11	0	0
Base	3	16	DERUD03	0	-9.4824	299.2642	-4.2823	0	0
Base	3	16	DERUD04	0	-14.9211	286.3051	1.4523	0	0
Base	3	16	DERUD05 Max	26.6434	-17.3932	280.4146	4.0589	46.2158	2.1741
Base	3	16	DERUD05 Min	-26.6434	-17.3932	280.4146	4.0589	-46.2158	-2.1741
Base	3	16	DERUD06 Max	0	-1.7494	285.2425	35.4177	0	0
Base	3	16	DERUD06 Min	0	-33.0371	275.5867	-27.2998	0	0
Base	3	16	DERUD07 Max	26.6434	-8.1492	186.2508	-0.278	46.2158	2.1741
Base	3	16	DERUD07 Min	-26.6434	-8.1492	186.2508	-0.278	-46.2158	-2.1741
Base	3	16	DERUD08 Max	0	7.4947	191.0787	31.0808	0	0
Base	3	16	DERUD08 Min	0	-23.7931	181.4229	-31.6367	0	0
Base	3	16	VIG01 Max	103.5724	-0.1788	285.7272	38.5659	179.6696	8.6932
Base	3	16	VIG01 Min	-103.5724	-34.6077	275.102	-30.4481	-179.6696	-8.6932
Base	3	16	VIG02 Max	31.0717	39.9882	298.1233	119.0823	53.9009	2.608
Base	3	16	VIG02 Min	-31.0717	-74.7747	262.7059	-110.9644	-53.9009	-2.608
Base	3	16	VIG03 Max	103.5724	9.0652	191.5634	34.229	179.6696	8.6932
Base	3	16	VIG03 Min	-103.5724	-25.3637	180.9382	-34.785	-179.6696	-8.6932
Base	3	16	VIG04 Max	31.0717	49.2322	203.9595	114.7454	53.9009	2.608
Base	3	16	VIG04 Min	-31.0717	-65.5307	168.5421	-115.3013	-53.9009	-2.608
Base	3	16	COL1 Max	155.3586	8.4284	288.3835	55.8194	269.5044	13.0398
Base	3	16	COL1 Min	-155.3586	-43.2149	272.4457	-47.7016	-269.5044	-13.0398
Base	3	16	COL2 Max	46.6076	68.679	306.9777	176.594	80.8513	3.9119
Base	3	16	COL2 Min	-46.6076	-103.4654	253.8515	-168.4761	-80.8513	-3.9119
Base	3	16	COL3 Max	155.3586	17.6724	194.2197	51.4825	269.5044	13.0398

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	COL3 Min	-155.3586	-33.9709	178.2819	-52.0385	-269.5044	-13.0398
Base	3	16	COL4 Max	46.6076	77.923	212.8139	172.257	80.8513	3.9119
Base	3	16	COL4 Min	-46.6076	-94.2214	159.6877	-172.813	-80.8513	-3.9119
Base	3	16	CIM09 Max	36.2503	0.5922	126.0266	11.8921	62.8844	3.0426
Base	3	16	CIM09 Min	-36.2503	-11.4579	122.3078	-12.2628	-62.8844	-3.0426
Base	3	16	CIM10 Max	10.8751	14.6507	130.3653	40.0729	18.8653	0.9128
Base	3	16	CIM10 Min	-10.8751	-25.5163	117.9692	-40.4435	-18.8653	-0.9128
Base	3	16	COMB9	0	-17.9974	319.4637	2.6108	0	0
Base	3	16	COMB10	0	-6.7937	343.7779	-9.0799	0	0
Base	3	16	COMB11	0	-14.0809	300.2156	-0.0469	0	0
Base	3	16	DER09	0	-17.9974	319.4637	2.6108	0	0
Base	3	16	DER10	0	-6.7937	343.7779	-9.0799	0	0
Base	3	16	DER11	0	-14.0809	300.2156	-0.0469	0	0
Base	3	16	DERUD09	0	-17.9974	319.4637	2.6108	0	0
Base	3	16	DERUD10	0	-6.7937	343.7779	-9.0799	0	0
Base	3	16	DERUD11	0	-14.0809	300.2156	-0.0469	0	0
Base	3	16	CIM11	0	-2.43	246.5474	-8.5206	0	0
Base	3	16	CIM12	0	-8.9819	260.7071	-3.1455	0	0
Base	3	16	CIM13 Max	27.4467	-4.3913	262.1237	6.0564	47.6124	2.3037
Base	3	16	CIM13 Min	-27.4467	-13.5724	259.2904	-12.3474	-47.6124	-2.3037
Base	3	16	CIM14 Max	8.2858	6.2242	265.3999	27.3357	14.3736	0.6955
Base	3	16	CIM14 Min	-8.2858	-24.1879	256.0142	-33.6267	-14.3736	-0.6955
Base	3	16	CIM15	0	-5.4328	124.1672	-0.1853	0	0
Base	4	18	D	0	-0.1956	56.6776	-9.6897	0	0
Base	4	18	L	0	4.1775	-2.4985	-6.8462	0	0
Base	4	18	LR	0	-5.1303	11.3944	5.3823	0	0
Base	4	18	EX Max	82.5542	0	0	0	143.2401	13.8443
Base	4	18	EY Max	0	91.9062	28.3122	183.167	0	0
Base	4	18	DISX Max	25.7982	0	0	0	44.7625	4.3264
Base	4	18	DISY Max	0	28.7207	8.8475	57.2397	0	0
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	0	-8.1718	21.5396	7.3415	0	0
Base	4	18	DERUX Max	10.7596	0	0	0	18.6704	2.1737
Base	4	18	DERUY Max	0	15.6602	4.8242	31.2104	0	0
Base	4	18	COMB1	0	-0.2738	79.3486	-13.5656	0	0
Base	4	18	COMB2	0	3.8843	69.7128	-19.8904	0	0
Base	4	18	COMB3	0	-4.2656	83.7457	-9.8622	0	0
Base	4	18	COMB4	0	1.3777	71.2119	-15.7827	0	0
Base	4	18	COMB5 Max	25.7982	12.5591	68.1689	-1.3019	44.7625	4.3264
Base	4	18	COMB5 Min	-25.7982	-4.6733	62.8604	-35.6457	-44.7625	-4.3264
Base	4	18	COMB6 Max	7.7395	32.6636	74.3622	38.7659	13.4288	1.2979
Base	4	18	COMB6 Min	-7.7395	-24.7778	56.6671	-75.7135	-13.4288	-1.2979
Base	4	18	COMB7 Max	7.7395	28.5447	59.8574	48.519	13.4288	1.2979
Base	4	18	COMB7 Min	-7.7395	-28.8967	42.1623	-65.9604	-13.4288	-1.2979
Base	4	18	COMB8 Max	25.7982	8.4402	53.6641	8.4512	44.7625	4.3264
Base	4	18	COMB8 Min	-25.7982	-8.7922	48.3556	-25.8926	-44.7625	-4.3264
Base	4	18	ENVE Max	25.7982	32.6636	83.7457	48.519	44.7625	4.3264
Base	4	18	ENVE Min	-25.7982	-28.8967	42.1623	-75.7135	-44.7625	-4.3264
Base	4	18	CIM01	0	-0.1956	56.6776	-9.6897	0	0
Base	4	18	CIM02	0	3.982	54.1792	-16.5359	0	0
Base	4	18	CIM03	0	-5.3258	68.072	-4.3074	0	0
Base	4	18	CIM04	0	-0.9101	63.3496	-10.7876	0	0
Base	4	18	CIM05 Max	18.0587	5.8358	58.5356	2.3306	31.3338	3.0285
Base	4	18	CIM05 Min	-18.0587	-6.2269	54.8196	-21.71	-31.3338	-3.0285
Base	4	18	CIM06 Max	5.4176	19.9089	62.8709	30.3781	9.4001	0.9085
Base	4	18	CIM06 Min	-5.4176	-20.3	50.4843	-49.7575	-9.4001	-0.9085
Base	4	18	CIM07 Max	13.673	3.6852	64.7652	-1.6293	23.7241	2.293
Base	4	18	CIM07 Min	-13.673	-5.5054	61.934	-19.946	-23.7241	-2.293
Base	4	18	CIM08 Max	4.1277	14.3118	68.0388	19.5494	7.162	0.6922
Base	4	18	CIM08 Min	-4.1277	-16.1321	58.6604	-41.1246	-7.162	-0.6922

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DER01	0	-0.2738	79.3486	-13.5656	0	0
Base	4	18	DER02	0	3.8843	69.7128	-19.8904	0	0
Base	4	18	DER03	0	-4.2656	83.7457	-9.8622	0	0
Base	4	18	DER04	0	1.3777	71.2119	-15.7827	0	0
Base	4	18	DER05 Max	82.5542	3.9429	65.5147	-18.4738	143.2401	13.8443
Base	4	18	DER05 Min	-82.5542	3.9429	65.5147	-18.4738	-143.2401	-13.8443
Base	4	18	DER06 Max	0	95.8491	93.8268	164.6932	0	0
Base	4	18	DER06 Min	0	-87.9633	37.2025	-201.6407	0	0
Base	4	18	DER07 Max	82.5542	-0.176	51.0098	-8.7207	143.2401	13.8443
Base	4	18	DER07 Min	-82.5542	-0.176	51.0098	-8.7207	-143.2401	-13.8443
Base	4	18	DER08 Max	0	91.7302	79.322	174.4462	0	0
Base	4	18	DER08 Min	0	-92.0822	22.6977	-191.8877	0	0
Base	4	18	DERUD01	0	-0.2738	79.3486	-13.5656	0	0
Base	4	18	DERUD02	0	3.8843	69.7128	-19.8904	0	0
Base	4	18	DERUD03	0	-4.2656	83.7457	-9.8622	0	0
Base	4	18	DERUD04	0	1.3777	71.2119	-15.7827	0	0
Base	4	18	DERUD05 Max	10.7596	3.9429	65.5147	-18.4738	18.6704	2.1737
Base	4	18	DERUD05 Min	-10.7596	3.9429	65.5147	-18.4738	-18.6704	-2.1737
Base	4	18	DERUD06 Max	0	19.6031	70.3389	12.7366	0	0
Base	4	18	DERUD06 Min	0	-11.7173	60.6905	-49.6842	0	0
Base	4	18	DERUD07 Max	10.7596	-0.176	51.0098	-8.7207	18.6704	2.1737
Base	4	18	DERUD07 Min	-10.7596	-0.176	51.0098	-8.7207	-18.6704	-2.1737
Base	4	18	DERUD08 Max	0	15.4842	55.834	22.4897	0	0
Base	4	18	DERUD08 Min	0	-15.8362	46.1856	-39.9312	0	0
Base	4	18	VIG01 Max	51.5963	21.1753	70.8232	15.87	89.5251	8.6527
Base	4	18	VIG01 Min	-51.5963	-13.2895	60.2061	-52.8176	-89.5251	-8.6527
Base	4	18	VIG02 Max	15.4789	61.3843	83.2098	96.0056	26.8575	2.5958
Base	4	18	VIG02 Min	-15.4789	-53.4985	47.8196	-132.9531	-26.8575	-2.5958
Base	4	18	VIG03 Max	51.5963	17.0564	56.3184	25.6231	89.5251	8.6527
Base	4	18	VIG03 Min	-51.5963	-17.4084	45.7013	-43.0645	-89.5251	-8.6527
Base	4	18	VIG04 Max	15.4789	57.2654	68.7049	105.7586	26.8575	2.5958
Base	4	18	VIG04 Min	-15.4789	-57.6174	33.3148	-123.2001	-26.8575	-2.5958
Base	4	18	COL1 Max	77.3945	29.7915	73.4775	33.0419	134.2876	12.9791
Base	4	18	COL1 Min	-77.3945	-21.9057	57.5519	-69.9895	-134.2876	-12.9791
Base	4	18	COL2 Max	23.2184	90.1049	92.0573	153.2452	40.2863	3.8937
Base	4	18	COL2 Min	-23.2184	-82.2192	38.972	-190.1928	-40.2863	-3.8937
Base	4	18	COL3 Max	77.3945	25.6726	58.9726	42.795	134.2876	12.9791
Base	4	18	COL3 Min	-77.3945	-26.0246	43.0471	-60.2364	-134.2876	-12.9791
Base	4	18	COL4 Max	23.2184	85.9861	77.5525	162.9983	40.2863	3.8937
Base	4	18	COL4 Min	-23.2184	-86.3381	24.4672	-180.4397	-40.2863	-3.8937
Base	4	18	CIM09 Max	18.0587	5.914	35.8645	6.2065	31.3338	3.0285
Base	4	18	CIM09 Min	-18.0587	-6.1487	32.1486	-17.8341	-31.3338	-3.0285
Base	4	18	CIM10 Max	5.4176	19.9871	40.1998	34.254	9.4001	0.9085
Base	4	18	CIM10 Min	-5.4176	-20.2218	27.8133	-45.8816	-9.4001	-0.9085
Base	4	18	COMB9	0	2.3635	74.7854	-18.9108	0	0
Base	4	18	COMB10	0	-9.132	99.978	-6.7275	0	0
Base	4	18	COMB11	0	-0.143	76.2845	-14.8031	0	0
Base	4	18	DER09	0	2.3635	74.7854	-18.9108	0	0
Base	4	18	DER10	0	-9.132	99.978	-6.7275	0	0
Base	4	18	DER11	0	-0.143	76.2845	-14.8031	0	0
Base	4	18	DERUD09	0	2.3635	74.7854	-18.9108	0	0
Base	4	18	DERUD10	0	-9.132	99.978	-6.7275	0	0
Base	4	18	DERUD11	0	-0.143	76.2845	-14.8031	0	0
Base	4	18	CIM11	0	-8.3674	78.2172	-2.3482	0	0
Base	4	18	CIM12	0	-3.1913	70.9584	-9.3182	0	0
Base	4	18	CIM13 Max	13.673	1.4041	72.3741	-0.1599	23.7241	2.293
Base	4	18	CIM13 Min	-13.673	-7.7866	69.5428	-18.4766	-23.7241	-2.293
Base	4	18	CIM14 Max	4.1277	12.0307	75.6476	21.0188	7.162	0.6922
Base	4	18	CIM14 Min	-4.1277	-18.4132	66.2692	-39.6552	-7.162	-0.6922
Base	4	18	CIM15	0	-0.1173	34.0066	-5.8138	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	5	19	D	-10.648	4.3805	115.7816	-14.5497	-11.2939	0
Base	5	19	L	-2.188	-2.37	13.8843	0.0187	-2.3207	0
Base	5	19	LR	0.0458	3.0012	5.5888	-3.1485	0.0486	0
Base	5	19	EX Max	131.8304	78.9646	38.0169	151.9541	251.2077	13.9091
Base	5	19	EY Max	0.0005	92.0855	28.2707	184.111	0.0005	0
Base	5	19	DISX Max	41.197	24.6764	11.8803	47.4856	78.5024	4.3466
Base	5	19	DISY Max	0.0002	28.7767	8.8346	57.5347	0.0002	0
Base	5	19	W	0	0	0	0	0	0
Base	5	19	G	-1.0023	4.8175	18.1199	-6.2876	-1.0631	0
Base	5	19	DERUX Max	21.2054	12.3815	5.8971	23.7933	40.3963	2.1741
Base	5	19	DERUY Max	0.0001	15.6908	4.8171	31.3713	0.0001	0
Base	5	19	COMB1	-14.9072	6.1327	162.0943	-20.3695	-15.8115	0
Base	5	19	COMB2	-16.2554	2.9651	163.9473	-19.0039	-17.2415	0
Base	5	19	COMB3	-14.8922	7.6885	161.7644	-22.4784	-15.7956	0
Base	5	19	COMB4	-14.9426	4.3871	155.6167	-19.0151	-15.8491	0
Base	5	19	COMB5 Max	26.2315	36.196	167.3529	47.3052	62.6291	4.3466
Base	5	19	COMB5 Min	-56.1626	-30.4229	138.2916	-82.1869	-94.3758	-4.3466
Base	5	19	COMB6 Max	-2.6063	39.0662	165.2209	54.3395	7.6775	1.304
Base	5	19	COMB6 Min	-27.3248	-33.2931	140.4236	-89.2212	-39.4243	-1.304
Base	5	19	COMB7 Max	2.7761	40.1221	116.6021	58.6857	13.3864	1.304
Base	5	19	COMB7 Min	-21.9424	-32.2372	91.8048	-84.8751	-33.7154	-1.304
Base	5	19	COMB8 Max	31.6139	37.2519	118.7341	51.6514	68.3379	4.3466
Base	5	19	COMB8 Min	-50.7802	-29.367	89.6728	-77.8407	-88.667	-4.3466
Base	5	19	ENVE Max	31.6139	40.1221	167.3529	58.6857	68.3379	4.3466
Base	5	19	ENVE Min	-56.1626	-33.2931	89.6728	-89.2212	-94.3758	-4.3466
Base	5	19	CIM01	-10.648	4.3805	115.7816	-14.5497	-11.2939	0
Base	5	19	CIM02	-12.8359	2.0104	129.6659	-14.5309	-13.6146	0
Base	5	19	CIM03	-10.6021	7.3817	121.3705	-17.6981	-11.2453	0
Base	5	19	CIM04	-12.2546	4.8539	130.3865	-16.897	-12.998	0
Base	5	19	CIM05 Max	18.19	27.6971	125.9531	30.7726	43.6578	3.0426
Base	5	19	CIM05 Min	-39.4859	-18.9362	105.6102	-59.8719	-66.2456	-3.0426
Base	5	19	CIM06 Max	-1.9965	29.7062	124.4607	35.6966	5.1917	0.9128
Base	5	19	CIM06 Min	-19.2994	-20.9453	107.1025	-64.7959	-27.7795	-0.9128
Base	5	19	CIM07 Max	9.5799	22.5367	138.0966	17.476	28.6083	2.3037
Base	5	19	CIM07 Min	-34.089	-12.8289	122.6764	-51.2699	-54.6043	-2.3037
Base	5	19	CIM08 Max	-5.663	24.0538	136.9697	21.1941	-0.4375	0.6955
Base	5	19	CIM08 Min	-18.8462	-14.346	123.8033	-54.9881	-25.5584	-0.6955
Base	5	19	DER01	-14.9072	6.1327	162.0943	-20.3695	-15.8115	0
Base	5	19	DER02	-16.2554	2.9651	163.9473	-19.0039	-17.2415	0
Base	5	19	DER03	-14.8922	7.6885	161.7644	-22.4784	-15.7956	0
Base	5	19	DER04	-14.9426	4.3871	155.6167	-19.0151	-15.8491	0
Base	5	19	DER05 Max	116.8649	81.8512	190.8391	134.5132	235.3343	13.9091
Base	5	19	DER05 Min	-146.796	-76.0781	114.8054	-169.3949	-267.081	-13.9091
Base	5	19	DER06 Max	-14.965	94.972	181.093	166.6701	-15.8729	0
Base	5	19	DER06 Min	-14.966	-89.1989	124.5515	-201.5518	-15.8739	0
Base	5	19	DER07 Max	122.2473	82.9071	142.2203	138.8594	241.0431	13.9091
Base	5	19	DER07 Min	-141.4136	-75.0222	66.1866	-165.0488	-261.3722	-13.9091
Base	5	19	DER08 Max	-9.5827	96.0279	132.4742	171.0163	-10.164	0
Base	5	19	DER08 Min	-9.5837	-88.1431	75.9327	-197.2057	-10.165	0
Base	5	19	DERUD01	-14.9072	6.1327	162.0943	-20.3695	-15.8115	0
Base	5	19	DERUD02	-16.2554	2.9651	163.9473	-19.0039	-17.2415	0
Base	5	19	DERUD03	-14.8922	7.6885	161.7644	-22.4784	-15.7956	0
Base	5	19	DERUD04	-14.9426	4.3871	155.6167	-19.0151	-15.8491	0
Base	5	19	DERUD05 Max	6.2399	15.2681	158.7193	6.3524	24.5229	2.1741
Base	5	19	DERUD05 Min	-36.1709	-9.495	146.9252	-41.2341	-56.2697	-2.1741
Base	5	19	DERUD06 Max	-14.9654	18.5773	157.6394	13.9304	-15.8733	0
Base	5	19	DERUD06 Min	-14.9656	-12.8042	148.0051	-48.8122	-15.8735	0
Base	5	19	DERUD07 Max	11.6222	16.324	110.1005	10.6986	30.2318	2.1741
Base	5	19	DERUD07 Min	-30.7886	-8.4391	98.3064	-36.888	-50.5608	-2.1741
Base	5	19	DERUD08 Max	-9.5831	19.6332	109.0206	18.2766	-10.1644	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	5	19	DERUD08 Min	-9.5833	-11.7483	99.3863	-44.466	-10.1646	0
Base	5	19	VIG01 Max	67.4286	69.5055	181.8836	112.0513	141.1315	8.6932
Base	5	19	VIG01 Min	-97.3596	-63.7324	123.761	-146.933	-172.8783	-8.6932
Base	5	19	VIG02 Max	9.753	75.2458	177.6196	126.1199	31.2284	2.608
Base	5	19	VIG02 Min	-39.684	-69.4728	128.0249	-161.0016	-62.9751	-2.608
Base	5	19	VIG03 Max	72.8109	70.5613	133.2648	116.3974	146.8404	8.6932
Base	5	19	VIG03 Min	-91.9773	-62.6765	75.1422	-142.5868	-167.1694	-8.6932
Base	5	19	VIG04 Max	15.1353	76.3017	129.0008	130.4661	36.9372	2.608
Base	5	19	VIG04 Min	-34.3017	-68.4169	79.4061	-156.6554	-57.2663	-2.608
Base	5	19	COL1 Max	108.6256	102.8149	196.4142	176.7973	219.6339	13.0398
Base	5	19	COL1 Min	-138.5567	-97.0419	109.2303	-211.679	-251.3807	-13.0398
Base	5	19	COL2 Max	22.1122	111.4255	190.0183	197.9003	54.7793	3.9119
Base	5	19	COL2 Min	-52.0433	-105.6524	115.6262	-232.782	-86.526	-3.9119
Base	5	19	COL3 Max	114.008	103.8708	147.7954	181.1435	225.3428	13.0398
Base	5	19	COL3 Min	-133.1743	-95.986	60.6115	-207.3329	-245.6718	-13.0398
Base	5	19	COL4 Max	27.4946	112.4814	141.3995	202.2464	60.4881	3.9119
Base	5	19	COL4 Min	-46.6609	-104.5965	67.0074	-228.4358	-80.8172	-3.9119
Base	5	19	CIM09 Max	22.4492	25.9449	79.6404	36.5924	48.1754	3.0426
Base	5	19	CIM09 Min	-35.2267	-20.6883	59.2975	-54.052	-61.7281	-3.0426
Base	5	19	CIM10 Max	2.2627	27.954	78.1481	41.5165	9.7093	0.9128
Base	5	19	CIM10 Min	-15.0403	-22.6975	60.7899	-58.9761	-23.262	-0.9128
Base	5	19	COMB9	-16.7795	3.8732	170.2128	-20.5734	-17.7973	0
Base	5	19	COMB10	-16.5692	10.5945	181.814	-27.501	-17.5743	0
Base	5	19	COMB11	-15.4667	5.2953	161.8822	-20.5847	-16.4049	0
Base	5	19	DER09	-16.7795	3.8732	170.2128	-20.5734	-17.7973	0
Base	5	19	DER10	-16.5692	10.5945	181.814	-27.501	-17.5743	0
Base	5	19	DER11	-15.4667	5.2953	161.8822	-20.5847	-16.4049	0
Base	5	19	DERUD09	-16.7795	3.8732	170.2128	-20.5734	-17.7973	0
Base	5	19	DERUD10	-16.5692	10.5945	181.814	-27.501	-17.5743	0
Base	5	19	DERUD11	-15.4667	5.2953	161.8822	-20.5847	-16.4049	0
Base	5	19	CIM11	-11.6503	9.1979	133.9015	-20.8373	-12.357	0
Base	5	19	CIM12	-13.0407	6.216	139.7847	-19.2513	-13.8317	0
Base	5	19	CIM13 Max	8.7938	23.8988	147.4948	15.1216	27.7745	2.3037
Base	5	19	CIM13 Min	-34.8751	-11.4668	132.0747	-53.6242	-55.438	-2.3037
Base	5	19	CIM14 Max	-6.4491	25.4159	146.3679	18.8398	-1.2713	0.6955
Base	5	19	CIM14 Min	-19.6323	-12.9838	133.2016	-57.3424	-26.3922	-0.6955
Base	5	19	CIM15	-6.3888	2.6283	69.469	-8.7298	-6.7763	0
Base	6	21	D	-2.5046	0.2447	39.6785	-10.1427	-2.6211	-0.0051
Base	6	21	L	-0.0599	3.5451	-1.7952	-6.1789	-0.0613	0.0007
Base	6	21	LR	-0.0151	-2.9082	5.7834	3.0592	-0.0166	-0.0065
Base	6	21	EX Max	62.8754	73.5068	31.0692	145.2195	122.2897	13.0462
Base	6	21	EY Max	0.0261	91.5806	28.2816	182.4125	0.0516	0.0749
Base	6	21	DISX Max	19.6486	22.9709	9.7091	45.3811	38.2155	4.0769
Base	6	21	DISY Max	0.0081	28.6189	8.838	57.0039	0.0161	0.0234
Base	6	21	W	0	0	0	0	0	0
Base	6	21	G	-0.0602	-4.0439	10.6693	3.0291	-0.0639	-0.0126
Base	6	21	DERUX Max	8.1622	11.4852	4.7679	22.6966	15.9049	2.0496
Base	6	21	DERUY Max	0.0044	15.6047	4.819	31.0819	0.0088	0.0128
Base	6	21	COMB1	-3.5064	0.3425	55.5499	-14.1998	-3.6695	-0.0072
Base	6	21	COMB2	-3.1089	4.5116	47.6336	-20.5278	-3.2517	-0.0083
Base	6	21	COMB3	-3.0896	-0.8145	55.0725	-13.4553	-3.2332	-0.0158
Base	6	21	COMB4	-3.0729	2.3845	48.7107	-16.8205	-3.2149	-0.0087
Base	6	21	COMB5 Max	16.5856	35.3952	58.1795	44.1322	35.0138	4.0785
Base	6	21	COMB5 Min	-22.7164	-27.7179	33.4585	-80.8324	-41.427	-4.0894
Base	6	21	COMB6 Max	2.8373	39.3489	57.5698	52.2681	8.2742	1.241
Base	6	21	COMB6 Min	-8.9681	-31.6716	34.0683	-88.9683	-14.6874	-1.2519
Base	6	21	COMB7 Max	3.6486	35.7304	47.4614	61.4898	9.1218	1.2419
Base	6	21	COMB7 Min	-8.1568	-35.29	23.9599	-79.7467	-13.8398	-1.2511
Base	6	21	COMB8 Max	17.3969	31.7767	48.0712	53.3538	35.8614	4.0794
Base	6	21	COMB8 Min	-21.9051	-31.3364	23.3501	-71.6107	-40.5794	-4.0886

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	6	21	ENVE Max	17.3969	39.3489	58.1795	61.4898	35.8614	4.0794
Base	6	21	ENVE Min	-22.7164	-35.29	23.3501	-88.9683	-41.427	-4.0894
Base	6	21	CIM01	-2.5046	0.2447	39.6785	-10.1427	-2.6211	-0.0051
Base	6	21	CIM02	-2.5644	3.7897	37.8833	-16.3216	-2.6824	-0.0044
Base	6	21	CIM03	-2.5197	-2.6636	45.4619	-7.0835	-2.6377	-0.0116
Base	6	21	CIM04	-2.5608	0.7223	42.6697	-12.4824	-2.6795	-0.0095
Base	6	21	CIM05 Max	11.2511	22.3342	48.3309	33.5949	24.1332	2.8537
Base	6	21	CIM05 Min	-16.2603	-21.8449	31.0261	-53.8803	-29.3753	-2.8639
Base	6	21	CIM06 Max	1.6273	25.1018	47.904	39.2901	5.4155	0.8674
Base	6	21	CIM06 Min	-6.6365	-24.6125	31.453	-59.5755	-10.6576	-0.8777
Base	6	21	CIM07 Max	7.8542	17.4759	49.2296	20.6902	17.5773	2.1551
Base	6	21	CIM07 Min	-12.9759	-16.0313	36.1098	-45.655	-22.9363	-2.174
Base	6	21	CIM08 Max	0.5872	19.5657	48.9073	24.9906	3.4435	0.6553
Base	6	21	CIM08 Min	-5.7089	-18.1211	36.4321	-49.9555	-8.8026	-0.6742
Base	6	21	DER01	-3.5064	0.3425	55.5499	-14.1998	-3.6695	-0.0072
Base	6	21	DER02	-3.1089	4.5116	47.6336	-20.5278	-3.2517	-0.0083
Base	6	21	DER03	-3.0896	-0.8145	55.0725	-13.4553	-3.2332	-0.0158
Base	6	21	DER04	-3.0729	2.3845	48.7107	-16.8205	-3.2149	-0.0087
Base	6	21	DER05 Max	59.81	77.3454	76.8882	126.8694	119.0832	13.0408
Base	6	21	DER05 Min	-65.9408	-69.6681	14.7498	-163.5696	-125.4963	-13.0517
Base	6	21	DER06 Max	-3.0393	95.4193	74.1007	164.0624	-3.155	0.0694
Base	6	21	DER06 Min	-3.0914	-87.742	17.5374	-200.7626	-3.2582	-0.0803
Base	6	21	DER07 Max	60.6213	73.727	66.7798	136.091	119.9308	13.0416
Base	6	21	DER07 Min	-65.1295	-73.2866	4.6415	-154.3479	-124.6487	-13.0508
Base	6	21	DER08 Max	-2.2281	91.8008	63.9923	173.2841	-2.3074	0.0703
Base	6	21	DER08 Min	-2.2802	-91.3604	7.429	-191.541	-2.4106	-0.0795
Base	6	21	DERUD01	-3.5064	0.3425	55.5499	-14.1998	-3.6695	-0.0072
Base	6	21	DERUD02	-3.1089	4.5116	47.6336	-20.5278	-3.2517	-0.0083
Base	6	21	DERUD03	-3.0896	-0.8145	55.0725	-13.4553	-3.2332	-0.0158
Base	6	21	DERUD04	-3.0729	2.3845	48.7107	-16.8205	-3.2149	-0.0087
Base	6	21	DERUD05 Max	5.0969	15.3239	50.5869	4.3465	12.6983	2.0442
Base	6	21	DERUD05 Min	-11.2276	-7.6466	41.0511	-41.0467	-19.1115	-2.0551
Base	6	21	DERUD06 Max	-3.0609	19.4434	50.638	12.7318	-3.1978	0.0073
Base	6	21	DERUD06 Min	-3.0698	-11.7661	41	-49.432	-3.2154	-0.0182
Base	6	21	DERUD07 Max	5.9081	11.7054	40.4786	13.5681	13.5459	2.045
Base	6	21	DERUD07 Min	-10.4164	-11.265	30.9427	-31.825	-18.2639	-2.0543
Base	6	21	DERUD08 Max	-2.2497	15.8249	40.5297	21.9535	-2.3502	0.0082
Base	6	21	DERUD08 Min	-2.2586	-15.3845	30.8916	-40.2103	-2.3678	-0.0174
Base	6	21	VIG01 Max	36.2367	66.9518	70.5401	106.6144	73.2342	8.1625
Base	6	21	VIG01 Min	-42.3674	-59.2745	21.098	-143.3146	-79.6473	-8.1734
Base	6	21	VIG02 Max	8.7401	74.8591	69.3205	122.8864	19.755	2.4875
Base	6	21	VIG02 Min	-14.8708	-67.1818	22.3175	-159.5866	-26.1681	-2.4984
Base	6	21	VIG03 Max	37.0479	63.3333	60.4317	115.8361	74.0818	8.1633
Base	6	21	VIG03 Min	-41.5562	-62.8929	10.9896	-134.093	-78.7997	-8.1725
Base	6	21	VIG04 Max	9.5513	71.2406	59.2121	132.108	20.6026	2.4884
Base	6	21	VIG04 Min	-14.0596	-70.8002	12.2092	-150.3649	-25.3206	-2.4976
Base	6	21	COL1 Max	55.8877	98.5083	82.9006	169.0967	111.4546	12.2464
Base	6	21	COL1 Min	-62.0184	-90.831	8.7375	-205.7969	-117.8677	-12.2573
Base	6	21	COL2 Max	14.6428	110.3693	81.0713	193.5046	31.2358	3.734
Base	6	21	COL2 Min	-20.7735	-102.692	10.5668	-230.2048	-37.6489	-3.7449
Base	6	21	COL3 Max	56.6989	94.8899	72.7922	178.3183	112.3022	12.2473
Base	6	21	COL3 Min	-61.2072	-94.4495	-1.3709	-196.5752	-117.0201	-12.2565
Base	6	21	COL4 Max	15.454	106.7508	70.9629	202.7263	32.0834	3.7348
Base	6	21	COL4 Min	-19.9623	-106.3104	0.4584	-220.9832	-36.8013	-3.744
Base	6	21	CIM09 Max	12.253	22.2364	32.4595	37.652	25.1816	2.8557
Base	6	21	CIM09 Min	-15.2585	-21.9428	15.1547	-49.8232	-28.3269	-2.8618
Base	6	21	CIM10 Max	2.6291	25.0039	32.0326	43.3471	6.4639	0.8695
Base	6	21	CIM10 Min	-5.6347	-24.7104	15.5816	-55.5184	-9.6092	-0.8756
Base	6	21	COMB9	-3.1314	3.9437	50.0766	-20.5429	-3.2753	-0.0113
Base	6	21	COMB10	-3.1617	-2.6316	62.8899	-13.5036	-3.3088	-0.0256

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	6	21	COMB11	-3.0955	1.8167	51.1537	-16.8356	-3.2385	-0.0118
Base	6	21	DER09	-3.1314	3.9437	50.0766	-20.5429	-3.2753	-0.0113
Base	6	21	DER10	-3.1617	-2.6316	62.8899	-13.5036	-3.3088	-0.0256
Base	6	21	DER11	-3.0955	1.8167	51.1537	-16.8356	-3.2385	-0.0118
Base	6	21	DERUD09	-3.1314	3.9437	50.0766	-20.5429	-3.2753	-0.0113
Base	6	21	DERUD10	-3.1617	-2.6316	62.8899	-13.5036	-3.3088	-0.0256
Base	6	21	DERUD11	-3.0955	1.8167	51.1537	-16.8356	-3.2385	-0.0118
Base	6	21	CIM11	-2.5648	-3.7993	50.3478	-7.1136	-2.685	-0.0177
Base	6	21	CIM12	-2.5946	-0.1295	46.3341	-12.505	-2.715	-0.014
Base	6	21	CIM13 Max	7.8204	16.6241	52.894	20.6676	17.5418	2.1505
Base	6	21	CIM13 Min	-13.0097	-16.8831	39.7742	-45.6777	-22.9718	-2.1786
Base	6	21	CIM14 Max	0.5534	18.7139	52.5717	24.968	3.4081	0.6507
Base	6	21	CIM14 Min	-5.7427	-18.9729	40.0965	-49.9781	-8.838	-0.6788
Base	6	21	CIM15	-1.5028	0.1468	23.8071	-6.0856	-1.5727	-0.0031

5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.221	4.518	28.389	805.9364
Modal	2	0.2	4.999	31.4066	986.3729
Modal	3	0.148	6.759	42.4664	1803.3955
Modal	4	0.052	19.049	119.6864	14324.8399
Modal	5	0.021	47.845	300.6167	90370.4244
Modal	6	0.017	57.377	360.5099	129967.3782
Modal	7	0.017	58.531	367.7593	135246.889
Modal	8	0.016	62.321	391.5731	153329.474
Modal	9	0.01	95.871	602.375	362855.6339

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.221	0.6545	0	0	0.6545	0	0
Modal	2	0.2	0	1	0	0.6545	1	0
Modal	3	0.148	0.3445	0	0	0.999	1	0
Modal	4	0.052	0.001	0	0	1	1	0
Modal	5	0.021	0	0	0	1	1	0
Modal	6	0.017	0	1.853E-05	0	1	1	0
Modal	7	0.017	0	0	0	1	1	0
Modal	8	0.016	0	0	0	1	1	0
Modal	9	0.01	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.6545	0.371	0	0.6545	0.371
Modal	2	1	0	0	1	0.6545	0.371
Modal	3	0	0.3445	0.6282	1	0.999	0.9992
Modal	4	0	0.001	0.0008	1	1	1
Modal	5	0	0	0	1	1	1
Modal	6	1.853E-05	0	0	1	1	1
Modal	7	0	0	1.265E-05	1	1	1
Modal	8	0	0	0	1	1	1
Modal	9	0	0	0	1	1	1

Table 5.11 - Modal Load Participation Ratios

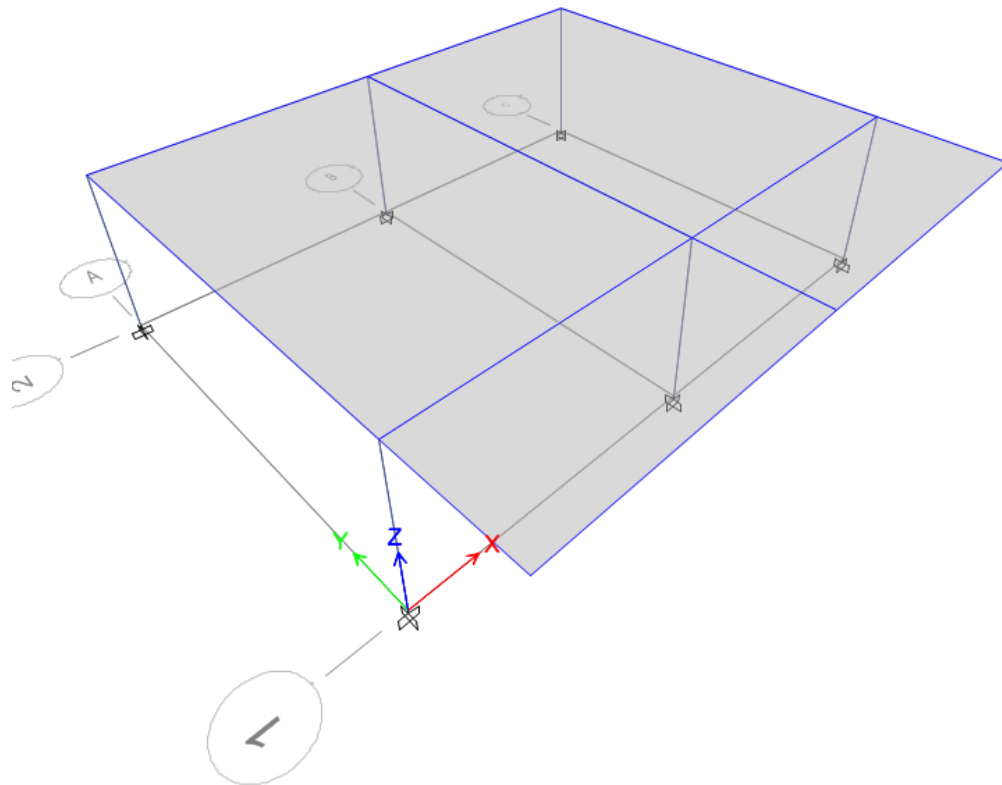
Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.12 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.221	0.667	0	0	0.333
Modal	2	0.2	0	1	0	0
Modal	3	0.148	0.348	0	0	0.652
Modal	4	0.052	0.013	0	0	0.987
Modal	5	0.021	0	1	0	0
Modal	6	0.017	0	1	0	0
Modal	7	0.017	0	0	0	1
Modal	8	0.016	0	1	0	0
Modal	9	0.01	0	0	0	1





## Project Report

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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	5.6
G1	X	C	Yes	End	11.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	5600	0	0
4	5600	8200	0
5	11200	0	0
6	11200	8200	0
10	0	-2400	0
11	5600	-2400	0
12	11200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below
C5	5	5	Below
C6	6	6	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B3	5	6	None
B4	1	3	None

Beam	I-End Point	J-End Point	Curve Type
B5	3	5	None
B6	2	4	None
B7	4	6	None
B10	10	11	None
B11	11	12	None
B8	10	1	None
B9	11	3	None
B12	12	5	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	10	12	None
		2	12	5	None
		3	5	1	None
		4	1	10	None
F2	4	1	1	5	None
		2	5	6	None
		3	6	2	None
		4	2	1	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	41809.44	41809.44	5.6	-0.7098	41809.44	41809.44	5.6	-0.7098	5.6	3.2149

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	41809.44	41809.44	769.2246	5.6	-0.7098

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	56483.87	56483.87	0
Base	3747.82	3747.82	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A416Gr270	Tendon	196500.6	0	76.9729	Fy=1689.91 MPa, Fu=1861.58 MPa
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 2.5 Tendon Sections

**Table 2.5 - Tendon Section Properties**

Name	Material	StrandArea cm <sup>2</sup>	Color
Tendon1	A416Gr270	1	Yellow

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	5	10	D1	
N1	6	20	Disconnected	
N1	10	25	D1	
N1	11	26	D1	
N1	12	27	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	5	19	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	6	21	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Max Station Spacing mm	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40		3
N1	C2	8	Column	3250	C40X40	C40X40		3
N1	C3	9	Column	3250	C40X40	C40X40		3
N1	C4	10	Column	3250	C40X40	C40X40		3
N1	C5	11	Column	3250	C40X40	C40X40		3
N1	C6	12	Column	3250	C40X40	C40X40		3
N1	B1	13	Beam	8200	V30X50	V30X50	500	
N1	B2	14	Beam	8200	V30X50	V30X50	500	
N1	B3	15	Beam	8200	V30X50	V30X50	500	
N1	B4	16	Beam	5600	V30X50	V30X50	500	
N1	B5	17	Beam	5600	V30X50	V30X50	500	
N1	B6	18	Beam	5600	V30X50	V30X50	500	
N1	B7	19	Beam	5600	V30X50	V30X50	500	
N1	B10	22	Beam	5600	VB20X50	VB20X50	500	
N1	B11	23	Beam	5600	VB20X50	VB20X50	500	
N1	B8	2	Beam	2400	V30X50	V30X50	500	
N1	B9	4	Beam	2400	V30X50	V30X50	500	
N1	B12	6	Beam	2400	V30X50	V30X50	500	

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F1	1	LOSA	90
N1	F2	2	CUB	

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

Table 4.1 - Load Patterns

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

Table 4.2 - Frame Loads - Distributed

Story	Label	Unique Name	Design Type	Load Pattern	Load Type	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm	Force at Start kN/m	Force at End kN/m
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B3	15	Beam	D	Force	Gravity	0	1	0	8200	4.4	0
N1	B4	16	Beam	D	Force	Gravity	0	1	0	5600	4.4	4.4
N1	B5	17	Beam	D	Force	Gravity	0	1	0	5600	4.4	4.4
N1	B10	22	Beam	D	Force	Gravity	0	1	0	5600	1.55	1.55
N1	B11	23	Beam	D	Force	Gravity	0	1	0	5600	1.55	1.55

#### 4.2.2 Area Loads

Table 4.3 - Shell Loads - Uniform

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	1	D	Gravity	4.3
N1	F2	2	D	Gravity	0.64
N1	F1	1	L	Gravity	2
N1	F2	2	LR	Gravity	0.5
N1	F1	1	G	Gravity	1
N1	F2	2	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

Table 4.4 - Response Spectrum Function - User

Name	Period sec	Acceleration	Damping %
Umbral	0	0.08	2
Umbral	0.01	0.086	
Umbral	0.02	0.093	
Umbral	0.03	0.099	
Umbral	0.04	0.106	
Umbral	0.05	0.112	
Umbral	0.06	0.118	
Umbral	0.07	0.125	
Umbral	0.08	0.131	
Umbral	0.09	0.138	
Umbral	0.1	0.144	
Umbral	0.11	0.15	



Name	Period sec	Acceleration	Damping %
Umbral	0.12	0.157	
Umbral	0.13	0.163	
Umbral	0.14	0.17	
Umbral	0.15	0.176	
Umbral	0.16	0.182	
Umbral	0.17	0.189	
Umbral	0.18	0.195	
Umbral	0.19	0.202	
Umbral	0.2	0.208	
Umbral	0.21	0.214	
Umbral	0.22	0.221	
Umbral	0.23	0.227	
Umbral	0.24	0.234	
Umbral	0.25	0.24	
Umbral	0.26	0.24	
Umbral	0.27	0.24	
Umbral	0.28	0.24	
Umbral	0.29	0.24	
Umbral	0.3	0.24	
Umbral	0.31	0.24	
Umbral	0.32	0.24	
Umbral	0.33	0.24	
Umbral	0.34	0.24	
Umbral	0.35	0.24	
Umbral	0.36	0.24	
Umbral	0.37	0.24	
Umbral	0.38	0.24	
Umbral	0.39	0.24	
Umbral	0.4	0.24	
Umbral	0.41	0.24	
Umbral	0.42	0.24	
Umbral	0.43	0.24	
Umbral	0.44	0.24	
Umbral	0.45	0.24	
Umbral	0.46	0.24	
Umbral	0.47	0.24	
Umbral	0.48	0.24	
Umbral	0.49	0.24	
Umbral	0.5	0.24	
Umbral	0.51	0.24	
Umbral	0.52	0.24	
Umbral	0.53	0.24	
Umbral	0.54	0.24	
Umbral	0.55	0.24	
Umbral	0.56	0.24	
Umbral	0.57	0.24	
Umbral	0.58	0.24	
Umbral	0.59	0.24	
Umbral	0.6	0.24	
Umbral	0.61	0.24	
Umbral	0.62	0.24	
Umbral	0.63	0.24	
Umbral	0.64	0.24	
Umbral	0.65	0.24	
Umbral	0.66	0.24	
Umbral	0.67	0.24	
Umbral	0.68	0.24	
Umbral	0.69	0.24	
Umbral	0.7	0.24	
Umbral	0.71	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	0.72	0.24	
Umbral	0.73	0.24	
Umbral	0.74	0.24	
Umbral	0.75	0.24	
Umbral	0.76	0.24	
Umbral	0.77	0.24	
Umbral	0.78	0.24	
Umbral	0.79	0.24	
Umbral	0.8	0.24	
Umbral	0.81	0.24	
Umbral	0.82	0.24	
Umbral	0.83	0.24	
Umbral	0.84	0.24	
Umbral	0.85	0.24	
Umbral	0.86	0.24	
Umbral	0.87	0.24	
Umbral	0.88	0.24	
Umbral	0.89	0.24	
Umbral	0.9	0.24	
Umbral	0.91	0.24	
Umbral	0.92	0.24	
Umbral	0.93	0.24	
Umbral	0.94	0.24	
Umbral	0.95	0.24	
Umbral	0.96	0.24	
Umbral	0.97	0.24	
Umbral	0.98	0.24	
Umbral	0.99	0.24	
Umbral	1	0.24	
Umbral	1.01	0.24	
Umbral	1.02	0.24	
Umbral	1.03	0.24	
Umbral	1.04	0.24	
Umbral	1.05	0.24	
Umbral	1.06	0.24	
Umbral	1.07	0.24	
Umbral	1.08	0.24	
Umbral	1.09	0.24	
Umbral	1.1	0.24	
Umbral	1.11	0.24	
Umbral	1.12	0.24	
Umbral	1.13	0.24	
Umbral	1.14	0.24	
Umbral	1.15	0.24	
Umbral	1.16	0.24	
Umbral	1.17	0.24	
Umbral	1.18	0.24	
Umbral	1.19	0.24	
Umbral	1.2	0.24	
Umbral	1.21	0.24	
Umbral	1.22	0.24	
Umbral	1.23	0.24	
Umbral	1.24	0.24	
Umbral	1.25	0.24	
Umbral	1.26	0.24	
Umbral	1.27	0.24	
Umbral	1.28	0.24	
Umbral	1.29	0.24	
Umbral	1.3	0.24	
Umbral	1.31	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.32	0.24	
Umbral	1.33	0.24	
Umbral	1.34	0.24	
Umbral	1.35	0.24	
Umbral	1.36	0.24	
Umbral	1.37	0.24	
Umbral	1.38	0.24	
Umbral	1.39	0.24	
Umbral	1.4	0.24	
Umbral	1.41	0.24	
Umbral	1.42	0.24	
Umbral	1.43	0.24	
Umbral	1.44	0.24	
Umbral	1.45	0.24	
Umbral	1.46	0.24	
Umbral	1.47	0.24	
Umbral	1.48	0.24	
Umbral	1.49	0.24	
Umbral	1.5	0.24	
Umbral	1.51	0.24	
Umbral	1.52	0.24	
Umbral	1.53	0.24	
Umbral	1.54	0.24	
Umbral	1.55	0.24	
Umbral	1.56	0.24	
Umbral	1.57	0.24	
Umbral	1.58	0.24	
Umbral	1.59	0.24	
Umbral	1.6	0.24	
Umbral	1.61	0.24	
Umbral	1.62	0.24	
Umbral	1.63	0.24	
Umbral	1.64	0.24	
Umbral	1.65	0.24	
Umbral	1.66	0.24	
Umbral	1.67	0.24	
Umbral	1.68	0.24	
Umbral	1.69	0.24	
Umbral	1.7	0.24	
Umbral	1.71	0.24	
Umbral	1.72	0.24	
Umbral	1.73	0.24	
Umbral	1.74	0.24	
Umbral	1.75	0.24	
Umbral	1.76	0.24	
Umbral	1.77	0.24	
Umbral	1.78	0.24	
Umbral	1.79	0.24	
Umbral	1.8	0.24	
Umbral	1.81	0.24	
Umbral	1.82	0.24	
Umbral	1.83	0.24	
Umbral	1.84	0.24	
Umbral	1.85	0.24	
Umbral	1.86	0.24	
Umbral	1.87	0.24	
Umbral	1.88	0.24	
Umbral	1.89	0.24	
Umbral	1.9	0.24	
Umbral	1.91	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.92	0.24	
Umbral	1.93	0.24	
Umbral	1.94	0.24	
Umbral	1.95	0.24	
Umbral	1.96	0.24	
Umbral	1.97	0.24	
Umbral	1.98	0.24	
Umbral	1.99	0.24	
Umbral	2	0.24	
Umbral	2.01	0.239	
Umbral	2.02	0.238	
Umbral	2.03	0.236	
Umbral	2.04	0.235	
Umbral	2.05	0.234	
Umbral	2.06	0.233	
Umbral	2.07	0.232	
Umbral	2.08	0.231	
Umbral	2.09	0.23	
Umbral	2.1	0.229	
Umbral	2.11	0.227	
Umbral	2.12	0.226	
Umbral	2.13	0.225	
Umbral	2.14	0.224	
Umbral	2.15	0.223	
Umbral	2.16	0.222	
Umbral	2.17	0.221	
Umbral	2.18	0.22	
Umbral	2.19	0.219	
Umbral	2.2	0.218	
Umbral	2.21	0.217	
Umbral	2.22	0.216	
Umbral	2.23	0.215	
Umbral	2.24	0.214	
Umbral	2.25	0.213	
Umbral	2.26	0.212	
Umbral	2.27	0.211	
Umbral	2.28	0.211	
Umbral	2.29	0.21	
Umbral	2.3	0.209	
Umbral	2.31	0.208	
Umbral	2.32	0.207	
Umbral	2.33	0.206	
Umbral	2.34	0.205	
Umbral	2.35	0.204	
Umbral	2.36	0.203	
Umbral	2.37	0.203	
Umbral	2.38	0.202	
Umbral	2.39	0.201	
Umbral	2.4	0.2	
Umbral	2.41	0.199	
Umbral	2.42	0.198	
Umbral	2.43	0.198	
Umbral	2.44	0.197	
Umbral	2.45	0.196	
Umbral	2.46	0.195	
Umbral	2.47	0.194	
Umbral	2.48	0.194	
Umbral	2.49	0.193	
Umbral	2.5	0.192	
Umbral	2.51	0.191	

Name	Period sec	Acceleration	Damping %
Umbral	2.52	0.19	
Umbral	2.53	0.19	
Umbral	2.54	0.189	
Umbral	2.55	0.188	
Umbral	2.56	0.188	
Umbral	2.57	0.187	
Umbral	2.58	0.186	
Umbral	2.59	0.185	
Umbral	2.6	0.185	
Umbral	2.61	0.184	
Umbral	2.62	0.183	
Umbral	2.63	0.183	
Umbral	2.64	0.182	
Umbral	2.65	0.181	
Umbral	2.66	0.18	
Umbral	2.67	0.18	
Umbral	2.68	0.179	
Umbral	2.69	0.178	
Umbral	2.7	0.178	
Umbral	2.71	0.177	
Umbral	2.72	0.176	
Umbral	2.73	0.176	
Umbral	2.74	0.175	
Umbral	2.75	0.175	
Umbral	2.76	0.174	
Umbral	2.77	0.173	
Umbral	2.78	0.173	
Umbral	2.79	0.172	
Umbral	2.8	0.171	
Umbral	2.81	0.171	
Umbral	2.82	0.17	
Umbral	2.83	0.17	
Umbral	2.84	0.169	
Umbral	2.85	0.168	
Umbral	2.86	0.168	
Umbral	2.87	0.167	
Umbral	2.88	0.167	
Umbral	2.89	0.166	
Umbral	2.9	0.166	
Umbral	2.91	0.165	
Umbral	2.92	0.164	
Umbral	2.93	0.164	
Umbral	2.94	0.163	
Umbral	2.95	0.163	
Umbral	2.96	0.162	
Umbral	2.97	0.162	
Umbral	2.98	0.161	
Umbral	2.99	0.161	
Umbral	3	0.16	
Umbral	3.01	0.159	
Umbral	3.02	0.159	
Umbral	3.03	0.158	
Umbral	3.04	0.158	
Umbral	3.05	0.157	
Umbral	3.06	0.157	
Umbral	3.07	0.156	
Umbral	3.08	0.156	
Umbral	3.09	0.155	
Umbral	3.1	0.155	
Umbral	3.11	0.154	

Name	Period sec	Acceleration	Damping %
Umbral	3.12	0.154	
Umbral	3.13	0.153	
Umbral	3.14	0.153	
Umbral	3.15	0.152	
Umbral	3.16	0.152	
Umbral	3.17	0.151	
Umbral	3.18	0.151	
Umbral	3.19	0.15	
Umbral	3.2	0.15	
Umbral	3.21	0.15	
Umbral	3.22	0.149	
Umbral	3.23	0.149	
Umbral	3.24	0.148	
Umbral	3.25	0.148	
Umbral	3.26	0.147	
Umbral	3.27	0.147	
Umbral	3.28	0.146	
Umbral	3.29	0.146	
Umbral	3.3	0.145	
Umbral	3.31	0.145	
Umbral	3.32	0.145	
Umbral	3.33	0.144	
Umbral	3.34	0.144	
Umbral	3.35	0.143	
Umbral	3.36	0.143	
Umbral	3.37	0.142	
Umbral	3.38	0.142	
Umbral	3.39	0.142	
Umbral	3.4	0.141	
Umbral	3.41	0.141	
Umbral	3.42	0.14	
Umbral	3.43	0.14	
Umbral	3.44	0.14	
Umbral	3.45	0.139	
Umbral	3.46	0.139	
Umbral	3.47	0.138	
Umbral	3.48	0.138	
Umbral	3.49	0.138	
Umbral	3.5	0.137	
Umbral	3.51	0.137	
Umbral	3.52	0.136	
Umbral	3.53	0.136	
Umbral	3.54	0.136	
Umbral	3.55	0.135	
Umbral	3.56	0.135	
Umbral	3.57	0.134	
Umbral	3.58	0.134	
Umbral	3.59	0.134	
Umbral	3.6	0.133	
Umbral	3.61	0.133	
Umbral	3.62	0.133	
Umbral	3.63	0.132	
Umbral	3.64	0.132	
Umbral	3.65	0.132	
Umbral	3.66	0.131	
Umbral	3.67	0.131	
Umbral	3.68	0.13	
Umbral	3.69	0.13	
Umbral	3.7	0.13	
Umbral	3.71	0.129	

Name	Period sec	Acceleration	Damping %
Umbral	3.72	0.129	
Umbral	3.73	0.129	
Umbral	3.74	0.128	
Umbral	3.75	0.128	
Umbral	3.76	0.128	
Umbral	3.77	0.127	
Umbral	3.78	0.127	
Umbral	3.79	0.127	
Umbral	3.8	0.126	
Umbral	3.81	0.126	
Umbral	3.82	0.126	
Umbral	3.83	0.125	
Umbral	3.84	0.125	
Umbral	3.85	0.125	
Umbral	3.86	0.124	
Umbral	3.87	0.124	
Umbral	3.88	0.124	
Umbral	3.89	0.123	
Umbral	3.9	0.123	
Umbral	3.91	0.123	
Umbral	3.92	0.122	
Umbral	3.93	0.122	
Umbral	3.94	0.122	
Umbral	3.95	0.122	
Umbral	3.96	0.121	
Umbral	3.97	0.121	
Umbral	3.98	0.121	
Umbral	3.99	0.12	
Umbral	4	0.12	
Umbral	4.01	0.12	
Umbral	4.02	0.119	
Umbral	4.03	0.119	
Umbral	4.04	0.119	
Umbral	4.05	0.119	
Umbral	4.06	0.118	
Umbral	4.07	0.118	
Umbral	4.08	0.118	
Umbral	4.09	0.117	
Umbral	4.1	0.117	
Umbral	4.11	0.117	
Umbral	4.12	0.117	
Umbral	4.13	0.116	
Umbral	4.14	0.116	
Umbral	4.15	0.116	
Umbral	4.16	0.115	
Umbral	4.17	0.115	
Umbral	4.18	0.115	
Umbral	4.19	0.115	
Umbral	4.2	0.114	
Umbral	4.21	0.114	
Umbral	4.22	0.114	
Umbral	4.23	0.113	
Umbral	4.24	0.113	
Umbral	4.25	0.113	
Umbral	4.26	0.113	
Umbral	4.27	0.112	
Umbral	4.28	0.112	
Umbral	4.29	0.112	
Umbral	4.3	0.112	
Umbral	4.31	0.111	

Name	Period sec	Acceleration	Damping %
Umbral	4.32	0.111	
Umbral	4.33	0.111	
Umbral	4.34	0.111	
Umbral	4.35	0.11	
Umbral	4.36	0.11	
Umbral	4.37	0.11	
Umbral	4.38	0.11	
Umbral	4.39	0.109	
Umbral	4.4	0.109	
Umbral	4.41	0.109	
Umbral	4.42	0.109	
Umbral	4.43	0.108	
Umbral	4.44	0.108	
Umbral	4.45	0.108	
Umbral	4.46	0.108	
Umbral	4.47	0.107	
Umbral	4.48	0.107	
Umbral	4.49	0.107	
Umbral	4.5	0.107	
Umbral	4.51	0.106	
Umbral	4.52	0.106	
Umbral	4.53	0.106	
Umbral	4.54	0.106	
Umbral	4.55	0.105	
Umbral	4.56	0.105	
Umbral	4.57	0.105	
Umbral	4.58	0.105	
Umbral	4.59	0.105	
Umbral	4.6	0.104	
Umbral	4.61	0.104	
Umbral	4.62	0.104	
Umbral	4.63	0.104	
Umbral	4.64	0.103	
Umbral	4.65	0.103	
Umbral	4.66	0.103	
Umbral	4.67	0.103	
Umbral	4.68	0.103	
Umbral	4.69	0.102	
Umbral	4.7	0.102	
Umbral	4.71	0.102	
Umbral	4.72	0.102	
Umbral	4.73	0.101	
Umbral	4.74	0.101	
Umbral	4.75	0.101	
Umbral	4.76	0.101	
Umbral	4.77	0.101	
Umbral	4.78	0.1	
Umbral	4.79	0.1	
Umbral	4.8	0.1	
Umbral	4.81	0.1	
Umbral	4.82	0.1	
Umbral	4.83	0.099	
Umbral	4.84	0.099	
Umbral	4.85	0.099	
Umbral	4.86	0.099	
Umbral	4.87	0.099	
Umbral	4.88	0.098	
Umbral	4.89	0.098	
Umbral	4.9	0.098	
Umbral	4.91	0.098	



Name	Period sec	Acceleration	Damping %
Umbral	4.92	0.098	
Umbral	4.93	0.097	
Umbral	4.94	0.097	
Umbral	4.95	0.097	
Umbral	4.96	0.097	
Umbral	4.97	0.097	
Umbral	4.98	0.096	
Umbral	4.99	0.096	
Umbral	5	0.096	
Umbral	5.01	0.096	
Umbral	5.02	0.096	
Umbral	5.03	0.095	
Umbral	5.04	0.095	
Umbral	5.05	0.095	
Umbral	5.06	0.095	
Umbral	5.07	0.095	
Umbral	5.08	0.094	
Umbral	5.09	0.094	
Umbral	5.1	0.094	
Umbral	5.11	0.094	
Umbral	5.12	0.094	
Umbral	5.13	0.094	
Umbral	5.14	0.093	
Umbral	5.15	0.093	
Umbral	5.16	0.093	
Umbral	5.17	0.093	
Umbral	5.18	0.093	
Umbral	5.19	0.092	
Umbral	5.2	0.092	
Umbral	5.21	0.092	
Umbral	5.22	0.092	
Umbral	5.23	0.092	
Umbral	5.24	0.092	
Umbral	5.25	0.091	
Umbral	5.26	0.091	
Umbral	5.27	0.091	
Umbral	5.28	0.091	
Umbral	5.29	0.091	
Umbral	5.3	0.091	
Umbral	5.31	0.09	
Umbral	5.32	0.09	
Umbral	5.33	0.09	
Umbral	5.34	0.09	
Umbral	5.35	0.09	
Umbral	5.36	0.09	
Umbral	5.37	0.089	
Umbral	5.38	0.089	
Umbral	5.39	0.089	
Umbral	5.4	0.089	
Umbral	5.41	0.089	
Umbral	5.42	0.089	
Umbral	5.43	0.088	
Umbral	5.44	0.088	
Umbral	5.45	0.088	
Umbral	5.46	0.088	
Umbral	5.47	0.088	
Umbral	5.48	0.088	
Umbral	5.49	0.087	
Umbral	5.5	0.087	
Umbral	5.51	0.087	

Name	Period sec	Acceleration	Damping %
Umbral	5.52	0.087	
Umbral	5.53	0.087	
Umbral	5.54	0.087	
Umbral	5.55	0.086	
Umbral	5.56	0.086	
Umbral	5.57	0.086	
Umbral	5.58	0.086	
Umbral	5.59	0.086	
Umbral	5.6	0.086	
Umbral	5.61	0.086	
Umbral	5.62	0.085	
Umbral	5.63	0.085	
Umbral	5.64	0.085	
Umbral	5.65	0.085	
Umbral	5.66	0.085	
Umbral	5.67	0.085	
Umbral	5.68	0.085	
Umbral	5.69	0.084	
Umbral	5.7	0.084	
Umbral	5.71	0.084	
Umbral	5.72	0.084	
Umbral	5.73	0.084	
Umbral	5.74	0.084	
Umbral	5.75	0.083	
Umbral	5.76	0.083	
Umbral	5.77	0.083	
Umbral	5.78	0.083	
Umbral	5.79	0.083	
Umbral	5.8	0.083	
Umbral	5.81	0.083	
Umbral	5.82	0.082	
Umbral	5.83	0.082	
Umbral	5.84	0.082	
Umbral	5.85	0.082	
Umbral	5.86	0.082	
Umbral	5.87	0.082	
Umbral	5.88	0.082	
Umbral	5.89	0.081	
Umbral	5.9	0.081	
Umbral	5.91	0.081	
Umbral	5.92	0.081	
Umbral	5.93	0.081	
Umbral	5.94	0.081	
Umbral	5.95	0.081	
Umbral	5.96	0.081	
Umbral	5.97	0.08	
Umbral	5.98	0.08	
Umbral	5.99	0.08	
Umbral	6	0.08	
Umbral	6.01	0.08	
Umbral	6.02	0.08	
Umbral	6.03	0.08	
Umbral	6.04	0.079	
Umbral	6.05	0.079	
Umbral	6.06	0.079	
Umbral	6.07	0.079	
Umbral	6.08	0.079	
Umbral	6.09	0.079	
Umbral	6.1	0.079	
Umbral	6.11	0.079	

Name	Period sec	Acceleration	Damping %
Umbral	6.12	0.078	
Umbral	6.13	0.078	
Umbral	6.14	0.078	
Umbral	6.15	0.078	
Umbral	6.16	0.078	
Umbral	6.17	0.078	
Umbral	6.18	0.078	
Umbral	6.19	0.078	
Umbral	6.2	0.077	
Umbral	6.21	0.077	
Umbral	6.22	0.077	
Umbral	6.23	0.077	
Umbral	6.24	0.077	
Umbral	6.25	0.077	
Umbral	6.26	0.077	
Umbral	6.27	0.077	
Umbral	6.28	0.076	
Umbral	6.29	0.076	
Umbral	6.3	0.076	
Umbral	6.31	0.076	
Umbral	6.32	0.076	
Umbral	6.33	0.076	
Umbral	6.34	0.076	
Umbral	6.35	0.076	
Umbral	6.36	0.075	
Umbral	6.37	0.075	
Umbral	6.38	0.075	
Umbral	6.39	0.075	
Umbral	6.4	0.075	
Umbral	6.41	0.075	
Umbral	6.42	0.075	
Umbral	6.43	0.075	
Umbral	6.44	0.075	
Umbral	6.45	0.074	
Umbral	6.46	0.074	
Umbral	6.47	0.074	
Umbral	6.48	0.074	
Umbral	6.49	0.074	
Umbral	6.5	0.074	
Umbral	6.51	0.074	
Umbral	6.52	0.074	
Umbral	6.53	0.074	
Umbral	6.54	0.073	
Umbral	6.55	0.073	
Umbral	6.56	0.073	
Umbral	6.57	0.073	
Umbral	6.58	0.073	
Umbral	6.59	0.073	
Umbral	6.6	0.073	
Umbral	6.61	0.073	
Umbral	6.62	0.073	
Umbral	6.63	0.072	
Umbral	6.64	0.072	
Umbral	6.65	0.072	
Umbral	6.66	0.072	
Umbral	6.67	0.072	
Umbral	6.68	0.072	
Umbral	6.69	0.072	
Umbral	6.7	0.072	
Umbral	6.71	0.072	

Name	Period sec	Acceleration	Damping %
Umbral	6.72	0.071	
Umbral	6.73	0.071	
Umbral	6.74	0.071	
Umbral	6.75	0.071	
Umbral	6.76	0.071	
Umbral	6.77	0.071	
Umbral	6.78	0.071	
Umbral	6.79	0.071	
Umbral	6.8	0.071	
Umbral	6.81	0.07	
Umbral	6.82	0.07	
Umbral	6.83	0.07	
Umbral	6.84	0.07	
Umbral	6.85	0.07	
Umbral	6.86	0.07	
Umbral	6.87	0.07	
Umbral	6.88	0.07	
Umbral	6.89	0.07	
Umbral	6.9	0.07	
Umbral	6.91	0.069	
Umbral	6.92	0.069	
Umbral	6.93	0.069	
Umbral	6.94	0.069	
Umbral	6.95	0.069	
Umbral	6.96	0.069	
Umbral	6.97	0.069	
Umbral	6.98	0.069	
Umbral	6.99	0.069	
Umbral	7	0.069	
Umbral	7.01	0.068	
Umbral	7.02	0.068	
Umbral	7.03	0.068	
Umbral	7.04	0.068	
Umbral	7.05	0.068	
Umbral	7.06	0.068	
Umbral	7.07	0.068	
Umbral	7.08	0.068	
Umbral	7.09	0.068	
Umbral	7.1	0.068	
Umbral	7.11	0.068	
Umbral	7.12	0.067	
Umbral	7.13	0.067	
Umbral	7.14	0.067	
Umbral	7.15	0.067	
Umbral	7.16	0.067	
Umbral	7.17	0.067	
Umbral	7.18	0.067	
Umbral	7.19	0.067	
Umbral	7.2	0.067	
Umbral	7.21	0.067	
Umbral	7.22	0.066	
Umbral	7.23	0.066	
Umbral	7.24	0.066	
Umbral	7.25	0.066	
Umbral	7.26	0.066	
Umbral	7.27	0.066	
Umbral	7.28	0.066	
Umbral	7.29	0.066	
Umbral	7.3	0.066	
Umbral	7.31	0.066	

Name	Period sec	Acceleration	Damping %
Umbral	7.32	0.066	
Umbral	7.33	0.065	
Umbral	7.34	0.065	
Umbral	7.35	0.065	
Umbral	7.36	0.065	
Umbral	7.37	0.065	
Umbral	7.38	0.065	
Umbral	7.39	0.065	
Umbral	7.4	0.065	
Umbral	7.41	0.065	
Umbral	7.42	0.065	
Umbral	7.43	0.065	
Umbral	7.44	0.065	
Umbral	7.45	0.064	
Umbral	7.46	0.064	
Umbral	7.47	0.064	
Umbral	7.48	0.064	
Umbral	7.49	0.064	
Umbral	7.5	0.064	

**4.4 Load Cases**

**Table 4.5 - Load Cases - Summary**

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

**4.5 Load Combinations**

**Table 4.6 - Load Combinations**

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
VIG01	D	1.2	Linear Add	No
VIG01	L	1		No
VIG01	DISX	2		No
VIG01	DISY	0.6		No
VIG02	D	1.2	Linear Add	No
VIG02	L	1		No
VIG02	DISX	0.6		No
VIG02	DISY	2		No
VIG03	D	0.9	Linear Add	No
VIG03	DISX	2		No
VIG03	DISY	0.6		No
VIG04	D	0.9	Linear Add	No
VIG04	DISX	0.6		No
VIG04	DISY	2		No
COL1	D	1.2	Linear Add	No
COL1	L	1		No
COL1	DISX	3		No
COL1	DISY	0.9		No
COL2	D	1.2	Linear Add	No
COL2	L	1		No
COL2	DISX	0.9		No
COL2	DISY	3		No
COL3	D	0.9	Linear Add	No
COL3	DISX	3		No
COL3	DISY	0.9		No
COL4	D	0.9	Linear Add	No
COL4	DISX	0.9		No
COL4	DISY	3		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No



### 5 Analysis Results

This chapter provides analysis results.

#### 5.1 Structure Results

**Table 5.1 - Base Reactions**

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	574.5432	1056.1004	-3217.4419	0	0	0	0
L	0	0	53.76	-64.6649	-301.056	0	0	0	0
LR	0	0	45.92	188.2732	-257.152	0	0	0	0
EX Max	548.781	0	0	0	1789.1262	2637.8352	0	0	0
EY Max	0	551.0487	0	1796.2297	0	3085.8729	0	0	0
DISX Max	171.4941	0	0	0	559.1019	824.3235	0	0	0
DISY Max	0	172.2027	0	561.3218	0	964.3353	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	118.72	344.2139	-664.832	0	0	0	0
DERUX Max	84.6295	0	0	0	275.9424	355.5259	0	0	0
DERUY Max	0	93.8951	0	306.0657	0	525.8124	0	0	0
COMB1	0	0	804.3605	1478.5406	-4504.4187	0	0	0	0
COMB2	0	0	798.4278	1257.9932	-4471.1959	0	0	0	0
COMB3	0	0	816.6838	1503.8927	-4573.4295	0	0	0	0
COMB4	0	0	766.1718	1296.7922	-4290.5623	0	0	0	0
COMB5 Max	171.4941	51.6608	743.2118	1371.0521	-3602.8844	1113.6241	0	0	0
COMB5 Min	-171.4941	-51.6608	743.2118	1034.2591	-4721.0882	-1113.6241	0	0	0
COMB6 Max	51.4482	172.2027	743.2118	1763.9774	-3994.2557	1211.6323	0	0	0
COMB6 Min	-51.4482	-172.2027	743.2118	641.3338	-4329.7169	-1211.6323	0	0	0
COMB7 Max	51.4482	172.2027	517.0889	1511.8122	-2727.9671	1211.6323	0	0	0
COMB7 Min	-51.4482	-172.2027	517.0889	389.1686	-3063.4283	-1211.6323	0	0	0
COMB8 Max	171.4941	51.6608	517.0889	1118.8869	-2336.5958	1113.6241	0	0	0
COMB8 Min	-171.4941	-51.6608	517.0889	782.0939	-3454.7997	-1113.6241	0	0	0
ENVE Max	171.4941	172.2027	816.6838	1763.9774	-2336.5958	1211.6323	0	0	0
ENVE Min	-171.4941	-172.2027	517.0889	389.1686	-4721.0882	-1211.6323	0	0	0
CIM01	0	0	574.5432	1056.1004	-3217.4419	0	0	0	0
CIM02	0	0	628.3032	991.4355	-3518.4979	0	0	0	0
CIM03	0	0	620.4632	1244.3736	-3474.5939	0	0	0	0
CIM04	0	0	649.3032	1148.8066	-3636.0979	0	0	0	0
CIM05 Max	120.0458	36.1626	574.5432	1173.978	-2826.0706	779.5369	0	0	0
CIM05 Min	-120.0458	-36.1626	574.5432	938.2229	-3608.8133	-779.5369	0	0	0
CIM06 Max	36.0138	120.5419	574.5432	1449.0257	-3100.0305	848.1426	0	0	0
CIM06 Min	-36.0138	-120.5419	574.5432	663.1752	-3334.8533	-848.1426	0	0	0
CIM07 Max	90.8919	27.5524	649.3032	1238.6181	-3339.7739	591.1851	0	0	0
CIM07 Min	-90.8919	-27.5524	649.3032	1058.9951	-3932.4219	-591.1851	0	0	0
CIM08 Max	27.4391	91.2674	649.3032	1446.3071	-3546.6416	642.9895	0	0	0
CIM08 Min	-27.4391	-91.2674	649.3032	851.3061	-3725.5542	-642.9895	0	0	0
DER01	0	0	804.3605	1478.5406	-4504.4187	0	0	0	0
DER02	0	0	798.4278	1257.9932	-4471.1959	0	0	0	0
DER03	0	0	816.6838	1503.8927	-4573.4295	0	0	0	0
DER04	0	0	766.1718	1296.7922	-4290.5623	0	0	0	0
DER05 Max	548.781	0	743.2118	1202.6556	-2372.8601	2637.8352	0	0	0
DER05 Min	-548.781	0	743.2118	1202.6556	-5951.1125	-2637.8352	0	0	0
DER06 Max	0	551.0487	743.2118	2998.8852	-4161.9863	3085.8729	0	0	0
DER06 Min	0	-551.0487	743.2118	-593.5741	-4161.9863	-3085.8729	0	0	0
DER07 Max	548.781	0	517.0889	950.4904	-1106.5716	2637.8352	0	0	0
DER07 Min	-548.781	0	517.0889	950.4904	-4684.8239	-2637.8352	0	0	0
DER08 Max	0	551.0487	517.0889	2746.7201	-2895.6977	3085.8729	0	0	0
DER08 Min	0	-551.0487	517.0889	-845.7393	-2895.6977	-3085.8729	0	0	0
DERUD01	0	0	804.3605	1478.5406	-4504.4187	0	0	0	0
DERUD02	0	0	798.4278	1257.9932	-4471.1959	0	0	0	0
DERUD03	0	0	816.6838	1503.8927	-4573.4295	0	0	0	0
DERUD04	0	0	766.1718	1296.7922	-4290.5623	0	0	0	0
DERUD05 Max	84.6295	0	743.2118	1202.6556	-3886.0439	355.5259	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-84.6295	0	743.2118	1202.6556	-4437.9287	-355.5259	0	0	0
DERUD06 Max	0	93.8951	743.2118	1508.7213	-4161.9863	525.8124	0	0	0
DERUD06 Min	0	-93.8951	743.2118	896.5899	-4161.9863	-525.8124	0	0	0
DERUD07 Max	84.6295	0	517.0889	950.4904	-2619.7553	355.5259	0	0	0
DERUD07 Min	-84.6295	0	517.0889	950.4904	-3171.6402	-355.5259	0	0	0
DERUD08 Max	0	93.8951	517.0889	1256.5561	-2895.6977	525.8124	0	0	0
DERUD08 Min	0	-93.8951	517.0889	644.4247	-2895.6977	-525.8124	0	0	0
VIG01 Max	342.9881	103.3216	743.2118	1539.4486	-3043.7824	2227.2482	0	0	0
VIG01 Min	-342.9881	-103.3216	743.2118	865.8625	-5280.1902	-2227.2482	0	0	0
VIG02 Max	102.8964	344.4055	743.2118	2325.2991	-3826.5251	2423.2647	0	0	0
VIG02 Min	-102.8964	-344.4055	743.2118	80.012	-4497.4475	-2423.2647	0	0	0
VIG03 Max	342.9881	103.3216	517.0889	1287.2835	-1777.4939	2227.2482	0	0	0
VIG03 Min	-342.9881	-103.3216	517.0889	613.6973	-4013.9016	-2227.2482	0	0	0
VIG04 Max	102.8964	344.4055	517.0889	2073.1339	-2560.2366	2423.2647	0	0	0
VIG04 Min	-102.8964	-344.4055	517.0889	-172.1531	-3231.1589	-2423.2647	0	0	0
COL1 Max	514.4822	154.9825	743.2118	1707.8452	-2484.6805	3340.8722	0	0	0
COL1 Min	-514.4822	-154.9825	743.2118	697.466	-5839.2921	-3340.8722	0	0	0
COL2 Max	154.3447	516.6082	743.2118	2886.6209	-3658.7946	3634.897	0	0	0
COL2 Min	-154.3447	-516.6082	743.2118	-481.3097	-4665.178	-3634.897	0	0	0
COL3 Max	514.4822	154.9825	517.0889	1455.68	-1218.3919	3340.8722	0	0	0
COL3 Min	-514.4822	-154.9825	517.0889	445.3008	-4573.0035	-3340.8722	0	0	0
COL4 Max	154.3447	516.6082	517.0889	2634.4557	-2392.506	3634.897	0	0	0
COL4 Min	-154.3447	-516.6082	517.0889	-733.4749	-3398.8895	-3634.897	0	0	0
CIM09 Max	120.0458	36.1626	344.7259	751.5378	-1539.0938	779.5369	0	0	0
CIM09 Min	-120.0458	-36.1626	344.7259	515.7827	-2321.8365	-779.5369	0	0	0
CIM10 Max	36.0138	120.5419	344.7259	1026.5855	-1813.0537	848.1426	0	0	0
CIM10 Min	-36.0138	-120.5419	344.7259	240.735	-2047.8766	-848.1426	0	0	0
COMB9	0	0	834.8278	1335.9636	-4675.0359	0	0	0	0
COMB10	0	0	933.1638	1753.3978	-5225.7175	0	0	0	0
COMB11	0	0	802.5718	1374.7625	-4494.4023	0	0	0	0
DER09	0	0	834.8278	1335.9636	-4675.0359	0	0	0	0
DER10	0	0	933.1638	1753.3978	-5225.7175	0	0	0	0
DER11	0	0	802.5718	1374.7625	-4494.4023	0	0	0	0
DERUD09	0	0	834.8278	1335.9636	-4675.0359	0	0	0	0
DERUD10	0	0	933.1638	1753.3978	-5225.7175	0	0	0	0
DERUD11	0	0	802.5718	1374.7625	-4494.4023	0	0	0	0
CIM11	0	0	693.2632	1400.3143	-3882.2739	0	0	0	0
CIM12	0	0	703.9032	1265.7621	-3941.8579	0	0	0	0
CIM13 Max	90.8919	27.5524	703.9032	1355.5736	-3645.5339	591.1851	0	0	0
CIM13 Min	-90.8919	-27.5524	703.9032	1175.9507	-4238.1819	-591.1851	0	0	0
CIM14 Max	27.4391	91.2674	703.9032	1563.2627	-3852.4016	642.9895	0	0	0
CIM14 Min	-27.4391	-91.2674	703.9032	968.2616	-4031.3142	-642.9895	0	0	0
CIM15	0	0	344.7259	633.6603	-1930.4652	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	41809.44	41809.44	5.6	-0.7098	41809.44	41809.44	5.6	-0.7098	5.6	3.2149

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.1	0	1	5.6	-0.7098	3.25
N1	D1	L	0	-0.3	0	1	5.6	-0.7098	3.25
N1	D1	LR	0	0.003994	0	1	5.6	-0.7098	3.25
N1	D1	EX Max	13.6	0	0.001397	1	5.6	-0.7098	3.25
N1	D1	EY Max	0	9.9	0	1	5.6	-0.7098	3.25
N1	D1	DISX Max	4.3	0	0.000437	1	5.6	-0.7098	3.25
N1	D1	DISY Max	0	3.1	0	1	5.6	-0.7098	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	W	0	0	0	1	5.6	-0.7098	3.25
N1	D1	G	0	-0.1	0	1	5.6	-0.7098	3.25
N1	D1	DERUX Max	2.2	0	0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUY Max	0	1.7	0	1	5.6	-0.7098	3.25
N1	D1	COMB1	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	COMB2	0	-1.8	0	1	5.6	-0.7098	3.25
N1	D1	COMB3	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	COMB4	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	COMB5 Max	4.3	-0.7	0.000437	1	5.6	-0.7098	3.25
N1	D1	COMB5 Min	-4.3	-2.6	-0.000437	1	5.6	-0.7098	3.25
N1	D1	COMB6 Max	1.3	1.4	0.000131	1	5.6	-0.7098	3.25
N1	D1	COMB6 Min	-1.3	-4.7	-0.000131	1	5.6	-0.7098	3.25
N1	D1	COMB7 Max	1.3	2.1	0.000131	1	5.6	-0.7098	3.25
N1	D1	COMB7 Min	-1.3	-4.1	-0.000131	1	5.6	-0.7098	3.25
N1	D1	COMB8 Max	4.3	-0.1	0.000437	1	5.6	-0.7098	3.25
N1	D1	COMB8 Min	-4.3	-2	-0.000437	1	5.6	-0.7098	3.25
N1	D1	ENVE Max	4.3	2.1	0.000437	1	5.6	-0.7098	3.25
N1	D1	ENVE Min	-4.3	-4.7	-0.000437	1	5.6	-0.7098	3.25
N1	D1	CIM01	0	-1.1	0	1	5.6	-0.7098	3.25
N1	D1	CIM02	0	-1.4	0	1	5.6	-0.7098	3.25
N1	D1	CIM03	0	-1.1	0	1	5.6	-0.7098	3.25
N1	D1	CIM04	0	-1.3	0	1	5.6	-0.7098	3.25
N1	D1	CIM05 Max	3	-0.5	0.000306	1	5.6	-0.7098	3.25
N1	D1	CIM05 Min	-3	-1.8	-0.000306	1	5.6	-0.7098	3.25
N1	D1	CIM06 Max	0.9	1	9.2E-05	1	5.6	-0.7098	3.25
N1	D1	CIM06 Min	-0.9	-3.3	-9.2E-05	1	5.6	-0.7098	3.25
N1	D1	CIM07 Max	2.3	-0.9	0.000231	1	5.6	-0.7098	3.25
N1	D1	CIM07 Min	-2.3	-1.8	-0.000231	1	5.6	-0.7098	3.25
N1	D1	CIM08 Max	0.7	0.3	7E-05	1	5.6	-0.7098	3.25
N1	D1	CIM08 Min	-0.7	-3	-7E-05	1	5.6	-0.7098	3.25
N1	D1	DER01	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DER02	0	-1.8	0	1	5.6	-0.7098	3.25
N1	D1	DER03	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DER04	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DER05 Max	13.6	-1.6	0.001397	1	5.6	-0.7098	3.25
N1	D1	DER05 Min	-13.6	-1.6	-0.001397	1	5.6	-0.7098	3.25
N1	D1	DER06 Max	0	8.3	0	1	5.6	-0.7098	3.25
N1	D1	DER06 Min	0	-11.6	0	1	5.6	-0.7098	3.25
N1	D1	DER07 Max	13.6	-1	0.001397	1	5.6	-0.7098	3.25
N1	D1	DER07 Min	-13.6	-1	-0.001397	1	5.6	-0.7098	3.25
N1	D1	DER08 Max	0	8.9	0	1	5.6	-0.7098	3.25
N1	D1	DER08 Min	0	-10.9	0	1	5.6	-0.7098	3.25
N1	D1	DERUD01	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DERUD02	0	-1.8	0	1	5.6	-0.7098	3.25
N1	D1	DERUD03	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DERUD04	0	-1.6	0	1	5.6	-0.7098	3.25
N1	D1	DERUD05 Max	2.2	-1.6	0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUD05 Min	-2.2	-1.6	-0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUD06 Max	0	0.04009	0	1	5.6	-0.7098	3.25
N1	D1	DERUD06 Min	0	-3.3	0	1	5.6	-0.7098	3.25
N1	D1	DERUD07 Max	2.2	-1	0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUD07 Min	-2.2	-1	-0.000218	1	5.6	-0.7098	3.25
N1	D1	DERUD08 Max	0	0.7	0	1	5.6	-0.7098	3.25
N1	D1	DERUD08 Min	0	-2.7	0	1	5.6	-0.7098	3.25
N1	D1	VIG01 Max	8.5	0.2	0.000873	1	5.6	-0.7098	3.25
N1	D1	VIG01 Min	-8.5	-3.5	-0.000873	1	5.6	-0.7098	3.25
N1	D1	VIG02 Max	2.6	4.5	0.000262	1	5.6	-0.7098	3.25
N1	D1	VIG02 Min	-2.6	-7.8	-0.000262	1	5.6	-0.7098	3.25
N1	D1	VIG03 Max	8.5	0.8	0.000873	1	5.6	-0.7098	3.25
N1	D1	VIG03 Min	-8.5	-2.9	-0.000873	1	5.6	-0.7098	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	VIG04 Max	2.6	5.2	0.000262	1	5.6	-0.7098	3.25
N1	D1	VIG04 Min	-2.6	-7.2	-0.000262	1	5.6	-0.7098	3.25
N1	D1	COL1 Max	12.8	1.1	0.00131	1	5.6	-0.7098	3.25
N1	D1	COL1 Min	-12.8	-4.4	-0.00131	1	5.6	-0.7098	3.25
N1	D1	COL2 Max	3.8	7.6	0.000393	1	5.6	-0.7098	3.25
N1	D1	COL2 Min	-3.8	-10.9	-0.000393	1	5.6	-0.7098	3.25
N1	D1	COL3 Max	12.8	1.8	0.00131	1	5.6	-0.7098	3.25
N1	D1	COL3 Min	-12.8	-3.8	-0.00131	1	5.6	-0.7098	3.25
N1	D1	COL4 Max	3.8	8.3	0.000393	1	5.6	-0.7098	3.25
N1	D1	COL4 Min	-3.8	-10.3	-0.000393	1	5.6	-0.7098	3.25
N1	D1	CIM09 Max	3	-0.03091	0.000306	1	5.6	-0.7098	3.25
N1	D1	CIM09 Min	-3	-1.3	-0.000306	1	5.6	-0.7098	3.25
N1	D1	CIM10 Max	0.9	1.5	9.2E-05	1	5.6	-0.7098	3.25
N1	D1	CIM10 Min	-0.9	-2.9	-9.2E-05	1	5.6	-0.7098	3.25
N1	D1	COMB9	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	COMB10	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	COMB11	0	-1.7	0	1	5.6	-0.7098	3.25
N1	D1	DER09	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	DER10	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	DER11	0	-1.7	0	1	5.6	-0.7098	3.25
N1	D1	DERUD09	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	DERUD10	0	-1.9	0	1	5.6	-0.7098	3.25
N1	D1	DERUD11	0	-1.7	0	1	5.6	-0.7098	3.25
N1	D1	CIM11	0	-1.3	0	1	5.6	-0.7098	3.25
N1	D1	CIM12	0	-1.5	0	1	5.6	-0.7098	3.25
N1	D1	CIM13 Max	2.3	-1	0.000231	1	5.6	-0.7098	3.25
N1	D1	CIM13 Min	-2.3	-1.9	-0.000231	1	5.6	-0.7098	3.25
N1	D1	CIM14 Max	0.7	0.2	7E-05	1	5.6	-0.7098	3.25
N1	D1	CIM14 Min	-0.7	-3.1	-7E-05	1	5.6	-0.7098	3.25
N1	D1	CIM15	0	-0.7	0	1	5.6	-0.7098	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.1	1.1	1
N1	L	Y	0.3	0.3	1
N1	LR	Y	0.003994	0.003994	1
N1	EX Max	X	12.8	12.8	1
N1	EX Max	Y	7.8	3.9	2
N1	EY Max	Y	9.9	9.9	1
N1	DISX Max	X	4	4	1
N1	DISX Max	Y	2.4	1.2	2
N1	DISY Max	Y	3.1	3.1	1
N1	G	Y	0.1	0.1	1
N1	DERUX Max	X	2.1	2.1	1
N1	DERUX Max	Y	1.2	0.6	2
N1	DERUY Max	Y	1.7	1.7	1
N1	COMB1	Y	1.6	1.6	1
N1	COMB2	Y	1.8	1.8	1
N1	COMB3	Y	1.6	1.6	1
N1	COMB4	Y	1.6	1.6	1
N1	COMB5 Max	X	4	4	1
N1	COMB5 Max	Y	1.7	0.5	3.432
N1	COMB5 Min	X	4	4	1
N1	COMB5 Min	Y	5	3.8	1.322
N1	COMB6 Max	X	1.2	1.2	1
N1	COMB6 Max	Y	2.2	1.8	1.202
N1	COMB6 Min	X	1.2	1.2	1
N1	COMB6 Min	Y	5.5	5.1	1.072

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	COMB7 Max	X	1.2	1.2	1
N1	COMB7 Max	Y	2.8	2.4	1.15
N1	COMB7 Min	X	1.2	1.2	1
N1	COMB7 Min	Y	4.9	4.5	1.082
N1	COMB8 Max	X	4	4	1
N1	COMB8 Max	Y	2.4	1.1	2.082
N1	COMB8 Min	X	4	4	1
N1	COMB8 Min	Y	4.4	3.2	1.385
N1	ENVE Max	X	4	4	1
N1	ENVE Max	Y	2.8	2.4	1.15
N1	ENVE Min	X	4	4	1
N1	ENVE Min	Y	5.5	5.1	1.072
N1	CIM01	Y	1.1	1.1	1
N1	CIM02	Y	1.4	1.4	1
N1	CIM03	Y	1.1	1.1	1
N1	CIM04	Y	1.3	1.3	1
N1	CIM05 Max	X	2.8	2.8	1
N1	CIM05 Max	Y	1.2	0.4	3.31
N1	CIM05 Min	X	2.8	2.8	1
N1	CIM05 Min	Y	3.5	2.6	1.324
N1	CIM06 Max	X	0.8	0.8	1
N1	CIM06 Max	Y	1.5	1.3	1.199
N1	CIM06 Min	X	0.8	0.8	1
N1	CIM06 Min	Y	3.8	3.6	1.072
N1	CIM07 Max	X	2.1	2.1	1
N1	CIM07 Min	X	2.1	2.1	1
N1	CIM07 Min	Y	3.1	2.5	1.26
N1	CIM08 Max	X	0.6	0.6	1
N1	CIM08 Max	Y	0.7	0.5	1.399
N1	CIM08 Min	X	0.6	0.6	1
N1	CIM08 Min	Y	3.4	3.2	1.061
N1	DER01	Y	1.6	1.6	1
N1	DER02	Y	1.8	1.8	1
N1	DER03	Y	1.6	1.6	1
N1	DER04	Y	1.6	1.6	1
N1	DER05 Max	X	12.8	12.8	1
N1	DER05 Max	Y	6.2	2.3	2.729
N1	DER05 Min	X	12.8	12.8	1
N1	DER05 Min	Y	9.5	5.6	1.703
N1	DER06 Max	Y	8.3	8.3	1
N1	DER06 Min	Y	11.6	11.6	1
N1	DER07 Max	X	12.8	12.8	1
N1	DER07 Max	Y	6.8	2.9	2.354
N1	DER07 Min	X	12.8	12.8	1
N1	DER07 Min	Y	8.8	4.9	1.793
N1	DER08 Max	Y	8.9	8.9	1
N1	DER08 Min	Y	10.9	10.9	1
N1	DERUD01	Y	1.6	1.6	1
N1	DERUD02	Y	1.8	1.8	1
N1	DERUD03	Y	1.6	1.6	1
N1	DERUD04	Y	1.6	1.6	1
N1	DERUD05 Max	X	2.1	2.1	1
N1	DERUD05 Max	Y	1.6	1	1.589
N1	DERUD05 Min	X	2.1	2.1	1
N1	DERUD05 Min	Y	2.9	2.3	1.27
N1	DERUD06 Max	Y	0.04009	0.04009	1
N1	DERUD06 Min	Y	3.3	3.3	1
N1	DERUD07 Max	X	2.1	2.1	1
N1	DERUD07 Max	Y	1	0.4	2.488
N1	DERUD07 Min	X	2.1	2.1	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD07 Min	Y	2.2	1.6	1.374
N1	DERUD08 Max	Y	0.7	0.7	1
N1	DERUD08 Min	Y	2.7	2.7	1
N1	VIG01 Max	X	8	8	1
N1	VIG01 Max	Y	5.1	2.7	1.921
N1	VIG01 Min	X	8	8	1
N1	VIG01 Min	Y	8.4	6	1.411
N1	VIG02 Max	X	2.4	2.4	1
N1	VIG02 Max	Y	6	5.3	1.139
N1	VIG02 Min	X	2.4	2.4	1
N1	VIG02 Min	Y	9.3	8.6	1.085
N1	VIG03 Max	X	8	8	1
N1	VIG03 Max	Y	5.7	3.3	1.745
N1	VIG03 Min	X	8	8	1
N1	VIG03 Min	Y	7.8	5.3	1.459
N1	VIG04 Max	X	2.4	2.4	1
N1	VIG04 Max	Y	6.6	5.9	1.124
N1	VIG04 Min	X	2.4	2.4	1
N1	VIG04 Min	Y	8.7	8	1.092
N1	COL1 Max	X	12	12	1
N1	COL1 Max	Y	8.5	4.8	1.763
N1	COL1 Min	X	12	12	1
N1	COL1 Min	Y	11.8	8.1	1.452
N1	COL2 Max	X	3.6	3.6	1
N1	COL2 Max	Y	9.8	8.7	1.126
N1	COL2 Min	X	3.6	3.6	1
N1	COL2 Min	Y	13.1	12	1.091
N1	COL3 Max	X	12	12	1
N1	COL3 Max	Y	9.1	5.4	1.675
N1	COL3 Min	X	12	12	1
N1	COL3 Min	Y	11.1	7.5	1.49
N1	COL4 Max	X	3.6	3.6	1
N1	COL4 Max	Y	10.5	9.4	1.117
N1	COL4 Min	X	3.6	3.6	1
N1	COL4 Min	Y	12.5	11.4	1.096
N1	CIM09 Max	X	2.8	2.8	1
N1	CIM09 Max	Y	1.7	0.8	2.037
N1	CIM09 Min	X	2.8	2.8	1
N1	CIM09 Min	Y	3	2.2	1.391
N1	CIM10 Max	X	0.8	0.8	1
N1	CIM10 Max	Y	2	1.7	1.147
N1	CIM10 Min	X	0.8	0.8	1
N1	CIM10 Min	Y	3.4	3.1	1.083
N1	COMB9	Y	1.9	1.9	1
N1	COMB10	Y	1.9	1.9	1
N1	COMB11	Y	1.7	1.7	1
N1	DER09	Y	1.9	1.9	1
N1	DER10	Y	1.9	1.9	1
N1	DER11	Y	1.7	1.7	1
N1	DERUD09	Y	1.9	1.9	1
N1	DERUD10	Y	1.9	1.9	1
N1	DERUD11	Y	1.7	1.7	1
N1	CIM11	Y	1.3	1.3	1
N1	CIM12	Y	1.5	1.5	1
N1	CIM13 Max	X	2.1	2.1	1
N1	CIM13 Max	Y	1	0.3	3.102
N1	CIM13 Min	X	2.1	2.1	1
N1	CIM13 Min	Y	3.2	2.6	1.25
N1	CIM14 Max	X	0.6	0.6	1
N1	CIM14 Max	Y	0.6	0.4	1.507

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	CIM14 Min	X	0.6	0.6	1
N1	CIM14 Min	Y	3.5	3.3	1.059
N1	CIM15	Y	0.7	0.7	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.00035	4	5.6	8.2	3.25
N1	L	Y	8.8E-05	1	0	0	3.25
N1	LR	Y	2E-06	4	5.6	8.2	3.25
N1	EX Max	X	0.003931	5	11.2	0	3.25
N1	EX Max	Y	0.002407	1	0	0	3.25
N1	EY Max	Y	0.003051	5	11.2	0	3.25
N1	DISX Max	X	0.001229	5	11.2	0	3.25
N1	DISX Max	Y	0.000752	1	0	0	3.25
N1	DISY Max	Y	0.000953	5	11.2	0	3.25
N1	G	Y	4.7E-05	4	5.6	8.2	3.25
N1	DERUX Max	X	0.000632	5	11.2	0	3.25
N1	DERUX Max	Y	0.000376	1	0	0	3.25
N1	DERUY Max	Y	0.00052	5	11.2	0	3.25
N1	COMB1	Y	0.00049	4	5.6	8.2	3.25
N1	COMB2	Y	0.00056	1	0	0	3.25
N1	COMB3	Y	0.000508	4	5.6	8.2	3.25
N1	COMB4	Y	0.000507	1	0	0	3.25
N1	COMB5 Max	X	0.001229	5	11.2	0	3.25
N1	COMB5 Max	Y	0.000531	1	0	0	3.25
N1	COMB5 Min	X	0.001229	5	11.2	0	3.25
N1	COMB5 Min	Y	0.001546	1	0	0	3.25
N1	COMB6 Max	X	0.000369	5	11.2	0	3.25
N1	COMB6 Max	Y	0.000672	5	11.2	0	3.25
N1	COMB6 Min	X	0.000369	5	11.2	0	3.25
N1	COMB6 Min	Y	0.001687	1	0	0	3.25
N1	COMB7 Max	X	0.000369	5	11.2	0	3.25
N1	COMB7 Max	Y	0.000865	5	11.2	0	3.25
N1	COMB7 Min	X	0.000369	5	11.2	0	3.25
N1	COMB7 Min	Y	0.001494	1	0	0	3.25
N1	COMB8 Max	X	0.001229	5	11.2	0	3.25
N1	COMB8 Max	Y	0.000724	1	0	0	3.25
N1	COMB8 Min	X	0.001229	5	11.2	0	3.25
N1	COMB8 Min	Y	0.001353	1	0	0	3.25
N1	ENVE Max	X	0.001229	5	11.2	0	3.25
N1	ENVE Max	Y	0.000865	5	11.2	0	3.25
N1	ENVE Min	X	0.001229	5	11.2	0	3.25
N1	ENVE Min	Y	0.001687	1	0	0	3.25
N1	CIM01	Y	0.00035	4	5.6	8.2	3.25
N1	CIM02	Y	0.000438	1	0	0	3.25
N1	CIM03	Y	0.000352	4	5.6	8.2	3.25
N1	CIM04	Y	0.000415	4	5.6	8.2	3.25
N1	CIM05 Max	X	0.00086	5	11.2	0	3.25
N1	CIM05 Max	Y	0.000377	1	0	0	3.25
N1	CIM05 Min	X	0.00086	5	11.2	0	3.25
N1	CIM05 Min	Y	0.001076	1	0	0	3.25
N1	CIM06 Max	X	0.000258	5	11.2	0	3.25
N1	CIM06 Max	Y	0.000476	5	11.2	0	3.25
N1	CIM06 Min	X	0.000258	5	11.2	0	3.25
N1	CIM06 Min	Y	0.001175	1	0	0	3.25
N1	CIM07 Max	X	0.000651	5	11.2	0	3.25
N1	CIM07 Max	Y	0.000264	4	5.6	8.2	3.25
N1	CIM07 Min	X	0.000651	5	11.2	0	3.25
N1	CIM07 Min	Y	0.000966	1	0	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM08 Max	X	0.000197	5	11.2	0	3.25
N1	CIM08 Max	Y	0.000211	5	11.2	0	3.25
N1	CIM08 Min	X	0.000197	5	11.2	0	3.25
N1	CIM08 Min	Y	0.00104	1	0	0	3.25
N1	DER01	Y	0.00049	4	5.6	8.2	3.25
N1	DER02	Y	0.00056	1	0	0	3.25
N1	DER03	Y	0.000508	4	5.6	8.2	3.25
N1	DER04	Y	0.000507	1	0	0	3.25
N1	DER05 Max	X	0.003931	5	11.2	0	3.25
N1	DER05 Max	Y	0.0019	1	0	0	3.25
N1	DER05 Min	X	0.003931	5	11.2	0	3.25
N1	DER05 Min	Y	0.002915	1	0	0	3.25
N1	DER06 Max	Y	0.002543	5	11.2	0	3.25
N1	DER06 Min	Y	0.003558	5	11.2	0	3.25
N1	DER07 Max	X	0.003931	5	11.2	0	3.25
N1	DER07 Max	Y	0.002093	1	0	0	3.25
N1	DER07 Min	X	0.003931	5	11.2	0	3.25
N1	DER07 Min	Y	0.002722	1	0	0	3.25
N1	DER08 Max	Y	0.002736	5	11.2	0	3.25
N1	DER08 Min	Y	0.003365	5	11.2	0	3.25
N1	DERUD01	Y	0.00049	4	5.6	8.2	3.25
N1	DERUD02	Y	0.00056	1	0	0	3.25
N1	DERUD03	Y	0.000508	4	5.6	8.2	3.25
N1	DERUD04	Y	0.000507	1	0	0	3.25
N1	DERUD05 Max	X	0.000632	5	11.2	0	3.25
N1	DERUD05 Max	Y	0.000508	3	5.6	0	3.25
N1	DERUD05 Min	X	0.000632	5	11.2	0	3.25
N1	DERUD05 Min	Y	0.000884	1	0	0	3.25
N1	DERUD06 Max	Y	1.2E-05	5	11.2	0	3.25
N1	DERUD06 Min	Y	0.001027	5	11.2	0	3.25
N1	DERUD07 Max	X	0.000632	5	11.2	0	3.25
N1	DERUD07 Max	Y	0.000315	4	5.6	8.2	3.25
N1	DERUD07 Min	X	0.000632	5	11.2	0	3.25
N1	DERUD07 Min	Y	0.000691	1	0	0	3.25
N1	DERUD08 Max	Y	0.000205	5	11.2	0	3.25
N1	DERUD08 Min	Y	0.000834	5	11.2	0	3.25
N1	VIG01 Max	X	0.002457	5	11.2	0	3.25
N1	VIG01 Max	Y	0.001569	1	0	0	3.25
N1	VIG01 Min	X	0.002457	5	11.2	0	3.25
N1	VIG01 Min	Y	0.002584	1	0	0	3.25
N1	VIG02 Max	X	0.000737	5	11.2	0	3.25
N1	VIG02 Max	Y	0.001851	5	11.2	0	3.25
N1	VIG02 Min	X	0.000737	5	11.2	0	3.25
N1	VIG02 Min	Y	0.002866	1	0	0	3.25
N1	VIG03 Max	X	0.002457	5	11.2	0	3.25
N1	VIG03 Max	Y	0.001762	1	0	0	3.25
N1	VIG03 Min	X	0.002457	5	11.2	0	3.25
N1	VIG03 Min	Y	0.002391	1	0	0	3.25
N1	VIG04 Max	X	0.000737	5	11.2	0	3.25
N1	VIG04 Max	Y	0.002044	5	11.2	0	3.25
N1	VIG04 Min	X	0.000737	5	11.2	0	3.25
N1	VIG04 Min	Y	0.002673	1	0	0	3.25
N1	COL1 Max	X	0.003686	5	11.2	0	3.25
N1	COL1 Max	Y	0.002607	1	0	0	3.25
N1	COL1 Min	X	0.003686	5	11.2	0	3.25
N1	COL1 Min	Y	0.003623	1	0	0	3.25
N1	COL2 Max	X	0.001106	5	11.2	0	3.25
N1	COL2 Max	Y	0.00303	5	11.2	0	3.25
N1	COL2 Min	X	0.001106	5	11.2	0	3.25
N1	COL2 Min	Y	0.004045	1	0	0	3.25



Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	COL3 Max	X	0.003686	5	11.2	0	3.25
N1	COL3 Max	Y	0.0028	1	0	0	3.25
N1	COL3 Min	X	0.003686	5	11.2	0	3.25
N1	COL3 Min	Y	0.00343	1	0	0	3.25
N1	COL4 Max	X	0.001106	5	11.2	0	3.25
N1	COL4 Max	Y	0.003223	5	11.2	0	3.25
N1	COL4 Min	X	0.001106	5	11.2	0	3.25
N1	COL4 Min	Y	0.003852	1	0	0	3.25
N1	CIM09 Max	X	0.00086	5	11.2	0	3.25
N1	CIM09 Max	Y	0.000517	1	0	0	3.25
N1	CIM09 Min	X	0.00086	5	11.2	0	3.25
N1	CIM09 Min	Y	0.000937	1	0	0	3.25
N1	CIM10 Max	X	0.000258	5	11.2	0	3.25
N1	CIM10 Max	Y	0.000616	5	11.2	0	3.25
N1	CIM10 Min	X	0.000258	5	11.2	0	3.25
N1	CIM10 Min	Y	0.001035	1	0	0	3.25
N1	COMB9	Y	0.000581	1	0	0	3.25
N1	COMB10	Y	0.00058	4	5.6	8.2	3.25
N1	COMB11	Y	0.000528	4	5.6	8.2	3.25
N1	DER09	Y	0.000581	1	0	0	3.25
N1	DER10	Y	0.00058	4	5.6	8.2	3.25
N1	DER11	Y	0.000528	4	5.6	8.2	3.25
N1	DERUD09	Y	0.000581	1	0	0	3.25
N1	DERUD10	Y	0.00058	4	5.6	8.2	3.25
N1	DERUD11	Y	0.000528	4	5.6	8.2	3.25
N1	CIM11	Y	0.000396	4	5.6	8.2	3.25
N1	CIM12	Y	0.000449	4	5.6	8.2	3.25
N1	CIM13 Max	X	0.000651	5	11.2	0	3.25
N1	CIM13 Max	Y	0.000297	4	5.6	8.2	3.25
N1	CIM13 Min	X	0.000651	5	11.2	0	3.25
N1	CIM13 Min	Y	0.000998	1	0	0	3.25
N1	CIM14 Max	X	0.000197	5	11.2	0	3.25
N1	CIM14 Max	Y	0.000179	5	11.2	0	3.25
N1	CIM14 Min	X	0.000197	5	11.2	0	3.25
N1	CIM14 Min	Y	0.001072	1	0	0	3.25
N1	CIM15	Y	0.00021	4	5.6	8.2	3.25

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	D	Y	1.1	1.1	1.001
N1	L	Y	0.3	0.3	1.015
N1	LR	Y	0.006497	0.001251	5.191
N1	EX Max	X	12.8	9.6	1.333
N1	EX Max	Y	7.8	3.9	2
N1	EY Max	Y	9.9	9.9	1.006
N1	DISX Max	X	4	3	1.333
N1	DISX Max	Y	2.4	1.2	2
N1	DISY Max	Y	3.1	3.1	1.006
N1	G	Y	0.2	0.1	1.058
N1	DERUX Max	X	2.1	1.4	1.423
N1	DERUX Max	Y	1.2	0.6	2
N1	DERUY Max	Y	1.7	1.7	1.006
N1	COMB1	Y	1.6	1.6	1.001
N1	COMB2	Y	1.8	1.8	1.003
N1	COMB3	Y	1.7	1.6	1.003
N1	COMB4	Y	1.6	1.6	1.002
N1	COMB5 Max	X	4	3	1.334
N1	COMB5 Max	Y	1.7	0.5	3.432
N1	COMB5 Min	X	4	3	1.334

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	COMB5 Min	Y	5	3.8	1.324
N1	COMB6 Max	X	1.2	0.9	1.336
N1	COMB6 Max	Y	2.2	1.8	1.207
N1	COMB6 Min	X	1.2	0.9	1.336
N1	COMB6 Min	Y	5.5	5.1	1.075
N1	COMB7 Max	X	1.2	0.9	1.335
N1	COMB7 Max	Y	2.8	2.4	1.155
N1	COMB7 Min	X	1.2	0.9	1.335
N1	COMB7 Min	Y	4.9	4.5	1.084
N1	COMB8 Max	X	4	3	1.334
N1	COMB8 Max	Y	2.4	1.1	2.089
N1	COMB8 Min	X	4	3	1.334
N1	COMB8 Min	Y	4.4	3.2	1.386
N1	ENVE Max	X	4	3	1.334
N1	ENVE Max	Y	2.8	2.4	1.155
N1	ENVE Min	X	4	3	1.334
N1	ENVE Min	Y	5.5	5.1	1.075
N1	CIM01	Y	1.1	1.1	1.001
N1	CIM02	Y	1.4	1.4	1.003
N1	CIM03	Y	1.1	1.1	1.005
N1	CIM04	Y	1.3	1.3	1.001
N1	CIM05 Max	X	2.8	2.1	1.334
N1	CIM05 Max	Y	1.2	0.4	3.333
N1	CIM05 Min	X	2.8	2.1	1.334
N1	CIM05 Min	Y	3.5	2.6	1.325
N1	CIM06 Max	X	0.8	0.6	1.337
N1	CIM06 Max	Y	1.5	1.3	1.206
N1	CIM06 Min	X	0.8	0.6	1.337
N1	CIM06 Min	Y	3.8	3.6	1.074
N1	CIM07 Max	X	2.1	1.6	1.335
N1	CIM07 Max	Y	0.9	0.2	4.148
N1	CIM07 Min	X	2.1	1.6	1.335
N1	CIM07 Min	Y	3.1	2.5	1.26
N1	CIM08 Max	X	0.6	0.5	1.338
N1	CIM08 Max	Y	0.7	0.5	1.419
N1	CIM08 Min	X	0.6	0.5	1.338
N1	CIM08 Min	Y	3.4	3.2	1.063
N1	DER01	Y	1.6	1.6	1.001
N1	DER02	Y	1.8	1.8	1.003
N1	DER03	Y	1.7	1.6	1.003
N1	DER04	Y	1.6	1.6	1.002
N1	DER05 Max	X	12.8	9.6	1.333
N1	DER05 Max	Y	6.2	2.3	2.729
N1	DER05 Min	X	12.8	9.6	1.333
N1	DER05 Min	Y	9.5	5.6	1.705
N1	DER06 Max	Y	8.3	8.2	1.006
N1	DER06 Min	Y	11.6	11.5	1.005
N1	DER07 Max	X	12.8	9.6	1.333
N1	DER07 Max	Y	6.8	2.9	2.354
N1	DER07 Min	X	12.8	9.6	1.333
N1	DER07 Min	Y	8.8	4.9	1.793
N1	DER08 Max	Y	8.9	8.8	1.006
N1	DER08 Min	Y	10.9	10.9	1.005
N1	DERUD01	Y	1.6	1.6	1.001
N1	DERUD02	Y	1.8	1.8	1.003
N1	DERUD03	Y	1.7	1.6	1.003
N1	DERUD04	Y	1.6	1.6	1.002
N1	DERUD05 Max	X	2.1	1.4	1.425
N1	DERUD05 Max	Y	1.6	1	1.589
N1	DERUD05 Min	X	2.1	1.4	1.425

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	DERUD05 Min	Y	2.9	2.3	1.273
N1	DERUD06 Max	Y	0.04009	0.03496	1.147
N1	DERUD06 Min	Y	3.3	3.3	1.004
N1	DERUD07 Max	X	2.1	1.4	1.424
N1	DERUD07 Max	Y	1	0.4	2.488
N1	DERUD07 Min	X	2.1	1.4	1.424
N1	DERUD07 Min	Y	2.2	1.6	1.374
N1	DERUD08 Max	Y	0.7	0.7	1.014
N1	DERUD08 Min	Y	2.7	2.7	1.004
N1	VIG01 Max	X	8	6	1.334
N1	VIG01 Max	Y	5.1	2.7	1.923
N1	VIG01 Min	X	8	6	1.334
N1	VIG01 Min	Y	8.4	5.9	1.413
N1	VIG02 Max	X	2.4	1.8	1.334
N1	VIG02 Max	Y	6	5.3	1.143
N1	VIG02 Min	X	2.4	1.8	1.334
N1	VIG02 Min	Y	9.3	8.6	1.089
N1	VIG03 Max	X	8	6	1.333
N1	VIG03 Max	Y	5.7	3.3	1.749
N1	VIG03 Min	X	8	6	1.333
N1	VIG03 Min	Y	7.8	5.3	1.461
N1	VIG04 Max	X	2.4	1.8	1.334
N1	VIG04 Max	Y	6.6	5.9	1.128
N1	VIG04 Min	X	2.4	1.8	1.334
N1	VIG04 Min	Y	8.7	7.9	1.095
N1	COL1 Max	X	12	9	1.333
N1	COL1 Max	Y	8.5	4.8	1.765
N1	COL1 Min	X	12	9	1.333
N1	COL1 Min	Y	11.8	8.1	1.455
N1	COL2 Max	X	3.6	2.7	1.334
N1	COL2 Max	Y	9.8	8.7	1.13
N1	COL2 Min	X	3.6	2.7	1.334
N1	COL2 Min	Y	13.1	12	1.095
N1	COL3 Max	X	12	9	1.333
N1	COL3 Max	Y	9.1	5.4	1.678
N1	COL3 Min	X	12	9	1.333
N1	COL3 Min	Y	11.1	7.5	1.492
N1	COL4 Max	X	3.6	2.7	1.333
N1	COL4 Max	Y	10.5	9.3	1.121
N1	COL4 Min	X	3.6	2.7	1.333
N1	COL4 Min	Y	12.5	11.4	1.1
N1	CIM09 Max	X	2.8	2.1	1.334
N1	CIM09 Max	Y	1.7	0.8	2.044
N1	CIM09 Min	X	2.8	2.1	1.334
N1	CIM09 Min	Y	3	2.2	1.392
N1	CIM10 Max	X	0.8	0.6	1.335
N1	CIM10 Max	Y	2	1.7	1.152
N1	CIM10 Min	X	0.8	0.6	1.335
N1	CIM10 Min	Y	3.4	3.1	1.085
N1	COMB9	Y	1.9	1.9	1.002
N1	COMB10	Y	1.9	1.9	1.005
N1	COMB11	Y	1.7	1.7	1.001
N1	DER09	Y	1.9	1.9	1.002
N1	DER10	Y	1.9	1.9	1.005
N1	DER11	Y	1.7	1.7	1.001
N1	DERUD09	Y	1.9	1.9	1.002
N1	DERUD10	Y	1.9	1.9	1.005
N1	DERUD11	Y	1.7	1.7	1.001
N1	CIM11	Y	1.3	1.3	1.007
N1	CIM12	Y	1.5	1.5	1.002

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM13 Max	X	2.1	1.6	1.335
N1	CIM13 Max	Y	1	0.3	3.084
N1	CIM13 Min	X	2.1	1.6	1.335
N1	CIM13 Min	Y	3.2	2.6	1.25
N1	CIM14 Max	X	0.6	0.5	1.338
N1	CIM14 Max	Y	0.6	0.4	1.543
N1	CIM14 Min	X	0.6	0.5	1.338
N1	CIM14 Min	Y	3.5	3.3	1.06
N1	CIM15	Y	0.7	0.7	1.001

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	501.036	0	0	0	755.3318	-2805.8016
N1	D	Bottom	574.5432	0	0	0	1056.1004	-3217.4419
N1	L	Top	53.76	0	0	0	-64.512	-301.056
N1	L	Bottom	53.76	0	0	0	-64.6649	-301.056
N1	LR	Top	45.92	0	0	0	188.272	-257.152
N1	LR	Bottom	45.92	0	0	0	188.2732	-257.152
N1	EX Max	Top	0	548.781	0	2637.8352	0	0.0002
N1	EX Max	Bottom	0	548.781	0	2637.8352	0	1789.1262
N1	EY Max	Top	0	0	551.0487	3085.8729	1.563E-05	0
N1	EY Max	Bottom	0	0	551.0487	3085.8729	1796.2297	0
N1	DISX Max	Top	0	171.4941	0	824.3235	0	4.818E-05
N1	DISX Max	Bottom	0	171.4941	0	824.3235	0	559.1019
N1	DISY Max	Top	0	0	172.2027	964.3353	4.885E-06	0
N1	DISY Max	Bottom	0	0	172.2027	964.3353	561.3218	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	118.72	0	0	0	344.288	-664.832
N1	G	Bottom	118.72	0	0	0	344.2139	-664.832
N1	DERUX Max	Top	0	84.6295	0	355.5259	0	2.367E-05
N1	DERUX Max	Bottom	0	84.6295	0	355.5259	0	275.9424
N1	DERUY Max	Top	0	0	93.8951	525.8124	2.664E-06	0
N1	DERUY Max	Bottom	0	0	93.8951	525.8124	306.0657	0
N1	COMB1	Top	701.4504	0	0	0	1057.4646	-3928.1222
N1	COMB1	Bottom	804.3605	0	0	0	1478.5406	-4504.4187
N1	COMB2	Top	710.2192	0	0	0	897.315	-3977.2275
N1	COMB2	Bottom	798.4278	0	0	0	1257.9932	-4471.1959
N1	COMB3	Top	728.4752	0	0	0	1143.1214	-4079.4611
N1	COMB3	Bottom	816.6838	0	0	0	1503.8927	-4573.4295
N1	COMB4	Top	677.9632	0	0	0	936.0222	-3796.5939
N1	COMB4	Bottom	766.1718	0	0	0	1296.7922	-4290.5623
N1	COMB5 Max	Top	655.0032	171.4941	51.6608	1113.6241	841.8862	-3668.0179
N1	COMB5 Max	Bottom	743.2118	171.4941	51.6608	1113.6241	1371.0521	-3602.8844
N1	COMB5 Min	Top	655.0032	-171.4941	-51.6608	-1113.6241	841.8862	-3668.018
N1	COMB5 Min	Bottom	743.2118	-171.4941	-51.6608	-1113.6241	1034.2591	-4721.0882
N1	COMB6 Max	Top	655.0032	51.4482	172.2027	1211.6323	841.8862	-3668.0179
N1	COMB6 Max	Bottom	743.2118	51.4482	172.2027	1211.6323	1763.9774	-3994.2557
N1	COMB6 Min	Top	655.0032	-51.4482	-172.2027	-1211.6323	841.8862	-3668.0179
N1	COMB6 Min	Bottom	743.2118	-51.4482	-172.2027	-1211.6323	641.3338	-4329.7169
N1	COMB7 Max	Top	450.9324	51.4482	172.2027	1211.6323	679.7987	-2525.2214
N1	COMB7 Max	Bottom	517.0889	51.4482	172.2027	1211.6323	1511.8122	-2727.9671
N1	COMB7 Min	Top	450.9324	-51.4482	-172.2027	-1211.6323	679.7986	-2525.2215
N1	COMB7 Min	Bottom	517.0889	-51.4482	-172.2027	-1211.6323	389.1686	-3063.4283
N1	COMB8 Max	Top	450.9324	171.4941	51.6608	1113.6241	679.7987	-2525.2214
N1	COMB8 Max	Bottom	517.0889	171.4941	51.6608	1113.6241	1118.8869	-2336.5958
N1	COMB8 Min	Top	450.9324	-171.4941	-51.6608	-1113.6241	679.7987	-2525.2215
N1	COMB8 Min	Bottom	517.0889	-171.4941	-51.6608	-1113.6241	782.0939	-3454.7997
N1	ENVE Max	Top	728.4752	171.4941	172.2027	1211.6323	1143.1214	-2525.2214

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	ENVE Max	Bottom	816.6838	171.4941	172.2027	1211.6323	1763.9774	-2336.5958
N1	ENVE Min	Top	450.9324	-171.4941	-172.2027	-1211.6323	679.7986	-4079.4611
N1	ENVE Min	Bottom	517.0889	-171.4941	-172.2027	-1211.6323	389.1686	-4721.0882
N1	CIM01	Top	501.036	0	0	0	755.3318	-2805.8016
N1	CIM01	Bottom	574.5432	0	0	0	1056.1004	-3217.4419
N1	CIM02	Top	554.796	0	0	0	690.8198	-3106.8576
N1	CIM02	Bottom	628.3032	0	0	0	991.4355	-3518.4979
N1	CIM03	Top	546.956	0	0	0	943.6038	-3062.9536
N1	CIM03	Bottom	620.4632	0	0	0	1244.3736	-3474.5939
N1	CIM04	Top	575.796	0	0	0	848.1518	-3224.4576
N1	CIM04	Bottom	649.3032	0	0	0	1148.8066	-3636.0979
N1	CIM05 Max	Top	501.036	120.0458	36.1626	779.5369	755.3318	-2805.8016
N1	CIM05 Max	Bottom	574.5432	120.0458	36.1626	779.5369	1173.978	-2826.0706
N1	CIM05 Min	Top	501.036	-120.0458	-36.1626	-779.5369	755.3318	-2805.8016
N1	CIM05 Min	Bottom	574.5432	-120.0458	-36.1626	-779.5369	938.2229	-3608.8133
N1	CIM06 Max	Top	501.036	36.0138	120.5419	848.1426	755.3318	-2805.8016
N1	CIM06 Max	Bottom	574.5432	36.0138	120.5419	848.1426	1449.0257	-3100.0305
N1	CIM06 Min	Top	501.036	-36.0138	-120.5419	-848.1426	755.3318	-2805.8016
N1	CIM06 Min	Bottom	574.5432	-36.0138	-120.5419	-848.1426	663.1752	-3334.8533
N1	CIM07 Max	Top	575.796	90.8919	27.5524	591.1851	848.1518	-3224.4576
N1	CIM07 Max	Bottom	649.3032	90.8919	27.5524	591.1851	1238.6181	-3339.7739
N1	CIM07 Min	Top	575.796	-90.8919	-27.5524	-591.1851	848.1518	-3224.4576
N1	CIM07 Min	Bottom	649.3032	-90.8919	-27.5524	-591.1851	1058.9951	-3932.4219
N1	CIM08 Max	Top	575.796	27.4391	91.2674	642.9895	848.1518	-3224.4576
N1	CIM08 Max	Bottom	649.3032	27.4391	91.2674	642.9895	1446.3071	-3546.6416
N1	CIM08 Min	Top	575.796	-27.4391	-91.2674	-642.9895	848.1518	-3224.4576
N1	CIM08 Min	Bottom	649.3032	-27.4391	-91.2674	-642.9895	851.3061	-3725.5542
N1	DER01	Top	701.4504	0	0	0	1057.4646	-3928.1222
N1	DER01	Bottom	804.3605	0	0	0	1478.5406	-4504.4187
N1	DER02	Top	710.2192	0	0	0	897.315	-3977.2275
N1	DER02	Bottom	798.4278	0	0	0	1257.9932	-4471.1959
N1	DER03	Top	728.4752	0	0	0	1143.1214	-4079.4611
N1	DER03	Bottom	816.6838	0	0	0	1503.8927	-4573.4295
N1	DER04	Top	677.9632	0	0	0	936.0222	-3796.5939
N1	DER04	Bottom	766.1718	0	0	0	1296.7922	-4290.5623
N1	DER05 Max	Top	655.0032	548.781	0	2637.8352	841.8862	-3668.0178
N1	DER05 Max	Bottom	743.2118	548.781	0	2637.8352	1202.6556	-2372.8601
N1	DER05 Min	Top	655.0032	-548.781	0	-2637.8352	841.8862	-3668.0181
N1	DER05 Min	Bottom	743.2118	-548.781	0	-2637.8352	1202.6556	-5951.1125
N1	DER06 Max	Top	655.0032	0	551.0487	3085.8729	841.8862	-3668.0179
N1	DER06 Max	Bottom	743.2118	0	551.0487	3085.8729	2998.8852	-4161.9863
N1	DER06 Min	Top	655.0032	0	-551.0487	-3085.8729	841.8862	-3668.0179
N1	DER06 Min	Bottom	743.2118	0	-551.0487	-3085.8729	-593.5741	-4161.9863
N1	DER07 Max	Top	450.9324	548.781	0	2637.8352	679.7987	-2525.2213
N1	DER07 Max	Bottom	517.0889	548.781	0	2637.8352	950.4904	-1106.5716
N1	DER07 Min	Top	450.9324	-548.781	0	-2637.8352	679.7987	-2525.2216
N1	DER07 Min	Bottom	517.0889	-548.781	0	-2637.8352	950.4904	-4684.8239
N1	DER08 Max	Top	450.9324	0	551.0487	3085.8729	679.7987	-2525.2214
N1	DER08 Max	Bottom	517.0889	0	551.0487	3085.8729	2746.7201	-2895.6977
N1	DER08 Min	Top	450.9324	0	-551.0487	-3085.8729	679.7986	-2525.2214
N1	DER08 Min	Bottom	517.0889	0	-551.0487	-3085.8729	-845.7393	-2895.6977
N1	DERUD01	Top	701.4504	0	0	0	1057.4646	-3928.1222
N1	DERUD01	Bottom	804.3605	0	0	0	1478.5406	-4504.4187
N1	DERUD02	Top	710.2192	0	0	0	897.315	-3977.2275
N1	DERUD02	Bottom	798.4278	0	0	0	1257.9932	-4471.1959
N1	DERUD03	Top	728.4752	0	0	0	1143.1214	-4079.4611
N1	DERUD03	Bottom	816.6838	0	0	0	1503.8927	-4573.4295
N1	DERUD04	Top	677.9632	0	0	0	936.0222	-3796.5939
N1	DERUD04	Bottom	766.1718	0	0	0	1296.7922	-4290.5623
N1	DERUD05 Max	Top	655.0032	84.6295	0	355.5259	841.8862	-3668.0179

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD05 Max	Bottom	743.2118	84.6295	0	355.5259	1202.6556	-3886.0439
N1	DERUD05 Min	Top	655.0032	-84.6295	0	-355.5259	841.8862	-3668.0179
N1	DERUD05 Min	Bottom	743.2118	-84.6295	0	-355.5259	1202.6556	-4437.9287
N1	DERUD06 Max	Top	655.0032	0	93.8951	525.8124	841.8862	-3668.0179
N1	DERUD06 Max	Bottom	743.2118	0	93.8951	525.8124	1508.7213	-4161.9863
N1	DERUD06 Min	Top	655.0032	0	-93.8951	-525.8124	841.8862	-3668.0179
N1	DERUD06 Min	Bottom	743.2118	0	-93.8951	-525.8124	896.5899	-4161.9863
N1	DERUD07 Max	Top	450.9324	84.6295	0	355.5259	679.7987	-2525.2214
N1	DERUD07 Max	Bottom	517.0889	84.6295	0	355.5259	950.4904	-2619.7553
N1	DERUD07 Min	Top	450.9324	-84.6295	0	-355.5259	679.7987	-2525.2215
N1	DERUD07 Min	Bottom	517.0889	-84.6295	0	-355.5259	950.4904	-3171.6402
N1	DERUD08 Max	Top	450.9324	0	93.8951	525.8124	679.7987	-2525.2214
N1	DERUD08 Max	Bottom	517.0889	0	93.8951	525.8124	1256.5561	-2895.6977
N1	DERUD08 Min	Top	450.9324	0	-93.8951	-525.8124	679.7987	-2525.2214
N1	DERUD08 Min	Bottom	517.0889	0	-93.8951	-525.8124	644.4247	-2895.6977
N1	VIG01 Max	Top	655.0032	342.9881	103.3216	2227.2482	841.8862	-3668.0178
N1	VIG01 Max	Bottom	743.2118	342.9881	103.3216	2227.2482	1539.4486	-3043.7824
N1	VIG01 Min	Top	655.0032	-342.9881	-103.3216	-2227.2482	841.8862	-3668.018
N1	VIG01 Min	Bottom	743.2118	-342.9881	-103.3216	-2227.2482	865.8625	-5280.1902
N1	VIG02 Max	Top	655.0032	102.8964	344.4055	2423.2647	841.8862	-3668.0179
N1	VIG02 Max	Bottom	743.2118	102.8964	344.4055	2423.2647	2325.2991	-3826.5251
N1	VIG02 Min	Top	655.0032	-102.8964	-344.4055	-2423.2647	841.8862	-3668.0179
N1	VIG02 Min	Bottom	743.2118	-102.8964	-344.4055	-2423.2647	80.012	-4497.4475
N1	VIG03 Max	Top	450.9324	342.9881	103.3216	2227.2482	679.7987	-2525.2213
N1	VIG03 Max	Bottom	517.0889	342.9881	103.3216	2227.2482	1287.2835	-1777.4939
N1	VIG03 Min	Top	450.9324	-342.9881	-103.3216	-2227.2482	679.7987	-2525.2215
N1	VIG03 Min	Bottom	517.0889	-342.9881	-103.3216	-2227.2482	613.6973	-4013.9016
N1	VIG04 Max	Top	450.9324	102.8964	344.4055	2423.2647	679.7987	-2525.2214
N1	VIG04 Max	Bottom	517.0889	102.8964	344.4055	2423.2647	2073.1339	-2560.2366
N1	VIG04 Min	Top	450.9324	-102.8964	-344.4055	-2423.2647	679.7986	-2525.2215
N1	VIG04 Min	Bottom	517.0889	-102.8964	-344.4055	-2423.2647	-172.1531	-3231.1589
N1	COL1 Max	Top	655.0032	514.4822	154.9825	3340.8722	841.8862	-3668.0178
N1	COL1 Max	Bottom	743.2118	514.4822	154.9825	3340.8722	1707.8452	-2484.6805
N1	COL1 Min	Top	655.0032	-514.4822	-154.9825	-3340.8722	841.8862	-3668.0181
N1	COL1 Min	Bottom	743.2118	-514.4822	-154.9825	-3340.8722	697.466	-5839.2921
N1	COL2 Max	Top	655.0032	154.3447	516.6082	3634.897	841.8862	-3668.0179
N1	COL2 Max	Bottom	743.2118	154.3447	516.6082	3634.897	2886.6209	-3658.7946
N1	COL2 Min	Top	655.0032	-154.3447	-516.6082	-3634.897	841.8862	-3668.018
N1	COL2 Min	Bottom	743.2118	-154.3447	-516.6082	-3634.897	-481.3097	-4665.178
N1	COL3 Max	Top	450.9324	514.4822	154.9825	3340.8722	679.7987	-2525.2213
N1	COL3 Max	Bottom	517.0889	514.4822	154.9825	3340.8722	1455.68	-1218.3919
N1	COL3 Min	Top	450.9324	-514.4822	-154.9825	-3340.8722	679.7986	-2525.2216
N1	COL3 Min	Bottom	517.0889	-514.4822	-154.9825	-3340.8722	445.3008	-4573.0035
N1	COL4 Max	Top	450.9324	154.3447	516.6082	3634.897	679.7987	-2525.2214
N1	COL4 Max	Bottom	517.0889	154.3447	516.6082	3634.897	2634.4557	-2392.506
N1	COL4 Min	Top	450.9324	-154.3447	-516.6082	-3634.897	679.7986	-2525.2215
N1	COL4 Min	Bottom	517.0889	-154.3447	-516.6082	-3634.897	-733.4749	-3398.8895
N1	CIM09 Max	Top	300.6216	120.0458	36.1626	779.5369	453.1991	-1683.4809
N1	CIM09 Max	Bottom	344.7259	120.0458	36.1626	779.5369	751.5378	-1539.0938
N1	CIM09 Min	Top	300.6216	-120.0458	-36.1626	-779.5369	453.1991	-1683.481
N1	CIM09 Min	Bottom	344.7259	-120.0458	-36.1626	-779.5369	515.7827	-2321.8365
N1	CIM10 Max	Top	300.6216	36.0138	120.5419	848.1426	453.1991	-1683.4809
N1	CIM10 Max	Bottom	344.7259	36.0138	120.5419	848.1426	1026.5855	-1813.0537
N1	CIM10 Min	Top	300.6216	-36.0138	-120.5419	-848.1426	453.1991	-1683.481
N1	CIM10 Min	Bottom	344.7259	-36.0138	-120.5419	-848.1426	240.735	-2047.8766
N1	COMB9	Top	746.6192	0	0	0	975.323	-4181.0675
N1	COMB9	Bottom	834.8278	0	0	0	1335.9636	-4675.0359
N1	COMB10	Top	844.9552	0	0	0	1392.747	-4731.7491
N1	COMB10	Bottom	933.1638	0	0	0	1753.3978	-5225.7175
N1	COMB11	Top	714.3632	0	0	0	1014.0302	-4000.4339

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COMB11	Bottom	802.5718	0	0	0	1374.7625	-4494.4023
N1	DER09	Top	746.6192	0	0	0	975.323	-4181.0675
N1	DER09	Bottom	834.8278	0	0	0	1335.9636	-4675.0359
N1	DER10	Top	844.9552	0	0	0	1392.747	-4731.7491
N1	DER10	Bottom	933.1638	0	0	0	1753.3978	-5225.7175
N1	DER11	Top	714.3632	0	0	0	1014.0302	-4000.4339
N1	DER11	Bottom	802.5718	0	0	0	1374.7625	-4494.4023
N1	DERUD09	Top	746.6192	0	0	0	975.323	-4181.0675
N1	DERUD09	Bottom	834.8278	0	0	0	1335.9636	-4675.0359
N1	DERUD10	Top	844.9552	0	0	0	1392.747	-4731.7491
N1	DERUD10	Bottom	933.1638	0	0	0	1753.3978	-5225.7175
N1	DERUD11	Top	714.3632	0	0	0	1014.0302	-4000.4339
N1	DERUD11	Bottom	802.5718	0	0	0	1374.7625	-4494.4023
N1	CIM11	Top	619.756	0	0	0	1099.6198	-3470.6336
N1	CIM11	Bottom	693.2632	0	0	0	1400.3143	-3882.2739
N1	CIM12	Top	630.396	0	0	0	965.1638	-3530.2176
N1	CIM12	Bottom	703.9032	0	0	0	1265.7621	-3941.8579
N1	CIM13 Max	Top	630.396	90.8919	27.5524	591.1851	965.1638	-3530.2176
N1	CIM13 Max	Bottom	703.9032	90.8919	27.5524	591.1851	1355.5736	-3645.5339
N1	CIM13 Min	Top	630.396	-90.8919	-27.5524	-591.1851	965.1638	-3530.2176
N1	CIM13 Min	Bottom	703.9032	-90.8919	-27.5524	-591.1851	1175.9507	-4238.1819
N1	CIM14 Max	Top	630.396	27.4391	91.2674	642.9895	965.1638	-3530.2176
N1	CIM14 Max	Bottom	703.9032	27.4391	91.2674	642.9895	1563.2627	-3852.4016
N1	CIM14 Min	Top	630.396	-27.4391	-91.2674	-642.9895	965.1638	-3530.2176
N1	CIM14 Min	Bottom	703.9032	-27.4391	-91.2674	-642.9895	968.2616	-4031.3142
N1	CIM15	Top	300.6216	0	0	0	453.1991	-1683.481
N1	CIM15	Bottom	344.7259	0	0	0	633.6603	-1930.4652

5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	10.648	4.3805	115.7816	-14.5497	11.2939	0
Base	1	13	L	2.188	-2.37	13.8843	0.0187	2.3207	0
Base	1	13	LR	-0.0458	3.0012	5.5888	-3.1485	-0.0486	0
Base	1	13	EX Max	131.8304	78.9646	38.0169	151.9541	251.2077	13.9091
Base	1	13	EY Max	0.0005	92.0855	28.2707	184.111	0.0005	0
Base	1	13	DISX Max	41.197	24.6764	11.8803	47.4856	78.5024	4.3466
Base	1	13	DISY Max	0.0002	28.7767	8.8346	57.5347	0.0002	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	1.0023	4.8175	18.1199	-6.2876	1.0631	0
Base	1	13	DERUX Max	21.2054	12.3815	5.8971	23.7933	40.3963	2.1741
Base	1	13	DERUY Max	0.0001	15.6908	4.8171	31.3713	0.0001	0
Base	1	13	COMB1	14.9072	6.1327	162.0943	-20.3695	15.8115	0
Base	1	13	COMB2	16.2554	2.9651	163.9473	-19.0039	17.2415	0
Base	1	13	COMB3	14.8922	7.6885	161.7644	-22.4784	15.7956	0
Base	1	13	COMB4	14.9426	4.3871	155.6167	-19.0151	15.8491	0
Base	1	13	COMB5 Max	56.1626	36.196	167.3529	47.3052	94.3758	4.3466
Base	1	13	COMB5 Min	-26.2315	-30.4229	138.2916	-82.1869	-62.6291	-4.3466
Base	1	13	COMB6 Max	27.3248	39.0662	165.2209	54.3395	39.4243	1.304
Base	1	13	COMB6 Min	2.6063	-33.2931	140.4236	-89.2212	-7.6775	-1.304
Base	1	13	COMB7 Max	21.9424	40.1221	116.6021	58.6857	33.7154	1.304
Base	1	13	COMB7 Min	-2.7761	-32.2372	91.8048	-84.8751	-13.3864	-1.304
Base	1	13	COMB8 Max	50.7802	37.2519	118.7341	51.6514	88.667	4.3466
Base	1	13	COMB8 Min	-31.6139	-29.367	89.6728	-77.8407	-68.3379	-4.3466
Base	1	13	ENVE Max	56.1626	40.1221	167.3529	58.6857	94.3758	4.3466
Base	1	13	ENVE Min	-31.6139	-33.2931	89.6728	-89.2212	-68.3379	-4.3466
Base	1	13	CIM01	10.648	4.3805	115.7816	-14.5497	11.2939	0
Base	1	13	CIM02	12.8359	2.0104	129.6659	-14.5309	13.6146	0
Base	1	13	CIM03	10.6021	7.3817	121.3705	-17.6981	11.2453	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	CIM04	12.2546	4.8539	130.3865	-16.897	12.998	0
Base	1	13	CIM05 Max	39.4859	27.6971	125.9531	30.7726	66.2456	3.0426
Base	1	13	CIM05 Min	-18.19	-18.9362	105.6102	-59.8719	-43.6578	-3.0426
Base	1	13	CIM06 Max	19.2994	29.7062	124.4607	35.6966	27.7795	0.9128
Base	1	13	CIM06 Min	1.9965	-20.9453	107.1025	-64.7959	-5.1917	-0.9128
Base	1	13	CIM07 Max	34.089	22.5367	138.0966	17.476	54.6043	2.3037
Base	1	13	CIM07 Min	-9.5799	-12.8289	122.6764	-51.2699	-28.6083	-2.3037
Base	1	13	CIM08 Max	18.8462	24.0538	136.9697	21.1941	25.5584	0.6955
Base	1	13	CIM08 Min	5.663	-14.346	123.8033	-54.9881	0.4375	-0.6955
Base	1	13	DER01	14.9072	6.1327	162.0943	-20.3695	15.8115	0
Base	1	13	DER02	16.2554	2.9651	163.9473	-19.0039	17.2415	0
Base	1	13	DER03	14.8922	7.6885	161.7644	-22.4784	15.7956	0
Base	1	13	DER04	14.9426	4.3871	155.6167	-19.0151	15.8491	0
Base	1	13	DER05 Max	146.796	81.8512	190.8391	134.5132	267.081	13.9091
Base	1	13	DER05 Min	-116.8649	-76.0781	114.8054	-169.3949	-235.3343	-13.9091
Base	1	13	DER06 Max	14.966	94.972	181.093	166.6701	15.8739	0
Base	1	13	DER06 Min	14.965	-89.1989	124.5515	-201.5518	15.8729	0
Base	1	13	DER07 Max	141.4136	82.9071	142.2203	138.8594	261.3722	13.9091
Base	1	13	DER07 Min	-122.2473	-75.0222	66.1866	-165.0488	-241.0431	-13.9091
Base	1	13	DER08 Max	9.5837	96.0279	132.4742	171.0163	10.165	0
Base	1	13	DER08 Min	9.5827	-88.1431	75.9327	-197.2057	10.164	0
Base	1	13	DERUD01	14.9072	6.1327	162.0943	-20.3695	15.8115	0
Base	1	13	DERUD02	16.2554	2.9651	163.9473	-19.0039	17.2415	0
Base	1	13	DERUD03	14.8922	7.6885	161.7644	-22.4784	15.7956	0
Base	1	13	DERUD04	14.9426	4.3871	155.6167	-19.0151	15.8491	0
Base	1	13	DERUD05 Max	36.1709	15.2681	158.7193	6.3524	56.2697	2.1741
Base	1	13	DERUD05 Min	-6.2399	-9.495	146.9252	-41.2341	-24.5229	-2.1741
Base	1	13	DERUD06 Max	14.9656	18.5773	157.6394	13.9304	15.8735	0
Base	1	13	DERUD06 Min	14.9654	-12.8042	148.0051	-48.8122	15.8733	0
Base	1	13	DERUD07 Max	30.7886	16.324	110.1005	10.6986	50.5608	2.1741
Base	1	13	DERUD07 Min	-11.6222	-8.4391	98.3064	-36.888	-30.2318	-2.1741
Base	1	13	DERUD08 Max	9.5833	19.6332	109.0206	18.2766	10.1646	0
Base	1	13	DERUD08 Min	9.5831	-11.7483	99.3863	-44.466	10.1644	0
Base	1	13	VIG01 Max	97.3596	69.5055	181.8836	112.0513	172.8783	8.6932
Base	1	13	VIG01 Min	-67.4286	-63.7324	123.761	-146.933	-141.1315	-8.6932
Base	1	13	VIG02 Max	39.684	75.2458	177.6196	126.1199	62.9751	2.608
Base	1	13	VIG02 Min	-9.753	-69.4728	128.0249	-161.0016	-31.2284	-2.608
Base	1	13	VIG03 Max	91.9773	70.5613	133.2648	116.3974	167.1694	8.6932
Base	1	13	VIG03 Min	-72.8109	-62.6765	75.1422	-142.5868	-146.8404	-8.6932
Base	1	13	VIG04 Max	34.3017	76.3017	129.0008	130.4661	57.2663	2.608
Base	1	13	VIG04 Min	-15.1353	-68.4169	79.4061	-156.6554	-36.9372	-2.608
Base	1	13	COL1 Max	138.5567	102.8149	196.4142	176.7973	251.3807	13.0398
Base	1	13	COL1 Min	-108.6256	-97.0419	109.2303	-211.679	-219.6339	-13.0398
Base	1	13	COL2 Max	52.0433	111.4255	190.0183	197.9003	86.526	3.9119
Base	1	13	COL2 Min	-22.1122	-105.6524	115.6262	-232.782	-54.7793	-3.9119
Base	1	13	COL3 Max	133.1743	103.8708	147.7954	181.1435	245.6718	13.0398
Base	1	13	COL3 Min	-114.008	-95.986	60.6115	-207.3329	-225.3428	-13.0398
Base	1	13	COL4 Max	46.6609	112.4814	141.3995	202.2464	80.8172	3.9119
Base	1	13	COL4 Min	-27.4946	-104.5965	67.0074	-228.4358	-60.4881	-3.9119
Base	1	13	CIM09 Max	35.2267	25.9449	79.6404	36.5924	61.7281	3.0426
Base	1	13	CIM09 Min	-22.4492	-20.6883	59.2975	-54.052	-48.1754	-3.0426
Base	1	13	CIM10 Max	15.0403	27.954	78.1481	41.5165	23.262	0.9128
Base	1	13	CIM10 Min	-2.2627	-22.6975	60.7899	-58.9761	-9.7093	-0.9128
Base	1	13	COMB9	16.7795	3.8732	170.2128	-20.5734	17.7973	0
Base	1	13	COMB10	16.5692	10.5945	181.814	-27.501	17.5743	0
Base	1	13	COMB11	15.4667	5.2953	161.8822	-20.5847	16.4049	0
Base	1	13	DER09	16.7795	3.8732	170.2128	-20.5734	17.7973	0
Base	1	13	DER10	16.5692	10.5945	181.814	-27.501	17.5743	0
Base	1	13	DER11	15.4667	5.2953	161.8822	-20.5847	16.4049	0
Base	1	13	DERUD09	16.7795	3.8732	170.2128	-20.5734	17.7973	0



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	DERUD10	16.5692	10.5945	181.814	-27.501	17.5743	0
Base	1	13	DERUD11	15.4667	5.2953	161.8822	-20.5847	16.4049	0
Base	1	13	CIM11	11.6503	9.1979	133.9015	-20.8373	12.357	0
Base	1	13	CIM12	13.0407	6.216	139.7847	-19.2513	13.8317	0
Base	1	13	CIM13 Max	34.8751	23.8988	147.4948	15.1216	55.438	2.3037
Base	1	13	CIM13 Min	-8.7938	-11.4668	132.0747	-53.6242	-27.7745	-2.3037
Base	1	13	CIM14 Max	19.6323	25.4159	146.3679	18.8398	26.3922	0.6955
Base	1	13	CIM14 Min	6.4491	-12.9838	133.2016	-57.3424	1.2713	-0.6955
Base	1	13	CIM15	6.3888	2.6283	69.469	-8.7298	6.7763	0
Base	2	15	D	2.5046	0.2447	39.6785	-10.1427	2.6211	0.0051
Base	2	15	L	0.0599	3.5451	-1.7952	-6.1789	0.0613	-0.0007
Base	2	15	LR	0.0151	-2.9082	5.7834	3.0592	0.0166	0.0065
Base	2	15	EX Max	62.8754	73.5068	31.0692	145.2195	122.2897	13.0462
Base	2	15	EY Max	0.0261	91.5806	28.2816	182.4125	0.0516	0.0749
Base	2	15	DISX Max	19.6486	22.9709	9.7091	45.3811	38.2155	4.0769
Base	2	15	DISY Max	0.0081	28.6189	8.838	57.0039	0.0161	0.0234
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.0602	-4.0439	10.6693	3.0291	0.0639	0.0126
Base	2	15	DERUX Max	8.1622	11.4852	4.7679	22.6966	15.9049	2.0496
Base	2	15	DERUY Max	0.0044	15.6047	4.819	31.0819	0.0088	0.0128
Base	2	15	COMB1	3.5064	0.3425	55.5499	-14.1998	3.6695	0.0072
Base	2	15	COMB2	3.1089	4.5116	47.6336	-20.5278	3.2517	0.0083
Base	2	15	COMB3	3.0896	-0.8145	55.0725	-13.4553	3.2332	0.0158
Base	2	15	COMB4	3.0729	2.3845	48.7107	-16.8205	3.2149	0.0087
Base	2	15	COMB5 Max	22.7164	35.3952	58.1795	44.1322	41.427	4.0894
Base	2	15	COMB5 Min	-16.5856	-27.7179	33.4585	-80.8324	-35.0138	-4.0785
Base	2	15	COMB6 Max	8.9681	39.3489	57.5698	52.2681	14.6874	1.2519
Base	2	15	COMB6 Min	-2.8373	-31.6716	34.0683	-88.9683	-8.2742	-1.241
Base	2	15	COMB7 Max	8.1568	35.7304	47.4614	61.4898	13.8398	1.2511
Base	2	15	COMB7 Min	-3.6486	-35.29	23.9599	-79.7467	-9.1218	-1.2419
Base	2	15	COMB8 Max	21.9051	31.7767	48.0712	53.3538	40.5794	4.0886
Base	2	15	COMB8 Min	-17.3969	-31.3364	23.3501	-71.6107	-35.8614	-4.0794
Base	2	15	ENVE Max	22.7164	39.3489	58.1795	61.4898	41.427	4.0894
Base	2	15	ENVE Min	-17.3969	-35.29	23.3501	-88.9683	-35.8614	-4.0794
Base	2	15	CIM01	2.5046	0.2447	39.6785	-10.1427	2.6211	0.0051
Base	2	15	CIM02	2.5644	3.7897	37.8833	-16.3216	2.6824	0.0044
Base	2	15	CIM03	2.5197	-2.6636	45.4619	-7.0835	2.6377	0.0116
Base	2	15	CIM04	2.5608	0.7223	42.6697	-12.4824	2.6795	0.0095
Base	2	15	CIM05 Max	16.2603	22.3342	48.3309	33.5949	29.3753	2.8639
Base	2	15	CIM05 Min	-11.2511	-21.8449	31.0261	-53.8803	-24.1332	-2.8537
Base	2	15	CIM06 Max	6.6365	25.1018	47.904	39.2901	10.6576	0.8777
Base	2	15	CIM06 Min	-1.6273	-24.6125	31.453	-59.5755	-5.4155	-0.8674
Base	2	15	CIM07 Max	12.9759	17.4759	49.2296	20.6902	22.9363	2.174
Base	2	15	CIM07 Min	-7.8542	-16.0313	36.1098	-45.655	-17.5773	-2.1551
Base	2	15	CIM08 Max	5.7089	19.5657	48.9073	24.9906	8.8026	0.6742
Base	2	15	CIM08 Min	-0.5872	-18.1211	36.4321	-49.9555	-3.4435	-0.6553
Base	2	15	DER01	3.5064	0.3425	55.5499	-14.1998	3.6695	0.0072
Base	2	15	DER02	3.1089	4.5116	47.6336	-20.5278	3.2517	0.0083
Base	2	15	DER03	3.0896	-0.8145	55.0725	-13.4553	3.2332	0.0158
Base	2	15	DER04	3.0729	2.3845	48.7107	-16.8205	3.2149	0.0087
Base	2	15	DER05 Max	65.9408	77.3454	76.8882	126.8694	125.4963	13.0517
Base	2	15	DER05 Min	-59.81	-69.6681	14.7498	-163.5696	-119.0832	-13.0408
Base	2	15	DER06 Max	3.0914	95.4193	74.1007	164.0624	3.2582	0.0803
Base	2	15	DER06 Min	3.0393	-87.742	17.5374	-200.7626	3.155	-0.0694
Base	2	15	DER07 Max	65.1295	73.727	66.7798	136.091	124.6487	13.0508
Base	2	15	DER07 Min	-60.6213	-73.2866	4.6415	-154.3479	-119.9308	-13.0416
Base	2	15	DER08 Max	2.2802	91.8008	63.9923	173.2841	2.4106	0.0795
Base	2	15	DER08 Min	2.2281	-91.3604	7.429	-191.541	2.3074	-0.0703
Base	2	15	DERUD01	3.5064	0.3425	55.5499	-14.1998	3.6695	0.0072
Base	2	15	DERUD02	3.1089	4.5116	47.6336	-20.5278	3.2517	0.0083

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DERUD03	3.0896	-0.8145	55.0725	-13.4553	3.2332	0.0158
Base	2	15	DERUD04	3.0729	2.3845	48.7107	-16.8205	3.2149	0.0087
Base	2	15	DERUD05 Max	11.2276	15.3239	50.5869	4.3465	19.1115	2.0551
Base	2	15	DERUD05 Min	-5.0969	-7.6466	41.0511	-41.0467	-12.6983	-2.0442
Base	2	15	DERUD06 Max	3.0698	19.4434	50.638	12.7318	3.2154	0.0182
Base	2	15	DERUD06 Min	3.0609	-11.7661	41	-49.432	3.1978	-0.0073
Base	2	15	DERUD07 Max	10.4164	11.7054	40.4786	13.5681	18.2639	2.0543
Base	2	15	DERUD07 Min	-5.9081	-11.265	30.9427	-31.825	-13.5459	-2.045
Base	2	15	DERUD08 Max	2.2586	15.8249	40.5297	21.9535	2.3678	0.0174
Base	2	15	DERUD08 Min	2.2497	-15.3845	30.8916	-40.2103	2.3502	-0.0082
Base	2	15	VIG01 Max	42.3674	66.9518	70.5401	106.6144	79.6473	8.1734
Base	2	15	VIG01 Min	-36.2367	-59.2745	21.098	-143.3146	-73.2342	-8.1625
Base	2	15	VIG02 Max	14.8708	74.8591	69.3205	122.8864	26.1681	2.4984
Base	2	15	VIG02 Min	-8.7401	-67.1818	22.3175	-159.5866	-19.755	-2.4875
Base	2	15	VIG03 Max	41.5562	63.3333	60.4317	115.8361	78.7997	8.1725
Base	2	15	VIG03 Min	-37.0479	-62.8929	10.9896	-134.093	-74.0818	-8.1633
Base	2	15	VIG04 Max	14.0596	71.2406	59.2121	132.108	25.3206	2.4976
Base	2	15	VIG04 Min	-9.5513	-70.8002	12.2092	-150.3649	-20.6026	-2.4884
Base	2	15	COL1 Max	62.0184	98.5083	82.9006	169.0967	117.8677	12.2573
Base	2	15	COL1 Min	-55.8877	-90.831	8.7375	-205.7969	-111.4546	-12.2464
Base	2	15	COL2 Max	20.7735	110.3693	81.0713	193.5046	37.6489	3.7449
Base	2	15	COL2 Min	-14.6428	-102.692	10.5668	-230.2048	-31.2358	-3.734
Base	2	15	COL3 Max	61.2072	94.8899	72.7922	178.3183	117.0201	12.2565
Base	2	15	COL3 Min	-56.6989	-94.4495	-1.3709	-196.5752	-112.3022	-12.2473
Base	2	15	COL4 Max	19.9623	106.7508	70.9629	202.7263	36.8013	3.744
Base	2	15	COL4 Min	-15.454	-106.3104	0.4584	-220.9832	-32.0834	-3.7348
Base	2	15	CIM09 Max	15.2585	22.2364	32.4595	37.652	28.3269	2.8618
Base	2	15	CIM09 Min	-12.253	-21.9428	15.1547	-49.8232	-25.1816	-2.8557
Base	2	15	CIM10 Max	5.6347	25.0039	32.0326	43.3471	9.6092	0.8756
Base	2	15	CIM10 Min	-2.6291	-24.7104	15.5816	-55.5184	-6.4639	-0.8695
Base	2	15	COMB9	3.1314	3.9437	50.0766	-20.5429	3.2753	0.0113
Base	2	15	COMB10	3.1617	-2.6316	62.8899	-13.5036	3.3088	0.0256
Base	2	15	COMB11	3.0955	1.8167	51.1537	-16.8356	3.2385	0.0118
Base	2	15	DER09	3.1314	3.9437	50.0766	-20.5429	3.2753	0.0113
Base	2	15	DER10	3.1617	-2.6316	62.8899	-13.5036	3.3088	0.0256
Base	2	15	DER11	3.0955	1.8167	51.1537	-16.8356	3.2385	0.0118
Base	2	15	DERUD09	3.1314	3.9437	50.0766	-20.5429	3.2753	0.0113
Base	2	15	DERUD10	3.1617	-2.6316	62.8899	-13.5036	3.3088	0.0256
Base	2	15	DERUD11	3.0955	1.8167	51.1537	-16.8356	3.2385	0.0118
Base	2	15	CIM11	2.5648	-3.7993	50.3478	-7.1136	2.685	0.0177
Base	2	15	CIM12	2.5946	-0.1295	46.3341	-12.505	2.715	0.014
Base	2	15	CIM13 Max	13.0097	16.6241	52.894	20.6676	22.9718	2.1786
Base	2	15	CIM13 Min	-7.8204	-16.8831	39.7742	-45.6777	-17.5418	-2.1505
Base	2	15	CIM14 Max	5.7427	18.7139	52.5717	24.968	8.838	0.6788
Base	2	15	CIM14 Min	-0.5534	-18.9729	40.0965	-49.9781	-3.4081	-0.6507
Base	2	15	CIM15	1.5028	0.1468	23.8071	-6.0856	1.5727	0.0031
Base	3	16	D	0	-9.0547	206.9454	-0.3089	0	0
Base	3	16	L	0	-6.5276	32.0802	4.4296	0	0
Base	3	16	LR	0	4.9443	11.781	-5.2133	0	0
Base	3	16	EX Max	165.7159	0	0	0	287.4714	13.9091
Base	3	16	EY Max	0	91.8103	28.3339	184.0373	0	0
Base	3	16	DISX Max	51.7862	0	0	0	89.8348	4.3466
Base	3	16	DISY Max	0	28.6907	8.8544	57.5117	0	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	0	6.6247	39.6021	-8.2118	0	0
Base	3	16	DERUX Max	26.6434	0	0	0	46.2158	2.1741
Base	3	16	DERUY Max	0	15.6439	4.8279	31.3588	0	0
Base	3	16	COMB1	0	-12.6766	289.7235	-0.4324	0	0
Base	3	16	COMB2	0	-18.8377	305.5532	4.11	0	0
Base	3	16	COMB3	0	-9.4824	299.2642	-4.2823	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	COMB4	0	-14.9211	286.3051	1.4523	0	0
Base	3	16	COMB5 Max	51.7862	-8.786	283.0709	21.3124	89.8348	4.3466
Base	3	16	COMB5 Min	-51.7862	-26.0005	277.7583	-13.1946	-89.8348	-4.3466
Base	3	16	COMB6 Max	15.5359	11.2975	289.269	61.5706	26.9504	1.304
Base	3	16	COMB6 Min	-15.5359	-46.084	271.5602	-53.4527	-26.9504	-1.304
Base	3	16	COMB7 Max	15.5359	20.5415	195.1052	57.2337	26.9504	1.304
Base	3	16	COMB7 Min	-15.5359	-36.84	177.3965	-57.7896	-26.9504	-1.304
Base	3	16	COMB8 Max	51.7862	0.458	188.9071	16.9755	89.8348	4.3466
Base	3	16	COMB8 Min	-51.7862	-16.7564	183.5945	-17.5315	-89.8348	-4.3466
Base	3	16	ENVE Max	51.7862	20.5415	305.5532	61.5706	89.8348	4.3466
Base	3	16	ENVE Min	-51.7862	-46.084	177.3965	-57.7896	-89.8348	-4.3466
Base	3	16	CIM01	0	-9.0547	206.9454	-0.3089	0	0
Base	3	16	CIM02	0	-15.5823	239.0255	4.1207	0	0
Base	3	16	CIM03	0	-4.1104	218.7264	-5.5221	0	0
Base	3	16	CIM04	0	-10.2422	239.8412	-0.8966	0	0
Base	3	16	CIM05 Max	36.2503	-3.0296	208.8048	11.7686	62.8844	3.0426
Base	3	16	CIM05 Min	-36.2503	-15.0797	205.0859	-12.3863	-62.8844	-3.0426
Base	3	16	CIM06 Max	10.8751	11.0288	213.1434	39.9493	18.8653	0.9128
Base	3	16	CIM06 Min	-10.8751	-29.1382	200.7473	-40.567	-18.8653	-0.9128
Base	3	16	CIM07 Max	27.4467	-5.6517	241.2579	8.3052	47.6124	2.3037
Base	3	16	CIM07 Min	-27.4467	-14.8327	238.4245	-10.0985	-47.6124	-2.3037
Base	3	16	CIM08 Max	8.2858	4.9639	244.534	29.5846	14.3736	0.6955
Base	3	16	CIM08 Min	-8.2858	-25.4483	235.1484	-31.3778	-14.3736	-0.6955
Base	3	16	DER01	0	-12.6766	289.7235	-0.4324	0	0
Base	3	16	DER02	0	-18.8377	305.5532	4.11	0	0
Base	3	16	DER03	0	-9.4824	299.2642	-4.2823	0	0
Base	3	16	DER04	0	-14.9211	286.3051	1.4523	0	0
Base	3	16	DER05 Max	165.7159	-17.3932	280.4146	4.0589	287.4714	13.9091
Base	3	16	DER05 Min	-165.7159	-17.3932	280.4146	4.0589	-287.4714	-13.9091
Base	3	16	DER06 Max	0	74.4171	308.7485	188.0963	0	0
Base	3	16	DER06 Min	0	-109.2036	252.0806	-179.9784	0	0
Base	3	16	DER07 Max	165.7159	-8.1492	186.2508	-0.278	287.4714	13.9091
Base	3	16	DER07 Min	-165.7159	-8.1492	186.2508	-0.278	-287.4714	-13.9091
Base	3	16	DER08 Max	0	83.6611	214.5848	183.7594	0	0
Base	3	16	DER08 Min	0	-99.9596	157.9169	-184.3153	0	0
Base	3	16	DERUD01	0	-12.6766	289.7235	-0.4324	0	0
Base	3	16	DERUD02	0	-18.8377	305.5532	4.11	0	0
Base	3	16	DERUD03	0	-9.4824	299.2642	-4.2823	0	0
Base	3	16	DERUD04	0	-14.9211	286.3051	1.4523	0	0
Base	3	16	DERUD05 Max	26.6434	-17.3932	280.4146	4.0589	46.2158	2.1741
Base	3	16	DERUD05 Min	-26.6434	-17.3932	280.4146	4.0589	-46.2158	-2.1741
Base	3	16	DERUD06 Max	0	-1.7494	285.2425	35.4177	0	0
Base	3	16	DERUD06 Min	0	-33.0371	275.5867	-27.2998	0	0
Base	3	16	DERUD07 Max	26.6434	-8.1492	186.2508	-0.278	46.2158	2.1741
Base	3	16	DERUD07 Min	-26.6434	-8.1492	186.2508	-0.278	-46.2158	-2.1741
Base	3	16	DERUD08 Max	0	7.4947	191.0787	31.0808	0	0
Base	3	16	DERUD08 Min	0	-23.7931	181.4229	-31.6367	0	0
Base	3	16	VIG01 Max	103.5724	-0.1788	285.7272	38.5659	179.6696	8.6932
Base	3	16	VIG01 Min	-103.5724	-34.6077	275.102	-30.4481	-179.6696	-8.6932
Base	3	16	VIG02 Max	31.0717	39.9882	298.1233	119.0823	53.9009	2.608
Base	3	16	VIG02 Min	-31.0717	-74.7747	262.7059	-110.9644	-53.9009	-2.608
Base	3	16	VIG03 Max	103.5724	9.0652	191.5634	34.229	179.6696	8.6932
Base	3	16	VIG03 Min	-103.5724	-25.3637	180.9382	-34.785	-179.6696	-8.6932
Base	3	16	VIG04 Max	31.0717	49.2322	203.9595	114.7454	53.9009	2.608
Base	3	16	VIG04 Min	-31.0717	-65.5307	168.5421	-115.3013	-53.9009	-2.608
Base	3	16	COL1 Max	155.3586	8.4284	288.3835	55.8194	269.5044	13.0398
Base	3	16	COL1 Min	-155.3586	-43.2149	272.4457	-47.7016	-269.5044	-13.0398
Base	3	16	COL2 Max	46.6076	68.679	306.9777	176.594	80.8513	3.9119
Base	3	16	COL2 Min	-46.6076	-103.4654	253.8515	-168.4761	-80.8513	-3.9119
Base	3	16	COL3 Max	155.3586	17.6724	194.2197	51.4825	269.5044	13.0398

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	COL3 Min	-155.3586	-33.9709	178.2819	-52.0385	-269.5044	-13.0398
Base	3	16	COL4 Max	46.6076	77.923	212.8139	172.257	80.8513	3.9119
Base	3	16	COL4 Min	-46.6076	-94.2214	159.6877	-172.813	-80.8513	-3.9119
Base	3	16	CIM09 Max	36.2503	0.5922	126.0266	11.8921	62.8844	3.0426
Base	3	16	CIM09 Min	-36.2503	-11.4579	122.3078	-12.2628	-62.8844	-3.0426
Base	3	16	CIM10 Max	10.8751	14.6507	130.3653	40.0729	18.8653	0.9128
Base	3	16	CIM10 Min	-10.8751	-25.5163	117.9692	-40.4435	-18.8653	-0.9128
Base	3	16	COMB9	0	-17.9974	319.4637	2.6108	0	0
Base	3	16	COMB10	0	-6.7937	343.7779	-9.0799	0	0
Base	3	16	COMB11	0	-14.0809	300.2156	-0.0469	0	0
Base	3	16	DER09	0	-17.9974	319.4637	2.6108	0	0
Base	3	16	DER10	0	-6.7937	343.7779	-9.0799	0	0
Base	3	16	DER11	0	-14.0809	300.2156	-0.0469	0	0
Base	3	16	DERUD09	0	-17.9974	319.4637	2.6108	0	0
Base	3	16	DERUD10	0	-6.7937	343.7779	-9.0799	0	0
Base	3	16	DERUD11	0	-14.0809	300.2156	-0.0469	0	0
Base	3	16	CIM11	0	-2.43	246.5474	-8.5206	0	0
Base	3	16	CIM12	0	-8.9819	260.7071	-3.1455	0	0
Base	3	16	CIM13 Max	27.4467	-4.3913	262.1237	6.0564	47.6124	2.3037
Base	3	16	CIM13 Min	-27.4467	-13.5724	259.2904	-12.3474	-47.6124	-2.3037
Base	3	16	CIM14 Max	8.2858	6.2242	265.3999	27.3357	14.3736	0.6955
Base	3	16	CIM14 Min	-8.2858	-24.1879	256.0142	-33.6267	-14.3736	-0.6955
Base	3	16	CIM15	0	-5.4328	124.1672	-0.1853	0	0
Base	4	18	D	0	-0.1956	56.6776	-9.6897	0	0
Base	4	18	L	0	4.1775	-2.4985	-6.8462	0	0
Base	4	18	LR	0	-5.1303	11.3944	5.3823	0	0
Base	4	18	EX Max	82.5542	0	0	0	143.2401	13.8443
Base	4	18	EY Max	0	91.9062	28.3122	183.167	0	0
Base	4	18	DISX Max	25.7982	0	0	0	44.7625	4.3264
Base	4	18	DISY Max	0	28.7207	8.8475	57.2397	0	0
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	0	-8.1718	21.5396	7.3415	0	0
Base	4	18	DERUX Max	10.7596	0	0	0	18.6704	2.1737
Base	4	18	DERUY Max	0	15.6602	4.8242	31.2104	0	0
Base	4	18	COMB1	0	-0.2738	79.3486	-13.5656	0	0
Base	4	18	COMB2	0	3.8843	69.7128	-19.8904	0	0
Base	4	18	COMB3	0	-4.2656	83.7457	-9.8622	0	0
Base	4	18	COMB4	0	1.3777	71.2119	-15.7827	0	0
Base	4	18	COMB5 Max	25.7982	12.5591	68.1689	-1.3019	44.7625	4.3264
Base	4	18	COMB5 Min	-25.7982	-4.6733	62.8604	-35.6457	-44.7625	-4.3264
Base	4	18	COMB6 Max	7.7395	32.6636	74.3622	38.7659	13.4288	1.2979
Base	4	18	COMB6 Min	-7.7395	-24.7778	56.6671	-75.7135	-13.4288	-1.2979
Base	4	18	COMB7 Max	7.7395	28.5447	59.8574	48.519	13.4288	1.2979
Base	4	18	COMB7 Min	-7.7395	-28.8967	42.1623	-65.9604	-13.4288	-1.2979
Base	4	18	COMB8 Max	25.7982	8.4402	53.6641	8.4512	44.7625	4.3264
Base	4	18	COMB8 Min	-25.7982	-8.7922	48.3556	-25.8926	-44.7625	-4.3264
Base	4	18	ENVE Max	25.7982	32.6636	83.7457	48.519	44.7625	4.3264
Base	4	18	ENVE Min	-25.7982	-28.8967	42.1623	-75.7135	-44.7625	-4.3264
Base	4	18	CIM01	0	-0.1956	56.6776	-9.6897	0	0
Base	4	18	CIM02	0	3.982	54.1792	-16.5359	0	0
Base	4	18	CIM03	0	-5.3258	68.072	-4.3074	0	0
Base	4	18	CIM04	0	-0.9101	63.3496	-10.7876	0	0
Base	4	18	CIM05 Max	18.0587	5.8358	58.5356	2.3306	31.3338	3.0285
Base	4	18	CIM05 Min	-18.0587	-6.2269	54.8196	-21.71	-31.3338	-3.0285
Base	4	18	CIM06 Max	5.4176	19.9089	62.8709	30.3781	9.4001	0.9085
Base	4	18	CIM06 Min	-5.4176	-20.3	50.4843	-49.7575	-9.4001	-0.9085
Base	4	18	CIM07 Max	13.673	3.6852	64.7652	-1.6293	23.7241	2.293
Base	4	18	CIM07 Min	-13.673	-5.5054	61.934	-19.946	-23.7241	-2.293
Base	4	18	CIM08 Max	4.1277	14.3118	68.0388	19.5494	7.162	0.6922
Base	4	18	CIM08 Min	-4.1277	-16.1321	58.6604	-41.1246	-7.162	-0.6922

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DER01	0	-0.2738	79.3486	-13.5656	0	0
Base	4	18	DER02	0	3.8843	69.7128	-19.8904	0	0
Base	4	18	DER03	0	-4.2656	83.7457	-9.8622	0	0
Base	4	18	DER04	0	1.3777	71.2119	-15.7827	0	0
Base	4	18	DER05 Max	82.5542	3.9429	65.5147	-18.4738	143.2401	13.8443
Base	4	18	DER05 Min	-82.5542	3.9429	65.5147	-18.4738	-143.2401	-13.8443
Base	4	18	DER06 Max	0	95.8491	93.8268	164.6932	0	0
Base	4	18	DER06 Min	0	-87.9633	37.2025	-201.6407	0	0
Base	4	18	DER07 Max	82.5542	-0.176	51.0098	-8.7207	143.2401	13.8443
Base	4	18	DER07 Min	-82.5542	-0.176	51.0098	-8.7207	-143.2401	-13.8443
Base	4	18	DER08 Max	0	91.7302	79.322	174.4462	0	0
Base	4	18	DER08 Min	0	-92.0822	22.6977	-191.8877	0	0
Base	4	18	DERUD01	0	-0.2738	79.3486	-13.5656	0	0
Base	4	18	DERUD02	0	3.8843	69.7128	-19.8904	0	0
Base	4	18	DERUD03	0	-4.2656	83.7457	-9.8622	0	0
Base	4	18	DERUD04	0	1.3777	71.2119	-15.7827	0	0
Base	4	18	DERUD05 Max	10.7596	3.9429	65.5147	-18.4738	18.6704	2.1737
Base	4	18	DERUD05 Min	-10.7596	3.9429	65.5147	-18.4738	-18.6704	-2.1737
Base	4	18	DERUD06 Max	0	19.6031	70.3389	12.7366	0	0
Base	4	18	DERUD06 Min	0	-11.7173	60.6905	-49.6842	0	0
Base	4	18	DERUD07 Max	10.7596	-0.176	51.0098	-8.7207	18.6704	2.1737
Base	4	18	DERUD07 Min	-10.7596	-0.176	51.0098	-8.7207	-18.6704	-2.1737
Base	4	18	DERUD08 Max	0	15.4842	55.834	22.4897	0	0
Base	4	18	DERUD08 Min	0	-15.8362	46.1856	-39.9312	0	0
Base	4	18	VIG01 Max	51.5963	21.1753	70.8232	15.87	89.5251	8.6527
Base	4	18	VIG01 Min	-51.5963	-13.2895	60.2061	-52.8176	-89.5251	-8.6527
Base	4	18	VIG02 Max	15.4789	61.3843	83.2098	96.0056	26.8575	2.5958
Base	4	18	VIG02 Min	-15.4789	-53.4985	47.8196	-132.9531	-26.8575	-2.5958
Base	4	18	VIG03 Max	51.5963	17.0564	56.3184	25.6231	89.5251	8.6527
Base	4	18	VIG03 Min	-51.5963	-17.4084	45.7013	-43.0645	-89.5251	-8.6527
Base	4	18	VIG04 Max	15.4789	57.2654	68.7049	105.7586	26.8575	2.5958
Base	4	18	VIG04 Min	-15.4789	-57.6174	33.3148	-123.2001	-26.8575	-2.5958
Base	4	18	COL1 Max	77.3945	29.7915	73.4775	33.0419	134.2876	12.9791
Base	4	18	COL1 Min	-77.3945	-21.9057	57.5519	-69.9895	-134.2876	-12.9791
Base	4	18	COL2 Max	23.2184	90.1049	92.0573	153.2452	40.2863	3.8937
Base	4	18	COL2 Min	-23.2184	-82.2192	38.972	-190.1928	-40.2863	-3.8937
Base	4	18	COL3 Max	77.3945	25.6726	58.9726	42.795	134.2876	12.9791
Base	4	18	COL3 Min	-77.3945	-26.0246	43.0471	-60.2364	-134.2876	-12.9791
Base	4	18	COL4 Max	23.2184	85.9861	77.5525	162.9983	40.2863	3.8937
Base	4	18	COL4 Min	-23.2184	-86.3381	24.4672	-180.4397	-40.2863	-3.8937
Base	4	18	CIM09 Max	18.0587	5.914	35.8645	6.2065	31.3338	3.0285
Base	4	18	CIM09 Min	-18.0587	-6.1487	32.1486	-17.8341	-31.3338	-3.0285
Base	4	18	CIM10 Max	5.4176	19.9871	40.1998	34.254	9.4001	0.9085
Base	4	18	CIM10 Min	-5.4176	-20.2218	27.8133	-45.8816	-9.4001	-0.9085
Base	4	18	COMB9	0	2.3635	74.7854	-18.9108	0	0
Base	4	18	COMB10	0	-9.132	99.978	-6.7275	0	0
Base	4	18	COMB11	0	-0.143	76.2845	-14.8031	0	0
Base	4	18	DER09	0	2.3635	74.7854	-18.9108	0	0
Base	4	18	DER10	0	-9.132	99.978	-6.7275	0	0
Base	4	18	DER11	0	-0.143	76.2845	-14.8031	0	0
Base	4	18	DERUD09	0	2.3635	74.7854	-18.9108	0	0
Base	4	18	DERUD10	0	-9.132	99.978	-6.7275	0	0
Base	4	18	DERUD11	0	-0.143	76.2845	-14.8031	0	0
Base	4	18	CIM11	0	-8.3674	78.2172	-2.3482	0	0
Base	4	18	CIM12	0	-3.1913	70.9584	-9.3182	0	0
Base	4	18	CIM13 Max	13.673	1.4041	72.3741	-0.1599	23.7241	2.293
Base	4	18	CIM13 Min	-13.673	-7.7866	69.5428	-18.4766	-23.7241	-2.293
Base	4	18	CIM14 Max	4.1277	12.0307	75.6476	21.0188	7.162	0.6922
Base	4	18	CIM14 Min	-4.1277	-18.4132	66.2692	-39.6552	-7.162	-0.6922
Base	4	18	CIM15	0	-0.1173	34.0066	-5.8138	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	5	19	D	-10.648	4.3805	115.7816	-14.5497	-11.2939	0
Base	5	19	L	-2.188	-2.37	13.8843	0.0187	-2.3207	0
Base	5	19	LR	0.0458	3.0012	5.5888	-3.1485	0.0486	0
Base	5	19	EX Max	131.8304	78.9646	38.0169	151.9541	251.2077	13.9091
Base	5	19	EY Max	0.0005	92.0855	28.2707	184.111	0.0005	0
Base	5	19	DISX Max	41.197	24.6764	11.8803	47.4856	78.5024	4.3466
Base	5	19	DISY Max	0.0002	28.7767	8.8346	57.5347	0.0002	0
Base	5	19	W	0	0	0	0	0	0
Base	5	19	G	-1.0023	4.8175	18.1199	-6.2876	-1.0631	0
Base	5	19	DERUX Max	21.2054	12.3815	5.8971	23.7933	40.3963	2.1741
Base	5	19	DERUY Max	0.0001	15.6908	4.8171	31.3713	0.0001	0
Base	5	19	COMB1	-14.9072	6.1327	162.0943	-20.3695	-15.8115	0
Base	5	19	COMB2	-16.2554	2.9651	163.9473	-19.0039	-17.2415	0
Base	5	19	COMB3	-14.8922	7.6885	161.7644	-22.4784	-15.7956	0
Base	5	19	COMB4	-14.9426	4.3871	155.6167	-19.0151	-15.8491	0
Base	5	19	COMB5 Max	26.2315	36.196	167.3529	47.3052	62.6291	4.3466
Base	5	19	COMB5 Min	-56.1626	-30.4229	138.2916	-82.1869	-94.3758	-4.3466
Base	5	19	COMB6 Max	-2.6063	39.0662	165.2209	54.3395	7.6775	1.304
Base	5	19	COMB6 Min	-27.3248	-33.2931	140.4236	-89.2212	-39.4243	-1.304
Base	5	19	COMB7 Max	2.7761	40.1221	116.6021	58.6857	13.3864	1.304
Base	5	19	COMB7 Min	-21.9424	-32.2372	91.8048	-84.8751	-33.7154	-1.304
Base	5	19	COMB8 Max	31.6139	37.2519	118.7341	51.6514	68.3379	4.3466
Base	5	19	COMB8 Min	-50.7802	-29.367	89.6728	-77.8407	-88.667	-4.3466
Base	5	19	ENVE Max	31.6139	40.1221	167.3529	58.6857	68.3379	4.3466
Base	5	19	ENVE Min	-56.1626	-33.2931	89.6728	-89.2212	-94.3758	-4.3466
Base	5	19	CIM01	-10.648	4.3805	115.7816	-14.5497	-11.2939	0
Base	5	19	CIM02	-12.8359	2.0104	129.6659	-14.5309	-13.6146	0
Base	5	19	CIM03	-10.6021	7.3817	121.3705	-17.6981	-11.2453	0
Base	5	19	CIM04	-12.2546	4.8539	130.3865	-16.897	-12.998	0
Base	5	19	CIM05 Max	18.19	27.6971	125.9531	30.7726	43.6578	3.0426
Base	5	19	CIM05 Min	-39.4859	-18.9362	105.6102	-59.8719	-66.2456	-3.0426
Base	5	19	CIM06 Max	-1.9965	29.7062	124.4607	35.6966	5.1917	0.9128
Base	5	19	CIM06 Min	-19.2994	-20.9453	107.1025	-64.7959	-27.7795	-0.9128
Base	5	19	CIM07 Max	9.5799	22.5367	138.0966	17.476	28.6083	2.3037
Base	5	19	CIM07 Min	-34.089	-12.8289	122.6764	-51.2699	-54.6043	-2.3037
Base	5	19	CIM08 Max	-5.663	24.0538	136.9697	21.1941	-0.4375	0.6955
Base	5	19	CIM08 Min	-18.8462	-14.346	123.8033	-54.9881	-25.5584	-0.6955
Base	5	19	DER01	-14.9072	6.1327	162.0943	-20.3695	-15.8115	0
Base	5	19	DER02	-16.2554	2.9651	163.9473	-19.0039	-17.2415	0
Base	5	19	DER03	-14.8922	7.6885	161.7644	-22.4784	-15.7956	0
Base	5	19	DER04	-14.9426	4.3871	155.6167	-19.0151	-15.8491	0
Base	5	19	DER05 Max	116.8649	81.8512	190.8391	134.5132	235.3343	13.9091
Base	5	19	DER05 Min	-146.796	-76.0781	114.8054	-169.3949	-267.081	-13.9091
Base	5	19	DER06 Max	-14.965	94.972	181.093	166.6701	-15.8729	0
Base	5	19	DER06 Min	-14.966	-89.1989	124.5515	-201.5518	-15.8739	0
Base	5	19	DER07 Max	122.2473	82.9071	142.2203	138.8594	241.0431	13.9091
Base	5	19	DER07 Min	-141.4136	-75.0222	66.1866	-165.0488	-261.3722	-13.9091
Base	5	19	DER08 Max	-9.5827	96.0279	132.4742	171.0163	-10.164	0
Base	5	19	DER08 Min	-9.5837	-88.1431	75.9327	-197.2057	-10.165	0
Base	5	19	DERUD01	-14.9072	6.1327	162.0943	-20.3695	-15.8115	0
Base	5	19	DERUD02	-16.2554	2.9651	163.9473	-19.0039	-17.2415	0
Base	5	19	DERUD03	-14.8922	7.6885	161.7644	-22.4784	-15.7956	0
Base	5	19	DERUD04	-14.9426	4.3871	155.6167	-19.0151	-15.8491	0
Base	5	19	DERUD05 Max	6.2399	15.2681	158.7193	6.3524	24.5229	2.1741
Base	5	19	DERUD05 Min	-36.1709	-9.495	146.9252	-41.2341	-56.2697	-2.1741
Base	5	19	DERUD06 Max	-14.9654	18.5773	157.6394	13.9304	-15.8733	0
Base	5	19	DERUD06 Min	-14.9656	-12.8042	148.0051	-48.8122	-15.8735	0
Base	5	19	DERUD07 Max	11.6222	16.324	110.1005	10.6986	30.2318	2.1741
Base	5	19	DERUD07 Min	-30.7886	-8.4391	98.3064	-36.888	-50.5608	-2.1741
Base	5	19	DERUD08 Max	-9.5831	19.6332	109.0206	18.2766	-10.1644	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	5	19	DERUD08 Min	-9.5833	-11.7483	99.3863	-44.466	-10.1646	0
Base	5	19	VIG01 Max	67.4286	69.5055	181.8836	112.0513	141.1315	8.6932
Base	5	19	VIG01 Min	-97.3596	-63.7324	123.761	-146.933	-172.8783	-8.6932
Base	5	19	VIG02 Max	9.753	75.2458	177.6196	126.1199	31.2284	2.608
Base	5	19	VIG02 Min	-39.684	-69.4728	128.0249	-161.0016	-62.9751	-2.608
Base	5	19	VIG03 Max	72.8109	70.5613	133.2648	116.3974	146.8404	8.6932
Base	5	19	VIG03 Min	-91.9773	-62.6765	75.1422	-142.5868	-167.1694	-8.6932
Base	5	19	VIG04 Max	15.1353	76.3017	129.0008	130.4661	36.9372	2.608
Base	5	19	VIG04 Min	-34.3017	-68.4169	79.4061	-156.6554	-57.2663	-2.608
Base	5	19	COL1 Max	108.6256	102.8149	196.4142	176.7973	219.6339	13.0398
Base	5	19	COL1 Min	-138.5567	-97.0419	109.2303	-211.679	-251.3807	-13.0398
Base	5	19	COL2 Max	22.1122	111.4255	190.0183	197.9003	54.7793	3.9119
Base	5	19	COL2 Min	-52.0433	-105.6524	115.6262	-232.782	-86.526	-3.9119
Base	5	19	COL3 Max	114.008	103.8708	147.7954	181.1435	225.3428	13.0398
Base	5	19	COL3 Min	-133.1743	-95.986	60.6115	-207.3329	-245.6718	-13.0398
Base	5	19	COL4 Max	27.4946	112.4814	141.3995	202.2464	60.4881	3.9119
Base	5	19	COL4 Min	-46.6609	-104.5965	67.0074	-228.4358	-80.8172	-3.9119
Base	5	19	CIM09 Max	22.4492	25.9449	79.6404	36.5924	48.1754	3.0426
Base	5	19	CIM09 Min	-35.2267	-20.6883	59.2975	-54.052	-61.7281	-3.0426
Base	5	19	CIM10 Max	2.2627	27.954	78.1481	41.5165	9.7093	0.9128
Base	5	19	CIM10 Min	-15.0403	-22.6975	60.7899	-58.9761	-23.262	-0.9128
Base	5	19	COMB9	-16.7795	3.8732	170.2128	-20.5734	-17.7973	0
Base	5	19	COMB10	-16.5692	10.5945	181.814	-27.501	-17.5743	0
Base	5	19	COMB11	-15.4667	5.2953	161.8822	-20.5847	-16.4049	0
Base	5	19	DER09	-16.7795	3.8732	170.2128	-20.5734	-17.7973	0
Base	5	19	DER10	-16.5692	10.5945	181.814	-27.501	-17.5743	0
Base	5	19	DER11	-15.4667	5.2953	161.8822	-20.5847	-16.4049	0
Base	5	19	DERUD09	-16.7795	3.8732	170.2128	-20.5734	-17.7973	0
Base	5	19	DERUD10	-16.5692	10.5945	181.814	-27.501	-17.5743	0
Base	5	19	DERUD11	-15.4667	5.2953	161.8822	-20.5847	-16.4049	0
Base	5	19	CIM11	-11.6503	9.1979	133.9015	-20.8373	-12.357	0
Base	5	19	CIM12	-13.0407	6.216	139.7847	-19.2513	-13.8317	0
Base	5	19	CIM13 Max	8.7938	23.8988	147.4948	15.1216	27.7745	2.3037
Base	5	19	CIM13 Min	-34.8751	-11.4668	132.0747	-53.6242	-55.438	-2.3037
Base	5	19	CIM14 Max	-6.4491	25.4159	146.3679	18.8398	-1.2713	0.6955
Base	5	19	CIM14 Min	-19.6323	-12.9838	133.2016	-57.3424	-26.3922	-0.6955
Base	5	19	CIM15	-6.3888	2.6283	69.469	-8.7298	-6.7763	0
Base	6	21	D	-2.5046	0.2447	39.6785	-10.1427	-2.6211	-0.0051
Base	6	21	L	-0.0599	3.5451	-1.7952	-6.1789	-0.0613	0.0007
Base	6	21	LR	-0.0151	-2.9082	5.7834	3.0592	-0.0166	-0.0065
Base	6	21	EX Max	62.8754	73.5068	31.0692	145.2195	122.2897	13.0462
Base	6	21	EY Max	0.0261	91.5806	28.2816	182.4125	0.0516	0.0749
Base	6	21	DISX Max	19.6486	22.9709	9.7091	45.3811	38.2155	4.0769
Base	6	21	DISY Max	0.0081	28.6189	8.838	57.0039	0.0161	0.0234
Base	6	21	W	0	0	0	0	0	0
Base	6	21	G	-0.0602	-4.0439	10.6693	3.0291	-0.0639	-0.0126
Base	6	21	DERUX Max	8.1622	11.4852	4.7679	22.6966	15.9049	2.0496
Base	6	21	DERUY Max	0.0044	15.6047	4.819	31.0819	0.0088	0.0128
Base	6	21	COMB1	-3.5064	0.3425	55.5499	-14.1998	-3.6695	-0.0072
Base	6	21	COMB2	-3.1089	4.5116	47.6336	-20.5278	-3.2517	-0.0083
Base	6	21	COMB3	-3.0896	-0.8145	55.0725	-13.4553	-3.2332	-0.0158
Base	6	21	COMB4	-3.0729	2.3845	48.7107	-16.8205	-3.2149	-0.0087
Base	6	21	COMB5 Max	16.5856	35.3952	58.1795	44.1322	35.0138	4.0785
Base	6	21	COMB5 Min	-22.7164	-27.7179	33.4585	-80.8324	-41.427	-4.0894
Base	6	21	COMB6 Max	2.8373	39.3489	57.5698	52.2681	8.2742	1.241
Base	6	21	COMB6 Min	-8.9681	-31.6716	34.0683	-88.9683	-14.6874	-1.2519
Base	6	21	COMB7 Max	3.6486	35.7304	47.4614	61.4898	9.1218	1.2419
Base	6	21	COMB7 Min	-8.1568	-35.29	23.9599	-79.7467	-13.8398	-1.2511
Base	6	21	COMB8 Max	17.3969	31.7767	48.0712	53.3538	35.8614	4.0794
Base	6	21	COMB8 Min	-21.9051	-31.3364	23.3501	-71.6107	-40.5794	-4.0886

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	6	21	ENVE Max	17.3969	39.3489	58.1795	61.4898	35.8614	4.0794
Base	6	21	ENVE Min	-22.7164	-35.29	23.3501	-88.9683	-41.427	-4.0894
Base	6	21	CIM01	-2.5046	0.2447	39.6785	-10.1427	-2.6211	-0.0051
Base	6	21	CIM02	-2.5644	3.7897	37.8833	-16.3216	-2.6824	-0.0044
Base	6	21	CIM03	-2.5197	-2.6636	45.4619	-7.0835	-2.6377	-0.0116
Base	6	21	CIM04	-2.5608	0.7223	42.6697	-12.4824	-2.6795	-0.0095
Base	6	21	CIM05 Max	11.2511	22.3342	48.3309	33.5949	24.1332	2.8537
Base	6	21	CIM05 Min	-16.2603	-21.8449	31.0261	-53.8803	-29.3753	-2.8639
Base	6	21	CIM06 Max	1.6273	25.1018	47.904	39.2901	5.4155	0.8674
Base	6	21	CIM06 Min	-6.6365	-24.6125	31.453	-59.5755	-10.6576	-0.8777
Base	6	21	CIM07 Max	7.8542	17.4759	49.2296	20.6902	17.5773	2.1551
Base	6	21	CIM07 Min	-12.9759	-16.0313	36.1098	-45.655	-22.9363	-2.174
Base	6	21	CIM08 Max	0.5872	19.5657	48.9073	24.9906	3.4435	0.6553
Base	6	21	CIM08 Min	-5.7089	-18.1211	36.4321	-49.9555	-8.8026	-0.6742
Base	6	21	DER01	-3.5064	0.3425	55.5499	-14.1998	-3.6695	-0.0072
Base	6	21	DER02	-3.1089	4.5116	47.6336	-20.5278	-3.2517	-0.0083
Base	6	21	DER03	-3.0896	-0.8145	55.0725	-13.4553	-3.2332	-0.0158
Base	6	21	DER04	-3.0729	2.3845	48.7107	-16.8205	-3.2149	-0.0087
Base	6	21	DER05 Max	59.81	77.3454	76.8882	126.8694	119.0832	13.0408
Base	6	21	DER05 Min	-65.9408	-69.6681	14.7498	-163.5696	-125.4963	-13.0517
Base	6	21	DER06 Max	-3.0393	95.4193	74.1007	164.0624	-3.155	0.0694
Base	6	21	DER06 Min	-3.0914	-87.742	17.5374	-200.7626	-3.2582	-0.0803
Base	6	21	DER07 Max	60.6213	73.727	66.7798	136.091	119.9308	13.0416
Base	6	21	DER07 Min	-65.1295	-73.2866	4.6415	-154.3479	-124.6487	-13.0508
Base	6	21	DER08 Max	-2.2281	91.8008	63.9923	173.2841	-2.3074	0.0703
Base	6	21	DER08 Min	-2.2802	-91.3604	7.429	-191.541	-2.4106	-0.0795
Base	6	21	DERUD01	-3.5064	0.3425	55.5499	-14.1998	-3.6695	-0.0072
Base	6	21	DERUD02	-3.1089	4.5116	47.6336	-20.5278	-3.2517	-0.0083
Base	6	21	DERUD03	-3.0896	-0.8145	55.0725	-13.4553	-3.2332	-0.0158
Base	6	21	DERUD04	-3.0729	2.3845	48.7107	-16.8205	-3.2149	-0.0087
Base	6	21	DERUD05 Max	5.0969	15.3239	50.5869	4.3465	12.6983	2.0442
Base	6	21	DERUD05 Min	-11.2276	-7.6466	41.0511	-41.0467	-19.1115	-2.0551
Base	6	21	DERUD06 Max	-3.0609	19.4434	50.638	12.7318	-3.1978	0.0073
Base	6	21	DERUD06 Min	-3.0698	-11.7661	41	-49.432	-3.2154	-0.0182
Base	6	21	DERUD07 Max	5.9081	11.7054	40.4786	13.5681	13.5459	2.045
Base	6	21	DERUD07 Min	-10.4164	-11.265	30.9427	-31.825	-18.2639	-2.0543
Base	6	21	DERUD08 Max	-2.2497	15.8249	40.5297	21.9535	-2.3502	0.0082
Base	6	21	DERUD08 Min	-2.2586	-15.3845	30.8916	-40.2103	-2.3678	-0.0174
Base	6	21	VIG01 Max	36.2367	66.9518	70.5401	106.6144	73.2342	8.1625
Base	6	21	VIG01 Min	-42.3674	-59.2745	21.098	-143.3146	-79.6473	-8.1734
Base	6	21	VIG02 Max	8.7401	74.8591	69.3205	122.8864	19.755	2.4875
Base	6	21	VIG02 Min	-14.8708	-67.1818	22.3175	-159.5866	-26.1681	-2.4984
Base	6	21	VIG03 Max	37.0479	63.3333	60.4317	115.8361	74.0818	8.1633
Base	6	21	VIG03 Min	-41.5562	-62.8929	10.9896	-134.093	-78.7997	-8.1725
Base	6	21	VIG04 Max	9.5513	71.2406	59.2121	132.108	20.6026	2.4884
Base	6	21	VIG04 Min	-14.0596	-70.8002	12.2092	-150.3649	-25.3206	-2.4976
Base	6	21	COL1 Max	55.8877	98.5083	82.9006	169.0967	111.4546	12.2464
Base	6	21	COL1 Min	-62.0184	-90.831	8.7375	-205.7969	-117.8677	-12.2573
Base	6	21	COL2 Max	14.6428	110.3693	81.0713	193.5046	31.2358	3.734
Base	6	21	COL2 Min	-20.7735	-102.692	10.5668	-230.2048	-37.6489	-3.7449
Base	6	21	COL3 Max	56.6989	94.8899	72.7922	178.3183	112.3022	12.2473
Base	6	21	COL3 Min	-61.2072	-94.4495	-1.3709	-196.5752	-117.0201	-12.2565
Base	6	21	COL4 Max	15.454	106.7508	70.9629	202.7263	32.0834	3.7348
Base	6	21	COL4 Min	-19.9623	-106.3104	0.4584	-220.9832	-36.8013	-3.744
Base	6	21	CIM09 Max	12.253	22.2364	32.4595	37.652	25.1816	2.8557
Base	6	21	CIM09 Min	-15.2585	-21.9428	15.1547	-49.8232	-28.3269	-2.8618
Base	6	21	CIM10 Max	2.6291	25.0039	32.0326	43.3471	6.4639	0.8695
Base	6	21	CIM10 Min	-5.6347	-24.7104	15.5816	-55.5184	-9.6092	-0.8756
Base	6	21	COMB9	-3.1314	3.9437	50.0766	-20.5429	-3.2753	-0.0113
Base	6	21	COMB10	-3.1617	-2.6316	62.8899	-13.5036	-3.3088	-0.0256



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	6	21	COMB11	-3.0955	1.8167	51.1537	-16.8356	-3.2385	-0.0118
Base	6	21	DER09	-3.1314	3.9437	50.0766	-20.5429	-3.2753	-0.0113
Base	6	21	DER10	-3.1617	-2.6316	62.8899	-13.5036	-3.3088	-0.0256
Base	6	21	DER11	-3.0955	1.8167	51.1537	-16.8356	-3.2385	-0.0118
Base	6	21	DERUD09	-3.1314	3.9437	50.0766	-20.5429	-3.2753	-0.0113
Base	6	21	DERUD10	-3.1617	-2.6316	62.8899	-13.5036	-3.3088	-0.0256
Base	6	21	DERUD11	-3.0955	1.8167	51.1537	-16.8356	-3.2385	-0.0118
Base	6	21	CIM11	-2.5648	-3.7993	50.3478	-7.1136	-2.685	-0.0177
Base	6	21	CIM12	-2.5946	-0.1295	46.3341	-12.505	-2.715	-0.014
Base	6	21	CIM13 Max	7.8204	16.6241	52.894	20.6676	17.5418	2.1505
Base	6	21	CIM13 Min	-13.0097	-16.8831	39.7742	-45.6777	-22.9718	-2.1786
Base	6	21	CIM14 Max	0.5534	18.7139	52.5717	24.968	3.4081	0.6507
Base	6	21	CIM14 Min	-5.7427	-18.9729	40.0965	-49.9781	-8.838	-0.6788
Base	6	21	CIM15	-1.5028	0.1468	23.8071	-6.0856	-1.5727	-0.0031

5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.221	4.518	28.389	805.9364
Modal	2	0.2	4.999	31.4066	986.3729
Modal	3	0.148	6.759	42.4664	1803.3955
Modal	4	0.052	19.049	119.6864	14324.8399
Modal	5	0.021	47.845	300.6167	90370.4244
Modal	6	0.017	57.377	360.5099	129967.3782
Modal	7	0.017	58.531	367.7593	135246.889
Modal	8	0.016	62.321	391.5731	153329.474
Modal	9	0.01	95.871	602.375	362855.6339

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.221	0.6545	0	0	0.6545	0	0
Modal	2	0.2	0	1	0	0.6545	1	0
Modal	3	0.148	0.3445	0	0	0.999	1	0
Modal	4	0.052	0.001	0	0	1	1	0
Modal	5	0.021	0	0	0	1	1	0
Modal	6	0.017	0	1.853E-05	0	1	1	0
Modal	7	0.017	0	0	0	1	1	0
Modal	8	0.016	0	0	0	1	1	0
Modal	9	0.01	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.6545	0.371	0	0.6545	0.371
Modal	2	1	0	0	1	0.6545	0.371
Modal	3	0	0.3445	0.6282	1	0.999	0.9992
Modal	4	0	0.001	0.0008	1	1	1
Modal	5	0	0	0	1	1	1
Modal	6	1.853E-05	0	0	1	1	1
Modal	7	0	0	1.265E-05	1	1	1
Modal	8	0	0	0	1	1	1
Modal	9	0	0	0	1	1	1

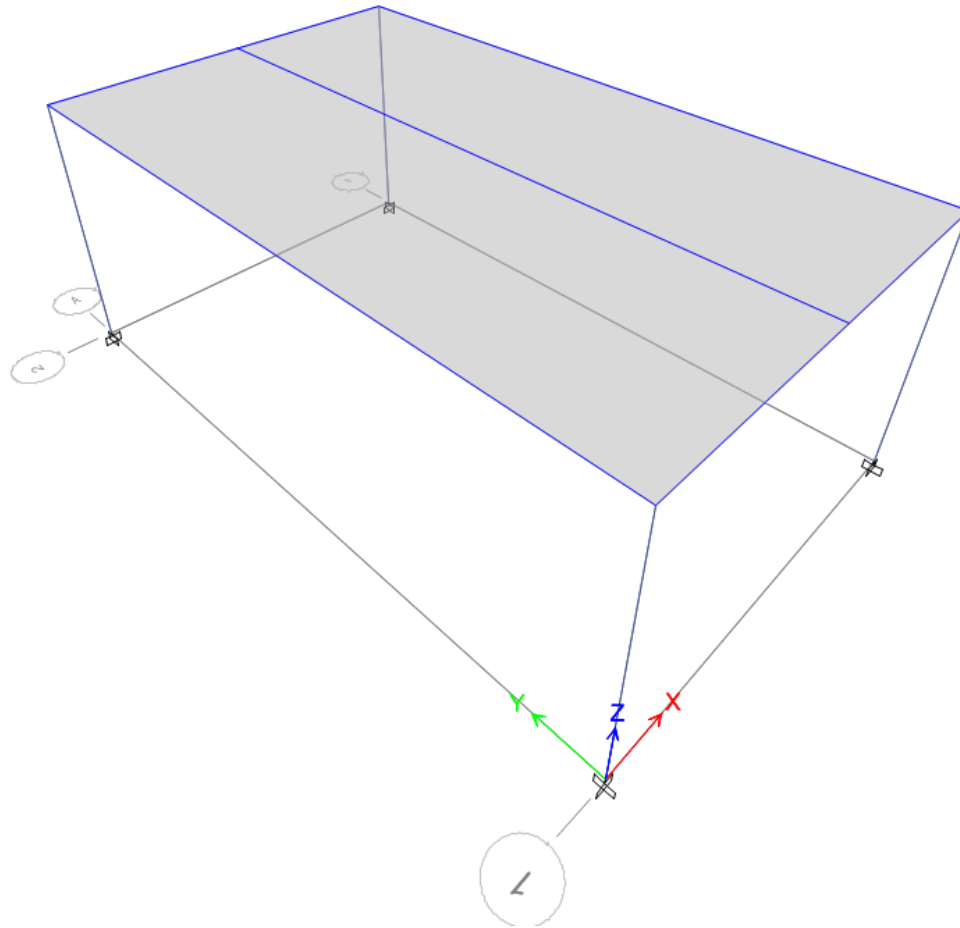
Table 5.11 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.12 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.221	0.667	0	0	0.333
Modal	2	0.2	0	1	0	0
Modal	3	0.148	0.348	0	0	0.652
Modal	4	0.052	0.013	0	0	0.987
Modal	5	0.021	0	1	0	0
Modal	6	0.017	0	1	0	0
Modal	7	0.017	0	0	0	1
Modal	8	0.016	0	1	0	0
Modal	9	0.01	0	0	0	1



## Project Report

Model File: 004 2017 EDUCACION MODULO 1B DMO - E, Revision 0  
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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	600	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	4.9
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	4900	0	0
4	4900	8200	0
5	2500	0	0
7	2500	8200	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B3	5	7	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	34394.99	34394.99	2.4543	4.1	34394.99	34394.99	2.4543	4.1	2.4511	4.1

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	34394.99	34394.99	706.6758	2.4543	4.1

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	34394.99	34394.99	0
Base	2498.55	2498.55	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A416Gr270	Tendon	196500.6	0	76.9729	Fy=1689.91 MPa, Fu=1861.58 MPa
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 2.5 Tendon Sections

**Table 2.5 - Tendon Section Properties**

Name	Material	StrandArea cm <sup>2</sup>	Color
Tendon1	A416Gr270	1	Yellow



### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Frame Assignments

**Table 3.1 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Area Loads

**Table 4.2 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F5	5	D	Gravity	4.3
N1	F5	5	L	Gravity	2
N1	F5	5	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.3 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
Umbral	0	0.08	2
Umbral	0.01	0.086	
Umbral	0.02	0.093	
Umbral	0.03	0.099	
Umbral	0.04	0.106	
Umbral	0.05	0.112	
Umbral	0.06	0.118	
Umbral	0.07	0.125	
Umbral	0.08	0.131	
Umbral	0.09	0.138	
Umbral	0.1	0.144	
Umbral	0.11	0.15	
Umbral	0.12	0.157	
Umbral	0.13	0.163	
Umbral	0.14	0.17	
Umbral	0.15	0.176	
Umbral	0.16	0.182	
Umbral	0.17	0.189	
Umbral	0.18	0.195	
Umbral	0.19	0.202	
Umbral	0.2	0.208	
Umbral	0.21	0.214	
Umbral	0.22	0.221	
Umbral	0.23	0.227	
Umbral	0.24	0.234	
Umbral	0.25	0.24	
Umbral	0.26	0.24	
Umbral	0.27	0.24	
Umbral	0.28	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	0.29	0.24	
Umbral	0.3	0.24	
Umbral	0.31	0.24	
Umbral	0.32	0.24	
Umbral	0.33	0.24	
Umbral	0.34	0.24	
Umbral	0.35	0.24	
Umbral	0.36	0.24	
Umbral	0.37	0.24	
Umbral	0.38	0.24	
Umbral	0.39	0.24	
Umbral	0.4	0.24	
Umbral	0.41	0.24	
Umbral	0.42	0.24	
Umbral	0.43	0.24	
Umbral	0.44	0.24	
Umbral	0.45	0.24	
Umbral	0.46	0.24	
Umbral	0.47	0.24	
Umbral	0.48	0.24	
Umbral	0.49	0.24	
Umbral	0.5	0.24	
Umbral	0.51	0.24	
Umbral	0.52	0.24	
Umbral	0.53	0.24	
Umbral	0.54	0.24	
Umbral	0.55	0.24	
Umbral	0.56	0.24	
Umbral	0.57	0.24	
Umbral	0.58	0.24	
Umbral	0.59	0.24	
Umbral	0.6	0.24	
Umbral	0.61	0.24	
Umbral	0.62	0.24	
Umbral	0.63	0.24	
Umbral	0.64	0.24	
Umbral	0.65	0.24	
Umbral	0.66	0.24	
Umbral	0.67	0.24	
Umbral	0.68	0.24	
Umbral	0.69	0.24	
Umbral	0.7	0.24	
Umbral	0.71	0.24	
Umbral	0.72	0.24	
Umbral	0.73	0.24	
Umbral	0.74	0.24	
Umbral	0.75	0.24	
Umbral	0.76	0.24	
Umbral	0.77	0.24	
Umbral	0.78	0.24	
Umbral	0.79	0.24	
Umbral	0.8	0.24	
Umbral	0.81	0.24	
Umbral	0.82	0.24	
Umbral	0.83	0.24	
Umbral	0.84	0.24	
Umbral	0.85	0.24	
Umbral	0.86	0.24	
Umbral	0.87	0.24	
Umbral	0.88	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	0.89	0.24	
Umbral	0.9	0.24	
Umbral	0.91	0.24	
Umbral	0.92	0.24	
Umbral	0.93	0.24	
Umbral	0.94	0.24	
Umbral	0.95	0.24	
Umbral	0.96	0.24	
Umbral	0.97	0.24	
Umbral	0.98	0.24	
Umbral	0.99	0.24	
Umbral	1	0.24	
Umbral	1.01	0.24	
Umbral	1.02	0.24	
Umbral	1.03	0.24	
Umbral	1.04	0.24	
Umbral	1.05	0.24	
Umbral	1.06	0.24	
Umbral	1.07	0.24	
Umbral	1.08	0.24	
Umbral	1.09	0.24	
Umbral	1.1	0.24	
Umbral	1.11	0.24	
Umbral	1.12	0.24	
Umbral	1.13	0.24	
Umbral	1.14	0.24	
Umbral	1.15	0.24	
Umbral	1.16	0.24	
Umbral	1.17	0.24	
Umbral	1.18	0.24	
Umbral	1.19	0.24	
Umbral	1.2	0.24	
Umbral	1.21	0.24	
Umbral	1.22	0.24	
Umbral	1.23	0.24	
Umbral	1.24	0.24	
Umbral	1.25	0.24	
Umbral	1.26	0.24	
Umbral	1.27	0.24	
Umbral	1.28	0.24	
Umbral	1.29	0.24	
Umbral	1.3	0.24	
Umbral	1.31	0.24	
Umbral	1.32	0.24	
Umbral	1.33	0.24	
Umbral	1.34	0.24	
Umbral	1.35	0.24	
Umbral	1.36	0.24	
Umbral	1.37	0.24	
Umbral	1.38	0.24	
Umbral	1.39	0.24	
Umbral	1.4	0.24	
Umbral	1.41	0.24	
Umbral	1.42	0.24	
Umbral	1.43	0.24	
Umbral	1.44	0.24	
Umbral	1.45	0.24	
Umbral	1.46	0.24	
Umbral	1.47	0.24	
Umbral	1.48	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.49	0.24	
Umbral	1.5	0.24	
Umbral	1.51	0.24	
Umbral	1.52	0.24	
Umbral	1.53	0.24	
Umbral	1.54	0.24	
Umbral	1.55	0.24	
Umbral	1.56	0.24	
Umbral	1.57	0.24	
Umbral	1.58	0.24	
Umbral	1.59	0.24	
Umbral	1.6	0.24	
Umbral	1.61	0.24	
Umbral	1.62	0.24	
Umbral	1.63	0.24	
Umbral	1.64	0.24	
Umbral	1.65	0.24	
Umbral	1.66	0.24	
Umbral	1.67	0.24	
Umbral	1.68	0.24	
Umbral	1.69	0.24	
Umbral	1.7	0.24	
Umbral	1.71	0.24	
Umbral	1.72	0.24	
Umbral	1.73	0.24	
Umbral	1.74	0.24	
Umbral	1.75	0.24	
Umbral	1.76	0.24	
Umbral	1.77	0.24	
Umbral	1.78	0.24	
Umbral	1.79	0.24	
Umbral	1.8	0.24	
Umbral	1.81	0.24	
Umbral	1.82	0.24	
Umbral	1.83	0.24	
Umbral	1.84	0.24	
Umbral	1.85	0.24	
Umbral	1.86	0.24	
Umbral	1.87	0.24	
Umbral	1.88	0.24	
Umbral	1.89	0.24	
Umbral	1.9	0.24	
Umbral	1.91	0.24	
Umbral	1.92	0.24	
Umbral	1.93	0.24	
Umbral	1.94	0.24	
Umbral	1.95	0.24	
Umbral	1.96	0.24	
Umbral	1.97	0.24	
Umbral	1.98	0.24	
Umbral	1.99	0.24	
Umbral	2	0.24	
Umbral	2.01	0.239	
Umbral	2.02	0.238	
Umbral	2.03	0.236	
Umbral	2.04	0.235	
Umbral	2.05	0.234	
Umbral	2.06	0.233	
Umbral	2.07	0.232	
Umbral	2.08	0.231	

Name	Period sec	Acceleration	Damping %
Umbral	2.09	0.23	
Umbral	2.1	0.229	
Umbral	2.11	0.227	
Umbral	2.12	0.226	
Umbral	2.13	0.225	
Umbral	2.14	0.224	
Umbral	2.15	0.223	
Umbral	2.16	0.222	
Umbral	2.17	0.221	
Umbral	2.18	0.22	
Umbral	2.19	0.219	
Umbral	2.2	0.218	
Umbral	2.21	0.217	
Umbral	2.22	0.216	
Umbral	2.23	0.215	
Umbral	2.24	0.214	
Umbral	2.25	0.213	
Umbral	2.26	0.212	
Umbral	2.27	0.211	
Umbral	2.28	0.211	
Umbral	2.29	0.21	
Umbral	2.3	0.209	
Umbral	2.31	0.208	
Umbral	2.32	0.207	
Umbral	2.33	0.206	
Umbral	2.34	0.205	
Umbral	2.35	0.204	
Umbral	2.36	0.203	
Umbral	2.37	0.203	
Umbral	2.38	0.202	
Umbral	2.39	0.201	
Umbral	2.4	0.2	
Umbral	2.41	0.199	
Umbral	2.42	0.198	
Umbral	2.43	0.198	
Umbral	2.44	0.197	
Umbral	2.45	0.196	
Umbral	2.46	0.195	
Umbral	2.47	0.194	
Umbral	2.48	0.194	
Umbral	2.49	0.193	
Umbral	2.5	0.192	
Umbral	2.51	0.191	
Umbral	2.52	0.19	
Umbral	2.53	0.19	
Umbral	2.54	0.189	
Umbral	2.55	0.188	
Umbral	2.56	0.188	
Umbral	2.57	0.187	
Umbral	2.58	0.186	
Umbral	2.59	0.185	
Umbral	2.6	0.185	
Umbral	2.61	0.184	
Umbral	2.62	0.183	
Umbral	2.63	0.183	
Umbral	2.64	0.182	
Umbral	2.65	0.181	
Umbral	2.66	0.18	
Umbral	2.67	0.18	
Umbral	2.68	0.179	

Name	Period sec	Acceleration	Damping %
Umbral	2.69	0.178	
Umbral	2.7	0.178	
Umbral	2.71	0.177	
Umbral	2.72	0.176	
Umbral	2.73	0.176	
Umbral	2.74	0.175	
Umbral	2.75	0.175	
Umbral	2.76	0.174	
Umbral	2.77	0.173	
Umbral	2.78	0.173	
Umbral	2.79	0.172	
Umbral	2.8	0.171	
Umbral	2.81	0.171	
Umbral	2.82	0.17	
Umbral	2.83	0.17	
Umbral	2.84	0.169	
Umbral	2.85	0.168	
Umbral	2.86	0.168	
Umbral	2.87	0.167	
Umbral	2.88	0.167	
Umbral	2.89	0.166	
Umbral	2.9	0.166	
Umbral	2.91	0.165	
Umbral	2.92	0.164	
Umbral	2.93	0.164	
Umbral	2.94	0.163	
Umbral	2.95	0.163	
Umbral	2.96	0.162	
Umbral	2.97	0.162	
Umbral	2.98	0.161	
Umbral	2.99	0.161	
Umbral	3	0.16	
Umbral	3.01	0.159	
Umbral	3.02	0.159	
Umbral	3.03	0.158	
Umbral	3.04	0.158	
Umbral	3.05	0.157	
Umbral	3.06	0.157	
Umbral	3.07	0.156	
Umbral	3.08	0.156	
Umbral	3.09	0.155	
Umbral	3.1	0.155	
Umbral	3.11	0.154	
Umbral	3.12	0.154	
Umbral	3.13	0.153	
Umbral	3.14	0.153	
Umbral	3.15	0.152	
Umbral	3.16	0.152	
Umbral	3.17	0.151	
Umbral	3.18	0.151	
Umbral	3.19	0.15	
Umbral	3.2	0.15	
Umbral	3.21	0.15	
Umbral	3.22	0.149	
Umbral	3.23	0.149	
Umbral	3.24	0.148	
Umbral	3.25	0.148	
Umbral	3.26	0.147	
Umbral	3.27	0.147	
Umbral	3.28	0.146	

Name	Period sec	Acceleration	Damping %
Umbral	3.29	0.146	
Umbral	3.3	0.145	
Umbral	3.31	0.145	
Umbral	3.32	0.145	
Umbral	3.33	0.144	
Umbral	3.34	0.144	
Umbral	3.35	0.143	
Umbral	3.36	0.143	
Umbral	3.37	0.142	
Umbral	3.38	0.142	
Umbral	3.39	0.142	
Umbral	3.4	0.141	
Umbral	3.41	0.141	
Umbral	3.42	0.14	
Umbral	3.43	0.14	
Umbral	3.44	0.14	
Umbral	3.45	0.139	
Umbral	3.46	0.139	
Umbral	3.47	0.138	
Umbral	3.48	0.138	
Umbral	3.49	0.138	
Umbral	3.5	0.137	
Umbral	3.51	0.137	
Umbral	3.52	0.136	
Umbral	3.53	0.136	
Umbral	3.54	0.136	
Umbral	3.55	0.135	
Umbral	3.56	0.135	
Umbral	3.57	0.134	
Umbral	3.58	0.134	
Umbral	3.59	0.134	
Umbral	3.6	0.133	
Umbral	3.61	0.133	
Umbral	3.62	0.133	
Umbral	3.63	0.132	
Umbral	3.64	0.132	
Umbral	3.65	0.132	
Umbral	3.66	0.131	
Umbral	3.67	0.131	
Umbral	3.68	0.13	
Umbral	3.69	0.13	
Umbral	3.7	0.13	
Umbral	3.71	0.129	
Umbral	3.72	0.129	
Umbral	3.73	0.129	
Umbral	3.74	0.128	
Umbral	3.75	0.128	
Umbral	3.76	0.128	
Umbral	3.77	0.127	
Umbral	3.78	0.127	
Umbral	3.79	0.127	
Umbral	3.8	0.126	
Umbral	3.81	0.126	
Umbral	3.82	0.126	
Umbral	3.83	0.125	
Umbral	3.84	0.125	
Umbral	3.85	0.125	
Umbral	3.86	0.124	
Umbral	3.87	0.124	
Umbral	3.88	0.124	



Name	Period sec	Acceleration	Damping %
Umbral	3.89	0.123	
Umbral	3.9	0.123	
Umbral	3.91	0.123	
Umbral	3.92	0.122	
Umbral	3.93	0.122	
Umbral	3.94	0.122	
Umbral	3.95	0.122	
Umbral	3.96	0.121	
Umbral	3.97	0.121	
Umbral	3.98	0.121	
Umbral	3.99	0.12	
Umbral	4	0.12	
Umbral	4.01	0.12	
Umbral	4.02	0.119	
Umbral	4.03	0.119	
Umbral	4.04	0.119	
Umbral	4.05	0.119	
Umbral	4.06	0.118	
Umbral	4.07	0.118	
Umbral	4.08	0.118	
Umbral	4.09	0.117	
Umbral	4.1	0.117	
Umbral	4.11	0.117	
Umbral	4.12	0.117	
Umbral	4.13	0.116	
Umbral	4.14	0.116	
Umbral	4.15	0.116	
Umbral	4.16	0.115	
Umbral	4.17	0.115	
Umbral	4.18	0.115	
Umbral	4.19	0.115	
Umbral	4.2	0.114	
Umbral	4.21	0.114	
Umbral	4.22	0.114	
Umbral	4.23	0.113	
Umbral	4.24	0.113	
Umbral	4.25	0.113	
Umbral	4.26	0.113	
Umbral	4.27	0.112	
Umbral	4.28	0.112	
Umbral	4.29	0.112	
Umbral	4.3	0.112	
Umbral	4.31	0.111	
Umbral	4.32	0.111	
Umbral	4.33	0.111	
Umbral	4.34	0.111	
Umbral	4.35	0.11	
Umbral	4.36	0.11	
Umbral	4.37	0.11	
Umbral	4.38	0.11	
Umbral	4.39	0.109	
Umbral	4.4	0.109	
Umbral	4.41	0.109	
Umbral	4.42	0.109	
Umbral	4.43	0.108	
Umbral	4.44	0.108	
Umbral	4.45	0.108	
Umbral	4.46	0.108	
Umbral	4.47	0.107	
Umbral	4.48	0.107	

Name	Period sec	Acceleration	Damping %
Umbral	4.49	0.107	
Umbral	4.5	0.107	
Umbral	4.51	0.106	
Umbral	4.52	0.106	
Umbral	4.53	0.106	
Umbral	4.54	0.106	
Umbral	4.55	0.105	
Umbral	4.56	0.105	
Umbral	4.57	0.105	
Umbral	4.58	0.105	
Umbral	4.59	0.105	
Umbral	4.6	0.104	
Umbral	4.61	0.104	
Umbral	4.62	0.104	
Umbral	4.63	0.104	
Umbral	4.64	0.103	
Umbral	4.65	0.103	
Umbral	4.66	0.103	
Umbral	4.67	0.103	
Umbral	4.68	0.103	
Umbral	4.69	0.102	
Umbral	4.7	0.102	
Umbral	4.71	0.102	
Umbral	4.72	0.102	
Umbral	4.73	0.101	
Umbral	4.74	0.101	
Umbral	4.75	0.101	
Umbral	4.76	0.101	
Umbral	4.77	0.101	
Umbral	4.78	0.1	
Umbral	4.79	0.1	
Umbral	4.8	0.1	
Umbral	4.81	0.1	
Umbral	4.82	0.1	
Umbral	4.83	0.099	
Umbral	4.84	0.099	
Umbral	4.85	0.099	
Umbral	4.86	0.099	
Umbral	4.87	0.099	
Umbral	4.88	0.098	
Umbral	4.89	0.098	
Umbral	4.9	0.098	
Umbral	4.91	0.098	
Umbral	4.92	0.098	
Umbral	4.93	0.097	
Umbral	4.94	0.097	
Umbral	4.95	0.097	
Umbral	4.96	0.097	
Umbral	4.97	0.097	
Umbral	4.98	0.096	
Umbral	4.99	0.096	
Umbral	5	0.096	
Umbral	5.01	0.096	
Umbral	5.02	0.096	
Umbral	5.03	0.095	
Umbral	5.04	0.095	
Umbral	5.05	0.095	
Umbral	5.06	0.095	
Umbral	5.07	0.095	
Umbral	5.08	0.094	

Name	Period sec	Acceleration	Damping %
Umbral	5.09	0.094	
Umbral	5.1	0.094	
Umbral	5.11	0.094	
Umbral	5.12	0.094	
Umbral	5.13	0.094	
Umbral	5.14	0.093	
Umbral	5.15	0.093	
Umbral	5.16	0.093	
Umbral	5.17	0.093	
Umbral	5.18	0.093	
Umbral	5.19	0.092	
Umbral	5.2	0.092	
Umbral	5.21	0.092	
Umbral	5.22	0.092	
Umbral	5.23	0.092	
Umbral	5.24	0.092	
Umbral	5.25	0.091	
Umbral	5.26	0.091	
Umbral	5.27	0.091	
Umbral	5.28	0.091	
Umbral	5.29	0.091	
Umbral	5.3	0.091	
Umbral	5.31	0.09	
Umbral	5.32	0.09	
Umbral	5.33	0.09	
Umbral	5.34	0.09	
Umbral	5.35	0.09	
Umbral	5.36	0.09	
Umbral	5.37	0.089	
Umbral	5.38	0.089	
Umbral	5.39	0.089	
Umbral	5.4	0.089	
Umbral	5.41	0.089	
Umbral	5.42	0.089	
Umbral	5.43	0.088	
Umbral	5.44	0.088	
Umbral	5.45	0.088	
Umbral	5.46	0.088	
Umbral	5.47	0.088	
Umbral	5.48	0.088	
Umbral	5.49	0.087	
Umbral	5.5	0.087	
Umbral	5.51	0.087	
Umbral	5.52	0.087	
Umbral	5.53	0.087	
Umbral	5.54	0.087	
Umbral	5.55	0.086	
Umbral	5.56	0.086	
Umbral	5.57	0.086	
Umbral	5.58	0.086	
Umbral	5.59	0.086	
Umbral	5.6	0.086	
Umbral	5.61	0.086	
Umbral	5.62	0.085	
Umbral	5.63	0.085	
Umbral	5.64	0.085	
Umbral	5.65	0.085	
Umbral	5.66	0.085	
Umbral	5.67	0.085	
Umbral	5.68	0.085	

Name	Period sec	Acceleration	Damping %
Umbral	5.69	0.084	
Umbral	5.7	0.084	
Umbral	5.71	0.084	
Umbral	5.72	0.084	
Umbral	5.73	0.084	
Umbral	5.74	0.084	
Umbral	5.75	0.083	
Umbral	5.76	0.083	
Umbral	5.77	0.083	
Umbral	5.78	0.083	
Umbral	5.79	0.083	
Umbral	5.8	0.083	
Umbral	5.81	0.083	
Umbral	5.82	0.082	
Umbral	5.83	0.082	
Umbral	5.84	0.082	
Umbral	5.85	0.082	
Umbral	5.86	0.082	
Umbral	5.87	0.082	
Umbral	5.88	0.082	
Umbral	5.89	0.081	
Umbral	5.9	0.081	
Umbral	5.91	0.081	
Umbral	5.92	0.081	
Umbral	5.93	0.081	
Umbral	5.94	0.081	
Umbral	5.95	0.081	
Umbral	5.96	0.081	
Umbral	5.97	0.08	
Umbral	5.98	0.08	
Umbral	5.99	0.08	
Umbral	6	0.08	
Umbral	6.01	0.08	
Umbral	6.02	0.08	
Umbral	6.03	0.08	
Umbral	6.04	0.079	
Umbral	6.05	0.079	
Umbral	6.06	0.079	
Umbral	6.07	0.079	
Umbral	6.08	0.079	
Umbral	6.09	0.079	
Umbral	6.1	0.079	
Umbral	6.11	0.079	
Umbral	6.12	0.078	
Umbral	6.13	0.078	
Umbral	6.14	0.078	
Umbral	6.15	0.078	
Umbral	6.16	0.078	
Umbral	6.17	0.078	
Umbral	6.18	0.078	
Umbral	6.19	0.078	
Umbral	6.2	0.077	
Umbral	6.21	0.077	
Umbral	6.22	0.077	
Umbral	6.23	0.077	
Umbral	6.24	0.077	
Umbral	6.25	0.077	
Umbral	6.26	0.077	
Umbral	6.27	0.077	
Umbral	6.28	0.076	

Name	Period sec	Acceleration	Damping %
Umbral	6.29	0.076	
Umbral	6.3	0.076	
Umbral	6.31	0.076	
Umbral	6.32	0.076	
Umbral	6.33	0.076	
Umbral	6.34	0.076	
Umbral	6.35	0.076	
Umbral	6.36	0.075	
Umbral	6.37	0.075	
Umbral	6.38	0.075	
Umbral	6.39	0.075	
Umbral	6.4	0.075	
Umbral	6.41	0.075	
Umbral	6.42	0.075	
Umbral	6.43	0.075	
Umbral	6.44	0.075	
Umbral	6.45	0.074	
Umbral	6.46	0.074	
Umbral	6.47	0.074	
Umbral	6.48	0.074	
Umbral	6.49	0.074	
Umbral	6.5	0.074	
Umbral	6.51	0.074	
Umbral	6.52	0.074	
Umbral	6.53	0.074	
Umbral	6.54	0.073	
Umbral	6.55	0.073	
Umbral	6.56	0.073	
Umbral	6.57	0.073	
Umbral	6.58	0.073	
Umbral	6.59	0.073	
Umbral	6.6	0.073	
Umbral	6.61	0.073	
Umbral	6.62	0.073	
Umbral	6.63	0.072	
Umbral	6.64	0.072	
Umbral	6.65	0.072	
Umbral	6.66	0.072	
Umbral	6.67	0.072	
Umbral	6.68	0.072	
Umbral	6.69	0.072	
Umbral	6.7	0.072	
Umbral	6.71	0.072	
Umbral	6.72	0.071	
Umbral	6.73	0.071	
Umbral	6.74	0.071	
Umbral	6.75	0.071	
Umbral	6.76	0.071	
Umbral	6.77	0.071	
Umbral	6.78	0.071	
Umbral	6.79	0.071	
Umbral	6.8	0.071	
Umbral	6.81	0.07	
Umbral	6.82	0.07	
Umbral	6.83	0.07	
Umbral	6.84	0.07	
Umbral	6.85	0.07	
Umbral	6.86	0.07	
Umbral	6.87	0.07	
Umbral	6.88	0.07	

Name	Period sec	Acceleration	Damping %
Umbral	6.89	0.07	
Umbral	6.9	0.07	
Umbral	6.91	0.069	
Umbral	6.92	0.069	
Umbral	6.93	0.069	
Umbral	6.94	0.069	
Umbral	6.95	0.069	
Umbral	6.96	0.069	
Umbral	6.97	0.069	
Umbral	6.98	0.069	
Umbral	6.99	0.069	
Umbral	7	0.069	
Umbral	7.01	0.068	
Umbral	7.02	0.068	
Umbral	7.03	0.068	
Umbral	7.04	0.068	
Umbral	7.05	0.068	
Umbral	7.06	0.068	
Umbral	7.07	0.068	
Umbral	7.08	0.068	
Umbral	7.09	0.068	
Umbral	7.1	0.068	
Umbral	7.11	0.068	
Umbral	7.12	0.067	
Umbral	7.13	0.067	
Umbral	7.14	0.067	
Umbral	7.15	0.067	
Umbral	7.16	0.067	
Umbral	7.17	0.067	
Umbral	7.18	0.067	
Umbral	7.19	0.067	
Umbral	7.2	0.067	
Umbral	7.21	0.067	
Umbral	7.22	0.066	
Umbral	7.23	0.066	
Umbral	7.24	0.066	
Umbral	7.25	0.066	
Umbral	7.26	0.066	
Umbral	7.27	0.066	
Umbral	7.28	0.066	
Umbral	7.29	0.066	
Umbral	7.3	0.066	
Umbral	7.31	0.066	
Umbral	7.32	0.066	
Umbral	7.33	0.065	
Umbral	7.34	0.065	
Umbral	7.35	0.065	
Umbral	7.36	0.065	
Umbral	7.37	0.065	
Umbral	7.38	0.065	
Umbral	7.39	0.065	
Umbral	7.4	0.065	
Umbral	7.41	0.065	
Umbral	7.42	0.065	
Umbral	7.43	0.065	
Umbral	7.44	0.065	
Umbral	7.45	0.064	
Umbral	7.46	0.064	
Umbral	7.47	0.064	
Umbral	7.48	0.064	

Name	Period sec	Acceleration	Damping %
Umbral	7.49	0.064	
Umbral	7.5	0.064	

4.4 Load Cases

Table 4.4 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.5 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No



Name	Load Case/Combo	Scale Factor	Type	Auto
VIG01	D	1.2	Linear Add	No
VIG01	L	1		No
VIG01	DISX	2		No
VIG01	DISY	0.6		No
VIG02	D	1.2	Linear Add	No
VIG02	L	1		No
VIG02	DISX	0.6		No
VIG02	DISY	2		No
VIG03	D	0.9	Linear Add	No
VIG03	DISX	2		No
VIG03	DISY	0.6		No
VIG04	D	0.9	Linear Add	No
VIG04	DISX	0.6		No
VIG04	DISY	2		No
COL1	D	1.2	Linear Add	No
COL1	L	1		No
COL1	DISX	3		No
COL1	DISY	0.9		No
COL2	D	1.2	Linear Add	No
COL2	L	1		No
COL2	DISX	0.9		No
COL2	DISY	3		No
COL3	D	0.9	Linear Add	No
COL3	DISX	3		No
COL3	DISY	0.9		No
COL4	D	0.9	Linear Add	No
COL4	DISX	0.9		No
COL4	DISY	3		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
DERUD10	L	1		No
DERUD10	G	1.6		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	337.694	1384.5454	-828.7955	0	0	0	0
L	0	0	80.36	329.476	-196.8807	0	0	0	0
LR	0	0	0	0	0	0	0	0	0
EX Max	324.0869	0	0	0	1055.6565	1328.7564	0	0	0
EY Max	0	324.0856	0	1055.8938	0	797.6879	0	0	0
DISX Max	108.029	0	0	0	351.8855	442.9188	0	0	0
DISY Max	0	108.0285	0	351.9646	0	265.896	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	40.18	164.738	-98.4403	0	0	0	0
DERUX Max	53.2992	0	0	0	173.6127	218.5266	0	0	0
DERUY Max	0	54.9523	0	179.0386	0	135.2753	0	0	0
COMB1	0	0	472.7716	1938.3636	-1160.3137	0	0	0	0
COMB2	0	0	533.8088	2188.6161	-1309.5637	0	0	0	0
COMB3	0	0	485.5928	1990.9305	-1191.4353	0	0	0	0
COMB4	0	0	485.5928	1990.9305	-1191.4353	0	0	0	0
COMB5 Max	108.029	32.4086	485.5928	2096.5199	-839.5497	522.6876	0	0	0
COMB5 Min	-108.029	-32.4086	485.5928	1885.3411	-1543.3208	-522.6876	0	0	0
COMB6 Max	32.4087	108.0285	485.5928	2342.8951	-1085.8696	398.7716	0	0	0
COMB6 Min	-32.4087	-108.0285	485.5928	1638.9659	-1297.0009	-398.7716	0	0	0
COMB7 Max	32.4087	108.0285	303.9246	1598.0555	-640.3503	398.7716	0	0	0
COMB7 Min	-32.4087	-108.0285	303.9246	894.1262	-851.4816	-398.7716	0	0	0
COMB8 Max	108.029	32.4086	303.9246	1351.6802	-394.0304	522.6876	0	0	0
COMB8 Min	-108.029	-32.4086	303.9246	1140.5015	-1097.8014	-522.6876	0	0	0
ENVE Max	108.029	108.0285	533.8088	2342.8951	-394.0304	522.6876	0	0	0
ENVE Min	-108.029	-108.0285	303.9246	894.1262	-1543.3208	-522.6876	0	0	0
CIM01	0	0	337.694	1384.5454	-828.7955	0	0	0	0
CIM02	0	0	418.054	1714.0214	-1025.6762	0	0	0	0
CIM03	0	0	337.694	1384.5454	-828.7955	0	0	0	0
CIM04	0	0	397.964	1631.6524	-976.456	0	0	0	0
CIM05 Max	75.6203	22.686	337.694	1458.458	-582.4756	365.8813	0	0	0
CIM05 Min	-75.6203	-22.686	337.694	1310.6328	-1075.1153	-365.8813	0	0	0
CIM06 Max	22.6861	75.62	337.694	1630.9206	-754.8995	279.1401	0	0	0
CIM06 Min	-22.6861	-75.62	337.694	1138.1702	-902.6914	-279.1401	0	0	0
CIM07 Max	57.2554	17.2846	397.964	1687.9667	-789.9567	277.2903	0	0	0
CIM07 Min	-57.2554	-17.2846	397.964	1575.3381	-1162.9553	-277.2903	0	0	0
CIM08 Max	17.2846	57.2551	397.964	1818.1936	-920.1543	211.7919	0	0	0
CIM08 Min	-17.2846	-57.2551	397.964	1445.1112	-1032.7577	-211.7919	0	0	0
DER01	0	0	472.7716	1938.3636	-1160.3137	0	0	0	0
DER02	0	0	533.8088	2188.6161	-1309.5637	0	0	0	0
DER03	0	0	485.5928	1990.9305	-1191.4353	0	0	0	0
DER04	0	0	485.5928	1990.9305	-1191.4353	0	0	0	0
DER05 Max	324.0869	0	485.5928	1990.9305	-135.7787	1328.7564	0	0	0
DER05 Min	-324.0869	0	485.5928	1990.9305	-2247.0918	-1328.7564	0	0	0
DER06 Max	0	324.0856	485.5928	3046.8243	-1191.4353	797.6879	0	0	0
DER06 Min	0	-324.0856	485.5928	935.0366	-1191.4353	-797.6879	0	0	0
DER07 Max	324.0869	0	303.9246	1246.0909	309.7406	1328.7564	0	0	0
DER07 Min	-324.0869	0	303.9246	1246.0909	-1801.5725	-1328.7564	0	0	0
DER08 Max	0	324.0856	303.9246	2301.9847	-745.9159	797.6879	0	0	0
DER08 Min	0	-324.0856	303.9246	190.197	-745.9159	-797.6879	0	0	0
DERUD01	0	0	472.7716	1938.3636	-1160.3137	0	0	0	0
DERUD02	0	0	533.8088	2188.6161	-1309.5637	0	0	0	0
DERUD03	0	0	485.5928	1990.9305	-1191.4353	0	0	0	0
DERUD04	0	0	485.5928	1990.9305	-1191.4353	0	0	0	0
DERUD05 Max	53.2992	0	485.5928	1990.9305	-1017.8226	218.5266	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-53.2992	0	485.5928	1990.9305	-1365.048	-218.5266	0	0	0
DERUD06 Max	0	54.9523	485.5928	2169.9691	-1191.4353	135.2753	0	0	0
DERUD06 Min	0	-54.9523	485.5928	1811.8919	-1191.4353	-135.2753	0	0	0
DERUD07 Max	53.2992	0	303.9246	1246.0909	-572.3032	218.5266	0	0	0
DERUD07 Min	-53.2992	0	303.9246	1246.0909	-919.5286	-218.5266	0	0	0
DERUD08 Max	0	54.9523	303.9246	1425.1294	-745.9159	135.2753	0	0	0
DERUD08 Min	0	-54.9523	303.9246	1067.0523	-745.9159	-135.2753	0	0	0
VIG01 Max	216.058	64.8171	485.5928	2202.1092	-487.6642	1045.3752	0	0	0
VIG01 Min	-216.058	-64.8171	485.5928	1779.7517	-1895.2063	-1045.3752	0	0	0
VIG02 Max	64.8174	216.0571	485.5928	2694.8597	-980.304	797.5432	0	0	0
VIG02 Min	-64.8174	-216.0571	485.5928	1287.0012	-1402.5666	-797.5432	0	0	0
VIG03 Max	216.058	64.8171	303.9246	1457.2696	-42.1449	1045.3752	0	0	0
VIG03 Min	-216.058	-64.8171	303.9246	1034.9121	-1449.687	-1045.3752	0	0	0
VIG04 Max	64.8174	216.0571	303.9246	1950.0201	-534.7846	797.5432	0	0	0
VIG04 Min	-64.8174	-216.0571	303.9246	542.1616	-957.0472	-797.5432	0	0	0
COL1 Max	324.0869	97.2257	485.5928	2307.6986	-135.7787	1568.0628	0	0	0
COL1 Min	-324.0869	-97.2257	485.5928	1674.1623	-2247.0918	-1568.0628	0	0	0
COL2 Max	97.2261	324.0856	485.5928	3046.8243	-874.7383	1196.3149	0	0	0
COL2 Min	-97.2261	-324.0856	485.5928	935.0366	-1508.1322	-1196.3149	0	0	0
COL3 Max	324.0869	97.2257	303.9246	1562.859	309.7406	1568.0628	0	0	0
COL3 Min	-324.0869	-97.2257	303.9246	929.3227	-1801.5725	-1568.0628	0	0	0
COL4 Max	97.2261	324.0856	303.9246	2301.9847	-429.219	1196.3149	0	0	0
COL4 Min	-97.2261	-324.0856	303.9246	190.197	-1062.6129	-1196.3149	0	0	0
CIM09 Max	75.6203	22.686	202.6164	904.6398	-250.9574	365.8813	0	0	0
CIM09 Min	-75.6203	-22.686	202.6164	756.8147	-743.5971	-365.8813	0	0	0
CIM10 Max	22.6861	75.62	202.6164	1077.1025	-423.3813	279.1401	0	0	0
CIM10 Min	-22.6861	-75.62	202.6164	584.352	-571.1732	-279.1401	0	0	0
CIM11	0	0	377.874	1549.2834	-927.2358	0	0	0	0
CIM12	0	0	428.099	1755.2059	-1050.2862	0	0	0	0
CIM13 Max	57.2554	17.2846	428.099	1811.5202	-863.7869	277.2903	0	0	0
CIM13 Min	-57.2554	-17.2846	428.099	1698.8916	-1236.7856	-277.2903	0	0	0
CIM14 Max	17.2846	57.2551	428.099	1941.7471	-993.9846	211.7919	0	0	0
CIM14 Min	-17.2846	-57.2551	428.099	1568.6647	-1106.5879	-211.7919	0	0	0
CIM15	0	0	202.6164	830.7272	-497.2773	0	0	0	0
COMB9	0	0	553.8988	2270.9851	-1358.7838	0	0	0	0
DER09	0	0	553.8988	2270.9851	-1358.7838	0	0	0	0
DERUD09	0	0	553.8988	2270.9851	-1358.7838	0	0	0	0
DERUD10	0	0	549.8808	2254.5113	-1348.9398	0	0	0	0
DER10	0	0	549.8808	2254.5113	-1348.9398	0	0	0	0
COMB10	0	0	549.8808	2254.5113	-1348.9398	0	0	0	0
COMB11	0	0	505.6828	2073.2995	-1240.6554	0	0	0	0
DER11	0	0	505.6828	2073.2995	-1240.6554	0	0	0	0
DERUD11	0	0	505.6828	2073.2995	-1240.6554	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	34394.99	34394.99	2.4543	4.1	34394.99	34394.99	2.4543	4.1	2.4511	4.1

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	-0.01201	0	0	1	2.4543	4.1	3.25
N1	D1	L	-0.004209	0	0	1	2.4543	4.1	3.25
N1	D1	LR	0	0	0	1	2.4543	4.1	3.25
N1	D1	EX Max	7.6	0	0	1	2.4543	4.1	3.25
N1	D1	EY Max	0	8.4	5E-06	1	2.4543	4.1	3.25
N1	D1	DISX Max	2.5	0	0	1	2.4543	4.1	3.25
N1	D1	DISY Max	0	2.8	2E-06	1	2.4543	4.1	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	W	0	0	0	1	2.4543	4.1	3.25
N1	D1	G	-0.002104	0	0	1	2.4543	4.1	3.25
N1	D1	DERUX Max	1.2	0	0	1	2.4543	4.1	3.25
N1	D1	DERUY Max	0	1.4	1E-06	1	2.4543	4.1	3.25
N1	D1	COMB1	-0.01681	0	0	1	2.4543	4.1	3.25
N1	D1	COMB2	-0.02114	0	0	1	2.4543	4.1	3.25
N1	D1	COMB3	-0.01862	0	0	1	2.4543	4.1	3.25
N1	D1	COMB4	-0.01862	0	0	1	2.4543	4.1	3.25
N1	D1	COMB5 Max	2.5	0.8	4.794E-07	1	2.4543	4.1	3.25
N1	D1	COMB5 Min	-2.5	-0.8	-4.794E-07	1	2.4543	4.1	3.25
N1	D1	COMB6 Max	0.7	2.8	2E-06	1	2.4543	4.1	3.25
N1	D1	COMB6 Min	-0.8	-2.8	-2E-06	1	2.4543	4.1	3.25
N1	D1	COMB7 Max	0.7	2.8	2E-06	1	2.4543	4.1	3.25
N1	D1	COMB7 Min	-0.8	-2.8	-2E-06	1	2.4543	4.1	3.25
N1	D1	COMB8 Max	2.5	0.8	4.794E-07	1	2.4543	4.1	3.25
N1	D1	COMB8 Min	-2.5	-0.8	-4.794E-07	1	2.4543	4.1	3.25
N1	D1	ENVE Max	2.5	2.8	2E-06	1	2.4543	4.1	3.25
N1	D1	ENVE Min	-2.5	-2.8	-2E-06	1	2.4543	4.1	3.25
N1	D1	CIM01	-0.01201	0	0	1	2.4543	4.1	3.25
N1	D1	CIM02	-0.01621	0	0	1	2.4543	4.1	3.25
N1	D1	CIM03	-0.01201	0	0	1	2.4543	4.1	3.25
N1	D1	CIM04	-0.01516	0	0	1	2.4543	4.1	3.25
N1	D1	CIM05 Max	1.8	0.6	3.356E-07	1	2.4543	4.1	3.25
N1	D1	CIM05 Min	-1.8	-0.6	-3.356E-07	1	2.4543	4.1	3.25
N1	D1	CIM06 Max	0.5	1.9	1E-06	1	2.4543	4.1	3.25
N1	D1	CIM06 Min	-0.5	-1.9	-1E-06	1	2.4543	4.1	3.25
N1	D1	CIM07 Max	1.3	0.4	2.557E-07	1	2.4543	4.1	3.25
N1	D1	CIM07 Min	-1.4	-0.4	-2.557E-07	1	2.4543	4.1	3.25
N1	D1	CIM08 Max	0.4	1.5	1E-06	1	2.4543	4.1	3.25
N1	D1	CIM08 Min	-0.4	-1.5	-1E-06	1	2.4543	4.1	3.25
N1	D1	DER01	-0.01681	0	0	1	2.4543	4.1	3.25
N1	D1	DER02	-0.02114	0	0	1	2.4543	4.1	3.25
N1	D1	DER03	-0.01862	0	0	1	2.4543	4.1	3.25
N1	D1	DER04	-0.01862	0	0	1	2.4543	4.1	3.25
N1	D1	DER05 Max	7.6	0	0	1	2.4543	4.1	3.25
N1	D1	DER05 Min	-7.6	0	0	1	2.4543	4.1	3.25
N1	D1	DER06 Max	-0.01862	8.4	5E-06	1	2.4543	4.1	3.25
N1	D1	DER06 Min	-0.01862	-8.4	-5E-06	1	2.4543	4.1	3.25
N1	D1	DER07 Max	7.6	0	0	1	2.4543	4.1	3.25
N1	D1	DER07 Min	-7.6	0	0	1	2.4543	4.1	3.25
N1	D1	DER08 Max	-0.0108	8.4	5E-06	1	2.4543	4.1	3.25
N1	D1	DER08 Min	-0.0108	-8.4	-5E-06	1	2.4543	4.1	3.25
N1	D1	DERUD01	-0.01681	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD02	-0.02114	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD03	-0.01862	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD04	-0.01862	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD05 Max	1.2	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD05 Min	-1.3	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD06 Max	-0.01862	1.4	1E-06	1	2.4543	4.1	3.25
N1	D1	DERUD06 Min	-0.01862	-1.4	-1E-06	1	2.4543	4.1	3.25
N1	D1	DERUD07 Max	1.2	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD07 Min	-1.3	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD08 Max	-0.0108	1.4	1E-06	1	2.4543	4.1	3.25
N1	D1	DERUD08 Min	-0.0108	-1.4	-1E-06	1	2.4543	4.1	3.25
N1	D1	VIG01 Max	5	1.7	1E-06	1	2.4543	4.1	3.25
N1	D1	VIG01 Min	-5.1	-1.7	-1E-06	1	2.4543	4.1	3.25
N1	D1	VIG02 Max	1.5	5.6	3E-06	1	2.4543	4.1	3.25
N1	D1	VIG02 Min	-1.5	-5.6	-3E-06	1	2.4543	4.1	3.25
N1	D1	VIG03 Max	5	1.7	1E-06	1	2.4543	4.1	3.25
N1	D1	VIG03 Min	-5.1	-1.7	-1E-06	1	2.4543	4.1	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	VIG04 Max	1.5	5.6	3E-06	1	2.4543	4.1	3.25
N1	D1	VIG04 Min	-1.5	-5.6	-3E-06	1	2.4543	4.1	3.25
N1	D1	COL1 Max	7.6	2.5	1E-06	1	2.4543	4.1	3.25
N1	D1	COL1 Min	-7.6	-2.5	-1E-06	1	2.4543	4.1	3.25
N1	D1	COL2 Max	2.3	8.4	5E-06	1	2.4543	4.1	3.25
N1	D1	COL2 Min	-2.3	-8.4	-5E-06	1	2.4543	4.1	3.25
N1	D1	COL3 Max	7.6	2.5	1E-06	1	2.4543	4.1	3.25
N1	D1	COL3 Min	-7.6	-2.5	-1E-06	1	2.4543	4.1	3.25
N1	D1	COL4 Max	2.3	8.4	5E-06	1	2.4543	4.1	3.25
N1	D1	COL4 Min	-2.3	-8.4	-5E-06	1	2.4543	4.1	3.25
N1	D1	CIM09 Max	1.8	0.6	3.356E-07	1	2.4543	4.1	3.25
N1	D1	CIM09 Min	-1.8	-0.6	-3.356E-07	1	2.4543	4.1	3.25
N1	D1	CIM10 Max	0.5	1.9	1E-06	1	2.4543	4.1	3.25
N1	D1	CIM10 Min	-0.5	-1.9	-1E-06	1	2.4543	4.1	3.25
N1	D1	CIM11	-0.01411	0	0	1	2.4543	4.1	3.25
N1	D1	CIM12	-0.01674	0	0	1	2.4543	4.1	3.25
N1	D1	CIM13 Max	1.3	0.4	2.557E-07	1	2.4543	4.1	3.25
N1	D1	CIM13 Min	-1.4	-0.4	-2.557E-07	1	2.4543	4.1	3.25
N1	D1	CIM14 Max	0.4	1.5	1E-06	1	2.4543	4.1	3.25
N1	D1	CIM14 Min	-0.4	-1.5	-1E-06	1	2.4543	4.1	3.25
N1	D1	CIM15	-0.007203	0	0	1	2.4543	4.1	3.25
N1	D1	COMB9	-0.02219	0	0	1	2.4543	4.1	3.25
N1	D1	DER09	-0.02219	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD09	-0.02219	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD10	-0.02198	0	0	1	2.4543	4.1	3.25
N1	D1	DER10	-0.02198	0	0	1	2.4543	4.1	3.25
N1	D1	COMB10	-0.02198	0	0	1	2.4543	4.1	3.25
N1	D1	COMB11	-0.01967	0	0	1	2.4543	4.1	3.25
N1	D1	DER11	-0.01967	0	0	1	2.4543	4.1	3.25
N1	D1	DERUD11	-0.01967	0	0	1	2.4543	4.1	3.25

5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	X	0.01201	0.01201	1
N1	L	X	0.004209	0.004209	1
N1	EX Max	X	7.6	7.6	1
N1	EY Max	Y	8.4	8.4	1.001
N1	DISX Max	X	2.5	2.5	1
N1	DISY Max	Y	2.8	2.8	1.001
N1	G	X	0.002104	0.002104	1
N1	DERUX Max	X	1.2	1.2	1
N1	DERUY Max	Y	1.4	1.4	1.001
N1	COMB1	X	0.01681	0.01681	1
N1	COMB2	X	0.02114	0.02114	1
N1	COMB3	X	0.01862	0.01862	1
N1	COMB4	X	0.01862	0.01862	1
N1	COMB5 Max	X	2.5	2.5	1
N1	COMB5 Max	Y	0.8	0.8	1.001
N1	COMB5 Min	X	2.5	2.5	1
N1	COMB5 Min	Y	0.8	0.8	1.001
N1	COMB6 Max	X	0.7	0.7	1
N1	COMB6 Max	Y	2.8	2.8	1.001
N1	COMB6 Min	X	0.8	0.8	1
N1	COMB6 Min	Y	2.8	2.8	1.001
N1	COMB7 Max	X	0.8	0.8	1
N1	COMB7 Max	Y	2.8	2.8	1.001
N1	COMB7 Min	X	0.8	0.8	1
N1	COMB7 Min	Y	2.8	2.8	1.001

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	COMB8 Max	X	2.5	2.5	1
N1	COMB8 Max	Y	0.8	0.8	1.001
N1	COMB8 Min	X	2.5	2.5	1
N1	COMB8 Min	Y	0.8	0.8	1.001
N1	ENVE Max	X	2.5	2.5	1
N1	ENVE Max	Y	2.8	2.8	1.001
N1	ENVE Min	X	2.5	2.5	1
N1	ENVE Min	Y	2.8	2.8	1.001
N1	CIM01	X	0.01201	0.01201	1
N1	CIM02	X	0.01621	0.01621	1
N1	CIM03	X	0.01201	0.01201	1
N1	CIM04	X	0.01516	0.01516	1
N1	CIM05 Max	X	1.8	1.8	1
N1	CIM05 Max	Y	0.6	0.6	1.001
N1	CIM05 Min	X	1.8	1.8	1
N1	CIM05 Min	Y	0.6	0.6	1.001
N1	CIM06 Max	X	0.5	0.5	1
N1	CIM06 Max	Y	2	1.9	1.001
N1	CIM06 Min	X	0.5	0.5	1
N1	CIM06 Min	Y	2	1.9	1.001
N1	CIM07 Max	X	1.3	1.3	1
N1	CIM07 Max	Y	0.4	0.4	1.001
N1	CIM07 Min	X	1.4	1.4	1
N1	CIM07 Min	Y	0.4	0.4	1.001
N1	CIM08 Max	X	0.4	0.4	1
N1	CIM08 Max	Y	1.5	1.5	1.001
N1	CIM08 Min	X	0.4	0.4	1
N1	CIM08 Min	Y	1.5	1.5	1.001
N1	DER01	X	0.01681	0.01681	1
N1	DER02	X	0.02114	0.02114	1
N1	DER03	X	0.01862	0.01862	1
N1	DER04	X	0.01862	0.01862	1
N1	DER05 Max	X	7.6	7.6	1
N1	DER05 Min	X	7.6	7.6	1
N1	DER06 Max	Y	8.4	8.4	1.001
N1	DER06 Min	Y	8.4	8.4	1.001
N1	DER07 Max	X	7.6	7.6	1
N1	DER07 Min	X	7.6	7.6	1
N1	DER08 Max	Y	8.4	8.4	1.001
N1	DER08 Min	Y	8.4	8.4	1.001
N1	DERUD01	X	0.01681	0.01681	1
N1	DERUD02	X	0.02114	0.02114	1
N1	DERUD03	X	0.01862	0.01862	1
N1	DERUD04	X	0.01862	0.01862	1
N1	DERUD05 Max	X	1.2	1.2	1
N1	DERUD05 Min	X	1.3	1.3	1
N1	DERUD06 Max	Y	1.4	1.4	1.001
N1	DERUD06 Min	Y	1.4	1.4	1.001
N1	DERUD07 Max	X	1.2	1.2	1
N1	DERUD07 Min	X	1.3	1.3	1
N1	DERUD08 Max	Y	1.4	1.4	1.001
N1	DERUD08 Min	Y	1.4	1.4	1.001
N1	VIG01 Max	X	5	5	1
N1	VIG01 Max	Y	1.7	1.7	1.001
N1	VIG01 Min	X	5.1	5.1	1
N1	VIG01 Min	Y	1.7	1.7	1.001
N1	VIG02 Max	X	1.5	1.5	1
N1	VIG02 Max	Y	5.6	5.6	1.001
N1	VIG02 Min	X	1.5	1.5	1
N1	VIG02 Min	Y	5.6	5.6	1.001

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	VIG03 Max	X	5	5	1
N1	VIG03 Max	Y	1.7	1.7	1.001
N1	VIG03 Min	X	5.1	5.1	1
N1	VIG03 Min	Y	1.7	1.7	1.001
N1	VIG04 Max	X	1.5	1.5	1
N1	VIG04 Max	Y	5.6	5.6	1.001
N1	VIG04 Min	X	1.5	1.5	1
N1	VIG04 Min	Y	5.6	5.6	1.001
N1	COL1 Max	X	7.6	7.6	1
N1	COL1 Max	Y	2.5	2.5	1.001
N1	COL1 Min	X	7.6	7.6	1
N1	COL1 Min	Y	2.5	2.5	1.001
N1	COL2 Max	X	2.3	2.3	1
N1	COL2 Max	Y	8.4	8.4	1.001
N1	COL2 Min	X	2.3	2.3	1
N1	COL2 Min	Y	8.4	8.4	1.001
N1	COL3 Max	X	7.6	7.6	1
N1	COL3 Max	Y	2.5	2.5	1.001
N1	COL3 Min	X	7.6	7.6	1
N1	COL3 Min	Y	2.5	2.5	1.001
N1	COL4 Max	X	2.3	2.3	1
N1	COL4 Max	Y	8.4	8.4	1.001
N1	COL4 Min	X	2.3	2.3	1
N1	COL4 Min	Y	8.4	8.4	1.001
N1	CIM09 Max	X	1.8	1.8	1
N1	CIM09 Max	Y	0.6	0.6	1.001
N1	CIM09 Min	X	1.8	1.8	1
N1	CIM09 Min	Y	0.6	0.6	1.001
N1	CIM10 Max	X	0.5	0.5	1
N1	CIM10 Max	Y	2	1.9	1.001
N1	CIM10 Min	X	0.5	0.5	1
N1	CIM10 Min	Y	2	1.9	1.001
N1	CIM11	X	0.01411	0.01411	1
N1	CIM12	X	0.01674	0.01674	1
N1	CIM13 Max	X	1.3	1.3	1
N1	CIM13 Max	Y	0.4	0.4	1.001
N1	CIM13 Min	X	1.4	1.4	1
N1	CIM13 Min	Y	0.4	0.4	1.001
N1	CIM14 Max	X	0.4	0.4	1
N1	CIM14 Max	Y	1.5	1.5	1.001
N1	CIM14 Min	X	0.4	0.4	1
N1	CIM14 Min	Y	1.5	1.5	1.001
N1	CIM15	X	0.007203	0.007203	1
N1	COMB9	X	0.02219	0.02219	1
N1	DER09	X	0.02219	0.02219	1
N1	DERUD09	X	0.02219	0.02219	1
N1	DERUD10	X	0.02198	0.02198	1
N1	DER10	X	0.02198	0.02198	1
N1	COMB10	X	0.02198	0.02198	1
N1	COMB11	X	0.01967	0.01967	1
N1	DER11	X	0.01967	0.01967	1
N1	DERUD11	X	0.01967	0.01967	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	X	4E-06	3	4.9	0	3.25
N1	L	X	1E-06	4	4.9	8.2	3.25
N1	EX Max	X	0.002332	4	4.9	8.2	3.25
N1	EY Max	Y	0.002572	4	4.9	8.2	3.25



Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DISX Max	X	0.000777	4	4.9	8.2	3.25
N1	DISY Max	Y	0.000857	4	4.9	8.2	3.25
N1	G	X	1E-06	4	4.9	8.2	3.25
N1	DERUX Max	X	0.000384	4	4.9	8.2	3.25
N1	DERUY Max	Y	0.000436	4	4.9	8.2	3.25
N1	COMB1	X	5E-06	3	4.9	0	3.25
N1	COMB2	X	7E-06	3	4.9	0	3.25
N1	COMB3	X	6E-06	3	4.9	0	3.25
N1	COMB4	X	6E-06	3	4.9	0	3.25
N1	COMB5 Max	X	0.000772	4	4.9	8.2	3.25
N1	COMB5 Max	Y	0.000257	4	4.9	8.2	3.25
N1	COMB5 Min	X	0.000784	4	4.9	8.2	3.25
N1	COMB5 Min	Y	0.000257	4	4.9	8.2	3.25
N1	COMB6 Max	X	0.00023	3	4.9	0	3.25
N1	COMB6 Max	Y	0.000857	4	4.9	8.2	3.25
N1	COMB6 Min	X	0.000241	3	4.9	0	3.25
N1	COMB6 Min	Y	0.000857	4	4.9	8.2	3.25
N1	COMB7 Max	X	0.000232	3	4.9	0	3.25
N1	COMB7 Max	Y	0.000857	4	4.9	8.2	3.25
N1	COMB7 Min	X	0.000239	3	4.9	0	3.25
N1	COMB7 Min	Y	0.000857	4	4.9	8.2	3.25
N1	COMB8 Max	X	0.000775	4	4.9	8.2	3.25
N1	COMB8 Max	Y	0.000257	4	4.9	8.2	3.25
N1	COMB8 Min	X	0.000781	4	4.9	8.2	3.25
N1	COMB8 Min	Y	0.000257	4	4.9	8.2	3.25
N1	ENVE Max	X	0.000775	4	4.9	8.2	3.25
N1	ENVE Max	Y	0.000857	4	4.9	8.2	3.25
N1	ENVE Min	X	0.000784	4	4.9	8.2	3.25
N1	ENVE Min	Y	0.000857	4	4.9	8.2	3.25
N1	CIM01	X	4E-06	3	4.9	0	3.25
N1	CIM02	X	5E-06	3	4.9	0	3.25
N1	CIM03	X	4E-06	3	4.9	0	3.25
N1	CIM04	X	5E-06	3	4.9	0	3.25
N1	CIM05 Max	X	0.000541	4	4.9	8.2	3.25
N1	CIM05 Max	Y	0.00018	4	4.9	8.2	3.25
N1	CIM05 Min	X	0.000548	4	4.9	8.2	3.25
N1	CIM05 Min	Y	0.00018	4	4.9	8.2	3.25
N1	CIM06 Max	X	0.000161	3	4.9	0	3.25
N1	CIM06 Max	Y	0.0006	4	4.9	8.2	3.25
N1	CIM06 Min	X	0.000168	3	4.9	0	3.25
N1	CIM06 Min	Y	0.0006	4	4.9	8.2	3.25
N1	CIM07 Max	X	0.000408	4	4.9	8.2	3.25
N1	CIM07 Max	Y	0.000137	4	4.9	8.2	3.25
N1	CIM07 Min	X	0.000417	4	4.9	8.2	3.25
N1	CIM07 Min	Y	0.000137	4	4.9	8.2	3.25
N1	CIM08 Max	X	0.000121	3	4.9	0	3.25
N1	CIM08 Max	Y	0.000454	4	4.9	8.2	3.25
N1	CIM08 Min	X	0.00013	3	4.9	0	3.25
N1	CIM08 Min	Y	0.000454	4	4.9	8.2	3.25
N1	DER01	X	5E-06	3	4.9	0	3.25
N1	DER02	X	7E-06	3	4.9	0	3.25
N1	DER03	X	6E-06	3	4.9	0	3.25
N1	DER04	X	6E-06	3	4.9	0	3.25
N1	DER05 Max	X	0.002327	4	4.9	8.2	3.25
N1	DER05 Min	X	0.002338	4	4.9	8.2	3.25
N1	DER06 Max	Y	0.002572	4	4.9	8.2	3.25
N1	DER06 Min	Y	0.002572	4	4.9	8.2	3.25
N1	DER07 Max	X	0.002329	4	4.9	8.2	3.25
N1	DER07 Min	X	0.002336	4	4.9	8.2	3.25
N1	DER08 Max	Y	0.002572	4	4.9	8.2	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	DER08 Min	Y	0.002572	4	4.9	8.2	3.25
N1	DERUD01	X	5E-06	3	4.9	0	3.25
N1	DERUD02	X	7E-06	3	4.9	0	3.25
N1	DERUD03	X	6E-06	3	4.9	0	3.25
N1	DERUD04	X	6E-06	3	4.9	0	3.25
N1	DERUD05 Max	X	0.000378	4	4.9	8.2	3.25
N1	DERUD05 Min	X	0.000389	4	4.9	8.2	3.25
N1	DERUD06 Max	Y	0.000436	4	4.9	8.2	3.25
N1	DERUD06 Min	Y	0.000436	4	4.9	8.2	3.25
N1	DERUD07 Max	X	0.00038	4	4.9	8.2	3.25
N1	DERUD07 Min	X	0.000387	4	4.9	8.2	3.25
N1	DERUD08 Max	Y	0.000436	4	4.9	8.2	3.25
N1	DERUD08 Min	Y	0.000436	4	4.9	8.2	3.25
N1	VIG01 Max	X	0.00155	4	4.9	8.2	3.25
N1	VIG01 Max	Y	0.000514	4	4.9	8.2	3.25
N1	VIG01 Min	X	0.001562	4	4.9	8.2	3.25
N1	VIG01 Min	Y	0.000514	4	4.9	8.2	3.25
N1	VIG02 Max	X	0.000465	3	4.9	0	3.25
N1	VIG02 Max	Y	0.001715	4	4.9	8.2	3.25
N1	VIG02 Min	X	0.000476	3	4.9	0	3.25
N1	VIG02 Min	Y	0.001715	4	4.9	8.2	3.25
N1	VIG03 Max	X	0.001553	4	4.9	8.2	3.25
N1	VIG03 Max	Y	0.000514	4	4.9	8.2	3.25
N1	VIG03 Min	X	0.001559	4	4.9	8.2	3.25
N1	VIG03 Min	Y	0.000514	4	4.9	8.2	3.25
N1	VIG04 Max	X	0.000467	3	4.9	0	3.25
N1	VIG04 Max	Y	0.001715	4	4.9	8.2	3.25
N1	VIG04 Min	X	0.000474	3	4.9	0	3.25
N1	VIG04 Min	Y	0.001715	4	4.9	8.2	3.25
N1	COL1 Max	X	0.002328	4	4.9	8.2	3.25
N1	COL1 Max	Y	0.000772	4	4.9	8.2	3.25
N1	COL1 Min	X	0.00234	4	4.9	8.2	3.25
N1	COL1 Min	Y	0.000772	4	4.9	8.2	3.25
N1	COL2 Max	X	0.0007	3	4.9	0	3.25
N1	COL2 Max	Y	0.002572	4	4.9	8.2	3.25
N1	COL2 Min	X	0.000711	3	4.9	0	3.25
N1	COL2 Min	Y	0.002572	4	4.9	8.2	3.25
N1	COL3 Max	X	0.002331	4	4.9	8.2	3.25
N1	COL3 Max	Y	0.000772	4	4.9	8.2	3.25
N1	COL3 Min	X	0.002337	4	4.9	8.2	3.25
N1	COL3 Min	Y	0.000772	4	4.9	8.2	3.25
N1	COL4 Max	X	0.000702	3	4.9	0	3.25
N1	COL4 Max	Y	0.002572	4	4.9	8.2	3.25
N1	COL4 Min	X	0.000709	3	4.9	0	3.25
N1	COL4 Min	Y	0.002572	4	4.9	8.2	3.25
N1	CIM09 Max	X	0.000542	4	4.9	8.2	3.25
N1	CIM09 Max	Y	0.00018	4	4.9	8.2	3.25
N1	CIM09 Min	X	0.000547	4	4.9	8.2	3.25
N1	CIM09 Min	Y	0.00018	4	4.9	8.2	3.25
N1	CIM10 Max	X	0.000162	3	4.9	0	3.25
N1	CIM10 Max	Y	0.0006	4	4.9	8.2	3.25
N1	CIM10 Min	X	0.000167	3	4.9	0	3.25
N1	CIM10 Min	Y	0.0006	4	4.9	8.2	3.25
N1	CIM11	X	4E-06	3	4.9	0	3.25
N1	CIM12	X	5E-06	3	4.9	0	3.25
N1	CIM13 Max	X	0.000407	4	4.9	8.2	3.25
N1	CIM13 Max	Y	0.000137	4	4.9	8.2	3.25
N1	CIM13 Min	X	0.000418	4	4.9	8.2	3.25
N1	CIM13 Min	Y	0.000137	4	4.9	8.2	3.25
N1	CIM14 Max	X	0.00012	3	4.9	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM14 Max	Y	0.000454	4	4.9	8.2	3.25
N1	CIM14 Min	X	0.000131	3	4.9	0	3.25
N1	CIM14 Min	Y	0.000454	4	4.9	8.2	3.25
N1	CIM15	X	2E-06	3	4.9	0	3.25
N1	COMB9	X	7E-06	3	4.9	0	3.25
N1	DER09	X	7E-06	3	4.9	0	3.25
N1	DERUD09	X	7E-06	3	4.9	0	3.25
N1	DERUD10	X	7E-06	3	4.9	0	3.25
N1	DER10	X	7E-06	3	4.9	0	3.25
N1	COMB10	X	7E-06	3	4.9	0	3.25
N1	COMB11	X	6E-06	3	4.9	0	3.25
N1	DER11	X	6E-06	3	4.9	0	3.25
N1	DERUD11	X	6E-06	3	4.9	0	3.25

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	D	X	0.01201	0.01201	1
N1	L	X	0.004209	0.004209	1
N1	EX Max	X	7.6	7.6	1
N1	EY Max	Y	8.4	8.4	1.001
N1	DISX Max	X	2.5	2.5	1
N1	DISY Max	Y	2.8	2.8	1.001
N1	G	X	0.002104	0.002104	1
N1	DERUX Max	X	1.2	1.2	1
N1	DERUY Max	Y	1.4	1.4	1.001
N1	COMB1	X	0.01681	0.01681	1
N1	COMB2	X	0.02114	0.02114	1
N1	COMB3	X	0.01862	0.01862	1
N1	COMB4	X	0.01862	0.01862	1
N1	COMB5 Max	X	2.5	2.5	1
N1	COMB5 Max	Y	0.8	0.8	1.001
N1	COMB5 Min	X	2.5	2.5	1
N1	COMB5 Min	Y	0.8	0.8	1.001
N1	COMB6 Max	X	0.7	0.7	1
N1	COMB6 Max	Y	2.8	2.8	1.001
N1	COMB6 Min	X	0.8	0.8	1
N1	COMB6 Min	Y	2.8	2.8	1.001
N1	COMB7 Max	X	0.8	0.8	1
N1	COMB7 Max	Y	2.8	2.8	1.001
N1	COMB7 Min	X	0.8	0.8	1
N1	COMB7 Min	Y	2.8	2.8	1.001
N1	COMB8 Max	X	2.5	2.5	1
N1	COMB8 Max	Y	0.8	0.8	1.001
N1	COMB8 Min	X	2.5	2.5	1
N1	COMB8 Min	Y	0.8	0.8	1.001
N1	ENVE Max	X	2.5	2.5	1
N1	ENVE Max	Y	2.8	2.8	1.001
N1	ENVE Min	X	2.5	2.5	1
N1	ENVE Min	Y	2.8	2.8	1.001
N1	CIM01	X	0.01201	0.01201	1
N1	CIM02	X	0.01621	0.01621	1
N1	CIM03	X	0.01201	0.01201	1
N1	CIM04	X	0.01516	0.01516	1
N1	CIM05 Max	X	1.8	1.8	1
N1	CIM05 Max	Y	0.6	0.6	1.001
N1	CIM05 Min	X	1.8	1.8	1
N1	CIM05 Min	Y	0.6	0.6	1.001
N1	CIM06 Max	X	0.5	0.5	1
N1	CIM06 Max	Y	2	1.9	1.001

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM06 Min	X	0.5	0.5	1
N1	CIM06 Min	Y	2	1.9	1.001
N1	CIM07 Max	X	1.3	1.3	1
N1	CIM07 Max	Y	0.4	0.4	1.001
N1	CIM07 Min	X	1.4	1.4	1
N1	CIM07 Min	Y	0.4	0.4	1.001
N1	CIM08 Max	X	0.4	0.4	1
N1	CIM08 Max	Y	1.5	1.5	1.001
N1	CIM08 Min	X	0.4	0.4	1
N1	CIM08 Min	Y	1.5	1.5	1.001
N1	DER01	X	0.01681	0.01681	1
N1	DER02	X	0.02114	0.02114	1
N1	DER03	X	0.01862	0.01862	1
N1	DER04	X	0.01862	0.01862	1
N1	DER05 Max	X	7.6	7.6	1
N1	DER05 Min	X	7.6	7.6	1
N1	DER06 Max	Y	8.4	8.4	1.001
N1	DER06 Min	Y	8.4	8.4	1.001
N1	DER07 Max	X	7.6	7.6	1
N1	DER07 Min	X	7.6	7.6	1
N1	DER08 Max	Y	8.4	8.4	1.001
N1	DER08 Min	Y	8.4	8.4	1.001
N1	DERUD01	X	0.01681	0.01681	1
N1	DERUD02	X	0.02114	0.02114	1
N1	DERUD03	X	0.01862	0.01862	1
N1	DERUD04	X	0.01862	0.01862	1
N1	DERUD05 Max	X	1.2	1.2	1
N1	DERUD05 Min	X	1.3	1.3	1
N1	DERUD06 Max	Y	1.4	1.4	1.001
N1	DERUD06 Min	Y	1.4	1.4	1.001
N1	DERUD07 Max	X	1.2	1.2	1
N1	DERUD07 Min	X	1.3	1.3	1
N1	DERUD08 Max	Y	1.4	1.4	1.001
N1	DERUD08 Min	Y	1.4	1.4	1.001
N1	VIG01 Max	X	5	5	1
N1	VIG01 Max	Y	1.7	1.7	1.001
N1	VIG01 Min	X	5.1	5.1	1
N1	VIG01 Min	Y	1.7	1.7	1.001
N1	VIG02 Max	X	1.5	1.5	1
N1	VIG02 Max	Y	5.6	5.6	1.001
N1	VIG02 Min	X	1.5	1.5	1
N1	VIG02 Min	Y	5.6	5.6	1.001
N1	VIG03 Max	X	5	5	1
N1	VIG03 Max	Y	1.7	1.7	1.001
N1	VIG03 Min	X	5.1	5.1	1
N1	VIG03 Min	Y	1.7	1.7	1.001
N1	VIG04 Max	X	1.5	1.5	1
N1	VIG04 Max	Y	5.6	5.6	1.001
N1	VIG04 Min	X	1.5	1.5	1
N1	VIG04 Min	Y	5.6	5.6	1.001
N1	COL1 Max	X	7.6	7.6	1
N1	COL1 Max	Y	2.5	2.5	1.001
N1	COL1 Min	X	7.6	7.6	1
N1	COL1 Min	Y	2.5	2.5	1.001
N1	COL2 Max	X	2.3	2.3	1
N1	COL2 Max	Y	8.4	8.4	1.001
N1	COL2 Min	X	2.3	2.3	1
N1	COL2 Min	Y	8.4	8.4	1.001
N1	COL3 Max	X	7.6	7.6	1
N1	COL3 Max	Y	2.5	2.5	1.001

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	COL3 Min	X	7.6	7.6	1
N1	COL3 Min	Y	2.5	2.5	1.001
N1	COL4 Max	X	2.3	2.3	1
N1	COL4 Max	Y	8.4	8.4	1.001
N1	COL4 Min	X	2.3	2.3	1
N1	COL4 Min	Y	8.4	8.4	1.001
N1	CIM09 Max	X	1.8	1.8	1
N1	CIM09 Max	Y	0.6	0.6	1.001
N1	CIM09 Min	X	1.8	1.8	1
N1	CIM09 Min	Y	0.6	0.6	1.001
N1	CIM10 Max	X	0.5	0.5	1
N1	CIM10 Max	Y	2	1.9	1.001
N1	CIM10 Min	X	0.5	0.5	1
N1	CIM10 Min	Y	2	1.9	1.001
N1	CIM11	X	0.01411	0.01411	1
N1	CIM12	X	0.01674	0.01674	1
N1	CIM13 Max	X	1.3	1.3	1
N1	CIM13 Max	Y	0.4	0.4	1.001
N1	CIM13 Min	X	1.4	1.4	1
N1	CIM13 Min	Y	0.4	0.4	1.001
N1	CIM14 Max	X	0.4	0.4	1
N1	CIM14 Max	Y	1.5	1.5	1.001
N1	CIM14 Min	X	0.4	0.4	1
N1	CIM14 Min	Y	1.5	1.5	1.001
N1	CIM15	X	0.007203	0.007203	1
N1	COMB9	X	0.02219	0.02219	1
N1	DER09	X	0.02219	0.02219	1
N1	DERUD09	X	0.02219	0.02219	1
N1	DERUD10	X	0.02198	0.02198	1
N1	DER10	X	0.02198	0.02198	1
N1	COMB10	X	0.02198	0.02198	1
N1	COMB11	X	0.01967	0.01967	1
N1	DER11	X	0.01967	0.01967	1
N1	DERUD11	X	0.01967	0.01967	1

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	288.6892	0	0	0	1183.6257	-708.7375
N1	D	Bottom	337.694	0	0	0	1384.5454	-828.7955
N1	L	Top	80.36	0	0	0	329.476	-196.882
N1	L	Bottom	80.36	0	0	0	329.476	-196.8807
N1	LR	Top	0	0	0	0	0	0
N1	LR	Bottom	0	0	0	0	0	0
N1	EX Max	Top	0	324.0869	0	1328.7564	0	0
N1	EX Max	Bottom	0	324.0869	0	1328.7564	0	1055.6565
N1	EY Max	Top	0	0	324.0856	797.6879	0	0
N1	EY Max	Bottom	0	0	324.0856	797.6879	1055.8938	0
N1	DISX Max	Top	0	108.029	0	442.9188	0	0
N1	DISX Max	Bottom	0	108.029	0	442.9188	0	351.8855
N1	DISY Max	Top	0	0	108.0285	265.896	0	0
N1	DISY Max	Bottom	0	0	108.0285	265.896	351.9646	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	40.18	0	0	0	164.738	-98.441
N1	G	Bottom	40.18	0	0	0	164.738	-98.4403
N1	DERUX Max	Top	0	53.2992	0	218.5266	0	0
N1	DERUX Max	Bottom	0	53.2992	0	218.5266	0	173.6127
N1	DERUY Max	Top	0	0	54.9523	135.2753	0	0
N1	DERUY Max	Bottom	0	0	54.9523	135.2753	179.0386	0

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COMB1	Top	404.1649	0	0	0	1657.076	-992.2325
N1	COMB1	Bottom	472.7716	0	0	0	1938.3636	-1160.3137
N1	COMB2	Top	475.003	0	0	0	1947.5125	-1165.4962
N1	COMB2	Bottom	533.8088	0	0	0	2188.6161	-1309.5637
N1	COMB3	Top	426.787	0	0	0	1749.8269	-1047.367
N1	COMB3	Bottom	485.5928	0	0	0	1990.9305	-1191.4353
N1	COMB4	Top	426.787	0	0	0	1749.8269	-1047.367
N1	COMB4	Bottom	485.5928	0	0	0	1990.9305	-1191.4353
N1	COMB5 Max	Top	426.787	108.029	32.4086	522.6876	1749.8269	-1047.367
N1	COMB5 Max	Bottom	485.5928	108.029	32.4086	522.6876	2096.5199	-839.5497
N1	COMB5 Min	Top	426.787	-108.029	-32.4086	-522.6876	1749.8269	-1047.367
N1	COMB5 Min	Bottom	485.5928	-108.029	-32.4086	-522.6876	1885.3411	-1543.3208
N1	COMB6 Max	Top	426.787	32.4087	108.0285	398.7716	1749.8269	-1047.367
N1	COMB6 Max	Bottom	485.5928	32.4087	108.0285	398.7716	2342.8951	-1085.8696
N1	COMB6 Min	Top	426.787	-32.4087	-108.0285	-398.7716	1749.8269	-1047.367
N1	COMB6 Min	Bottom	485.5928	-32.4087	-108.0285	-398.7716	1638.9659	-1297.0009
N1	COMB7 Max	Top	259.8203	32.4087	108.0285	398.7716	1065.2631	-637.8637
N1	COMB7 Max	Bottom	303.9246	32.4087	108.0285	398.7716	1598.0555	-640.3503
N1	COMB7 Min	Top	259.8203	-32.4087	-108.0285	-398.7716	1065.2631	-637.8637
N1	COMB7 Min	Bottom	303.9246	-32.4087	-108.0285	-398.7716	894.1262	-851.4816
N1	COMB8 Max	Top	259.8203	108.029	32.4086	522.6876	1065.2631	-637.8637
N1	COMB8 Max	Bottom	303.9246	108.029	32.4086	522.6876	1351.6802	-394.0304
N1	COMB8 Min	Top	259.8203	-108.029	-32.4086	-522.6876	1065.2631	-637.8637
N1	COMB8 Min	Bottom	303.9246	-108.029	-32.4086	-522.6876	1140.5015	-1097.8014
N1	ENVE Max	Top	475.003	108.029	108.0285	522.6876	1947.5125	-637.8637
N1	ENVE Max	Bottom	533.8088	108.029	108.0285	522.6876	2342.8951	-394.0304
N1	ENVE Min	Top	259.8203	-108.029	-108.0285	-522.6876	1065.2631	-1165.4962
N1	ENVE Min	Bottom	303.9246	-108.029	-108.0285	-522.6876	894.1262	-1543.3208
N1	CIM01	Top	288.6892	0	0	0	1183.6257	-708.7375
N1	CIM01	Bottom	337.694	0	0	0	1384.5454	-828.7955
N1	CIM02	Top	369.0492	0	0	0	1513.1017	-905.6195
N1	CIM02	Bottom	418.054	0	0	0	1714.0214	-1025.6762
N1	CIM03	Top	288.6892	0	0	0	1183.6257	-708.7375
N1	CIM03	Bottom	337.694	0	0	0	1384.5454	-828.7955
N1	CIM04	Top	348.9592	0	0	0	1430.7327	-856.399
N1	CIM04	Bottom	397.964	0	0	0	1631.6524	-976.456
N1	CIM05 Max	Top	288.6892	75.6203	22.686	365.8813	1183.6257	-708.7375
N1	CIM05 Max	Bottom	337.694	75.6203	22.686	365.8813	1458.458	-582.4756
N1	CIM05 Min	Top	288.6892	-75.6203	-22.686	-365.8813	1183.6257	-708.7375
N1	CIM05 Min	Bottom	337.694	-75.6203	-22.686	-365.8813	1310.6328	-1075.1153
N1	CIM06 Max	Top	288.6892	22.6861	75.62	279.1401	1183.6257	-708.7375
N1	CIM06 Max	Bottom	337.694	22.6861	75.62	279.1401	1630.9206	-754.8995
N1	CIM06 Min	Top	288.6892	-22.6861	-75.62	-279.1401	1183.6257	-708.7375
N1	CIM06 Min	Bottom	337.694	-22.6861	-75.62	-279.1401	1138.1702	-902.6914
N1	CIM07 Max	Top	348.9592	57.2554	17.2846	277.2903	1430.7327	-856.399
N1	CIM07 Max	Bottom	397.964	57.2554	17.2846	277.2903	1687.9667	-789.9567
N1	CIM07 Min	Top	348.9592	-57.2554	-17.2846	-277.2903	1430.7327	-856.399
N1	CIM07 Min	Bottom	397.964	-57.2554	-17.2846	-277.2903	1575.3381	-1162.9553
N1	CIM08 Max	Top	348.9592	17.2846	57.2551	211.7919	1430.7327	-856.399
N1	CIM08 Max	Bottom	397.964	17.2846	57.2551	211.7919	1818.1936	-920.1543
N1	CIM08 Min	Top	348.9592	-17.2846	-57.2551	-211.7919	1430.7327	-856.399
N1	CIM08 Min	Bottom	397.964	-17.2846	-57.2551	-211.7919	1445.1112	-1032.7577
N1	DER01	Top	404.1649	0	0	0	1657.076	-992.2325
N1	DER01	Bottom	472.7716	0	0	0	1938.3636	-1160.3137
N1	DER02	Top	475.003	0	0	0	1947.5125	-1165.4962
N1	DER02	Bottom	533.8088	0	0	0	2188.6161	-1309.5637
N1	DER03	Top	426.787	0	0	0	1749.8269	-1047.367
N1	DER03	Bottom	485.5928	0	0	0	1990.9305	-1191.4353
N1	DER04	Top	426.787	0	0	0	1749.8269	-1047.367
N1	DER04	Bottom	485.5928	0	0	0	1990.9305	-1191.4353

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DER05 Max	Top	426.787	324.0869	0	1328.7564	1749.8269	-1047.367
N1	DER05 Max	Bottom	485.5928	324.0869	0	1328.7564	1990.9305	-135.7787
N1	DER05 Min	Top	426.787	-324.0869	0	-1328.7564	1749.8269	-1047.367
N1	DER05 Min	Bottom	485.5928	-324.0869	0	-1328.7564	1990.9305	-2247.0918
N1	DER06 Max	Top	426.787	0	324.0856	797.6879	1749.8269	-1047.367
N1	DER06 Max	Bottom	485.5928	0	324.0856	797.6879	3046.8243	-1191.4353
N1	DER06 Min	Top	426.787	0	-324.0856	-797.6879	1749.8269	-1047.367
N1	DER06 Min	Bottom	485.5928	0	-324.0856	-797.6879	935.0366	-1191.4353
N1	DER07 Max	Top	259.8203	324.0869	0	1328.7564	1065.2631	-637.8637
N1	DER07 Max	Bottom	303.9246	324.0869	0	1328.7564	1246.0909	309.7406
N1	DER07 Min	Top	259.8203	-324.0869	0	-1328.7564	1065.2631	-637.8637
N1	DER07 Min	Bottom	303.9246	-324.0869	0	-1328.7564	1246.0909	-1801.5725
N1	DER08 Max	Top	259.8203	0	324.0856	797.6879	1065.2631	-637.8637
N1	DER08 Max	Bottom	303.9246	0	324.0856	797.6879	2301.9847	-745.9159
N1	DER08 Min	Top	259.8203	0	-324.0856	-797.6879	1065.2631	-637.8637
N1	DER08 Min	Bottom	303.9246	0	-324.0856	-797.6879	190.197	-745.9159
N1	DERUD01	Top	404.1649	0	0	0	1657.076	-992.2325
N1	DERUD01	Bottom	472.7716	0	0	0	1938.3636	-1160.3137
N1	DERUD02	Top	475.003	0	0	0	1947.5125	-1165.4962
N1	DERUD02	Bottom	533.8088	0	0	0	2188.6161	-1309.5637
N1	DERUD03	Top	426.787	0	0	0	1749.8269	-1047.367
N1	DERUD03	Bottom	485.5928	0	0	0	1990.9305	-1191.4353
N1	DERUD04	Top	426.787	0	0	0	1749.8269	-1047.367
N1	DERUD04	Bottom	485.5928	0	0	0	1990.9305	-1191.4353
N1	DERUD05 Max	Top	426.787	53.2992	0	218.5266	1749.8269	-1047.367
N1	DERUD05 Max	Bottom	485.5928	53.2992	0	218.5266	1990.9305	-1017.8226
N1	DERUD05 Min	Top	426.787	-53.2992	0	-218.5266	1749.8269	-1047.367
N1	DERUD05 Min	Bottom	485.5928	-53.2992	0	-218.5266	1990.9305	-1365.048
N1	DERUD06 Max	Top	426.787	0	54.9523	135.2753	1749.8269	-1047.367
N1	DERUD06 Max	Bottom	485.5928	0	54.9523	135.2753	2169.9691	-1191.4353
N1	DERUD06 Min	Top	426.787	0	-54.9523	-135.2753	1749.8269	-1047.367
N1	DERUD06 Min	Bottom	485.5928	0	-54.9523	-135.2753	1811.8919	-1191.4353
N1	DERUD07 Max	Top	259.8203	53.2992	0	218.5266	1065.2631	-637.8637
N1	DERUD07 Max	Bottom	303.9246	53.2992	0	218.5266	1246.0909	-572.3032
N1	DERUD07 Min	Top	259.8203	-53.2992	0	-218.5266	1065.2631	-637.8637
N1	DERUD07 Min	Bottom	303.9246	-53.2992	0	-218.5266	1246.0909	-919.5286
N1	DERUD08 Max	Top	259.8203	0	54.9523	135.2753	1065.2631	-637.8637
N1	DERUD08 Max	Bottom	303.9246	0	54.9523	135.2753	1425.1294	-745.9159
N1	DERUD08 Min	Top	259.8203	0	-54.9523	-135.2753	1065.2631	-637.8637
N1	DERUD08 Min	Bottom	303.9246	0	-54.9523	-135.2753	1067.0523	-745.9159
N1	VIG01 Max	Top	426.787	216.058	64.8171	1045.3752	1749.8269	-1047.367
N1	VIG01 Max	Bottom	485.5928	216.058	64.8171	1045.3752	2202.1092	-487.6642
N1	VIG01 Min	Top	426.787	-216.058	-64.8171	-1045.3752	1749.8269	-1047.367
N1	VIG01 Min	Bottom	485.5928	-216.058	-64.8171	-1045.3752	1779.7517	-1895.2063
N1	VIG02 Max	Top	426.787	64.8174	216.0571	797.5432	1749.8269	-1047.367
N1	VIG02 Max	Bottom	485.5928	64.8174	216.0571	797.5432	2694.8597	-980.304
N1	VIG02 Min	Top	426.787	-64.8174	-216.0571	-797.5432	1749.8269	-1047.367
N1	VIG02 Min	Bottom	485.5928	-64.8174	-216.0571	-797.5432	1287.0012	-1402.5666
N1	VIG03 Max	Top	259.8203	216.058	64.8171	1045.3752	1065.2631	-637.8637
N1	VIG03 Max	Bottom	303.9246	216.058	64.8171	1045.3752	1457.2696	-42.1449
N1	VIG03 Min	Top	259.8203	-216.058	-64.8171	-1045.3752	1065.2631	-637.8637
N1	VIG03 Min	Bottom	303.9246	-216.058	-64.8171	-1045.3752	1034.9121	-1449.687
N1	VIG04 Max	Top	259.8203	64.8174	216.0571	797.5432	1065.2631	-637.8637
N1	VIG04 Max	Bottom	303.9246	64.8174	216.0571	797.5432	1950.0201	-534.7846
N1	VIG04 Min	Top	259.8203	-64.8174	-216.0571	-797.5432	1065.2631	-637.8637
N1	VIG04 Min	Bottom	303.9246	-64.8174	-216.0571	-797.5432	542.1616	-957.0472
N1	COL1 Max	Top	426.787	324.0869	97.2257	1568.0628	1749.8269	-1047.367
N1	COL1 Max	Bottom	485.5928	324.0869	97.2257	1568.0628	2307.6986	-135.7787
N1	COL1 Min	Top	426.787	-324.0869	-97.2257	-1568.0628	1749.8269	-1047.367
N1	COL1 Min	Bottom	485.5928	-324.0869	-97.2257	-1568.0628	1674.1623	-2247.0918

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COL2 Max	Top	426.787	97.2261	324.0856	1196.3149	1749.8269	-1047.367
N1	COL2 Max	Bottom	485.5928	97.2261	324.0856	1196.3149	3046.8243	-874.7383
N1	COL2 Min	Top	426.787	-97.2261	-324.0856	-1196.3149	1749.8269	-1047.367
N1	COL2 Min	Bottom	485.5928	-97.2261	-324.0856	-1196.3149	935.0366	-1508.1322
N1	COL3 Max	Top	259.8203	324.0869	97.2257	1568.0628	1065.2631	-637.8637
N1	COL3 Max	Bottom	303.9246	324.0869	97.2257	1568.0628	1562.859	309.7406
N1	COL3 Min	Top	259.8203	-324.0869	-97.2257	-1568.0628	1065.2631	-637.8637
N1	COL3 Min	Bottom	303.9246	-324.0869	-97.2257	-1568.0628	929.3227	-1801.5725
N1	COL4 Max	Top	259.8203	97.2261	324.0856	1196.3149	1065.2631	-637.8637
N1	COL4 Max	Bottom	303.9246	97.2261	324.0856	1196.3149	2301.9847	-429.219
N1	COL4 Min	Top	259.8203	-97.2261	-324.0856	-1196.3149	1065.2631	-637.8637
N1	COL4 Min	Bottom	303.9246	-97.2261	-324.0856	-1196.3149	190.197	-1062.6129
N1	CIM09 Max	Top	173.2135	75.6203	22.686	365.8813	710.1754	-425.2425
N1	CIM09 Max	Bottom	202.6164	75.6203	22.686	365.8813	904.6398	-250.9574
N1	CIM09 Min	Top	173.2135	-75.6203	-22.686	-365.8813	710.1754	-425.2425
N1	CIM09 Min	Bottom	202.6164	-75.6203	-22.686	-365.8813	756.8147	-743.5971
N1	CIM10 Max	Top	173.2135	22.6861	75.62	279.1401	710.1754	-425.2425
N1	CIM10 Max	Bottom	202.6164	22.6861	75.62	279.1401	1077.1025	-423.3813
N1	CIM10 Min	Top	173.2135	-22.6861	-75.62	-279.1401	710.1754	-425.2425
N1	CIM10 Min	Bottom	202.6164	-22.6861	-75.62	-279.1401	584.352	-571.1732
N1	CIM11	Top	328.8692	0	0	0	1348.3637	-807.1785
N1	CIM11	Bottom	377.874	0	0	0	1549.2834	-927.2358
N1	CIM12	Top	379.0942	0	0	0	1554.2862	-930.2297
N1	CIM12	Bottom	428.099	0	0	0	1755.2059	-1050.2862
N1	CIM13 Max	Top	379.0942	57.2554	17.2846	277.2903	1554.2862	-930.2297
N1	CIM13 Max	Bottom	428.099	57.2554	17.2846	277.2903	1811.5202	-863.7869
N1	CIM13 Min	Top	379.0942	-57.2554	-17.2846	-277.2903	1554.2862	-930.2297
N1	CIM13 Min	Bottom	428.099	-57.2554	-17.2846	-277.2903	1698.8916	-1236.7856
N1	CIM14 Max	Top	379.0942	17.2846	57.2551	211.7919	1554.2862	-930.2297
N1	CIM14 Max	Bottom	428.099	17.2846	57.2551	211.7919	1941.7471	-993.9846
N1	CIM14 Min	Top	379.0942	-17.2846	-57.2551	-211.7919	1554.2862	-930.2297
N1	CIM14 Min	Bottom	428.099	-17.2846	-57.2551	-211.7919	1568.6647	-1106.5879
N1	CIM15	Top	173.2135	0	0	0	710.1754	-425.2425
N1	CIM15	Bottom	202.6164	0	0	0	830.7272	-497.2773
N1	COMB9	Top	495.093	0	0	0	2029.8815	-1214.7167
N1	COMB9	Bottom	553.8988	0	0	0	2270.9851	-1358.7838
N1	DER09	Top	495.093	0	0	0	2029.8815	-1214.7167
N1	DER09	Bottom	553.8988	0	0	0	2270.9851	-1358.7838
N1	DERUD09	Top	495.093	0	0	0	2029.8815	-1214.7167
N1	DERUD09	Bottom	553.8988	0	0	0	2270.9851	-1358.7838
N1	DERUD10	Top	491.075	0	0	0	2013.4077	-1204.8726
N1	DERUD10	Bottom	549.8808	0	0	0	2254.5113	-1348.9398
N1	DER10	Top	491.075	0	0	0	2013.4077	-1204.8726
N1	DER10	Bottom	549.8808	0	0	0	2254.5113	-1348.9398
N1	COMB10	Top	491.075	0	0	0	2013.4077	-1204.8726
N1	COMB10	Bottom	549.8808	0	0	0	2254.5113	-1348.9398
N1	COMB11	Top	446.877	0	0	0	1832.1959	-1096.5875
N1	COMB11	Bottom	505.6828	0	0	0	2073.2995	-1240.6554
N1	DER11	Top	446.877	0	0	0	1832.1959	-1096.5875
N1	DER11	Bottom	505.6828	0	0	0	2073.2995	-1240.6554
N1	DERUD11	Top	446.877	0	0	0	1832.1959	-1096.5875
N1	DERUD11	Bottom	505.6828	0	0	0	2073.2995	-1240.6554

5.3 Modal Results

Table 5.8 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.187	5.346	33.5891	1128.2294
Modal	2	0.178	5.611	35.2571	1243.0646



Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	3	0.166	6.022	37.8343	1431.4377

**Table 5.9 - Modal Participating Mass Ratios (Part 1 of 2)**

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.187	0	1	0	0	1	0
Modal	2	0.178	1	0	0	1	1	0
Modal	3	0.166	0	6.976E-06	0	1	1	0

**Table 5.9 - Modal Participating Mass Ratios (Part 2 of 2)**

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	1	0	7.319E-06	1	0	7.319E-06
Modal	2	0	1	0	1	1	7.319E-06
Modal	3	6.976E-06	0	1	1	1	1

**Table 5.10 - Modal Load Participation Ratios**

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

**Table 5.11 - Modal Direction Factors**

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.187	0	1	0	0
Modal	2	0.178	1	0	0	0
Modal	3	0.166	0	0	0	1

## 6 Design Data

This chapter provides design data and results.

### 6.1 Concrete Frame Design

**Table 6.1 - Concrete Frame Preferences - ACI 318-08**

Item	Value
Multi-Response Design	Step-by-Step
Seismic Design Category	D
# Interaction Curves	24
# Interaction Points	11
Minimum Eccentricity	Yes
Phi (Tension)	0.9
Phi (Compression Tied)	0.65
Phi (Compression Spiral)	0.7
Phi (Shear and Torsion)	0.85
Phi (Shear Seismic)	0.6
Phi (Shear Joint)	0.85
Pattern Live Load Factor	0.75
D/C Ratio Limit	0.95

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor	KMajor	KMinor	CmMajor	CmMinor
N1	C1	7	Column	Program Determined	1	0.846154	0.846154	1	1	1	1

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 2 of 2)**

Story	Label	Unique Name	DnsMajor	DnsMinor	DsMajor	DsMinor
N1	C1	7	1	1	1	1

**Table 6.3 - Concrete Column PMM Envelope**

Label	Story	Section	Location	P kN	M Major kN-m	M Minor kN-m	PMM Combo	PMM Ratio or Rebar %
C1	N1	C40X40	Top	113.7343	33.844	62.8562	COMB11	1 %
C1	N1	C40X40	Bottom	121.1981	3.3014	1.5019	COMB11	1 %

**Table 6.4 - Concrete Column Shear Envelope**

Label	Story	Section	Location	V Major kN	Major Combo	At Major cm <sup>2</sup> /m	V Minor kN	Minor Combo	At Minor cm <sup>2</sup> /m
C1	N1	C40X40	Top	48.4651	COMB8	3.33	41.084	COMB10	3.33
C1	N1	C40X40	Bottom	48.4651	COMB8	3.33	41.084	COMB10	3.33

**Table 6.5 - Concrete Joint Envelope**

Label	Story	Section	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio
C1	N1	C40X40								

**Table 6.6 - Concrete Column Summary - ACI 318-08 (Part 1 of 2)**

Story	Label	Unique Name	Station mm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm <sup>2</sup>	As cm <sup>2</sup>
N1	C1	7	0	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	275	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	550	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	825	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1100	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1375	C40X40	Design	No Message		COMB11	16	16

Story	Label	Unique Name	Station mm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm <sup>2</sup>	As cm <sup>2</sup>
N1	C1	7	1650	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1925	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2200	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2475	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2750	C40X40	Design	No Message		COMB11	16	16

Table 6.6 - Concrete Column Summary - ACI 318-08 (Part 2 of 2)

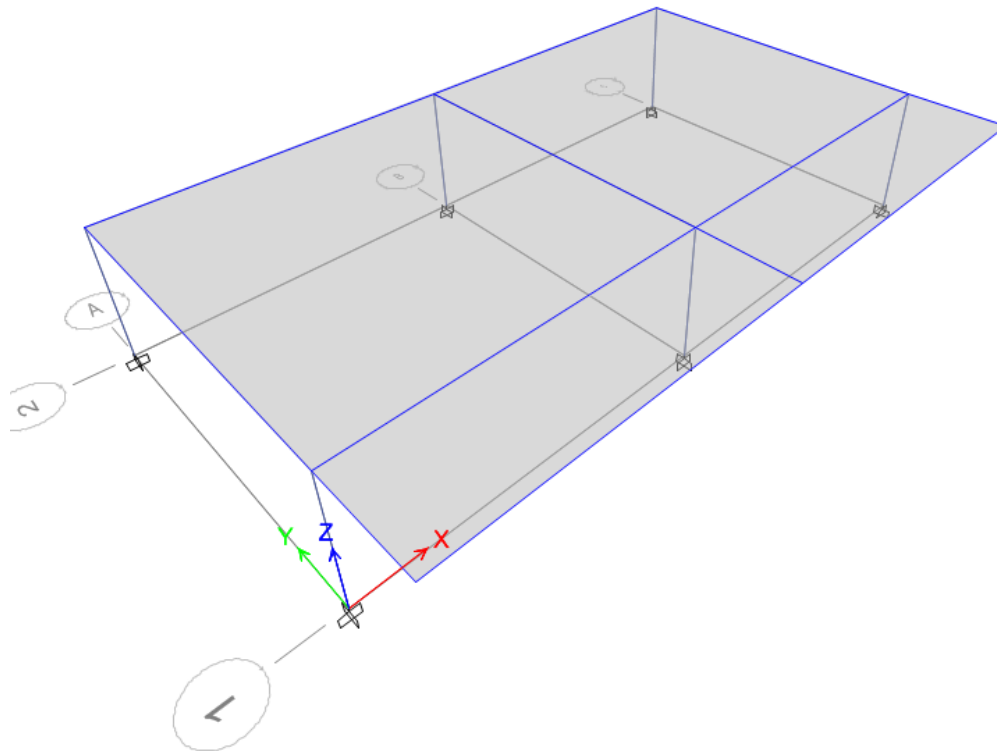
Story	Label	Unique Name	Station mm	Mid Bar As cm <sup>2</sup>	Corner Bar As cm <sup>2</sup>	V Major Combo	At V Major cm <sup>2</sup> /m	V Minor Combo	At V Minor cm <sup>2</sup> /m	Warnings	Errors
N1	C1	7	0	2	2	COMB8	3.33	COMB9	3.33	No Message	No Message
N1	C1	7	275	2	2	COMB8	3.33	COMB9	3.33	No Message	No Message
N1	C1	7	550	2	2	COMB8	3.33	COMB9	3.33	No Message	No Message
N1	C1	7	825	2	2	COMB8	3.33	COMB9	3.33	No Message	No Message
N1	C1	7	1100	2	2	COMB8	3.33	COMB10	3.33	No Message	No Message
N1	C1	7	1375	2	2	COMB8	3.33	COMB10	3.33	No Message	No Message
N1	C1	7	1650	2	2	COMB8	3.33	COMB10	3.33	No Message	No Message
N1	C1	7	1925	2	2	COMB8	3.33	COMB10	3.33	No Message	No Message
N1	C1	7	2200	2	2	COMB8	3.33	COMB10	3.33	No Message	No Message
N1	C1	7	2475	2	2	COMB8	3.33	COMB10	3.33	No Message	No Message
N1	C1	7	2750	2	2	COMB8	3.33	COMB10	3.33	No Message	No Message

Table 6.7 - Concrete Joint Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Design Section	Status	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio
N1	C1	7	C40X40	Joint check not done.				

Table 6.7 - Concrete Joint Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio	Warnings	Errors
N1	C1	7					No Message	No Message



## Project Report

Model File: 004 2017 EDUCACION MODULO 2A DMO - E, Revision 0  
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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	8.2
G1	X	C	Yes	End	16.4
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	8200	0	0
4	8200	8200	0
5	16400	0	0
6	16400	8200	0
10	0	-2400	0
8	16400	-2400	0
9	8200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below
C5	5	5	Below
C6	6	6	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None



Beam	I-End Point	J-End Point	Curve Type
B2	3	4	None
B3	5	6	None
B4	1	3	None
B5	3	5	None
B6	2	4	None
B7	4	6	None
B8	10	1	None
B14	8	5	None
B15	10	9	None
B16	9	8	None
B17	9	3	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F2	4	1	1	5	None
		2	5	6	None
		3	6	2	None
		4	2	1	None
F3	4	1	10	8	None
		2	8	5	None
		3	5	1	None
		4	1	10	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	55714.78	55714.78	8.2	-0.7562	55714.78	55714.78	8.2	-0.7562	8.2	3.4372

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	55714.78	55714.78	2078.5227	8.2	-0.7562

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	73654.51	73654.51	0
Base	3747.82	3747.82	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A416Gr270	Tendon	196500.6	0	76.9729	Fy=1689.91 MPa, Fu=1861.58 MPa
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 2.5 Tendon Sections

**Table 2.5 - Tendon Section Properties**

Name	Material	StrandArea cm <sup>2</sup>	Color
Tendon1	A416Gr270	1	Yellow

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restrains
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	5	10	D1	
N1	6	20	Disconnected	
N1	10	25	D1	
N1	8	27	D1	
N1	9	26	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	5	19	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	6	21	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	C5	11	Column	3250	C40X40	C40X40	11
N1	C6	12	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	8200	V30X50	V30X50	11
N1	B2	14	Beam	8200	V30X50	V30X50	11
N1	B3	15	Beam	8200	V30X50	V30X50	11
N1	B4	16	Beam	8200	V30X50	V30X50	11
N1	B5	17	Beam	8200	V30X50	V30X50	11
N1	B6	18	Beam	8200	V30X50	V30X50	11
N1	B7	19	Beam	8200	V30X50	V30X50	11
N1	B8	2	Beam	2400	V30X50	V30X50	11
N1	B14	6	Beam	2400	V30X50	V30X50	11
N1	B15	22	Beam	8200	VB20X50	VB20X50	11
N1	B16	23	Beam	8200	VB20X50	VB20X50	11
N1	B17	4	Beam	2400	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F2	2	CUB	
N1	F3	1	LOSA	90

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

Table 4.1 - Load Patterns

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

Table 4.2 - Frame Loads - Distributed (Part 1 of 2)

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200
N1	B3	15	Beam	D	Force	Gravity	0	1	0	8200
N1	B4	16	Beam	D	Force	Gravity	0	1	0	8200
N1	B5	17	Beam	D	Force	Gravity	0	1	0	8200
N1	B15	22	Beam	D	Force	Gravity	0	1	0	8200
N1	B16	23	Beam	D	Force	Gravity	0	1	0	8200

Table 4.2 - Frame Loads - Distributed (Part 2 of 2)

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N1	B1	13	4.4	0
N1	B2	14	4.4	0
N1	B3	15	4.4	0
N1	B4	16	4.4	4.4
N1	B5	17	4.4	4.4
N1	B15	22	1.55	1.55
N1	B16	23	1.55	1.55

#### 4.2.2 Area Loads

Table 4.3 - Shell Loads - Uniform

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F2	2	D	Gravity	0.64
N1	F3	1	D	Gravity	4.3
N1	F3	1	L	Gravity	2
N1	F2	2	LR	Gravity	0.5
N1	F2	2	G	Gravity	1
N1	F3	1	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

Table 4.4 - Response Spectrum Function - User

Name	Period sec	Acceleration	Damping %
Umbral	0	0.08	2
Umbral	0.01	0.086	
Umbral	0.02	0.093	
Umbral	0.03	0.099	
Umbral	0.04	0.106	
Umbral	0.05	0.112	
Umbral	0.06	0.118	
Umbral	0.07	0.125	
Umbral	0.08	0.131	
Umbral	0.09	0.138	
Umbral	0.1	0.144	
Umbral	0.11	0.15	
Umbral	0.12	0.157	
Umbral	0.13	0.163	
Umbral	0.14	0.17	
Umbral	0.15	0.176	
Umbral	0.16	0.182	
Umbral	0.17	0.189	
Umbral	0.18	0.195	
Umbral	0.19	0.202	
Umbral	0.2	0.208	
Umbral	0.21	0.214	
Umbral	0.22	0.221	
Umbral	0.23	0.227	
Umbral	0.24	0.234	
Umbral	0.25	0.24	
Umbral	0.26	0.24	
Umbral	0.27	0.24	
Umbral	0.28	0.24	
Umbral	0.29	0.24	
Umbral	0.3	0.24	
Umbral	0.31	0.24	
Umbral	0.32	0.24	
Umbral	0.33	0.24	
Umbral	0.34	0.24	
Umbral	0.35	0.24	
Umbral	0.36	0.24	
Umbral	0.37	0.24	
Umbral	0.38	0.24	
Umbral	0.39	0.24	
Umbral	0.4	0.24	
Umbral	0.41	0.24	
Umbral	0.42	0.24	
Umbral	0.43	0.24	
Umbral	0.44	0.24	
Umbral	0.45	0.24	
Umbral	0.46	0.24	
Umbral	0.47	0.24	
Umbral	0.48	0.24	
Umbral	0.49	0.24	
Umbral	0.5	0.24	
Umbral	0.51	0.24	
Umbral	0.52	0.24	
Umbral	0.53	0.24	
Umbral	0.54	0.24	
Umbral	0.55	0.24	
Umbral	0.56	0.24	
Umbral	0.57	0.24	
Umbral	0.58	0.24	
Umbral	0.59	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	0.6	0.24	
Umbral	0.61	0.24	
Umbral	0.62	0.24	
Umbral	0.63	0.24	
Umbral	0.64	0.24	
Umbral	0.65	0.24	
Umbral	0.66	0.24	
Umbral	0.67	0.24	
Umbral	0.68	0.24	
Umbral	0.69	0.24	
Umbral	0.7	0.24	
Umbral	0.71	0.24	
Umbral	0.72	0.24	
Umbral	0.73	0.24	
Umbral	0.74	0.24	
Umbral	0.75	0.24	
Umbral	0.76	0.24	
Umbral	0.77	0.24	
Umbral	0.78	0.24	
Umbral	0.79	0.24	
Umbral	0.8	0.24	
Umbral	0.81	0.24	
Umbral	0.82	0.24	
Umbral	0.83	0.24	
Umbral	0.84	0.24	
Umbral	0.85	0.24	
Umbral	0.86	0.24	
Umbral	0.87	0.24	
Umbral	0.88	0.24	
Umbral	0.89	0.24	
Umbral	0.9	0.24	
Umbral	0.91	0.24	
Umbral	0.92	0.24	
Umbral	0.93	0.24	
Umbral	0.94	0.24	
Umbral	0.95	0.24	
Umbral	0.96	0.24	
Umbral	0.97	0.24	
Umbral	0.98	0.24	
Umbral	0.99	0.24	
Umbral	1	0.24	
Umbral	1.01	0.24	
Umbral	1.02	0.24	
Umbral	1.03	0.24	
Umbral	1.04	0.24	
Umbral	1.05	0.24	
Umbral	1.06	0.24	
Umbral	1.07	0.24	
Umbral	1.08	0.24	
Umbral	1.09	0.24	
Umbral	1.1	0.24	
Umbral	1.11	0.24	
Umbral	1.12	0.24	
Umbral	1.13	0.24	
Umbral	1.14	0.24	
Umbral	1.15	0.24	
Umbral	1.16	0.24	
Umbral	1.17	0.24	
Umbral	1.18	0.24	
Umbral	1.19	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.2	0.24	
Umbral	1.21	0.24	
Umbral	1.22	0.24	
Umbral	1.23	0.24	
Umbral	1.24	0.24	
Umbral	1.25	0.24	
Umbral	1.26	0.24	
Umbral	1.27	0.24	
Umbral	1.28	0.24	
Umbral	1.29	0.24	
Umbral	1.3	0.24	
Umbral	1.31	0.24	
Umbral	1.32	0.24	
Umbral	1.33	0.24	
Umbral	1.34	0.24	
Umbral	1.35	0.24	
Umbral	1.36	0.24	
Umbral	1.37	0.24	
Umbral	1.38	0.24	
Umbral	1.39	0.24	
Umbral	1.4	0.24	
Umbral	1.41	0.24	
Umbral	1.42	0.24	
Umbral	1.43	0.24	
Umbral	1.44	0.24	
Umbral	1.45	0.24	
Umbral	1.46	0.24	
Umbral	1.47	0.24	
Umbral	1.48	0.24	
Umbral	1.49	0.24	
Umbral	1.5	0.24	
Umbral	1.51	0.24	
Umbral	1.52	0.24	
Umbral	1.53	0.24	
Umbral	1.54	0.24	
Umbral	1.55	0.24	
Umbral	1.56	0.24	
Umbral	1.57	0.24	
Umbral	1.58	0.24	
Umbral	1.59	0.24	
Umbral	1.6	0.24	
Umbral	1.61	0.24	
Umbral	1.62	0.24	
Umbral	1.63	0.24	
Umbral	1.64	0.24	
Umbral	1.65	0.24	
Umbral	1.66	0.24	
Umbral	1.67	0.24	
Umbral	1.68	0.24	
Umbral	1.69	0.24	
Umbral	1.7	0.24	
Umbral	1.71	0.24	
Umbral	1.72	0.24	
Umbral	1.73	0.24	
Umbral	1.74	0.24	
Umbral	1.75	0.24	
Umbral	1.76	0.24	
Umbral	1.77	0.24	
Umbral	1.78	0.24	
Umbral	1.79	0.24	



Name	Period sec	Acceleration	Damping %
Umbral	1.8	0.24	
Umbral	1.81	0.24	
Umbral	1.82	0.24	
Umbral	1.83	0.24	
Umbral	1.84	0.24	
Umbral	1.85	0.24	
Umbral	1.86	0.24	
Umbral	1.87	0.24	
Umbral	1.88	0.24	
Umbral	1.89	0.24	
Umbral	1.9	0.24	
Umbral	1.91	0.24	
Umbral	1.92	0.24	
Umbral	1.93	0.24	
Umbral	1.94	0.24	
Umbral	1.95	0.24	
Umbral	1.96	0.24	
Umbral	1.97	0.24	
Umbral	1.98	0.24	
Umbral	1.99	0.24	
Umbral	2	0.24	
Umbral	2.01	0.239	
Umbral	2.02	0.238	
Umbral	2.03	0.236	
Umbral	2.04	0.235	
Umbral	2.05	0.234	
Umbral	2.06	0.233	
Umbral	2.07	0.232	
Umbral	2.08	0.231	
Umbral	2.09	0.23	
Umbral	2.1	0.229	
Umbral	2.11	0.227	
Umbral	2.12	0.226	
Umbral	2.13	0.225	
Umbral	2.14	0.224	
Umbral	2.15	0.223	
Umbral	2.16	0.222	
Umbral	2.17	0.221	
Umbral	2.18	0.22	
Umbral	2.19	0.219	
Umbral	2.2	0.218	
Umbral	2.21	0.217	
Umbral	2.22	0.216	
Umbral	2.23	0.215	
Umbral	2.24	0.214	
Umbral	2.25	0.213	
Umbral	2.26	0.212	
Umbral	2.27	0.211	
Umbral	2.28	0.211	
Umbral	2.29	0.21	
Umbral	2.3	0.209	
Umbral	2.31	0.208	
Umbral	2.32	0.207	
Umbral	2.33	0.206	
Umbral	2.34	0.205	
Umbral	2.35	0.204	
Umbral	2.36	0.203	
Umbral	2.37	0.203	
Umbral	2.38	0.202	
Umbral	2.39	0.201	

Name	Period sec	Acceleration	Damping %
Umbral	2.4	0.2	
Umbral	2.41	0.199	
Umbral	2.42	0.198	
Umbral	2.43	0.198	
Umbral	2.44	0.197	
Umbral	2.45	0.196	
Umbral	2.46	0.195	
Umbral	2.47	0.194	
Umbral	2.48	0.194	
Umbral	2.49	0.193	
Umbral	2.5	0.192	
Umbral	2.51	0.191	
Umbral	2.52	0.19	
Umbral	2.53	0.19	
Umbral	2.54	0.189	
Umbral	2.55	0.188	
Umbral	2.56	0.188	
Umbral	2.57	0.187	
Umbral	2.58	0.186	
Umbral	2.59	0.185	
Umbral	2.6	0.185	
Umbral	2.61	0.184	
Umbral	2.62	0.183	
Umbral	2.63	0.183	
Umbral	2.64	0.182	
Umbral	2.65	0.181	
Umbral	2.66	0.18	
Umbral	2.67	0.18	
Umbral	2.68	0.179	
Umbral	2.69	0.178	
Umbral	2.7	0.178	
Umbral	2.71	0.177	
Umbral	2.72	0.176	
Umbral	2.73	0.176	
Umbral	2.74	0.175	
Umbral	2.75	0.175	
Umbral	2.76	0.174	
Umbral	2.77	0.173	
Umbral	2.78	0.173	
Umbral	2.79	0.172	
Umbral	2.8	0.171	
Umbral	2.81	0.171	
Umbral	2.82	0.17	
Umbral	2.83	0.17	
Umbral	2.84	0.169	
Umbral	2.85	0.168	
Umbral	2.86	0.168	
Umbral	2.87	0.167	
Umbral	2.88	0.167	
Umbral	2.89	0.166	
Umbral	2.9	0.166	
Umbral	2.91	0.165	
Umbral	2.92	0.164	
Umbral	2.93	0.164	
Umbral	2.94	0.163	
Umbral	2.95	0.163	
Umbral	2.96	0.162	
Umbral	2.97	0.162	
Umbral	2.98	0.161	
Umbral	2.99	0.161	

Name	Period sec	Acceleration	Damping %
Umbral	3	0.16	
Umbral	3.01	0.159	
Umbral	3.02	0.159	
Umbral	3.03	0.158	
Umbral	3.04	0.158	
Umbral	3.05	0.157	
Umbral	3.06	0.157	
Umbral	3.07	0.156	
Umbral	3.08	0.156	
Umbral	3.09	0.155	
Umbral	3.1	0.155	
Umbral	3.11	0.154	
Umbral	3.12	0.154	
Umbral	3.13	0.153	
Umbral	3.14	0.153	
Umbral	3.15	0.152	
Umbral	3.16	0.152	
Umbral	3.17	0.151	
Umbral	3.18	0.151	
Umbral	3.19	0.15	
Umbral	3.2	0.15	
Umbral	3.21	0.15	
Umbral	3.22	0.149	
Umbral	3.23	0.149	
Umbral	3.24	0.148	
Umbral	3.25	0.148	
Umbral	3.26	0.147	
Umbral	3.27	0.147	
Umbral	3.28	0.146	
Umbral	3.29	0.146	
Umbral	3.3	0.145	
Umbral	3.31	0.145	
Umbral	3.32	0.145	
Umbral	3.33	0.144	
Umbral	3.34	0.144	
Umbral	3.35	0.143	
Umbral	3.36	0.143	
Umbral	3.37	0.142	
Umbral	3.38	0.142	
Umbral	3.39	0.142	
Umbral	3.4	0.141	
Umbral	3.41	0.141	
Umbral	3.42	0.14	
Umbral	3.43	0.14	
Umbral	3.44	0.14	
Umbral	3.45	0.139	
Umbral	3.46	0.139	
Umbral	3.47	0.138	
Umbral	3.48	0.138	
Umbral	3.49	0.138	
Umbral	3.5	0.137	
Umbral	3.51	0.137	
Umbral	3.52	0.136	
Umbral	3.53	0.136	
Umbral	3.54	0.136	
Umbral	3.55	0.135	
Umbral	3.56	0.135	
Umbral	3.57	0.134	
Umbral	3.58	0.134	
Umbral	3.59	0.134	

Name	Period sec	Acceleration	Damping %
Umbral	3.6	0.133	
Umbral	3.61	0.133	
Umbral	3.62	0.133	
Umbral	3.63	0.132	
Umbral	3.64	0.132	
Umbral	3.65	0.132	
Umbral	3.66	0.131	
Umbral	3.67	0.131	
Umbral	3.68	0.13	
Umbral	3.69	0.13	
Umbral	3.7	0.13	
Umbral	3.71	0.129	
Umbral	3.72	0.129	
Umbral	3.73	0.129	
Umbral	3.74	0.128	
Umbral	3.75	0.128	
Umbral	3.76	0.128	
Umbral	3.77	0.127	
Umbral	3.78	0.127	
Umbral	3.79	0.127	
Umbral	3.8	0.126	
Umbral	3.81	0.126	
Umbral	3.82	0.126	
Umbral	3.83	0.125	
Umbral	3.84	0.125	
Umbral	3.85	0.125	
Umbral	3.86	0.124	
Umbral	3.87	0.124	
Umbral	3.88	0.124	
Umbral	3.89	0.123	
Umbral	3.9	0.123	
Umbral	3.91	0.123	
Umbral	3.92	0.122	
Umbral	3.93	0.122	
Umbral	3.94	0.122	
Umbral	3.95	0.122	
Umbral	3.96	0.121	
Umbral	3.97	0.121	
Umbral	3.98	0.121	
Umbral	3.99	0.12	
Umbral	4	0.12	
Umbral	4.01	0.12	
Umbral	4.02	0.119	
Umbral	4.03	0.119	
Umbral	4.04	0.119	
Umbral	4.05	0.119	
Umbral	4.06	0.118	
Umbral	4.07	0.118	
Umbral	4.08	0.118	
Umbral	4.09	0.117	
Umbral	4.1	0.117	
Umbral	4.11	0.117	
Umbral	4.12	0.117	
Umbral	4.13	0.116	
Umbral	4.14	0.116	
Umbral	4.15	0.116	
Umbral	4.16	0.115	
Umbral	4.17	0.115	
Umbral	4.18	0.115	
Umbral	4.19	0.115	

Name	Period sec	Acceleration	Damping %
Umbral	4.2	0.114	
Umbral	4.21	0.114	
Umbral	4.22	0.114	
Umbral	4.23	0.113	
Umbral	4.24	0.113	
Umbral	4.25	0.113	
Umbral	4.26	0.113	
Umbral	4.27	0.112	
Umbral	4.28	0.112	
Umbral	4.29	0.112	
Umbral	4.3	0.112	
Umbral	4.31	0.111	
Umbral	4.32	0.111	
Umbral	4.33	0.111	
Umbral	4.34	0.111	
Umbral	4.35	0.11	
Umbral	4.36	0.11	
Umbral	4.37	0.11	
Umbral	4.38	0.11	
Umbral	4.39	0.109	
Umbral	4.4	0.109	
Umbral	4.41	0.109	
Umbral	4.42	0.109	
Umbral	4.43	0.108	
Umbral	4.44	0.108	
Umbral	4.45	0.108	
Umbral	4.46	0.108	
Umbral	4.47	0.107	
Umbral	4.48	0.107	
Umbral	4.49	0.107	
Umbral	4.5	0.107	
Umbral	4.51	0.106	
Umbral	4.52	0.106	
Umbral	4.53	0.106	
Umbral	4.54	0.106	
Umbral	4.55	0.105	
Umbral	4.56	0.105	
Umbral	4.57	0.105	
Umbral	4.58	0.105	
Umbral	4.59	0.105	
Umbral	4.6	0.104	
Umbral	4.61	0.104	
Umbral	4.62	0.104	
Umbral	4.63	0.104	
Umbral	4.64	0.103	
Umbral	4.65	0.103	
Umbral	4.66	0.103	
Umbral	4.67	0.103	
Umbral	4.68	0.103	
Umbral	4.69	0.102	
Umbral	4.7	0.102	
Umbral	4.71	0.102	
Umbral	4.72	0.102	
Umbral	4.73	0.101	
Umbral	4.74	0.101	
Umbral	4.75	0.101	
Umbral	4.76	0.101	
Umbral	4.77	0.101	
Umbral	4.78	0.1	
Umbral	4.79	0.1	

Name	Period sec	Acceleration	Damping %
Umbral	4.8	0.1	
Umbral	4.81	0.1	
Umbral	4.82	0.1	
Umbral	4.83	0.099	
Umbral	4.84	0.099	
Umbral	4.85	0.099	
Umbral	4.86	0.099	
Umbral	4.87	0.099	
Umbral	4.88	0.098	
Umbral	4.89	0.098	
Umbral	4.9	0.098	
Umbral	4.91	0.098	
Umbral	4.92	0.098	
Umbral	4.93	0.097	
Umbral	4.94	0.097	
Umbral	4.95	0.097	
Umbral	4.96	0.097	
Umbral	4.97	0.097	
Umbral	4.98	0.096	
Umbral	4.99	0.096	
Umbral	5	0.096	
Umbral	5.01	0.096	
Umbral	5.02	0.096	
Umbral	5.03	0.095	
Umbral	5.04	0.095	
Umbral	5.05	0.095	
Umbral	5.06	0.095	
Umbral	5.07	0.095	
Umbral	5.08	0.094	
Umbral	5.09	0.094	
Umbral	5.1	0.094	
Umbral	5.11	0.094	
Umbral	5.12	0.094	
Umbral	5.13	0.094	
Umbral	5.14	0.093	
Umbral	5.15	0.093	
Umbral	5.16	0.093	
Umbral	5.17	0.093	
Umbral	5.18	0.093	
Umbral	5.19	0.092	
Umbral	5.2	0.092	
Umbral	5.21	0.092	
Umbral	5.22	0.092	
Umbral	5.23	0.092	
Umbral	5.24	0.092	
Umbral	5.25	0.091	
Umbral	5.26	0.091	
Umbral	5.27	0.091	
Umbral	5.28	0.091	
Umbral	5.29	0.091	
Umbral	5.3	0.091	
Umbral	5.31	0.09	
Umbral	5.32	0.09	
Umbral	5.33	0.09	
Umbral	5.34	0.09	
Umbral	5.35	0.09	
Umbral	5.36	0.09	
Umbral	5.37	0.089	
Umbral	5.38	0.089	
Umbral	5.39	0.089	

Name	Period sec	Acceleration	Damping %
Umbral	5.4	0.089	
Umbral	5.41	0.089	
Umbral	5.42	0.089	
Umbral	5.43	0.088	
Umbral	5.44	0.088	
Umbral	5.45	0.088	
Umbral	5.46	0.088	
Umbral	5.47	0.088	
Umbral	5.48	0.088	
Umbral	5.49	0.087	
Umbral	5.5	0.087	
Umbral	5.51	0.087	
Umbral	5.52	0.087	
Umbral	5.53	0.087	
Umbral	5.54	0.087	
Umbral	5.55	0.086	
Umbral	5.56	0.086	
Umbral	5.57	0.086	
Umbral	5.58	0.086	
Umbral	5.59	0.086	
Umbral	5.6	0.086	
Umbral	5.61	0.086	
Umbral	5.62	0.085	
Umbral	5.63	0.085	
Umbral	5.64	0.085	
Umbral	5.65	0.085	
Umbral	5.66	0.085	
Umbral	5.67	0.085	
Umbral	5.68	0.085	
Umbral	5.69	0.084	
Umbral	5.7	0.084	
Umbral	5.71	0.084	
Umbral	5.72	0.084	
Umbral	5.73	0.084	
Umbral	5.74	0.084	
Umbral	5.75	0.083	
Umbral	5.76	0.083	
Umbral	5.77	0.083	
Umbral	5.78	0.083	
Umbral	5.79	0.083	
Umbral	5.8	0.083	
Umbral	5.81	0.083	
Umbral	5.82	0.082	
Umbral	5.83	0.082	
Umbral	5.84	0.082	
Umbral	5.85	0.082	
Umbral	5.86	0.082	
Umbral	5.87	0.082	
Umbral	5.88	0.082	
Umbral	5.89	0.081	
Umbral	5.9	0.081	
Umbral	5.91	0.081	
Umbral	5.92	0.081	
Umbral	5.93	0.081	
Umbral	5.94	0.081	
Umbral	5.95	0.081	
Umbral	5.96	0.081	
Umbral	5.97	0.08	
Umbral	5.98	0.08	
Umbral	5.99	0.08	

Name	Period sec	Acceleration	Damping %
Umbral	6	0.08	
Umbral	6.01	0.08	
Umbral	6.02	0.08	
Umbral	6.03	0.08	
Umbral	6.04	0.079	
Umbral	6.05	0.079	
Umbral	6.06	0.079	
Umbral	6.07	0.079	
Umbral	6.08	0.079	
Umbral	6.09	0.079	
Umbral	6.1	0.079	
Umbral	6.11	0.079	
Umbral	6.12	0.078	
Umbral	6.13	0.078	
Umbral	6.14	0.078	
Umbral	6.15	0.078	
Umbral	6.16	0.078	
Umbral	6.17	0.078	
Umbral	6.18	0.078	
Umbral	6.19	0.078	
Umbral	6.2	0.077	
Umbral	6.21	0.077	
Umbral	6.22	0.077	
Umbral	6.23	0.077	
Umbral	6.24	0.077	
Umbral	6.25	0.077	
Umbral	6.26	0.077	
Umbral	6.27	0.077	
Umbral	6.28	0.076	
Umbral	6.29	0.076	
Umbral	6.3	0.076	
Umbral	6.31	0.076	
Umbral	6.32	0.076	
Umbral	6.33	0.076	
Umbral	6.34	0.076	
Umbral	6.35	0.076	
Umbral	6.36	0.075	
Umbral	6.37	0.075	
Umbral	6.38	0.075	
Umbral	6.39	0.075	
Umbral	6.4	0.075	
Umbral	6.41	0.075	
Umbral	6.42	0.075	
Umbral	6.43	0.075	
Umbral	6.44	0.075	
Umbral	6.45	0.074	
Umbral	6.46	0.074	
Umbral	6.47	0.074	
Umbral	6.48	0.074	
Umbral	6.49	0.074	
Umbral	6.5	0.074	
Umbral	6.51	0.074	
Umbral	6.52	0.074	
Umbral	6.53	0.074	
Umbral	6.54	0.073	
Umbral	6.55	0.073	
Umbral	6.56	0.073	
Umbral	6.57	0.073	
Umbral	6.58	0.073	
Umbral	6.59	0.073	



Name	Period sec	Acceleration	Damping %
Umbral	6.6	0.073	
Umbral	6.61	0.073	
Umbral	6.62	0.073	
Umbral	6.63	0.072	
Umbral	6.64	0.072	
Umbral	6.65	0.072	
Umbral	6.66	0.072	
Umbral	6.67	0.072	
Umbral	6.68	0.072	
Umbral	6.69	0.072	
Umbral	6.7	0.072	
Umbral	6.71	0.072	
Umbral	6.72	0.071	
Umbral	6.73	0.071	
Umbral	6.74	0.071	
Umbral	6.75	0.071	
Umbral	6.76	0.071	
Umbral	6.77	0.071	
Umbral	6.78	0.071	
Umbral	6.79	0.071	
Umbral	6.8	0.071	
Umbral	6.81	0.07	
Umbral	6.82	0.07	
Umbral	6.83	0.07	
Umbral	6.84	0.07	
Umbral	6.85	0.07	
Umbral	6.86	0.07	
Umbral	6.87	0.07	
Umbral	6.88	0.07	
Umbral	6.89	0.07	
Umbral	6.9	0.07	
Umbral	6.91	0.069	
Umbral	6.92	0.069	
Umbral	6.93	0.069	
Umbral	6.94	0.069	
Umbral	6.95	0.069	
Umbral	6.96	0.069	
Umbral	6.97	0.069	
Umbral	6.98	0.069	
Umbral	6.99	0.069	
Umbral	7	0.069	
Umbral	7.01	0.068	
Umbral	7.02	0.068	
Umbral	7.03	0.068	
Umbral	7.04	0.068	
Umbral	7.05	0.068	
Umbral	7.06	0.068	
Umbral	7.07	0.068	
Umbral	7.08	0.068	
Umbral	7.09	0.068	
Umbral	7.1	0.068	
Umbral	7.11	0.068	
Umbral	7.12	0.067	
Umbral	7.13	0.067	
Umbral	7.14	0.067	
Umbral	7.15	0.067	
Umbral	7.16	0.067	
Umbral	7.17	0.067	
Umbral	7.18	0.067	
Umbral	7.19	0.067	

Name	Period sec	Acceleration	Damping %
Umbral	7.2	0.067	
Umbral	7.21	0.067	
Umbral	7.22	0.066	
Umbral	7.23	0.066	
Umbral	7.24	0.066	
Umbral	7.25	0.066	
Umbral	7.26	0.066	
Umbral	7.27	0.066	
Umbral	7.28	0.066	
Umbral	7.29	0.066	
Umbral	7.3	0.066	
Umbral	7.31	0.066	
Umbral	7.32	0.066	
Umbral	7.33	0.065	
Umbral	7.34	0.065	
Umbral	7.35	0.065	
Umbral	7.36	0.065	
Umbral	7.37	0.065	
Umbral	7.38	0.065	
Umbral	7.39	0.065	
Umbral	7.4	0.065	
Umbral	7.41	0.065	
Umbral	7.42	0.065	
Umbral	7.43	0.065	
Umbral	7.44	0.065	
Umbral	7.45	0.064	
Umbral	7.46	0.064	
Umbral	7.47	0.064	
Umbral	7.48	0.064	
Umbral	7.49	0.064	
Umbral	7.5	0.064	

**4.4 Load Cases**

**Table 4.5 - Load Cases - Summary**

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

**4.5 Load Combinations**

**Table 4.6 - Load Combinations**

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
VIG01	D	1.2	Linear Add	No
VIG01	L	1		No
VIG01	DISX	2		No
VIG01	DISY	0.6		No
VIG02	D	1.2	Linear Add	No
VIG02	L	1		No
VIG02	DISX	0.6		No
VIG02	DISY	2		No
VIG03	D	0.9	Linear Add	No
VIG03	DISX	2		No
VIG03	DISY	0.6		No
VIG04	D	0.9	Linear Add	No
VIG04	DISX	0.6		No
VIG04	DISY	2		No
COL1	D	1.2	Linear Add	No
COL1	L	1		No
COL1	DISX	3		No
COL1	DISY	0.9		No
COL2	D	1.2	Linear Add	No
COL2	L	1		No
COL2	DISX	0.9		No
COL2	DISY	3		No
COL3	D	0.9	Linear Add	No
COL3	DISX	3		No
COL3	DISY	0.9		No
COL4	D	0.9	Linear Add	No
COL4	DISX	0.9		No
COL4	DISY	3		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	L	0.75		No
CIM12	G	0.75		No
CIM13	D	1	Linear Add	No
CIM13	L	0.75		No
CIM13	G	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	L	0.75		No
CIM14	G	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

Table 5.1 - Base Reactions

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	735.4416	1205.004	-6030.6211	0	0	0	0
L	0	0	78.72	-94.7548	-645.504	0	0	0	0
LR	0	0	67.24	275.6862	-551.368	0	0	0	0
EX Max	705.5937	0	0	0	2302.9675	3834.3918	0	0	0
EY Max	0	706.2802	0	2304.2814	0	5791.4973	0	0	0
DISX Max	220.498	0	0	0	719.6774	1198.2474	0	0	0
DISY Max	0	220.7125	0	720.0879	0	1809.8429	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	173.84	503.995	-1425.488	0	0	0	0
DERUX Max	108.0792	0	0	0	352.7931	523.4864	0	0	0
DERUY Max	0	133.1021	0	434.2537	0	1091.4376	0	0	0
COMB1	0	0	1029.6182	1687.0056	-8442.8696	0	0	0	0
COMB2	0	0	1042.1019	1432.2402	-8545.2357	0	0	0	0
COMB3	0	0	1068.8339	1792.3479	-8764.4381	0	0	0	0
COMB4	0	0	994.8699	1489.0931	-8157.9333	0	0	0	0
COMB5 Max	220.498	66.2138	961.2499	1567.2764	-7162.572	1741.2003	0	0	0
COMB5 Min	-220.498	-66.2138	961.2499	1135.2236	-8601.9267	-1741.2003	0	0	0
COMB6 Max	66.1494	220.7125	961.2499	2071.3379	-7666.3461	2169.3171	0	0	0
COMB6 Min	-66.1494	-220.7125	961.2499	631.162	-8098.1526	-2169.3171	0	0	0
COMB7 Max	66.1494	220.7125	661.8974	1804.5916	-5211.6558	2169.3171	0	0	0
COMB7 Min	-66.1494	-220.7125	661.8974	364.4157	-5643.4622	-2169.3171	0	0	0
COMB8 Max	220.498	66.2138	661.8974	1300.53	-4707.8817	1741.2003	0	0	0
COMB8 Min	-220.498	-66.2138	661.8974	868.4772	-6147.2364	-1741.2003	0	0	0
ENVE Max	220.498	220.7125	1068.8339	2071.3379	-4707.8817	2169.3171	0	0	0
ENVE Min	-220.498	-220.7125	661.8974	364.4157	-8764.4381	-2169.3171	0	0	0
CIM01	0	0	735.4416	1205.004	-6030.6211	0	0	0	0
CIM02	0	0	814.1616	1110.2492	-6676.1251	0	0	0	0
CIM03	0	0	802.6816	1480.6903	-6581.9891	0	0	0	0
CIM04	0	0	844.9116	1340.7026	-6928.2751	0	0	0	0
CIM05 Max	154.3486	46.3496	735.4416	1356.2225	-5526.847	1218.8402	0	0	0
CIM05 Min	-154.3486	-46.3496	735.4416	1053.7856	-6534.3953	-1218.8402	0	0	0
CIM06 Max	46.3046	154.4988	735.4416	1709.0656	-5879.4889	1518.522	0	0	0
CIM06 Min	-46.3046	-154.4988	735.4416	700.9425	-6181.7534	-1518.522	0	0	0
CIM07 Max	116.864	35.314	844.9116	1455.9166	-6546.8461	924.646	0	0	0
CIM07 Min	-116.864	-35.314	844.9116	1225.4885	-7309.7041	-924.646	0	0	0
CIM08 Max	35.2797	116.9777	844.9116	1722.3492	-6813.1267	1150.9363	0	0	0
CIM08 Min	-35.2797	-116.9777	844.9116	959.056	-7043.4235	-1150.9363	0	0	0
DER01	0	0	1029.6182	1687.0056	-8442.8696	0	0	0	0
DER02	0	0	1042.1019	1432.2402	-8545.2357	0	0	0	0
DER03	0	0	1068.8339	1792.3479	-8764.4381	0	0	0	0
DER04	0	0	994.8699	1489.0931	-8157.9333	0	0	0	0
DER05 Max	705.5937	0	961.2499	1351.25	-5579.2818	3834.3918	0	0	0
DER05 Min	-705.5937	0	961.2499	1351.25	-10185.2169	-3834.3918	0	0	0
DER06 Max	0	706.2802	961.2499	3655.5314	-7882.2493	5791.4973	0	0	0
DER06 Min	0	-706.2802	961.2499	-953.0314	-7882.2493	-5791.4973	0	0	0
DER07 Max	705.5937	0	661.8974	1084.5036	-3124.5915	3834.3918	0	0	0
DER07 Min	-705.5937	0	661.8974	1084.5036	-7730.5265	-3834.3918	0	0	0
DER08 Max	0	706.2802	661.8974	3388.785	-5427.559	5791.4973	0	0	0
DER08 Min	0	-706.2802	661.8974	-1219.7778	-5427.559	-5791.4973	0	0	0
DERUD01	0	0	1029.6182	1687.0056	-8442.8696	0	0	0	0
DERUD02	0	0	1042.1019	1432.2402	-8545.2357	0	0	0	0
DERUD03	0	0	1068.8339	1792.3479	-8764.4381	0	0	0	0
DERUD04	0	0	994.8699	1489.0931	-8157.9333	0	0	0	0
DERUD05 Max	108.0792	0	961.2499	1351.25	-7529.4563	523.4864	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-108.0792	0	961.2499	1351.25	-8235.0424	-523.4864	0	0	0
DERUD06 Max	0	133.1021	961.2499	1785.5037	-7882.2493	1091.4376	0	0	0
DERUD06 Min	0	-133.1021	961.2499	916.9962	-7882.2493	-1091.4376	0	0	0
DERUD07 Max	108.0792	0	661.8974	1084.5036	-5074.7659	523.4864	0	0	0
DERUD07 Min	-108.0792	0	661.8974	1084.5036	-5780.3521	-523.4864	0	0	0
DERUD08 Max	0	133.1021	661.8974	1518.7574	-5427.559	1091.4376	0	0	0
DERUD08 Min	0	-133.1021	661.8974	650.2499	-5427.559	-1091.4376	0	0	0
VIG01 Max	440.9961	132.4275	961.2499	1783.3027	-6442.8946	3482.4006	0	0	0
VIG01 Min	-440.9961	-132.4275	961.2499	919.1972	-9321.6041	-3482.4006	0	0	0
VIG02 Max	132.2988	441.4251	961.2499	2791.4259	-7450.4429	4338.6342	0	0	0
VIG02 Min	-132.2988	-441.4251	961.2499	-88.9259	-8314.0558	-4338.6342	0	0	0
VIG03 Max	440.9961	132.4275	661.8974	1516.5564	-3988.2043	3482.4006	0	0	0
VIG03 Min	-440.9961	-132.4275	661.8974	652.4509	-6866.9137	-3482.4006	0	0	0
VIG04 Max	132.2988	441.4251	661.8974	2524.6795	-4995.7526	4338.6342	0	0	0
VIG04 Min	-132.2988	-441.4251	661.8974	-355.6722	-5859.3654	-4338.6342	0	0	0
COL1 Max	661.4941	198.6413	961.2499	1999.3291	-5723.2173	5223.6009	0	0	0
COL1 Min	-661.4941	-198.6413	961.2499	703.1708	-10041.2814	-5223.6009	0	0	0
COL2 Max	198.4482	662.1376	961.2499	3511.5138	-7234.5397	6507.9514	0	0	0
COL2 Min	-198.4482	-662.1376	961.2499	-809.0138	-8529.959	-6507.9514	0	0	0
COL3 Max	661.4941	198.6413	661.8974	1732.5828	-3268.5269	5223.6009	0	0	0
COL3 Min	-661.4941	-198.6413	661.8974	436.4245	-7586.5911	-5223.6009	0	0	0
COL4 Max	198.4482	662.1376	661.8974	3244.7674	-4779.8494	6507.9514	0	0	0
COL4 Min	-198.4482	-662.1376	661.8974	-1075.7602	-6075.2686	-6507.9514	0	0	0
CIM09 Max	154.3486	46.3496	441.265	874.2209	-3114.5985	1218.8402	0	0	0
CIM09 Min	-154.3486	-46.3496	441.265	571.784	-4122.1468	-1218.8402	0	0	0
CIM10 Max	46.3046	154.4988	441.265	1227.064	-3467.2404	1518.522	0	0	0
CIM10 Min	-46.3046	-154.4988	441.265	218.9409	-3769.5049	-1518.522	0	0	0
CIM11	0	0	909.2816	1708.9991	-7456.1091	0	0	0	0
CIM12	0	0	924.8616	1511.9342	-7583.8651	0	0	0	0
CIM13 Max	116.864	35.314	924.8616	1627.1482	-7202.4361	924.646	0	0	0
CIM13 Min	-116.864	-35.314	924.8616	1396.7201	-7965.2941	-924.646	0	0	0
CIM14 Max	35.2797	116.9777	924.8616	1893.5808	-7468.7167	1150.9363	0	0	0
CIM14 Min	-35.2797	-116.9777	924.8616	1130.2876	-7699.0135	-1150.9363	0	0	0
CIM15	0	0	441.265	723.0024	-3618.3727	0	0	0	0
COMB9	0	0	1095.4019	1546.3946	-8982.2957	0	0	0	0
DER09	0	0	1095.4019	1546.3946	-8982.2957	0	0	0	0
DERUD09	0	0	1095.4019	1546.3946	-8982.2957	0	0	0	0
DERUD10	0	0	1239.3939	2157.642	-10163.0301	0	0	0	0
DER10	0	0	1239.3939	2157.642	-10163.0301	0	0	0	0
COMB10	0	0	1239.3939	2157.642	-10163.0301	0	0	0	0
COMB11	0	0	1048.1699	1603.2475	-8594.9933	0	0	0	0
DER11	0	0	1048.1699	1603.2475	-8594.9933	0	0	0	0
DERUD11	0	0	1048.1699	1603.2475	-8594.9933	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	55714.78	55714.78	8.2	-0.7562	55714.78	55714.78	8.2	-0.7562	8.2	3.4372

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.6	0	1	8.2	-0.7562	3.25
N1	D1	L	0	-0.4	0	1	8.2	-0.7562	3.25
N1	D1	LR	0	0.005494	0	1	8.2	-0.7562	3.25
N1	D1	EX Max	16.9	0	0.001347	1	8.2	-0.7562	3.25
N1	D1	EY Max	0	12.7	0	1	8.2	-0.7562	3.25
N1	D1	DISX Max	5.3	0	0.000421	1	8.2	-0.7562	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	DISY Max	0	4	0	1	8.2	-0.7562	3.25
N1	D1	W	0	0	0	1	8.2	-0.7562	3.25
N1	D1	G	0	-0.2	0	1	8.2	-0.7562	3.25
N1	D1	DERUX Max	2.7	0	0.000206	1	8.2	-0.7562	3.25
N1	D1	DERUY Max	0	2.4	0	1	8.2	-0.7562	3.25
N1	D1	COMB1	0	-2.3	0	1	8.2	-0.7562	3.25
N1	D1	COMB2	0	-2.6	0	1	8.2	-0.7562	3.25
N1	D1	COMB3	0	-2.4	0	1	8.2	-0.7562	3.25
N1	D1	COMB4	0	-2.4	0	1	8.2	-0.7562	3.25
N1	D1	COMB5 Max	5.3	-1.2	0.000421	1	8.2	-0.7562	3.25
N1	D1	COMB5 Min	-5.3	-3.6	-0.000421	1	8.2	-0.7562	3.25
N1	D1	COMB6 Max	1.6	1.6	0.000126	1	8.2	-0.7562	3.25
N1	D1	COMB6 Min	-1.6	-6.4	-0.000126	1	8.2	-0.7562	3.25
N1	D1	COMB7 Max	1.6	2.5	0.000126	1	8.2	-0.7562	3.25
N1	D1	COMB7 Min	-1.6	-5.4	-0.000126	1	8.2	-0.7562	3.25
N1	D1	COMB8 Max	5.3	-0.3	0.000421	1	8.2	-0.7562	3.25
N1	D1	COMB8 Min	-5.3	-2.7	-0.000421	1	8.2	-0.7562	3.25
N1	D1	ENVE Max	5.3	2.5	0.000421	1	8.2	-0.7562	3.25
N1	D1	ENVE Min	-5.3	-6.4	-0.000421	1	8.2	-0.7562	3.25
N1	D1	CIM01	0	-1.6	0	1	8.2	-0.7562	3.25
N1	D1	CIM02	0	-2.1	0	1	8.2	-0.7562	3.25
N1	D1	CIM03	0	-1.6	0	1	8.2	-0.7562	3.25
N1	D1	CIM04	0	-1.9	0	1	8.2	-0.7562	3.25
N1	D1	CIM05 Max	3.7	-0.8	0.000295	1	8.2	-0.7562	3.25
N1	D1	CIM05 Min	-3.7	-2.5	-0.000295	1	8.2	-0.7562	3.25
N1	D1	CIM06 Max	1.1	1.1	8.8E-05	1	8.2	-0.7562	3.25
N1	D1	CIM06 Min	-1.1	-4.4	-8.8E-05	1	8.2	-0.7562	3.25
N1	D1	CIM07 Max	2.8	-1.3	0.000223	1	8.2	-0.7562	3.25
N1	D1	CIM07 Min	-2.8	-2.6	-0.000223	1	8.2	-0.7562	3.25
N1	D1	CIM08 Max	0.8	0.2	6.7E-05	1	8.2	-0.7562	3.25
N1	D1	CIM08 Min	-0.8	-4.1	-6.7E-05	1	8.2	-0.7562	3.25
N1	D1	DER01	0	-2.3	0	1	8.2	-0.7562	3.25
N1	D1	DER02	0	-2.6	0	1	8.2	-0.7562	3.25
N1	D1	DER03	0	-2.4	0	1	8.2	-0.7562	3.25
N1	D1	DER04	0	-2.4	0	1	8.2	-0.7562	3.25
N1	D1	DER05 Max	16.9	-2.4	0.001347	1	8.2	-0.7562	3.25
N1	D1	DER05 Min	-16.9	-2.4	-0.001347	1	8.2	-0.7562	3.25
N1	D1	DER06 Max	0	10.3	0	1	8.2	-0.7562	3.25
N1	D1	DER06 Min	0	-15.1	0	1	8.2	-0.7562	3.25
N1	D1	DER07 Max	16.9	-1.5	0.001347	1	8.2	-0.7562	3.25
N1	D1	DER07 Min	-16.9	-1.5	-0.001347	1	8.2	-0.7562	3.25
N1	D1	DER08 Max	0	11.2	0	1	8.2	-0.7562	3.25
N1	D1	DER08 Min	0	-14.2	0	1	8.2	-0.7562	3.25
N1	D1	DERUD01	0	-2.3	0	1	8.2	-0.7562	3.25
N1	D1	DERUD02	0	-2.6	0	1	8.2	-0.7562	3.25
N1	D1	DERUD03	0	-2.4	0	1	8.2	-0.7562	3.25
N1	D1	DERUD04	0	-2.4	0	1	8.2	-0.7562	3.25
N1	D1	DERUD05 Max	2.7	-2.4	0.000206	1	8.2	-0.7562	3.25
N1	D1	DERUD05 Min	-2.7	-2.4	-0.000206	1	8.2	-0.7562	3.25
N1	D1	DERUD06 Max	0	0.0138	0	1	8.2	-0.7562	3.25
N1	D1	DERUD06 Min	0	-4.8	0	1	8.2	-0.7562	3.25
N1	D1	DERUD07 Max	2.7	-1.5	0.000206	1	8.2	-0.7562	3.25
N1	D1	DERUD07 Min	-2.7	-1.5	-0.000206	1	8.2	-0.7562	3.25
N1	D1	DERUD08 Max	0	0.9	0	1	8.2	-0.7562	3.25
N1	D1	DERUD08 Min	0	-3.9	0	1	8.2	-0.7562	3.25
N1	D1	VIG01 Max	10.6	0.001652	0.000842	1	8.2	-0.7562	3.25
N1	D1	VIG01 Min	-10.6	-4.8	-0.000842	1	8.2	-0.7562	3.25
N1	D1	VIG02 Max	3.2	5.6	0.000253	1	8.2	-0.7562	3.25
N1	D1	VIG02 Min	-3.2	-10.3	-0.000253	1	8.2	-0.7562	3.25
N1	D1	VIG03 Max	10.6	0.9	0.000842	1	8.2	-0.7562	3.25



Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	VIG03 Min	-10.6	-3.9	-0.000842	1	8.2	-0.7562	3.25
N1	D1	VIG04 Max	3.2	6.5	0.000253	1	8.2	-0.7562	3.25
N1	D1	VIG04 Min	-3.2	-9.4	-0.000253	1	8.2	-0.7562	3.25
N1	D1	COL1 Max	15.9	1.2	0.001263	1	8.2	-0.7562	3.25
N1	D1	COL1 Min	-15.9	-6	-0.001263	1	8.2	-0.7562	3.25
N1	D1	COL2 Max	4.8	9.5	0.000379	1	8.2	-0.7562	3.25
N1	D1	COL2 Min	-4.8	-14.3	-0.000379	1	8.2	-0.7562	3.25
N1	D1	COL3 Max	15.9	2.1	0.001263	1	8.2	-0.7562	3.25
N1	D1	COL3 Min	-15.9	-5.1	-0.001263	1	8.2	-0.7562	3.25
N1	D1	COL4 Max	4.8	10.5	0.000379	1	8.2	-0.7562	3.25
N1	D1	COL4 Min	-4.8	-13.4	-0.000379	1	8.2	-0.7562	3.25
N1	D1	CIM09 Max	3.7	-0.1	0.000295	1	8.2	-0.7562	3.25
N1	D1	CIM09 Min	-3.7	-1.8	-0.000295	1	8.2	-0.7562	3.25
N1	D1	CIM10 Max	1.1	1.8	8.8E-05	1	8.2	-0.7562	3.25
N1	D1	CIM10 Min	-1.1	-3.8	-8.8E-05	1	8.2	-0.7562	3.25
N1	D1	CIM11	0	-1.8	0	1	8.2	-0.7562	3.25
N1	D1	CIM12	0	-2.1	0	1	8.2	-0.7562	3.25
N1	D1	CIM13 Max	2.8	-1.5	0.000223	1	8.2	-0.7562	3.25
N1	D1	CIM13 Min	-2.8	-2.7	-0.000223	1	8.2	-0.7562	3.25
N1	D1	CIM14 Max	0.8	0.006634	6.7E-05	1	8.2	-0.7562	3.25
N1	D1	CIM14 Min	-0.8	-4.2	-6.7E-05	1	8.2	-0.7562	3.25
N1	D1	CIM15	0	-1	0	1	8.2	-0.7562	3.25
N1	D1	COMB9	0	-2.7	0	1	8.2	-0.7562	3.25
N1	D1	DER09	0	-2.7	0	1	8.2	-0.7562	3.25
N1	D1	DERUD09	0	-2.7	0	1	8.2	-0.7562	3.25
N1	D1	DERUD10	0	-2.7	0	1	8.2	-0.7562	3.25
N1	D1	DER10	0	-2.7	0	1	8.2	-0.7562	3.25
N1	D1	COMB10	0	-2.7	0	1	8.2	-0.7562	3.25
N1	D1	COMB11	0	-2.5	0	1	8.2	-0.7562	3.25
N1	D1	DER11	0	-2.5	0	1	8.2	-0.7562	3.25
N1	D1	DERUD11	0	-2.5	0	1	8.2	-0.7562	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.6	1.6	1
N1	L	Y	0.4	0.4	1
N1	LR	Y	0.005494	0.005494	1
N1	EX Max	X	16.1	16.1	1
N1	EX Max	Y	11	5.5	2
N1	EY Max	Y	12.7	12.7	1
N1	DISX Max	X	5	5	1
N1	DISX Max	Y	3.5	1.7	2
N1	DISY Max	Y	4	4	1
N1	G	Y	0.2	0.2	1
N1	DERUX Max	X	2.5	2.5	1
N1	DERUX Max	Y	1.7	0.8	2
N1	DERUY Max	Y	2.4	2.4	1
N1	COMB1	Y	2.3	2.3	1
N1	COMB2	Y	2.6	2.6	1
N1	COMB3	Y	2.4	2.4	1
N1	COMB4	Y	2.4	2.4	1
N1	COMB5 Max	X	5	5	1
N1	COMB5 Max	Y	2.3	0.5	4.226
N1	COMB5 Min	X	5	5	1
N1	COMB5 Min	Y	7	5.3	1.326
N1	COMB6 Max	X	1.5	1.5	1
N1	COMB6 Max	Y	2.6	2.1	1.245

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	COMB6 Min	X	1.5	1.5	1
N1	COMB6 Min	Y	7.4	6.9	1.075
N1	COMB7 Max	X	1.5	1.5	1
N1	COMB7 Max	Y	3.5	3	1.171
N1	COMB7 Min	X	1.5	1.5	1
N1	COMB7 Min	Y	6.5	6	1.087
N1	COMB8 Max	X	5	5	1
N1	COMB8 Max	Y	3.2	1.4	2.194
N1	COMB8 Min	X	5	5	1
N1	COMB8 Min	Y	6.1	4.4	1.393
N1	ENVE Max	X	5	5	1
N1	ENVE Max	Y	3.5	3	1.171
N1	ENVE Min	X	5	5	1
N1	ENVE Min	Y	7.4	6.9	1.075
N1	CIM01	Y	1.6	1.6	1
N1	CIM02	Y	2.1	2.1	1
N1	CIM03	Y	1.6	1.6	1
N1	CIM04	Y	1.9	1.9	1
N1	CIM05 Max	X	3.5	3.5	1
N1	CIM05 Max	Y	1.6	0.4	3.976
N1	CIM05 Min	X	3.5	3.5	1
N1	CIM05 Min	Y	4.9	3.7	1.328
N1	CIM06 Max	X	1.1	1.1	1
N1	CIM06 Max	Y	1.9	1.5	1.24
N1	CIM06 Min	X	1.1	1.1	1
N1	CIM06 Min	Y	5.1	4.8	1.076
N1	CIM07 Max	X	2.7	2.7	1
N1	CIM07 Max	Y	1.3	0.4	3.308
N1	CIM07 Min	X	2.7	2.7	1
N1	CIM07 Min	Y	4.4	3.5	1.262
N1	CIM08 Max	X	0.8	0.8	1
N1	CIM08 Max	Y	0.7	0.4	1.634
N1	CIM08 Min	X	0.8	0.8	1
N1	CIM08 Min	Y	4.6	4.3	1.064
N1	DER01	Y	2.3	2.3	1
N1	DER02	Y	2.6	2.6	1
N1	DER03	Y	2.4	2.4	1
N1	DER04	Y	2.4	2.4	1
N1	DER05 Max	X	16.1	16.1	1
N1	DER05 Max	Y	8.7	3.1	2.759
N1	DER05 Min	X	16.1	16.1	1
N1	DER05 Min	Y	13.4	7.9	1.699
N1	DER06 Max	Y	10.3	10.3	1
N1	DER06 Min	Y	15.1	15.1	1
N1	DER07 Max	X	16.1	16.1	1
N1	DER07 Max	Y	9.6	4.1	2.364
N1	DER07 Min	X	16.1	16.1	1
N1	DER07 Min	Y	12.5	7	1.789
N1	DER08 Max	Y	11.2	11.2	1
N1	DER08 Min	Y	14.2	14.2	1
N1	DERUD01	Y	2.3	2.3	1
N1	DERUD02	Y	2.6	2.6	1
N1	DERUD03	Y	2.4	2.4	1
N1	DERUD04	Y	2.4	2.4	1
N1	DERUD05 Max	X	2.5	2.5	1
N1	DERUD05 Max	Y	2.4	1.5	1.547
N1	DERUD05 Min	X	2.5	2.5	1
N1	DERUD05 Min	Y	4.1	3.2	1.261
N1	DERUD06 Max	Y	0.0138	0.0138	1
N1	DERUD06 Min	Y	4.8	4.8	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD07 Max	X	2.5	2.5	1
N1	DERUD07 Max	Y	1.5	0.6	2.338
N1	DERUD07 Min	X	2.5	2.5	1
N1	DERUD07 Min	Y	3.2	2.3	1.364
N1	DERUD08 Max	Y	0.9	0.9	1
N1	DERUD08 Min	Y	3.9	3.9	1
N1	VIG01 Max	X	10.1	10.1	1
N1	VIG01 Max	Y	6.9	3.5	2
N1	VIG01 Min	X	10.1	10.1	1
N1	VIG01 Min	Y	11.7	8.2	1.42
N1	VIG02 Max	X	3	3	1
N1	VIG02 Max	Y	7.6	6.6	1.157
N1	VIG02 Min	X	3	3	1
N1	VIG02 Min	Y	12.4	11.4	1.091
N1	VIG03 Max	X	10.1	10.1	1
N1	VIG03 Max	Y	7.8	4.4	1.791
N1	VIG03 Min	X	10.1	10.1	1
N1	VIG03 Min	Y	10.8	7.3	1.472
N1	VIG04 Max	X	3	3	1
N1	VIG04 Max	Y	8.5	7.5	1.138
N1	VIG04 Min	X	3	3	1
N1	VIG04 Min	Y	11.5	10.5	1.099
N1	COL1 Max	X	15.1	15.1	1
N1	COL1 Max	Y	11.6	6.4	1.813
N1	COL1 Min	X	15.1	15.1	1
N1	COL1 Min	Y	16.3	11.1	1.465
N1	COL2 Max	X	4.5	4.5	1
N1	COL2 Max	Y	12.7	11.1	1.14
N1	COL2 Min	X	4.5	4.5	1
N1	COL2 Min	Y	17.4	15.9	1.098
N1	COL3 Max	X	15.1	15.1	1
N1	COL3 Max	Y	12.5	7.3	1.711
N1	COL3 Min	X	15.1	15.1	1
N1	COL3 Min	Y	15.4	10.2	1.506
N1	COL4 Max	X	4.5	4.5	1
N1	COL4 Max	Y	13.6	12	1.129
N1	COL4 Min	X	4.5	4.5	1
N1	COL4 Min	Y	16.5	15	1.104
N1	CIM09 Max	X	3.5	3.5	1
N1	CIM09 Max	Y	2.3	1.1	2.139
N1	CIM09 Min	X	3.5	3.5	1
N1	CIM09 Min	Y	4.2	3	1.399
N1	CIM10 Max	X	1.1	1.1	1
N1	CIM10 Max	Y	2.5	2.2	1.168
N1	CIM10 Min	X	1.1	1.1	1
N1	CIM10 Min	Y	4.5	4.1	1.088
N1	CIM11	Y	1.8	1.8	1
N1	CIM12	Y	2.1	2.1	1
N1	CIM13 Max	X	2.7	2.7	1
N1	CIM13 Max	Y	1.5	0.5	2.665
N1	CIM13 Min	X	2.7	2.7	1
N1	CIM13 Min	Y	4.6	3.7	1.251
N1	CIM14 Max	X	0.8	0.8	1
N1	CIM14 Max	Y	0.6	0.3	1.977
N1	CIM14 Min	X	0.8	0.8	1
N1	CIM14 Min	Y	4.8	4.5	1.062
N1	CIM15	Y	1	1	1
N1	COMB9	Y	2.7	2.7	1
N1	DER09	Y	2.7	2.7	1
N1	DERUD09	Y	2.7	2.7	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD10	Y	2.7	2.7	1
N1	DER10	Y	2.7	2.7	1
N1	COMB10	Y	2.7	2.7	1
N1	COMB11	Y	2.5	2.5	1
N1	DER11	Y	2.5	2.5	1
N1	DERUD11	Y	2.5	2.5	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.000504	1	0	0	3.25
N1	L	Y	0.000129	1	0	0	3.25
N1	LR	Y	3E-06	4	8.2	8.2	3.25
N1	EX Max	X	0.004953	5	16.4	0	3.25
N1	EX Max	Y	0.003399	1	0	0	3.25
N1	EY Max	Y	0.003914	5	16.4	0	3.25
N1	DISX Max	X	0.001548	5	16.4	0	3.25
N1	DISX Max	Y	0.001062	1	0	0	3.25
N1	DISY Max	Y	0.001223	5	16.4	0	3.25
N1	G	Y	6.8E-05	4	8.2	8.2	3.25
N1	DERUX Max	X	0.000779	5	16.4	0	3.25
N1	DERUX Max	Y	0.000519	1	0	0	3.25
N1	DERUY Max	Y	0.000738	5	16.4	0	3.25
N1	COMB1	Y	0.000705	1	0	0	3.25
N1	COMB2	Y	0.00081	1	0	0	3.25
N1	COMB3	Y	0.000731	4	8.2	8.2	3.25
N1	COMB4	Y	0.000733	1	0	0	3.25
N1	COMB5 Max	X	0.001548	5	16.4	0	3.25
N1	COMB5 Max	Y	0.000696	1	0	0	3.25
N1	COMB5 Min	X	0.001548	5	16.4	0	3.25
N1	COMB5 Min	Y	0.002163	1	0	0	3.25
N1	COMB6 Max	X	0.000464	5	16.4	0	3.25
N1	COMB6 Max	Y	0.000808	5	16.4	0	3.25
N1	COMB6 Min	X	0.000464	5	16.4	0	3.25
N1	COMB6 Min	Y	0.002275	1	0	0	3.25
N1	COMB7 Max	X	0.000464	5	16.4	0	3.25
N1	COMB7 Max	Y	0.001089	1	0	0	3.25
N1	COMB7 Min	X	0.000464	5	16.4	0	3.25
N1	COMB7 Min	Y	0.001995	1	0	0	3.25
N1	COMB8 Max	X	0.001548	5	16.4	0	3.25
N1	COMB8 Max	Y	0.000976	1	0	0	3.25
N1	COMB8 Min	X	0.001548	5	16.4	0	3.25
N1	COMB8 Min	Y	0.001883	1	0	0	3.25
N1	ENVE Max	X	0.001548	5	16.4	0	3.25
N1	ENVE Max	Y	0.001089	1	0	0	3.25
N1	ENVE Min	X	0.001548	5	16.4	0	3.25
N1	ENVE Min	Y	0.002275	1	0	0	3.25
N1	CIM01	Y	0.000504	1	0	0	3.25
N1	CIM02	Y	0.000633	1	0	0	3.25
N1	CIM03	Y	0.000504	4	8.2	8.2	3.25
N1	CIM04	Y	0.000599	1	0	0	3.25
N1	CIM05 Max	X	0.001084	5	16.4	0	3.25
N1	CIM05 Max	Y	0.000497	1	0	0	3.25
N1	CIM05 Min	X	0.001084	5	16.4	0	3.25
N1	CIM05 Min	Y	0.001504	1	0	0	3.25
N1	CIM06 Max	X	0.000325	5	16.4	0	3.25
N1	CIM06 Max	Y	0.000576	5	16.4	0	3.25
N1	CIM06 Min	X	0.000325	5	16.4	0	3.25
N1	CIM06 Min	Y	0.001583	1	0	0	3.25
N1	CIM07 Max	X	0.00082	5	16.4	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM07 Max	Y	0.000403	3	8.2	0	3.25
N1	CIM07 Min	X	0.00082	5	16.4	0	3.25
N1	CIM07 Min	Y	0.001358	1	0	0	3.25
N1	CIM08 Max	X	0.000248	5	16.4	0	3.25
N1	CIM08 Max	Y	0.000219	5	16.4	0	3.25
N1	CIM08 Min	X	0.000248	5	16.4	0	3.25
N1	CIM08 Min	Y	0.001417	1	0	0	3.25
N1	DER01	Y	0.000705	1	0	0	3.25
N1	DER02	Y	0.00081	1	0	0	3.25
N1	DER03	Y	0.000731	4	8.2	8.2	3.25
N1	DER04	Y	0.000733	1	0	0	3.25
N1	DER05 Max	X	0.004953	5	16.4	0	3.25
N1	DER05 Max	Y	0.002666	1	0	0	3.25
N1	DER05 Min	X	0.004953	5	16.4	0	3.25
N1	DER05 Min	Y	0.004133	1	0	0	3.25
N1	DER06 Max	Y	0.003181	5	16.4	0	3.25
N1	DER06 Min	Y	0.004648	5	16.4	0	3.25
N1	DER07 Max	X	0.004953	5	16.4	0	3.25
N1	DER07 Max	Y	0.002946	1	0	0	3.25
N1	DER07 Min	X	0.004953	5	16.4	0	3.25
N1	DER07 Min	Y	0.003853	1	0	0	3.25
N1	DER08 Max	Y	0.003461	5	16.4	0	3.25
N1	DER08 Min	Y	0.004368	5	16.4	0	3.25
N1	DERUD01	Y	0.000705	1	0	0	3.25
N1	DERUD02	Y	0.00081	1	0	0	3.25
N1	DERUD03	Y	0.000731	4	8.2	8.2	3.25
N1	DERUD04	Y	0.000733	1	0	0	3.25
N1	DERUD05 Max	X	0.000779	5	16.4	0	3.25
N1	DERUD05 Max	Y	0.000733	3	8.2	0	3.25
N1	DERUD05 Min	X	0.000779	5	16.4	0	3.25
N1	DERUD05 Min	Y	0.001252	1	0	0	3.25
N1	DERUD06 Max	Y	6E-06	4	8.2	8.2	3.25
N1	DERUD06 Min	Y	0.001471	1	0	0	3.25
N1	DERUD07 Max	X	0.000779	5	16.4	0	3.25
N1	DERUD07 Max	Y	0.000453	3	8.2	0	3.25
N1	DERUD07 Min	X	0.000779	5	16.4	0	3.25
N1	DERUD07 Min	Y	0.000972	1	0	0	3.25
N1	DERUD08 Max	Y	0.000284	5	16.4	0	3.25
N1	DERUD08 Min	Y	0.001191	1	0	0	3.25
N1	VIG01 Max	X	0.003096	5	16.4	0	3.25
N1	VIG01 Max	Y	0.002125	1	0	0	3.25
N1	VIG01 Min	X	0.003096	5	16.4	0	3.25
N1	VIG01 Min	Y	0.003592	1	0	0	3.25
N1	VIG02 Max	X	0.000929	5	16.4	0	3.25
N1	VIG02 Max	Y	0.00235	1	0	0	3.25
N1	VIG02 Min	X	0.000929	5	16.4	0	3.25
N1	VIG02 Min	Y	0.003817	1	0	0	3.25
N1	VIG03 Max	X	0.003096	5	16.4	0	3.25
N1	VIG03 Max	Y	0.002405	1	0	0	3.25
N1	VIG03 Min	X	0.003096	5	16.4	0	3.25
N1	VIG03 Min	Y	0.003312	1	0	0	3.25
N1	VIG04 Max	X	0.000929	5	16.4	0	3.25
N1	VIG04 Max	Y	0.00263	1	0	0	3.25
N1	VIG04 Min	X	0.000929	5	16.4	0	3.25
N1	VIG04 Min	Y	0.003537	1	0	0	3.25
N1	COL1 Max	X	0.004644	5	16.4	0	3.25
N1	COL1 Max	Y	0.003554	1	0	0	3.25
N1	COL1 Min	X	0.004644	5	16.4	0	3.25
N1	COL1 Min	Y	0.005021	1	0	0	3.25
N1	COL2 Max	X	0.001393	5	16.4	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	COL2 Max	Y	0.003892	1	0	0	3.25
N1	COL2 Min	X	0.001393	5	16.4	0	3.25
N1	COL2 Min	Y	0.005359	1	0	0	3.25
N1	COL3 Max	X	0.004644	5	16.4	0	3.25
N1	COL3 Max	Y	0.003834	1	0	0	3.25
N1	COL3 Min	X	0.004644	5	16.4	0	3.25
N1	COL3 Min	Y	0.004741	1	0	0	3.25
N1	COL4 Max	X	0.001393	5	16.4	0	3.25
N1	COL4 Max	Y	0.004172	1	0	0	3.25
N1	COL4 Min	X	0.001393	5	16.4	0	3.25
N1	COL4 Min	Y	0.005079	1	0	0	3.25
N1	CIM09 Max	X	0.001084	5	16.4	0	3.25
N1	CIM09 Max	Y	0.000698	1	0	0	3.25
N1	CIM09 Min	X	0.001084	5	16.4	0	3.25
N1	CIM09 Min	Y	0.001303	1	0	0	3.25
N1	CIM10 Max	X	0.000325	5	16.4	0	3.25
N1	CIM10 Max	Y	0.000777	1	0	0	3.25
N1	CIM10 Min	X	0.000325	5	16.4	0	3.25
N1	CIM10 Min	Y	0.001382	1	0	0	3.25
N1	CIM11	Y	0.000569	4	8.2	8.2	3.25
N1	CIM12	Y	0.000646	1	0	0	3.25
N1	CIM13 Max	X	0.00082	5	16.4	0	3.25
N1	CIM13 Max	Y	0.000452	4	8.2	8.2	3.25
N1	CIM13 Min	X	0.00082	5	16.4	0	3.25
N1	CIM13 Min	Y	0.001405	1	0	0	3.25
N1	CIM14 Max	X	0.000248	5	16.4	0	3.25
N1	CIM14 Max	Y	0.000172	5	16.4	0	3.25
N1	CIM14 Min	X	0.000248	5	16.4	0	3.25
N1	CIM14 Min	Y	0.001465	1	0	0	3.25
N1	CIM15	Y	0.000302	1	0	0	3.25
N1	COMB9	Y	0.000841	1	0	0	3.25
N1	DER09	Y	0.000841	1	0	0	3.25
N1	DERUD09	Y	0.000841	1	0	0	3.25
N1	DERUD10	Y	0.000836	4	8.2	8.2	3.25
N1	DER10	Y	0.000836	4	8.2	8.2	3.25
N1	COMB10	Y	0.000836	4	8.2	8.2	3.25
N1	COMB11	Y	0.000764	1	0	0	3.25
N1	DER11	Y	0.000764	1	0	0	3.25
N1	DERUD11	Y	0.000764	1	0	0	3.25

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	D	Y	1.6	1.6	1.003
N1	L	Y	0.4	0.4	1.015
N1	LR	Y	0.00924	0.001873	4.933
N1	EX Max	X	16.1	12.5	1.292
N1	EX Max	Y	11	5.5	2
N1	EY Max	Y	12.7	12.6	1.006
N1	DISX Max	X	5	3.9	1.292
N1	DISX Max	Y	3.5	1.7	2
N1	DISY Max	Y	4	4	1.006
N1	G	Y	0.2	0.2	1.056
N1	DERUX Max	X	2.5	1.9	1.347
N1	DERUX Max	Y	1.7	0.8	2
N1	DERUY Max	Y	2.4	2.4	1.006
N1	COMB1	Y	2.3	2.3	1.003
N1	COMB2	Y	2.6	2.6	1.005
N1	COMB3	Y	2.4	2.4	1.002

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	COMB4	Y	2.4	2.4	1.004
N1	COMB5 Max	X	5	3.9	1.295
N1	COMB5 Max	Y	2.3	0.5	4.226
N1	COMB5 Min	X	5	3.9	1.295
N1	COMB5 Min	Y	7	5.3	1.329
N1	COMB6 Max	X	1.5	1.2	1.301
N1	COMB6 Max	Y	2.6	2.1	1.247
N1	COMB6 Min	X	1.5	1.2	1.301
N1	COMB6 Min	Y	7.4	6.9	1.079
N1	COMB7 Max	X	1.5	1.2	1.298
N1	COMB7 Max	Y	3.5	3	1.175
N1	COMB7 Min	X	1.5	1.2	1.298
N1	COMB7 Min	Y	6.5	5.9	1.09
N1	COMB8 Max	X	5	3.9	1.294
N1	COMB8 Max	Y	3.2	1.4	2.194
N1	COMB8 Min	X	5	3.9	1.294
N1	COMB8 Min	Y	6.1	4.4	1.395
N1	ENVE Max	X	5	3.9	1.294
N1	ENVE Max	Y	3.5	3	1.175
N1	ENVE Min	X	5	3.9	1.294
N1	ENVE Min	Y	7.4	6.9	1.079
N1	CIM01	Y	1.6	1.6	1.003
N1	CIM02	Y	2.1	2	1.005
N1	CIM03	Y	1.6	1.6	1.002
N1	CIM04	Y	1.9	1.9	1.003
N1	CIM05 Max	X	3.5	2.7	1.296
N1	CIM05 Max	Y	1.6	0.4	3.976
N1	CIM05 Min	X	3.5	2.7	1.296
N1	CIM05 Min	Y	4.9	3.7	1.331
N1	CIM06 Max	X	1.1	0.8	1.303
N1	CIM06 Max	Y	1.9	1.5	1.244
N1	CIM06 Min	X	1.1	0.8	1.303
N1	CIM06 Min	Y	5.1	4.8	1.079
N1	CIM07 Max	X	2.7	2.1	1.297
N1	CIM07 Max	Y	1.3	0.4	3.308
N1	CIM07 Min	X	2.7	2.1	1.297
N1	CIM07 Min	Y	4.4	3.5	1.263
N1	CIM08 Max	X	0.8	0.6	1.307
N1	CIM08 Max	Y	0.7	0.4	1.647
N1	CIM08 Min	X	0.8	0.6	1.307
N1	CIM08 Min	Y	4.6	4.3	1.066
N1	DER01	Y	2.3	2.3	1.003
N1	DER02	Y	2.6	2.6	1.005
N1	DER03	Y	2.4	2.4	1.002
N1	DER04	Y	2.4	2.4	1.004
N1	DER05 Max	X	16.1	12.4	1.293
N1	DER05 Max	Y	8.7	3.1	2.759
N1	DER05 Min	X	16.1	12.4	1.293
N1	DER05 Min	Y	13.4	7.9	1.701
N1	DER06 Max	Y	10.3	10.3	1.006
N1	DER06 Min	Y	15.1	15	1.006
N1	DER07 Max	X	16.1	12.5	1.293
N1	DER07 Max	Y	9.6	4.1	2.364
N1	DER07 Min	X	16.1	12.5	1.293
N1	DER07 Min	Y	12.5	7	1.79
N1	DER08 Max	Y	11.2	11.2	1.006
N1	DER08 Min	Y	14.2	14.1	1.006
N1	DERUD01	Y	2.3	2.3	1.003
N1	DERUD02	Y	2.6	2.6	1.005

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	DERUD03	Y	2.4	2.4	1.002
N1	DERUD04	Y	2.4	2.4	1.004
N1	DERUD05 Max	X	2.5	1.9	1.354
N1	DERUD05 Max	Y	2.4	1.5	1.551
N1	DERUD05 Min	X	2.5	1.9	1.354
N1	DERUD05 Min	Y	4.1	3.2	1.266
N1	DERUD06 Max	Y	0.02054	0.01468	1.399
N1	DERUD06 Min	Y	4.8	4.8	1.005
N1	DERUD07 Max	X	2.5	1.9	1.352
N1	DERUD07 Max	Y	1.5	0.6	2.338
N1	DERUD07 Min	X	2.5	1.9	1.352
N1	DERUD07 Min	Y	3.2	2.3	1.366
N1	DERUD08 Max	Y	0.9	0.9	1.01
N1	DERUD08 Min	Y	3.9	3.9	1.005
N1	VIG01 Max	X	10.1	7.8	1.294
N1	VIG01 Max	Y	6.9	3.5	2
N1	VIG01 Min	X	10.1	7.8	1.294
N1	VIG01 Min	Y	11.7	8.2	1.423
N1	VIG02 Max	X	3	2.3	1.296
N1	VIG02 Max	Y	7.6	6.6	1.159
N1	VIG02 Min	X	3	2.3	1.296
N1	VIG02 Min	Y	12.4	11.3	1.095
N1	VIG03 Max	X	10.1	7.8	1.293
N1	VIG03 Max	Y	7.8	4.4	1.793
N1	VIG03 Min	X	10.1	7.8	1.293
N1	VIG03 Min	Y	10.8	7.3	1.475
N1	VIG04 Max	X	3	2.3	1.295
N1	VIG04 Max	Y	8.5	7.5	1.141
N1	VIG04 Min	X	3	2.3	1.295
N1	VIG04 Min	Y	11.5	10.4	1.102
N1	COL1 Max	X	15.1	11.7	1.293
N1	COL1 Max	Y	11.6	6.4	1.813
N1	COL1 Min	X	15.1	11.7	1.293
N1	COL1 Min	Y	16.3	11.1	1.468
N1	COL2 Max	X	4.5	3.5	1.295
N1	COL2 Max	Y	12.7	11.1	1.143
N1	COL2 Min	X	4.5	3.5	1.295
N1	COL2 Min	Y	17.4	15.8	1.101
N1	COL3 Max	X	15.1	11.7	1.293
N1	COL3 Max	Y	12.5	7.3	1.713
N1	COL3 Min	X	15.1	11.7	1.293
N1	COL3 Min	Y	15.4	10.2	1.509
N1	COL4 Max	X	4.5	3.5	1.294
N1	COL4 Max	Y	13.6	12	1.133
N1	COL4 Min	X	4.5	3.5	1.294
N1	COL4 Min	Y	16.5	14.9	1.107
N1	CIM09 Max	X	3.5	2.7	1.294
N1	CIM09 Max	Y	2.3	1.1	2.139
N1	CIM09 Min	X	3.5	2.7	1.294
N1	CIM09 Min	Y	4.2	3	1.402
N1	CIM10 Max	X	1.1	0.8	1.298
N1	CIM10 Max	Y	2.5	2.2	1.171
N1	CIM10 Min	X	1.1	0.8	1.298
N1	CIM10 Min	Y	4.5	4.1	1.091
N1	CIM11	Y	1.9	1.8	1.004
N1	CIM12	Y	2.1	2.1	1.002
N1	CIM13 Max	X	2.7	2.1	1.297
N1	CIM13 Max	Y	1.5	0.6	2.662
N1	CIM13 Min	X	2.7	2.1	1.297



Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM13 Min	Y	4.6	3.6	1.251
N1	CIM14 Max	X	0.8	0.6	1.307
N1	CIM14 Max	Y	0.6	0.3	2.026
N1	CIM14 Min	X	0.8	0.6	1.307
N1	CIM14 Min	Y	4.8	4.5	1.063
N1	CIM15	Y	1	1	1.003
N1	COMB9	Y	2.7	2.7	1.004
N1	DER09	Y	2.7	2.7	1.004
N1	DERUD09	Y	2.7	2.7	1.004
N1	DERUD10	Y	2.7	2.7	1.003
N1	DER10	Y	2.7	2.7	1.003
N1	COMB10	Y	2.7	2.7	1.003
N1	COMB11	Y	2.5	2.5	1.003
N1	DER11	Y	2.5	2.5	1.003
N1	DERUD11	Y	2.5	2.5	1.003

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	661.9344	0	0	0	904.767	-5427.8621
N1	D	Bottom	735.4416	0	0	0	1205.004	-6030.6211
N1	L	Top	78.72	0	0	0	-94.4636	-645.504
N1	L	Bottom	78.72	0	0	0	-94.7548	-645.504
N1	LR	Top	67.24	0	0	0	275.684	-551.368
N1	LR	Bottom	67.24	0	0	0	275.6862	-551.368
N1	EX Max	Top	0	705.5937	0	3834.3918	0	0.0005
N1	EX Max	Bottom	0	705.5937	0	3834.3918	0	2302.9675
N1	EY Max	Top	0	0	706.2802	5791.4973	0.0009	0
N1	EY Max	Bottom	0	0	706.2802	5791.4973	2304.2814	0
N1	DISX Max	Top	0	220.498	0	1198.2474	0	0.0001
N1	DISX Max	Bottom	0	220.498	0	1198.2474	0	719.6774
N1	DISY Max	Top	0	0	220.7125	1809.8429	0.0003	0
N1	DISY Max	Bottom	0	0	220.7125	1809.8429	720.0879	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	173.84	0	0	0	504.1362	-1425.488
N1	G	Bottom	173.84	0	0	0	503.995	-1425.488
N1	DERUX Max	Top	0	108.0792	0	523.4864	0	0.0001
N1	DERUX Max	Bottom	0	108.0792	0	523.4864	0	352.7931
N1	DERUY Max	Top	0	0	133.1021	1091.4376	0.0002	0
N1	DERUY Max	Bottom	0	0	133.1021	1091.4376	434.2537	0
N1	COMB1	Top	926.7082	0	0	0	1266.6738	-7599.0069
N1	COMB1	Bottom	1029.6182	0	0	0	1687.0056	-8442.8696
N1	COMB2	Top	953.8933	0	0	0	1072.4207	-7821.9249
N1	COMB2	Bottom	1042.1019	0	0	0	1432.2402	-8545.2357
N1	COMB3	Top	980.6253	0	0	0	1432.3512	-8041.1273
N1	COMB3	Bottom	1068.8339	0	0	0	1792.3479	-8764.4381
N1	COMB4	Top	906.6613	0	0	0	1129.0988	-7434.6225
N1	COMB4	Bottom	994.8699	0	0	0	1489.0931	-8157.9333
N1	COMB5 Max	Top	873.0413	220.498	66.2138	1741.2003	991.2569	-7158.9383
N1	COMB5 Max	Bottom	961.2499	220.498	66.2138	1741.2003	1567.2764	-7162.572
N1	COMB5 Min	Top	873.0413	-220.498	-66.2138	-1741.2003	991.2567	-7158.9386
N1	COMB5 Min	Bottom	961.2499	-220.498	-66.2138	-1741.2003	1135.2236	-8601.9267
N1	COMB6 Max	Top	873.0413	66.1494	220.7125	2169.3171	991.2571	-7158.9385
N1	COMB6 Max	Bottom	961.2499	66.1494	220.7125	2169.3171	2071.3379	-7666.3461
N1	COMB6 Min	Top	873.0413	-66.1494	-220.7125	-2169.3171	991.2565	-7158.9385
N1	COMB6 Min	Bottom	961.2499	-66.1494	-220.7125	-2169.3171	631.162	-8098.1526
N1	COMB7 Max	Top	595.741	66.1494	220.7125	2169.3171	814.2906	-4885.0758
N1	COMB7 Max	Bottom	661.8974	66.1494	220.7125	2169.3171	1804.5916	-5211.6558

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COMB7 Min	Top	595.741	-66.1494	-220.7125	-2169.3171	814.29	-4885.0759
N1	COMB7 Min	Bottom	661.8974	-66.1494	-220.7125	-2169.3171	364.4157	-5643.4622
N1	COMB8 Max	Top	595.741	220.498	66.2138	1741.2003	814.2904	-4885.0757
N1	COMB8 Max	Bottom	661.8974	220.498	66.2138	1741.2003	1300.53	-4707.8817
N1	COMB8 Min	Top	595.741	-220.498	-66.2138	-1741.2003	814.2902	-4885.076
N1	COMB8 Min	Bottom	661.8974	-220.498	-66.2138	-1741.2003	868.4772	-6147.2364
N1	ENVE Max	Top	980.6253	220.498	220.7125	2169.3171	1432.3512	-4885.0757
N1	ENVE Max	Bottom	1068.8339	220.498	220.7125	2169.3171	2071.3379	-4707.8817
N1	ENVE Min	Top	595.741	-220.498	-220.7125	-2169.3171	814.29	-8041.1273
N1	ENVE Min	Bottom	661.8974	-220.498	-220.7125	-2169.3171	364.4157	-8764.4381
N1	CIM01	Top	661.9344	0	0	0	904.767	-5427.8621
N1	CIM01	Bottom	735.4416	0	0	0	1205.004	-6030.6211
N1	CIM02	Top	740.6544	0	0	0	810.3034	-6073.3661
N1	CIM02	Bottom	814.1616	0	0	0	1110.2492	-6676.1251
N1	CIM03	Top	729.1744	0	0	0	1180.451	-5979.2301
N1	CIM03	Bottom	802.6816	0	0	0	1480.6903	-6581.9891
N1	CIM04	Top	771.4044	0	0	0	1040.6823	-6325.5161
N1	CIM04	Bottom	844.9116	0	0	0	1340.7026	-6928.2751
N1	CIM05 Max	Top	661.9344	154.3486	46.3496	1218.8402	904.7671	-5427.862
N1	CIM05 Max	Bottom	735.4416	154.3486	46.3496	1218.8402	1356.2225	-5526.847
N1	CIM05 Min	Top	661.9344	-154.3486	-46.3496	-1218.8402	904.767	-5427.8622
N1	CIM05 Min	Bottom	735.4416	-154.3486	-46.3496	-1218.8402	1053.7856	-6534.3953
N1	CIM06 Max	Top	661.9344	46.3046	154.4988	1518.522	904.7672	-5427.862
N1	CIM06 Max	Bottom	735.4416	46.3046	154.4988	1518.522	1709.0656	-5879.4889
N1	CIM06 Min	Top	661.9344	-46.3046	-154.4988	-1518.522	904.7668	-5427.8621
N1	CIM06 Min	Bottom	735.4416	-46.3046	-154.4988	-1518.522	700.9425	-6181.7534
N1	CIM07 Max	Top	771.4044	116.864	35.314	924.646	1040.6824	-6325.516
N1	CIM07 Max	Bottom	844.9116	116.864	35.314	924.646	1455.9166	-6546.8461
N1	CIM07 Min	Top	771.4044	-116.864	-35.314	-924.646	1040.6823	-6325.5162
N1	CIM07 Min	Bottom	844.9116	-116.864	-35.314	-924.646	1225.4885	-7309.7041
N1	CIM08 Max	Top	771.4044	35.2797	116.9777	1150.9363	1040.6825	-6325.5161
N1	CIM08 Max	Bottom	844.9116	35.2797	116.9777	1150.9363	1722.3492	-6813.1267
N1	CIM08 Min	Top	771.4044	-35.2797	-116.9777	-1150.9363	1040.6822	-6325.5161
N1	CIM08 Min	Bottom	844.9116	-35.2797	-116.9777	-1150.9363	959.056	-7043.4235
N1	DER01	Top	926.7082	0	0	0	1266.6738	-7599.0069
N1	DER01	Bottom	1029.6182	0	0	0	1687.0056	-8442.8696
N1	DER02	Top	953.8933	0	0	0	1072.4207	-7821.9249
N1	DER02	Bottom	1042.1019	0	0	0	1432.2402	-8545.2357
N1	DER03	Top	980.6253	0	0	0	1432.3512	-8041.1273
N1	DER03	Bottom	1068.8339	0	0	0	1792.3479	-8764.4381
N1	DER04	Top	906.6613	0	0	0	1129.0988	-7434.6225
N1	DER04	Bottom	994.8699	0	0	0	1489.0931	-8157.9333
N1	DER05 Max	Top	873.0413	705.5937	0	3834.3918	991.2568	-7158.938
N1	DER05 Max	Bottom	961.2499	705.5937	0	3834.3918	1351.25	-5579.2818
N1	DER05 Min	Top	873.0413	-705.5937	0	-3834.3918	991.2568	-7158.939
N1	DER05 Min	Bottom	961.2499	-705.5937	0	-3834.3918	1351.25	-10185.2169
N1	DER06 Max	Top	873.0413	0	706.2802	5791.4973	991.2578	-7158.9385
N1	DER06 Max	Bottom	961.2499	0	706.2802	5791.4973	3655.5314	-7882.2493
N1	DER06 Min	Top	873.0413	0	-706.2802	-5791.4973	991.2559	-7158.9385
N1	DER06 Min	Bottom	961.2499	0	-706.2802	-5791.4973	-953.0314	-7882.2493
N1	DER07 Max	Top	595.741	705.5937	0	3834.3918	814.2903	-4885.0754
N1	DER07 Max	Bottom	661.8974	705.5937	0	3834.3918	1084.5036	-3124.5915
N1	DER07 Min	Top	595.741	-705.5937	0	-3834.3918	814.2903	-4885.0763
N1	DER07 Min	Bottom	661.8974	-705.5937	0	-3834.3918	1084.5036	-7730.5265
N1	DER08 Max	Top	595.741	0	706.2802	5791.4973	814.2912	-4885.0759
N1	DER08 Max	Bottom	661.8974	0	706.2802	5791.4973	3388.785	-5427.559
N1	DER08 Min	Top	595.741	0	-706.2802	-5791.4973	814.2894	-4885.0759
N1	DER08 Min	Bottom	661.8974	0	-706.2802	-5791.4973	-1219.7778	-5427.559
N1	DERUD01	Top	926.7082	0	0	0	1266.6738	-7599.0069
N1	DERUD01	Bottom	1029.6182	0	0	0	1687.0056	-8442.8696

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD02	Top	953.8933	0	0	0	1072.4207	-7821.9249
N1	DERUD02	Bottom	1042.1019	0	0	0	1432.2402	-8545.2357
N1	DERUD03	Top	980.6253	0	0	0	1432.3512	-8041.1273
N1	DERUD03	Bottom	1068.8339	0	0	0	1792.3479	-8764.4381
N1	DERUD04	Top	906.6613	0	0	0	1129.0988	-7434.6225
N1	DERUD04	Bottom	994.8699	0	0	0	1489.0931	-8157.9333
N1	DERUD05 Max	Top	873.0413	108.0792	0	523.4864	991.2568	-7158.9384
N1	DERUD05 Max	Bottom	961.2499	108.0792	0	523.4864	1351.25	-7529.4563
N1	DERUD05 Min	Top	873.0413	-108.0792	0	-523.4864	991.2568	-7158.9386
N1	DERUD05 Min	Bottom	961.2499	-108.0792	0	-523.4864	1351.25	-8235.0424
N1	DERUD06 Max	Top	873.0413	0	133.1021	1091.4376	991.257	-7158.9385
N1	DERUD06 Max	Bottom	961.2499	0	133.1021	1091.4376	1785.5037	-7882.2493
N1	DERUD06 Min	Top	873.0413	0	-133.1021	-1091.4376	991.2567	-7158.9385
N1	DERUD06 Min	Bottom	961.2499	0	-133.1021	-1091.4376	916.9962	-7882.2493
N1	DERUD07 Max	Top	595.741	108.0792	0	523.4864	814.2903	-4885.0758
N1	DERUD07 Max	Bottom	661.8974	108.0792	0	523.4864	1084.5036	-5074.7659
N1	DERUD07 Min	Top	595.741	-108.0792	0	-523.4864	814.2903	-4885.0759
N1	DERUD07 Min	Bottom	661.8974	-108.0792	0	-523.4864	1084.5036	-5780.3521
N1	DERUD08 Max	Top	595.741	0	133.1021	1091.4376	814.2905	-4885.0759
N1	DERUD08 Max	Bottom	661.8974	0	133.1021	1091.4376	1518.7574	-5427.559
N1	DERUD08 Min	Top	595.741	0	-133.1021	-1091.4376	814.2901	-4885.0759
N1	DERUD08 Min	Bottom	661.8974	0	-133.1021	-1091.4376	650.2499	-5427.559
N1	VIG01 Max	Top	873.0413	440.9961	132.4275	3482.4006	991.257	-7158.9382
N1	VIG01 Max	Bottom	961.2499	440.9961	132.4275	3482.4006	1783.3027	-6442.8946
N1	VIG01 Min	Top	873.0413	-440.9961	-132.4275	-3482.4006	991.2567	-7158.9388
N1	VIG01 Min	Bottom	961.2499	-440.9961	-132.4275	-3482.4006	919.1972	-9321.6041
N1	VIG02 Max	Top	873.0413	132.2988	441.4251	4338.6342	991.2574	-7158.9384
N1	VIG02 Max	Bottom	961.2499	132.2988	441.4251	4338.6342	2791.4259	-7450.4429
N1	VIG02 Min	Top	873.0413	-132.2988	-441.4251	-4338.6342	991.2562	-7158.9386
N1	VIG02 Min	Bottom	961.2499	-132.2988	-441.4251	-4338.6342	-88.9259	-8314.0558
N1	VIG03 Max	Top	595.741	440.9961	132.4275	3482.4006	814.2905	-4885.0756
N1	VIG03 Max	Bottom	661.8974	440.9961	132.4275	3482.4006	1516.5564	-3988.2043
N1	VIG03 Min	Top	595.741	-440.9961	-132.4275	-3482.4006	814.2901	-4885.0762
N1	VIG03 Min	Bottom	661.8974	-440.9961	-132.4275	-3482.4006	652.4509	-6866.9137
N1	VIG04 Max	Top	595.741	132.2988	441.4251	4338.6342	814.2909	-4885.0758
N1	VIG04 Max	Bottom	661.8974	132.2988	441.4251	4338.6342	2524.6795	-4995.7526
N1	VIG04 Min	Top	595.741	-132.2988	-441.4251	-4338.6342	814.2897	-4885.076
N1	VIG04 Min	Bottom	661.8974	-132.2988	-441.4251	-4338.6342	-355.6722	-5859.3654
N1	COL1 Max	Top	873.0413	661.4941	198.6413	5223.6009	991.2571	-7158.9381
N1	COL1 Max	Bottom	961.2499	661.4941	198.6413	5223.6009	1999.3291	-5723.2173
N1	COL1 Min	Top	873.0413	-661.4941	-198.6413	-5223.6009	991.2566	-7158.9389
N1	COL1 Min	Bottom	961.2499	-661.4941	-198.6413	-5223.6009	703.1708	-10041.2814
N1	COL2 Max	Top	873.0413	198.4482	662.1376	6507.9514	991.2577	-7158.9384
N1	COL2 Max	Bottom	961.2499	198.4482	662.1376	6507.9514	3511.5138	-7234.5397
N1	COL2 Min	Top	873.0413	-198.4482	-662.1376	-6507.9514	991.256	-7158.9386
N1	COL2 Min	Bottom	961.2499	-198.4482	-662.1376	-6507.9514	-809.0138	-8529.959
N1	COL3 Max	Top	595.741	661.4941	198.6413	5223.6009	814.2906	-4885.0754
N1	COL3 Max	Bottom	661.8974	661.4941	198.6413	5223.6009	1732.5828	-3268.5269
N1	COL3 Min	Top	595.741	-661.4941	-198.6413	-5223.6009	814.2901	-4885.0763
N1	COL3 Min	Bottom	661.8974	-661.4941	-198.6413	-5223.6009	436.4245	-7586.5911
N1	COL4 Max	Top	595.741	198.4482	662.1376	6507.9514	814.2912	-4885.0757
N1	COL4 Max	Bottom	661.8974	198.4482	662.1376	6507.9514	3244.7674	-4779.8494
N1	COL4 Min	Top	595.741	-198.4482	-662.1376	-6507.9514	814.2894	-4885.076
N1	COL4 Min	Bottom	661.8974	-198.4482	-662.1376	-6507.9514	-1075.7602	-6075.2686
N1	CIM09 Max	Top	397.1606	154.3486	46.3496	1218.8402	542.8603	-3256.7171
N1	CIM09 Max	Bottom	441.265	154.3486	46.3496	1218.8402	874.2209	-3114.5985
N1	CIM09 Min	Top	397.1606	-154.3486	-46.3496	-1218.8402	542.8602	-3256.7174
N1	CIM09 Min	Bottom	441.265	-154.3486	-46.3496	-1218.8402	571.784	-4122.1468
N1	CIM10 Max	Top	397.1606	46.3046	154.4988	1518.522	542.8604	-3256.7172
N1	CIM10 Max	Bottom	441.265	46.3046	154.4988	1518.522	1227.064	-3467.2404

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM10 Min	Top	397.1606	-46.3046	-154.4988	-1518.522	542.86	-3256.7173
N1	CIM10 Min	Bottom	441.265	-46.3046	-154.4988	-1518.522	218.9409	-3769.5049
N1	CIM11	Top	835.7744	0	0	0	1408.9032	-6853.3501
N1	CIM11	Bottom	909.2816	0	0	0	1708.9991	-7456.1091
N1	CIM12	Top	851.3544	0	0	0	1212.0215	-6981.1061
N1	CIM12	Bottom	924.8616	0	0	0	1511.9342	-7583.8651
N1	CIM13 Max	Top	851.3544	116.864	35.314	924.646	1212.0215	-6981.106
N1	CIM13 Max	Bottom	924.8616	116.864	35.314	924.646	1627.1482	-7202.4361
N1	CIM13 Min	Top	851.3544	-116.864	-35.314	-924.646	1212.0214	-6981.1062
N1	CIM13 Min	Bottom	924.8616	-116.864	-35.314	-924.646	1396.7201	-7965.2941
N1	CIM14 Max	Top	851.3544	35.2797	116.9777	1150.9363	1212.0216	-6981.1061
N1	CIM14 Max	Bottom	924.8616	35.2797	116.9777	1150.9363	1893.5808	-7468.7167
N1	CIM14 Min	Top	851.3544	-35.2797	-116.9777	-1150.9363	1212.0213	-6981.1061
N1	CIM14 Min	Bottom	924.8616	-35.2797	-116.9777	-1150.9363	1130.2876	-7699.0135
N1	CIM15	Top	397.1606	0	0	0	542.8602	-3256.7172
N1	CIM15	Bottom	441.265	0	0	0	723.0024	-3618.3727
N1	COMB9	Top	1007.1933	0	0	0	1186.6468	-8258.9849
N1	COMB9	Bottom	1095.4019	0	0	0	1546.3946	-8982.2957
N1	DER09	Top	1007.1933	0	0	0	1186.6468	-8258.9849
N1	DER09	Bottom	1095.4019	0	0	0	1546.3946	-8982.2957
N1	DERUD09	Top	1007.1933	0	0	0	1186.6468	-8258.9849
N1	DERUD09	Bottom	1095.4019	0	0	0	1546.3946	-8982.2957
N1	DERUD10	Top	1151.1853	0	0	0	1797.8747	-9439.7193
N1	DERUD10	Bottom	1239.3939	0	0	0	2157.642	-10163.0301
N1	DER10	Top	1151.1853	0	0	0	1797.8747	-9439.7193
N1	DER10	Bottom	1239.3939	0	0	0	2157.642	-10163.0301
N1	COMB10	Top	1151.1853	0	0	0	1797.8747	-9439.7193
N1	COMB10	Bottom	1239.3939	0	0	0	2157.642	-10163.0301
N1	COMB11	Top	959.9613	0	0	0	1243.3249	-7871.6825
N1	COMB11	Bottom	1048.1699	0	0	0	1603.2475	-8594.9933
N1	DER11	Top	959.9613	0	0	0	1243.3249	-7871.6825
N1	DER11	Bottom	1048.1699	0	0	0	1603.2475	-8594.9933
N1	DERUD11	Top	959.9613	0	0	0	1243.3249	-7871.6825
N1	DERUD11	Bottom	1048.1699	0	0	0	1603.2475	-8594.9933

5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	25.3981	4.1357	146.483	-18.6676	26.9457	0
Base	1	13	L	5.1552	-2.8844	19.8114	-0.5959	5.4693	0
Base	1	13	LR	-0.0748	4.261	8.2876	-4.4727	-0.0793	0
Base	1	13	EX Max	151.7904	108.3746	24.3526	211.3308	301.4543	13.4121
Base	1	13	EY Max	0.0004	118.0072	36.2662	236.1649	0.0004	0
Base	1	13	DISX Max	47.4345	33.8671	7.6102	66.0409	94.2045	4.1913
Base	1	13	DISY Max	0.0001	36.8772	11.3332	73.8015	0.0001	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	2.4281	7.0797	26.4808	-9.2433	2.576	0
Base	1	13	DERUX Max	23.8823	16.5873	3.3388	32.3093	47.414	2.0477
Base	1	13	DERUY Max	0.0001	22.2391	6.8346	44.5065	0.0001	0
Base	1	13	COMB1	35.5574	5.7899	205.0762	-26.1346	37.7239	0
Base	1	13	COMB2	38.6887	2.4783	211.6216	-25.5909	41.046	0
Base	1	13	COMB3	35.5133	8.896	208.8511	-30.1533	37.6772	0
Base	1	13	COMB4	35.5955	4.2089	199.7348	-25.2334	37.7644	0
Base	1	13	COMB5 Max	83.0675	47.0087	206.6011	65.1843	132.0086	4.1913
Base	1	13	COMB5 Min	-11.8016	-42.8518	184.5808	-111.1783	-56.4004	-4.1913
Base	1	13	COMB6 Max	49.8634	49.1158	209.2072	70.6168	66.0656	1.2574
Base	1	13	COMB6 Min	21.4025	-44.9589	181.9747	-116.6108	9.5426	-1.2574
Base	1	13	COMB7 Max	37.0888	50.7595	145.451	76.813	52.5126	1.2574

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	COMB7 Min	8.6278	-43.3153	118.2185	-110.4146	-4.0104	-1.2574
Base	1	13	COMB8 Max	70.2928	48.6523	142.8448	71.3805	118.4556	4.1913
Base	1	13	COMB8 Min	-24.5762	-41.2081	120.8246	-104.9822	-69.9534	-4.1913
Base	1	13	ENVE Max	83.0675	50.7595	211.6216	76.813	132.0086	4.1913
Base	1	13	ENVE Min	-24.5762	-44.9589	118.2185	-116.6108	-69.9534	-4.1913
Base	1	13	CIM01	25.3981	4.1357	146.483	-18.6676	26.9457	0
Base	1	13	CIM02	30.5533	1.2513	166.2944	-19.2635	32.415	0
Base	1	13	CIM03	25.3233	8.3966	154.7706	-23.1403	26.8663	0
Base	1	13	CIM04	29.2084	5.1681	167.5572	-22.469	30.9882	0
Base	1	13	CIM05 Max	58.6023	35.5868	154.1901	43.0593	92.8888	2.9339
Base	1	13	CIM05 Min	-7.8061	-27.3155	138.7759	-80.3945	-38.9975	-2.9339
Base	1	13	CIM06 Max	35.3594	37.0618	156.0144	46.8621	46.7287	0.8802
Base	1	13	CIM06 Min	15.4368	-28.7905	136.9516	-84.1972	7.1626	-0.8802
Base	1	13	CIM07 Max	54.3487	29.018	173.4039	24.3409	80.9165	2.2214
Base	1	13	CIM07 Min	4.0681	-18.6818	161.7105	-69.2789	-18.9402	-2.2214
Base	1	13	CIM08 Max	36.798	30.1318	174.7814	27.2123	46.0609	0.6706
Base	1	13	CIM08 Min	21.6188	-19.7956	160.333	-72.1504	15.9154	-0.6706
Base	1	13	DER01	35.5574	5.7899	205.0762	-26.1346	37.7239	0
Base	1	13	DER02	38.6887	2.4783	211.6216	-25.5909	41.046	0
Base	1	13	DER03	35.5133	8.896	208.8511	-30.1533	37.6772	0
Base	1	13	DER04	35.5955	4.2089	199.7348	-25.2334	37.7644	0
Base	1	13	DER05 Max	187.4233	110.453	219.9435	188.3338	339.2584	13.4121
Base	1	13	DER05 Min	-116.1575	-106.2962	171.2384	-234.3278	-263.6502	-13.4121
Base	1	13	DER06 Max	35.6333	120.0856	231.8572	213.1679	37.8045	0
Base	1	13	DER06 Min	35.6325	-115.9288	159.3248	-259.1619	37.8037	0
Base	1	13	DER07 Max	174.6487	112.0967	156.1873	194.53	325.7054	13.4121
Base	1	13	DER07 Min	-128.9321	-104.6525	107.4822	-228.1316	-277.2032	-13.4121
Base	1	13	DER08 Max	22.8587	121.7293	168.1009	219.3641	24.2515	0
Base	1	13	DER08 Min	22.8579	-114.2851	95.5685	-252.9657	24.2507	0
Base	1	13	DERUD01	35.5574	5.7899	205.0762	-26.1346	37.7239	0
Base	1	13	DERUD02	38.6887	2.4783	211.6216	-25.5909	41.046	0
Base	1	13	DERUD03	35.5133	8.896	208.8511	-30.1533	37.6772	0
Base	1	13	DERUD04	35.5955	4.2089	199.7348	-25.2334	37.7644	0
Base	1	13	DERUD05 Max	59.5152	18.6658	198.9298	9.3123	85.2181	2.0477
Base	1	13	DERUD05 Min	11.7506	-14.5089	192.2522	-55.3063	-9.6099	-2.0477
Base	1	13	DERUD06 Max	35.633	24.3175	202.4255	21.5095	37.8042	0
Base	1	13	DERUD06 Min	35.6329	-20.1606	188.7564	-67.5035	37.804	0
Base	1	13	DERUD07 Max	46.7406	20.3094	135.1735	15.5085	71.6651	2.0477
Base	1	13	DERUD07 Min	-1.024	-12.8652	128.4959	-49.1101	-23.1629	-2.0477
Base	1	13	DERUD08 Max	22.8584	25.9612	138.6693	27.7057	24.2512	0
Base	1	13	DERUD08 Min	22.8582	-18.517	125.0002	-61.3073	24.251	0
Base	1	13	VIG01 Max	130.502	91.9389	217.6112	153.3656	226.2131	8.3825
Base	1	13	VIG01 Min	-59.2361	-87.7821	173.5707	-199.3597	-150.6049	-8.3825
Base	1	13	VIG02 Max	64.0939	96.1532	222.8235	164.2306	94.327	2.5148
Base	1	13	VIG02 Min	7.172	-91.9963	168.3585	-210.2246	-18.7188	-2.5148
Base	1	13	VIG03 Max	117.7274	93.5826	153.855	159.5618	212.6601	8.3825
Base	1	13	VIG03 Min	-72.0108	-86.1384	109.8145	-193.1635	-164.1579	-8.3825
Base	1	13	VIG04 Max	51.3192	97.7968	159.0672	170.4267	80.774	2.5148
Base	1	13	VIG04 Min	-5.6026	-90.3526	104.6022	-204.0284	-32.2718	-2.5148
Base	1	13	COL1 Max	177.9365	136.8691	228.6214	241.547	320.4176	12.5738
Base	1	13	COL1 Min	-106.6707	-132.7123	162.5606	-287.541	-244.8094	-12.5738
Base	1	13	COL2 Max	78.3243	143.1905	236.4397	257.8443	122.5885	3.7721
Base	1	13	COL2 Min	-7.0585	-139.0337	154.7422	-303.8384	-46.9803	-3.7721
Base	1	13	COL3 Max	165.1619	138.5128	164.8651	247.7432	306.8646	12.5738
Base	1	13	COL3 Min	-119.4453	-131.0686	98.8043	-281.3448	-258.3624	-12.5738
Base	1	13	COL4 Max	65.5497	144.8342	172.6834	264.0405	109.0355	3.7721
Base	1	13	COL4 Min	-19.8331	-137.39	90.986	-297.6422	-60.5333	-3.7721
Base	1	13	CIM09 Max	48.443	33.9326	95.5969	50.5264	82.1106	2.9339
Base	1	13	CIM09 Min	-17.9653	-28.9698	80.1827	-72.9275	-49.7757	-2.9339
Base	1	13	CIM10 Max	25.2002	35.4076	97.4212	54.3291	35.9504	0.8802

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	CIM10 Min	5.2775	-30.4448	78.3584	-76.7302	-3.6156	-0.8802
Base	1	13	CIM11	27.8262	11.2154	172.9639	-27.9109	29.5217	0
Base	1	13	CIM12	31.0855	7.2822	181.2022	-26.047	32.9796	0
Base	1	13	CIM13 Max	56.2258	31.1321	187.0489	20.7629	82.908	2.2214
Base	1	13	CIM13 Min	5.9452	-16.5677	175.3555	-72.8569	-16.9487	-2.2214
Base	1	13	CIM14 Max	38.6751	32.2459	188.4264	23.6344	48.0524	0.6706
Base	1	13	CIM14 Min	23.496	-17.6815	173.9779	-75.7283	17.9069	-0.6706
Base	1	13	CIM15	15.2389	2.4814	87.8898	-11.2006	16.1674	0
Base	1	13	COMB9	39.9401	3.8877	220.7182	-27.9762	42.3737	0
Base	1	13	DER09	39.9401	3.8877	220.7182	-27.9762	42.3737	0
Base	1	13	DERUD09	39.9401	3.8877	220.7182	-27.9762	42.3737	0
Base	1	13	DERUD10	39.5178	13.406	237.9603	-37.7863	41.9257	0
Base	1	13	DER10	39.5178	13.406	237.9603	-37.7863	41.9257	0
Base	1	13	COMB10	39.5178	13.406	237.9603	-37.7863	41.9257	0
Base	1	13	COMB11	36.847	5.6183	208.8314	-27.6187	39.0921	0
Base	1	13	DER11	36.847	5.6183	208.8314	-27.6187	39.0921	0
Base	1	13	DERUD11	36.847	5.6183	208.8314	-27.6187	39.0921	0
Base	2	15	D	6.2405	4.4078	44.7451	-18.8365	6.4921	0.016
Base	2	15	L	0.168	5.0857	-2.5106	-8.9438	0.1722	-0.0003
Base	2	15	LR	0.0115	-4.1892	8.4385	4.41	0.0134	0.0057
Base	2	15	EX Max	77.6611	103.3655	39.633	204.748	159.0528	13.0931
Base	2	15	EY Max	0.0463	117.4373	36.2775	233.9384	0.0967	0.0738
Base	2	15	DISX Max	24.2691	32.3017	12.3853	63.9837	49.704	4.0916
Base	2	15	DISY Max	0.0145	36.6991	11.3367	73.1057	0.0302	0.0231
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.107	-5.8355	15.6217	4.3481	0.113	0.0112
Base	2	15	DERUX Max	10.7348	15.7776	6.2575	31.2596	22.0485	2.0127
Base	2	15	DERUY Max	0.0087	22.1317	6.8367	44.0869	0.0182	0.0139
Base	2	15	COMB1	8.7367	6.171	62.6431	-26.3711	9.089	0.0224
Base	2	15	COMB2	7.7631	11.3319	53.8964	-34.709	8.0728	0.0215
Base	2	15	COMB3	7.675	3.6724	64.6851	-24.4917	7.9842	0.0279
Base	2	15	COMB4	7.6623	8.2805	55.4027	-29.3427	7.9695	0.0217
Base	2	15	COMB5 Max	31.93	53.6865	66.9698	54.3678	57.6758	4.1174
Base	2	15	COMB5 Min	-16.6169	-32.9364	35.3972	-117.4631	-41.7503	-4.0796
Base	2	15	COMB6 Max	14.9518	56.7647	66.2358	60.7532	22.9042	1.2694
Base	2	15	COMB6 Min	0.3614	-36.0146	36.1312	-123.8485	-6.9787	-1.2317
Base	2	15	COMB7 Max	12.9116	50.3567	55.3229	75.348	20.7843	1.265
Base	2	15	COMB7 Min	-1.6788	-42.4226	25.2183	-109.2537	-9.0985	-1.2361
Base	2	15	COMB8 Max	29.8899	47.2785	56.0569	68.9626	55.556	4.1129
Base	2	15	COMB8 Min	-18.657	-39.3444	24.4842	-102.8683	-43.8702	-4.0841
Base	2	15	ENVE Max	31.93	56.7647	66.9698	75.348	57.6758	4.1174
Base	2	15	ENVE Min	-18.657	-42.4226	24.4842	-123.8485	-43.8702	-4.0841
Base	2	15	CIM01	6.2405	4.4078	44.7451	-18.8365	6.4921	0.016
Base	2	15	CIM02	6.4085	9.4935	42.2345	-27.7804	6.6643	0.0157
Base	2	15	CIM03	6.252	0.2186	53.1836	-14.4265	6.5056	0.0217
Base	2	15	CIM04	6.3751	5.0802	49.191	-22.2369	6.6313	0.02
Base	2	15	CIM05 Max	23.2319	34.7259	55.7955	41.3043	41.2913	2.885
Base	2	15	CIM05 Min	-10.7509	-25.9102	33.6946	-78.9773	-28.307	-2.8529
Base	2	15	CIM06 Max	11.3471	36.8806	55.2817	45.7741	16.9511	0.8914
Base	2	15	CIM06 Min	1.1338	-28.0649	34.2084	-83.4471	-3.9669	-0.8594
Base	2	15	CIM07 Max	19.24	28.072	57.5691	23.3714	32.9793	2.1922
Base	2	15	CIM07 Min	-6.4898	-17.9116	40.8129	-67.8452	-19.7166	-2.1522
Base	2	15	CIM08 Max	10.2658	29.699	57.1811	26.7465	14.6	0.6869
Base	2	15	CIM08 Min	2.4844	-19.5386	41.2009	-71.2203	-1.3373	-0.6469
Base	2	15	DER01	8.7367	6.171	62.6431	-26.3711	9.089	0.0224
Base	2	15	DER02	7.7631	11.3319	53.8964	-34.709	8.0728	0.0215
Base	2	15	DER03	7.675	3.6724	64.6851	-24.4917	7.9842	0.0279
Base	2	15	DER04	7.6623	8.2805	55.4027	-29.3427	7.9695	0.0217
Base	2	15	DER05 Max	85.3176	113.7406	90.8165	173.2003	167.0156	13.112
Base	2	15	DER05 Min	-70.0045	-92.9904	11.5505	-236.2956	-151.0901	-13.0742

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DER06 Max	7.7029	127.8124	87.461	202.3907	8.0595	0.0927
Base	2	15	DER06 Min	7.6102	-107.0622	14.906	-265.486	7.866	-0.055
Base	2	15	DER07 Max	83.2775	107.3325	79.9035	187.7951	164.8957	13.1075
Base	2	15	DER07 Min	-72.0447	-99.3984	0.6376	-221.7008	-153.2099	-13.0787
Base	2	15	DER08 Max	5.6628	121.4043	76.548	216.9855	5.9396	0.0883
Base	2	15	DER08 Min	5.5701	-113.4702	3.9931	-250.8912	5.7462	-0.0594
Base	2	15	DERUD01	8.7367	6.171	62.6431	-26.3711	9.089	0.0224
Base	2	15	DERUD02	7.7631	11.3319	53.8964	-34.709	8.0728	0.0215
Base	2	15	DERUD03	7.675	3.6724	64.6851	-24.4917	7.9842	0.0279
Base	2	15	DERUD04	7.6623	8.2805	55.4027	-29.3427	7.9695	0.0217
Base	2	15	DERUD05 Max	18.3914	26.1527	57.441	-0.2881	30.0112	2.0316
Base	2	15	DERUD05 Min	-3.0783	-5.4025	44.926	-62.8073	-14.0857	-1.9938
Base	2	15	DERUD06 Max	7.6653	32.5067	58.0202	12.5392	7.981	0.0328
Base	2	15	DERUD06 Min	7.6478	-11.7566	44.3468	-75.6346	7.9445	0.005
Base	2	15	DERUD07 Max	16.3512	19.7447	46.5281	14.3067	27.8914	2.0271
Base	2	15	DERUD07 Min	-5.1184	-11.8106	34.013	-48.2125	-16.2055	-1.9983
Base	2	15	DERUD08 Max	5.6252	26.0987	47.1072	27.134	5.8611	0.0283
Base	2	15	DERUD08 Min	5.6077	-18.1646	33.4339	-61.0398	5.8247	0.0005
Base	2	15	VIG01 Max	56.2034	96.998	82.7561	140.2833	107.3889	8.2159
Base	2	15	VIG01 Min	-40.8903	-76.2478	19.6108	-203.3786	-91.4634	-8.1781
Base	2	15	VIG02 Max	22.247	103.1544	81.2881	153.0541	37.8456	2.52
Base	2	15	VIG02 Min	-6.9339	-82.4042	21.0789	-216.1494	-21.9201	-2.4822
Base	2	15	VIG03 Max	54.1633	90.59	71.8432	154.8781	105.2691	8.2114
Base	2	15	VIG03 Min	-42.9304	-82.6559	8.6979	-188.7838	-93.5832	-8.1826
Base	2	15	VIG04 Max	20.2068	96.7464	70.3752	167.6488	35.7258	2.5155
Base	2	15	VIG04 Min	-8.974	-88.8123	10.1659	-201.5546	-24.0399	-2.4867
Base	2	15	COL1 Max	80.4769	140.3095	98.5425	226.1987	157.102	12.3144
Base	2	15	COL1 Min	-65.1637	-119.5593	3.8245	-289.294	-141.1765	-12.2766
Base	2	15	COL2 Max	29.5422	149.5441	96.3404	245.3549	52.787	3.7705
Base	2	15	COL2 Min	-14.2291	-128.7939	6.0266	-308.4502	-36.8615	-3.7328
Base	2	15	COL3 Max	78.4367	133.9014	87.6295	240.7935	154.9821	12.3099
Base	2	15	COL3 Min	-67.2039	-125.9673	-7.0884	-274.6993	-143.2963	-12.2811
Base	2	15	COL4 Max	27.5021	143.136	85.4275	259.9497	50.6672	3.7661
Base	2	15	COL4 Min	-16.2692	-135.2019	-4.8864	-293.8555	-38.9814	-3.7372
Base	2	15	CIM09 Max	20.7357	32.9627	37.8975	48.8389	38.6944	2.8786
Base	2	15	CIM09 Min	-13.2471	-27.6733	15.7966	-71.4427	-30.9039	-2.8593
Base	2	15	CIM10 Max	8.8509	35.1175	37.3837	53.3087	14.3543	0.885
Base	2	15	CIM10 Min	-1.3624	-29.8281	16.3104	-75.9125	-6.5637	-0.8658
Base	2	15	CIM11	6.3475	-1.4277	60.3668	-14.4884	6.6051	0.0272
Base	2	15	CIM12	6.4467	3.8454	54.5784	-22.2833	6.706	0.0241
Base	2	15	CIM13 Max	19.3117	26.8372	62.9565	23.325	33.0539	2.1964
Base	2	15	CIM13 Min	-6.4182	-19.1463	46.2003	-67.8916	-19.642	-2.1481
Base	2	15	CIM14 Max	10.3375	28.4643	62.5685	26.7001	14.6746	0.691
Base	2	15	CIM14 Min	2.556	-20.7734	46.5883	-71.2668	-1.2627	-0.6428
Base	2	15	CIM15	3.7443	2.6447	26.847	-11.3019	3.8953	0.0096
Base	2	15	COMB9	7.8109	10.5087	57.488	-34.7399	8.1225	0.0243
Base	2	15	DER09	7.8109	10.5087	57.488	-34.7399	8.1225	0.0243
Base	2	15	DERUD09	7.8109	10.5087	57.488	-34.7399	8.1225	0.0243
Base	2	15	DERUD10	7.8278	1.0382	76.1782	-24.5907	8.1435	0.0367
Base	2	15	DER10	7.8278	1.0382	76.1782	-24.5907	8.1435	0.0367
Base	2	15	COMB10	7.8278	1.0382	76.1782	-24.5907	8.1435	0.0367
Base	2	15	COMB11	7.7101	7.4573	58.9943	-29.3736	8.0192	0.0245
Base	2	15	DER11	7.7101	7.4573	58.9943	-29.3736	8.0192	0.0245
Base	2	15	DERUD11	7.7101	7.4573	58.9943	-29.3736	8.0192	0.0245
Base	3	16	D	0	-21.8618	285.1152	8.9041	0	0
Base	3	16	L	0	-10.7466	48.0183	7.7491	0	0
Base	3	16	LR	0	7.5145	17.0421	-7.9335	0	0
Base	3	16	EX Max	194.4319	0	0	0	347.2938	13.4121
Base	3	16	EY Max	0	117.4674	36.3635	236.0181	0	0
Base	3	16	DISX Max	60.76	0	0	0	108.5293	4.1913

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	DISY Max	0	36.7086	11.3636	73.7557	0	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	0	9.6558	58.0934	-11.9924	0	0
Base	3	16	DERUX Max	30.5767	0	0	0	54.6103	2.0477
Base	3	16	DERUY Max	0	22.1373	6.8529	44.4788	0	0
Base	3	16	COMB1	0	-30.6066	399.1613	12.4658	0	0
Base	3	16	COMB2	0	-39.6714	427.4887	19.1167	0	0
Base	3	16	COMB3	0	-24.9575	417.4241	5.7404	0	0
Base	3	16	COMB4	0	-33.2235	398.6777	14.4673	0	0
Base	3	16	COMB5 Max	60.76	-25.9682	393.5657	40.5607	108.5293	4.1913
Base	3	16	COMB5 Min	-60.76	-47.9933	386.7476	-3.6927	-108.5293	-4.1913
Base	3	16	COMB6 Max	18.228	-0.2722	401.5202	92.1897	32.5588	1.2574
Base	3	16	COMB6 Min	-18.228	-73.6893	378.793	-55.3217	-32.5588	-1.2574
Base	3	16	COMB7 Max	18.228	17.0329	267.9673	81.7694	32.5588	1.2574
Base	3	16	COMB7 Min	-18.228	-56.3842	245.2401	-65.742	-32.5588	-1.2574
Base	3	16	COMB8 Max	60.76	-8.6631	260.0128	30.1404	108.5293	4.1913
Base	3	16	COMB8 Min	-60.76	-30.6882	253.1946	-14.113	-108.5293	-4.1913
Base	3	16	ENVE Max	60.76	17.0329	427.4887	92.1897	108.5293	4.1913
Base	3	16	ENVE Min	-60.76	-73.6893	245.2401	-65.742	-108.5293	-4.1913
Base	3	16	CIM01	0	-21.8618	285.1152	8.9041	0	0
Base	3	16	CIM02	0	-32.6084	333.1336	16.6532	0	0
Base	3	16	CIM03	0	-14.3473	302.1574	0.9706	0	0
Base	3	16	CIM04	0	-24.2859	333.9106	8.7658	0	0
Base	3	16	CIM05 Max	42.532	-14.153	287.5016	24.3928	75.9705	2.9339
Base	3	16	CIM05 Min	-42.532	-29.5706	282.7289	-6.5846	-75.9705	-2.9339
Base	3	16	CIM06 Max	12.7596	3.8342	293.0698	60.5331	22.7912	0.8802
Base	3	16	CIM06 Min	-12.7596	-47.5578	277.1607	-42.7249	-22.7912	-0.8802
Base	3	16	CIM07 Max	32.2028	-18.4125	335.7288	20.5667	57.5205	2.2214
Base	3	16	CIM07 Min	-32.2028	-30.1592	332.0924	-3.0351	-57.5205	-2.2214
Base	3	16	CIM08 Max	9.7216	-4.8303	339.9333	47.8563	17.3647	0.6706
Base	3	16	CIM08 Min	-9.7216	-43.7414	327.8879	-30.3247	-17.3647	-0.6706
Base	3	16	DER01	0	-30.6066	399.1613	12.4658	0	0
Base	3	16	DER02	0	-39.6714	427.4887	19.1167	0	0
Base	3	16	DER03	0	-24.9575	417.4241	5.7404	0	0
Base	3	16	DER04	0	-33.2235	398.6777	14.4673	0	0
Base	3	16	DER05 Max	194.4319	-36.9808	390.1566	18.434	347.2938	13.4121
Base	3	16	DER05 Min	-194.4319	-36.9808	390.1566	18.434	-347.2938	-13.4121
Base	3	16	DER06 Max	0	80.4867	426.5202	254.4521	0	0
Base	3	16	DER06 Min	0	-154.4482	353.7931	-217.5841	0	0
Base	3	16	DER07 Max	194.4319	-19.6756	256.6037	8.0137	347.2938	13.4121
Base	3	16	DER07 Min	-194.4319	-19.6756	256.6037	8.0137	-347.2938	-13.4121
Base	3	16	DER08 Max	0	97.7918	292.9673	244.0318	0	0
Base	3	16	DER08 Min	0	-137.1431	220.2402	-228.0044	0	0
Base	3	16	DERUD01	0	-30.6066	399.1613	12.4658	0	0
Base	3	16	DERUD02	0	-39.6714	427.4887	19.1167	0	0
Base	3	16	DERUD03	0	-24.9575	417.4241	5.7404	0	0
Base	3	16	DERUD04	0	-33.2235	398.6777	14.4673	0	0
Base	3	16	DERUD05 Max	30.5767	-36.9808	390.1566	18.434	54.6103	2.0477
Base	3	16	DERUD05 Min	-30.5767	-36.9808	390.1566	18.434	-54.6103	-2.0477
Base	3	16	DERUD06 Max	0	-14.8434	397.0095	62.9128	0	0
Base	3	16	DERUD06 Min	0	-59.1181	383.3037	-26.0448	0	0
Base	3	16	DERUD07 Max	30.5767	-19.6756	256.6037	8.0137	54.6103	2.0477
Base	3	16	DERUD07 Min	-30.5767	-19.6756	256.6037	8.0137	-54.6103	-2.0477
Base	3	16	DERUD08 Max	0	2.4617	263.4566	52.4925	0	0
Base	3	16	DERUD08 Min	0	-41.813	249.7508	-36.4651	0	0
Base	3	16	VIG01 Max	121.5199	-14.9556	396.9748	62.6874	217.0586	8.3825
Base	3	16	VIG01 Min	-121.5199	-59.0059	383.3385	-25.8194	-217.0586	-8.3825
Base	3	16	VIG02 Max	36.456	36.4364	412.8838	165.9453	65.1176	2.5148
Base	3	16	VIG02 Min	-36.456	-110.3979	367.4294	-129.0773	-65.1176	-2.5148
Base	3	16	VIG03 Max	121.5199	2.3495	263.4219	52.2671	217.0586	8.3825



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	VIG03 Min	-121.5199	-41.7008	249.7855	-36.2397	-217.0586	-8.3825
Base	3	16	VIG04 Max	36.456	53.7415	279.3309	155.525	65.1176	2.5148
Base	3	16	VIG04 Min	-36.456	-93.0928	233.8765	-139.4976	-65.1176	-2.5148
Base	3	16	COL1 Max	182.2799	-3.943	400.3839	84.8141	325.588	12.5738
Base	3	16	COL1 Min	-182.2799	-70.0185	379.9294	-47.9461	-325.588	-12.5738
Base	3	16	COL2 Max	54.684	73.145	424.2475	239.701	97.6764	3.7721
Base	3	16	COL2 Min	-54.684	-147.1065	356.0658	-202.833	-97.6764	-3.7721
Base	3	16	COL3 Max	182.2799	13.3621	266.831	74.3938	325.588	12.5738
Base	3	16	COL3 Min	-182.2799	-52.7134	246.3765	-58.3664	-325.588	-12.5738
Base	3	16	COL4 Max	54.684	90.4501	290.6945	229.2807	97.6764	3.7721
Base	3	16	COL4 Min	-54.684	-129.8014	222.5129	-213.2533	-97.6764	-3.7721
Base	3	16	CIM09 Max	42.532	-5.4083	173.4555	20.8312	75.9705	2.9339
Base	3	16	CIM09 Min	-42.532	-20.8259	168.6828	-10.1462	-75.9705	-2.9339
Base	3	16	CIM10 Max	12.7596	12.5789	179.0237	56.9714	22.7912	0.8802
Base	3	16	CIM10 Min	-12.7596	-38.8131	163.1146	-46.2865	-22.7912	-0.8802
Base	3	16	CIM11	0	-12.2061	343.2087	-3.0883	0	0
Base	3	16	CIM12	0	-22.6799	364.6991	5.7216	0	0
Base	3	16	CIM13 Max	32.2028	-16.8066	366.5173	17.5225	57.5205	2.2214
Base	3	16	CIM13 Min	-32.2028	-28.5533	362.8809	-6.0793	-57.5205	-2.2214
Base	3	16	CIM14 Max	9.7216	-3.2244	370.7218	44.8121	17.3647	0.6706
Base	3	16	CIM14 Min	-9.7216	-42.1355	358.6764	-33.3689	-17.3647	-0.6706
Base	3	16	CIM15	0	-13.1171	171.0691	5.3425	0	0
Base	3	16	COMB9	0	-38.6008	448.0144	17.0872	0	0
Base	3	16	DERUD09	0	-38.6008	448.0144	17.0872	0	0
Base	3	16	DERUD10	0	-21.5316	483.1061	-0.7539	0	0
Base	3	16	DER10	0	-21.5316	483.1061	-0.7539	0	0
Base	3	16	COMB10	0	-21.5316	483.1061	-0.7539	0	0
Base	3	16	COMB11	0	-32.1529	419.2034	12.4378	0	0
Base	3	16	DER11	0	-32.1529	419.2034	12.4378	0	0
Base	3	16	DERUD11	0	-32.1529	419.2034	12.4378	0	0
Base	4	18	D	0	4.7748	67.8702	-19.2467	0	0
Base	4	18	L	0	6.344	-3.8999	-10.2717	0	0
Base	4	18	LR	0	-7.6581	16.7457	8.0389	0	0
Base	4	18	EX Max	105.0082	0	0	0	188.2396	13.5683
Base	4	18	EY Max	0	117.9238	36.341	235.1099	0	0
Base	4	18	DISX Max	32.8151	0	0	0	58.8249	4.2401
Base	4	18	DISY Max	0	36.8512	11.3566	73.4718	0	0
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	0	-12.1441	31.5414	10.942	0	0
Base	4	18	DERUX Max	14.5899	0	0	0	26.1623	2.0844
Base	4	18	DERUY Max	0	22.2233	6.8486	44.3077	0	0
Base	4	18	COMB1	0	6.6847	95.0183	-26.9454	0	0
Base	4	18	COMB2	0	12.0511	83.5773	-35.5113	0	0
Base	4	18	COMB3	0	-0.1791	104.3375	-20.5054	0	0
Base	4	18	COMB4	0	8.2447	85.9172	-29.3483	0	0
Base	4	18	COMB5 Max	32.8151	23.1291	80.9513	-11.3262	58.8249	4.2401
Base	4	18	COMB5 Min	-32.8151	1.0184	74.1374	-55.4093	-58.8249	-4.2401
Base	4	18	COMB6 Max	9.8445	48.9249	88.9009	40.1041	17.6475	1.272
Base	4	18	COMB6 Min	-9.8445	-24.7774	66.1878	-106.8395	-17.6475	-1.272
Base	4	18	COMB7 Max	9.8445	41.1485	72.4398	56.1498	17.6475	1.272
Base	4	18	COMB7 Min	-9.8445	-32.5538	49.7266	-90.7938	-17.6475	-1.272
Base	4	18	COMB8 Max	32.8151	15.3527	64.4902	4.7195	58.8249	4.2401
Base	4	18	COMB8 Min	-32.8151	-6.758	57.6762	-39.3636	-58.8249	-4.2401
Base	4	18	ENVE Max	32.8151	48.9249	104.3375	56.1498	58.8249	4.2401
Base	4	18	ENVE Min	-32.8151	-32.5538	49.7266	-106.8395	-58.8249	-4.2401
Base	4	18	CIM01	0	4.7748	67.8702	-19.2467	0	0
Base	4	18	CIM02	0	11.1188	63.9703	-29.5184	0	0
Base	4	18	CIM03	0	-2.8832	84.6159	-11.2078	0	0
Base	4	18	CIM04	0	3.7892	77.5046	-20.9213	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	CIM05 Max	22.9705	12.5136	70.2551	-3.8176	41.1774	2.9681
Base	4	18	CIM05 Min	-22.9705	-2.9639	65.4853	-34.6758	-41.1774	-2.9681
Base	4	18	CIM06 Max	6.8912	30.5706	75.8198	32.1836	12.3532	0.8904
Base	4	18	CIM06 Min	-6.8912	-21.021	59.9206	-70.677	-12.3532	-0.8904
Base	4	18	CIM07 Max	17.392	9.6854	79.3216	-9.1658	31.1772	2.2473
Base	4	18	CIM07 Min	-17.392	-2.1069	75.6875	-32.6768	-31.1772	-2.2473
Base	4	18	CIM08 Max	5.2504	23.3204	83.5235	18.0188	9.412	0.6784
Base	4	18	CIM08 Min	-5.2504	-15.7419	71.4856	-59.8613	-9.412	-0.6784
Base	4	18	DER01	0	6.6847	95.0183	-26.9454	0	0
Base	4	18	DER02	0	12.0511	83.5773	-35.5113	0	0
Base	4	18	DER03	0	-0.1791	104.3375	-20.5054	0	0
Base	4	18	DER04	0	8.2447	85.9172	-29.3483	0	0
Base	4	18	DER05 Max	105.0082	12.0737	77.5444	-33.3677	188.2396	13.5683
Base	4	18	DER05 Min	-105.0082	12.0737	77.5444	-33.3677	-188.2396	-13.5683
Base	4	18	DER06 Max	0	129.9975	113.8854	201.7421	0	0
Base	4	18	DER06 Min	0	-105.85	41.2034	-268.4776	0	0
Base	4	18	DER07 Max	105.0082	4.2973	61.0832	-17.322	188.2396	13.5683
Base	4	18	DER07 Min	-105.0082	4.2973	61.0832	-17.322	-188.2396	-13.5683
Base	4	18	DER08 Max	0	122.2211	97.4242	217.7878	0	0
Base	4	18	DER08 Min	0	-113.6264	24.7422	-252.4319	0	0
Base	4	18	DERUD01	0	6.6847	95.0183	-26.9454	0	0
Base	4	18	DERUD02	0	12.0511	83.5773	-35.5113	0	0
Base	4	18	DERUD03	0	-0.1791	104.3375	-20.5054	0	0
Base	4	18	DERUD04	0	8.2447	85.9172	-29.3483	0	0
Base	4	18	DERUD05 Max	14.5899	12.0737	77.5444	-33.3677	26.1623	2.0844
Base	4	18	DERUD05 Min	-14.5899	12.0737	77.5444	-33.3677	-26.1623	-2.0844
Base	4	18	DERUD06 Max	0	34.2971	84.393	10.94	0	0
Base	4	18	DERUD06 Min	0	-10.1496	70.6957	-77.6754	0	0
Base	4	18	DERUD07 Max	14.5899	4.2973	61.0832	-17.322	26.1623	2.0844
Base	4	18	DERUD07 Min	-14.5899	4.2973	61.0832	-17.322	-26.1623	-2.0844
Base	4	18	DERUD08 Max	0	26.5207	67.9318	26.9857	0	0
Base	4	18	DERUD08 Min	0	-17.926	54.2345	-61.6297	0	0
Base	4	18	VIG01 Max	65.6301	34.1845	84.3583	10.7154	117.6498	8.4802
Base	4	18	VIG01 Min	-65.6301	-10.037	70.7304	-77.4508	-117.6498	-8.4802
Base	4	18	VIG02 Max	19.689	85.7761	100.2575	113.5759	35.2949	2.5441
Base	4	18	VIG02 Min	-19.689	-61.6286	54.8313	-180.3114	-35.2949	-2.5441
Base	4	18	VIG03 Max	65.6301	26.408	67.8971	26.7611	117.6498	8.4802
Base	4	18	VIG03 Min	-65.6301	-17.8134	54.2693	-61.4051	-117.6498	-8.4802
Base	4	18	VIG04 Max	19.689	77.9997	83.7963	129.6216	35.2949	2.5441
Base	4	18	VIG04 Min	-19.689	-69.405	38.3701	-164.2657	-35.2949	-2.5441
Base	4	18	COL1 Max	98.4452	45.2398	87.7653	32.7569	176.4747	12.7203
Base	4	18	COL1 Min	-98.4452	-21.0923	67.3235	-99.4924	-176.4747	-12.7203
Base	4	18	COL2 Max	29.5335	122.6273	111.614	187.0478	52.9424	3.8161
Base	4	18	COL2 Min	-29.5335	-98.4798	43.4747	-253.7832	-52.9424	-3.8161
Base	4	18	COL3 Max	98.4452	37.4634	71.3041	48.8026	176.4747	12.7203
Base	4	18	COL3 Min	-98.4452	-28.8687	50.8623	-83.4467	-176.4747	-12.7203
Base	4	18	COL4 Max	29.5335	114.8509	95.1529	203.0935	52.9424	3.8161
Base	4	18	COL4 Min	-29.5335	-106.2562	27.0135	-237.7375	-52.9424	-3.8161
Base	4	18	CIM09 Max	22.9705	10.6036	43.107	3.8811	41.1774	2.9681
Base	4	18	CIM09 Min	-22.9705	-4.8739	38.3373	-26.9771	-41.1774	-2.9681
Base	4	18	CIM10 Max	6.8912	28.6607	48.6717	39.8823	12.3532	0.8904
Base	4	18	CIM10 Min	-6.8912	-22.9309	32.7725	-62.9783	-12.3532	-0.8904
Base	4	18	CIM11	0	-7.3693	99.4117	-8.3047	0	0
Base	4	18	CIM12	0	0.4247	88.6014	-18.744	0	0
Base	4	18	CIM13 Max	17.392	6.3209	90.4184	-6.9885	31.1772	2.2473
Base	4	18	CIM13 Min	-17.392	-5.4715	86.7843	-30.4995	-31.1772	-2.2473
Base	4	18	CIM14 Max	5.2504	19.9558	94.6204	20.1961	9.412	0.6784
Base	4	18	CIM14 Min	-5.2504	-19.1064	82.5824	-57.684	-9.412	-0.6784
Base	4	18	CIM15	0	2.8649	40.7221	-11.548	0	0
Base	4	18	COMB9	0	9.8081	90.9752	-34.0597	0	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DER09	0	9.8081	90.9752	-34.0597	0	0
Base	4	18	DERUD09	0	9.8081	90.9752	-34.0597	0	0
Base	4	18	DERUD10	0	-7.3569	128.0107	-15.8605	0	0
Base	4	18	DER10	0	-7.3569	128.0107	-15.8605	0	0
Base	4	18	COMB10	0	-7.3569	128.0107	-15.8605	0	0
Base	4	18	COMB11	0	6.0017	93.3151	-27.8967	0	0
Base	4	18	DER11	0	6.0017	93.3151	-27.8967	0	0
Base	4	18	DERUD11	0	6.0017	93.3151	-27.8967	0	0
Base	5	19	D	-25.3981	4.1357	146.483	-18.6676	-26.9457	0
Base	5	19	L	-5.1552	-2.8844	19.8114	-0.5959	-5.4693	0
Base	5	19	LR	0.0748	4.261	8.2876	-4.4727	0.0793	0
Base	5	19	EX Max	151.7904	108.3746	24.3526	211.3308	301.4543	13.4121
Base	5	19	EY Max	0.0004	118.0072	36.2662	236.1649	0.0004	0
Base	5	19	DISX Max	47.4345	33.8671	7.6102	66.0409	94.2045	4.1913
Base	5	19	DISY Max	0.0001	36.8772	11.3332	73.8015	0.0001	0
Base	5	19	W	0	0	0	0	0	0
Base	5	19	G	-2.4281	7.0797	26.4808	-9.2433	-2.576	0
Base	5	19	DERUX Max	23.8823	16.5873	3.3388	32.3093	47.414	2.0477
Base	5	19	DERUY Max	0.0001	22.2391	6.8346	44.5065	0.0001	0
Base	5	19	COMB1	-35.5574	5.7899	205.0762	-26.1346	-37.7239	0
Base	5	19	COMB2	-38.6887	2.4783	211.6216	-25.5909	-41.046	0
Base	5	19	COMB3	-35.5133	8.896	208.8511	-30.1533	-37.6772	0
Base	5	19	COMB4	-35.5955	4.2089	199.7348	-25.2334	-37.7644	0
Base	5	19	COMB5 Max	11.8016	47.0087	206.6011	65.1843	56.4004	4.1913
Base	5	19	COMB5 Min	-83.0675	-42.8518	184.5808	-111.1783	-132.0086	-4.1913
Base	5	19	COMB6 Max	-21.4025	49.1158	209.2072	70.6168	-9.5426	1.2574
Base	5	19	COMB6 Min	-49.8634	-44.9589	181.9747	-116.6108	-66.0656	-1.2574
Base	5	19	COMB7 Max	-8.6278	50.7595	145.451	76.813	4.0104	1.2574
Base	5	19	COMB7 Min	-37.0888	-43.3153	118.2185	-110.4146	-52.5126	-1.2574
Base	5	19	COMB8 Max	24.5762	48.6523	142.8448	71.3805	69.9534	4.1913
Base	5	19	COMB8 Min	-70.2928	-41.2081	120.8246	-104.9822	-118.4556	-4.1913
Base	5	19	ENVE Max	24.5762	50.7595	211.6216	76.813	69.9534	4.1913
Base	5	19	ENVE Min	-83.0675	-44.9589	118.2185	-116.6108	-132.0086	-4.1913
Base	5	19	CIM01	-25.3981	4.1357	146.483	-18.6676	-26.9457	0
Base	5	19	CIM02	-30.5533	1.2513	166.2944	-19.2635	-32.415	0
Base	5	19	CIM03	-25.3233	8.3966	154.7706	-23.1403	-26.8663	0
Base	5	19	CIM04	-29.2084	5.1681	167.5572	-22.469	-30.9882	0
Base	5	19	CIM05 Max	7.8061	35.5868	154.1901	43.0593	38.9975	2.9339
Base	5	19	CIM05 Min	-58.6023	-27.3155	138.7759	-80.3945	-92.8888	-2.9339
Base	5	19	CIM06 Max	-15.4368	37.0618	156.0144	46.8621	-7.1626	0.8802
Base	5	19	CIM06 Min	-35.3594	-28.7905	136.9516	-84.1972	-46.7287	-0.8802
Base	5	19	CIM07 Max	-4.0681	29.018	173.4039	24.3409	18.9402	2.2214
Base	5	19	CIM07 Min	-54.3487	-18.6818	161.7105	-69.2789	-80.9165	-2.2214
Base	5	19	CIM08 Max	-21.6188	30.1318	174.7814	27.2123	-15.9154	0.6706
Base	5	19	CIM08 Min	-36.798	-19.7956	160.333	-72.1504	-46.0609	-0.6706
Base	5	19	DER01	-35.5574	5.7899	205.0762	-26.1346	-37.7239	0
Base	5	19	DER02	-38.6887	2.4783	211.6216	-25.5909	-41.046	0
Base	5	19	DER03	-35.5133	8.896	208.8511	-30.1533	-37.6772	0
Base	5	19	DER04	-35.5955	4.2089	199.7348	-25.2334	-37.7644	0
Base	5	19	DER05 Max	116.1575	110.453	219.9435	188.3338	263.6502	13.4121
Base	5	19	DER05 Min	-187.4233	-106.2962	171.2384	-234.3278	-339.2584	-13.4121
Base	5	19	DER06 Max	-35.6325	120.0856	231.8572	213.1679	-37.8037	0
Base	5	19	DER06 Min	-35.6333	-115.9288	159.3248	-259.1619	-37.8045	0
Base	5	19	DER07 Max	128.9321	112.0967	156.1873	194.53	277.2032	13.4121
Base	5	19	DER07 Min	-174.6487	-104.6525	107.4822	-228.1316	-325.7054	-13.4121
Base	5	19	DER08 Max	-22.8579	121.7293	168.1009	219.3641	-24.2507	0
Base	5	19	DER08 Min	-22.8587	-114.2851	95.5685	-252.9657	-24.2515	0
Base	5	19	DERUD01	-35.5574	5.7899	205.0762	-26.1346	-37.7239	0
Base	5	19	DERUD02	-38.6887	2.4783	211.6216	-25.5909	-41.046	0
Base	5	19	DERUD03	-35.5133	8.896	208.8511	-30.1533	-37.6772	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	5	19	DERUD04	-35.5955	4.2089	199.7348	-25.2334	-37.7644	0
Base	5	19	DERUD05 Max	-11.7506	18.6658	198.9298	9.3123	9.6099	2.0477
Base	5	19	DERUD05 Min	-59.5152	-14.5089	192.2522	-55.3063	-85.2181	-2.0477
Base	5	19	DERUD06 Max	-35.6329	24.3175	202.4255	21.5095	-37.804	0
Base	5	19	DERUD06 Min	-35.633	-20.1606	188.7564	-67.5035	-37.8042	0
Base	5	19	DERUD07 Max	1.024	20.3094	135.1735	15.5085	23.1629	2.0477
Base	5	19	DERUD07 Min	-46.7406	-12.8652	128.4959	-49.1101	-71.6651	-2.0477
Base	5	19	DERUD08 Max	-22.8582	25.9612	138.6693	27.7057	-24.251	0
Base	5	19	DERUD08 Min	-22.8584	-18.517	125.0002	-61.3073	-24.2512	0
Base	5	19	VIG01 Max	59.2361	91.9389	217.6112	153.3656	150.6049	8.3825
Base	5	19	VIG01 Min	-130.502	-87.7821	173.5707	-199.3597	-226.2131	-8.3825
Base	5	19	VIG02 Max	-7.172	96.1532	222.8235	164.2306	18.7188	2.5148
Base	5	19	VIG02 Min	-64.0939	-91.9963	168.3585	-210.2246	-94.327	-2.5148
Base	5	19	VIG03 Max	72.0108	93.5826	153.855	159.5618	164.1579	8.3825
Base	5	19	VIG03 Min	-117.7274	-86.1384	109.8145	-193.1635	-212.6601	-8.3825
Base	5	19	VIG04 Max	5.6026	97.7968	159.0672	170.4267	32.2718	2.5148
Base	5	19	VIG04 Min	-51.3192	-90.3526	104.6022	-204.0284	-80.774	-2.5148
Base	5	19	COL1 Max	106.6707	136.8691	228.6214	241.547	244.8094	12.5738
Base	5	19	COL1 Min	-177.9365	-132.7123	162.5606	-287.541	-320.4176	-12.5738
Base	5	19	COL2 Max	7.0585	143.1905	236.4397	257.8443	46.9803	3.7721
Base	5	19	COL2 Min	-78.3243	-139.0337	154.7422	-303.8384	-122.5885	-3.7721
Base	5	19	COL3 Max	119.4453	138.5128	164.8651	247.7432	258.3624	12.5738
Base	5	19	COL3 Min	-165.1619	-131.0686	98.8043	-281.3448	-306.8646	-12.5738
Base	5	19	COL4 Max	19.8331	144.8342	172.6834	264.0405	60.5333	3.7721
Base	5	19	COL4 Min	-65.5497	-137.39	90.986	-297.6422	-109.0355	-3.7721
Base	5	19	CIM09 Max	17.9653	33.9326	95.5969	50.5264	49.7757	2.9339
Base	5	19	CIM09 Min	-48.443	-28.9698	80.1827	-72.9275	-82.1106	-2.9339
Base	5	19	CIM10 Max	-5.2775	35.4076	97.4212	54.3291	3.6156	0.8802
Base	5	19	CIM10 Min	-25.2002	-30.4448	78.3584	-76.7302	-35.9504	-0.8802
Base	5	19	CIM11	-27.8262	11.2154	172.9639	-27.9109	-29.5217	0
Base	5	19	CIM12	-31.0855	7.2822	181.2022	-26.047	-32.9796	0
Base	5	19	CIM13 Max	-5.9452	31.1321	187.0489	20.7629	16.9487	2.2214
Base	5	19	CIM13 Min	-56.2258	-16.5677	175.3555	-72.8569	-82.908	-2.2214
Base	5	19	CIM14 Max	-23.496	32.2459	188.4264	23.6344	-17.9069	0.6706
Base	5	19	CIM14 Min	-38.6751	-17.6815	173.9779	-75.7283	-48.0524	-0.6706
Base	5	19	CIM15	-15.2389	2.4814	87.8898	-11.2006	-16.1674	0
Base	5	19	COMB9	-39.9401	3.8877	220.7182	-27.9762	-42.3737	0
Base	5	19	DER09	-39.9401	3.8877	220.7182	-27.9762	-42.3737	0
Base	5	19	DERUD09	-39.9401	3.8877	220.7182	-27.9762	-42.3737	0
Base	5	19	DERUD10	-39.5178	13.406	237.9603	-37.7863	-41.9257	0
Base	5	19	DER10	-39.5178	13.406	237.9603	-37.7863	-41.9257	0
Base	5	19	COMB10	-39.5178	13.406	237.9603	-37.7863	-41.9257	0
Base	5	19	COMB11	-36.847	5.6183	208.8314	-27.6187	-39.0921	0
Base	5	19	DER11	-36.847	5.6183	208.8314	-27.6187	-39.0921	0
Base	5	19	DERUD11	-36.847	5.6183	208.8314	-27.6187	-39.0921	0
Base	6	21	D	-6.2405	4.4078	44.7451	-18.8365	-6.4921	-0.016
Base	6	21	L	-0.168	5.0857	-2.5106	-8.9438	-0.1722	0.0003
Base	6	21	LR	-0.0115	-4.1892	8.4385	4.41	-0.0134	-0.0057
Base	6	21	EX Max	77.6611	103.3655	39.633	204.748	159.0528	13.0931
Base	6	21	EY Max	0.0463	117.4373	36.2775	233.9384	0.0967	0.0738
Base	6	21	DISX Max	24.2691	32.3017	12.3853	63.9837	49.704	4.0916
Base	6	21	DISY Max	0.0145	36.6991	11.3367	73.1057	0.0302	0.0231
Base	6	21	W	0	0	0	0	0	0
Base	6	21	G	-0.107	-5.8355	15.6217	4.3481	-0.113	-0.0112
Base	6	21	DERUX Max	10.7348	15.7776	6.2575	31.2596	22.0485	2.0127
Base	6	21	DERUY Max	0.0087	22.1317	6.8367	44.0869	0.0182	0.0139
Base	6	21	COMB1	-8.7367	6.171	62.6431	-26.3711	-9.089	-0.0224
Base	6	21	COMB2	-7.7631	11.3319	53.8964	-34.709	-8.0728	-0.0215
Base	6	21	COMB3	-7.675	3.6724	64.6851	-24.4917	-7.9842	-0.0279
Base	6	21	COMB4	-7.6623	8.2805	55.4027	-29.3427	-7.9695	-0.0217

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	6	21	COMB5 Max	16.6169	53.6865	66.9698	54.3678	41.7503	4.0796
Base	6	21	COMB5 Min	-31.93	-32.9364	35.3972	-117.4631	-57.6758	-4.1174
Base	6	21	COMB6 Max	-0.3614	56.7647	66.2358	60.7532	6.9787	1.2317
Base	6	21	COMB6 Min	-14.9518	-36.0146	36.1312	-123.8485	-22.9042	-1.2694
Base	6	21	COMB7 Max	1.6788	50.3567	55.3229	75.348	9.0985	1.2361
Base	6	21	COMB7 Min	-12.9116	-42.4226	25.2183	-109.2537	-20.7843	-1.265
Base	6	21	COMB8 Max	18.657	47.2785	56.0569	68.9626	43.8702	4.0841
Base	6	21	COMB8 Min	-29.8899	-39.3444	24.4842	-102.8683	-55.556	-4.1129
Base	6	21	ENVE Max	18.657	56.7647	66.9698	75.348	43.8702	4.0841
Base	6	21	ENVE Min	-31.93	-42.4226	24.4842	-123.8485	-57.6758	-4.1174
Base	6	21	CIM01	-6.2405	4.4078	44.7451	-18.8365	-6.4921	-0.016
Base	6	21	CIM02	-6.4085	9.4935	42.2345	-27.7804	-6.6643	-0.0157
Base	6	21	CIM03	-6.252	0.2186	53.1836	-14.4265	-6.5056	-0.0217
Base	6	21	CIM04	-6.3751	5.0802	49.191	-22.2369	-6.6313	-0.02
Base	6	21	CIM05 Max	10.7509	34.7259	55.7955	41.3043	28.307	2.8529
Base	6	21	CIM05 Min	-23.2319	-25.9102	33.6946	-78.9773	-41.2913	-2.885
Base	6	21	CIM06 Max	-1.1338	36.8806	55.2817	45.7741	3.9669	0.8594
Base	6	21	CIM06 Min	-11.3471	-28.0649	34.2084	-83.4471	-16.9511	-0.8914
Base	6	21	CIM07 Max	6.4898	28.072	57.5691	23.3714	19.7166	2.1522
Base	6	21	CIM07 Min	-19.24	-17.9116	40.8129	-67.8452	-32.9793	-2.1922
Base	6	21	CIM08 Max	-2.4844	29.699	57.1811	26.7465	1.3373	0.6469
Base	6	21	CIM08 Min	-10.2658	-19.5386	41.2009	-71.2203	-14.6	-0.6869
Base	6	21	DER01	-8.7367	6.171	62.6431	-26.3711	-9.089	-0.0224
Base	6	21	DER02	-7.7631	11.3319	53.8964	-34.709	-8.0728	-0.0215
Base	6	21	DER03	-7.675	3.6724	64.6851	-24.4917	-7.9842	-0.0279
Base	6	21	DER04	-7.6623	8.2805	55.4027	-29.3427	-7.9695	-0.0217
Base	6	21	DER05 Max	70.0045	113.7406	90.8165	173.2003	151.0901	13.0742
Base	6	21	DER05 Min	-85.3176	-92.9904	11.5505	-236.2956	-167.0156	-13.112
Base	6	21	DER06 Max	-7.6102	127.8124	87.461	202.3907	-7.866	0.055
Base	6	21	DER06 Min	-7.7029	-107.0622	14.906	-265.486	-8.0595	-0.0927
Base	6	21	DER07 Max	72.0447	107.3325	79.9035	187.7951	153.2099	13.0787
Base	6	21	DER07 Min	-83.2775	-99.3984	0.6376	-221.7008	-164.8957	-13.1075
Base	6	21	DER08 Max	-5.5701	121.4043	76.548	216.9855	-5.7462	0.0594
Base	6	21	DER08 Min	-5.6628	-113.4702	3.9931	-250.8912	-5.9396	-0.0883
Base	6	21	DERUD01	-8.7367	6.171	62.6431	-26.3711	-9.089	-0.0224
Base	6	21	DERUD02	-7.7631	11.3319	53.8964	-34.709	-8.0728	-0.0215
Base	6	21	DERUD03	-7.675	3.6724	64.6851	-24.4917	-7.9842	-0.0279
Base	6	21	DERUD04	-7.6623	8.2805	55.4027	-29.3427	-7.9695	-0.0217
Base	6	21	DERUD05 Max	3.0783	26.1527	57.441	-0.2881	14.0857	1.9938
Base	6	21	DERUD05 Min	-18.3914	-5.4025	44.926	-62.8073	-30.0112	-2.0316
Base	6	21	DERUD06 Max	-7.6478	32.5067	58.0202	12.5392	-7.9445	-0.005
Base	6	21	DERUD06 Min	-7.6653	-11.7566	44.3468	-75.6346	-7.981	-0.0328
Base	6	21	DERUD07 Max	5.1184	19.7447	46.5281	14.3067	16.2055	1.9983
Base	6	21	DERUD07 Min	-16.3512	-11.8106	34.013	-48.2125	-27.8914	-2.0271
Base	6	21	DERUD08 Max	-5.6077	26.0987	47.1072	27.134	-5.8247	-0.0005
Base	6	21	DERUD08 Min	-5.6252	-18.1646	33.4339	-61.0398	-5.8611	-0.0283
Base	6	21	VIG01 Max	40.8903	96.998	82.7561	140.2833	91.4634	8.1781
Base	6	21	VIG01 Min	-56.2034	-76.2478	19.6108	-203.3786	-107.3889	-8.2159
Base	6	21	VIG02 Max	6.9339	103.1544	81.2881	153.0541	21.9201	2.4822
Base	6	21	VIG02 Min	-22.247	-82.4042	21.0789	-216.1494	-37.8456	-2.52
Base	6	21	VIG03 Max	42.9304	90.59	71.8432	154.8781	93.5832	8.1826
Base	6	21	VIG03 Min	-54.1633	-82.6559	8.6979	-188.7838	-105.2691	-8.2114
Base	6	21	VIG04 Max	8.974	96.7464	70.3752	167.6488	24.0399	2.4867
Base	6	21	VIG04 Min	-20.2068	-88.8123	10.1659	-201.5546	-35.7258	-2.5155
Base	6	21	COL1 Max	65.1637	140.3095	98.5425	226.1987	141.1765	12.2766
Base	6	21	COL1 Min	-80.4769	-119.5593	3.8245	-289.294	-157.102	-12.3144
Base	6	21	COL2 Max	14.2291	149.5441	96.3404	245.3549	36.8615	3.7328
Base	6	21	COL2 Min	-29.5422	-128.7939	6.0266	-308.4502	-52.787	-3.7705
Base	6	21	COL3 Max	67.2039	133.9014	87.6295	240.7935	143.2963	12.2811
Base	6	21	COL3 Min	-78.4367	-125.9673	-7.0884	-274.6993	-154.9821	-12.3099

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	6	21	COL4 Max	16.2692	143.136	85.4275	259.9497	38.9814	3.7372
Base	6	21	COL4 Min	-27.5021	-135.2019	-4.8864	-293.8555	-50.6672	-3.7661
Base	6	21	CIM09 Max	13.2471	32.9627	37.8975	48.8389	30.9039	2.8593
Base	6	21	CIM09 Min	-20.7357	-27.6733	15.7966	-71.4427	-38.6944	-2.8786
Base	6	21	CIM10 Max	1.3624	35.1175	37.3837	53.3087	6.5637	0.8658
Base	6	21	CIM10 Min	-8.8509	-29.8281	16.3104	-75.9125	-14.3543	-0.885
Base	6	21	CIM11	-6.3475	-1.4277	60.3668	-14.4884	-6.6051	-0.0272
Base	6	21	CIM12	-6.4467	3.8454	54.5784	-22.2833	-6.706	-0.0241
Base	6	21	CIM13 Max	6.4182	26.8372	62.9565	23.325	19.642	2.1481
Base	6	21	CIM13 Min	-19.3117	-19.1463	46.2003	-67.8916	-33.0539	-2.1964
Base	6	21	CIM14 Max	-2.556	28.4643	62.5685	26.7001	1.2627	0.6428
Base	6	21	CIM14 Min	-10.3375	-20.7734	46.5883	-71.2668	-14.6746	-0.691
Base	6	21	CIM15	-3.7443	2.6447	26.847	-11.3019	-3.8953	-0.0096
Base	6	21	COMB9	-7.8109	10.5087	57.488	-34.7399	-8.1225	-0.0243
Base	6	21	DER09	-7.8109	10.5087	57.488	-34.7399	-8.1225	-0.0243
Base	6	21	DERUD09	-7.8109	10.5087	57.488	-34.7399	-8.1225	-0.0243
Base	6	21	DERUD10	-7.8278	1.0382	76.1782	-24.5907	-8.1435	-0.0367
Base	6	21	DER10	-7.8278	1.0382	76.1782	-24.5907	-8.1435	-0.0367
Base	6	21	COMB10	-7.8278	1.0382	76.1782	-24.5907	-8.1435	-0.0367
Base	6	21	COMB11	-7.7101	7.4573	58.9943	-29.3736	-8.0192	-0.0245
Base	6	21	DER11	-7.7101	7.4573	58.9943	-29.3736	-8.0192	-0.0245
Base	6	21	DERUD11	-7.7101	7.4573	58.9943	-29.3736	-8.0192	-0.0245

5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.253	3.96	24.8824	619.133
Modal	2	0.229	4.375	27.4866	755.5136
Modal	3	0.179	5.597	35.1688	1236.8427
Modal	4	0.056	17.839	112.084	12562.824
Modal	5	0.024	42.38	266.2845	70907.4354
Modal	6	0.021	47.611	299.1504	89490.9517
Modal	7	0.019	53.252	334.5916	111951.5548
Modal	8	0.019	54.046	339.5804	115314.8388
Modal	9	0.014	71.338	448.2302	200910.3456

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.253	0.6999	0	0	0.6999	0	0
Modal	2	0.229	0	1	0	0.6999	1	0
Modal	3	0.179	0.299	0	0	0.9989	1	0
Modal	4	0.056	0.0011	0	0	1	1	0
Modal	5	0.024	0	0	0	1	1	0
Modal	6	0.021	0	6.574E-07	0	1	1	0
Modal	7	0.019	0	1.802E-05	0	1	1	0
Modal	8	0.019	0	0	0	1	1	0
Modal	9	0.014	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.6999	0.3163	0	0.6999	0.3163
Modal	2	1	0	0	1	0.6999	0.3163
Modal	3	0	0.299	0.6833	1	0.9989	0.9996
Modal	4	0	0.0011	0.0004	1	1	1

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	5	0	0	0	1	1	1
Modal	6	6.574E-07	0	0	1	1	1
Modal	7	1.802E-05	0	0	1	1	1
Modal	8	0	0	1.581E-05	1	1	1
Modal	9	0	0	0	1	1	1

**Table 5.11 - Modal Load Participation Ratios**

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

**Table 5.12 - Modal Direction Factors**

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.253	0.706	0	0	0.294
Modal	2	0.229	0	1	0	0
Modal	3	0.179	0.305	0	0	0.695
Modal	4	0.056	0.842	0	0	0.158
Modal	5	0.024	0	1	0	0
Modal	6	0.021	0	1	0	0
Modal	7	0.019	0	1	0	0
Modal	8	0.019	0	0	0	1
Modal	9	0.014	0	0	0	1

## 6 Design Data

This chapter provides design data and results.

### 6.1 Concrete Frame Design

**Table 6.1 - Concrete Frame Preferences - ACI 318-08**

Item	Value
Multi-Response Design	Step-by-Step
Seismic Design Category	D
# Interaction Curves	24
# Interaction Points	11
Minimum Eccentricity	Yes
Phi (Tension)	0.9
Phi (Compression Tied)	0.65
Phi (Compression Spiral)	0.7
Phi (Shear and Torsion)	0.85
Phi (Shear Seismic)	0.6
Phi (Shear Joint)	0.85
Pattern Live Load Factor	0.75
D/C Ratio Limit	0.95

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor	KMajor	KMinor	CmMajor
N1	C1	7	Column	Program Determined	0.89197	0.846154	0.846154	1	1	1
N1	C2	8	Column	Program Determined	0.985479	0.846154	0.846154	1	1	1
N1	C3	9	Column	Program Determined	0.61975	0.846154	0.846154	1	1	1
N1	C4	10	Column	Program Determined	0.848393	0.846154	0.846154	1	1	1
N1	C5	11	Column	Program Determined	0.89197	0.846154	0.846154	1	1	1
N1	C6	12	Column	Program Determined	0.985479	0.846154	0.846154	1	1	1

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 2 of 2)**

Story	Label	Unique Name	CmMinor	DnsMajor	DnsMinor	DsMajor	DsMinor
N1	C1	7	1	1	1	1	1
N1	C2	8	1	1	1	1	1
N1	C3	9	1	1	1	1	1
N1	C4	10	1	1	1	1	1
N1	C5	11	1	1	1	1	1
N1	C6	12	1	1	1	1	1

**Table 6.3 - Concrete Beam Overwrites - ACI 318-08**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor
N1	B1	13	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B2	14	Beam	Program Determined	0.540988	0.95122	0.95122
N1	B3	15	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B4	16	Beam	Program Determined	1	0.95122	0.95122
N1	B5	17	Beam	Program Determined	1	0.95122	0.95122
N1	B6	18	Beam	Program Determined	1	0.95122	0.95122
N1	B7	19	Beam	Program Determined	1	0.95122	0.95122
N1	B8	2	Beam	Program Determined	1	0.916667	0.916667
N1	B14	6	Beam	Program Determined	1	0.916667	0.916667
N1	B15	22	Beam	Program Determined	1	1	1
N1	B16	23	Beam	Program Determined	1	1	1
N1	B17	4	Beam	Program Determined	1	0.916667	0.916667

**Table 6.4 - Concrete Column PMM Envelope**



Label	Story	Section	Location	P kN	M Major kN-m	M Minor kN-m	PMM Combo	PMM Ratio or Rebar %
C1	N1	C40X40	Top	172.1412	97.1027	-52.977	COMB5	1.15 %
C1	N1	C40X40	Bottom	206.6011	-132.0086	-111.1783	COMB5	2.73 %
C2	N1	C40X40	Top	46.5547	13.1872	-8.7938	COMB11	1 %
C2	N1	C40X40	Bottom	35.3972	-57.6758	-117.4631	COMB5	1.69 %
C3	N1	C40X40	Top	406.7637	11.5532	-75.6122	COMB11	1 %
C3	N1	C40X40	Bottom	414.2275	11.7754	-22.9406	COMB11	1 %
C4	N1	C40X40	Top	80.8754	2.2216	-11.2776	COMB11	1 %
C4	N1	C40X40	Bottom	66.1878	17.6475	-106.8395	COMB6	1.25 %
C5	N1	C40X40	Top	172.1412	-97.1027	-52.977	COMB5	1.15 %
C5	N1	C40X40	Bottom	206.6011	132.0086	-111.1783	COMB5	2.73 %
C6	N1	C40X40	Top	46.5547	-13.1872	-8.7938	COMB11	1 %
C6	N1	C40X40	Bottom	35.3972	57.6758	-117.4631	COMB5	1.69 %

Table 6.5 - Concrete Column Shear Envelope

Label	Story	Section	Location	V Major kN	Major Combo	At Major cm <sup>2</sup> /m	V Minor kN	Minor Combo	At Minor cm <sup>2</sup> /m
C1	N1	C40X40	Top	70.2928	COMB8	3.33	93.5826	COMB8	3.33
C1	N1	C40X40	Bottom	70.2928	COMB8	3.33	93.5826	COMB8	3.33
C2	N1	C40X40	Top	7.7101		0	48.4651	COMB8	3.33
C2	N1	C40X40	Bottom	7.7101		0	48.4651	COMB8	3.33
C3	N1	C40X40	Top	101.6143	COMB8	3.33	93.0928	COMB7	3.33
C3	N1	C40X40	Bottom	102.099	COMB8	3.33	93.0928	COMB7	3.33
C4	N1	C40X40	Top	55.6095	COMB8	3.33	48.4651	COMB7	3.33
C4	N1	C40X40	Bottom	55.6095	COMB8	3.33	48.4651	COMB7	3.33
C5	N1	C40X40	Top	70.2928	COMB8	3.33	93.5826	COMB8	3.33
C5	N1	C40X40	Bottom	70.2928	COMB8	3.33	93.5826	COMB8	3.33
C6	N1	C40X40	Top	7.7101		0	48.4651	COMB8	3.33
C6	N1	C40X40	Bottom	7.7101		0	48.4651	COMB8	3.33

Table 6.6 - Concrete Beam Flexure Envelope

Label	Story	Section	Location	(-) Moment kN-m	(-) Combo	As Top cm <sup>2</sup>	(+) Moment kN-m	(+) Combo	As Bot cm <sup>2</sup>
B1	N1	V30X50	End-I	-163.4797	COMB6	11	54.4932	COMB6	4
B1	N1	V30X50	Middle	-32.6959	COMB6	3	54.1129	COMB10	4
B1	N1	V30X50	End-J	0	COMB8	4	64.5734	COMB6	4
B2	N1	V30X50	End-I	-234.868	COMB10	16	78.2893	COMB10	5
B2	N1	V30X50	Middle	-47.3505	COMB6	4	80.7347	COMB10	5
B2	N1	V30X50	End-J	-42.9752	COMB6	4	55.7548	COMB6	4
B3	N1	V30X50	End-I	-163.4797	COMB6	11	54.4932	COMB6	4
B3	N1	V30X50	Middle	-32.6959	COMB6	3	54.1129	COMB10	4
B3	N1	V30X50	End-J	0	COMB8	4	64.5734	COMB6	4
B4	N1	V30X50	End-I	-90.2987	COMB5	6	62.0362	COMB5	4
B4	N1	V30X50	Middle	-29.0758	COMB5	2	76.3013	COMB5	5
B4	N1	V30X50	End-J	-145.3792	COMB5	9	48.4597	COMB5	4
B5	N1	V30X50	End-I	-145.3792	COMB5	9	48.4597	COMB5	4
B5	N1	V30X50	Middle	-29.0758	COMB5	2	76.3013	COMB5	5
B5	N1	V30X50	End-J	-90.2987	COMB5	6	62.0362	COMB5	4
B6	N1	V30X50	End-I	-38.9874	COMB5	3	25.372	COMB5	2
B6	N1	V30X50	Middle	-9.5614	COMB5	1	25.2561	COMB5	2
B6	N1	V30X50	End-J	-47.8072	COMB5	4	15.9357	COMB5	1
B7	N1	V30X50	End-I	-47.8072	COMB5	4	15.9357	COMB5	1
B7	N1	V30X50	Middle	-9.5614	COMB5	1	25.2561	COMB5	2
B7	N1	V30X50	End-J	-38.9874	COMB5	3	25.372	COMB5	2
B8	N1	V30X50	End-I	-29.8338	COMB9	2	27.2479	COMB9	2

Label	Story	Section	Location	(-) Moment kN-m	(-) Combo	As Top cm <sup>2</sup>	(+) Moment kN-m	(+) Combo	As Bot cm <sup>2</sup>
B8	N1	V30X50	Middle	-94.7981	COMB9	6	27.2479	COMB9	2
B8	N1	V30X50	End-J	-136.2397	COMB9	9	45.4132	COMB9	4
B14	N1	V30X50	End-I	-29.8338	COMB9	2	27.2479	COMB9	2
B14	N1	V30X50	Middle	-94.7981	COMB9	6	27.2479	COMB9	2
B14	N1	V30X50	End-J	-136.2397	COMB9	9	45.4132	COMB9	4
B15	N1	VB20X50	End-I	-34.875	COMB5	3	44.3194	COMB2	3
B15	N1	VB20X50	Middle	-19.0518	COMB10	1	71.9746	COMB2	4
B15	N1	VB20X50	End-J	-95.2591	COMB10	5	31.753	COMB10	2
B16	N1	VB20X50	End-I	-95.2591	COMB10	5	31.753	COMB10	2
B16	N1	VB20X50	Middle	-19.0518	COMB10	1	71.9746	COMB2	4
B16	N1	VB20X50	End-J	-34.875	COMB5	3	44.3194	COMB2	3
B17	N1	V30X50	End-I	-56.6106	COMB11	4	56.6106	COMB11	4
B17	N1	V30X50	Middle	-212.3918	COMB9	14	56.6106	COMB11	4
B17	N1	V30X50	End-J	-311.0256	COMB9	22	103.6752	COMB9	7

Table 6.7 - Concrete Beam Shear Envelope

Label	Story	Section	Location	V kN	V Combo	At cm <sup>2</sup> /m	T for At kN-m	T Combo At	At Torsion cm <sup>2</sup> /m	T for As kN-m	T Combo As	As Torsion cm <sup>2</sup>
B1	N1	V30X50	End-I	43.6919	COMB11	2.5	3.5609	COMB5	1.28	3.5609	COMB5	5
B1	N1	V30X50	Middle	42.2352	COMB7	2.5	4.5501	COMB5	1.28	4.5501	COMB5	5
B1	N1	V30X50	End-J	44.837	COMB10	2.5	3.8758	COMB5	1.28	3.8758	COMB5	5
B2	N1	V30X50	End-I	132.5009	COMB10	4.08	0	COMB11	0	0	COMB11	0
B2	N1	V30X50	Middle	44.4265	COMB6	2.5	0	COMB11	0	0	COMB11	0
B2	N1	V30X50	End-J	39.7436	COMB11	2.5	0	COMB11	0	0	COMB11	0
B3	N1	V30X50	End-I	43.6919	COMB11	2.5	3.5609	COMB5	1.28	3.5609	COMB5	5
B3	N1	V30X50	Middle	42.2352	COMB7	2.5	4.5501	COMB5	1.28	4.5501	COMB5	5
B3	N1	V30X50	End-J	44.837	COMB10	2.5	3.8758	COMB5	1.28	3.8758	COMB5	5
B4	N1	V30X50	End-I	47.2407	COMB7	2.5	4.6481	COMB5	1.57	4.6481	COMB5	5
B4	N1	V30X50	Middle	36.4132	COMB3	0.68	4.6481	COMB5	1.57	4.6481	COMB5	5
B4	N1	V30X50	End-J	57.7676	COMB7	2.5	4.6481	COMB5	1.57	4.6481	COMB5	5
B5	N1	V30X50	End-I	39.3836	COMB7	2.5	4.6481	COMB5	1.57	4.6481	COMB5	5
B5	N1	V30X50	Middle	20.0987	COMB3	0.68	4.6481	COMB5	1.57	4.6481	COMB5	5
B5	N1	V30X50	End-J	47.2407	COMB7	2.5	4.6481	COMB5	1.57	4.6481	COMB5	5
B6	N1	V30X50	End-I	8.0738	COMB11	0	0.1894	COMB11	0	0.1894	COMB11	0
B6	N1	V30X50	Middle	8.4653	COMB11	0	0.1894	COMB11	0	0.1894	COMB11	0
B6	N1	V30X50	End-J	18.3888	COMB11	0	0.1894	COMB11	0	0.1894	COMB11	0
B7	N1	V30X50	End-I	11.7731	COMB11	0	0.1894	COMB11	0	0.1894	COMB11	0
B7	N1	V30X50	Middle	4.766	COMB11	0	0.1894	COMB11	0	0.1894	COMB11	0
B7	N1	V30X50	End-J	14.6895	COMB11	0	0.1894	COMB11	0	0.1894	COMB11	0
B8	N1	V30X50	End-I		O/S		34.875	COMB5	7.62	34.875	COMB5	9
B8	N1	V30X50	Middle		O/S		34.875	COMB5	7.62	34.875	COMB5	9
B8	N1	V30X50	End-J		O/S		34.875	COMB5	7.62	34.875	COMB5	9
B14	N1	V30X50	End-I		O/S		34.875	COMB5	7.62	34.875	COMB5	9
B14	N1	V30X50	Middle		O/S		34.875	COMB5	7.62	34.875	COMB5	9
B14	N1	V30X50	End-J		O/S		34.875	COMB5	7.62	34.875	COMB5	9
B15	N1	VB20X50	End-I	26.8829	COMB11	0	4.7671	COMB5	2.24	4.7671	COMB5	3
B15	N1	VB20X50	Middle	30.0218	COMB11	0	4.7671	COMB5	2.24	4.7671	COMB5	3
B15	N1	VB20X50	End-J	70.7574	COMB9	0.88	5.2849	COMB5	2.24	5.2849	COMB5	3
B16	N1	VB20X50	End-I	70.7574	COMB9	0.88	4.7671	COMB5	2.24	4.7671	COMB5	3
B16	N1	VB20X50	Middle	15.502	COMB11	0	4.7671	COMB5	2.24	4.7671	COMB5	3
B16	N1	VB20X50	End-J	49.6448	COMB11	0	4.7671	COMB5	2.24	4.7671	COMB5	3
B17	N1	V30X50	End-I	143.3808	COMB9	4.87	0	COMB5	1.92	0	COMB5	5
B17	N1	V30X50	Middle	148.0457	COMB9	5.2	0	COMB5	1.92	0	COMB5	5
B17	N1	V30X50	End-J	150.8446	COMB9	5.41	0	COMB5	1.92	0	COMB5	5

Table 6.8 - Concrete Joint Envelope

Label	Story	Section	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio
C1	N1	C40X40								
C2	N1	C40X40								
C3	N1	C40X40								
C4	N1	C40X40								
C5	N1	C40X40								
C6	N1	C40X40								

Table 6.9 - Concrete Column Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Station mm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm <sup>2</sup>	As cm <sup>2</sup>
N1	C1	7	0	C40X40	Design	No Message		COMB5	16	44
N1	C1	7	275	C40X40	Design	No Message		COMB5	16	32
N1	C1	7	550	C40X40	Design	No Message		COMB5	16	23
N1	C1	7	825	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1100	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1375	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1650	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1925	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2200	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2475	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2750	C40X40	Design	No Message		COMB5	16	18
N1	C2	8	0	C40X40	Design	No Message		COMB5	16	27
N1	C2	8	275	C40X40	Design	No Message		COMB5	16	23
N1	C2	8	550	C40X40	Design	No Message		COMB5	16	18
N1	C2	8	825	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1100	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1375	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1650	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1925	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2200	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2475	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2750	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	0	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	275	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	550	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	825	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1100	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1375	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1650	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1925	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	2200	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	2475	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	2750	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	0	C40X40	Design	No Message		COMB6	16	20
N1	C4	10	275	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	550	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	825	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1100	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1375	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1650	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1925	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2200	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2475	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2750	C40X40	Design	No Message		COMB11	16	16
N1	C5	11	0	C40X40	Design	No Message		COMB5	16	44
N1	C5	11	275	C40X40	Design	No Message		COMB5	16	32
N1	C5	11	550	C40X40	Design	No Message		COMB5	16	23
N1	C5	11	825	C40X40	Design	No Message		COMB11	16	16
N1	C5	11	1100	C40X40	Design	No Message		COMB11	16	16

Story	Label	Unique Name	Station mm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm <sup>2</sup>	As cm <sup>2</sup>
N1	C5	11	1375	C40X40	Design	No Message		COMB11	16	16
N1	C5	11	1650	C40X40	Design	No Message		COMB11	16	16
N1	C5	11	1925	C40X40	Design	No Message		COMB11	16	16
N1	C5	11	2200	C40X40	Design	No Message		COMB11	16	16
N1	C5	11	2475	C40X40	Design	No Message		COMB11	16	16
N1	C5	11	2750	C40X40	Design	No Message		COMB5	16	18
N1	C6	12	0	C40X40	Design	No Message		COMB5	16	27
N1	C6	12	275	C40X40	Design	No Message		COMB5	16	23
N1	C6	12	550	C40X40	Design	No Message		COMB5	16	18
N1	C6	12	825	C40X40	Design	No Message		COMB11	16	16
N1	C6	12	1100	C40X40	Design	No Message		COMB11	16	16
N1	C6	12	1375	C40X40	Design	No Message		COMB11	16	16
N1	C6	12	1650	C40X40	Design	No Message		COMB11	16	16
N1	C6	12	1925	C40X40	Design	No Message		COMB11	16	16
N1	C6	12	2200	C40X40	Design	No Message		COMB11	16	16
N1	C6	12	2475	C40X40	Design	No Message		COMB11	16	16
N1	C6	12	2750	C40X40	Design	No Message		COMB11	16	16

Table 6.9 - Concrete Column Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	Station mm	Mid Bar As cm <sup>2</sup>	Corner Bar As cm <sup>2</sup>	V Major Combo	At V Major cm <sup>2</sup> /m	V Minor Combo	At V Minor cm <sup>2</sup> /m	Warnings	Errors
N1	C1	7	0	5	6	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	275	3	5	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	550	2	3	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	825	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	1100	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	1375	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	1650	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	1925	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	2200	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	2475	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	2750	2	3	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	0	3	4	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	275	2	3	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	550	2	3	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	825	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	1100	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	1375	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	1650	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	1925	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	2200	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	2475	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C2	8	2750	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C3	9	0	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	275	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	550	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	825	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	1100	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	1375	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	1650	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	1925	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	2200	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	2475	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C3	9	2750	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	0	2	3	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	275	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	550	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	825	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message

Story	Label	Unique Name	Station mm	Mid Bar As cm <sup>2</sup>	Corner Bar As cm <sup>2</sup>	V Major Combo	At V Major cm <sup>2</sup> /m	V Minor Combo	At V Minor cm <sup>2</sup> /m	Warnings	Errors
N1	C4	10	1100	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	1375	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	1650	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	1925	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	2200	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	2475	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C4	10	2750	2	2	COMB8	3.33	COMB7	3.33	No Message	No Message
N1	C5	11	0	5	6	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	275	3	5	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	550	2	3	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	825	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	1100	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	1375	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	1650	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	1925	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	2200	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	2475	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C5	11	2750	2	3	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C6	12	0	3	4	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	275	2	3	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	550	2	3	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	825	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	1100	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	1375	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	1650	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	1925	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	2200	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	2475	2	2	COMB11	0	COMB8	3.33	No Message	No Message
N1	C6	12	2750	2	2	COMB11	0	COMB8	3.33	No Message	No Message

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Station mm	Design Section	Status	As Top Combo	As,min Top cm <sup>2</sup>	As Top cm <sup>2</sup>	As Bottom Combo	As,min Bottom cm <sup>2</sup>	As Bottom cm <sup>2</sup>
N1	B1	13	200	V30X50	No Message	COMB6	4	11	COMB6	4	4
N1	B1	13	980	V30X50	No Message	COMB6	4	8	COMB6	3	3
N1	B1	13	1760	V30X50	No Message	COMB6	4	5	COMB6	3	3
N1	B1	13	2540	V30X50	No Message	COMB6	3	3	COMB6	3	3
N1	B1	13	3320	V30X50	No Message	COMB6	3	3	COMB6	3	3
N1	B1	13	4100	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B1	13	4880	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B1	13	5660	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B1	13	6440	V30X50	No Message	COMB6	3	3	COMB8	4	4
N1	B1	13	7220	V30X50	No Message	COMB6	3	3	COMB6	4	4
N1	B1	13	8000	V30X50	No Message	COMB8	4	4	COMB8	4	4
N1	B2	14	200	V30X50	No Message	COMB10	4	16	COMB10	4	5
N1	B2	14	980	V30X50	No Message	COMB6	4	10	COMB6	4	4
N1	B2	14	1760	V30X50	No Message	COMB6	4	6	COMB6	4	4
N1	B2	14	2540	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B2	14	3320	V30X50	No Message	COMB6	4	4	COMB6	4	4
N1	B2	14	4100	V30X50	No Message	COMB6	4	4	COMB10	4	4
N1	B2	14	4880	V30X50	No Message	COMB6	4	4	COMB10	4	5
N1	B2	14	5660	V30X50	No Message	COMB6	4	4	COMB10	4	5
N1	B2	14	6440	V30X50	No Message	COMB6	4	4	COMB10	4	4
N1	B2	14	7220	V30X50	No Message	COMB6	4	4	COMB7	4	4
N1	B2	14	8000	V30X50	No Message	COMB7	4	4	COMB6	4	4
N1	B3	15	200	V30X50	No Message	COMB6	4	11	COMB6	4	4
N1	B3	15	980	V30X50	No Message	COMB6	4	8	COMB6	3	3

Story	Label	Unique Name	Station mm	Design Section	Status	As Top Combo	As,min Top cm <sup>2</sup>	As Top cm <sup>2</sup>	As Bottom Combo	As,min Bottom cm <sup>2</sup>	As Bottom cm <sup>2</sup>
N1	B3	15	1760	V30X50	No Message	COMB6	4	5	COMB6	3	3
N1	B3	15	2540	V30X50	No Message	COMB6	3	3	COMB6	3	3
N1	B3	15	3320	V30X50	No Message	COMB6	3	3	COMB6	3	3
N1	B3	15	4100	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B3	15	4880	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B3	15	5660	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B3	15	6440	V30X50	No Message	COMB6	3	3	COMB8	4	4
N1	B3	15	7220	V30X50	No Message	COMB6	3	3	COMB6	4	4
N1	B3	15	8000	V30X50	No Message	COMB8	4	4	COMB8	4	4
N1	B4	16	200	V30X50	No Message	COMB5	4	6	COMB5	2	2
N1	B4	16	980	V30X50	No Message	COMB8	3	3	COMB5	3	3
N1	B4	16	1760	V30X50	No Message	COMB5	2	2	COMB5	4	4
N1	B4	16	2540	V30X50	No Message	COMB5	2	2	COMB5	4	5
N1	B4	16	3320	V30X50	No Message	COMB5	2	2	COMB5	4	5
N1	B4	16	4100	V30X50	No Message	COMB5	2	2	COMB2	4	5
N1	B4	16	4880	V30X50	No Message	COMB5	2	2	COMB10	4	4
N1	B4	16	5660	V30X50	No Message	COMB5	2	2	COMB2	3	3
N1	B4	16	6440	V30X50	No Message	COMB5	2	2	COMB5	2	2
N1	B4	16	7220	V30X50	No Message	COMB5	4	5	COMB5	2	2
N1	B4	16	8000	V30X50	No Message	COMB5	4	9	COMB5	4	4
N1	B5	17	200	V30X50	No Message	COMB5	4	9	COMB5	4	4
N1	B5	17	980	V30X50	No Message	COMB5	4	5	COMB5	2	2
N1	B5	17	1760	V30X50	No Message	COMB5	2	2	COMB5	2	2
N1	B5	17	2540	V30X50	No Message	COMB5	2	2	COMB2	3	3
N1	B5	17	3320	V30X50	No Message	COMB5	2	2	COMB10	4	4
N1	B5	17	4100	V30X50	No Message	COMB5	2	2	COMB2	4	5
N1	B5	17	4880	V30X50	No Message	COMB5	2	2	COMB5	4	5
N1	B5	17	5660	V30X50	No Message	COMB5	2	2	COMB5	4	5
N1	B5	17	6440	V30X50	No Message	COMB5	2	2	COMB5	4	4
N1	B5	17	7220	V30X50	No Message	COMB8	3	3	COMB5	3	3
N1	B5	17	8000	V30X50	No Message	COMB5	4	6	COMB5	2	2
N1	B6	18	200	V30X50	No Message	COMB5	3	3	COMB8	2	2
N1	B6	18	980	V30X50	No Message	COMB8	2	2	COMB8	2	2
N1	B6	18	1760	V30X50	No Message	COMB8	1	1	COMB5	2	2
N1	B6	18	2540	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	3320	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	4100	V30X50	No Message	COMB5	1	1	COMB5	1	1
N1	B6	18	4880	V30X50	No Message	COMB5	1	1	COMB5	1	1
N1	B6	18	5660	V30X50	No Message	COMB5	1	1	COMB5	1	1
N1	B6	18	6440	V30X50	No Message	COMB8	1	1	COMB8	1	1
N1	B6	18	7220	V30X50	No Message	COMB5	2	2	COMB5	1	1
N1	B6	18	8000	V30X50	No Message	COMB5	4	4	COMB5	1	1
N1	B7	19	200	V30X50	No Message	COMB5	4	4	COMB5	1	1
N1	B7	19	980	V30X50	No Message	COMB5	2	2	COMB5	1	1
N1	B7	19	1760	V30X50	No Message	COMB8	1	1	COMB8	1	1
N1	B7	19	2540	V30X50	No Message	COMB5	1	1	COMB5	1	1
N1	B7	19	3320	V30X50	No Message	COMB5	1	1	COMB5	1	1
N1	B7	19	4100	V30X50	No Message	COMB5	1	1	COMB5	1	1
N1	B7	19	4880	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B7	19	5660	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B7	19	6440	V30X50	No Message	COMB8	1	1	COMB5	2	2
N1	B7	19	7220	V30X50	No Message	COMB8	2	2	COMB8	2	2
N1	B7	19	8000	V30X50	No Message	COMB5	3	3	COMB8	2	2
N1	B8	2	0	V30X50	See ErrMsg	COMB5	0.4295	0.4295	COMB5	0.1429	0.1429
N1	B8	2	220	V30X50	See ErrMsg	COMB9	2	2	COMB9	2	2
N1	B8	2	440	V30X50	See ErrMsg	COMB9	2	2	COMB9	2	2
N1	B8	2	660	V30X50	See ErrMsg	COMB9	3	3	COMB9	2	2
N1	B8	2	880	V30X50	See ErrMsg	COMB10	4	4	COMB9	2	2
N1	B8	2	1100	V30X50	See ErrMsg	COMB11	4	4	COMB9	2	2

Story	Label	Unique Name	Station mm	Design Section	Status	As Top Combo	As,min Top cm <sup>2</sup>	As Top cm <sup>2</sup>	As Bottom Combo	As,min Bottom cm <sup>2</sup>	As Bottom cm <sup>2</sup>
N1	B8	2	1320	V30X50	See ErrMsg	COMB9	4	5	COMB9	2	2
N1	B8	2	1540	V30X50	See ErrMsg	COMB9	4	6	COMB9	2	2
N1	B8	2	1760	V30X50	See ErrMsg	COMB9	4	7	COMB9	2	2
N1	B8	2	1980	V30X50	See ErrMsg	COMB9	4	8	COMB9	2	2
N1	B8	2	2200	V30X50	See ErrMsg	COMB9	4	9	COMB9	4	4
N1	B14	6	0	V30X50	See ErrMsg	COMB5	0.4295	0.4295	COMB5	0.1429	0.1429
N1	B14	6	220	V30X50	See ErrMsg	COMB9	2	2	COMB9	2	2
N1	B14	6	440	V30X50	See ErrMsg	COMB9	2	2	COMB9	2	2
N1	B14	6	660	V30X50	See ErrMsg	COMB9	3	3	COMB9	2	2
N1	B14	6	880	V30X50	See ErrMsg	COMB10	4	4	COMB9	2	2
N1	B14	6	1100	V30X50	See ErrMsg	COMB11	4	4	COMB9	2	2
N1	B14	6	1320	V30X50	See ErrMsg	COMB9	4	5	COMB9	2	2
N1	B14	6	1540	V30X50	See ErrMsg	COMB9	4	6	COMB9	2	2
N1	B14	6	1760	V30X50	See ErrMsg	COMB9	4	7	COMB9	2	2
N1	B14	6	1980	V30X50	See ErrMsg	COMB9	4	8	COMB9	2	2
N1	B14	6	2200	V30X50	See ErrMsg	COMB9	4	9	COMB9	4	4
N1	B15	22	0	VB20X50	No Message	COMB5	3	3	COMB5	1	1
N1	B15	22	820	VB20X50	No Message	COMB10	1	1	COMB10	1	1
N1	B15	22	1640	VB20X50	No Message	COMB10	1	1	COMB2	3	3
N1	B15	22	2460	VB20X50	No Message	COMB10	1	1	COMB2	3	3
N1	B15	22	3280	VB20X50	No Message	COMB10	1	1	COMB2	3	4
N1	B15	22	4100	VB20X50	No Message	COMB10	1	1	COMB2	3	4
N1	B15	22	4920	VB20X50	No Message	COMB10	1	1	COMB2	3	3
N1	B15	22	5740	VB20X50	No Message	COMB10	1	1	COMB2	3	3
N1	B15	22	6560	VB20X50	No Message	COMB10	1	1	COMB10	1	1
N1	B15	22	7380	VB20X50	No Message	COMB10	3	3	COMB10	1	1
N1	B15	22	8200	VB20X50	No Message	COMB10	3	5	COMB10	2	2
N1	B16	23	0	VB20X50	No Message	COMB10	3	5	COMB10	2	2
N1	B16	23	820	VB20X50	No Message	COMB10	3	3	COMB10	1	1
N1	B16	23	1640	VB20X50	No Message	COMB10	1	1	COMB10	1	1
N1	B16	23	2460	VB20X50	No Message	COMB10	1	1	COMB2	3	3
N1	B16	23	3280	VB20X50	No Message	COMB10	1	1	COMB2	3	3
N1	B16	23	4100	VB20X50	No Message	COMB10	1	1	COMB2	3	4
N1	B16	23	4920	VB20X50	No Message	COMB10	1	1	COMB2	3	4
N1	B16	23	5740	VB20X50	No Message	COMB10	1	1	COMB2	3	3
N1	B16	23	6560	VB20X50	No Message	COMB10	1	1	COMB2	3	3
N1	B16	23	7380	VB20X50	No Message	COMB10	1	1	COMB10	1	1
N1	B16	23	8200	VB20X50	No Message	COMB5	3	3	COMB5	1	1
N1	B17	4	0	V30X50	No Message	COMB11	0	0	COMB9	1	1
N1	B17	4	220	V30X50	No Message	COMB11	4	4	COMB11	4	4
N1	B17	4	440	V30X50	No Message	COMB11	4	4	COMB11	4	4
N1	B17	4	660	V30X50	No Message	COMB10	4	5	COMB11	4	4
N1	B17	4	880	V30X50	No Message	COMB10	4	7	COMB11	4	4
N1	B17	4	1100	V30X50	No Message	COMB9	4	10	COMB11	4	4
N1	B17	4	1320	V30X50	No Message	COMB9	4	12	COMB11	4	4
N1	B17	4	1540	V30X50	No Message	COMB9	4	14	COMB11	4	4
N1	B17	4	1760	V30X50	No Message	COMB9	4	17	COMB11	4	4
N1	B17	4	1980	V30X50	No Message	COMB9	4	20	COMB11	4	4
N1	B17	4	2200	V30X50	No Message	COMB9	4	22	COMB9	4	7

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	Station mm	V Combo	At Shear cm <sup>2</sup> /m	Torsion Long Combo	At Torsion cm <sup>2</sup>	Torsion Tran Combo	At Torsion cm <sup>2</sup> /m	Warnings
N1	B1	13	200	COMB11	2.5	COMB8	5	COMB5	1.28	No Message
N1	B1	13	980	COMB11	2.5	COMB8	5	COMB5	1.28	No Message
N1	B1	13	1760	COMB11	2.5	COMB8	5	COMB5	1.28	No Message
N1	B1	13	2540	COMB10	2.5	COMB8	5	COMB5	1.28	No Message
N1	B1	13	3320	COMB7	2.5	COMB8	5	COMB5	1.28	No Message

Story	Label	Unique Name	Station mm	V Combo	At Shear cm <sup>2</sup> /m	Torsion Long Combo	AI Torsion cm <sup>2</sup>	Torsion Tran Combo	At Torsion cm <sup>2</sup> /m	Warnings
N1	B1	13	4100	COMB6	0.69	COMB8	5	COMB5	1.28	No Message
N1	B1	13	4880	COMB6	0.69	COMB8	5	COMB5	1.28	No Message
N1	B1	13	5660	COMB6	0.69	COMB8	5	COMB5	1.28	No Message
N1	B1	13	6440	COMB6	0.69	COMB8	5	COMB5	1.28	No Message
N1	B1	13	7220	COMB7	2.5	COMB8	5	COMB5	1.28	No Message
N1	B1	13	8000	COMB10	2.5	COMB8	5	COMB5	1.28	No Message
N1	B2	14	200	COMB10	4.08	COMB11	0	COMB11	0	No Message
N1	B2	14	980	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B2	14	1760	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B2	14	2540	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B2	14	3320	COMB10	2.5	COMB11	0	COMB11	0	No Message
N1	B2	14	4100	COMB6	2.5	COMB11	0	COMB11	0	No Message
N1	B2	14	4880	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B2	14	5660	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B2	14	6440	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B2	14	7220	COMB10	2.5	COMB11	0	COMB11	0	No Message
N1	B2	14	8000	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B3	15	200	COMB11	2.5	COMB8	5	COMB5	1.28	No Message
N1	B3	15	980	COMB11	2.5	COMB8	5	COMB5	1.28	No Message
N1	B3	15	1760	COMB11	2.5	COMB8	5	COMB5	1.28	No Message
N1	B3	15	2540	COMB10	2.5	COMB8	5	COMB5	1.28	No Message
N1	B3	15	3320	COMB7	2.5	COMB8	5	COMB5	1.28	No Message
N1	B3	15	4100	COMB6	0.69	COMB8	5	COMB5	1.28	No Message
N1	B3	15	4880	COMB6	0.69	COMB8	5	COMB5	1.28	No Message
N1	B3	15	5660	COMB6	0.69	COMB8	5	COMB5	1.28	No Message
N1	B3	15	6440	COMB6	0.69	COMB8	5	COMB5	1.28	No Message
N1	B3	15	7220	COMB7	2.5	COMB8	5	COMB5	1.28	No Message
N1	B3	15	8000	COMB10	2.5	COMB8	5	COMB5	1.28	No Message
N1	B4	16	200	COMB7	2.5	COMB11	5	COMB5	1.57	No Message
N1	B4	16	980	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B4	16	1760	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B4	16	2540	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B4	16	3320	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B4	16	4100	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B4	16	4880	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B4	16	5660	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B4	16	6440	COMB7	2.5	COMB11	5	COMB5	1.57	No Message
N1	B4	16	7220	COMB7	2.5	COMB11	5	COMB5	1.57	No Message
N1	B4	16	8000	COMB7	2.5	COMB11	5	COMB5	1.57	No Message
N1	B5	17	200	COMB7	2.5	COMB11	5	COMB5	1.57	No Message
N1	B5	17	980	COMB7	2.5	COMB11	5	COMB5	1.57	No Message
N1	B5	17	1760	COMB7	2.5	COMB11	5	COMB5	1.57	No Message
N1	B5	17	2540	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B5	17	3320	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B5	17	4100	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B5	17	4880	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B5	17	5660	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B5	17	6440	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B5	17	7220	COMB3	0.68	COMB11	5	COMB5	1.57	No Message
N1	B5	17	8000	COMB7	2.5	COMB11	5	COMB5	1.57	No Message
N1	B6	18	200	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	980	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	1760	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	2540	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	3320	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	4100	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	4880	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	5660	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	6440	COMB11	0	COMB11	0	COMB11	0	No Message



Story	Label	Unique Name	Station mm	V Combo	At Shear cm <sup>2</sup> /m	Torsion Long Combo	AI Torsion cm <sup>2</sup>	Torsion Tran Combo	At Torsion cm <sup>2</sup> /m	Warnings
N1	B6	18	7220	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	8000	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	200	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	980	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	1760	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	2540	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	3320	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	4100	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	4880	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	5660	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	6440	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	7220	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B7	19	8000	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B8	2	0	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	220	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	440	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	660	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	880	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	1100	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	1320	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	1540	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	1760	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	1980	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B8	2	2200	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	0	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	220	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	440	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	660	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	880	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	1100	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	1320	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	1540	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	1760	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	1980	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B14	6	2200	COMB5	0	COMB5	9	COMB5	7.62	No Message
N1	B15	22	0	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	820	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	1640	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	2460	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	3280	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	4100	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	4920	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	5740	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	6560	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B15	22	7380	COMB9	0.07	COMB7	3	COMB5	2.24	No Message
N1	B15	22	8200	COMB9	0.88	COMB7	3	COMB5	2.24	No Message
N1	B16	23	0	COMB9	0.88	COMB7	3	COMB5	2.24	No Message
N1	B16	23	820	COMB9	0.07	COMB7	3	COMB5	2.24	No Message
N1	B16	23	1640	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B16	23	2460	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B16	23	3280	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B16	23	4100	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B16	23	4920	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B16	23	5740	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B16	23	6560	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B16	23	7380	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B16	23	8200	COMB11	0	COMB7	3	COMB5	2.24	No Message
N1	B17	4	0	COMB9	4.73	COMB8	5	COMB5	1.92	No Message
N1	B17	4	220	COMB9	4.8	COMB8	5	COMB5	1.92	No Message

Story	Label	Unique Name	Station mm	V Combo	At Shear cm <sup>2</sup> /m	Torsion Long Combo	AI Torsion cm <sup>2</sup>	Torsion Tran Combo	At Torsion cm <sup>2</sup> /m	Warnings
N1	B17	4	440	COMB9	4.87	COMB8	5	COMB5	1.92	No Message
N1	B17	4	660	COMB9	4.93	COMB8	5	COMB5	1.92	No Message
N1	B17	4	880	COMB9	5	COMB8	5	COMB5	1.92	No Message
N1	B17	4	1100	COMB9	5.07	COMB8	5	COMB5	1.92	No Message
N1	B17	4	1320	COMB9	5.14	COMB8	5	COMB5	1.92	No Message
N1	B17	4	1540	COMB9	5.2	COMB8	5	COMB5	1.92	No Message
N1	B17	4	1760	COMB9	5.27	COMB8	5	COMB5	1.92	No Message
N1	B17	4	1980	COMB9	5.34	COMB8	5	COMB5	1.92	No Message
N1	B17	4	2200	COMB9	5.41	COMB8	5	COMB5	1.92	No Message

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 3 of 2)

Story	Label	Unique Name	Station mm	Errors
N1	B1	13	200	No Message
N1	B1	13	980	No Message
N1	B1	13	1760	No Message
N1	B1	13	2540	No Message
N1	B1	13	3320	No Message
N1	B1	13	4100	No Message
N1	B1	13	4880	No Message
N1	B1	13	5660	No Message
N1	B1	13	6440	No Message
N1	B1	13	7220	No Message
N1	B1	13	8000	No Message
N1	B2	14	200	No Message
N1	B2	14	980	No Message
N1	B2	14	1760	No Message
N1	B2	14	2540	No Message
N1	B2	14	3320	No Message
N1	B2	14	4100	No Message
N1	B2	14	4880	No Message
N1	B2	14	5660	No Message
N1	B2	14	6440	No Message
N1	B2	14	7220	No Message
N1	B2	14	8000	No Message
N1	B3	15	200	No Message
N1	B3	15	980	No Message
N1	B3	15	1760	No Message
N1	B3	15	2540	No Message
N1	B3	15	3320	No Message
N1	B3	15	4100	No Message
N1	B3	15	4880	No Message
N1	B3	15	5660	No Message
N1	B3	15	6440	No Message
N1	B3	15	7220	No Message
N1	B3	15	8000	No Message
N1	B4	16	200	No Message
N1	B4	16	980	No Message
N1	B4	16	1760	No Message
N1	B4	16	2540	No Message
N1	B4	16	3320	No Message
N1	B4	16	4100	No Message
N1	B4	16	4880	No Message
N1	B4	16	5660	No Message
N1	B4	16	6440	No Message
N1	B4	16	7220	No Message
N1	B4	16	8000	No Message
N1	B5	17	200	No Message
N1	B5	17	980	No Message

Story	Label	Unique Name	Station mm	Errors
N1	B5	17	1760	No Message
N1	B5	17	2540	No Message
N1	B5	17	3320	No Message
N1	B5	17	4100	No Message
N1	B5	17	4880	No Message
N1	B5	17	5660	No Message
N1	B5	17	6440	No Message
N1	B5	17	7220	No Message
N1	B5	17	8000	No Message
N1	B6	18	200	No Message
N1	B6	18	980	No Message
N1	B6	18	1760	No Message
N1	B6	18	2540	No Message
N1	B6	18	3320	No Message
N1	B6	18	4100	No Message
N1	B6	18	4880	No Message
N1	B6	18	5660	No Message
N1	B6	18	6440	No Message
N1	B6	18	7220	No Message
N1	B6	18	8000	No Message
N1	B7	19	200	No Message
N1	B7	19	980	No Message
N1	B7	19	1760	No Message
N1	B7	19	2540	No Message
N1	B7	19	3320	No Message
N1	B7	19	4100	No Message
N1	B7	19	4880	No Message
N1	B7	19	5660	No Message
N1	B7	19	6440	No Message
N1	B7	19	7220	No Message
N1	B7	19	8000	No Message
N1	B8	2	0	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	220	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	440	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	660	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	880	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1100	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1320	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1540	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1760	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1980	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	2200	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	0	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	220	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	440	Shear stress due to shear force and torsion together exceeds maximum allowed

Story	Label	Unique Name	Station mm	Errors
N1	B14	6	660	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	880	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	1100	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	1320	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	1540	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	1760	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	1980	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B14	6	2200	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B15	22	0	No Message
N1	B15	22	820	No Message
N1	B15	22	1640	No Message
N1	B15	22	2460	No Message
N1	B15	22	3280	No Message
N1	B15	22	4100	No Message
N1	B15	22	4920	No Message
N1	B15	22	5740	No Message
N1	B15	22	6560	No Message
N1	B15	22	7380	No Message
N1	B15	22	8200	No Message
N1	B16	23	0	No Message
N1	B16	23	820	No Message
N1	B16	23	1640	No Message
N1	B16	23	2460	No Message
N1	B16	23	3280	No Message
N1	B16	23	4100	No Message
N1	B16	23	4920	No Message
N1	B16	23	5740	No Message
N1	B16	23	6560	No Message
N1	B16	23	7380	No Message
N1	B16	23	8200	No Message
N1	B17	4	0	No Message
N1	B17	4	220	No Message
N1	B17	4	440	No Message
N1	B17	4	660	No Message
N1	B17	4	880	No Message
N1	B17	4	1100	No Message
N1	B17	4	1320	No Message
N1	B17	4	1540	No Message
N1	B17	4	1760	No Message
N1	B17	4	1980	No Message
N1	B17	4	2200	No Message

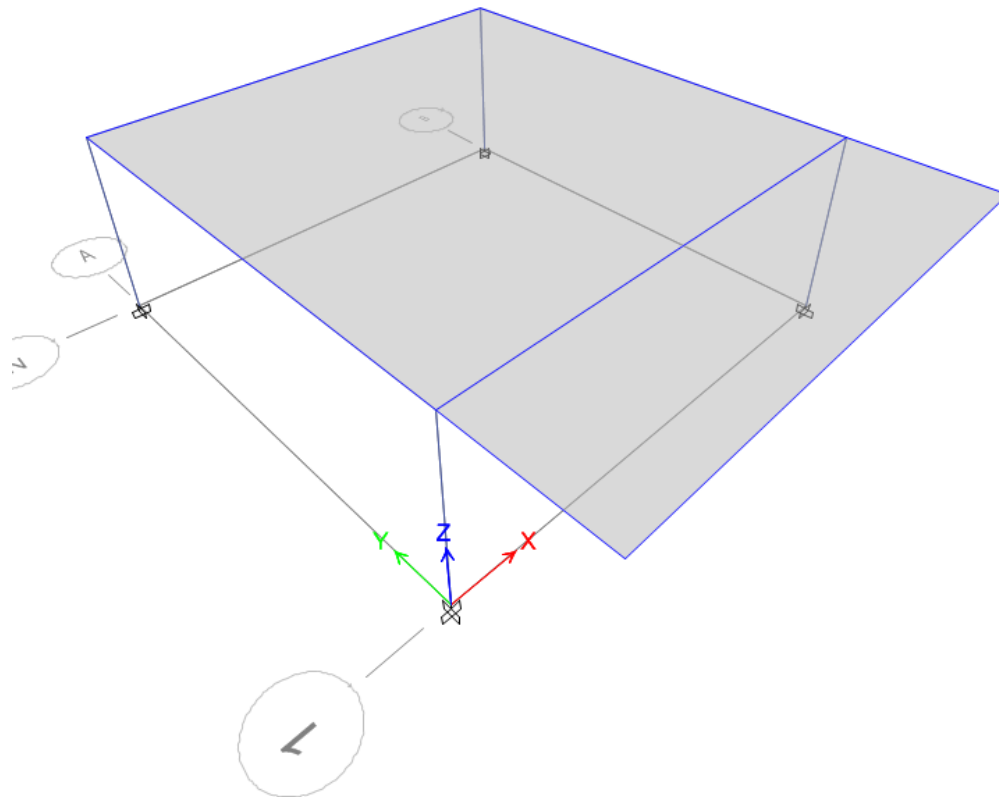
Table 6.11 - Concrete Joint Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Design Section	Status	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio
N1	C1	7	C40X40	Joint check not done.				
N1	C2	8	C40X40	Joint check not done.				
N1	C3	9	C40X40	Joint check not done.				
N1	C4	10	C40X40	Joint check not done.				
N1	C5	11	C40X40	Joint check not done.				

Story	Label	Unique Name	Design Section	Status	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio
N1	C6	12	C40X40	Joint check not done.				

Table 6.11 - Concrete Joint Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio	Warnings	Errors
N1	C1	7					No Message	No Message
N1	C2	8					No Message	No Message
N1	C3	9					No Message	No Message
N1	C4	10					No Message	No Message
N1	C5	11					No Message	No Message
N1	C6	12					No Message	No Message



## Project Report

Model File: 004 2017 EDUCACION MODULO 2B DMO - E, Revision 0  
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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	8.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	8200	0	0
4	8200	8200	0
10	0	-2400	0
9	8200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B8	10	1	None
B15	10	9	None
B17	9	3	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	9	3	None
		2	3	1	None
		3	1	10	None
		4	10	9	None
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	29882.02	29882.02	4.1	-0.7209	29882.02	29882.02	4.1	-0.7209	4.1	3.2834

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	29882.02	29882.02	538.4872	4.1	-0.7209

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	40173.51	40173.51	0
Base	2498.55	2498.55	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A416Gr270	Tendon	196500.6	0	76.9729	Fy=1689.91 MPa, Fu=1861.58 MPa
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 2.5 Tendon Sections

**Table 2.5 - Tendon Section Properties**

Name	Material	StrandArea cm <sup>2</sup>	Color
Tendon1	A416Gr270	1	Yellow

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	10	25	D1	
N1	9	26	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	8200	V30X50	V30X50	11
N1	B2	14	Beam	8200	V30X50	V30X50	11
N1	B4	16	Beam	8200	V30X50	V30X50	11
N1	B6	18	Beam	8200	V30X50	V30X50	11
N1	B8	2	Beam	2400	V30X50	V30X50	11
N1	B15	22	Beam	8200	VB20X50	VB20X50	11
N1	B17	4	Beam	2400	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F1	3	LOSA	90
N1	F5	5	CUB	

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200
N1	B4	16	Beam	D	Force	Gravity	0	1	0	8200
N1	B15	22	Beam	D	Force	Gravity	0	1	0	8200

**Table 4.2 - Frame Loads - Distributed (Part 2 of 2)**

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N1	B1	13	4.4	0
N1	B2	14	4.4	0
N1	B4	16	4.4	4.4
N1	B15	22	1.55	1.55

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	3	D	Gravity	4.3
N1	F5	5	D	Gravity	0.64
N1	F1	3	L	Gravity	2
N1	F5	5	LR	Gravity	0.5
N1	F1	3	G	Gravity	1
N1	F5	5	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
Umbral	0	0.08	2
Umbral	0.01	0.086	
Umbral	0.02	0.093	
Umbral	0.03	0.099	

Name	Period sec	Acceleration	Damping %
Umbral	0.04	0.106	
Umbral	0.05	0.112	
Umbral	0.06	0.118	
Umbral	0.07	0.125	
Umbral	0.08	0.131	
Umbral	0.09	0.138	
Umbral	0.1	0.144	
Umbral	0.11	0.15	
Umbral	0.12	0.157	
Umbral	0.13	0.163	
Umbral	0.14	0.17	
Umbral	0.15	0.176	
Umbral	0.16	0.182	
Umbral	0.17	0.189	
Umbral	0.18	0.195	
Umbral	0.19	0.202	
Umbral	0.2	0.208	
Umbral	0.21	0.214	
Umbral	0.22	0.221	
Umbral	0.23	0.227	
Umbral	0.24	0.234	
Umbral	0.25	0.24	
Umbral	0.26	0.24	
Umbral	0.27	0.24	
Umbral	0.28	0.24	
Umbral	0.29	0.24	
Umbral	0.3	0.24	
Umbral	0.31	0.24	
Umbral	0.32	0.24	
Umbral	0.33	0.24	
Umbral	0.34	0.24	
Umbral	0.35	0.24	
Umbral	0.36	0.24	
Umbral	0.37	0.24	
Umbral	0.38	0.24	
Umbral	0.39	0.24	
Umbral	0.4	0.24	
Umbral	0.41	0.24	
Umbral	0.42	0.24	
Umbral	0.43	0.24	
Umbral	0.44	0.24	
Umbral	0.45	0.24	
Umbral	0.46	0.24	
Umbral	0.47	0.24	
Umbral	0.48	0.24	
Umbral	0.49	0.24	
Umbral	0.5	0.24	
Umbral	0.51	0.24	
Umbral	0.52	0.24	
Umbral	0.53	0.24	
Umbral	0.54	0.24	
Umbral	0.55	0.24	
Umbral	0.56	0.24	
Umbral	0.57	0.24	
Umbral	0.58	0.24	
Umbral	0.59	0.24	
Umbral	0.6	0.24	
Umbral	0.61	0.24	
Umbral	0.62	0.24	
Umbral	0.63	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	0.64	0.24	
Umbral	0.65	0.24	
Umbral	0.66	0.24	
Umbral	0.67	0.24	
Umbral	0.68	0.24	
Umbral	0.69	0.24	
Umbral	0.7	0.24	
Umbral	0.71	0.24	
Umbral	0.72	0.24	
Umbral	0.73	0.24	
Umbral	0.74	0.24	
Umbral	0.75	0.24	
Umbral	0.76	0.24	
Umbral	0.77	0.24	
Umbral	0.78	0.24	
Umbral	0.79	0.24	
Umbral	0.8	0.24	
Umbral	0.81	0.24	
Umbral	0.82	0.24	
Umbral	0.83	0.24	
Umbral	0.84	0.24	
Umbral	0.85	0.24	
Umbral	0.86	0.24	
Umbral	0.87	0.24	
Umbral	0.88	0.24	
Umbral	0.89	0.24	
Umbral	0.9	0.24	
Umbral	0.91	0.24	
Umbral	0.92	0.24	
Umbral	0.93	0.24	
Umbral	0.94	0.24	
Umbral	0.95	0.24	
Umbral	0.96	0.24	
Umbral	0.97	0.24	
Umbral	0.98	0.24	
Umbral	0.99	0.24	
Umbral	1	0.24	
Umbral	1.01	0.24	
Umbral	1.02	0.24	
Umbral	1.03	0.24	
Umbral	1.04	0.24	
Umbral	1.05	0.24	
Umbral	1.06	0.24	
Umbral	1.07	0.24	
Umbral	1.08	0.24	
Umbral	1.09	0.24	
Umbral	1.1	0.24	
Umbral	1.11	0.24	
Umbral	1.12	0.24	
Umbral	1.13	0.24	
Umbral	1.14	0.24	
Umbral	1.15	0.24	
Umbral	1.16	0.24	
Umbral	1.17	0.24	
Umbral	1.18	0.24	
Umbral	1.19	0.24	
Umbral	1.2	0.24	
Umbral	1.21	0.24	
Umbral	1.22	0.24	
Umbral	1.23	0.24	



Name	Period sec	Acceleration	Damping %
Umbral	1.24	0.24	
Umbral	1.25	0.24	
Umbral	1.26	0.24	
Umbral	1.27	0.24	
Umbral	1.28	0.24	
Umbral	1.29	0.24	
Umbral	1.3	0.24	
Umbral	1.31	0.24	
Umbral	1.32	0.24	
Umbral	1.33	0.24	
Umbral	1.34	0.24	
Umbral	1.35	0.24	
Umbral	1.36	0.24	
Umbral	1.37	0.24	
Umbral	1.38	0.24	
Umbral	1.39	0.24	
Umbral	1.4	0.24	
Umbral	1.41	0.24	
Umbral	1.42	0.24	
Umbral	1.43	0.24	
Umbral	1.44	0.24	
Umbral	1.45	0.24	
Umbral	1.46	0.24	
Umbral	1.47	0.24	
Umbral	1.48	0.24	
Umbral	1.49	0.24	
Umbral	1.5	0.24	
Umbral	1.51	0.24	
Umbral	1.52	0.24	
Umbral	1.53	0.24	
Umbral	1.54	0.24	
Umbral	1.55	0.24	
Umbral	1.56	0.24	
Umbral	1.57	0.24	
Umbral	1.58	0.24	
Umbral	1.59	0.24	
Umbral	1.6	0.24	
Umbral	1.61	0.24	
Umbral	1.62	0.24	
Umbral	1.63	0.24	
Umbral	1.64	0.24	
Umbral	1.65	0.24	
Umbral	1.66	0.24	
Umbral	1.67	0.24	
Umbral	1.68	0.24	
Umbral	1.69	0.24	
Umbral	1.7	0.24	
Umbral	1.71	0.24	
Umbral	1.72	0.24	
Umbral	1.73	0.24	
Umbral	1.74	0.24	
Umbral	1.75	0.24	
Umbral	1.76	0.24	
Umbral	1.77	0.24	
Umbral	1.78	0.24	
Umbral	1.79	0.24	
Umbral	1.8	0.24	
Umbral	1.81	0.24	
Umbral	1.82	0.24	
Umbral	1.83	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.84	0.24	
Umbral	1.85	0.24	
Umbral	1.86	0.24	
Umbral	1.87	0.24	
Umbral	1.88	0.24	
Umbral	1.89	0.24	
Umbral	1.9	0.24	
Umbral	1.91	0.24	
Umbral	1.92	0.24	
Umbral	1.93	0.24	
Umbral	1.94	0.24	
Umbral	1.95	0.24	
Umbral	1.96	0.24	
Umbral	1.97	0.24	
Umbral	1.98	0.24	
Umbral	1.99	0.24	
Umbral	2	0.24	
Umbral	2.01	0.239	
Umbral	2.02	0.238	
Umbral	2.03	0.236	
Umbral	2.04	0.235	
Umbral	2.05	0.234	
Umbral	2.06	0.233	
Umbral	2.07	0.232	
Umbral	2.08	0.231	
Umbral	2.09	0.23	
Umbral	2.1	0.229	
Umbral	2.11	0.227	
Umbral	2.12	0.226	
Umbral	2.13	0.225	
Umbral	2.14	0.224	
Umbral	2.15	0.223	
Umbral	2.16	0.222	
Umbral	2.17	0.221	
Umbral	2.18	0.22	
Umbral	2.19	0.219	
Umbral	2.2	0.218	
Umbral	2.21	0.217	
Umbral	2.22	0.216	
Umbral	2.23	0.215	
Umbral	2.24	0.214	
Umbral	2.25	0.213	
Umbral	2.26	0.212	
Umbral	2.27	0.211	
Umbral	2.28	0.211	
Umbral	2.29	0.21	
Umbral	2.3	0.209	
Umbral	2.31	0.208	
Umbral	2.32	0.207	
Umbral	2.33	0.206	
Umbral	2.34	0.205	
Umbral	2.35	0.204	
Umbral	2.36	0.203	
Umbral	2.37	0.203	
Umbral	2.38	0.202	
Umbral	2.39	0.201	
Umbral	2.4	0.2	
Umbral	2.41	0.199	
Umbral	2.42	0.198	
Umbral	2.43	0.198	

Name	Period sec	Acceleration	Damping %
Umbral	2.44	0.197	
Umbral	2.45	0.196	
Umbral	2.46	0.195	
Umbral	2.47	0.194	
Umbral	2.48	0.194	
Umbral	2.49	0.193	
Umbral	2.5	0.192	
Umbral	2.51	0.191	
Umbral	2.52	0.19	
Umbral	2.53	0.19	
Umbral	2.54	0.189	
Umbral	2.55	0.188	
Umbral	2.56	0.188	
Umbral	2.57	0.187	
Umbral	2.58	0.186	
Umbral	2.59	0.185	
Umbral	2.6	0.185	
Umbral	2.61	0.184	
Umbral	2.62	0.183	
Umbral	2.63	0.183	
Umbral	2.64	0.182	
Umbral	2.65	0.181	
Umbral	2.66	0.18	
Umbral	2.67	0.18	
Umbral	2.68	0.179	
Umbral	2.69	0.178	
Umbral	2.7	0.178	
Umbral	2.71	0.177	
Umbral	2.72	0.176	
Umbral	2.73	0.176	
Umbral	2.74	0.175	
Umbral	2.75	0.175	
Umbral	2.76	0.174	
Umbral	2.77	0.173	
Umbral	2.78	0.173	
Umbral	2.79	0.172	
Umbral	2.8	0.171	
Umbral	2.81	0.171	
Umbral	2.82	0.17	
Umbral	2.83	0.17	
Umbral	2.84	0.169	
Umbral	2.85	0.168	
Umbral	2.86	0.168	
Umbral	2.87	0.167	
Umbral	2.88	0.167	
Umbral	2.89	0.166	
Umbral	2.9	0.166	
Umbral	2.91	0.165	
Umbral	2.92	0.164	
Umbral	2.93	0.164	
Umbral	2.94	0.163	
Umbral	2.95	0.163	
Umbral	2.96	0.162	
Umbral	2.97	0.162	
Umbral	2.98	0.161	
Umbral	2.99	0.161	
Umbral	3	0.16	
Umbral	3.01	0.159	
Umbral	3.02	0.159	
Umbral	3.03	0.158	

Name	Period sec	Acceleration	Damping %
Umbral	3.04	0.158	
Umbral	3.05	0.157	
Umbral	3.06	0.157	
Umbral	3.07	0.156	
Umbral	3.08	0.156	
Umbral	3.09	0.155	
Umbral	3.1	0.155	
Umbral	3.11	0.154	
Umbral	3.12	0.154	
Umbral	3.13	0.153	
Umbral	3.14	0.153	
Umbral	3.15	0.152	
Umbral	3.16	0.152	
Umbral	3.17	0.151	
Umbral	3.18	0.151	
Umbral	3.19	0.15	
Umbral	3.2	0.15	
Umbral	3.21	0.15	
Umbral	3.22	0.149	
Umbral	3.23	0.149	
Umbral	3.24	0.148	
Umbral	3.25	0.148	
Umbral	3.26	0.147	
Umbral	3.27	0.147	
Umbral	3.28	0.146	
Umbral	3.29	0.146	
Umbral	3.3	0.145	
Umbral	3.31	0.145	
Umbral	3.32	0.145	
Umbral	3.33	0.144	
Umbral	3.34	0.144	
Umbral	3.35	0.143	
Umbral	3.36	0.143	
Umbral	3.37	0.142	
Umbral	3.38	0.142	
Umbral	3.39	0.142	
Umbral	3.4	0.141	
Umbral	3.41	0.141	
Umbral	3.42	0.14	
Umbral	3.43	0.14	
Umbral	3.44	0.14	
Umbral	3.45	0.139	
Umbral	3.46	0.139	
Umbral	3.47	0.138	
Umbral	3.48	0.138	
Umbral	3.49	0.138	
Umbral	3.5	0.137	
Umbral	3.51	0.137	
Umbral	3.52	0.136	
Umbral	3.53	0.136	
Umbral	3.54	0.136	
Umbral	3.55	0.135	
Umbral	3.56	0.135	
Umbral	3.57	0.134	
Umbral	3.58	0.134	
Umbral	3.59	0.134	
Umbral	3.6	0.133	
Umbral	3.61	0.133	
Umbral	3.62	0.133	
Umbral	3.63	0.132	

Name	Period sec	Acceleration	Damping %
Umbral	3.64	0.132	
Umbral	3.65	0.132	
Umbral	3.66	0.131	
Umbral	3.67	0.131	
Umbral	3.68	0.13	
Umbral	3.69	0.13	
Umbral	3.7	0.13	
Umbral	3.71	0.129	
Umbral	3.72	0.129	
Umbral	3.73	0.129	
Umbral	3.74	0.128	
Umbral	3.75	0.128	
Umbral	3.76	0.128	
Umbral	3.77	0.127	
Umbral	3.78	0.127	
Umbral	3.79	0.127	
Umbral	3.8	0.126	
Umbral	3.81	0.126	
Umbral	3.82	0.126	
Umbral	3.83	0.125	
Umbral	3.84	0.125	
Umbral	3.85	0.125	
Umbral	3.86	0.124	
Umbral	3.87	0.124	
Umbral	3.88	0.124	
Umbral	3.89	0.123	
Umbral	3.9	0.123	
Umbral	3.91	0.123	
Umbral	3.92	0.122	
Umbral	3.93	0.122	
Umbral	3.94	0.122	
Umbral	3.95	0.122	
Umbral	3.96	0.121	
Umbral	3.97	0.121	
Umbral	3.98	0.121	
Umbral	3.99	0.12	
Umbral	4	0.12	
Umbral	4.01	0.12	
Umbral	4.02	0.119	
Umbral	4.03	0.119	
Umbral	4.04	0.119	
Umbral	4.05	0.119	
Umbral	4.06	0.118	
Umbral	4.07	0.118	
Umbral	4.08	0.118	
Umbral	4.09	0.117	
Umbral	4.1	0.117	
Umbral	4.11	0.117	
Umbral	4.12	0.117	
Umbral	4.13	0.116	
Umbral	4.14	0.116	
Umbral	4.15	0.116	
Umbral	4.16	0.115	
Umbral	4.17	0.115	
Umbral	4.18	0.115	
Umbral	4.19	0.115	
Umbral	4.2	0.114	
Umbral	4.21	0.114	
Umbral	4.22	0.114	
Umbral	4.23	0.113	

Name	Period sec	Acceleration	Damping %
Umbral	4.24	0.113	
Umbral	4.25	0.113	
Umbral	4.26	0.113	
Umbral	4.27	0.112	
Umbral	4.28	0.112	
Umbral	4.29	0.112	
Umbral	4.3	0.112	
Umbral	4.31	0.111	
Umbral	4.32	0.111	
Umbral	4.33	0.111	
Umbral	4.34	0.111	
Umbral	4.35	0.11	
Umbral	4.36	0.11	
Umbral	4.37	0.11	
Umbral	4.38	0.11	
Umbral	4.39	0.109	
Umbral	4.4	0.109	
Umbral	4.41	0.109	
Umbral	4.42	0.109	
Umbral	4.43	0.108	
Umbral	4.44	0.108	
Umbral	4.45	0.108	
Umbral	4.46	0.108	
Umbral	4.47	0.107	
Umbral	4.48	0.107	
Umbral	4.49	0.107	
Umbral	4.5	0.107	
Umbral	4.51	0.106	
Umbral	4.52	0.106	
Umbral	4.53	0.106	
Umbral	4.54	0.106	
Umbral	4.55	0.105	
Umbral	4.56	0.105	
Umbral	4.57	0.105	
Umbral	4.58	0.105	
Umbral	4.59	0.105	
Umbral	4.6	0.104	
Umbral	4.61	0.104	
Umbral	4.62	0.104	
Umbral	4.63	0.104	
Umbral	4.64	0.103	
Umbral	4.65	0.103	
Umbral	4.66	0.103	
Umbral	4.67	0.103	
Umbral	4.68	0.103	
Umbral	4.69	0.102	
Umbral	4.7	0.102	
Umbral	4.71	0.102	
Umbral	4.72	0.102	
Umbral	4.73	0.101	
Umbral	4.74	0.101	
Umbral	4.75	0.101	
Umbral	4.76	0.101	
Umbral	4.77	0.101	
Umbral	4.78	0.1	
Umbral	4.79	0.1	
Umbral	4.8	0.1	
Umbral	4.81	0.1	
Umbral	4.82	0.1	
Umbral	4.83	0.099	

Name	Period sec	Acceleration	Damping %
Umbral	4.84	0.099	
Umbral	4.85	0.099	
Umbral	4.86	0.099	
Umbral	4.87	0.099	
Umbral	4.88	0.098	
Umbral	4.89	0.098	
Umbral	4.9	0.098	
Umbral	4.91	0.098	
Umbral	4.92	0.098	
Umbral	4.93	0.097	
Umbral	4.94	0.097	
Umbral	4.95	0.097	
Umbral	4.96	0.097	
Umbral	4.97	0.097	
Umbral	4.98	0.096	
Umbral	4.99	0.096	
Umbral	5	0.096	
Umbral	5.01	0.096	
Umbral	5.02	0.096	
Umbral	5.03	0.095	
Umbral	5.04	0.095	
Umbral	5.05	0.095	
Umbral	5.06	0.095	
Umbral	5.07	0.095	
Umbral	5.08	0.094	
Umbral	5.09	0.094	
Umbral	5.1	0.094	
Umbral	5.11	0.094	
Umbral	5.12	0.094	
Umbral	5.13	0.094	
Umbral	5.14	0.093	
Umbral	5.15	0.093	
Umbral	5.16	0.093	
Umbral	5.17	0.093	
Umbral	5.18	0.093	
Umbral	5.19	0.092	
Umbral	5.2	0.092	
Umbral	5.21	0.092	
Umbral	5.22	0.092	
Umbral	5.23	0.092	
Umbral	5.24	0.092	
Umbral	5.25	0.091	
Umbral	5.26	0.091	
Umbral	5.27	0.091	
Umbral	5.28	0.091	
Umbral	5.29	0.091	
Umbral	5.3	0.091	
Umbral	5.31	0.09	
Umbral	5.32	0.09	
Umbral	5.33	0.09	
Umbral	5.34	0.09	
Umbral	5.35	0.09	
Umbral	5.36	0.09	
Umbral	5.37	0.089	
Umbral	5.38	0.089	
Umbral	5.39	0.089	
Umbral	5.4	0.089	
Umbral	5.41	0.089	
Umbral	5.42	0.089	
Umbral	5.43	0.088	

Name	Period sec	Acceleration	Damping %
Umbral	5.44	0.088	
Umbral	5.45	0.088	
Umbral	5.46	0.088	
Umbral	5.47	0.088	
Umbral	5.48	0.088	
Umbral	5.49	0.087	
Umbral	5.5	0.087	
Umbral	5.51	0.087	
Umbral	5.52	0.087	
Umbral	5.53	0.087	
Umbral	5.54	0.087	
Umbral	5.55	0.086	
Umbral	5.56	0.086	
Umbral	5.57	0.086	
Umbral	5.58	0.086	
Umbral	5.59	0.086	
Umbral	5.6	0.086	
Umbral	5.61	0.086	
Umbral	5.62	0.085	
Umbral	5.63	0.085	
Umbral	5.64	0.085	
Umbral	5.65	0.085	
Umbral	5.66	0.085	
Umbral	5.67	0.085	
Umbral	5.68	0.085	
Umbral	5.69	0.084	
Umbral	5.7	0.084	
Umbral	5.71	0.084	
Umbral	5.72	0.084	
Umbral	5.73	0.084	
Umbral	5.74	0.084	
Umbral	5.75	0.083	
Umbral	5.76	0.083	
Umbral	5.77	0.083	
Umbral	5.78	0.083	
Umbral	5.79	0.083	
Umbral	5.8	0.083	
Umbral	5.81	0.083	
Umbral	5.82	0.082	
Umbral	5.83	0.082	
Umbral	5.84	0.082	
Umbral	5.85	0.082	
Umbral	5.86	0.082	
Umbral	5.87	0.082	
Umbral	5.88	0.082	
Umbral	5.89	0.081	
Umbral	5.9	0.081	
Umbral	5.91	0.081	
Umbral	5.92	0.081	
Umbral	5.93	0.081	
Umbral	5.94	0.081	
Umbral	5.95	0.081	
Umbral	5.96	0.081	
Umbral	5.97	0.08	
Umbral	5.98	0.08	
Umbral	5.99	0.08	
Umbral	6	0.08	
Umbral	6.01	0.08	
Umbral	6.02	0.08	
Umbral	6.03	0.08	



Name	Period sec	Acceleration	Damping %
Umbral	6.04	0.079	
Umbral	6.05	0.079	
Umbral	6.06	0.079	
Umbral	6.07	0.079	
Umbral	6.08	0.079	
Umbral	6.09	0.079	
Umbral	6.1	0.079	
Umbral	6.11	0.079	
Umbral	6.12	0.078	
Umbral	6.13	0.078	
Umbral	6.14	0.078	
Umbral	6.15	0.078	
Umbral	6.16	0.078	
Umbral	6.17	0.078	
Umbral	6.18	0.078	
Umbral	6.19	0.078	
Umbral	6.2	0.077	
Umbral	6.21	0.077	
Umbral	6.22	0.077	
Umbral	6.23	0.077	
Umbral	6.24	0.077	
Umbral	6.25	0.077	
Umbral	6.26	0.077	
Umbral	6.27	0.077	
Umbral	6.28	0.076	
Umbral	6.29	0.076	
Umbral	6.3	0.076	
Umbral	6.31	0.076	
Umbral	6.32	0.076	
Umbral	6.33	0.076	
Umbral	6.34	0.076	
Umbral	6.35	0.076	
Umbral	6.36	0.075	
Umbral	6.37	0.075	
Umbral	6.38	0.075	
Umbral	6.39	0.075	
Umbral	6.4	0.075	
Umbral	6.41	0.075	
Umbral	6.42	0.075	
Umbral	6.43	0.075	
Umbral	6.44	0.075	
Umbral	6.45	0.074	
Umbral	6.46	0.074	
Umbral	6.47	0.074	
Umbral	6.48	0.074	
Umbral	6.49	0.074	
Umbral	6.5	0.074	
Umbral	6.51	0.074	
Umbral	6.52	0.074	
Umbral	6.53	0.074	
Umbral	6.54	0.073	
Umbral	6.55	0.073	
Umbral	6.56	0.073	
Umbral	6.57	0.073	
Umbral	6.58	0.073	
Umbral	6.59	0.073	
Umbral	6.6	0.073	
Umbral	6.61	0.073	
Umbral	6.62	0.073	
Umbral	6.63	0.072	

Name	Period sec	Acceleration	Damping %
Umbral	6.64	0.072	
Umbral	6.65	0.072	
Umbral	6.66	0.072	
Umbral	6.67	0.072	
Umbral	6.68	0.072	
Umbral	6.69	0.072	
Umbral	6.7	0.072	
Umbral	6.71	0.072	
Umbral	6.72	0.071	
Umbral	6.73	0.071	
Umbral	6.74	0.071	
Umbral	6.75	0.071	
Umbral	6.76	0.071	
Umbral	6.77	0.071	
Umbral	6.78	0.071	
Umbral	6.79	0.071	
Umbral	6.8	0.071	
Umbral	6.81	0.07	
Umbral	6.82	0.07	
Umbral	6.83	0.07	
Umbral	6.84	0.07	
Umbral	6.85	0.07	
Umbral	6.86	0.07	
Umbral	6.87	0.07	
Umbral	6.88	0.07	
Umbral	6.89	0.07	
Umbral	6.9	0.07	
Umbral	6.91	0.069	
Umbral	6.92	0.069	
Umbral	6.93	0.069	
Umbral	6.94	0.069	
Umbral	6.95	0.069	
Umbral	6.96	0.069	
Umbral	6.97	0.069	
Umbral	6.98	0.069	
Umbral	6.99	0.069	
Umbral	7	0.069	
Umbral	7.01	0.068	
Umbral	7.02	0.068	
Umbral	7.03	0.068	
Umbral	7.04	0.068	
Umbral	7.05	0.068	
Umbral	7.06	0.068	
Umbral	7.07	0.068	
Umbral	7.08	0.068	
Umbral	7.09	0.068	
Umbral	7.1	0.068	
Umbral	7.11	0.068	
Umbral	7.12	0.067	
Umbral	7.13	0.067	
Umbral	7.14	0.067	
Umbral	7.15	0.067	
Umbral	7.16	0.067	
Umbral	7.17	0.067	
Umbral	7.18	0.067	
Umbral	7.19	0.067	
Umbral	7.2	0.067	
Umbral	7.21	0.067	
Umbral	7.22	0.066	
Umbral	7.23	0.066	

Name	Period sec	Acceleration	Damping %
Umbral	7.24	0.066	
Umbral	7.25	0.066	
Umbral	7.26	0.066	
Umbral	7.27	0.066	
Umbral	7.28	0.066	
Umbral	7.29	0.066	
Umbral	7.3	0.066	
Umbral	7.31	0.066	
Umbral	7.32	0.066	
Umbral	7.33	0.065	
Umbral	7.34	0.065	
Umbral	7.35	0.065	
Umbral	7.36	0.065	
Umbral	7.37	0.065	
Umbral	7.38	0.065	
Umbral	7.39	0.065	
Umbral	7.4	0.065	
Umbral	7.41	0.065	
Umbral	7.42	0.065	
Umbral	7.43	0.065	
Umbral	7.44	0.065	
Umbral	7.45	0.064	
Umbral	7.46	0.064	
Umbral	7.47	0.064	
Umbral	7.48	0.064	
Umbral	7.49	0.064	
Umbral	7.5	0.064	

4.4 Load Cases

Table 4.5 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.6 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
VIG01	D	1.2	Linear Add	No
VIG01	L	1		No
VIG01	DISX	2		No
VIG01	DISY	0.6		No
VIG02	D	1.2	Linear Add	No
VIG02	L	1		No
VIG02	DISX	0.6		No
VIG02	DISY	2		No
VIG03	D	0.9	Linear Add	No
VIG03	DISX	2		No
VIG03	DISY	0.6		No
VIG04	D	0.9	Linear Add	No
VIG04	DISX	0.6		No
VIG04	DISY	2		No
COL1	D	1.2	Linear Add	No
COL1	L	1		No
COL1	DISX	3		No
COL1	DISY	0.9		No
COL2	D	1.2	Linear Add	No
COL2	L	1		No
COL2	DISX	0.9		No
COL2	DISY	3		No
COL3	D	0.9	Linear Add	No
COL3	DISX	3		No
COL3	DISY	0.9		No
COL4	D	0.9	Linear Add	No
COL4	DISX	0.9		No
COL4	DISY	3		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

**Table 5.1 - Base Reactions**

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	406.662	728.9378	-1667.3142	0	0	0	0
L	0	0	39.36	-47.3513	-161.376	0	0	0	0
LR	0	0	33.62	137.843	-137.842	0	0	0	0
EX Max	387.969	0	0	0	1265.7439	1840.023	0	0	0
EY Max	0	388.5912	0	1266.9216	0	1593.2237	0	0	0
DISX Max	143.4796	0	0	0	468.1006	680.4819	0	0	0
DISY Max	0	143.7047	0	468.5196	0	589.1892	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	86.92	252.0102	-356.372	0	0	0	0
DERUX Max	59.8783	0	0	0	195.3842	246.4616	0	0	0
DERUY Max	0	68.052	0	221.8697	0	279.0134	0	0	0
COMB1	0	0	569.3268	1020.5129	-2334.2399	0	0	0	0
COMB2	0	0	567.7804	867.8847	-2327.8996	0	0	0	0
COMB3	0	0	581.1464	1047.9227	-2382.7002	0	0	0	0
COMB4	0	0	544.1644	896.2955	-2231.074	0	0	0	0
COMB5 Max	143.4796	43.1114	527.3544	967.9299	-1694.0525	857.2386	0	0	0
COMB5 Min	-143.4796	-43.1114	527.3544	686.8181	-2630.2536	-857.2386	0	0	0
COMB6 Max	43.0439	143.7047	527.3544	1295.8936	-2021.7229	793.3338	0	0	0
COMB6 Min	-43.0439	-143.7047	527.3544	358.8544	-2302.5832	-793.3338	0	0	0
COMB7 Max	43.0439	143.7047	365.9958	1124.5636	-1360.1526	793.3338	0	0	0
COMB7 Min	-43.0439	-143.7047	365.9958	187.5244	-1641.0129	-793.3338	0	0	0
COMB8 Max	143.4796	43.1114	365.9958	796.5999	-1032.4822	857.2386	0	0	0
COMB8 Min	-143.4796	-43.1114	365.9958	515.4881	-1968.6833	-857.2386	0	0	0
ENVE Max	143.4796	143.7047	581.1464	1295.8936	-1032.4822	857.2386	0	0	0
ENVE Min	-143.4796	-143.7047	365.9958	187.5244	-2630.2536	-857.2386	0	0	0
CIM01	0	0	406.662	728.9378	-1667.3142	0	0	0	0
CIM02	0	0	446.022	681.5864	-1828.6902	0	0	0	0
CIM03	0	0	440.282	866.7807	-1805.1562	0	0	0	0
CIM04	0	0	461.397	796.8065	-1891.7277	0	0	0	0
CIM05 Max	100.4358	30.178	406.662	827.3269	-1339.6438	600.0671	0	0	0
CIM05 Min	-100.4358	-30.178	406.662	630.5487	-1994.9846	-600.0671	0	0	0
CIM06 Max	30.1307	100.5933	406.662	1056.9015	-1569.0131	555.3337	0	0	0
CIM06 Min	-30.1307	-100.5933	406.662	400.9741	-1765.6153	-555.3337	0	0	0
CIM07 Max	76.0442	22.9928	461.397	871.7696	-1643.6344	454.9257	0	0	0
CIM07 Min	-76.0442	-22.9928	461.397	721.8434	-2139.821	-454.9257	0	0	0
CIM08 Max	22.9567	76.1635	461.397	1045.1219	-1816.8316	421.1474	0	0	0
CIM08 Min	-22.9567	-76.1635	461.397	548.4911	-1966.6238	-421.1474	0	0	0
DER01	0	0	569.3268	1020.5129	-2334.2399	0	0	0	0
DER02	0	0	567.7804	867.8847	-2327.8996	0	0	0	0
DER03	0	0	581.1464	1047.9227	-2382.7002	0	0	0	0
DER04	0	0	544.1644	896.2955	-2231.074	0	0	0	0
DER05 Max	387.969	0	527.3544	827.374	-896.4091	1840.023	0	0	0
DER05 Min	-387.969	0	527.3544	827.374	-3427.897	-1840.023	0	0	0
DER06 Max	0	388.5912	527.3544	2094.2956	-2162.153	1593.2237	0	0	0
DER06 Min	0	-388.5912	527.3544	-439.5476	-2162.153	-1593.2237	0	0	0
DER07 Max	387.969	0	365.9958	656.044	-234.8389	1840.023	0	0	0
DER07 Min	-387.969	0	365.9958	656.044	-2766.3267	-1840.023	0	0	0
DER08 Max	0	388.5912	365.9958	1922.9656	-1500.5828	1593.2237	0	0	0
DER08 Min	0	-388.5912	365.9958	-610.8775	-1500.5828	-1593.2237	0	0	0
DERUD01	0	0	569.3268	1020.5129	-2334.2399	0	0	0	0
DERUD02	0	0	567.7804	867.8847	-2327.8996	0	0	0	0
DERUD03	0	0	581.1464	1047.9227	-2382.7002	0	0	0	0
DERUD04	0	0	544.1644	896.2955	-2231.074	0	0	0	0
DERUD05 Max	59.8783	0	527.3544	827.374	-1966.7689	246.4616	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-59.8783	0	527.3544	827.374	-2357.5372	-246.4616	0	0	0
DERUD06 Max	0	68.052	527.3544	1049.2437	-2162.153	279.0134	0	0	0
DERUD06 Min	0	-68.052	527.3544	605.5043	-2162.153	-279.0134	0	0	0
DERUD07 Max	59.8783	0	365.9958	656.044	-1305.1986	246.4616	0	0	0
DERUD07 Min	-59.8783	0	365.9958	656.044	-1695.967	-246.4616	0	0	0
DERUD08 Max	0	68.052	365.9958	877.9137	-1500.5828	279.0134	0	0	0
DERUD08 Min	0	-68.052	365.9958	434.1743	-1500.5828	-279.0134	0	0	0
VIG01 Max	286.9593	86.2228	527.3544	1108.4858	-1225.9519	1714.4773	0	0	0
VIG01 Min	-286.9593	-86.2228	527.3544	546.2622	-3098.3542	-1714.4773	0	0	0
VIG02 Max	86.0878	287.4094	527.3544	1764.4132	-1881.2927	1586.6676	0	0	0
VIG02 Min	-86.0878	-287.4094	527.3544	-109.6652	-2443.0134	-1586.6676	0	0	0
VIG03 Max	286.9593	86.2228	365.9958	937.1558	-564.3817	1714.4773	0	0	0
VIG03 Min	-286.9593	-86.2228	365.9958	374.9322	-2436.7839	-1714.4773	0	0	0
VIG04 Max	86.0878	287.4094	365.9958	1593.0832	-1219.7224	1586.6676	0	0	0
VIG04 Min	-86.0878	-287.4094	365.9958	-280.9952	-1781.4431	-1586.6676	0	0	0
COL1 Max	430.4389	129.3342	527.3544	1249.0416	-757.8513	2571.7159	0	0	0
COL1 Min	-430.4389	-129.3342	527.3544	405.7064	-3566.4547	-2571.7159	0	0	0
COL2 Max	129.1317	431.1141	527.3544	2232.9328	-1740.8625	2380.0014	0	0	0
COL2 Min	-129.1317	-431.1141	527.3544	-578.1848	-2583.4435	-2380.0014	0	0	0
COL3 Max	430.4389	129.3342	365.9958	1077.7117	-96.2811	2571.7159	0	0	0
COL3 Min	-430.4389	-129.3342	365.9958	234.3764	-2904.8845	-2571.7159	0	0	0
COL4 Max	129.1317	431.1141	365.9958	2061.6028	-1079.2923	2380.0014	0	0	0
COL4 Min	-129.1317	-431.1141	365.9958	-749.5148	-1921.8733	-2380.0014	0	0	0
CIM09 Max	100.4358	30.178	243.9972	535.7518	-672.7181	600.0671	0	0	0
CIM09 Min	-100.4358	-30.178	243.9972	338.9736	-1328.0589	-600.0671	0	0	0
CIM10 Max	30.1307	100.5933	243.9972	765.3264	-902.0874	555.3337	0	0	0
CIM10 Min	-30.1307	-100.5933	243.9972	109.3989	-1098.6896	-555.3337	0	0	0
CIM11	0	0	493.582	980.948	-2023.6862	0	0	0	0
CIM12	0	0	501.372	882.432	-2055.6252	0	0	0	0
CIM13 Max	76.0442	22.9928	501.372	957.3951	-1807.5319	454.9257	0	0	0
CIM13 Min	-76.0442	-22.9928	501.372	807.4688	-2303.7185	-454.9257	0	0	0
CIM14 Max	22.9567	76.1635	501.372	1130.7474	-1980.7291	421.1474	0	0	0
CIM14 Min	-22.9567	-76.1635	501.372	634.1166	-2130.5213	-421.1474	0	0	0
CIM15	0	0	243.9972	437.3627	-1000.3885	0	0	0	0
COMB9	0	0	594.4304	924.9683	-2437.1646	0	0	0	0
COMB10	0	0	666.4264	1230.5904	-2732.3482	0	0	0	0
COMB11	0	0	570.8144	953.3791	-2340.339	0	0	0	0
DER09	0	0	594.4304	924.9683	-2437.1646	0	0	0	0
DERUD09	0	0	594.4304	924.9683	-2437.1646	0	0	0	0
DER10	0	0	666.4264	1230.5904	-2732.3482	0	0	0	0
DERUD10	0	0	666.4264	1230.5904	-2732.3482	0	0	0	0
DER11	0	0	570.8144	953.3791	-2340.339	0	0	0	0
DERUD11	0	0	570.8144	953.3791	-2340.339	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	29882.02	29882.02	4.1	-0.7209	29882.02	29882.02	4.1	-0.7209	4.1	3.2834

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.2	0	1	4.1	-0.7209	3.25
N1	D1	L	0	-0.3	0	1	4.1	-0.7209	3.25
N1	D1	LR	0	0.004378	0	1	4.1	-0.7209	3.25
N1	D1	EX Max	16.6	0	0.00173	1	4.1	-0.7209	3.25
N1	D1	EY Max	0	10.5	0	1	4.1	-0.7209	3.25
N1	D1	DISX Max	6.1	0	0.00064	1	4.1	-0.7209	3.25



Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	DISY Max	0	3.9	0	1	4.1	-0.7209	3.25
N1	D1	W	0	0	0	1	4.1	-0.7209	3.25
N1	D1	G	0	-0.1	0	1	4.1	-0.7209	3.25
N1	D1	DERUX Max	2.7	0	0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUY Max	0	1.8	0	1	4.1	-0.7209	3.25
N1	D1	COMB1	0	-1.7	0	1	4.1	-0.7209	3.25
N1	D1	COMB2	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	COMB3	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	COMB4	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	COMB5 Max	6.1	-0.6	0.00064	1	4.1	-0.7209	3.25
N1	D1	COMB5 Min	-6.1	-3	-0.00064	1	4.1	-0.7209	3.25
N1	D1	COMB6 Max	1.8	2.1	0.000192	1	4.1	-0.7209	3.25
N1	D1	COMB6 Min	-1.8	-5.7	-0.000192	1	4.1	-0.7209	3.25
N1	D1	COMB7 Max	1.8	2.8	0.000192	1	4.1	-0.7209	3.25
N1	D1	COMB7 Min	-1.8	-5	-0.000192	1	4.1	-0.7209	3.25
N1	D1	COMB8 Max	6.1	0.04597	0.00064	1	4.1	-0.7209	3.25
N1	D1	COMB8 Min	-6.1	-2.3	-0.00064	1	4.1	-0.7209	3.25
N1	D1	ENVE Max	6.1	2.8	0.00064	1	4.1	-0.7209	3.25
N1	D1	ENVE Min	-6.1	-5.7	-0.00064	1	4.1	-0.7209	3.25
N1	D1	CIM01	0	-1.2	0	1	4.1	-0.7209	3.25
N1	D1	CIM02	0	-1.6	0	1	4.1	-0.7209	3.25
N1	D1	CIM03	0	-1.2	0	1	4.1	-0.7209	3.25
N1	D1	CIM04	0	-1.5	0	1	4.1	-0.7209	3.25
N1	D1	CIM05 Max	4.3	-0.4	0.000448	1	4.1	-0.7209	3.25
N1	D1	CIM05 Min	-4.3	-2.1	-0.000448	1	4.1	-0.7209	3.25
N1	D1	CIM06 Max	1.3	1.5	0.000134	1	4.1	-0.7209	3.25
N1	D1	CIM06 Min	-1.3	-4	-0.000134	1	4.1	-0.7209	3.25
N1	D1	CIM07 Max	3.3	-0.9	0.000339	1	4.1	-0.7209	3.25
N1	D1	CIM07 Min	-3.3	-2.1	-0.000339	1	4.1	-0.7209	3.25
N1	D1	CIM08 Max	1	0.6	0.000102	1	4.1	-0.7209	3.25
N1	D1	CIM08 Min	-1	-3.5	-0.000102	1	4.1	-0.7209	3.25
N1	D1	DER01	0	-1.7	0	1	4.1	-0.7209	3.25
N1	D1	DER02	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	DER03	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	DER04	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	DER05 Max	16.6	-1.8	0.00173	1	4.1	-0.7209	3.25
N1	D1	DER05 Min	-16.6	-1.8	-0.00173	1	4.1	-0.7209	3.25
N1	D1	DER06 Max	0	8.7	0	1	4.1	-0.7209	3.25
N1	D1	DER06 Min	0	-12.3	0	1	4.1	-0.7209	3.25
N1	D1	DER07 Max	16.6	-1.1	0.00173	1	4.1	-0.7209	3.25
N1	D1	DER07 Min	-16.6	-1.1	-0.00173	1	4.1	-0.7209	3.25
N1	D1	DER08 Max	0	9.4	0	1	4.1	-0.7209	3.25
N1	D1	DER08 Min	0	-11.6	0	1	4.1	-0.7209	3.25
N1	D1	DERUD01	0	-1.7	0	1	4.1	-0.7209	3.25
N1	D1	DERUD02	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	DERUD03	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	DERUD04	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	DERUD05 Max	2.7	-1.8	0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUD05 Min	-2.7	-1.8	-0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUD06 Max	0	0.0323	0	1	4.1	-0.7209	3.25
N1	D1	DERUD06 Min	0	-3.6	0	1	4.1	-0.7209	3.25
N1	D1	DERUD07 Max	2.7	-1.1	0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUD07 Min	-2.7	-1.1	-0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUD08 Max	0	0.7	0	1	4.1	-0.7209	3.25
N1	D1	DERUD08 Min	0	-3	0	1	4.1	-0.7209	3.25
N1	D1	VIG01 Max	12.3	0.5	0.00128	1	4.1	-0.7209	3.25
N1	D1	VIG01 Min	-12.3	-4.1	-0.00128	1	4.1	-0.7209	3.25
N1	D1	VIG02 Max	3.7	6	0.000384	1	4.1	-0.7209	3.25
N1	D1	VIG02 Min	-3.7	-9.6	-0.000384	1	4.1	-0.7209	3.25
N1	D1	VIG03 Max	12.3	1.2	0.00128	1	4.1	-0.7209	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	VIG03 Min	-12.3	-3.4	-0.00128	1	4.1	-0.7209	3.25
N1	D1	VIG04 Max	3.7	6.6	0.000384	1	4.1	-0.7209	3.25
N1	D1	VIG04 Min	-3.7	-8.9	-0.000384	1	4.1	-0.7209	3.25
N1	D1	COL1 Max	18.4	1.7	0.001919	1	4.1	-0.7209	3.25
N1	D1	COL1 Min	-18.4	-5.3	-0.001919	1	4.1	-0.7209	3.25
N1	D1	COL2 Max	5.5	9.8	0.000576	1	4.1	-0.7209	3.25
N1	D1	COL2 Min	-5.5	-13.4	-0.000576	1	4.1	-0.7209	3.25
N1	D1	COL3 Max	18.4	2.4	0.001919	1	4.1	-0.7209	3.25
N1	D1	COL3 Min	-18.4	-4.6	-0.001919	1	4.1	-0.7209	3.25
N1	D1	COL4 Max	5.5	10.5	0.000576	1	4.1	-0.7209	3.25
N1	D1	COL4 Min	-5.5	-12.8	-0.000576	1	4.1	-0.7209	3.25
N1	D1	CIM09 Max	4.3	0.1	0.000448	1	4.1	-0.7209	3.25
N1	D1	CIM09 Min	-4.3	-1.6	-0.000448	1	4.1	-0.7209	3.25
N1	D1	CIM10 Max	1.3	2	0.000134	1	4.1	-0.7209	3.25
N1	D1	CIM10 Min	-1.3	-3.5	-0.000134	1	4.1	-0.7209	3.25
N1	D1	CIM11	0	-1.4	0	1	4.1	-0.7209	3.25
N1	D1	CIM12	0	-1.6	0	1	4.1	-0.7209	3.25
N1	D1	CIM13 Max	3.3	-1	0.000339	1	4.1	-0.7209	3.25
N1	D1	CIM13 Min	-3.3	-2.2	-0.000339	1	4.1	-0.7209	3.25
N1	D1	CIM14 Max	1	0.5	0.000102	1	4.1	-0.7209	3.25
N1	D1	CIM14 Min	-1	-3.6	-0.000102	1	4.1	-0.7209	3.25
N1	D1	CIM15	0	-0.7	0	1	4.1	-0.7209	3.25
N1	D1	COMB9	0	-2.1	0	1	4.1	-0.7209	3.25
N1	D1	COMB10	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	COMB11	0	-1.9	0	1	4.1	-0.7209	3.25
N1	D1	DER09	0	-2.1	0	1	4.1	-0.7209	3.25
N1	D1	DERUD09	0	-2.1	0	1	4.1	-0.7209	3.25
N1	D1	DER10	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	DERUD10	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	DER11	0	-1.9	0	1	4.1	-0.7209	3.25
N1	D1	DERUD11	0	-1.9	0	1	4.1	-0.7209	3.25

## 5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.2	1.2	1
N1	L	Y	0.3	0.3	1
N1	LR	Y	0.004378	0.004378	1
N1	EX Max	X	15.6	15.6	1
N1	EX Max	Y	7.1	7.1	1
N1	EY Max	Y	10.5	10.5	1
N1	DISX Max	X	5.8	5.8	1
N1	DISX Max	Y	2.6	2.6	1
N1	DISY Max	Y	3.9	3.9	1
N1	G	Y	0.1	0.1	1
N1	DERUX Max	X	2.5	2.5	1
N1	DERUX Max	Y	1.1	1.1	1
N1	DERUY Max	Y	1.8	1.8	1
N1	COMB1	Y	1.7	1.7	1
N1	COMB2	Y	2	2	1
N1	COMB3	Y	1.8	1.8	1
N1	COMB4	Y	1.8	1.8	1
N1	COMB5 Max	X	5.8	5.8	1
N1	COMB5 Max	Y	2	2	1
N1	COMB5 Min	X	5.8	5.8	1
N1	COMB5 Min	Y	5.6	5.6	1
N1	COMB6 Max	X	1.7	1.7	1
N1	COMB6 Max	Y	2.9	2.9	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	COMB6 Min	X	1.7	1.7	1
N1	COMB6 Min	Y	6.5	6.5	1
N1	COMB7 Max	X	1.7	1.7	1
N1	COMB7 Max	Y	3.5	3.5	1
N1	COMB7 Min	X	1.7	1.7	1
N1	COMB7 Min	Y	5.8	5.8	1
N1	COMB8 Max	X	5.8	5.8	1
N1	COMB8 Max	Y	2.7	2.7	1
N1	COMB8 Min	X	5.8	5.8	1
N1	COMB8 Min	Y	4.9	4.9	1
N1	ENVE Max	X	5.8	5.8	1
N1	ENVE Max	Y	3.5	3.5	1
N1	ENVE Min	X	5.8	5.8	1
N1	ENVE Min	Y	6.5	6.5	1
N1	CIM01	Y	1.2	1.2	1
N1	CIM02	Y	1.6	1.6	1
N1	CIM03	Y	1.2	1.2	1
N1	CIM04	Y	1.5	1.5	1
N1	CIM05 Max	X	4	4	1
N1	CIM05 Max	Y	1.4	1.4	1
N1	CIM05 Min	X	4	4	1
N1	CIM05 Min	Y	3.9	3.9	1
N1	CIM06 Max	X	1.2	1.2	1
N1	CIM06 Max	Y	2	2	1
N1	CIM06 Min	X	1.2	1.2	1
N1	CIM06 Min	Y	4.5	4.5	1
N1	CIM07 Max	X	3	3	1
N1	CIM07 Max	Y	0.5	0.5	1
N1	CIM07 Min	X	3	3	1
N1	CIM07 Min	Y	3.5	3.5	1
N1	CIM08 Max	X	0.9	0.9	1
N1	CIM08 Max	Y	1	1	1
N1	CIM08 Min	X	0.9	0.9	1
N1	CIM08 Min	Y	4	4	1
N1	DER01	Y	1.7	1.7	1
N1	DER02	Y	2	2	1
N1	DER03	Y	1.8	1.8	1
N1	DER04	Y	1.8	1.8	1
N1	DER05 Max	X	15.6	15.6	1
N1	DER05 Max	Y	5.3	5.3	1
N1	DER05 Min	X	15.6	15.6	1
N1	DER05 Min	Y	8.9	8.9	1
N1	DER06 Max	Y	8.7	8.7	1
N1	DER06 Min	Y	12.3	12.3	1
N1	DER07 Max	X	15.6	15.6	1
N1	DER07 Max	Y	6	6	1
N1	DER07 Min	X	15.6	15.6	1
N1	DER07 Min	Y	8.2	8.2	1
N1	DER08 Max	Y	9.4	9.4	1
N1	DER08 Min	Y	11.6	11.6	1
N1	DERUD01	Y	1.7	1.7	1
N1	DERUD02	Y	2	2	1
N1	DERUD03	Y	1.8	1.8	1
N1	DERUD04	Y	1.8	1.8	1
N1	DERUD05 Max	X	2.5	2.5	1
N1	DERUD05 Max	Y	0.7	0.7	1
N1	DERUD05 Min	X	2.5	2.5	1
N1	DERUD05 Min	Y	2.9	2.9	1
N1	DERUD06 Max	Y	0.0323	0.0323	1
N1	DERUD06 Min	Y	3.6	3.6	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD07 Max	X	2.5	2.5	1
N1	DERUD07 Min	X	2.5	2.5	1
N1	DERUD07 Min	Y	2.2	2.2	1
N1	DERUD08 Max	Y	0.7	0.7	1
N1	DERUD08 Min	Y	3	3	1
N1	VIG01 Max	X	11.5	11.5	1
N1	VIG01 Max	Y	5.8	5.8	1
N1	VIG01 Min	X	11.5	11.5	1
N1	VIG01 Min	Y	9.4	9.4	1
N1	VIG02 Max	X	3.5	3.5	1
N1	VIG02 Max	Y	7.5	7.5	1
N1	VIG02 Min	X	3.5	3.5	1
N1	VIG02 Min	Y	11.1	11.1	1
N1	VIG03 Max	X	11.5	11.5	1
N1	VIG03 Max	Y	6.5	6.5	1
N1	VIG03 Min	X	11.5	11.5	1
N1	VIG03 Min	Y	8.7	8.7	1
N1	VIG04 Max	X	3.5	3.5	1
N1	VIG04 Max	Y	8.2	8.2	1
N1	VIG04 Min	X	3.5	3.5	1
N1	VIG04 Min	Y	10.5	10.5	1
N1	COL1 Max	X	17.3	17.3	1
N1	COL1 Max	Y	9.6	9.6	1
N1	COL1 Min	X	17.3	17.3	1
N1	COL1 Min	Y	13.2	13.2	1
N1	COL2 Max	X	5.2	5.2	1
N1	COL2 Max	Y	12.2	12.2	1
N1	COL2 Min	X	5.2	5.2	1
N1	COL2 Min	Y	15.8	15.8	1
N1	COL3 Max	X	17.3	17.3	1
N1	COL3 Max	Y	10.2	10.2	1
N1	COL3 Min	X	17.3	17.3	1
N1	COL3 Min	Y	12.5	12.5	1
N1	COL4 Max	X	5.2	5.2	1
N1	COL4 Max	Y	12.9	12.9	1
N1	COL4 Min	X	5.2	5.2	1
N1	COL4 Min	Y	15.1	15.1	1
N1	CIM09 Max	X	4	4	1
N1	CIM09 Max	Y	1.9	1.9	1
N1	CIM09 Min	X	4	4	1
N1	CIM09 Min	Y	3.4	3.4	1
N1	CIM10 Max	X	1.2	1.2	1
N1	CIM10 Max	Y	2.5	2.5	1
N1	CIM10 Min	X	1.2	1.2	1
N1	CIM10 Min	Y	4	4	1
N1	CIM11	Y	1.4	1.4	1
N1	CIM12	Y	1.6	1.6	1
N1	CIM13 Max	X	3	3	1
N1	CIM13 Max	Y	0.4	0.4	1
N1	CIM13 Min	X	3	3	1
N1	CIM13 Min	Y	3.6	3.6	1
N1	CIM14 Max	X	0.9	0.9	1
N1	CIM14 Max	Y	0.9	0.9	1
N1	CIM14 Min	X	0.9	0.9	1
N1	CIM14 Min	Y	4.1	4.1	1
N1	CIM15	Y	0.7	0.7	1
N1	COMB9	Y	2.1	2.1	1
N1	COMB10	Y	2	2	1
N1	COMB11	Y	1.9	1.9	1
N1	DER09	Y	2.1	2.1	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD09	Y	2.1	2.1	1
N1	DER10	Y	2	2	1
N1	DERUD10	Y	2	2	1
N1	DER11	Y	1.9	1.9	1
N1	DERUD11	Y	1.9	1.9	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.000382	1	0	0	3.25
N1	L	Y	9.7E-05	1	0	0	3.25
N1	LR	Y	1E-06	1	0	0	3.25
N1	EX Max	X	0.004785	3	8.2	0	3.25
N1	EX Max	Y	0.002182	1	0	0	3.25
N1	EY Max	Y	0.003228	3	8.2	0	3.25
N1	DISX Max	X	0.00177	3	8.2	0	3.25
N1	DISX Max	Y	0.000807	1	0	0	3.25
N1	DISY Max	Y	0.001194	3	8.2	0	3.25
N1	G	Y	5E-05	2	0	8.2	3.25
N1	DERUX Max	X	0.000771	3	8.2	0	3.25
N1	DERUX Max	Y	0.000342	1	0	0	3.25
N1	DERUY Max	Y	0.000565	3	8.2	0	3.25
N1	COMB1	Y	0.000535	1	0	0	3.25
N1	COMB2	Y	0.000613	1	0	0	3.25
N1	COMB3	Y	0.000554	2	0	8.2	3.25
N1	COMB4	Y	0.000555	1	0	0	3.25
N1	COMB5 Max	X	0.00177	3	8.2	0	3.25
N1	COMB5 Max	Y	0.00061	1	0	0	3.25
N1	COMB5 Min	X	0.00177	3	8.2	0	3.25
N1	COMB5 Min	Y	0.001721	1	0	0	3.25
N1	COMB6 Max	X	0.000531	3	8.2	0	3.25
N1	COMB6 Max	Y	0.00088	1	0	0	3.25
N1	COMB6 Min	X	0.000531	3	8.2	0	3.25
N1	COMB6 Min	Y	0.001991	1	0	0	3.25
N1	COMB7 Max	X	0.000531	3	8.2	0	3.25
N1	COMB7 Max	Y	0.001092	1	0	0	3.25
N1	COMB7 Min	X	0.000531	3	8.2	0	3.25
N1	COMB7 Min	Y	0.00178	1	0	0	3.25
N1	COMB8 Max	X	0.00177	3	8.2	0	3.25
N1	COMB8 Max	Y	0.000821	1	0	0	3.25
N1	COMB8 Min	X	0.00177	3	8.2	0	3.25
N1	COMB8 Min	Y	0.001509	1	0	0	3.25
N1	ENVE Max	X	0.00177	3	8.2	0	3.25
N1	ENVE Max	Y	0.001092	1	0	0	3.25
N1	ENVE Min	X	0.00177	3	8.2	0	3.25
N1	ENVE Min	Y	0.001991	1	0	0	3.25
N1	CIM01	Y	0.000382	1	0	0	3.25
N1	CIM02	Y	0.000479	1	0	0	3.25
N1	CIM03	Y	0.000383	2	0	8.2	3.25
N1	CIM04	Y	0.000454	1	0	0	3.25
N1	CIM05 Max	X	0.001239	3	8.2	0	3.25
N1	CIM05 Max	Y	0.000433	1	0	0	3.25
N1	CIM05 Min	X	0.001239	3	8.2	0	3.25
N1	CIM05 Min	Y	0.001198	1	0	0	3.25
N1	CIM06 Max	X	0.000372	3	8.2	0	3.25
N1	CIM06 Max	Y	0.000623	1	0	0	3.25
N1	CIM06 Min	X	0.000372	3	8.2	0	3.25
N1	CIM06 Min	Y	0.001387	1	0	0	3.25
N1	CIM07 Max	X	0.000938	3	8.2	0	3.25
N1	CIM07 Max	Y	0.000165	1	0	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM07 Min	X	0.000938	3	8.2	0	3.25
N1	CIM07 Min	Y	0.001072	1	0	0	3.25
N1	CIM08 Max	X	0.000283	3	8.2	0	3.25
N1	CIM08 Max	Y	0.000308	3	8.2	0	3.25
N1	CIM08 Min	X	0.000283	3	8.2	0	3.25
N1	CIM08 Min	Y	0.001215	1	0	0	3.25
N1	DER01	Y	0.000535	1	0	0	3.25
N1	DER02	Y	0.000613	1	0	0	3.25
N1	DER03	Y	0.000554	2	0	8.2	3.25
N1	DER04	Y	0.000555	1	0	0	3.25
N1	DER05 Max	X	0.004785	3	8.2	0	3.25
N1	DER05 Max	Y	0.001627	1	0	0	3.25
N1	DER05 Min	X	0.004785	3	8.2	0	3.25
N1	DER05 Min	Y	0.002738	1	0	0	3.25
N1	DER06 Max	Y	0.002672	3	8.2	0	3.25
N1	DER06 Min	Y	0.003783	1	0	0	3.25
N1	DER07 Max	X	0.004785	3	8.2	0	3.25
N1	DER07 Max	Y	0.001838	1	0	0	3.25
N1	DER07 Min	X	0.004785	3	8.2	0	3.25
N1	DER07 Min	Y	0.002526	1	0	0	3.25
N1	DER08 Max	Y	0.002884	3	8.2	0	3.25
N1	DER08 Min	Y	0.003572	1	0	0	3.25
N1	DERUD01	Y	0.000535	1	0	0	3.25
N1	DERUD02	Y	0.000613	1	0	0	3.25
N1	DERUD03	Y	0.000554	2	0	8.2	3.25
N1	DERUD04	Y	0.000555	1	0	0	3.25
N1	DERUD05 Max	X	0.000771	3	8.2	0	3.25
N1	DERUD05 Max	Y	0.000214	4	8.2	8.2	3.25
N1	DERUD05 Min	X	0.000771	3	8.2	0	3.25
N1	DERUD05 Min	Y	0.000897	1	0	0	3.25
N1	DERUD06 Max	Y	1E-05	3	8.2	0	3.25
N1	DERUD06 Min	Y	0.001121	1	0	0	3.25
N1	DERUD07 Max	X	0.000771	3	8.2	0	3.25
N1	DERUD07 Min	X	0.000771	3	8.2	0	3.25
N1	DERUD07 Min	Y	0.000686	1	0	0	3.25
N1	DERUD08 Max	Y	0.000221	3	8.2	0	3.25
N1	DERUD08 Min	Y	0.000909	1	0	0	3.25
N1	VIG01 Max	X	0.003539	3	8.2	0	3.25
N1	VIG01 Max	Y	0.001775	1	0	0	3.25
N1	VIG01 Min	X	0.003539	3	8.2	0	3.25
N1	VIG01 Min	Y	0.002886	1	0	0	3.25
N1	VIG02 Max	X	0.001062	3	8.2	0	3.25
N1	VIG02 Max	Y	0.002316	1	0	0	3.25
N1	VIG02 Min	X	0.001062	3	8.2	0	3.25
N1	VIG02 Min	Y	0.003427	1	0	0	3.25
N1	VIG03 Max	X	0.003539	3	8.2	0	3.25
N1	VIG03 Max	Y	0.001986	1	0	0	3.25
N1	VIG03 Min	X	0.003539	3	8.2	0	3.25
N1	VIG03 Min	Y	0.002674	1	0	0	3.25
N1	VIG04 Max	X	0.001062	3	8.2	0	3.25
N1	VIG04 Max	Y	0.002528	1	0	0	3.25
N1	VIG04 Min	X	0.001062	3	8.2	0	3.25
N1	VIG04 Min	Y	0.003216	1	0	0	3.25
N1	COL1 Max	X	0.005309	3	8.2	0	3.25
N1	COL1 Max	Y	0.00294	1	0	0	3.25
N1	COL1 Min	X	0.005309	3	8.2	0	3.25
N1	COL1 Min	Y	0.004051	1	0	0	3.25
N1	COL2 Max	X	0.001593	3	8.2	0	3.25
N1	COL2 Max	Y	0.003752	1	0	0	3.25
N1	COL2 Min	X	0.001593	3	8.2	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	COL2 Min	Y	0.004863	1	0	0	3.25
N1	COL3 Max	X	0.005309	3	8.2	0	3.25
N1	COL3 Max	Y	0.003152	1	0	0	3.25
N1	COL3 Min	X	0.005309	3	8.2	0	3.25
N1	COL3 Min	Y	0.00384	1	0	0	3.25
N1	COL4 Max	X	0.001593	3	8.2	0	3.25
N1	COL4 Max	Y	0.003963	1	0	0	3.25
N1	COL4 Min	X	0.001593	3	8.2	0	3.25
N1	COL4 Min	Y	0.004651	1	0	0	3.25
N1	CIM09 Max	X	0.001239	3	8.2	0	3.25
N1	CIM09 Max	Y	0.000586	1	0	0	3.25
N1	CIM09 Min	X	0.001239	3	8.2	0	3.25
N1	CIM09 Min	Y	0.001045	1	0	0	3.25
N1	CIM10 Max	X	0.000372	3	8.2	0	3.25
N1	CIM10 Max	Y	0.000776	1	0	0	3.25
N1	CIM10 Min	X	0.000372	3	8.2	0	3.25
N1	CIM10 Min	Y	0.001234	1	0	0	3.25
N1	CIM11	Y	0.000431	2	0	8.2	3.25
N1	CIM12	Y	0.000489	2	0	8.2	3.25
N1	CIM13 Max	X	0.000938	3	8.2	0	3.25
N1	CIM13 Max	Y	0.00013	1	0	0	3.25
N1	CIM13 Min	X	0.000938	3	8.2	0	3.25
N1	CIM13 Min	Y	0.001108	1	0	0	3.25
N1	CIM14 Max	X	0.000283	3	8.2	0	3.25
N1	CIM14 Max	Y	0.000273	3	8.2	0	3.25
N1	CIM14 Min	X	0.000283	3	8.2	0	3.25
N1	CIM14 Min	Y	0.001251	1	0	0	3.25
N1	CIM15	Y	0.000229	1	0	0	3.25
N1	COMB9	Y	0.000636	1	0	0	3.25
N1	COMB10	Y	0.000631	2	0	8.2	3.25
N1	COMB11	Y	0.000578	1	0	0	3.25
N1	DER09	Y	0.000636	1	0	0	3.25
N1	DERUD09	Y	0.000636	1	0	0	3.25
N1	DER10	Y	0.000631	2	0	8.2	3.25
N1	DERUD10	Y	0.000631	2	0	8.2	3.25
N1	DER11	Y	0.000578	1	0	0	3.25
N1	DERUD11	Y	0.000578	1	0	0	3.25

Table 5.6 - Story Max/Avg Drifts

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	D	Y	1.2	1.2	1.001
N1	L	Y	0.3	0.3	1.014
N1	LR	Y	0.004378	1.812E-05	241.615
N1	EX Max	X	15.6	11.7	1.33
N1	EX Max	Y	7.1	7	1.007
N1	EY Max	Y	10.5	10.4	1.005
N1	DISX Max	X	5.8	4.3	1.33
N1	DISX Max	Y	2.6	2.6	1.007
N1	DISY Max	Y	3.9	3.9	1.005
N1	G	Y	0.2	0.2	1.042
N1	DERUX Max	X	2.5	1.8	1.425
N1	DERUX Max	Y	1.1	1.1	1.007
N1	DERUY Max	Y	1.8	1.8	1.005
N1	COMB1	Y	1.7	1.7	1.001
N1	COMB2	Y	2	2	1.003
N1	COMB3	Y	1.8	1.8	1.001
N1	COMB4	Y	1.8	1.8	1.002
N1	COMB5 Max	X	5.8	4.3	1.331

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	COMB5 Max	Y	2	2	1.009
N1	COMB5 Min	X	5.8	4.3	1.331
N1	COMB5 Min	Y	5.6	5.6	1.005
N1	COMB6 Max	X	1.7	1.3	1.335
N1	COMB6 Max	Y	2.9	2.8	1.006
N1	COMB6 Min	X	1.7	1.3	1.335
N1	COMB6 Min	Y	6.5	6.4	1.005
N1	COMB7 Max	X	1.7	1.3	1.334
N1	COMB7 Max	Y	3.5	3.5	1.007
N1	COMB7 Min	X	1.7	1.3	1.334
N1	COMB7 Min	Y	5.8	5.8	1.004
N1	COMB8 Max	X	5.8	4.3	1.331
N1	COMB8 Max	Y	2.7	2.6	1.008
N1	COMB8 Min	X	5.8	4.3	1.331
N1	COMB8 Min	Y	4.9	4.9	1.005
N1	ENVE Max	X	5.8	4.3	1.331
N1	ENVE Max	Y	3.5	3.5	1.007
N1	ENVE Min	X	5.8	4.3	1.331
N1	ENVE Min	Y	6.5	6.4	1.005
N1	CIM01	Y	1.2	1.2	1.001
N1	CIM02	Y	1.6	1.6	1.004
N1	CIM03	Y	1.2	1.2	1.003
N1	CIM04	Y	1.5	1.5	1.001
N1	CIM05 Max	X	4	3	1.332
N1	CIM05 Max	Y	1.4	1.4	1.011
N1	CIM05 Min	X	4	3	1.332
N1	CIM05 Min	Y	3.9	3.9	1.004
N1	CIM06 Max	X	1.2	0.9	1.336
N1	CIM06 Max	Y	2	2	1.008
N1	CIM06 Min	X	1.2	0.9	1.336
N1	CIM06 Min	Y	4.5	4.5	1.004
N1	CIM07 Max	X	3	2.3	1.332
N1	CIM07 Max	Y	0.5	0.5	1.021
N1	CIM07 Min	X	3	2.3	1.332
N1	CIM07 Min	Y	3.5	3.5	1.004
N1	CIM08 Max	X	0.9	0.7	1.338
N1	CIM08 Max	Y	1	1	1.012
N1	CIM08 Min	X	0.9	0.7	1.338
N1	CIM08 Min	Y	4	3.9	1.004
N1	DER01	Y	1.7	1.7	1.001
N1	DER02	Y	2	2	1.003
N1	DER03	Y	1.8	1.8	1.001
N1	DER04	Y	1.8	1.8	1.002
N1	DER05 Max	X	15.6	11.7	1.33
N1	DER05 Max	Y	5.3	5.2	1.008
N1	DER05 Min	X	15.6	11.7	1.33
N1	DER05 Min	Y	8.9	8.8	1.006
N1	DER06 Max	Y	8.7	8.6	1.005
N1	DER06 Min	Y	12.3	12.2	1.005
N1	DER07 Max	X	15.6	11.7	1.33
N1	DER07 Max	Y	6	5.9	1.008
N1	DER07 Min	X	15.6	11.7	1.33
N1	DER07 Min	Y	8.2	8.2	1.006
N1	DER08 Max	Y	9.4	9.3	1.005
N1	DER08 Min	Y	11.6	11.6	1.005
N1	DERUD01	Y	1.7	1.7	1.001
N1	DERUD02	Y	2	2	1.003
N1	DERUD03	Y	1.8	1.8	1.001
N1	DERUD04	Y	1.8	1.8	1.002



Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	DERUD05 Max	X	2.5	1.8	1.43
N1	DERUD05 Max	Y	0.7	0.7	1.002
N1	DERUD05 Min	X	2.5	1.8	1.43
N1	DERUD05 Min	Y	2.9	2.9	1.005
N1	DERUD06 Max	Y	0.0323	0.02923	1.105
N1	DERUD06 Min	Y	3.6	3.6	1.004
N1	DERUD07 Max	X	2.5	1.8	1.429
N1	DERUD07 Min	X	2.5	1.8	1.429
N1	DERUD07 Min	Y	2.2	2.2	1.004
N1	DERUD08 Max	Y	0.7	0.7	1.011
N1	DERUD08 Min	Y	3	2.9	1.003
N1	VIG01 Max	X	11.5	8.6	1.331
N1	VIG01 Max	Y	5.8	5.7	1.007
N1	VIG01 Min	X	11.5	8.6	1.331
N1	VIG01 Min	Y	9.4	9.3	1.006
N1	VIG02 Max	X	3.5	2.6	1.332
N1	VIG02 Max	Y	7.5	7.5	1.006
N1	VIG02 Min	X	3.5	2.6	1.332
N1	VIG02 Min	Y	11.1	11.1	1.005
N1	VIG03 Max	X	11.5	8.6	1.33
N1	VIG03 Max	Y	6.5	6.4	1.007
N1	VIG03 Min	X	11.5	8.6	1.33
N1	VIG03 Min	Y	8.7	8.6	1.005
N1	VIG04 Max	X	3.5	2.6	1.331
N1	VIG04 Max	Y	8.2	8.2	1.006
N1	VIG04 Min	X	3.5	2.6	1.331
N1	VIG04 Min	Y	10.5	10.4	1.005
N1	COL1 Max	X	17.3	13	1.33
N1	COL1 Max	Y	9.6	9.5	1.007
N1	COL1 Min	X	17.3	13	1.33
N1	COL1 Min	Y	13.2	13.1	1.006
N1	COL2 Max	X	5.2	3.9	1.331
N1	COL2 Max	Y	12.2	12.1	1.006
N1	COL2 Min	X	5.2	3.9	1.331
N1	COL2 Min	Y	15.8	15.7	1.005
N1	COL3 Max	X	17.3	13	1.33
N1	COL3 Max	Y	10.2	10.2	1.007
N1	COL3 Min	X	17.3	13	1.33
N1	COL3 Min	Y	12.5	12.4	1.006
N1	COL4 Max	X	5.2	3.9	1.331
N1	COL4 Max	Y	12.9	12.8	1.006
N1	COL4 Min	X	5.2	3.9	1.331
N1	COL4 Min	Y	15.1	15	1.005
N1	CIM09 Max	X	4	3	1.331
N1	CIM09 Max	Y	1.9	1.9	1.008
N1	CIM09 Min	X	4	3	1.331
N1	CIM09 Min	Y	3.4	3.4	1.005
N1	CIM10 Max	X	1.2	0.9	1.333
N1	CIM10 Max	Y	2.5	2.5	1.007
N1	CIM10 Min	X	1.2	0.9	1.333
N1	CIM10 Min	Y	4	4	1.004
N1	CIM11	Y	1.4	1.4	1.004
N1	CIM12	Y	1.6	1.6	1
N1	CIM13 Max	X	3	2.3	1.332
N1	CIM13 Max	Y	0.4	0.4	1.03
N1	CIM13 Min	X	3	2.3	1.332
N1	CIM13 Min	Y	3.6	3.6	1.003
N1	CIM14 Max	X	0.9	0.7	1.338
N1	CIM14 Max	Y	0.9	0.9	1.015

Story	Load Case/Combo	Direction	Max Drift mm	Avg Drift mm	Ratio
N1	CIM14 Min	X	0.9	0.7	1.338
N1	CIM14 Min	Y	4.1	4.1	1.003
N1	CIM15	Y	0.7	0.7	1.001
N1	COMB9	Y	2.1	2.1	1.003
N1	COMB10	Y	2.1	2	1.002
N1	COMB11	Y	1.9	1.9	1.001
N1	DER09	Y	2.1	2.1	1.003
N1	DERUD09	Y	2.1	2.1	1.003
N1	DER10	Y	2.1	2	1.002
N1	DERUD10	Y	2.1	2	1.002
N1	DER11	Y	1.9	1.9	1.001
N1	DERUD11	Y	1.9	1.9	1.001

Table 5.7 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	357.6572	0	0	0	528.4926	-1466.3945
N1	D	Bottom	406.662	0	0	0	728.9378	-1667.3142
N1	L	Top	39.36	0	0	0	-47.232	-161.376
N1	L	Bottom	39.36	0	0	0	-47.3513	-161.376
N1	LR	Top	33.62	0	0	0	137.842	-137.842
N1	LR	Bottom	33.62	0	0	0	137.843	-137.842
N1	EX Max	Top	0	387.969	0	1840.023	0	0.0004
N1	EX Max	Bottom	0	387.969	0	1840.023	0	1265.7439
N1	EY Max	Top	0	0	388.5912	1593.2237	0.0001	0
N1	EY Max	Bottom	0	0	388.5912	1593.2237	1266.9216	0
N1	DISX Max	Top	0	143.4796	0	680.4819	0	0.0002
N1	DISX Max	Bottom	0	143.4796	0	680.4819	0	468.1006
N1	DISY Max	Top	0	0	143.7047	589.1892	4.317E-05	0
N1	DISY Max	Bottom	0	0	143.7047	589.1892	468.5196	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	86.92	0	0	0	252.068	-356.372
N1	G	Bottom	86.92	0	0	0	252.0102	-356.372
N1	DERUX Max	Top	0	59.8783	0	246.4616	0	0.0001
N1	DERUX Max	Bottom	0	59.8783	0	246.4616	0	195.3842
N1	DERUY Max	Top	0	0	68.052	279.0134	2.044E-05	0
N1	DERUY Max	Bottom	0	0	68.052	279.0134	221.8697	0
N1	COMB1	Top	500.7201	0	0	0	739.8896	-2052.9523
N1	COMB1	Bottom	569.3268	0	0	0	1020.5129	-2334.2399
N1	COMB2	Top	508.9746	0	0	0	627.5409	-2086.796
N1	COMB2	Bottom	567.7804	0	0	0	867.8847	-2327.8996
N1	COMB3	Top	522.3406	0	0	0	807.5063	-2141.5966
N1	COMB3	Bottom	581.1464	0	0	0	1047.9227	-2382.7002
N1	COMB4	Top	485.3586	0	0	0	655.8801	-1989.9704
N1	COMB4	Bottom	544.1644	0	0	0	896.2955	-2231.074
N1	COMB5 Max	Top	468.5486	143.4796	43.1114	857.2386	586.9591	-1921.0493
N1	COMB5 Max	Bottom	527.3544	143.4796	43.1114	857.2386	967.9299	-1694.0525
N1	COMB5 Min	Top	468.5486	-143.4796	-43.1114	-857.2386	586.9591	-1921.0496
N1	COMB5 Min	Bottom	527.3544	-143.4796	-43.1114	-857.2386	686.8181	-2630.2536
N1	COMB6 Max	Top	468.5486	43.0439	143.7047	793.3338	586.9592	-1921.0494
N1	COMB6 Max	Bottom	527.3544	43.0439	143.7047	793.3338	1295.8936	-2021.7229
N1	COMB6 Min	Top	468.5486	-43.0439	-143.7047	-793.3338	586.9591	-1921.0495
N1	COMB6 Min	Bottom	527.3544	-43.0439	-143.7047	-793.3338	358.8544	-2302.5832
N1	COMB7 Max	Top	321.8915	43.0439	143.7047	793.3338	475.6433	-1319.755
N1	COMB7 Max	Bottom	365.9958	43.0439	143.7047	793.3338	1124.5636	-1360.1526
N1	COMB7 Min	Top	321.8915	-43.0439	-143.7047	-793.3338	475.6433	-1319.7551
N1	COMB7 Min	Bottom	365.9958	-43.0439	-143.7047	-793.3338	187.5244	-1641.0129
N1	COMB8 Max	Top	321.8915	143.4796	43.1114	857.2386	475.6433	-1319.7549

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COMB8 Max	Bottom	365.9958	143.4796	43.1114	857.2386	796.5999	-1032.4822
N1	COMB8 Min	Top	321.8915	-143.4796	-43.1114	-857.2386	475.6433	-1319.7552
N1	COMB8 Min	Bottom	365.9958	-143.4796	-43.1114	-857.2386	515.4881	-1968.6833
N1	ENVE Max	Top	522.3406	143.4796	143.7047	857.2386	807.5063	-1319.7549
N1	ENVE Max	Bottom	581.1464	143.4796	143.7047	857.2386	1295.8936	-1032.4822
N1	ENVE Min	Top	321.8915	-143.4796	-143.7047	-857.2386	475.6433	-2141.5966
N1	ENVE Min	Bottom	365.9958	-143.4796	-143.7047	-857.2386	187.5244	-2630.2536
N1	CIM01	Top	357.6572	0	0	0	528.4926	-1466.3945
N1	CIM01	Bottom	406.662	0	0	0	728.9378	-1667.3142
N1	CIM02	Top	397.0172	0	0	0	481.2606	-1627.7705
N1	CIM02	Bottom	446.022	0	0	0	681.5864	-1828.6902
N1	CIM03	Top	391.2772	0	0	0	666.3346	-1604.2365
N1	CIM03	Bottom	440.282	0	0	0	866.7807	-1805.1562
N1	CIM04	Top	412.3922	0	0	0	596.4501	-1690.808
N1	CIM04	Bottom	461.397	0	0	0	796.8065	-1891.7277
N1	CIM05 Max	Top	357.6572	100.4358	30.178	600.0671	528.4926	-1466.3944
N1	CIM05 Max	Bottom	406.662	100.4358	30.178	600.0671	827.3269	-1339.6438
N1	CIM05 Min	Top	357.6572	-100.4358	-30.178	-600.0671	528.4926	-1466.3946
N1	CIM05 Min	Bottom	406.662	-100.4358	-30.178	-600.0671	630.5487	-1994.9846
N1	CIM06 Max	Top	357.6572	30.1307	100.5933	555.3337	528.4926	-1466.3945
N1	CIM06 Max	Bottom	406.662	30.1307	100.5933	555.3337	1056.9015	-1569.0131
N1	CIM06 Min	Top	357.6572	-30.1307	-100.5933	-555.3337	528.4925	-1466.3946
N1	CIM06 Min	Bottom	406.662	-30.1307	-100.5933	-555.3337	400.9741	-1765.6153
N1	CIM07 Max	Top	412.3922	76.0442	22.9928	454.9257	596.4501	-1690.8079
N1	CIM07 Max	Bottom	461.397	76.0442	22.9928	454.9257	871.7696	-1643.6344
N1	CIM07 Min	Top	412.3922	-76.0442	-22.9928	-454.9257	596.4501	-1690.8081
N1	CIM07 Min	Bottom	461.397	-76.0442	-22.9928	-454.9257	721.8434	-2139.821
N1	CIM08 Max	Top	412.3922	22.9567	76.1635	421.1474	596.4501	-1690.808
N1	CIM08 Max	Bottom	461.397	22.9567	76.1635	421.1474	1045.1219	-1816.8316
N1	CIM08 Min	Top	412.3922	-22.9567	-76.1635	-421.1474	596.4501	-1690.808
N1	CIM08 Min	Bottom	461.397	-22.9567	-76.1635	-421.1474	548.4911	-1966.6238
N1	DER01	Top	500.7201	0	0	0	739.8896	-2052.9523
N1	DER01	Bottom	569.3268	0	0	0	1020.5129	-2334.2399
N1	DER02	Top	508.9746	0	0	0	627.5409	-2086.796
N1	DER02	Bottom	567.7804	0	0	0	867.8847	-2327.8996
N1	DER03	Top	522.3406	0	0	0	807.5063	-2141.5966
N1	DER03	Bottom	581.1464	0	0	0	1047.9227	-2382.7002
N1	DER04	Top	485.3586	0	0	0	655.8801	-1989.9704
N1	DER04	Bottom	544.1644	0	0	0	896.2955	-2231.074
N1	DER05 Max	Top	468.5486	387.969	0	1840.023	586.9591	-1921.049
N1	DER05 Max	Bottom	527.3544	387.969	0	1840.023	827.374	-896.4091
N1	DER05 Min	Top	468.5486	-387.969	0	-1840.023	586.9591	-1921.0499
N1	DER05 Min	Bottom	527.3544	-387.969	0	-1840.023	827.374	-3427.897
N1	DER06 Max	Top	468.5486	0	388.5912	1593.2237	586.9592	-1921.0494
N1	DER06 Max	Bottom	527.3544	0	388.5912	1593.2237	2094.2956	-2162.153
N1	DER06 Min	Top	468.5486	0	-388.5912	-1593.2237	586.959	-1921.0494
N1	DER06 Min	Bottom	527.3544	0	-388.5912	-1593.2237	-439.5476	-2162.153
N1	DER07 Max	Top	321.8915	387.969	0	1840.023	475.6433	-1319.7546
N1	DER07 Max	Bottom	365.9958	387.969	0	1840.023	656.044	-234.8389
N1	DER07 Min	Top	321.8915	-387.969	0	-1840.023	475.6433	-1319.7555
N1	DER07 Min	Bottom	365.9958	-387.969	0	-1840.023	656.044	-2766.3267
N1	DER08 Max	Top	321.8915	0	388.5912	1593.2237	475.6434	-1319.7551
N1	DER08 Max	Bottom	365.9958	0	388.5912	1593.2237	1922.9656	-1500.5828
N1	DER08 Min	Top	321.8915	0	-388.5912	-1593.2237	475.6432	-1319.7551
N1	DER08 Min	Bottom	365.9958	0	-388.5912	-1593.2237	-610.8775	-1500.5828
N1	DERUD01	Top	500.7201	0	0	0	739.8896	-2052.9523
N1	DERUD01	Bottom	569.3268	0	0	0	1020.5129	-2334.2399
N1	DERUD02	Top	508.9746	0	0	0	627.5409	-2086.796
N1	DERUD02	Bottom	567.7804	0	0	0	867.8847	-2327.8996
N1	DERUD03	Top	522.3406	0	0	0	807.5063	-2141.5966

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUD03	Bottom	581.1464	0	0	0	1047.9227	-2382.7002
N1	DERUD04	Top	485.3586	0	0	0	655.8801	-1989.9704
N1	DERUD04	Bottom	544.1644	0	0	0	896.2955	-2231.074
N1	DERUD05 Max	Top	468.5486	59.8783	0	246.4616	586.9591	-1921.0494
N1	DERUD05 Max	Bottom	527.3544	59.8783	0	246.4616	827.374	-1966.7689
N1	DERUD05 Min	Top	468.5486	-59.8783	0	-246.4616	586.9591	-1921.0495
N1	DERUD05 Min	Bottom	527.3544	-59.8783	0	-246.4616	827.374	-2357.5372
N1	DERUD06 Max	Top	468.5486	0	68.052	279.0134	586.9591	-1921.0494
N1	DERUD06 Max	Bottom	527.3544	0	68.052	279.0134	1049.2437	-2162.153
N1	DERUD06 Min	Top	468.5486	0	-68.052	-279.0134	586.9591	-1921.0494
N1	DERUD06 Min	Bottom	527.3544	0	-68.052	-279.0134	605.5043	-2162.153
N1	DERUD07 Max	Top	321.8915	59.8783	0	246.4616	475.6433	-1319.755
N1	DERUD07 Max	Bottom	365.9958	59.8783	0	246.4616	656.044	-1305.1986
N1	DERUD07 Min	Top	321.8915	-59.8783	0	-246.4616	475.6433	-1319.7551
N1	DERUD07 Min	Bottom	365.9958	-59.8783	0	-246.4616	656.044	-1695.967
N1	DERUD08 Max	Top	321.8915	0	68.052	279.0134	475.6433	-1319.7551
N1	DERUD08 Max	Bottom	365.9958	0	68.052	279.0134	877.9137	-1500.5828
N1	DERUD08 Min	Top	321.8915	0	-68.052	-279.0134	475.6433	-1319.7551
N1	DERUD08 Min	Bottom	365.9958	0	-68.052	-279.0134	434.1743	-1500.5828
N1	VIG01 Max	Top	468.5486	286.9593	86.2228	1714.4773	586.9591	-1921.0491
N1	VIG01 Max	Bottom	527.3544	286.9593	86.2228	1714.4773	1108.4858	-1225.9519
N1	VIG01 Min	Top	468.5486	-286.9593	-86.2228	-1714.4773	586.9591	-1921.0497
N1	VIG01 Min	Bottom	527.3544	-286.9593	-86.2228	-1714.4773	546.2622	-3098.3542
N1	VIG02 Max	Top	468.5486	86.0878	287.4094	1586.6676	586.9592	-1210.0493
N1	VIG02 Max	Bottom	527.3544	86.0878	287.4094	1586.6676	1764.4132	-1881.2927
N1	VIG02 Min	Top	468.5486	-86.0878	-287.4094	-1586.6676	586.959	-1921.0495
N1	VIG02 Min	Bottom	527.3544	-86.0878	-287.4094	-1586.6676	-109.6652	-2443.0134
N1	VIG03 Max	Top	321.8915	286.9593	86.2228	1714.4773	475.6433	-1319.7548
N1	VIG03 Max	Bottom	365.9958	286.9593	86.2228	1714.4773	937.1558	-564.3817
N1	VIG03 Min	Top	321.8915	-286.9593	-86.2228	-1714.4773	475.6433	-1319.7554
N1	VIG03 Min	Bottom	365.9958	-286.9593	-86.2228	-1714.4773	374.9322	-2436.7839
N1	VIG04 Max	Top	321.8915	86.0878	287.4094	1586.6676	475.6434	-1319.755
N1	VIG04 Max	Bottom	365.9958	86.0878	287.4094	1586.6676	1593.0832	-1219.7224
N1	VIG04 Min	Top	321.8915	-86.0878	-287.4094	-1586.6676	475.6432	-1319.7552
N1	VIG04 Min	Bottom	365.9958	-86.0878	-287.4094	-1586.6676	-280.9952	-1781.4431
N1	COL1 Max	Top	468.5486	430.4389	129.3342	2571.7159	586.9592	-1921.049
N1	COL1 Max	Bottom	527.3544	430.4389	129.3342	2571.7159	1249.0416	-757.8513
N1	COL1 Min	Top	468.5486	-430.4389	-129.3342	-2571.7159	586.9591	-1921.0499
N1	COL1 Min	Bottom	527.3544	-430.4389	-129.3342	-2571.7159	405.7064	-3566.4547
N1	COL2 Max	Top	468.5486	129.1317	431.1141	2380.0014	586.9592	-1921.0493
N1	COL2 Max	Bottom	527.3544	129.1317	431.1141	2380.0014	2232.9328	-1740.8625
N1	COL2 Min	Top	468.5486	-129.1317	-431.1141	-2380.0014	586.959	-1921.0496
N1	COL2 Min	Bottom	527.3544	-129.1317	-431.1141	-2380.0014	-578.1848	-2583.4435
N1	COL3 Max	Top	321.8915	430.4389	129.3342	2571.7159	475.6433	-1319.7546
N1	COL3 Max	Bottom	365.9958	430.4389	129.3342	2571.7159	1077.7117	-96.2811
N1	COL3 Min	Top	321.8915	-430.4389	-129.3342	-2571.7159	475.6433	-1319.7555
N1	COL3 Min	Bottom	365.9958	-430.4389	-129.3342	-2571.7159	234.3764	-2904.8845
N1	COL4 Max	Top	321.8915	129.1317	431.1141	2380.0014	475.6434	-1319.7549
N1	COL4 Max	Bottom	365.9958	129.1317	431.1141	2380.0014	2061.6028	-1079.2923
N1	COL4 Min	Top	321.8915	-129.1317	-431.1141	-2380.0014	475.6432	-1319.7552
N1	COL4 Min	Bottom	365.9958	-129.1317	-431.1141	-2380.0014	-749.5148	-1921.8733
N1	CIM09 Max	Top	214.5943	100.4358	30.178	600.0671	317.0955	-879.8366
N1	CIM09 Max	Bottom	243.9972	100.4358	30.178	600.0671	535.7518	-672.7181
N1	CIM09 Min	Top	214.5943	-100.4358	-30.178	-600.0671	317.0955	-879.8368
N1	CIM09 Min	Bottom	243.9972	-100.4358	-30.178	-600.0671	338.9736	-1328.0589
N1	CIM10 Max	Top	214.5943	30.1307	100.5933	555.3337	317.0956	-879.8367
N1	CIM10 Max	Bottom	243.9972	30.1307	100.5933	555.3337	765.3264	-902.0874
N1	CIM10 Min	Top	214.5943	-30.1307	-100.5933	-555.3337	317.0955	-879.8367
N1	CIM10 Min	Bottom	243.9972	-30.1307	-100.5933	-555.3337	109.3989	-1098.6896
N1	CIM11	Top	444.5772	0	0	0	780.5606	-1822.7665

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	CIM11	Bottom	493.582	0	0	0	980.948	-2023.6862
N1	CIM12	Top	452.3672	0	0	0	682.1196	-1854.7055
N1	CIM12	Bottom	501.372	0	0	0	882.432	-2055.6252
N1	CIM13 Max	Top	452.3672	76.0442	22.9928	454.9257	682.1196	-1854.7054
N1	CIM13 Max	Bottom	501.372	76.0442	22.9928	454.9257	957.3951	-1807.5319
N1	CIM13 Min	Top	452.3672	-76.0442	-22.9928	-454.9257	682.1196	-1854.7056
N1	CIM13 Min	Bottom	501.372	-76.0442	-22.9928	-454.9257	807.4688	-2303.7185
N1	CIM14 Max	Top	452.3672	22.9567	76.1635	421.1474	682.1196	-1854.7055
N1	CIM14 Max	Bottom	501.372	22.9567	76.1635	421.1474	1130.7474	-1980.7291
N1	CIM14 Min	Top	452.3672	-22.9567	-76.1635	-421.1474	682.1196	-1854.7055
N1	CIM14 Min	Bottom	501.372	-22.9567	-76.1635	-421.1474	634.1166	-2130.5213
N1	CIM15	Top	214.5943	0	0	0	317.0955	-879.8367
N1	CIM15	Bottom	243.9972	0	0	0	437.3627	-1000.3885
N1	COMB9	Top	535.6246	0	0	0	684.654	-2196.061
N1	COMB9	Bottom	594.4304	0	0	0	924.9683	-2437.1646
N1	COMB10	Top	607.6206	0	0	0	990.268	-2491.2446
N1	COMB10	Bottom	666.4264	0	0	0	1230.5904	-2732.3482
N1	COMB11	Top	512.0086	0	0	0	712.9931	-2099.2354
N1	COMB11	Bottom	570.8144	0	0	0	953.3791	-2340.339
N1	DER09	Top	535.6246	0	0	0	684.654	-2196.061
N1	DER09	Bottom	594.4304	0	0	0	924.9683	-2437.1646
N1	DERUD09	Top	535.6246	0	0	0	684.654	-2196.061
N1	DERUD09	Bottom	594.4304	0	0	0	924.9683	-2437.1646
N1	DER10	Top	607.6206	0	0	0	990.268	-2491.2446
N1	DER10	Bottom	666.4264	0	0	0	1230.5904	-2732.3482
N1	DERUD10	Top	607.6206	0	0	0	990.268	-2491.2446
N1	DERUD10	Bottom	666.4264	0	0	0	1230.5904	-2732.3482
N1	DER11	Top	512.0086	0	0	0	712.9931	-2099.2354
N1	DER11	Bottom	570.8144	0	0	0	953.3791	-2340.339
N1	DERUD11	Top	512.0086	0	0	0	712.9931	-2099.2354
N1	DERUD11	Bottom	570.8144	0	0	0	953.3791	-2340.339

5.3 Point Results

Table 5.8 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	31.1588	-1.0338	156.2461	-9.7389	33.06	0
Base	1	13	L	6.3058	-4.1254	21.9091	1.6349	6.6905	0
Base	1	13	LR	-4.248E-05	4.0073	8.4045	-4.2136	-4.507E-05	0
Base	1	13	EX Max	153.8529	73.3875	34.2726	139.7298	298.8999	17.2225
Base	1	13	EY Max	0.0005	97.2913	29.9331	194.7456	0.0005	0
Base	1	13	DISX Max	56.8983	27.1403	12.6748	51.6752	110.5399	6.3693
Base	1	13	DISY Max	0.0002	35.9792	11.0696	72.0188	0.0002	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	3.1528	5.9518	27.7636	-7.6098	3.3452	0
Base	1	13	DERUX Max	24.8125	11.549	5.3286	21.9466	48.1887	2.6982
Base	1	13	DERUY Max	0.0001	17.0381	5.242	34.1048	0.0001	0
Base	1	13	COMB1	43.6223	-1.4473	218.7446	-13.6345	46.284	0
Base	1	13	COMB2	47.4798	-5.8376	226.7522	-11.1777	50.3769	0
Base	1	13	COMB3	43.6962	1.0456	222.8517	-16.7936	46.3625	0
Base	1	13	COMB4	43.6963	-3.3624	213.6067	-12.1586	46.3625	0
Base	1	13	COMB5 Max	100.5946	32.5681	225.4001	63.229	156.9025	6.3693
Base	1	13	COMB5 Min	-13.202	-43.3001	193.4088	-83.3327	-64.1774	-6.3693
Base	1	13	COMB6 Max	60.766	38.7553	224.2765	77.4695	79.5247	1.9108
Base	1	13	COMB6 Min	26.6266	-49.4873	194.5325	-97.5731	13.2004	-1.9108
Base	1	13	COMB7 Max	45.1126	43.1909	155.4935	78.7563	62.9162	1.9108
Base	1	13	COMB7 Min	10.9732	-45.0518	125.7495	-96.2863	-3.4082	-1.9108
Base	1	13	COMB8 Max	84.9412	37.0037	156.6172	64.5158	140.294	6.3693
Base	1	13	COMB8 Min	-28.8554	-38.8645	124.6259	-82.0459	-80.7859	-6.3693

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	ENVE Max	100.5946	43.1909	226.7522	78.7563	156.9025	6.3693
Base	1	13	ENVE Min	-28.8554	-49.4873	124.6259	-97.5731	-80.7859	-6.3693
Base	1	13	CIM01	31.1588	-1.0338	156.2461	-9.7389	33.06	0
Base	1	13	CIM02	37.4646	-5.1592	178.1552	-8.104	39.7505	0
Base	1	13	CIM03	31.1587	2.9735	164.6506	-13.9525	33.06	0
Base	1	13	CIM04	35.8881	-1.1224	178.9814	-11.673	38.0779	0
Base	1	13	CIM05 Max	70.9876	25.5201	167.4431	41.5577	110.438	4.4585
Base	1	13	CIM05 Min	-8.67	-27.5877	145.0492	-61.0355	-44.318	-4.4585
Base	1	13	CIM06 Max	43.1076	29.8511	166.6565	51.526	56.2735	1.3375
Base	1	13	CIM06 Min	19.21	-31.9187	145.8357	-71.0038	9.8465	-1.3375
Base	1	13	CIM07 Max	66.0442	19.0186	187.4701	27.2379	96.6641	3.3757
Base	1	13	CIM07 Min	5.732	-21.2635	170.4926	-50.5838	-20.5083	-3.3757
Base	1	13	CIM08 Max	44.9919	22.289	186.8762	34.765	55.7644	1.0191
Base	1	13	CIM08 Min	26.7843	-24.5339	171.0865	-58.1109	20.3914	-1.0191
Base	1	13	DER01	43.6223	-1.4473	218.7446	-13.6345	46.284	0
Base	1	13	DER02	47.4798	-5.8376	226.7522	-11.1777	50.3769	0
Base	1	13	DER03	43.6962	1.0456	222.8517	-16.7936	46.3625	0
Base	1	13	DER04	43.6963	-3.3624	213.6067	-12.1586	46.3625	0
Base	1	13	DER05 Max	197.5492	68.0215	243.6771	129.678	345.2624	17.2225
Base	1	13	DER05 Min	-110.1566	-78.7535	175.1318	-149.7816	-252.5373	-17.2225
Base	1	13	DER06 Max	43.6968	91.9253	239.3376	184.6937	46.3631	0
Base	1	13	DER06 Min	43.6958	-102.6573	179.4713	-204.7974	46.362	0
Base	1	13	DER07 Max	181.8958	72.457	174.8941	130.9648	328.6539	17.2225
Base	1	13	DER07 Min	-125.81	-74.3179	106.3489	-148.4948	-269.1459	-17.2225
Base	1	13	DER08 Max	28.0434	96.3609	170.5546	185.9805	29.7546	0
Base	1	13	DER08 Min	28.0424	-98.2217	110.6884	-203.5106	29.7535	0
Base	1	13	DERUD01	43.6223	-1.4473	218.7446	-13.6345	46.284	0
Base	1	13	DERUD02	47.4798	-5.8376	226.7522	-11.1777	50.3769	0
Base	1	13	DERUD03	43.6962	1.0456	222.8517	-16.7936	46.3625	0
Base	1	13	DERUD04	43.6963	-3.3624	213.6067	-12.1586	46.3625	0
Base	1	13	DERUD05 Max	68.5088	6.183	214.7331	11.8948	94.5513	2.6982
Base	1	13	DERUD05 Min	18.8838	-16.915	204.0759	-31.9984	-1.8262	-2.6982
Base	1	13	DERUD06 Max	43.6964	11.6721	214.6465	24.053	46.3626	0
Base	1	13	DERUD06 Min	43.6962	-22.4041	204.1624	-44.1566	46.3625	0
Base	1	13	DERUD07 Max	52.8554	10.6186	145.9501	13.1816	77.9428	2.6982
Base	1	13	DERUD07 Min	3.2304	-12.4794	135.2929	-30.7116	-18.4347	-2.6982
Base	1	13	DERUD08 Max	28.043	16.1077	145.8636	25.3398	29.7541	0
Base	1	13	DERUD08 Min	28.0428	-17.9686	135.3795	-42.8698	29.7539	0
Base	1	13	VIG01 Max	157.493	70.5022	241.3958	136.5099	267.4425	12.7385
Base	1	13	VIG01 Min	-70.1003	-81.2342	177.4132	-156.6135	-174.7174	-12.7385
Base	1	13	VIG02 Max	77.8357	82.8767	239.1485	164.9908	112.6869	3.8216
Base	1	13	VIG02 Min	9.557	-93.6087	179.6605	-185.0945	-19.9618	-3.8216
Base	1	13	VIG03 Max	141.8396	74.9378	172.6128	137.7967	250.8339	12.7385
Base	1	13	VIG03 Min	-85.7537	-76.7986	108.6302	-155.3267	-191.3259	-12.7385
Base	1	13	VIG04 Max	62.1822	87.3123	170.3655	166.2776	96.0783	3.8216
Base	1	13	VIG04 Min	-6.0964	-89.1731	110.8775	-183.8077	-36.5703	-3.8216
Base	1	13	COL1 Max	214.3913	108.4363	257.3914	209.7907	377.9824	19.1078
Base	1	13	COL1 Min	-126.9987	-119.1683	161.4175	-229.8944	-285.2573	-19.1078
Base	1	13	COL2 Max	94.9053	126.998	254.0204	252.5121	145.8491	5.7323
Base	1	13	COL2 Min	-7.5127	-137.73	164.7885	-272.6158	-53.124	-5.7323
Base	1	13	COL3 Max	198.7379	112.8719	188.6085	211.0775	361.3739	19.1078
Base	1	13	COL3 Min	-142.6521	-114.7327	92.6345	-228.6076	-301.8659	-19.1078
Base	1	13	COL4 Max	79.2519	131.4336	185.2375	253.7989	129.2405	5.7323
Base	1	13	COL4 Min	-23.1661	-133.2944	96.0055	-271.329	-69.7325	-5.7323
Base	1	13	CIM09 Max	58.5241	25.9336	104.9446	45.4532	97.214	4.4585
Base	1	13	CIM09 Min	-21.1336	-27.1742	82.5507	-57.1399	-57.542	-4.4585
Base	1	13	CIM10 Max	30.644	30.2647	104.1581	55.4216	43.0495	1.3375
Base	1	13	CIM10 Min	6.7465	-31.5052	83.3373	-67.1083	-3.3775	-1.3375
Base	1	13	CIM11	34.3116	4.918	184.0097	-17.3487	36.4052	0
Base	1	13	CIM12	38.2527	0.336	193.5007	-14.2201	40.5868	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	CIM13 Max	68.4088	20.4771	201.9894	24.6908	99.173	3.3757
Base	1	13	CIM13 Min	8.0966	-19.8051	185.0119	-53.1309	-17.9994	-3.3757
Base	1	13	CIM14 Max	47.3565	23.7474	201.3955	32.2179	58.2733	1.0191
Base	1	13	CIM14 Min	29.1489	-23.0755	185.6058	-60.6581	22.9003	-1.0191
Base	1	13	CIM15	18.6953	-0.6203	93.7477	-5.8433	19.836	0
Base	1	13	COMB9	49.0562	-4.8653	236.4317	-12.8758	52.0495	0
Base	1	13	COMB10	48.7408	4.1569	253.8262	-22.2274	51.7148	0
Base	1	13	COMB11	45.2727	-2.3901	223.2863	-13.8567	48.0351	0
Base	1	13	DER09	49.0562	-4.8653	236.4317	-12.8758	52.0495	0
Base	1	13	DERUD09	49.0562	-4.8653	236.4317	-12.8758	52.0495	0
Base	1	13	DER10	48.7408	4.1569	253.8262	-22.2274	51.7148	0
Base	1	13	DERUD10	48.7408	4.1569	253.8262	-22.2274	51.7148	0
Base	1	13	DER11	45.2727	-2.3901	223.2863	-13.8567	48.0351	0
Base	1	13	DERUD11	45.2727	-2.3901	223.2863	-13.8567	48.0351	0
Base	2	15	D	7.877	1.0338	47.0849	-11.8882	8.2715	0.0153
Base	2	15	L	0.259	4.1254	-2.2291	-7.0318	0.2708	0.0007
Base	2	15	LR	0.0009	-4.0073	8.4055	4.2102	0.0021	-0.0002
Base	2	15	EX Max	73.4419	66.9416	27.1215	131.9026	146.091	16.5501
Base	2	15	EY Max	0.0108	97.0043	29.9331	193.2635	0.025	0.0026
Base	2	15	DISX Max	27.1605	24.7565	10.0301	48.7805	54.0277	6.1206
Base	2	15	DISY Max	0.004	35.8731	11.0696	71.4707	0.0092	0.001
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.1313	-5.9518	15.6964	4.9044	0.1396	-0.0001
Base	2	15	DERUX Max	9.4168	10.4812	4.1678	20.6607	18.7729	2.6041
Base	2	15	DERUY Max	0.0019	16.9879	5.242	33.8453	0.0044	0.0005
Base	2	15	COMB1	11.0278	1.4473	65.9188	-16.6434	11.5801	0.0214
Base	2	15	COMB2	9.8672	5.8376	57.138	-23.4116	10.36	0.0194
Base	2	15	COMB3	9.7129	-1.0456	67.7215	-14.5614	10.1999	0.0188
Base	2	15	COMB4	9.7119	3.3624	58.4755	-19.1925	10.1976	0.019
Base	2	15	COMB5 Max	36.8731	40.8844	67.6237	48.9241	64.227	6.14
Base	2	15	COMB5 Min	-17.4503	-30.1524	40.9217	-91.5194	-43.834	-6.1018
Base	2	15	COMB6 Max	17.8635	48.6661	68.3513	64.8072	26.4141	1.8563
Base	2	15	COMB6 Min	1.5593	-37.9341	40.1941	-107.4024	-6.021	-1.818
Base	2	15	COMB7 Max	15.2415	44.2305	56.455	75.4055	23.6619	1.8509
Base	2	15	COMB7 Min	-1.0628	-42.3696	28.2978	-96.8042	-8.7732	-1.8234
Base	2	15	COMB8 Max	34.251	36.4489	55.7274	59.5224	61.4748	6.1347
Base	2	15	COMB8 Min	-20.0723	-34.588	29.0254	-80.9211	-46.5862	-6.1071
Base	2	15	ENVE Max	36.8731	48.6661	68.3513	75.4055	64.227	6.14
Base	2	15	ENVE Min	-20.0723	-42.3696	28.2978	-107.4024	-46.5862	-6.1071
Base	2	15	CIM01	7.877	1.0338	47.0849	-11.8882	8.2715	0.0153
Base	2	15	CIM02	8.136	5.1592	44.8558	-18.92	8.5422	0.016
Base	2	15	CIM03	7.8779	-2.9735	55.4904	-7.678	8.2736	0.0151
Base	2	15	CIM04	8.0719	1.1224	51.7171	-14.0044	8.4761	0.0157
Base	2	15	CIM05 Max	26.8902	25.8967	56.4306	37.267	46.0928	4.2999
Base	2	15	CIM05 Min	-11.1361	-23.8291	37.7392	-61.0434	-29.5499	-4.2693
Base	2	15	CIM06 Max	13.5835	31.3438	56.9399	48.3852	19.6238	1.3013
Base	2	15	CIM06 Min	2.1705	-29.2762	37.2299	-72.1616	-3.0808	-1.2707
Base	2	15	CIM07 Max	22.4676	19.9831	58.8042	23.2846	37.1123	3.2598
Base	2	15	CIM07 Min	-6.3238	-17.7382	44.6301	-51.2934	-20.1601	-3.2284
Base	2	15	CIM08 Max	12.4197	24.0962	59.1888	31.6799	17.1254	0.9955
Base	2	15	CIM08 Min	3.7241	-21.8514	44.2455	-59.6887	-0.1732	-0.9641
Base	2	15	DER01	11.0278	1.4473	65.9188	-16.6434	11.5801	0.0214
Base	2	15	DER02	9.8672	5.8376	57.138	-23.4116	10.36	0.0194
Base	2	15	DER03	9.7129	-1.0456	67.7215	-14.5614	10.1999	0.0188
Base	2	15	DER04	9.7119	3.3624	58.4755	-19.1925	10.1976	0.019
Base	2	15	DER05 Max	83.1533	72.3076	81.3942	110.605	156.2876	16.5692
Base	2	15	DER05 Min	-63.7305	-61.5756	27.1513	-153.2002	-135.8945	-16.5309
Base	2	15	DER06 Max	9.7222	102.3703	84.2059	171.9659	10.2215	0.0217
Base	2	15	DER06 Min	9.7006	-91.6383	24.3396	-214.5611	10.1716	0.0165
Base	2	15	DER07 Max	80.5313	67.872	69.4979	121.2032	153.5353	16.5638

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	DER07 Min	-66.3526	-66.0112	15.2549	-142.6019	-138.6467	-16.5363
Base	2	15	DER08 Max	7.1001	97.9347	72.3095	182.5642	7.4693	0.0164
Base	2	15	DER08 Min	7.0786	-96.0739	12.4433	-203.9629	7.4194	0.0112
Base	2	15	DERUD01	11.0278	1.4473	65.9188	-16.6434	11.5801	0.0214
Base	2	15	DERUD02	9.8672	5.8376	57.138	-23.4116	10.36	0.0194
Base	2	15	DERUD03	9.7129	-1.0456	67.7215	-14.5614	10.1999	0.0188
Base	2	15	DERUD04	9.7119	3.3624	58.4755	-19.1925	10.1976	0.019
Base	2	15	DERUD05 Max	19.1282	15.8472	58.4405	-0.6369	28.9694	2.6232
Base	2	15	DERUD05 Min	0.2946	-5.1152	50.105	-41.9583	-8.5764	-2.585
Base	2	15	DERUD06 Max	9.7133	22.3539	59.5148	12.5477	10.2009	0.0196
Base	2	15	DERUD06 Min	9.7095	-11.6219	49.0307	-55.1429	10.1922	0.0187
Base	2	15	DERUD07 Max	16.5061	11.4116	46.5441	9.9614	26.2172	2.6179
Base	2	15	DERUD07 Min	-2.3275	-9.5508	38.2086	-31.3601	-11.3286	-2.5903
Base	2	15	DERUD08 Max	7.0912	17.9183	47.6184	23.1459	7.4487	0.0142
Base	2	15	DERUD08 Min	7.0874	-16.0575	37.1343	-44.5446	7.44	0.0133
Base	2	15	VIG01 Max	64.0348	76.4029	80.9747	119.1459	118.2576	12.2609
Base	2	15	VIG01 Min	-44.6119	-65.6709	27.5707	-161.7411	-97.8645	-12.2226
Base	2	15	VIG02 Max	26.0157	91.9661	82.4299	150.9121	42.6316	3.6934
Base	2	15	VIG02 Min	-6.5929	-81.2341	26.1155	-193.5073	-22.2386	-3.6552
Base	2	15	VIG03 Max	61.4127	71.9673	69.0784	129.7441	115.5054	12.2555
Base	2	15	VIG03 Min	-47.234	-70.1065	15.6744	-151.1428	-100.6167	-12.2228
Base	2	15	VIG04 Max	23.3936	87.5305	70.5336	161.5103	39.8794	3.6881
Base	2	15	VIG04 Min	-9.2149	-85.6697	14.2192	-182.909	-24.9908	-3.6605
Base	2	15	COL1 Max	91.1964	111.9213	94.3257	189.3676	172.2881	18.3817
Base	2	15	COL1 Min	-71.7736	-101.1893	14.2197	-231.9628	-151.895	-18.3435
Base	2	15	COL2 Max	34.1678	135.2662	96.5085	237.0169	58.8492	5.5306
Base	2	15	COL2 Min	-14.745	-124.5342	12.0369	-279.6121	-38.4561	-5.4923
Base	2	15	COL3 Max	88.5744	107.4857	82.4294	199.9659	169.5359	18.3764
Base	2	15	COL3 Min	-74.3957	-105.6249	2.3234	-221.3646	-154.6472	-18.3488
Base	2	15	COL4 Max	31.5457	130.8306	84.6122	247.6152	56.097	5.5252
Base	2	15	COL4 Min	-17.3671	-128.9698	0.1406	-269.0139	-41.2083	-5.4977
Base	2	15	CIM09 Max	23.7394	25.4832	37.5966	42.0223	42.7842	4.2938
Base	2	15	CIM09 Min	-14.287	-24.2426	18.9052	-56.2881	-32.8585	-4.2754
Base	2	15	CIM10 Max	10.4327	30.9303	38.1059	53.1405	16.3152	1.2952
Base	2	15	CIM10 Min	-0.9803	-29.6898	18.3959	-67.4063	-6.3894	-1.2768
Base	2	15	CIM11	8.0083	-4.918	62.7813	-6.9838	8.411	0.0152
Base	2	15	CIM12	8.1697	-0.336	57.1853	-13.4837	8.5792	0.0158
Base	2	15	CIM13 Max	22.5654	18.5247	64.2724	23.8053	37.2154	3.2599
Base	2	15	CIM13 Min	-6.226	-19.1966	50.0982	-50.7727	-20.057	-3.2283
Base	2	15	CIM14 Max	12.5175	22.6378	64.657	32.2006	17.2286	0.9956
Base	2	15	CIM14 Min	3.8219	-23.3098	49.7137	-59.1681	-0.0701	-0.964
Base	2	15	CIM15	4.7262	0.6203	28.2509	-7.1329	4.9629	0.0092
Base	2	15	COMB9	9.9324	4.8653	60.7835	-23.0645	10.4288	0.0195
Base	2	15	COMB10	9.9215	-4.1569	79.387	-13.4505	10.4198	0.019
Base	2	15	COMB11	9.7771	2.3901	62.1209	-18.8454	10.2663	0.0191
Base	2	15	DER09	9.9324	4.8653	60.7835	-23.0645	10.4288	0.0195
Base	2	15	DERUD09	9.9324	4.8653	60.7835	-23.0645	10.4288	0.0195
Base	2	15	DER10	9.9215	-4.1569	79.387	-13.4505	10.4198	0.019
Base	2	15	DERUD10	9.9215	-4.1569	79.387	-13.4505	10.4198	0.019
Base	2	15	DER11	9.7771	2.3901	62.1209	-18.8454	10.2663	0.0191
Base	2	15	DERUD11	9.7771	2.3901	62.1209	-18.8454	10.2663	0.0191
Base	3	16	D	-31.1588	-1.0338	156.2461	-9.7389	-33.06	0
Base	3	16	L	-6.3058	-4.1254	21.9091	1.6349	-6.6905	0
Base	3	16	LR	4.248E-05	4.0073	8.4045	-4.2136	4.507E-05	0
Base	3	16	EX Max	153.8529	73.3875	34.2726	139.7298	298.8999	17.2225
Base	3	16	EY Max	0.0005	97.2913	29.9331	194.7456	0.0005	0
Base	3	16	DISX Max	56.8983	27.1403	12.6748	51.6752	110.5399	6.3693
Base	3	16	DISY Max	0.0002	35.9792	11.0696	72.0188	0.0002	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	-3.1528	5.9518	27.7636	-7.6098	-3.3452	0



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	DERUX Max	24.8125	11.549	5.3286	21.9466	48.1887	2.6982
Base	3	16	DERUY Max	0.0001	17.0381	5.242	34.1048	0.0001	0
Base	3	16	COMB1	-43.6223	-1.4473	218.7446	-13.6345	-46.284	0
Base	3	16	COMB2	-47.4798	-5.8376	226.7522	-11.1777	-50.3769	0
Base	3	16	COMB3	-43.6962	1.0456	222.8517	-16.7936	-46.3625	0
Base	3	16	COMB4	-43.6963	-3.3624	213.6067	-12.1586	-46.3625	0
Base	3	16	COMB5 Max	13.202	32.5681	225.4001	63.229	64.1774	6.3693
Base	3	16	COMB5 Min	-100.5946	-43.3001	193.4088	-83.3327	-156.9025	-6.3693
Base	3	16	COMB6 Max	-26.6266	38.7553	224.2765	77.4695	-13.2004	1.9108
Base	3	16	COMB6 Min	-60.766	-49.4873	194.5325	-97.5731	-79.5247	-1.9108
Base	3	16	COMB7 Max	-10.9732	43.1909	155.4935	78.7563	3.4082	1.9108
Base	3	16	COMB7 Min	-45.1126	-45.0518	125.7495	-96.2863	-62.9162	-1.9108
Base	3	16	COMB8 Max	28.8554	37.0037	156.6172	64.5158	80.7859	6.3693
Base	3	16	COMB8 Min	-84.9412	-38.8645	124.6259	-82.0459	-140.294	-6.3693
Base	3	16	ENVE Max	28.8554	43.1909	226.7522	78.7563	80.7859	6.3693
Base	3	16	ENVE Min	-100.5946	-49.4873	124.6259	-97.5731	-156.9025	-6.3693
Base	3	16	CIM01	-31.1588	-1.0338	156.2461	-9.7389	-33.06	0
Base	3	16	CIM02	-37.4646	-5.1592	178.1552	-8.104	-39.7505	0
Base	3	16	CIM03	-31.1587	2.9735	164.6506	-13.9525	-33.06	0
Base	3	16	CIM04	-35.8881	-1.1224	178.9814	-11.673	-38.0779	0
Base	3	16	CIM05 Max	8.67	25.5201	167.4431	41.5577	44.318	4.4585
Base	3	16	CIM05 Min	-70.9876	-27.5877	145.0492	-61.0355	-110.438	-4.4585
Base	3	16	CIM06 Max	-19.21	29.8511	166.6565	51.526	-9.8465	1.3375
Base	3	16	CIM06 Min	-43.1076	-31.9187	145.8357	-71.0038	-56.2735	-1.3375
Base	3	16	CIM07 Max	-5.732	19.0186	187.4701	27.2379	20.5083	3.3757
Base	3	16	CIM07 Min	-66.0442	-21.2635	170.4926	-50.5838	-96.6641	-3.3757
Base	3	16	CIM08 Max	-26.7843	22.289	186.8762	34.765	-20.3914	1.0191
Base	3	16	CIM08 Min	-44.9919	-24.5339	171.0865	-58.1109	-55.7644	-1.0191
Base	3	16	DER01	-43.6223	-1.4473	218.7446	-13.6345	-46.284	0
Base	3	16	DER02	-47.4798	-5.8376	226.7522	-11.1777	-50.3769	0
Base	3	16	DER03	-43.6962	1.0456	222.8517	-16.7936	-46.3625	0
Base	3	16	DER04	-43.6963	-3.3624	213.6067	-12.1586	-46.3625	0
Base	3	16	DER05 Max	110.1566	68.0215	243.6771	129.678	252.5373	17.2225
Base	3	16	DER05 Min	-197.5492	-78.7535	175.1318	-149.7816	-345.2624	-17.2225
Base	3	16	DER06 Max	-43.6958	91.9253	239.3376	184.6937	-46.362	0
Base	3	16	DER06 Min	-43.6968	-102.6573	179.4713	-204.7974	-46.3631	0
Base	3	16	DER07 Max	125.81	72.457	174.8941	130.9648	269.1459	17.2225
Base	3	16	DER07 Min	-181.8958	-74.3179	106.3489	-148.4948	-328.6539	-17.2225
Base	3	16	DER08 Max	-28.0424	96.3609	170.5546	185.9805	-29.7535	0
Base	3	16	DER08 Min	-28.0434	-98.2217	110.6884	-203.5106	-29.7546	0
Base	3	16	DERUD01	-43.6223	-1.4473	218.7446	-13.6345	-46.284	0
Base	3	16	DERUD02	-47.4798	-5.8376	226.7522	-11.1777	-50.3769	0
Base	3	16	DERUD03	-43.6962	1.0456	222.8517	-16.7936	-46.3625	0
Base	3	16	DERUD04	-43.6963	-3.3624	213.6067	-12.1586	-46.3625	0
Base	3	16	DERUD05 Max	-18.8838	6.183	214.7331	11.8948	1.8262	2.6982
Base	3	16	DERUD05 Min	-68.5088	-16.915	204.0759	-31.9984	-94.5513	-2.6982
Base	3	16	DERUD06 Max	-43.6962	11.6721	214.6465	24.053	-46.3625	0
Base	3	16	DERUD06 Min	-43.6964	-22.4041	204.1624	-44.1566	-46.3626	0
Base	3	16	DERUD07 Max	-3.2304	10.6186	145.9501	13.1816	18.4347	2.6982
Base	3	16	DERUD07 Min	-52.8554	-12.4794	135.2929	-30.7116	-77.9428	-2.6982
Base	3	16	DERUD08 Max	-28.0428	16.1077	145.8636	25.3398	-29.7539	0
Base	3	16	DERUD08 Min	-28.043	-17.9686	135.3795	-42.8698	-29.7541	0
Base	3	16	VIG01 Max	70.1003	70.5022	241.3958	136.5099	174.7174	12.7385
Base	3	16	VIG01 Min	-157.493	-81.2342	177.4132	-156.6135	-267.4425	-12.7385
Base	3	16	VIG02 Max	-9.557	82.8767	239.1485	164.9908	19.9618	3.8216
Base	3	16	VIG02 Min	-77.8357	-93.6087	179.6605	-185.0945	-112.6869	-3.8216
Base	3	16	VIG03 Max	85.7537	74.9378	172.6128	137.7967	191.3259	12.7385
Base	3	16	VIG03 Min	-141.8396	-76.7986	108.6302	-155.3267	-250.8339	-12.7385
Base	3	16	VIG04 Max	6.0964	87.3123	170.3655	166.2776	36.5703	3.8216
Base	3	16	VIG04 Min	-62.1822	-89.1731	110.8775	-183.8077	-96.0783	-3.8216

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	COL1 Max	126.9987	108.4363	257.3914	209.7907	285.2573	19.1078
Base	3	16	COL1 Min	-214.3913	-119.1683	161.4175	-229.8944	-377.9824	-19.1078
Base	3	16	COL2 Max	7.5127	126.998	254.0204	252.5121	53.124	5.7323
Base	3	16	COL2 Min	-94.9053	-137.73	164.7885	-272.6158	-145.8491	-5.7323
Base	3	16	COL3 Max	142.6521	112.8719	188.6085	211.0775	301.8659	19.1078
Base	3	16	COL3 Min	-198.7379	-114.7327	92.6345	-228.6076	-361.3739	-19.1078
Base	3	16	COL4 Max	23.1661	131.4336	185.2375	253.7989	69.7325	5.7323
Base	3	16	COL4 Min	-79.2519	-133.2944	96.0055	-271.329	-129.2405	-5.7323
Base	3	16	CIM09 Max	21.1336	25.9336	104.9446	45.4532	57.542	4.4585
Base	3	16	CIM09 Min	-58.5241	-27.1742	82.5507	-57.1399	-97.214	-4.4585
Base	3	16	CIM10 Max	-6.7465	30.2647	104.1581	55.4216	3.3775	1.3375
Base	3	16	CIM10 Min	-30.644	-31.5052	83.3373	-67.1083	-43.0495	-1.3375
Base	3	16	CIM11	-34.3116	4.918	184.0097	-17.3487	-36.4052	0
Base	3	16	CIM12	-38.2527	0.336	193.5007	-14.2201	-40.5868	0
Base	3	16	CIM13 Max	-8.0966	20.4771	201.9894	24.6908	17.9994	3.3757
Base	3	16	CIM13 Min	-68.4088	-19.8051	185.0119	-53.1309	-99.173	-3.3757
Base	3	16	CIM14 Max	-29.1489	23.7474	201.3955	32.2179	-22.9003	1.0191
Base	3	16	CIM14 Min	-47.3565	-23.0755	185.6058	-60.6581	-58.2733	-1.0191
Base	3	16	CIM15	-18.6953	-0.6203	93.7477	-5.8433	-19.836	0
Base	3	16	COMB9	-49.0562	-4.8653	236.4317	-12.8758	-52.0495	0
Base	3	16	COMB10	-48.7408	4.1569	253.8262	-22.2274	-51.7148	0
Base	3	16	COMB11	-45.2727	-2.3901	223.2863	-13.8567	-48.0351	0
Base	3	16	DER09	-49.0562	-4.8653	236.4317	-12.8758	-52.0495	0
Base	3	16	DERUD09	-49.0562	-4.8653	236.4317	-12.8758	-52.0495	0
Base	3	16	DER10	-48.7408	4.1569	253.8262	-22.2274	-51.7148	0
Base	3	16	DERUD10	-48.7408	4.1569	253.8262	-22.2274	-51.7148	0
Base	3	16	DER11	-45.2727	-2.3901	223.2863	-13.8567	-48.0351	0
Base	3	16	DERUD11	-45.2727	-2.3901	223.2863	-13.8567	-48.0351	0
Base	4	18	D	-7.877	1.0338	47.0849	-11.8882	-8.2715	-0.0153
Base	4	18	L	-0.259	4.1254	-2.2291	-7.0318	-0.2708	-0.0007
Base	4	18	LR	-0.0009	-4.0073	8.4055	4.2102	-0.0021	0.0002
Base	4	18	EX Max	73.4419	66.9416	27.1215	131.9026	146.091	16.5501
Base	4	18	EY Max	0.0108	97.0043	29.9331	193.2635	0.025	0.0026
Base	4	18	DISX Max	27.1605	24.7565	10.0301	48.7805	54.0277	6.1206
Base	4	18	DISY Max	0.004	35.8731	11.0696	71.4707	0.0092	0.001
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	-0.1313	-5.9518	15.6964	4.9044	-0.1396	0.0001
Base	4	18	DERUX Max	9.4168	10.4812	4.1678	20.6607	18.7729	2.6041
Base	4	18	DERUY Max	0.0019	16.9879	5.242	33.8453	0.0044	0.0005
Base	4	18	COMB1	-11.0278	1.4473	65.9188	-16.6434	-11.5801	-0.0214
Base	4	18	COMB2	-9.8672	5.8376	57.138	-23.4116	-10.36	-0.0194
Base	4	18	COMB3	-9.7129	-1.0456	67.7215	-14.5614	-10.1999	-0.0188
Base	4	18	COMB4	-9.7119	3.3624	58.4755	-19.1925	-10.1976	-0.019
Base	4	18	COMB5 Max	17.4503	40.8844	67.6237	48.9241	43.834	6.1018
Base	4	18	COMB5 Min	-36.8731	-30.1524	40.9217	-91.5194	-64.227	-6.14
Base	4	18	COMB6 Max	-1.5593	48.6661	68.3513	64.8072	6.021	1.818
Base	4	18	COMB6 Min	-17.8635	-37.9341	40.1941	-107.4024	-26.4141	-1.8563
Base	4	18	COMB7 Max	1.0628	44.2305	56.455	75.4055	8.7732	1.8234
Base	4	18	COMB7 Min	-15.2415	-42.3696	28.2978	-96.8042	-23.6619	-1.8509
Base	4	18	COMB8 Max	20.0723	36.4489	55.7274	59.5224	46.5862	6.1071
Base	4	18	COMB8 Min	-34.251	-34.588	29.0254	-80.9211	-61.4748	-6.1347
Base	4	18	ENVE Max	20.0723	48.6661	68.3513	75.4055	46.5862	6.1071
Base	4	18	ENVE Min	-36.8731	-42.3696	28.2978	-107.4024	-64.227	-6.14
Base	4	18	CIM01	-7.877	1.0338	47.0849	-11.8882	-8.2715	-0.0153
Base	4	18	CIM02	-8.136	5.1592	44.8558	-18.92	-8.5422	-0.016
Base	4	18	CIM03	-7.8779	-2.9735	55.4904	-7.678	-8.2736	-0.0151
Base	4	18	CIM04	-8.0719	1.1224	51.7171	-14.0044	-8.4761	-0.0157
Base	4	18	CIM05 Max	11.1361	25.8967	56.4306	37.267	29.5499	4.2693
Base	4	18	CIM05 Min	-26.8902	-23.8291	37.7392	-61.0434	-46.0928	-4.2999
Base	4	18	CIM06 Max	-2.1705	31.3438	56.9399	48.3852	3.0808	1.2707

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	CIM06 Min	-13.5835	-29.2762	37.2299	-72.1616	-19.6238	-1.3013
Base	4	18	CIM07 Max	6.3238	19.9831	58.8042	23.2846	20.1601	3.2284
Base	4	18	CIM07 Min	-22.4676	-17.7382	44.6301	-51.2934	-37.1123	-3.2598
Base	4	18	CIM08 Max	-3.7241	24.0962	59.1888	31.6799	0.1732	0.9641
Base	4	18	CIM08 Min	-12.4197	-21.8514	44.2455	-59.6887	-17.1254	-0.9955
Base	4	18	DER01	-11.0278	1.4473	65.9188	-16.6434	-11.5801	-0.0214
Base	4	18	DER02	-9.8672	5.8376	57.138	-23.4116	-10.36	-0.0194
Base	4	18	DER03	-9.7129	-1.0456	67.7215	-14.5614	-10.1999	-0.0188
Base	4	18	DER04	-9.7119	3.3624	58.4755	-19.1925	-10.1976	-0.019
Base	4	18	DER05 Max	63.7305	72.3076	81.3942	110.605	135.8945	16.5309
Base	4	18	DER05 Min	-83.1533	-61.5756	27.1513	-153.2002	-156.2876	-16.5692
Base	4	18	DER06 Max	-9.7006	102.3703	84.2059	171.9659	-10.1716	-0.0165
Base	4	18	DER06 Min	-9.7222	-91.6383	24.3396	-214.5611	-10.2215	-0.0217
Base	4	18	DER07 Max	66.3526	67.872	69.4979	121.2032	138.6467	16.5363
Base	4	18	DER07 Min	-80.5313	-66.0112	15.2549	-142.6019	-153.5353	-16.5638
Base	4	18	DER08 Max	-7.0786	97.9347	72.3095	182.5642	-7.4194	-0.0112
Base	4	18	DER08 Min	-7.1001	-96.0739	12.4433	-203.9629	-7.4693	-0.0164
Base	4	18	DERUD01	-11.0278	1.4473	65.9188	-16.6434	-11.5801	-0.0214
Base	4	18	DERUD02	-9.8672	5.8376	57.138	-23.4116	-10.36	-0.0194
Base	4	18	DERUD03	-9.7129	-1.0456	67.7215	-14.5614	-10.1999	-0.0188
Base	4	18	DERUD04	-9.7119	3.3624	58.4755	-19.1925	-10.1976	-0.019
Base	4	18	DERUD05 Max	-0.2946	15.8472	58.4405	-0.6369	8.5764	2.585
Base	4	18	DERUD05 Min	-19.1282	-5.1152	50.105	-41.9583	-28.9694	-2.6232
Base	4	18	DERUD06 Max	-9.7095	22.3539	59.5148	12.5477	-10.1922	-0.0187
Base	4	18	DERUD06 Min	-9.7133	-11.6219	49.0307	-55.1429	-10.2009	-0.0196
Base	4	18	DERUD07 Max	2.3275	11.4116	46.5441	9.9614	11.3286	2.5903
Base	4	18	DERUD07 Min	-16.5061	-9.5508	38.2086	-31.3601	-26.2172	-2.6179
Base	4	18	DERUD08 Max	-7.0874	17.9183	47.6184	23.1459	-7.44	-0.0133
Base	4	18	DERUD08 Min	-7.0912	-16.0575	37.1343	-44.5446	-7.4487	-0.0142
Base	4	18	VIG01 Max	44.6119	76.4029	80.9747	119.1459	97.8645	12.2226
Base	4	18	VIG01 Min	-64.0348	-65.6709	27.5707	-161.7411	-118.2576	-12.2609
Base	4	18	VIG02 Max	6.5929	91.9661	82.4299	150.9121	22.2386	3.6552
Base	4	18	VIG02 Min	-26.0157	-81.2341	26.1155	-193.5073	-42.6316	-3.6934
Base	4	18	VIG03 Max	47.234	71.9673	69.0784	129.7441	100.6167	12.228
Base	4	18	VIG03 Min	-61.4127	-70.1065	15.6744	-151.1428	-115.5054	-12.2555
Base	4	18	VIG04 Max	9.2149	87.5305	70.5336	161.5103	24.9908	3.6605
Base	4	18	VIG04 Min	-23.3936	-85.6697	14.2192	-182.909	-39.8794	-3.6881
Base	4	18	COL1 Max	71.7736	111.9213	94.3257	189.3676	151.895	18.3435
Base	4	18	COL1 Min	-91.1964	-101.1893	14.2197	-231.9628	-172.2881	-18.3817
Base	4	18	COL2 Max	14.745	135.2662	96.5085	237.0169	38.4561	5.4923
Base	4	18	COL2 Min	-34.1678	-124.5342	12.0369	-279.6121	-58.8492	-5.5306
Base	4	18	COL3 Max	74.3957	107.4857	82.4294	199.9659	154.6472	18.3488
Base	4	18	COL3 Min	-88.5744	-105.6249	2.3234	-221.3646	-169.5359	-18.3764
Base	4	18	COL4 Max	17.3671	130.8306	84.6122	247.6152	41.2083	5.4977
Base	4	18	COL4 Min	-31.5457	-128.9698	0.1406	-269.0139	-56.097	-5.5252
Base	4	18	CIM09 Max	14.287	25.4832	37.5966	42.0223	32.8585	4.2754
Base	4	18	CIM09 Min	-23.7394	-24.2426	18.9052	-56.2881	-42.7842	-4.2938
Base	4	18	CIM10 Max	0.9803	30.9303	38.1059	53.1405	6.3894	1.2768
Base	4	18	CIM10 Min	-10.4327	-29.6898	18.3959	-67.4063	-16.3152	-1.2952
Base	4	18	CIM11	-8.0083	-4.918	62.7813	-6.9838	-8.411	-0.0152
Base	4	18	CIM12	-8.1697	-0.336	57.1853	-13.4837	-8.5792	-0.0158
Base	4	18	CIM13 Max	6.226	18.5247	64.2724	23.8053	20.057	3.2283
Base	4	18	CIM13 Min	-22.5654	-19.1966	50.0982	-50.7727	-37.2154	-3.2599
Base	4	18	CIM14 Max	-3.8219	22.6378	64.657	32.2006	0.0701	0.964
Base	4	18	CIM14 Min	-12.5175	-23.3098	49.7137	-59.1681	-17.2286	-0.9956
Base	4	18	CIM15	-4.7262	0.6203	28.2509	-7.1329	-4.9629	-0.0092
Base	4	18	COMB9	-9.9324	4.8653	60.7835	-23.0645	-10.4288	-0.0195
Base	4	18	COMB10	-9.9215	-4.1569	79.387	-13.4505	-10.4198	-0.019
Base	4	18	COMB11	-9.7771	2.3901	62.1209	-18.8454	-10.2663	-0.0191
Base	4	18	DER09	-9.9324	4.8653	60.7835	-23.0645	-10.4288	-0.0195

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	DERUD09	-9.9324	4.8653	60.7835	-23.0645	-10.4288	-0.0195
Base	4	18	DER10	-9.9215	-4.1569	79.387	-13.4505	-10.4198	-0.019
Base	4	18	DERUD10	-9.9215	-4.1569	79.387	-13.4505	-10.4198	-0.019
Base	4	18	DER11	-9.7771	2.3901	62.1209	-18.8454	-10.2663	-0.0191
Base	4	18	DERUD11	-9.7771	2.3901	62.1209	-18.8454	-10.2663	-0.0191

5.4 Modal Results

Table 5.9 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.245	4.076	25.6093	655.8368
Modal	2	0.207	4.839	30.4043	924.4222
Modal	3	0.163	6.121	38.4572	1478.9576
Modal	4	0.052	19.182	120.5248	14526.2338
Modal	5	0.019	52.711	331.191	109687.4482
Modal	6	0.018	55.386	348.0003	121104.1905
Modal	7	0.015	65.942	414.3234	171663.8497

Table 5.10 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.245	0.6558	0	0	0.6558	0	0
Modal	2	0.207	0	1	0	0.6558	1	0
Modal	3	0.163	0.3436	0	0	0.9994	1	0
Modal	4	0.052	0.0006	0	0	1	1	0
Modal	5	0.019	0	0	0	1	1	0
Modal	6	0.018	0	1.864E-05	0	1	1	0
Modal	7	0.015	0	0	0	1	1	0

Table 5.10 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.6558	0.369	0	0.6558	0.369
Modal	2	1	0	0	1	0.6558	0.369
Modal	3	0	0.3436	0.6304	1	0.9994	0.9994
Modal	4	0	0.0006	0.0006	1	1	1
Modal	5	0	0	1.395E-05	1	1	1
Modal	6	1.864E-05	0	0	1	1	1
Modal	7	0	0	0	1	1	1

Table 5.11 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

Table 5.12 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.245	0.664	0	0	0.336
Modal	2	0.207	0	1	0	0
Modal	3	0.163	0.346	0	0	0.654
Modal	4	0.052	0.01	0	0	0.99
Modal	5	0.019	0	0	0	1
Modal	6	0.018	0	1	0	0

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	7	0.015	0	1	0	0

## 6 Design Data

This chapter provides design data and results.

### 6.1 Concrete Frame Design

**Table 6.1 - Concrete Frame Preferences - ACI 318-08**

Item	Value
Multi-Response Design	Step-by-Step
Seismic Design Category	D
# Interaction Curves	24
# Interaction Points	11
Minimum Eccentricity	Yes
Phi (Tension)	0.9
Phi (Compression Tied)	0.65
Phi (Compression Spiral)	0.7
Phi (Shear and Torsion)	0.85
Phi (Shear Seismic)	0.6
Phi (Shear Joint)	0.85
Pattern Live Load Factor	0.75
D/C Ratio Limit	0.95

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor	KMajor	KMinor	CmMajor
N1	C1	7	Column	Program Determined	0.880924	0.846154	0.846154	1	1	1
N1	C2	8	Column	Program Determined	0.984836	0.846154	0.846154	1	1	1
N1	C3	9	Column	Program Determined	0.880924	0.846154	0.846154	1	1	1
N1	C4	10	Column	Program Determined	0.984836	0.846154	0.846154	1	1	1

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 2 of 2)**

Story	Label	Unique Name	CmMinor	DnsMajor	DnsMinor	DsMajor	DsMinor
N1	C1	7	1	1	1	1	1
N1	C2	8	1	1	1	1	1
N1	C3	9	1	1	1	1	1
N1	C4	10	1	1	1	1	1

**Table 6.3 - Concrete Beam Overwrites - ACI 318-08**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor
N1	B1	13	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B2	14	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B4	16	Beam	Program Determined	1	0.95122	0.95122
N1	B6	18	Beam	Program Determined	1	0.95122	0.95122
N1	B8	2	Beam	Program Determined	1	0.916667	0.916667
N1	B15	22	Beam	Program Determined	1	1	1
N1	B17	4	Beam	Program Determined	1	0.916667	0.916667

**Table 6.4 - Concrete Column PMM Envelope**

Label	Story	Section	Location	P kN	M Major kN-m	M Minor kN-m	PMM Combo	PMM Ratio or Rebar %
C1	N1	C40X40	Top	180.9691	120.5701	-56.165	COMB5	1.6 %
C1	N1	C40X40	Bottom	225.4001	-156.9025	-83.3327	COMB5	2.7 %
C2	N1	C40X40	Top	49.6813	16.6259	-12.2163	COMB11	1 %
C2	N1	C40X40	Bottom	40.9217	-64.227	-91.5194	COMB5	1.4 %
C3	N1	C40X40	Top	180.9691	-120.5701	-56.165	COMB5	1.6 %
C3	N1	C40X40	Bottom	225.4001	156.9025	-83.3327	COMB5	2.7 %

Label	Story	Section	Location	P kN	M Major kN-m	M Minor kN-m	PMM Combo	PMM Ratio or Rebar %
C4	N1	C40X40	Top	49.6813	-16.6259	-12.2163	COMB11	1 %
C4	N1	C40X40	Bottom	40.9217	64.227	-91.5194	COMB5	1.4 %

Table 6.5 - Concrete Column Shear Envelope

Label	Story	Section	Location	V Major kN	Major Combo	At Major cm <sup>2</sup> /m	V Minor kN	Minor Combo	At Minor cm <sup>2</sup> /m
C1	N1	C40X40	Top	45.2727	COMB11	3.33	76.7986	COMB8	3.33
C1	N1	C40X40	Bottom	45.2727	COMB11	3.33	76.7986	COMB8	3.33
C2	N1	C40X40	Top	39.9261	COMB8	3.33	48.4651	COMB8	3.33
C2	N1	C40X40	Bottom	39.9261	COMB8	3.33	48.4651	COMB8	3.33
C3	N1	C40X40	Top	45.2727	COMB11	3.33	76.7986	COMB8	3.33
C3	N1	C40X40	Bottom	45.2727	COMB11	3.33	76.7986	COMB8	3.33
C4	N1	C40X40	Top	39.9261	COMB8	3.33	48.4651	COMB8	3.33
C4	N1	C40X40	Bottom	39.9261	COMB8	3.33	48.4651	COMB8	3.33

Table 6.6 - Concrete Beam Flexure Envelope

Label	Story	Section	Location	(-) Moment kN-m	(-) Combo	As Top cm <sup>2</sup>	(+) Moment kN-m	(+) Combo	As Bot cm <sup>2</sup>
B1	N1	V30X50	End-I	-155.1657	COMB6	10	51.7219	COMB6	4
B1	N1	V30X50	Middle	-31.0331	COMB6	3	51.67	COMB6	4
B1	N1	V30X50	End-J	0	COMB7	4	51.8389	COMB6	4
B2	N1	V30X50	End-I	-155.1657	COMB6	10	51.7219	COMB6	4
B2	N1	V30X50	Middle	-31.0331	COMB6	3	51.67	COMB6	4
B2	N1	V30X50	End-J	0	COMB7	4	51.8389	COMB6	4
B4	N1	V30X50	End-I	-116.2332	COMB5	7	53.9259	COMB8	4
B4	N1	V30X50	Middle	-23.2466	COMB5	2	90.4797	COMB2	6
B4	N1	V30X50	End-J	-116.2332	COMB5	7	53.9259	COMB8	4
B6	N1	V30X50	End-I	-46.1454	COMB5	4	26.1185	COMB5	2
B6	N1	V30X50	Middle	-9.2291	COMB5	1	26.1176	COMB5	2
B6	N1	V30X50	End-J	-46.1454	COMB5	4	26.1185	COMB5	2
B8	N1	V30X50	End-I	-29.6884	COMB9	2	29.6884	COMB9	2
B8	N1	V30X50	Middle	-101.7542	COMB9	6	29.6884	COMB9	2
B8	N1	V30X50	End-J	-148.4419	COMB9	10	49.4806	COMB9	4
B15	N1	VB20X50	End-I	-38.6461	COMB5	3	46.2373	COMB11	3
B15	N1	VB20X50	Middle	-7.7292	COMB5	1	97.1912	COMB9	6
B15	N1	VB20X50	End-J	-38.6461	COMB5	3	46.2373	COMB11	3
B17	N1	V30X50	End-I	-29.6884	COMB9	2	29.6884	COMB9	2
B17	N1	V30X50	Middle	-101.7542	COMB9	6	29.6884	COMB9	2
B17	N1	V30X50	End-J	-148.4419	COMB9	10	49.4806	COMB9	4

Table 6.7 - Concrete Beam Shear Envelope

Label	Story	Section	Location	V kN	V Combo	At cm <sup>2</sup> /m	T for At kN-m	T Combo At	At Torsion cm <sup>2</sup> /m	T for As kN-m	T Combo As	As Torsion cm <sup>2</sup>
B1	N1	V30X50	End-I	52.2794	COMB7	2.5	4.3578	COMB5	1.65	4.3578	COMB5	5
B1	N1	V30X50	Middle	39.3695	COMB7	2.5	4.3578	COMB5	1.65	4.3578	COMB5	5
B1	N1	V30X50	End-J	44.6193	COMB7	2.5	4.3578	COMB5	1.65	4.3578	COMB5	5
B2	N1	V30X50	End-I	52.2794	COMB7	2.5	4.3578	COMB5	1.65	4.3578	COMB5	5
B2	N1	V30X50	Middle	39.3695	COMB7	2.5	4.3578	COMB5	1.65	4.3578	COMB5	5
B2	N1	V30X50	End-J	44.6193	COMB7	2.5	4.3578	COMB5	1.65	4.3578	COMB5	5
B4	N1	V30X50	End-I	43.788	COMB11	2.5	0	COMB11	0	0	COMB11	0
B4	N1	V30X50	Middle	42.2484	COMB8	2.5	0	COMB11	0	0	COMB11	0
B4	N1	V30X50	End-J	72.9799	COMB11	2.5	0	COMB11	0	0	COMB11	0
B6	N1	V30X50	End-I	9.9235	COMB11	0	0	COMB11	0	0	COMB11	0

Label	Story	Section	Location	V kN	V Combo	At cm <sup>2</sup> /m	T for At kN-m	T Combo At	At Torsion cm <sup>2</sup> /m	T for As kN-m	T Combo As	As Torsion cm <sup>2</sup>
B6	N1	V30X50	Middle	6.6156	COMB11	0	0	COMB11	0	0	COMB11	0
B6	N1	V30X50	End-J	16.5391	COMB11	0	0	COMB11	0	0	COMB11	0
B8	N1	V30X50	End-I		O/S		38.6461	COMB5	8.44	38.6461	COMB5	11
B8	N1	V30X50	Middle		O/S		38.6461	COMB5	8.44	38.6461	COMB5	11
B8	N1	V30X50	End-J		O/S		38.6461	COMB5	8.44	38.6461	COMB5	11
B15	N1	VB20X50	End-I	34.1428	COMB11	1.67	0	COMB11	0	0	COMB11	0
B15	N1	VB20X50	Middle	22.7619	COMB11	0	0	COMB11	0	0	COMB11	0
B15	N1	VB20X50	End-J	56.9047	COMB11	1.67	0	COMB11	0	0	COMB11	0
B17	N1	V30X50	End-I		O/S		38.6461	COMB5	8.44	38.6461	COMB5	11
B17	N1	V30X50	Middle		O/S		38.6461	COMB5	8.44	38.6461	COMB5	11
B17	N1	V30X50	End-J		O/S		38.6461	COMB5	8.44	38.6461	COMB5	11

Table 6.8 - Concrete Joint Envelope

Label	Story	Section	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio
C1	N1	C40X40								
C2	N1	C40X40								
C3	N1	C40X40								
C4	N1	C40X40								

Table 6.9 - Concrete Column Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Station mm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm <sup>2</sup>	As cm <sup>2</sup>
N1	C1	7	0	C40X40	Design	No Message		COMB5	16	43
N1	C1	7	275	C40X40	Design	No Message		COMB5	16	31
N1	C1	7	550	C40X40	Design	No Message		COMB5	16	23
N1	C1	7	825	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1100	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1375	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1650	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	1925	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2200	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2475	C40X40	Design	No Message		COMB11	16	16
N1	C1	7	2750	C40X40	Design	No Message		COMB5	16	26
N1	C2	8	0	C40X40	Design	No Message		COMB5	16	22
N1	C2	8	275	C40X40	Design	No Message		COMB6	16	18
N1	C2	8	550	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	825	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1100	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1375	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1650	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	1925	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2200	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2475	C40X40	Design	No Message		COMB11	16	16
N1	C2	8	2750	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	0	C40X40	Design	No Message		COMB5	16	43
N1	C3	9	275	C40X40	Design	No Message		COMB5	16	31
N1	C3	9	550	C40X40	Design	No Message		COMB5	16	23
N1	C3	9	825	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1100	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1375	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1650	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	1925	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	2200	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	2475	C40X40	Design	No Message		COMB11	16	16
N1	C3	9	2750	C40X40	Design	No Message		COMB5	16	26
N1	C4	10	0	C40X40	Design	No Message		COMB5	16	22



Story	Label	Unique Name	Station mm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm <sup>2</sup>	As cm <sup>2</sup>
N1	C4	10	275	C40X40	Design	No Message		COMB6	16	18
N1	C4	10	550	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	825	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1100	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1375	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1650	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	1925	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2200	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2475	C40X40	Design	No Message		COMB11	16	16
N1	C4	10	2750	C40X40	Design	No Message		COMB11	16	16

Table 6.9 - Concrete Column Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	Station mm	Mid Bar As cm <sup>2</sup>	Corner Bar As cm <sup>2</sup>	V Major Combo	At V Major cm <sup>2</sup> /m	V Minor Combo	At V Minor cm <sup>2</sup> /m	Warnings	Errors
N1	C1	7	0	5	6	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	275	3	5	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	550	2	3	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	825	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	1100	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	1375	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	1650	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	1925	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	2200	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	2475	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C1	7	2750	3	4	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	0	2	3	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	275	2	3	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	550	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	825	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	1100	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	1375	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	1650	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	1925	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	2200	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	2475	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C2	8	2750	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	0	5	6	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	275	3	5	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	550	2	3	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	825	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	1100	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	1375	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	1650	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	1925	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	2200	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	2475	2	2	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C3	9	2750	3	4	COMB11	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	0	2	3	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	275	2	3	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	550	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	825	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	1100	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	1375	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	1650	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	1925	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	2200	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	2475	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message
N1	C4	10	2750	2	2	COMB8	3.33	COMB8	3.33	No Message	No Message

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Station mm	Design Section	Status	As Top Combo	As,min Top cm <sup>2</sup>	As Top cm <sup>2</sup>	As Bottom Combo	As,min Bottom cm <sup>2</sup>	As Bottom cm <sup>2</sup>
N1	B1	13	200	V30X50	No Message	COMB6	4	10	COMB6	4	4
N1	B1	13	980	V30X50	No Message	COMB6	4	7	COMB6	3	3
N1	B1	13	1760	V30X50	No Message	COMB6	4	4	COMB6	3	3
N1	B1	13	2540	V30X50	No Message	COMB6	3	3	COMB6	3	3
N1	B1	13	3320	V30X50	No Message	COMB6	3	3	COMB6	3	3
N1	B1	13	4100	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B1	13	4880	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B1	13	5660	V30X50	No Message	COMB6	3	3	COMB6	4	4
N1	B1	13	6440	V30X50	No Message	COMB6	3	3	COMB6	4	4
N1	B1	13	7220	V30X50	No Message	COMB7	3	3	COMB7	4	4
N1	B1	13	8000	V30X50	No Message	COMB7	4	4	COMB6	4	4
N1	B2	14	200	V30X50	No Message	COMB6	4	10	COMB6	4	4
N1	B2	14	980	V30X50	No Message	COMB6	4	7	COMB6	3	3
N1	B2	14	1760	V30X50	No Message	COMB6	4	4	COMB6	3	3
N1	B2	14	2540	V30X50	No Message	COMB6	3	3	COMB6	3	3
N1	B2	14	3320	V30X50	No Message	COMB6	3	3	COMB6	3	3
N1	B2	14	4100	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B2	14	4880	V30X50	No Message	COMB6	3	3	COMB10	4	4
N1	B2	14	5660	V30X50	No Message	COMB6	3	3	COMB6	4	4
N1	B2	14	6440	V30X50	No Message	COMB6	3	3	COMB6	4	4
N1	B2	14	7220	V30X50	No Message	COMB7	3	3	COMB7	4	4
N1	B2	14	8000	V30X50	No Message	COMB7	4	4	COMB6	4	4
N1	B4	16	200	V30X50	No Message	COMB5	4	7	COMB5	3	3
N1	B4	16	980	V30X50	No Message	COMB5	4	4	COMB8	3	3
N1	B4	16	1760	V30X50	No Message	COMB5	2	2	COMB8	4	4
N1	B4	16	2540	V30X50	No Message	COMB5	2	2	COMB5	4	5
N1	B4	16	3320	V30X50	No Message	COMB5	2	2	COMB5	4	5
N1	B4	16	4100	V30X50	No Message	COMB5	2	2	COMB2	4	6
N1	B4	16	4880	V30X50	No Message	COMB5	2	2	COMB5	4	5
N1	B4	16	5660	V30X50	No Message	COMB5	2	2	COMB5	4	5
N1	B4	16	6440	V30X50	No Message	COMB5	2	2	COMB8	4	4
N1	B4	16	7220	V30X50	No Message	COMB5	4	4	COMB8	3	3
N1	B4	16	8000	V30X50	No Message	COMB5	4	7	COMB5	3	3
N1	B6	18	200	V30X50	No Message	COMB5	4	4	COMB8	2	2
N1	B6	18	980	V30X50	No Message	COMB8	2	2	COMB8	2	2
N1	B6	18	1760	V30X50	No Message	COMB8	1	1	COMB5	2	2
N1	B6	18	2540	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	3320	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	4100	V30X50	No Message	COMB5	1	1	COMB1	2	2
N1	B6	18	4880	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	5660	V30X50	No Message	COMB5	1	1	COMB5	2	2
N1	B6	18	6440	V30X50	No Message	COMB8	1	1	COMB5	2	2
N1	B6	18	7220	V30X50	No Message	COMB8	2	2	COMB8	2	2
N1	B6	18	8000	V30X50	No Message	COMB5	4	4	COMB8	2	2
N1	B8	2	0	V30X50	See ErrMsg	COMB5	0.06843	0.06843	COMB8	0.06843	0.06843
N1	B8	2	220	V30X50	See ErrMsg	COMB9	2	2	COMB9	2	2
N1	B8	2	440	V30X50	See ErrMsg	COMB9	2	2	COMB9	2	2
N1	B8	2	660	V30X50	See ErrMsg	COMB9	3	3	COMB9	2	2
N1	B8	2	880	V30X50	See ErrMsg	COMB10	4	4	COMB9	2	2
N1	B8	2	1100	V30X50	See ErrMsg	COMB9	4	4	COMB9	2	2
N1	B8	2	1320	V30X50	See ErrMsg	COMB9	4	5	COMB9	2	2
N1	B8	2	1540	V30X50	See ErrMsg	COMB9	4	6	COMB9	2	2
N1	B8	2	1760	V30X50	See ErrMsg	COMB9	4	7	COMB9	2	2
N1	B8	2	1980	V30X50	See ErrMsg	COMB9	4	9	COMB9	2	2
N1	B8	2	2200	V30X50	See ErrMsg	COMB9	4	10	COMB9	4	4
N1	B15	22	0	VB20X50	No Message	COMB5	3	3	COMB5	1	1
N1	B15	22	820	VB20X50	No Message	COMB5	1	1	COMB5	2	2

Story	Label	Unique Name	Station mm	Design Section	Status	As Top Combo	As,min Top cm <sup>2</sup>	As Top cm <sup>2</sup>	As Bottom Combo	As,min Bottom cm <sup>2</sup>	As Bottom cm <sup>2</sup>
N1	B15	22	1640	VB20X50	No Message	COMB5	1	1	COMB11	3	3
N1	B15	22	2460	VB20X50	No Message	COMB5	1	1	COMB9	3	4
N1	B15	22	3280	VB20X50	No Message	COMB5	1	1	COMB9	3	5
N1	B15	22	4100	VB20X50	No Message	COMB5	1	1	COMB9	3	6
N1	B15	22	4920	VB20X50	No Message	COMB5	1	1	COMB9	3	5
N1	B15	22	5740	VB20X50	No Message	COMB5	1	1	COMB9	3	4
N1	B15	22	6560	VB20X50	No Message	COMB5	1	1	COMB11	3	3
N1	B15	22	7380	VB20X50	No Message	COMB5	1	1	COMB5	2	2
N1	B15	22	8200	VB20X50	No Message	COMB5	3	3	COMB5	1	1
N1	B17	4	0	V30X50	See ErrMsg	COMB5	0.06843	0.06843	COMB8	0.06843	0.06843
N1	B17	4	220	V30X50	See ErrMsg	COMB9	2	2	COMB9	2	2
N1	B17	4	440	V30X50	See ErrMsg	COMB9	2	2	COMB9	2	2
N1	B17	4	660	V30X50	See ErrMsg	COMB9	3	3	COMB9	2	2
N1	B17	4	880	V30X50	See ErrMsg	COMB10	4	4	COMB9	2	2
N1	B17	4	1100	V30X50	See ErrMsg	COMB9	4	4	COMB9	2	2
N1	B17	4	1320	V30X50	See ErrMsg	COMB9	4	5	COMB9	2	2
N1	B17	4	1540	V30X50	See ErrMsg	COMB9	4	6	COMB9	2	2
N1	B17	4	1760	V30X50	See ErrMsg	COMB9	4	7	COMB9	2	2
N1	B17	4	1980	V30X50	See ErrMsg	COMB9	4	9	COMB9	2	2
N1	B17	4	2200	V30X50	See ErrMsg	COMB9	4	10	COMB9	4	4

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	Station mm	V Combo	At Shear cm <sup>2</sup> /m	Torsion Long Combo	At Torsion cm <sup>2</sup>	Torsion Tran Combo	At Torsion cm <sup>2</sup> /m	Warnings
N1	B1	13	200	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B1	13	980	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B1	13	1760	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B1	13	2540	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B1	13	3320	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B1	13	4100	COMB4	0.68	COMB11	5	COMB5	1.65	No Message
N1	B1	13	4880	COMB4	0.68	COMB11	5	COMB5	1.65	No Message
N1	B1	13	5660	COMB4	0.68	COMB11	5	COMB5	1.65	No Message
N1	B1	13	6440	COMB4	0.68	COMB11	5	COMB5	1.65	No Message
N1	B1	13	7220	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B1	13	8000	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B2	14	200	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B2	14	980	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B2	14	1760	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B2	14	2540	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B2	14	3320	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B2	14	4100	COMB4	0.68	COMB11	5	COMB5	1.65	No Message
N1	B2	14	4880	COMB4	0.68	COMB11	5	COMB5	1.65	No Message
N1	B2	14	5660	COMB4	0.68	COMB11	5	COMB5	1.65	No Message
N1	B2	14	6440	COMB4	0.68	COMB11	5	COMB5	1.65	No Message
N1	B2	14	7220	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B2	14	8000	COMB7	2.5	COMB11	5	COMB5	1.65	No Message
N1	B4	16	200	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	980	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	1760	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	2540	COMB8	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	3320	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B4	16	4100	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B4	16	4880	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B4	16	5660	COMB8	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	6440	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	7220	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B4	16	8000	COMB11	2.5	COMB11	0	COMB11	0	No Message
N1	B6	18	200	COMB11	0	COMB11	0	COMB11	0	No Message

Story	Label	Unique Name	Station mm	V Combo	At Shear cm <sup>2</sup> /m	Torsion Long Combo	AI Torsion cm <sup>2</sup>	Torsion Tran Combo	At Torsion cm <sup>2</sup> /m	Warnings
N1	B6	18	980	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	1760	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	2540	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	3320	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	4100	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	4880	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	5660	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	6440	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	7220	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B6	18	8000	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B8	2	0	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	220	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	440	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	660	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	880	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	1100	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	1320	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	1540	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	1760	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	1980	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B8	2	2200	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B15	22	0	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	820	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	1640	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	2460	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B15	22	3280	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B15	22	4100	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B15	22	4920	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B15	22	5740	COMB11	0	COMB11	0	COMB11	0	No Message
N1	B15	22	6560	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	7380	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B15	22	8200	COMB11	1.67	COMB11	0	COMB11	0	No Message
N1	B17	4	0	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	220	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	440	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	660	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	880	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	1100	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	1320	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	1540	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	1760	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	1980	COMB2	0	COMB5	11	COMB5	8.44	No Message
N1	B17	4	2200	COMB2	0	COMB5	11	COMB5	8.44	No Message

Table 6.10 - Concrete Beam Summary - ACI 318-08 (Part 3 of 2)

Story	Label	Unique Name	Station mm	Errors
N1	B1	13	200	No Message
N1	B1	13	980	No Message
N1	B1	13	1760	No Message
N1	B1	13	2540	No Message
N1	B1	13	3320	No Message
N1	B1	13	4100	No Message
N1	B1	13	4880	No Message
N1	B1	13	5660	No Message
N1	B1	13	6440	No Message
N1	B1	13	7220	No Message
N1	B1	13	8000	No Message
N1	B2	14	200	No Message

Story	Label	Unique Name	Station mm	Errors
N1	B2	14	980	No Message
N1	B2	14	1760	No Message
N1	B2	14	2540	No Message
N1	B2	14	3320	No Message
N1	B2	14	4100	No Message
N1	B2	14	4880	No Message
N1	B2	14	5660	No Message
N1	B2	14	6440	No Message
N1	B2	14	7220	No Message
N1	B2	14	8000	No Message
N1	B4	16	200	No Message
N1	B4	16	980	No Message
N1	B4	16	1760	No Message
N1	B4	16	2540	No Message
N1	B4	16	3320	No Message
N1	B4	16	4100	No Message
N1	B4	16	4880	No Message
N1	B4	16	5660	No Message
N1	B4	16	6440	No Message
N1	B4	16	7220	No Message
N1	B4	16	8000	No Message
N1	B6	18	200	No Message
N1	B6	18	980	No Message
N1	B6	18	1760	No Message
N1	B6	18	2540	No Message
N1	B6	18	3320	No Message
N1	B6	18	4100	No Message
N1	B6	18	4880	No Message
N1	B6	18	5660	No Message
N1	B6	18	6440	No Message
N1	B6	18	7220	No Message
N1	B6	18	8000	No Message
N1	B8	2	0	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	220	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	440	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	660	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	880	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1100	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1320	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1540	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1760	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	1980	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B8	2	2200	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B15	22	0	No Message
N1	B15	22	820	No Message
N1	B15	22	1640	No Message
N1	B15	22	2460	No Message
N1	B15	22	3280	No Message
N1	B15	22	4100	No Message

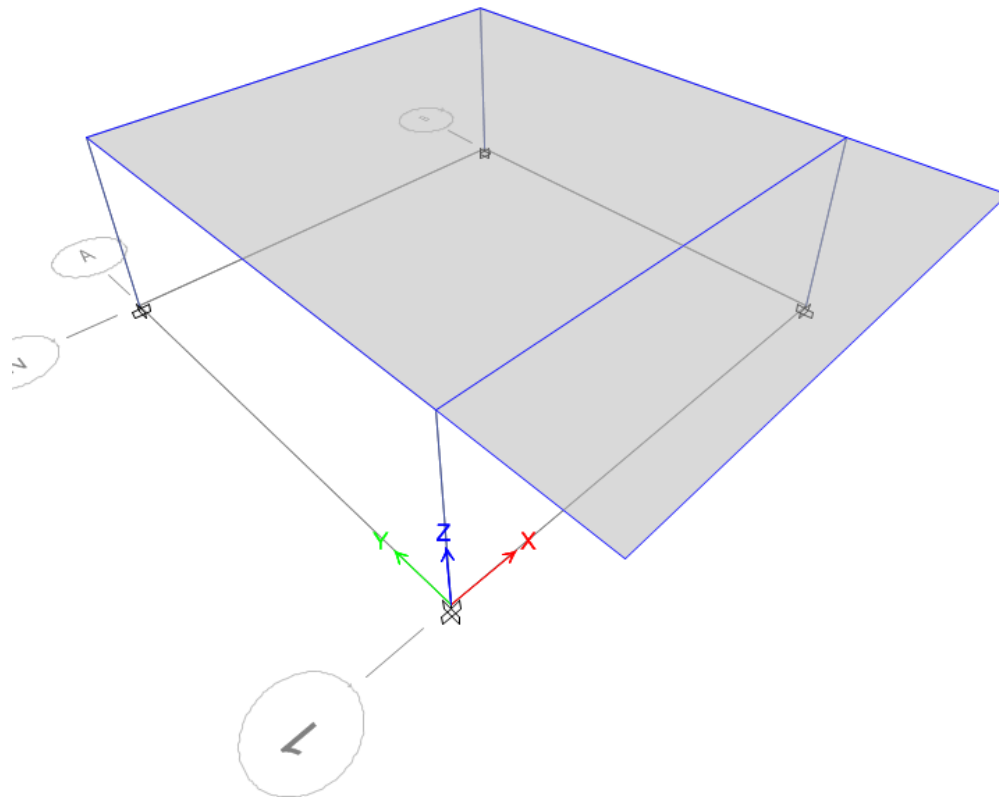
Story	Label	Unique Name	Station mm	Errors
N1	B15	22	4920	No Message
N1	B15	22	5740	No Message
N1	B15	22	6560	No Message
N1	B15	22	7380	No Message
N1	B15	22	8200	No Message
N1	B17	4	0	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	220	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	440	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	660	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	880	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1100	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1320	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1540	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1760	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	1980	Shear stress due to shear force and torsion together exceeds maximum allowed
N1	B17	4	2200	Shear stress due to shear force and torsion together exceeds maximum allowed

Table 6.11 - Concrete Joint Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Design Section	Status	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio
N1	C1	7	C40X40	Joint check not done.				
N1	C2	8	C40X40	Joint check not done.				
N1	C3	9	C40X40	Joint check not done.				
N1	C4	10	C40X40	Joint check not done.				

Table 6.11 - Concrete Joint Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio	Warnings	Errors
N1	C1	7					No Message	No Message
N1	C2	8					No Message	No Message
N1	C3	9					No Message	No Message
N1	C4	10					No Message	No Message



## Project Report

Model File: 004 2017 EDUCACION MODULO 3 DMO - E, Revision 0  
06/04/2017

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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	8.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	8.2

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	8200	0
3	8200	0	0
4	8200	8200	0
10	0	-2400	0
9	8200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B8	10	1	None
B15	10	9	None
B17	9	3	None

1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	9	3	None
		2	3	1	None
		3	1	10	None
		4	10	9	None
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	29882.02	29882.02	4.1	-0.7209	29882.02	29882.02	4.1	-0.7209	4.1	3.2834

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	29882.02	29882.02	538.4872	4.1	-0.7209

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	40173.51	40173.51	0
Base	2498.55	2498.55	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A416Gr270	Tendon	196500.6	0	76.9729	Fy=1689.91 MPa, Fu=1861.58 MPa
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3226
#3	9.5	1
#5	15.9	2
#6	19.1	3
#8	25.4	5
#9	28.7	6
15M	16	2

### 2.5 Tendon Sections

**Table 2.5 - Tendon Section Properties**

Name	Material	StrandArea cm <sup>2</sup>	Color
Tendon1	A416Gr270	1	Yellow

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	10	25	D1	
N1	9	26	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	8200	V30X50	V30X50	11
N1	B2	14	Beam	8200	V30X50	V30X50	11
N1	B4	16	Beam	8200	V30X50	V30X50	11
N1	B6	18	Beam	8200	V30X50	V30X50	11
N1	B8	2	Beam	2400	V30X50	V30X50	11
N1	B15	22	Beam	8200	VB20X50	VB20X50	11
N1	B17	4	Beam	2400	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F1	3	LOSA	90
N1	F5	5	CUB	

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed (Part 1 of 2)**

Story	Label	Unique Name	Design Type	Load Pattern	LoadType	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm
N1	B1	13	Beam	D	Force	Gravity	0	1	0	8200
N1	B2	14	Beam	D	Force	Gravity	0	1	0	8200
N1	B4	16	Beam	D	Force	Gravity	0	1	0	8200
N1	B15	22	Beam	D	Force	Gravity	0	1	0	8200

**Table 4.2 - Frame Loads - Distributed (Part 2 of 2)**

Story	Label	Unique Name	Force at Start kN/m	Force at End kN/m
N1	B1	13	4.4	0
N1	B2	14	4.4	0
N1	B4	16	4.4	4.4
N1	B15	22	1.55	1.55

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	3	D	Gravity	4.3
N1	F5	5	D	Gravity	0.64
N1	F1	3	L	Gravity	2
N1	F5	5	LR	Gravity	0.5
N1	F1	3	G	Gravity	1
N1	F5	5	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
Umbral	0	0.08	2
Umbral	0.01	0.086	
Umbral	0.02	0.093	
Umbral	0.03	0.099	

Name	Period sec	Acceleration	Damping %
Umbral	0.04	0.106	
Umbral	0.05	0.112	
Umbral	0.06	0.118	
Umbral	0.07	0.125	
Umbral	0.08	0.131	
Umbral	0.09	0.138	
Umbral	0.1	0.144	
Umbral	0.11	0.15	
Umbral	0.12	0.157	
Umbral	0.13	0.163	
Umbral	0.14	0.17	
Umbral	0.15	0.176	
Umbral	0.16	0.182	
Umbral	0.17	0.189	
Umbral	0.18	0.195	
Umbral	0.19	0.202	
Umbral	0.2	0.208	
Umbral	0.21	0.214	
Umbral	0.22	0.221	
Umbral	0.23	0.227	
Umbral	0.24	0.234	
Umbral	0.25	0.24	
Umbral	0.26	0.24	
Umbral	0.27	0.24	
Umbral	0.28	0.24	
Umbral	0.29	0.24	
Umbral	0.3	0.24	
Umbral	0.31	0.24	
Umbral	0.32	0.24	
Umbral	0.33	0.24	
Umbral	0.34	0.24	
Umbral	0.35	0.24	
Umbral	0.36	0.24	
Umbral	0.37	0.24	
Umbral	0.38	0.24	
Umbral	0.39	0.24	
Umbral	0.4	0.24	
Umbral	0.41	0.24	
Umbral	0.42	0.24	
Umbral	0.43	0.24	
Umbral	0.44	0.24	
Umbral	0.45	0.24	
Umbral	0.46	0.24	
Umbral	0.47	0.24	
Umbral	0.48	0.24	
Umbral	0.49	0.24	
Umbral	0.5	0.24	
Umbral	0.51	0.24	
Umbral	0.52	0.24	
Umbral	0.53	0.24	
Umbral	0.54	0.24	
Umbral	0.55	0.24	
Umbral	0.56	0.24	
Umbral	0.57	0.24	
Umbral	0.58	0.24	
Umbral	0.59	0.24	
Umbral	0.6	0.24	
Umbral	0.61	0.24	
Umbral	0.62	0.24	
Umbral	0.63	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	0.64	0.24	
Umbral	0.65	0.24	
Umbral	0.66	0.24	
Umbral	0.67	0.24	
Umbral	0.68	0.24	
Umbral	0.69	0.24	
Umbral	0.7	0.24	
Umbral	0.71	0.24	
Umbral	0.72	0.24	
Umbral	0.73	0.24	
Umbral	0.74	0.24	
Umbral	0.75	0.24	
Umbral	0.76	0.24	
Umbral	0.77	0.24	
Umbral	0.78	0.24	
Umbral	0.79	0.24	
Umbral	0.8	0.24	
Umbral	0.81	0.24	
Umbral	0.82	0.24	
Umbral	0.83	0.24	
Umbral	0.84	0.24	
Umbral	0.85	0.24	
Umbral	0.86	0.24	
Umbral	0.87	0.24	
Umbral	0.88	0.24	
Umbral	0.89	0.24	
Umbral	0.9	0.24	
Umbral	0.91	0.24	
Umbral	0.92	0.24	
Umbral	0.93	0.24	
Umbral	0.94	0.24	
Umbral	0.95	0.24	
Umbral	0.96	0.24	
Umbral	0.97	0.24	
Umbral	0.98	0.24	
Umbral	0.99	0.24	
Umbral	1	0.24	
Umbral	1.01	0.24	
Umbral	1.02	0.24	
Umbral	1.03	0.24	
Umbral	1.04	0.24	
Umbral	1.05	0.24	
Umbral	1.06	0.24	
Umbral	1.07	0.24	
Umbral	1.08	0.24	
Umbral	1.09	0.24	
Umbral	1.1	0.24	
Umbral	1.11	0.24	
Umbral	1.12	0.24	
Umbral	1.13	0.24	
Umbral	1.14	0.24	
Umbral	1.15	0.24	
Umbral	1.16	0.24	
Umbral	1.17	0.24	
Umbral	1.18	0.24	
Umbral	1.19	0.24	
Umbral	1.2	0.24	
Umbral	1.21	0.24	
Umbral	1.22	0.24	
Umbral	1.23	0.24	



Name	Period sec	Acceleration	Damping %
Umbral	1.24	0.24	
Umbral	1.25	0.24	
Umbral	1.26	0.24	
Umbral	1.27	0.24	
Umbral	1.28	0.24	
Umbral	1.29	0.24	
Umbral	1.3	0.24	
Umbral	1.31	0.24	
Umbral	1.32	0.24	
Umbral	1.33	0.24	
Umbral	1.34	0.24	
Umbral	1.35	0.24	
Umbral	1.36	0.24	
Umbral	1.37	0.24	
Umbral	1.38	0.24	
Umbral	1.39	0.24	
Umbral	1.4	0.24	
Umbral	1.41	0.24	
Umbral	1.42	0.24	
Umbral	1.43	0.24	
Umbral	1.44	0.24	
Umbral	1.45	0.24	
Umbral	1.46	0.24	
Umbral	1.47	0.24	
Umbral	1.48	0.24	
Umbral	1.49	0.24	
Umbral	1.5	0.24	
Umbral	1.51	0.24	
Umbral	1.52	0.24	
Umbral	1.53	0.24	
Umbral	1.54	0.24	
Umbral	1.55	0.24	
Umbral	1.56	0.24	
Umbral	1.57	0.24	
Umbral	1.58	0.24	
Umbral	1.59	0.24	
Umbral	1.6	0.24	
Umbral	1.61	0.24	
Umbral	1.62	0.24	
Umbral	1.63	0.24	
Umbral	1.64	0.24	
Umbral	1.65	0.24	
Umbral	1.66	0.24	
Umbral	1.67	0.24	
Umbral	1.68	0.24	
Umbral	1.69	0.24	
Umbral	1.7	0.24	
Umbral	1.71	0.24	
Umbral	1.72	0.24	
Umbral	1.73	0.24	
Umbral	1.74	0.24	
Umbral	1.75	0.24	
Umbral	1.76	0.24	
Umbral	1.77	0.24	
Umbral	1.78	0.24	
Umbral	1.79	0.24	
Umbral	1.8	0.24	
Umbral	1.81	0.24	
Umbral	1.82	0.24	
Umbral	1.83	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.84	0.24	
Umbral	1.85	0.24	
Umbral	1.86	0.24	
Umbral	1.87	0.24	
Umbral	1.88	0.24	
Umbral	1.89	0.24	
Umbral	1.9	0.24	
Umbral	1.91	0.24	
Umbral	1.92	0.24	
Umbral	1.93	0.24	
Umbral	1.94	0.24	
Umbral	1.95	0.24	
Umbral	1.96	0.24	
Umbral	1.97	0.24	
Umbral	1.98	0.24	
Umbral	1.99	0.24	
Umbral	2	0.24	
Umbral	2.01	0.239	
Umbral	2.02	0.238	
Umbral	2.03	0.236	
Umbral	2.04	0.235	
Umbral	2.05	0.234	
Umbral	2.06	0.233	
Umbral	2.07	0.232	
Umbral	2.08	0.231	
Umbral	2.09	0.23	
Umbral	2.1	0.229	
Umbral	2.11	0.227	
Umbral	2.12	0.226	
Umbral	2.13	0.225	
Umbral	2.14	0.224	
Umbral	2.15	0.223	
Umbral	2.16	0.222	
Umbral	2.17	0.221	
Umbral	2.18	0.22	
Umbral	2.19	0.219	
Umbral	2.2	0.218	
Umbral	2.21	0.217	
Umbral	2.22	0.216	
Umbral	2.23	0.215	
Umbral	2.24	0.214	
Umbral	2.25	0.213	
Umbral	2.26	0.212	
Umbral	2.27	0.211	
Umbral	2.28	0.211	
Umbral	2.29	0.21	
Umbral	2.3	0.209	
Umbral	2.31	0.208	
Umbral	2.32	0.207	
Umbral	2.33	0.206	
Umbral	2.34	0.205	
Umbral	2.35	0.204	
Umbral	2.36	0.203	
Umbral	2.37	0.203	
Umbral	2.38	0.202	
Umbral	2.39	0.201	
Umbral	2.4	0.2	
Umbral	2.41	0.199	
Umbral	2.42	0.198	
Umbral	2.43	0.198	

Name	Period sec	Acceleration	Damping %
Umbral	2.44	0.197	
Umbral	2.45	0.196	
Umbral	2.46	0.195	
Umbral	2.47	0.194	
Umbral	2.48	0.194	
Umbral	2.49	0.193	
Umbral	2.5	0.192	
Umbral	2.51	0.191	
Umbral	2.52	0.19	
Umbral	2.53	0.19	
Umbral	2.54	0.189	
Umbral	2.55	0.188	
Umbral	2.56	0.188	
Umbral	2.57	0.187	
Umbral	2.58	0.186	
Umbral	2.59	0.185	
Umbral	2.6	0.185	
Umbral	2.61	0.184	
Umbral	2.62	0.183	
Umbral	2.63	0.183	
Umbral	2.64	0.182	
Umbral	2.65	0.181	
Umbral	2.66	0.18	
Umbral	2.67	0.18	
Umbral	2.68	0.179	
Umbral	2.69	0.178	
Umbral	2.7	0.178	
Umbral	2.71	0.177	
Umbral	2.72	0.176	
Umbral	2.73	0.176	
Umbral	2.74	0.175	
Umbral	2.75	0.175	
Umbral	2.76	0.174	
Umbral	2.77	0.173	
Umbral	2.78	0.173	
Umbral	2.79	0.172	
Umbral	2.8	0.171	
Umbral	2.81	0.171	
Umbral	2.82	0.17	
Umbral	2.83	0.17	
Umbral	2.84	0.169	
Umbral	2.85	0.168	
Umbral	2.86	0.168	
Umbral	2.87	0.167	
Umbral	2.88	0.167	
Umbral	2.89	0.166	
Umbral	2.9	0.166	
Umbral	2.91	0.165	
Umbral	2.92	0.164	
Umbral	2.93	0.164	
Umbral	2.94	0.163	
Umbral	2.95	0.163	
Umbral	2.96	0.162	
Umbral	2.97	0.162	
Umbral	2.98	0.161	
Umbral	2.99	0.161	
Umbral	3	0.16	
Umbral	3.01	0.159	
Umbral	3.02	0.159	
Umbral	3.03	0.158	

Name	Period sec	Acceleration	Damping %
Umbral	3.04	0.158	
Umbral	3.05	0.157	
Umbral	3.06	0.157	
Umbral	3.07	0.156	
Umbral	3.08	0.156	
Umbral	3.09	0.155	
Umbral	3.1	0.155	
Umbral	3.11	0.154	
Umbral	3.12	0.154	
Umbral	3.13	0.153	
Umbral	3.14	0.153	
Umbral	3.15	0.152	
Umbral	3.16	0.152	
Umbral	3.17	0.151	
Umbral	3.18	0.151	
Umbral	3.19	0.15	
Umbral	3.2	0.15	
Umbral	3.21	0.15	
Umbral	3.22	0.149	
Umbral	3.23	0.149	
Umbral	3.24	0.148	
Umbral	3.25	0.148	
Umbral	3.26	0.147	
Umbral	3.27	0.147	
Umbral	3.28	0.146	
Umbral	3.29	0.146	
Umbral	3.3	0.145	
Umbral	3.31	0.145	
Umbral	3.32	0.145	
Umbral	3.33	0.144	
Umbral	3.34	0.144	
Umbral	3.35	0.143	
Umbral	3.36	0.143	
Umbral	3.37	0.142	
Umbral	3.38	0.142	
Umbral	3.39	0.142	
Umbral	3.4	0.141	
Umbral	3.41	0.141	
Umbral	3.42	0.14	
Umbral	3.43	0.14	
Umbral	3.44	0.14	
Umbral	3.45	0.139	
Umbral	3.46	0.139	
Umbral	3.47	0.138	
Umbral	3.48	0.138	
Umbral	3.49	0.138	
Umbral	3.5	0.137	
Umbral	3.51	0.137	
Umbral	3.52	0.136	
Umbral	3.53	0.136	
Umbral	3.54	0.136	
Umbral	3.55	0.135	
Umbral	3.56	0.135	
Umbral	3.57	0.134	
Umbral	3.58	0.134	
Umbral	3.59	0.134	
Umbral	3.6	0.133	
Umbral	3.61	0.133	
Umbral	3.62	0.133	
Umbral	3.63	0.132	

Name	Period sec	Acceleration	Damping %
Umbral	3.64	0.132	
Umbral	3.65	0.132	
Umbral	3.66	0.131	
Umbral	3.67	0.131	
Umbral	3.68	0.13	
Umbral	3.69	0.13	
Umbral	3.7	0.13	
Umbral	3.71	0.129	
Umbral	3.72	0.129	
Umbral	3.73	0.129	
Umbral	3.74	0.128	
Umbral	3.75	0.128	
Umbral	3.76	0.128	
Umbral	3.77	0.127	
Umbral	3.78	0.127	
Umbral	3.79	0.127	
Umbral	3.8	0.126	
Umbral	3.81	0.126	
Umbral	3.82	0.126	
Umbral	3.83	0.125	
Umbral	3.84	0.125	
Umbral	3.85	0.125	
Umbral	3.86	0.124	
Umbral	3.87	0.124	
Umbral	3.88	0.124	
Umbral	3.89	0.123	
Umbral	3.9	0.123	
Umbral	3.91	0.123	
Umbral	3.92	0.122	
Umbral	3.93	0.122	
Umbral	3.94	0.122	
Umbral	3.95	0.122	
Umbral	3.96	0.121	
Umbral	3.97	0.121	
Umbral	3.98	0.121	
Umbral	3.99	0.12	
Umbral	4	0.12	
Umbral	4.01	0.12	
Umbral	4.02	0.119	
Umbral	4.03	0.119	
Umbral	4.04	0.119	
Umbral	4.05	0.119	
Umbral	4.06	0.118	
Umbral	4.07	0.118	
Umbral	4.08	0.118	
Umbral	4.09	0.117	
Umbral	4.1	0.117	
Umbral	4.11	0.117	
Umbral	4.12	0.117	
Umbral	4.13	0.116	
Umbral	4.14	0.116	
Umbral	4.15	0.116	
Umbral	4.16	0.115	
Umbral	4.17	0.115	
Umbral	4.18	0.115	
Umbral	4.19	0.115	
Umbral	4.2	0.114	
Umbral	4.21	0.114	
Umbral	4.22	0.114	
Umbral	4.23	0.113	

Name	Period sec	Acceleration	Damping %
Umbral	4.24	0.113	
Umbral	4.25	0.113	
Umbral	4.26	0.113	
Umbral	4.27	0.112	
Umbral	4.28	0.112	
Umbral	4.29	0.112	
Umbral	4.3	0.112	
Umbral	4.31	0.111	
Umbral	4.32	0.111	
Umbral	4.33	0.111	
Umbral	4.34	0.111	
Umbral	4.35	0.11	
Umbral	4.36	0.11	
Umbral	4.37	0.11	
Umbral	4.38	0.11	
Umbral	4.39	0.109	
Umbral	4.4	0.109	
Umbral	4.41	0.109	
Umbral	4.42	0.109	
Umbral	4.43	0.108	
Umbral	4.44	0.108	
Umbral	4.45	0.108	
Umbral	4.46	0.108	
Umbral	4.47	0.107	
Umbral	4.48	0.107	
Umbral	4.49	0.107	
Umbral	4.5	0.107	
Umbral	4.51	0.106	
Umbral	4.52	0.106	
Umbral	4.53	0.106	
Umbral	4.54	0.106	
Umbral	4.55	0.105	
Umbral	4.56	0.105	
Umbral	4.57	0.105	
Umbral	4.58	0.105	
Umbral	4.59	0.105	
Umbral	4.6	0.104	
Umbral	4.61	0.104	
Umbral	4.62	0.104	
Umbral	4.63	0.104	
Umbral	4.64	0.103	
Umbral	4.65	0.103	
Umbral	4.66	0.103	
Umbral	4.67	0.103	
Umbral	4.68	0.103	
Umbral	4.69	0.102	
Umbral	4.7	0.102	
Umbral	4.71	0.102	
Umbral	4.72	0.102	
Umbral	4.73	0.101	
Umbral	4.74	0.101	
Umbral	4.75	0.101	
Umbral	4.76	0.101	
Umbral	4.77	0.101	
Umbral	4.78	0.1	
Umbral	4.79	0.1	
Umbral	4.8	0.1	
Umbral	4.81	0.1	
Umbral	4.82	0.1	
Umbral	4.83	0.099	

Name	Period sec	Acceleration	Damping %
Umbral	4.84	0.099	
Umbral	4.85	0.099	
Umbral	4.86	0.099	
Umbral	4.87	0.099	
Umbral	4.88	0.098	
Umbral	4.89	0.098	
Umbral	4.9	0.098	
Umbral	4.91	0.098	
Umbral	4.92	0.098	
Umbral	4.93	0.097	
Umbral	4.94	0.097	
Umbral	4.95	0.097	
Umbral	4.96	0.097	
Umbral	4.97	0.097	
Umbral	4.98	0.096	
Umbral	4.99	0.096	
Umbral	5	0.096	
Umbral	5.01	0.096	
Umbral	5.02	0.096	
Umbral	5.03	0.095	
Umbral	5.04	0.095	
Umbral	5.05	0.095	
Umbral	5.06	0.095	
Umbral	5.07	0.095	
Umbral	5.08	0.094	
Umbral	5.09	0.094	
Umbral	5.1	0.094	
Umbral	5.11	0.094	
Umbral	5.12	0.094	
Umbral	5.13	0.094	
Umbral	5.14	0.093	
Umbral	5.15	0.093	
Umbral	5.16	0.093	
Umbral	5.17	0.093	
Umbral	5.18	0.093	
Umbral	5.19	0.092	
Umbral	5.2	0.092	
Umbral	5.21	0.092	
Umbral	5.22	0.092	
Umbral	5.23	0.092	
Umbral	5.24	0.092	
Umbral	5.25	0.091	
Umbral	5.26	0.091	
Umbral	5.27	0.091	
Umbral	5.28	0.091	
Umbral	5.29	0.091	
Umbral	5.3	0.091	
Umbral	5.31	0.09	
Umbral	5.32	0.09	
Umbral	5.33	0.09	
Umbral	5.34	0.09	
Umbral	5.35	0.09	
Umbral	5.36	0.09	
Umbral	5.37	0.089	
Umbral	5.38	0.089	
Umbral	5.39	0.089	
Umbral	5.4	0.089	
Umbral	5.41	0.089	
Umbral	5.42	0.089	
Umbral	5.43	0.088	

Name	Period sec	Acceleration	Damping %
Umbral	5.44	0.088	
Umbral	5.45	0.088	
Umbral	5.46	0.088	
Umbral	5.47	0.088	
Umbral	5.48	0.088	
Umbral	5.49	0.087	
Umbral	5.5	0.087	
Umbral	5.51	0.087	
Umbral	5.52	0.087	
Umbral	5.53	0.087	
Umbral	5.54	0.087	
Umbral	5.55	0.086	
Umbral	5.56	0.086	
Umbral	5.57	0.086	
Umbral	5.58	0.086	
Umbral	5.59	0.086	
Umbral	5.6	0.086	
Umbral	5.61	0.086	
Umbral	5.62	0.085	
Umbral	5.63	0.085	
Umbral	5.64	0.085	
Umbral	5.65	0.085	
Umbral	5.66	0.085	
Umbral	5.67	0.085	
Umbral	5.68	0.085	
Umbral	5.69	0.084	
Umbral	5.7	0.084	
Umbral	5.71	0.084	
Umbral	5.72	0.084	
Umbral	5.73	0.084	
Umbral	5.74	0.084	
Umbral	5.75	0.083	
Umbral	5.76	0.083	
Umbral	5.77	0.083	
Umbral	5.78	0.083	
Umbral	5.79	0.083	
Umbral	5.8	0.083	
Umbral	5.81	0.083	
Umbral	5.82	0.082	
Umbral	5.83	0.082	
Umbral	5.84	0.082	
Umbral	5.85	0.082	
Umbral	5.86	0.082	
Umbral	5.87	0.082	
Umbral	5.88	0.082	
Umbral	5.89	0.081	
Umbral	5.9	0.081	
Umbral	5.91	0.081	
Umbral	5.92	0.081	
Umbral	5.93	0.081	
Umbral	5.94	0.081	
Umbral	5.95	0.081	
Umbral	5.96	0.081	
Umbral	5.97	0.08	
Umbral	5.98	0.08	
Umbral	5.99	0.08	
Umbral	6	0.08	
Umbral	6.01	0.08	
Umbral	6.02	0.08	
Umbral	6.03	0.08	



Name	Period sec	Acceleration	Damping %
Umbral	6.04	0.079	
Umbral	6.05	0.079	
Umbral	6.06	0.079	
Umbral	6.07	0.079	
Umbral	6.08	0.079	
Umbral	6.09	0.079	
Umbral	6.1	0.079	
Umbral	6.11	0.079	
Umbral	6.12	0.078	
Umbral	6.13	0.078	
Umbral	6.14	0.078	
Umbral	6.15	0.078	
Umbral	6.16	0.078	
Umbral	6.17	0.078	
Umbral	6.18	0.078	
Umbral	6.19	0.078	
Umbral	6.2	0.077	
Umbral	6.21	0.077	
Umbral	6.22	0.077	
Umbral	6.23	0.077	
Umbral	6.24	0.077	
Umbral	6.25	0.077	
Umbral	6.26	0.077	
Umbral	6.27	0.077	
Umbral	6.28	0.076	
Umbral	6.29	0.076	
Umbral	6.3	0.076	
Umbral	6.31	0.076	
Umbral	6.32	0.076	
Umbral	6.33	0.076	
Umbral	6.34	0.076	
Umbral	6.35	0.076	
Umbral	6.36	0.075	
Umbral	6.37	0.075	
Umbral	6.38	0.075	
Umbral	6.39	0.075	
Umbral	6.4	0.075	
Umbral	6.41	0.075	
Umbral	6.42	0.075	
Umbral	6.43	0.075	
Umbral	6.44	0.075	
Umbral	6.45	0.074	
Umbral	6.46	0.074	
Umbral	6.47	0.074	
Umbral	6.48	0.074	
Umbral	6.49	0.074	
Umbral	6.5	0.074	
Umbral	6.51	0.074	
Umbral	6.52	0.074	
Umbral	6.53	0.074	
Umbral	6.54	0.073	
Umbral	6.55	0.073	
Umbral	6.56	0.073	
Umbral	6.57	0.073	
Umbral	6.58	0.073	
Umbral	6.59	0.073	
Umbral	6.6	0.073	
Umbral	6.61	0.073	
Umbral	6.62	0.073	
Umbral	6.63	0.072	

Name	Period sec	Acceleration	Damping %
Umbral	6.64	0.072	
Umbral	6.65	0.072	
Umbral	6.66	0.072	
Umbral	6.67	0.072	
Umbral	6.68	0.072	
Umbral	6.69	0.072	
Umbral	6.7	0.072	
Umbral	6.71	0.072	
Umbral	6.72	0.071	
Umbral	6.73	0.071	
Umbral	6.74	0.071	
Umbral	6.75	0.071	
Umbral	6.76	0.071	
Umbral	6.77	0.071	
Umbral	6.78	0.071	
Umbral	6.79	0.071	
Umbral	6.8	0.071	
Umbral	6.81	0.07	
Umbral	6.82	0.07	
Umbral	6.83	0.07	
Umbral	6.84	0.07	
Umbral	6.85	0.07	
Umbral	6.86	0.07	
Umbral	6.87	0.07	
Umbral	6.88	0.07	
Umbral	6.89	0.07	
Umbral	6.9	0.07	
Umbral	6.91	0.069	
Umbral	6.92	0.069	
Umbral	6.93	0.069	
Umbral	6.94	0.069	
Umbral	6.95	0.069	
Umbral	6.96	0.069	
Umbral	6.97	0.069	
Umbral	6.98	0.069	
Umbral	6.99	0.069	
Umbral	7	0.069	
Umbral	7.01	0.068	
Umbral	7.02	0.068	
Umbral	7.03	0.068	
Umbral	7.04	0.068	
Umbral	7.05	0.068	
Umbral	7.06	0.068	
Umbral	7.07	0.068	
Umbral	7.08	0.068	
Umbral	7.09	0.068	
Umbral	7.1	0.068	
Umbral	7.11	0.068	
Umbral	7.12	0.067	
Umbral	7.13	0.067	
Umbral	7.14	0.067	
Umbral	7.15	0.067	
Umbral	7.16	0.067	
Umbral	7.17	0.067	
Umbral	7.18	0.067	
Umbral	7.19	0.067	
Umbral	7.2	0.067	
Umbral	7.21	0.067	
Umbral	7.22	0.066	
Umbral	7.23	0.066	

Name	Period sec	Acceleration	Damping %
Umbral	7.24	0.066	
Umbral	7.25	0.066	
Umbral	7.26	0.066	
Umbral	7.27	0.066	
Umbral	7.28	0.066	
Umbral	7.29	0.066	
Umbral	7.3	0.066	
Umbral	7.31	0.066	
Umbral	7.32	0.066	
Umbral	7.33	0.065	
Umbral	7.34	0.065	
Umbral	7.35	0.065	
Umbral	7.36	0.065	
Umbral	7.37	0.065	
Umbral	7.38	0.065	
Umbral	7.39	0.065	
Umbral	7.4	0.065	
Umbral	7.41	0.065	
Umbral	7.42	0.065	
Umbral	7.43	0.065	
Umbral	7.44	0.065	
Umbral	7.45	0.064	
Umbral	7.46	0.064	
Umbral	7.47	0.064	
Umbral	7.48	0.064	
Umbral	7.49	0.064	
Umbral	7.5	0.064	

4.4 Load Cases

Table 4.5 - Load Cases - Summary

Name	Type
D	Linear Static
L	Linear Static
LR	Linear Static
EX	Response Spectrum
EY	Response Spectrum
DISX	Response Spectrum
DISY	Response Spectrum
W	Linear Static
G	Linear Static
DERUX	Response Spectrum
DERUY	Response Spectrum

4.5 Load Combinations

Table 4.6 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB1	D	1.4	Linear Add	No
COMB2	D	1.2	Linear Add	No
COMB2	L	1.6		No
COMB2	LR	0.5		No
COMB3	D	1.2	Linear Add	No
COMB3	L	1		No
COMB3	LR	1.6		No
COMB4	D	1.2	Linear Add	No
COMB4	L	1		No
COMB4	LR	0.5		No
COMB5	D	1.2	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
COMB5	L	1		No
COMB5	DISX	1		No
COMB5	DISY	0.3		No
COMB6	D	1.2	Linear Add	No
COMB6	L	1		No
COMB6	DISY	1		No
COMB6	DISX	0.3		No
COMB7	D	0.9	Linear Add	No
COMB7	DISY	1		No
COMB7	DISX	0.3		No
COMB8	D	0.9	Linear Add	No
COMB8	DISY	0.3		No
COMB8	DISX	1		No
ENVE	COMB1	1	Envelope	No
ENVE	COMB2	1		No
ENVE	COMB3	1		No
ENVE	COMB4	1		No
ENVE	COMB5	1		No
ENVE	COMB6	1		No
ENVE	COMB7	1		No
ENVE	COMB8	1		No
CIM01	D	1	Linear Add	No
CIM02	D	1	Linear Add	No
CIM02	L	1		No
CIM03	D	1	Linear Add	No
CIM03	LR	1		No
CIM04	D	1	Linear Add	No
CIM04	L	0.75		No
CIM04	LR	0.75		No
CIM05	D	1	Linear Add	No
CIM05	DISX	0.7		No
CIM05	DISY	0.21		No
CIM06	D	1	Linear Add	No
CIM06	DISX	0.21		No
CIM06	DISY	0.7		No
CIM07	D	1	Linear Add	No
CIM07	DISX	0.53		No
CIM07	DISY	0.16		No
CIM07	L	0.75		No
CIM07	LR	0.75		No
CIM08	D	1	Linear Add	No
CIM08	DISX	0.16		No
CIM08	DISY	0.53		No
CIM08	L	0.75		No
CIM08	LR	0.75		No
DER01	D	1.4	Linear Add	No
DER02	D	1.2	Linear Add	No
DER02	L	1.6		No
DER02	LR	0.5		No
DER03	D	1.2	Linear Add	No
DER03	L	1		No
DER03	LR	1.6		No
DER04	D	1.2	Linear Add	No
DER04	L	1		No
DER04	LR	0.5		No
DER05	D	1.2	Linear Add	No
DER05	L	1		No
DER05	EX	1		No
DER06	D	1.2	Linear Add	No
DER06	L	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
DER06	EY	1		No
DER07	D	0.9	Linear Add	No
DER07	EX	1		No
DER08	D	0.9	Linear Add	No
DER08	EY	1		No
DERUD01	D	1.4	Linear Add	No
DERUD02	D	1.2	Linear Add	No
DERUD02	L	1.6		No
DERUD02	LR	0.5		No
DERUD03	D	1.2	Linear Add	No
DERUD03	L	1		No
DERUD03	LR	1.6		No
DERUD04	D	1.2	Linear Add	No
DERUD04	L	1		No
DERUD04	LR	0.5		No
DERUD05	D	1.2	Linear Add	No
DERUD05	L	1		No
DERUD05	DERUX	1		No
DERUD06	D	1.2	Linear Add	No
DERUD06	L	1		No
DERUD06	DERUY	1		No
DERUD07	D	0.9	Linear Add	No
DERUD07	DERUX	1		No
DERUD08	D	0.9	Linear Add	No
DERUD08	DERUY	1		No
VIG01	D	1.2	Linear Add	No
VIG01	L	1		No
VIG01	DISX	2		No
VIG01	DISY	0.6		No
VIG02	D	1.2	Linear Add	No
VIG02	L	1		No
VIG02	DISX	0.6		No
VIG02	DISY	2		No
VIG03	D	0.9	Linear Add	No
VIG03	DISX	2		No
VIG03	DISY	0.6		No
VIG04	D	0.9	Linear Add	No
VIG04	DISX	0.6		No
VIG04	DISY	2		No
COL1	D	1.2	Linear Add	No
COL1	L	1		No
COL1	DISX	3		No
COL1	DISY	0.9		No
COL2	D	1.2	Linear Add	No
COL2	L	1		No
COL2	DISX	0.9		No
COL2	DISY	3		No
COL3	D	0.9	Linear Add	No
COL3	DISX	3		No
COL3	DISY	0.9		No
COL4	D	0.9	Linear Add	No
COL4	DISX	0.9		No
COL4	DISY	3		No
CIM09	D	0.6	Linear Add	No
CIM09	DISX	0.7		No
CIM09	DISY	0.21		No
CIM10	D	0.6	Linear Add	No
CIM10	DISX	0.21		No
CIM10	DISY	0.7		No
CIM11	D	1	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
CIM11	G	1		No
CIM12	D	1	Linear Add	No
CIM12	G	0.75		No
CIM12	L	0.75		No
CIM13	D	1	Linear Add	No
CIM13	G	0.75		No
CIM13	L	0.75		No
CIM13	DISX	0.53		No
CIM13	DISY	0.16		No
CIM14	D	1	Linear Add	No
CIM14	G	0.75		No
CIM14	L	0.75		No
CIM14	DISX	0.16		No
CIM14	DISY	0.53		No
CIM15	D	0.6	Linear Add	No
COMB9	D	1.2	Linear Add	No
COMB9	L	1.6		No
COMB9	G	0.5		No
COMB10	D	1.2	Linear Add	No
COMB10	L	1		No
COMB10	G	1.6		No
COMB11	D	1.2	Linear Add	No
COMB11	L	1		No
COMB11	G	0.5		No
DER09	D	1.2	Linear Add	No
DER09	L	1.6		No
DER09	G	0.5		No
DERUD09	D	1.2	Linear Add	No
DERUD09	L	1.6		No
DERUD09	G	0.5		No
DER10	D	1.2	Linear Add	No
DER10	L	1		No
DER10	G	1.6		No
DERUD10	D	1.2	Linear Add	No
DERUD10	L	1		No
DERUD10	G	1.6		No
DER11	D	1.2	Linear Add	No
DER11	L	1		No
DER11	G	0.5		No
DERUD11	D	1.2	Linear Add	No
DERUD11	L	1		No
DERUD11	G	0.5		No

### 5 Analysis Results

This chapter provides analysis results.

#### 5.1 Structure Results

**Table 5.1 - Base Reactions**

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
D	0	0	406.662	728.9378	-1667.3142	0	0	0	0
L	0	0	39.36	-47.3513	-161.376	0	0	0	0
LR	0	0	33.62	137.843	-137.842	0	0	0	0
EX Max	387.969	0	0	0	1265.7439	1840.023	0	0	0
EY Max	0	388.5912	0	1266.9216	0	1593.2237	0	0	0
DISX Max	143.4796	0	0	0	468.1006	680.4819	0	0	0
DISY Max	0	143.7047	0	468.5196	0	589.1892	0	0	0
W	0	0	0	0	0	0	0	0	0
G	0	0	86.92	252.0102	-356.372	0	0	0	0
DERUX Max	59.8783	0	0	0	195.3842	246.4616	0	0	0
DERUY Max	0	68.052	0	221.8697	0	279.0134	0	0	0
COMB1	0	0	569.3268	1020.5129	-2334.2399	0	0	0	0
COMB2	0	0	567.7804	867.8847	-2327.8996	0	0	0	0
COMB3	0	0	581.1464	1047.9227	-2382.7002	0	0	0	0
COMB4	0	0	544.1644	896.2955	-2231.074	0	0	0	0
COMB5 Max	143.4796	43.1114	527.3544	967.9299	-1694.0525	857.2386	0	0	0
COMB5 Min	-143.4796	-43.1114	527.3544	686.8181	-2630.2536	-857.2386	0	0	0
COMB6 Max	43.0439	143.7047	527.3544	1295.8936	-2021.7229	793.3338	0	0	0
COMB6 Min	-43.0439	-143.7047	527.3544	358.8544	-2302.5832	-793.3338	0	0	0
COMB7 Max	43.0439	143.7047	365.9958	1124.5636	-1360.1526	793.3338	0	0	0
COMB7 Min	-43.0439	-143.7047	365.9958	187.5244	-1641.0129	-793.3338	0	0	0
COMB8 Max	143.4796	43.1114	365.9958	796.5999	-1032.4822	857.2386	0	0	0
COMB8 Min	-143.4796	-43.1114	365.9958	515.4881	-1968.6833	-857.2386	0	0	0
ENVE Max	143.4796	143.7047	581.1464	1295.8936	-1032.4822	857.2386	0	0	0
ENVE Min	-143.4796	-143.7047	365.9958	187.5244	-2630.2536	-857.2386	0	0	0
CIM01	0	0	406.662	728.9378	-1667.3142	0	0	0	0
CIM02	0	0	446.022	681.5864	-1828.6902	0	0	0	0
CIM03	0	0	440.282	866.7807	-1805.1562	0	0	0	0
CIM04	0	0	461.397	796.8065	-1891.7277	0	0	0	0
CIM05 Max	100.4358	30.178	406.662	827.3269	-1339.6438	600.0671	0	0	0
CIM05 Min	-100.4358	-30.178	406.662	630.5487	-1994.9846	-600.0671	0	0	0
CIM06 Max	30.1307	100.5933	406.662	1056.9015	-1569.0131	555.3337	0	0	0
CIM06 Min	-30.1307	-100.5933	406.662	400.9741	-1765.6153	-555.3337	0	0	0
CIM07 Max	76.0442	22.9928	461.397	871.7696	-1643.6344	454.9257	0	0	0
CIM07 Min	-76.0442	-22.9928	461.397	721.8434	-2139.821	-454.9257	0	0	0
CIM08 Max	22.9567	76.1635	461.397	1045.1219	-1816.8316	421.1474	0	0	0
CIM08 Min	-22.9567	-76.1635	461.397	548.4911	-1966.6238	-421.1474	0	0	0
DER01	0	0	569.3268	1020.5129	-2334.2399	0	0	0	0
DER02	0	0	567.7804	867.8847	-2327.8996	0	0	0	0
DER03	0	0	581.1464	1047.9227	-2382.7002	0	0	0	0
DER04	0	0	544.1644	896.2955	-2231.074	0	0	0	0
DER05 Max	387.969	0	527.3544	827.374	-896.4091	1840.023	0	0	0
DER05 Min	-387.969	0	527.3544	827.374	-3427.897	-1840.023	0	0	0
DER06 Max	0	388.5912	527.3544	2094.2956	-2162.153	1593.2237	0	0	0
DER06 Min	0	-388.5912	527.3544	-439.5476	-2162.153	-1593.2237	0	0	0
DER07 Max	387.969	0	365.9958	656.044	-234.8389	1840.023	0	0	0
DER07 Min	-387.969	0	365.9958	656.044	-2766.3267	-1840.023	0	0	0
DER08 Max	0	388.5912	365.9958	1922.9656	-1500.5828	1593.2237	0	0	0
DER08 Min	0	-388.5912	365.9958	-610.8775	-1500.5828	-1593.2237	0	0	0
DERUD01	0	0	569.3268	1020.5129	-2334.2399	0	0	0	0
DERUD02	0	0	567.7804	867.8847	-2327.8996	0	0	0	0
DERUD03	0	0	581.1464	1047.9227	-2382.7002	0	0	0	0
DERUD04	0	0	544.1644	896.2955	-2231.074	0	0	0	0
DERUD05 Max	59.8783	0	527.3544	827.374	-1966.7689	246.4616	0	0	0

Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m	X m	Y m	Z m
DERUD05 Min	-59.8783	0	527.3544	827.374	-2357.5372	-246.4616	0	0	0
DERUD06 Max	0	68.052	527.3544	1049.2437	-2162.153	279.0134	0	0	0
DERUD06 Min	0	-68.052	527.3544	605.5043	-2162.153	-279.0134	0	0	0
DERUD07 Max	59.8783	0	365.9958	656.044	-1305.1986	246.4616	0	0	0
DERUD07 Min	-59.8783	0	365.9958	656.044	-1695.967	-246.4616	0	0	0
DERUD08 Max	0	68.052	365.9958	877.9137	-1500.5828	279.0134	0	0	0
DERUD08 Min	0	-68.052	365.9958	434.1743	-1500.5828	-279.0134	0	0	0
VIG01 Max	286.9593	86.2228	527.3544	1108.4858	-1225.9519	1714.4773	0	0	0
VIG01 Min	-286.9593	-86.2228	527.3544	546.2622	-3098.3542	-1714.4773	0	0	0
VIG02 Max	86.0878	287.4094	527.3544	1764.4132	-1881.2927	1586.6676	0	0	0
VIG02 Min	-86.0878	-287.4094	527.3544	-109.6652	-2443.0134	-1586.6676	0	0	0
VIG03 Max	286.9593	86.2228	365.9958	937.1558	-564.3817	1714.4773	0	0	0
VIG03 Min	-286.9593	-86.2228	365.9958	374.9322	-2436.7839	-1714.4773	0	0	0
VIG04 Max	86.0878	287.4094	365.9958	1593.0832	-1219.7224	1586.6676	0	0	0
VIG04 Min	-86.0878	-287.4094	365.9958	-280.9952	-1781.4431	-1586.6676	0	0	0
COL1 Max	430.4389	129.3342	527.3544	1249.0416	-757.8513	2571.7159	0	0	0
COL1 Min	-430.4389	-129.3342	527.3544	405.7064	-3566.4547	-2571.7159	0	0	0
COL2 Max	129.1317	431.1141	527.3544	2232.9328	-1740.8625	2380.0014	0	0	0
COL2 Min	-129.1317	-431.1141	527.3544	-578.1848	-2583.4435	-2380.0014	0	0	0
COL3 Max	430.4389	129.3342	365.9958	1077.7117	-96.2811	2571.7159	0	0	0
COL3 Min	-430.4389	-129.3342	365.9958	234.3764	-2904.8845	-2571.7159	0	0	0
COL4 Max	129.1317	431.1141	365.9958	2061.6028	-1079.2923	2380.0014	0	0	0
COL4 Min	-129.1317	-431.1141	365.9958	-749.5148	-1921.8733	-2380.0014	0	0	0
CIM09 Max	100.4358	30.178	243.9972	535.7518	-672.7181	600.0671	0	0	0
CIM09 Min	-100.4358	-30.178	243.9972	338.9736	-1328.0589	-600.0671	0	0	0
CIM10 Max	30.1307	100.5933	243.9972	765.3264	-902.0874	555.3337	0	0	0
CIM10 Min	-30.1307	-100.5933	243.9972	109.3989	-1098.6896	-555.3337	0	0	0
CIM11	0	0	493.582	980.948	-2023.6862	0	0	0	0
CIM12	0	0	501.372	882.432	-2055.6252	0	0	0	0
CIM13 Max	76.0442	22.9928	501.372	957.3951	-1807.5319	454.9257	0	0	0
CIM13 Min	-76.0442	-22.9928	501.372	807.4688	-2303.7185	-454.9257	0	0	0
CIM14 Max	22.9567	76.1635	501.372	1130.7474	-1980.7291	421.1474	0	0	0
CIM14 Min	-22.9567	-76.1635	501.372	634.1166	-2130.5213	-421.1474	0	0	0
CIM15	0	0	243.9972	437.3627	-1000.3885	0	0	0	0
COMB9	0	0	594.4304	924.9683	-2437.1646	0	0	0	0
COMB10	0	0	666.4264	1230.5904	-2732.3482	0	0	0	0
COMB11	0	0	570.8144	953.3791	-2340.339	0	0	0	0
DER09	0	0	594.4304	924.9683	-2437.1646	0	0	0	0
DERUD09	0	0	594.4304	924.9683	-2437.1646	0	0	0	0
DER10	0	0	666.4264	1230.5904	-2732.3482	0	0	0	0
DERUD10	0	0	666.4264	1230.5904	-2732.3482	0	0	0	0
DER11	0	0	570.8144	953.3791	-2340.339	0	0	0	0
DERUD11	0	0	570.8144	953.3791	-2340.339	0	0	0	0

Table 5.2 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	29882.02	29882.02	4.1	-0.7209	29882.02	29882.02	4.1	-0.7209	4.1	3.2834

Table 5.3 - Diaphragm Center of Mass Displacements

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	D	0	-1.2	0	1	4.1	-0.7209	3.25
N1	D1	L	0	-0.3	0	1	4.1	-0.7209	3.25
N1	D1	LR	0	0.004378	0	1	4.1	-0.7209	3.25
N1	D1	EX Max	16.6	0	0.00173	1	4.1	-0.7209	3.25
N1	D1	EY Max	0	10.5	0	1	4.1	-0.7209	3.25
N1	D1	DISX Max	6.1	0	0.00064	1	4.1	-0.7209	3.25
N1	D1	DISY Max	0	3.9	0	1	4.1	-0.7209	3.25



Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	W	0	0	0	1	4.1	-0.7209	3.25
N1	D1	G	0	-0.1	0	1	4.1	-0.7209	3.25
N1	D1	DERUX Max	2.7	0	0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUY Max	0	1.8	0	1	4.1	-0.7209	3.25
N1	D1	COMB1	0	-1.7	0	1	4.1	-0.7209	3.25
N1	D1	COMB2	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	COMB3	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	COMB4	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	COMB5 Max	6.1	-0.6	0.00064	1	4.1	-0.7209	3.25
N1	D1	COMB5 Min	-6.1	-3	-0.00064	1	4.1	-0.7209	3.25
N1	D1	COMB6 Max	1.8	2.1	0.000192	1	4.1	-0.7209	3.25
N1	D1	COMB6 Min	-1.8	-5.7	-0.000192	1	4.1	-0.7209	3.25
N1	D1	COMB7 Max	1.8	2.8	0.000192	1	4.1	-0.7209	3.25
N1	D1	COMB7 Min	-1.8	-5	-0.000192	1	4.1	-0.7209	3.25
N1	D1	COMB8 Max	6.1	0.04597	0.00064	1	4.1	-0.7209	3.25
N1	D1	COMB8 Min	-6.1	-2.3	-0.00064	1	4.1	-0.7209	3.25
N1	D1	ENVE Max	6.1	2.8	0.00064	1	4.1	-0.7209	3.25
N1	D1	ENVE Min	-6.1	-5.7	-0.00064	1	4.1	-0.7209	3.25
N1	D1	CIM01	0	-1.2	0	1	4.1	-0.7209	3.25
N1	D1	CIM02	0	-1.6	0	1	4.1	-0.7209	3.25
N1	D1	CIM03	0	-1.2	0	1	4.1	-0.7209	3.25
N1	D1	CIM04	0	-1.5	0	1	4.1	-0.7209	3.25
N1	D1	CIM05 Max	4.3	-0.4	0.000448	1	4.1	-0.7209	3.25
N1	D1	CIM05 Min	-4.3	-2.1	-0.000448	1	4.1	-0.7209	3.25
N1	D1	CIM06 Max	1.3	1.5	0.000134	1	4.1	-0.7209	3.25
N1	D1	CIM06 Min	-1.3	-4	-0.000134	1	4.1	-0.7209	3.25
N1	D1	CIM07 Max	3.3	-0.9	0.000339	1	4.1	-0.7209	3.25
N1	D1	CIM07 Min	-3.3	-2.1	-0.000339	1	4.1	-0.7209	3.25
N1	D1	CIM08 Max	1	0.6	0.000102	1	4.1	-0.7209	3.25
N1	D1	CIM08 Min	-1	-3.5	-0.000102	1	4.1	-0.7209	3.25
N1	D1	DER01	0	-1.7	0	1	4.1	-0.7209	3.25
N1	D1	DER02	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	DER03	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	DER04	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	DER05 Max	16.6	-1.8	0.00173	1	4.1	-0.7209	3.25
N1	D1	DER05 Min	-16.6	-1.8	-0.00173	1	4.1	-0.7209	3.25
N1	D1	DER06 Max	0	8.7	0	1	4.1	-0.7209	3.25
N1	D1	DER06 Min	0	-12.3	0	1	4.1	-0.7209	3.25
N1	D1	DER07 Max	16.6	-1.1	0.00173	1	4.1	-0.7209	3.25
N1	D1	DER07 Min	-16.6	-1.1	-0.00173	1	4.1	-0.7209	3.25
N1	D1	DER08 Max	0	9.4	0	1	4.1	-0.7209	3.25
N1	D1	DER08 Min	0	-11.6	0	1	4.1	-0.7209	3.25
N1	D1	DERUD01	0	-1.7	0	1	4.1	-0.7209	3.25
N1	D1	DERUD02	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	DERUD03	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	DERUD04	0	-1.8	0	1	4.1	-0.7209	3.25
N1	D1	DERUD05 Max	2.7	-1.8	0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUD05 Min	-2.7	-1.8	-0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUD06 Max	0	0.0323	0	1	4.1	-0.7209	3.25
N1	D1	DERUD06 Min	0	-3.6	0	1	4.1	-0.7209	3.25
N1	D1	DERUD07 Max	2.7	-1.1	0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUD07 Min	-2.7	-1.1	-0.000271	1	4.1	-0.7209	3.25
N1	D1	DERUD08 Max	0	0.7	0	1	4.1	-0.7209	3.25
N1	D1	DERUD08 Min	0	-3	0	1	4.1	-0.7209	3.25
N1	D1	VIG01 Max	12.3	0.5	0.00128	1	4.1	-0.7209	3.25
N1	D1	VIG01 Min	-12.3	-4.1	-0.00128	1	4.1	-0.7209	3.25
N1	D1	VIG02 Max	3.7	6	0.000384	1	4.1	-0.7209	3.25
N1	D1	VIG02 Min	-3.7	-9.6	-0.000384	1	4.1	-0.7209	3.25
N1	D1	VIG03 Max	12.3	1.2	0.00128	1	4.1	-0.7209	3.25
N1	D1	VIG03 Min	-12.3	-3.4	-0.00128	1	4.1	-0.7209	3.25

Story	Diaphragm	Load Case/Combo	UX mm	UY mm	RZ rad	Point	X m	Y m	Z m
N1	D1	VIG04 Max	3.7	6.6	0.000384	1	4.1	-0.7209	3.25
N1	D1	VIG04 Min	-3.7	-8.9	-0.000384	1	4.1	-0.7209	3.25
N1	D1	COL1 Max	18.4	1.7	0.001919	1	4.1	-0.7209	3.25
N1	D1	COL1 Min	-18.4	-5.3	-0.001919	1	4.1	-0.7209	3.25
N1	D1	COL2 Max	5.5	9.8	0.000576	1	4.1	-0.7209	3.25
N1	D1	COL2 Min	-5.5	-13.4	-0.000576	1	4.1	-0.7209	3.25
N1	D1	COL3 Max	18.4	2.4	0.001919	1	4.1	-0.7209	3.25
N1	D1	COL3 Min	-18.4	-4.6	-0.001919	1	4.1	-0.7209	3.25
N1	D1	COL4 Max	5.5	10.5	0.000576	1	4.1	-0.7209	3.25
N1	D1	COL4 Min	-5.5	-12.8	-0.000576	1	4.1	-0.7209	3.25
N1	D1	CIM09 Max	4.3	0.1	0.000448	1	4.1	-0.7209	3.25
N1	D1	CIM09 Min	-4.3	-1.6	-0.000448	1	4.1	-0.7209	3.25
N1	D1	CIM10 Max	1.3	2	0.000134	1	4.1	-0.7209	3.25
N1	D1	CIM10 Min	-1.3	-3.5	-0.000134	1	4.1	-0.7209	3.25
N1	D1	CIM11	0	-1.4	0	1	4.1	-0.7209	3.25
N1	D1	CIM12	0	-1.6	0	1	4.1	-0.7209	3.25
N1	D1	CIM13 Max	3.3	-1	0.000339	1	4.1	-0.7209	3.25
N1	D1	CIM13 Min	-3.3	-2.2	-0.000339	1	4.1	-0.7209	3.25
N1	D1	CIM14 Max	1	0.5	0.000102	1	4.1	-0.7209	3.25
N1	D1	CIM14 Min	-1	-3.6	-0.000102	1	4.1	-0.7209	3.25
N1	D1	CIM15	0	-0.7	0	1	4.1	-0.7209	3.25
N1	D1	COMB9	0	-2.1	0	1	4.1	-0.7209	3.25
N1	D1	COMB10	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	COMB11	0	-1.9	0	1	4.1	-0.7209	3.25
N1	D1	DER09	0	-2.1	0	1	4.1	-0.7209	3.25
N1	D1	DERUD09	0	-2.1	0	1	4.1	-0.7209	3.25
N1	D1	DER10	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	DERUD10	0	-2	0	1	4.1	-0.7209	3.25
N1	D1	DER11	0	-1.9	0	1	4.1	-0.7209	3.25
N1	D1	DERUD11	0	-1.9	0	1	4.1	-0.7209	3.25

5.2 Story Results

Table 5.4 - Story Max/Avg Displacements

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	D	Y	1.2	1.2	1
N1	L	Y	0.3	0.3	1
N1	LR	Y	0.004378	0.004378	1
N1	EX Max	X	15.6	15.6	1
N1	EX Max	Y	7.1	7.1	1
N1	EY Max	Y	10.5	10.5	1
N1	DISX Max	X	5.8	5.8	1
N1	DISX Max	Y	2.6	2.6	1
N1	DISY Max	Y	3.9	3.9	1
N1	G	Y	0.1	0.1	1
N1	DERUX Max	X	2.5	2.5	1
N1	DERUX Max	Y	1.1	1.1	1
N1	DERUY Max	Y	1.8	1.8	1
N1	COMB1	Y	1.7	1.7	1
N1	COMB2	Y	2	2	1
N1	COMB3	Y	1.8	1.8	1
N1	COMB4	Y	1.8	1.8	1
N1	COMB5 Max	X	5.8	5.8	1
N1	COMB5 Max	Y	2	2	1
N1	COMB5 Min	X	5.8	5.8	1
N1	COMB5 Min	Y	5.6	5.6	1
N1	COMB6 Max	X	1.7	1.7	1
N1	COMB6 Max	Y	2.9	2.9	1
N1	COMB6 Min	X	1.7	1.7	1
N1	COMB6 Min	Y	6.5	6.5	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	COMB7 Max	X	1.7	1.7	1
N1	COMB7 Max	Y	3.5	3.5	1
N1	COMB7 Min	X	1.7	1.7	1
N1	COMB7 Min	Y	5.8	5.8	1
N1	COMB8 Max	X	5.8	5.8	1
N1	COMB8 Max	Y	2.7	2.7	1
N1	COMB8 Min	X	5.8	5.8	1
N1	COMB8 Min	Y	4.9	4.9	1
N1	ENVE Max	X	5.8	5.8	1
N1	ENVE Max	Y	3.5	3.5	1
N1	ENVE Min	X	5.8	5.8	1
N1	ENVE Min	Y	6.5	6.5	1
N1	CIM01	Y	1.2	1.2	1
N1	CIM02	Y	1.6	1.6	1
N1	CIM03	Y	1.2	1.2	1
N1	CIM04	Y	1.5	1.5	1
N1	CIM05 Max	X	4	4	1
N1	CIM05 Max	Y	1.4	1.4	1
N1	CIM05 Min	X	4	4	1
N1	CIM05 Min	Y	3.9	3.9	1
N1	CIM06 Max	X	1.2	1.2	1
N1	CIM06 Max	Y	2	2	1
N1	CIM06 Min	X	1.2	1.2	1
N1	CIM06 Min	Y	4.5	4.5	1
N1	CIM07 Max	X	3	3	1
N1	CIM07 Max	Y	0.5	0.5	1
N1	CIM07 Min	X	3	3	1
N1	CIM07 Min	Y	3.5	3.5	1
N1	CIM08 Max	X	0.9	0.9	1
N1	CIM08 Max	Y	1	1	1
N1	CIM08 Min	X	0.9	0.9	1
N1	CIM08 Min	Y	4	4	1
N1	DER01	Y	1.7	1.7	1
N1	DER02	Y	2	2	1
N1	DER03	Y	1.8	1.8	1
N1	DER04	Y	1.8	1.8	1
N1	DER05 Max	X	15.6	15.6	1
N1	DER05 Max	Y	5.3	5.3	1
N1	DER05 Min	X	15.6	15.6	1
N1	DER05 Min	Y	8.9	8.9	1
N1	DER06 Max	Y	8.7	8.7	1
N1	DER06 Min	Y	12.3	12.3	1
N1	DER07 Max	X	15.6	15.6	1
N1	DER07 Max	Y	6	6	1
N1	DER07 Min	X	15.6	15.6	1
N1	DER07 Min	Y	8.2	8.2	1
N1	DER08 Max	Y	9.4	9.4	1
N1	DER08 Min	Y	11.6	11.6	1
N1	DERUD01	Y	1.7	1.7	1
N1	DERUD02	Y	2	2	1
N1	DERUD03	Y	1.8	1.8	1
N1	DERUD04	Y	1.8	1.8	1
N1	DERUD05 Max	X	2.5	2.5	1
N1	DERUD05 Max	Y	0.7	0.7	1
N1	DERUD05 Min	X	2.5	2.5	1
N1	DERUD05 Min	Y	2.9	2.9	1
N1	DERUD06 Max	Y	0.0323	0.0323	1
N1	DERUD06 Min	Y	3.6	3.6	1
N1	DERUD07 Max	X	2.5	2.5	1
N1	DERUD07 Min	X	2.5	2.5	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD07 Min	Y	2.2	2.2	1
N1	DERUD08 Max	Y	0.7	0.7	1
N1	DERUD08 Min	Y	3	3	1
N1	VIG01 Max	X	11.5	11.5	1
N1	VIG01 Max	Y	5.8	5.8	1
N1	VIG01 Min	X	11.5	11.5	1
N1	VIG01 Min	Y	9.4	9.4	1
N1	VIG02 Max	X	3.5	3.5	1
N1	VIG02 Max	Y	7.5	7.5	1
N1	VIG02 Min	X	3.5	3.5	1
N1	VIG02 Min	Y	11.1	11.1	1
N1	VIG03 Max	X	11.5	11.5	1
N1	VIG03 Max	Y	6.5	6.5	1
N1	VIG03 Min	X	11.5	11.5	1
N1	VIG03 Min	Y	8.7	8.7	1
N1	VIG04 Max	X	3.5	3.5	1
N1	VIG04 Max	Y	8.2	8.2	1
N1	VIG04 Min	X	3.5	3.5	1
N1	VIG04 Min	Y	10.5	10.5	1
N1	COL1 Max	X	17.3	17.3	1
N1	COL1 Max	Y	9.6	9.6	1
N1	COL1 Min	X	17.3	17.3	1
N1	COL1 Min	Y	13.2	13.2	1
N1	COL2 Max	X	5.2	5.2	1
N1	COL2 Max	Y	12.2	12.2	1
N1	COL2 Min	X	5.2	5.2	1
N1	COL2 Min	Y	15.8	15.8	1
N1	COL3 Max	X	17.3	17.3	1
N1	COL3 Max	Y	10.2	10.2	1
N1	COL3 Min	X	17.3	17.3	1
N1	COL3 Min	Y	12.5	12.5	1
N1	COL4 Max	X	5.2	5.2	1
N1	COL4 Max	Y	12.9	12.9	1
N1	COL4 Min	X	5.2	5.2	1
N1	COL4 Min	Y	15.1	15.1	1
N1	CIM09 Max	X	4	4	1
N1	CIM09 Max	Y	1.9	1.9	1
N1	CIM09 Min	X	4	4	1
N1	CIM09 Min	Y	3.4	3.4	1
N1	CIM10 Max	X	1.2	1.2	1
N1	CIM10 Max	Y	2.5	2.5	1
N1	CIM10 Min	X	1.2	1.2	1
N1	CIM10 Min	Y	4	4	1
N1	CIM11	Y	1.4	1.4	1
N1	CIM12	Y	1.6	1.6	1
N1	CIM13 Max	X	3	3	1
N1	CIM13 Max	Y	0.4	0.4	1
N1	CIM13 Min	X	3	3	1
N1	CIM13 Min	Y	3.6	3.6	1
N1	CIM14 Max	X	0.9	0.9	1
N1	CIM14 Max	Y	0.9	0.9	1
N1	CIM14 Min	X	0.9	0.9	1
N1	CIM14 Min	Y	4.1	4.1	1
N1	CIM15	Y	0.7	0.7	1
N1	COMB9	Y	2.1	2.1	1
N1	COMB10	Y	2	2	1
N1	COMB11	Y	1.9	1.9	1
N1	DER09	Y	2.1	2.1	1
N1	DERUD09	Y	2.1	2.1	1
N1	DER10	Y	2	2	1

Story	Load Case/Combo	Direction	Maximum mm	Average mm	Ratio
N1	DERUD10	Y	2	2	1
N1	DER11	Y	1.9	1.9	1
N1	DERUD11	Y	1.9	1.9	1

Table 5.5 - Story Drifts

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	D	Y	0.000382	1	0	0	3.25
N1	L	Y	9.7E-05	1	0	0	3.25
N1	LR	Y	1E-06	1	0	0	3.25
N1	EX Max	X	0.004785	3	8.2	0	3.25
N1	EX Max	Y	0.002182	1	0	0	3.25
N1	EY Max	Y	0.003228	3	8.2	0	3.25
N1	DISX Max	X	0.00177	3	8.2	0	3.25
N1	DISX Max	Y	0.000807	1	0	0	3.25
N1	DISY Max	Y	0.001194	3	8.2	0	3.25
N1	G	Y	5E-05	2	0	8.2	3.25
N1	DERUX Max	X	0.000771	3	8.2	0	3.25
N1	DERUX Max	Y	0.000342	1	0	0	3.25
N1	DERUY Max	Y	0.000565	3	8.2	0	3.25
N1	COMB1	Y	0.000535	1	0	0	3.25
N1	COMB2	Y	0.000613	1	0	0	3.25
N1	COMB3	Y	0.000554	2	0	8.2	3.25
N1	COMB4	Y	0.000555	1	0	0	3.25
N1	COMB5 Max	X	0.00177	3	8.2	0	3.25
N1	COMB5 Max	Y	0.00061	1	0	0	3.25
N1	COMB5 Min	X	0.00177	3	8.2	0	3.25
N1	COMB5 Min	Y	0.001721	1	0	0	3.25
N1	COMB6 Max	X	0.000531	3	8.2	0	3.25
N1	COMB6 Max	Y	0.00088	1	0	0	3.25
N1	COMB6 Min	X	0.000531	3	8.2	0	3.25
N1	COMB6 Min	Y	0.001991	1	0	0	3.25
N1	COMB7 Max	X	0.000531	3	8.2	0	3.25
N1	COMB7 Max	Y	0.001092	1	0	0	3.25
N1	COMB7 Min	X	0.000531	3	8.2	0	3.25
N1	COMB7 Min	Y	0.00178	1	0	0	3.25
N1	COMB8 Max	X	0.00177	3	8.2	0	3.25
N1	COMB8 Max	Y	0.000821	1	0	0	3.25
N1	COMB8 Min	X	0.00177	3	8.2	0	3.25
N1	COMB8 Min	Y	0.001509	1	0	0	3.25
N1	ENVE Max	X	0.00177	3	8.2	0	3.25
N1	ENVE Max	Y	0.001092	1	0	0	3.25
N1	ENVE Min	X	0.00177	3	8.2	0	3.25
N1	ENVE Min	Y	0.001991	1	0	0	3.25
N1	CIM01	Y	0.000382	1	0	0	3.25
N1	CIM02	Y	0.000479	1	0	0	3.25
N1	CIM03	Y	0.000383	2	0	8.2	3.25
N1	CIM04	Y	0.000454	1	0	0	3.25
N1	CIM05 Max	X	0.001239	3	8.2	0	3.25
N1	CIM05 Max	Y	0.000433	1	0	0	3.25
N1	CIM05 Min	X	0.001239	3	8.2	0	3.25
N1	CIM05 Min	Y	0.001198	1	0	0	3.25
N1	CIM06 Max	X	0.000372	3	8.2	0	3.25
N1	CIM06 Max	Y	0.000623	1	0	0	3.25
N1	CIM06 Min	X	0.000372	3	8.2	0	3.25
N1	CIM06 Min	Y	0.001387	1	0	0	3.25
N1	CIM07 Max	X	0.000938	3	8.2	0	3.25
N1	CIM07 Max	Y	0.000165	1	0	0	3.25
N1	CIM07 Min	X	0.000938	3	8.2	0	3.25
N1	CIM07 Min	Y	0.001072	1	0	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	CIM08 Max	X	0.000283	3	8.2	0	3.25
N1	CIM08 Max	Y	0.000308	3	8.2	0	3.25
N1	CIM08 Min	X	0.000283	3	8.2	0	3.25
N1	CIM08 Min	Y	0.001215	1	0	0	3.25
N1	DER01	Y	0.000535	1	0	0	3.25
N1	DER02	Y	0.000613	1	0	0	3.25
N1	DER03	Y	0.000554	2	0	8.2	3.25
N1	DER04	Y	0.000555	1	0	0	3.25
N1	DER05 Max	X	0.004785	3	8.2	0	3.25
N1	DER05 Max	Y	0.001627	1	0	0	3.25
N1	DER05 Min	X	0.004785	3	8.2	0	3.25
N1	DER05 Min	Y	0.002738	1	0	0	3.25
N1	DER06 Max	Y	0.002672	3	8.2	0	3.25
N1	DER06 Min	Y	0.003783	1	0	0	3.25
N1	DER07 Max	X	0.004785	3	8.2	0	3.25
N1	DER07 Max	Y	0.001838	1	0	0	3.25
N1	DER07 Min	X	0.004785	3	8.2	0	3.25
N1	DER07 Min	Y	0.002526	1	0	0	3.25
N1	DER08 Max	Y	0.002884	3	8.2	0	3.25
N1	DER08 Min	Y	0.003572	1	0	0	3.25
N1	DERUD01	Y	0.000535	1	0	0	3.25
N1	DERUD02	Y	0.000613	1	0	0	3.25
N1	DERUD03	Y	0.000554	2	0	8.2	3.25
N1	DERUD04	Y	0.000555	1	0	0	3.25
N1	DERUD05 Max	X	0.000771	3	8.2	0	3.25
N1	DERUD05 Max	Y	0.000214	4	8.2	8.2	3.25
N1	DERUD05 Min	X	0.000771	3	8.2	0	3.25
N1	DERUD05 Min	Y	0.000897	1	0	0	3.25
N1	DERUD06 Max	Y	1E-05	3	8.2	0	3.25
N1	DERUD06 Min	Y	0.001121	1	0	0	3.25
N1	DERUD07 Max	X	0.000771	3	8.2	0	3.25
N1	DERUD07 Min	X	0.000771	3	8.2	0	3.25
N1	DERUD07 Min	Y	0.000686	1	0	0	3.25
N1	DERUD08 Max	Y	0.000221	3	8.2	0	3.25
N1	DERUD08 Min	Y	0.000909	1	0	0	3.25
N1	VIG01 Max	X	0.003539	3	8.2	0	3.25
N1	VIG01 Max	Y	0.001775	1	0	0	3.25
N1	VIG01 Min	X	0.003539	3	8.2	0	3.25
N1	VIG01 Min	Y	0.002886	1	0	0	3.25
N1	VIG02 Max	X	0.001062	3	8.2	0	3.25
N1	VIG02 Max	Y	0.002316	1	0	0	3.25
N1	VIG02 Min	X	0.001062	3	8.2	0	3.25
N1	VIG02 Min	Y	0.003427	1	0	0	3.25
N1	VIG03 Max	X	0.003539	3	8.2	0	3.25
N1	VIG03 Max	Y	0.001986	1	0	0	3.25
N1	VIG03 Min	X	0.003539	3	8.2	0	3.25
N1	VIG03 Min	Y	0.002674	1	0	0	3.25
N1	VIG04 Max	X	0.001062	3	8.2	0	3.25
N1	VIG04 Max	Y	0.002528	1	0	0	3.25
N1	VIG04 Min	X	0.001062	3	8.2	0	3.25
N1	VIG04 Min	Y	0.003216	1	0	0	3.25
N1	COL1 Max	X	0.005309	3	8.2	0	3.25
N1	COL1 Max	Y	0.00294	1	0	0	3.25
N1	COL1 Min	X	0.005309	3	8.2	0	3.25
N1	COL1 Min	Y	0.004051	1	0	0	3.25
N1	COL2 Max	X	0.001593	3	8.2	0	3.25
N1	COL2 Max	Y	0.003752	1	0	0	3.25
N1	COL2 Min	X	0.001593	3	8.2	0	3.25
N1	COL2 Min	Y	0.004863	1	0	0	3.25
N1	COL3 Max	X	0.005309	3	8.2	0	3.25

Story	Load Case/Combo	Direction	Drift	Label	X m	Y m	Z m
N1	COL3 Max	Y	0.003152	1	0	0	3.25
N1	COL3 Min	X	0.005309	3	8.2	0	3.25
N1	COL3 Min	Y	0.00384	1	0	0	3.25
N1	COL4 Max	X	0.001593	3	8.2	0	3.25
N1	COL4 Max	Y	0.003963	1	0	0	3.25
N1	COL4 Min	X	0.001593	3	8.2	0	3.25
N1	COL4 Min	Y	0.004651	1	0	0	3.25
N1	CIM09 Max	X	0.001239	3	8.2	0	3.25
N1	CIM09 Max	Y	0.000586	1	0	0	3.25
N1	CIM09 Min	X	0.001239	3	8.2	0	3.25
N1	CIM09 Min	Y	0.001045	1	0	0	3.25
N1	CIM10 Max	X	0.000372	3	8.2	0	3.25
N1	CIM10 Max	Y	0.000776	1	0	0	3.25
N1	CIM10 Min	X	0.000372	3	8.2	0	3.25
N1	CIM10 Min	Y	0.001234	1	0	0	3.25
N1	CIM11	Y	0.000431	2	0	8.2	3.25
N1	CIM12	Y	0.000489	2	0	8.2	3.25
N1	CIM13 Max	X	0.000938	3	8.2	0	3.25
N1	CIM13 Max	Y	0.00013	1	0	0	3.25
N1	CIM13 Min	X	0.000938	3	8.2	0	3.25
N1	CIM13 Min	Y	0.001108	1	0	0	3.25
N1	CIM14 Max	X	0.000283	3	8.2	0	3.25
N1	CIM14 Max	Y	0.000273	3	8.2	0	3.25
N1	CIM14 Min	X	0.000283	3	8.2	0	3.25
N1	CIM14 Min	Y	0.001251	1	0	0	3.25
N1	CIM15	Y	0.000229	1	0	0	3.25
N1	COMB9	Y	0.000636	1	0	0	3.25
N1	COMB10	Y	0.000631	2	0	8.2	3.25
N1	COMB11	Y	0.000578	1	0	0	3.25
N1	DER09	Y	0.000636	1	0	0	3.25
N1	DERUD09	Y	0.000636	1	0	0	3.25
N1	DER10	Y	0.000631	2	0	8.2	3.25
N1	DERUD10	Y	0.000631	2	0	8.2	3.25
N1	DER11	Y	0.000578	1	0	0	3.25
N1	DERUD11	Y	0.000578	1	0	0	3.25

Table 5.6 - Story Forces

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	D	Top	357.6572	0	0	0	528.4926	-1466.3945
N1	D	Bottom	406.662	0	0	0	728.9378	-1667.3142
N1	L	Top	39.36	0	0	0	-47.232	-161.376
N1	L	Bottom	39.36	0	0	0	-47.3513	-161.376
N1	LR	Top	33.62	0	0	0	137.842	-137.842
N1	LR	Bottom	33.62	0	0	0	137.843	-137.842
N1	EX Max	Top	0	387.969	0	1840.023	0	0.0004
N1	EX Max	Bottom	0	387.969	0	1840.023	0	1265.7439
N1	EY Max	Top	0	0	388.5912	1593.2237	0.0001	0
N1	EY Max	Bottom	0	0	388.5912	1593.2237	1266.9216	0
N1	DISX Max	Top	0	143.4796	0	680.4819	0	0.0002
N1	DISX Max	Bottom	0	143.4796	0	680.4819	0	468.1006
N1	DISY Max	Top	0	0	143.7047	589.1892	4.317E-05	0
N1	DISY Max	Bottom	0	0	143.7047	589.1892	468.5196	0
N1	W	Top	0	0	0	0	0	0
N1	W	Bottom	0	0	0	0	0	0
N1	G	Top	86.92	0	0	0	252.068	-356.372
N1	G	Bottom	86.92	0	0	0	252.0102	-356.372
N1	DERUX Max	Top	0	59.8783	0	246.4616	0	0.0001
N1	DERUX Max	Bottom	0	59.8783	0	246.4616	0	195.3842
N1	DERUY Max	Top	0	0	68.052	279.0134	2.044E-05	0

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DERUY Max	Bottom	0	0	68.052	279.0134	221.8697	0
N1	COMB1	Top	500.7201	0	0	0	739.8896	-2052.9523
N1	COMB1	Bottom	569.3268	0	0	0	1020.5129	-2334.2399
N1	COMB2	Top	508.9746	0	0	0	627.5409	-2086.796
N1	COMB2	Bottom	567.7804	0	0	0	867.8847	-2327.8996
N1	COMB3	Top	522.3406	0	0	0	807.5063	-2141.5966
N1	COMB3	Bottom	581.1464	0	0	0	1047.9227	-2382.7002
N1	COMB4	Top	485.3586	0	0	0	655.8801	-1989.9704
N1	COMB4	Bottom	544.1644	0	0	0	896.2955	-2231.074
N1	COMB5 Max	Top	468.5486	143.4796	43.1114	857.2386	586.9591	-1921.0493
N1	COMB5 Max	Bottom	527.3544	143.4796	43.1114	857.2386	967.9299	-1694.0525
N1	COMB5 Min	Top	468.5486	-143.4796	-43.1114	-857.2386	586.9591	-1921.0496
N1	COMB5 Min	Bottom	527.3544	-143.4796	-43.1114	-857.2386	686.8181	-2630.2536
N1	COMB6 Max	Top	468.5486	43.0439	143.7047	793.3338	586.9592	-1921.0494
N1	COMB6 Max	Bottom	527.3544	43.0439	143.7047	793.3338	1295.8936	-2021.7229
N1	COMB6 Min	Top	468.5486	-43.0439	-143.7047	-793.3338	586.9591	-1921.0495
N1	COMB6 Min	Bottom	527.3544	-43.0439	-143.7047	-793.3338	358.8544	-2302.5832
N1	COMB7 Max	Top	321.8915	43.0439	143.7047	793.3338	475.6433	-1319.755
N1	COMB7 Max	Bottom	365.9958	43.0439	143.7047	793.3338	1124.5636	-1360.1526
N1	COMB7 Min	Top	321.8915	-43.0439	-143.7047	-793.3338	475.6433	-1319.7551
N1	COMB7 Min	Bottom	365.9958	-43.0439	-143.7047	-793.3338	187.5244	-1641.0129
N1	COMB8 Max	Top	321.8915	143.4796	43.1114	857.2386	475.6433	-1319.7549
N1	COMB8 Max	Bottom	365.9958	143.4796	43.1114	857.2386	796.5999	-1032.4822
N1	COMB8 Min	Top	321.8915	-143.4796	-43.1114	-857.2386	475.6433	-1319.7552
N1	COMB8 Min	Bottom	365.9958	-143.4796	-43.1114	-857.2386	515.4881	-1968.6833
N1	ENVE Max	Top	522.3406	143.4796	143.7047	857.2386	807.5063	-1319.7549
N1	ENVE Max	Bottom	581.1464	143.4796	143.7047	857.2386	1295.8936	-1032.4822
N1	ENVE Min	Top	321.8915	-143.4796	-143.7047	-857.2386	475.6433	-2141.5966
N1	ENVE Min	Bottom	365.9958	-143.4796	-143.7047	-857.2386	187.5244	-2630.2536
N1	CIM01	Top	357.6572	0	0	0	528.4926	-1466.3945
N1	CIM01	Bottom	406.662	0	0	0	728.9378	-1667.3142
N1	CIM02	Top	397.0172	0	0	0	481.2606	-1627.7705
N1	CIM02	Bottom	446.022	0	0	0	681.5864	-1828.6902
N1	CIM03	Top	391.2772	0	0	0	666.3346	-1604.2365
N1	CIM03	Bottom	440.282	0	0	0	866.7807	-1805.1562
N1	CIM04	Top	412.3922	0	0	0	596.4501	-1690.808
N1	CIM04	Bottom	461.397	0	0	0	796.8065	-1891.7277
N1	CIM05 Max	Top	357.6572	100.4358	30.178	600.0671	528.4926	-1466.3944
N1	CIM05 Max	Bottom	406.662	100.4358	30.178	600.0671	827.3269	-1339.6438
N1	CIM05 Min	Top	357.6572	-100.4358	-30.178	-600.0671	528.4926	-1466.3946
N1	CIM05 Min	Bottom	406.662	-100.4358	-30.178	-600.0671	630.5487	-1994.9846
N1	CIM06 Max	Top	357.6572	30.1307	100.5933	555.3337	528.4926	-1466.3945
N1	CIM06 Max	Bottom	406.662	30.1307	100.5933	555.3337	1056.9015	-1569.0131
N1	CIM06 Min	Top	357.6572	-30.1307	-100.5933	-555.3337	528.4925	-1466.3946
N1	CIM06 Min	Bottom	406.662	-30.1307	-100.5933	-555.3337	400.9741	-1765.6153
N1	CIM07 Max	Top	412.3922	76.0442	22.9928	454.9257	596.4501	-1690.8079
N1	CIM07 Max	Bottom	461.397	76.0442	22.9928	454.9257	871.7696	-1643.6344
N1	CIM07 Min	Top	412.3922	-76.0442	-22.9928	-454.9257	596.4501	-1690.8081
N1	CIM07 Min	Bottom	461.397	-76.0442	-22.9928	-454.9257	721.8434	-2139.821
N1	CIM08 Max	Top	412.3922	22.9567	76.1635	421.1474	596.4501	-1690.808
N1	CIM08 Max	Bottom	461.397	22.9567	76.1635	421.1474	1045.1219	-1816.8316
N1	CIM08 Min	Top	412.3922	-22.9567	-76.1635	-421.1474	596.4501	-1690.808
N1	CIM08 Min	Bottom	461.397	-22.9567	-76.1635	-421.1474	548.4911	-1966.6238
N1	DER01	Top	500.7201	0	0	0	739.8896	-2052.9523
N1	DER01	Bottom	569.3268	0	0	0	1020.5129	-2334.2399
N1	DER02	Top	508.9746	0	0	0	627.5409	-2086.796
N1	DER02	Bottom	567.7804	0	0	0	867.8847	-2327.8996
N1	DER03	Top	522.3406	0	0	0	807.5063	-2141.5966
N1	DER03	Bottom	581.1464	0	0	0	1047.9227	-2382.7002
N1	DER04	Top	485.3586	0	0	0	655.8801	-1989.9704



Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	DER04	Bottom	544.1644	0	0	0	896.2955	-2231.074
N1	DER05 Max	Top	468.5486	387.969	0	1840.023	586.9591	-1921.049
N1	DER05 Max	Bottom	527.3544	387.969	0	1840.023	827.374	-896.4091
N1	DER05 Min	Top	468.5486	-387.969	0	-1840.023	586.9591	-1921.0499
N1	DER05 Min	Bottom	527.3544	-387.969	0	-1840.023	827.374	-3427.897
N1	DER06 Max	Top	468.5486	0	388.5912	1593.2237	586.9592	-1921.0494
N1	DER06 Max	Bottom	527.3544	0	388.5912	1593.2237	2094.2956	-2162.153
N1	DER06 Min	Top	468.5486	0	-388.5912	-1593.2237	586.959	-1921.0494
N1	DER06 Min	Bottom	527.3544	0	-388.5912	-1593.2237	-439.5476	-2162.153
N1	DER07 Max	Top	321.8915	387.969	0	1840.023	475.6433	-1319.7546
N1	DER07 Max	Bottom	365.9958	387.969	0	1840.023	656.044	-234.8389
N1	DER07 Min	Top	321.8915	-387.969	0	-1840.023	475.6433	-1319.7555
N1	DER07 Min	Bottom	365.9958	-387.969	0	-1840.023	656.044	-2766.3267
N1	DER08 Max	Top	321.8915	0	388.5912	1593.2237	475.6434	-1319.7551
N1	DER08 Max	Bottom	365.9958	0	388.5912	1593.2237	1922.9656	-1500.5828
N1	DER08 Min	Top	321.8915	0	-388.5912	-1593.2237	475.6432	-1319.7551
N1	DER08 Min	Bottom	365.9958	0	-388.5912	-1593.2237	-610.8775	-1500.5828
N1	DERUD01	Top	500.7201	0	0	0	739.8896	-2052.9523
N1	DERUD01	Bottom	569.3268	0	0	0	1020.5129	-2334.2399
N1	DERUD02	Top	508.9746	0	0	0	627.5409	-2086.796
N1	DERUD02	Bottom	567.7804	0	0	0	867.8847	-2327.8996
N1	DERUD03	Top	522.3406	0	0	0	807.5063	-2141.5966
N1	DERUD03	Bottom	581.1464	0	0	0	1047.9227	-2382.7002
N1	DERUD04	Top	485.3586	0	0	0	655.8801	-1989.9704
N1	DERUD04	Bottom	544.1644	0	0	0	896.2955	-2231.074
N1	DERUD05 Max	Top	468.5486	59.8783	0	246.4616	586.9591	-1921.0494
N1	DERUD05 Max	Bottom	527.3544	59.8783	0	246.4616	827.374	-1966.7689
N1	DERUD05 Min	Top	468.5486	-59.8783	0	-246.4616	586.9591	-1921.0495
N1	DERUD05 Min	Bottom	527.3544	-59.8783	0	-246.4616	827.374	-2357.5372
N1	DERUD06 Max	Top	468.5486	0	68.052	279.0134	586.9591	-1921.0494
N1	DERUD06 Max	Bottom	527.3544	0	68.052	279.0134	1049.2437	-2162.153
N1	DERUD06 Min	Top	468.5486	0	-68.052	-279.0134	586.9591	-1921.0494
N1	DERUD06 Min	Bottom	527.3544	0	-68.052	-279.0134	605.5043	-2162.153
N1	DERUD07 Max	Top	321.8915	59.8783	0	246.4616	475.6433	-1319.755
N1	DERUD07 Max	Bottom	365.9958	59.8783	0	246.4616	656.044	-1305.1986
N1	DERUD07 Min	Top	321.8915	-59.8783	0	-246.4616	475.6433	-1319.7551
N1	DERUD07 Min	Bottom	365.9958	-59.8783	0	-246.4616	656.044	-1695.967
N1	DERUD08 Max	Top	321.8915	0	68.052	279.0134	475.6433	-1319.7551
N1	DERUD08 Max	Bottom	365.9958	0	68.052	279.0134	877.9137	-1500.5828
N1	DERUD08 Min	Top	321.8915	0	-68.052	-279.0134	475.6433	-1319.7551
N1	DERUD08 Min	Bottom	365.9958	0	-68.052	-279.0134	434.1743	-1500.5828
N1	VIG01 Max	Top	468.5486	286.9593	86.2228	1714.4773	586.9591	-1921.0491
N1	VIG01 Max	Bottom	527.3544	286.9593	86.2228	1714.4773	1108.4858	-1225.9519
N1	VIG01 Min	Top	468.5486	-286.9593	-86.2228	-1714.4773	586.9591	-1921.0497
N1	VIG01 Min	Bottom	527.3544	-286.9593	-86.2228	-1714.4773	546.2622	-3098.3542
N1	VIG02 Max	Top	468.5486	86.0878	287.4094	1586.6676	586.9592	-1921.0493
N1	VIG02 Max	Bottom	527.3544	86.0878	287.4094	1586.6676	1764.4132	-1881.2927
N1	VIG02 Min	Top	468.5486	-86.0878	-287.4094	-1586.6676	586.959	-1921.0495
N1	VIG02 Min	Bottom	527.3544	-86.0878	-287.4094	-1586.6676	-109.6652	-2443.0134
N1	VIG03 Max	Top	321.8915	286.9593	86.2228	1714.4773	475.6433	-1319.7548
N1	VIG03 Max	Bottom	365.9958	286.9593	86.2228	1714.4773	937.1558	-564.3817
N1	VIG03 Min	Top	321.8915	-286.9593	-86.2228	-1714.4773	475.6433	-1319.7554
N1	VIG03 Min	Bottom	365.9958	-286.9593	-86.2228	-1714.4773	374.9322	-2436.7839
N1	VIG04 Max	Top	321.8915	86.0878	287.4094	1586.6676	475.6434	-1319.755
N1	VIG04 Max	Bottom	365.9958	86.0878	287.4094	1586.6676	1593.0832	-1219.7224
N1	VIG04 Min	Top	321.8915	-86.0878	-287.4094	-1586.6676	475.6432	-1319.7552
N1	VIG04 Min	Bottom	365.9958	-86.0878	-287.4094	-1586.6676	-280.9952	-1781.4431
N1	COL1 Max	Top	468.5486	430.4389	129.3342	2571.7159	586.9592	-1921.049
N1	COL1 Max	Bottom	527.3544	430.4389	129.3342	2571.7159	1249.0416	-757.8513
N1	COL1 Min	Top	468.5486	-430.4389	-129.3342	-2571.7159	586.9591	-1921.0499

Story	Load Case/Combo	Location	P kN	VX kN	VY kN	T kN-m	MX kN-m	MY kN-m
N1	COL1 Min	Bottom	527.3544	-430.4389	-129.3342	-2571.7159	405.7064	-3566.4547
N1	COL2 Max	Top	468.5486	129.1317	431.1141	2380.0014	586.9592	-1921.0493
N1	COL2 Max	Bottom	527.3544	129.1317	431.1141	2380.0014	2232.9328	-1740.8625
N1	COL2 Min	Top	468.5486	-129.1317	-431.1141	-2380.0014	586.959	-1921.0496
N1	COL2 Min	Bottom	527.3544	-129.1317	-431.1141	-2380.0014	-578.1848	-2583.4435
N1	COL3 Max	Top	321.8915	430.4389	129.3342	2571.7159	475.6433	-1319.7546
N1	COL3 Max	Bottom	365.9958	430.4389	129.3342	2571.7159	1077.7117	-96.2811
N1	COL3 Min	Top	321.8915	-430.4389	-129.3342	-2571.7159	475.6433	-1319.7555
N1	COL3 Min	Bottom	365.9958	-430.4389	-129.3342	-2571.7159	234.3764	-2904.8845
N1	COL4 Max	Top	321.8915	129.1317	431.1141	2380.0014	475.6434	-1319.7549
N1	COL4 Max	Bottom	365.9958	129.1317	431.1141	2380.0014	2061.6028	-1079.2923
N1	COL4 Min	Top	321.8915	-129.1317	-431.1141	-2380.0014	475.6432	-1319.7552
N1	COL4 Min	Bottom	365.9958	-129.1317	-431.1141	-2380.0014	-749.5148	-1921.8733
N1	CIM09 Max	Top	214.5943	100.4358	30.178	600.0671	317.0955	-879.8366
N1	CIM09 Max	Bottom	243.9972	100.4358	30.178	600.0671	535.7518	-672.7181
N1	CIM09 Min	Top	214.5943	-100.4358	-30.178	-600.0671	317.0955	-879.8368
N1	CIM09 Min	Bottom	243.9972	-100.4358	-30.178	-600.0671	338.9736	-1328.0589
N1	CIM10 Max	Top	214.5943	30.1307	100.5933	555.3337	317.0956	-879.8367
N1	CIM10 Max	Bottom	243.9972	30.1307	100.5933	555.3337	765.3264	-902.0874
N1	CIM10 Min	Top	214.5943	-30.1307	-100.5933	-555.3337	317.0955	-879.8367
N1	CIM10 Min	Bottom	243.9972	-30.1307	-100.5933	-555.3337	109.3989	-1098.6896
N1	CIM11	Top	444.5772	0	0	0	780.5606	-1822.7665
N1	CIM11	Bottom	493.582	0	0	0	980.948	-2023.6862
N1	CIM12	Top	452.3672	0	0	0	682.1196	-1854.7055
N1	CIM12	Bottom	501.372	0	0	0	882.432	-2055.6252
N1	CIM13 Max	Top	452.3672	76.0442	22.9928	454.9257	682.1196	-1854.7054
N1	CIM13 Max	Bottom	501.372	76.0442	22.9928	454.9257	957.3951	-1807.5319
N1	CIM13 Min	Top	452.3672	-76.0442	-22.9928	-454.9257	682.1196	-1854.7056
N1	CIM13 Min	Bottom	501.372	-76.0442	-22.9928	-454.9257	807.4688	-2303.7185
N1	CIM14 Max	Top	452.3672	22.9567	76.1635	421.1474	682.1196	-1854.7055
N1	CIM14 Max	Bottom	501.372	22.9567	76.1635	421.1474	1130.7474	-1980.7291
N1	CIM14 Min	Top	452.3672	-22.9567	-76.1635	-421.1474	682.1196	-1854.7055
N1	CIM14 Min	Bottom	501.372	-22.9567	-76.1635	-421.1474	634.1166	-2130.5213
N1	CIM15	Top	214.5943	0	0	0	317.0955	-879.8367
N1	CIM15	Bottom	243.9972	0	0	0	437.3627	-1000.3885
N1	COMB9	Top	535.6246	0	0	0	684.654	-2196.061
N1	COMB9	Bottom	594.4304	0	0	0	924.9683	-2437.1646
N1	COMB10	Top	607.6206	0	0	0	990.268	-2491.2446
N1	COMB10	Bottom	666.4264	0	0	0	1230.5904	-2732.3482
N1	COMB11	Top	512.0086	0	0	0	712.9931	-2099.2354
N1	COMB11	Bottom	570.8144	0	0	0	953.3791	-2340.339
N1	DER09	Top	535.6246	0	0	0	684.654	-2196.061
N1	DER09	Bottom	594.4304	0	0	0	924.9683	-2437.1646
N1	DERUD09	Top	535.6246	0	0	0	684.654	-2196.061
N1	DERUD09	Bottom	594.4304	0	0	0	924.9683	-2437.1646
N1	DER10	Top	607.6206	0	0	0	990.268	-2491.2446
N1	DER10	Bottom	666.4264	0	0	0	1230.5904	-2732.3482
N1	DERUD10	Top	607.6206	0	0	0	990.268	-2491.2446
N1	DERUD10	Bottom	666.4264	0	0	0	1230.5904	-2732.3482
N1	DER11	Top	512.0086	0	0	0	712.9931	-2099.2354
N1	DER11	Bottom	570.8144	0	0	0	953.3791	-2340.339
N1	DERUD11	Top	512.0086	0	0	0	712.9931	-2099.2354
N1	DERUD11	Bottom	570.8144	0	0	0	953.3791	-2340.339

5.3 Point Results

Table 5.7 - Joint Reactions

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	D	31.1588	-1.0338	156.2461	-9.7389	33.06	0
Base	1	13	L	6.3058	-4.1254	21.9091	1.6349	6.6905	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	LR	-4.248E-05	4.0073	8.4045	-4.2136	-4.507E-05	0
Base	1	13	EX Max	153.8529	73.3875	34.2726	139.7298	298.8999	17.2225
Base	1	13	EY Max	0.0005	97.2913	29.9331	194.7456	0.0005	0
Base	1	13	DISX Max	56.8983	27.1403	12.6748	51.6752	110.5399	6.3693
Base	1	13	DISY Max	0.0002	35.9792	11.0696	72.0188	0.0002	0
Base	1	13	W	0	0	0	0	0	0
Base	1	13	G	3.1528	5.9518	27.7636	-7.6098	3.3452	0
Base	1	13	DERUX Max	24.8125	11.549	5.3286	21.9466	48.1887	2.6982
Base	1	13	DERUY Max	0.0001	17.0381	5.242	34.1048	0.0001	0
Base	1	13	COMB1	43.6223	-1.4473	218.7446	-13.6345	46.284	0
Base	1	13	COMB2	47.4798	-5.8376	226.7522	-11.1777	50.3769	0
Base	1	13	COMB3	43.6962	1.0456	222.8517	-16.7936	46.3625	0
Base	1	13	COMB4	43.6963	-3.3624	213.6067	-12.1586	46.3625	0
Base	1	13	COMB5 Max	100.5946	32.5681	225.4001	63.229	156.9025	6.3693
Base	1	13	COMB5 Min	-13.202	-43.3001	193.4088	-83.3327	-64.1774	-6.3693
Base	1	13	COMB6 Max	60.766	38.7553	224.2765	77.4695	79.5247	1.9108
Base	1	13	COMB6 Min	26.6266	-49.4873	194.5325	-97.5731	13.2004	-1.9108
Base	1	13	COMB7 Max	45.1126	43.1909	155.4935	78.7563	62.9162	1.9108
Base	1	13	COMB7 Min	10.9732	-45.0518	125.7495	-96.2863	-3.4082	-1.9108
Base	1	13	COMB8 Max	84.9412	37.0037	156.6172	64.5158	140.294	6.3693
Base	1	13	COMB8 Min	-28.8554	-38.8645	124.6259	-82.0459	-80.7859	-6.3693
Base	1	13	ENVE Max	100.5946	43.1909	226.7522	78.7563	156.9025	6.3693
Base	1	13	ENVE Min	-28.8554	-49.4873	124.6259	-97.5731	-80.7859	-6.3693
Base	1	13	CIM01	31.1588	-1.0338	156.2461	-9.7389	33.06	0
Base	1	13	CIM02	37.4646	-5.1592	178.1552	-8.104	39.7505	0
Base	1	13	CIM03	31.1587	2.9735	164.6506	-13.9525	33.06	0
Base	1	13	CIM04	35.8881	-1.1224	178.9814	-11.673	38.0779	0
Base	1	13	CIM05 Max	70.9876	25.5201	167.4431	41.5577	110.438	4.4585
Base	1	13	CIM05 Min	-8.67	-27.5877	145.0492	-61.0355	-44.318	-4.4585
Base	1	13	CIM06 Max	43.1076	29.8511	166.6565	51.526	56.2735	1.3375
Base	1	13	CIM06 Min	19.21	-31.9187	145.8357	-71.0038	9.8465	-1.3375
Base	1	13	CIM07 Max	66.0442	19.0186	187.4701	27.2379	96.6641	3.3757
Base	1	13	CIM07 Min	5.732	-21.2635	170.4926	-50.5838	-20.5083	-3.3757
Base	1	13	CIM08 Max	44.9919	22.289	186.8762	34.765	55.7644	1.0191
Base	1	13	CIM08 Min	26.7843	-24.5339	171.0865	-58.1109	20.3914	-1.0191
Base	1	13	DER01	43.6223	-1.4473	218.7446	-13.6345	46.284	0
Base	1	13	DER02	47.4798	-5.8376	226.7522	-11.1777	50.3769	0
Base	1	13	DER03	43.6962	1.0456	222.8517	-16.7936	46.3625	0
Base	1	13	DER04	43.6963	-3.3624	213.6067	-12.1586	46.3625	0
Base	1	13	DER05 Max	197.5492	68.0215	243.6771	129.678	345.2624	17.2225
Base	1	13	DER05 Min	-110.1566	-78.7535	175.1318	-149.7816	-252.5373	-17.2225
Base	1	13	DER06 Max	43.6968	91.9253	239.3376	184.6937	46.3631	0
Base	1	13	DER06 Min	43.6958	-102.6573	179.4713	-204.7974	46.362	0
Base	1	13	DER07 Max	181.8958	72.457	174.8941	130.9648	328.6539	17.2225
Base	1	13	DER07 Min	-125.81	-74.3179	106.3489	-148.4948	-269.1459	-17.2225
Base	1	13	DER08 Max	28.0434	96.3609	170.5546	185.9805	29.7546	0
Base	1	13	DER08 Min	28.0424	-98.2217	110.6884	-203.5106	29.7535	0
Base	1	13	DERUD01	43.6223	-1.4473	218.7446	-13.6345	46.284	0
Base	1	13	DERUD02	47.4798	-5.8376	226.7522	-11.1777	50.3769	0
Base	1	13	DERUD03	43.6962	1.0456	222.8517	-16.7936	46.3625	0
Base	1	13	DERUD04	43.6963	-3.3624	213.6067	-12.1586	46.3625	0
Base	1	13	DERUD05 Max	68.5088	6.183	214.7331	11.8948	94.5513	2.6982
Base	1	13	DERUD05 Min	18.8838	-16.915	204.0759	-31.9984	-1.8262	-2.6982
Base	1	13	DERUD06 Max	43.6964	11.6721	214.6465	24.053	46.3626	0
Base	1	13	DERUD06 Min	43.6962	-22.4041	204.1624	-44.1566	46.3625	0
Base	1	13	DERUD07 Max	52.8554	10.6186	145.9501	13.1816	77.9428	2.6982
Base	1	13	DERUD07 Min	3.2304	-12.4794	135.2929	-30.7116	-18.4347	-2.6982
Base	1	13	DERUD08 Max	28.043	16.1077	145.8636	25.3398	29.7541	0
Base	1	13	DERUD08 Min	28.0428	-17.9686	135.3795	-42.8698	29.7539	0
Base	1	13	VIG01 Max	157.493	70.5022	241.3958	136.5099	267.4425	12.7385

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	1	13	VIG01 Min	-70.1003	-81.2342	177.4132	-156.6135	-174.7174	-12.7385
Base	1	13	VIG02 Max	77.8357	82.8767	239.1485	164.9908	112.6869	3.8216
Base	1	13	VIG02 Min	9.557	-93.6087	179.6605	-185.0945	-19.9618	-3.8216
Base	1	13	VIG03 Max	141.8396	74.9378	172.6128	137.7967	250.8339	12.7385
Base	1	13	VIG03 Min	-85.7537	-76.7986	108.6302	-155.3267	-191.3259	-12.7385
Base	1	13	VIG04 Max	62.1822	87.3123	170.3655	166.2776	96.0783	3.8216
Base	1	13	VIG04 Min	-6.0964	-89.1731	110.8775	-183.8077	-36.5703	-3.8216
Base	1	13	COL1 Max	214.3913	108.4363	257.3914	209.7907	377.9824	19.1078
Base	1	13	COL1 Min	-126.9987	-119.1683	161.4175	-229.8944	-285.2573	-19.1078
Base	1	13	COL2 Max	94.9053	126.998	254.0204	252.5121	145.8491	5.7323
Base	1	13	COL2 Min	-7.5127	-137.73	164.7885	-272.6158	-53.124	-5.7323
Base	1	13	COL3 Max	198.7379	112.8719	188.6085	211.0775	361.3739	19.1078
Base	1	13	COL3 Min	-142.6521	-114.7327	92.6345	-228.6076	-301.8659	-19.1078
Base	1	13	COL4 Max	79.2519	131.4336	185.2375	253.7989	129.2405	5.7323
Base	1	13	COL4 Min	-23.1661	-133.2944	96.0055	-271.329	-69.7325	-5.7323
Base	1	13	CIM09 Max	58.5241	25.9336	104.9446	45.4532	97.214	4.4585
Base	1	13	CIM09 Min	-21.1336	-27.1742	82.5507	-57.1399	-57.542	-4.4585
Base	1	13	CIM10 Max	30.644	30.2647	104.1581	55.4216	43.0495	1.3375
Base	1	13	CIM10 Min	6.7465	-31.5052	83.3373	-67.1083	-3.3775	-1.3375
Base	1	13	CIM11	34.3116	4.918	184.0097	-17.3487	36.4052	0
Base	1	13	CIM12	38.2527	0.336	193.5007	-14.2201	40.5868	0
Base	1	13	CIM13 Max	68.4088	20.4771	201.9894	24.6908	99.173	3.3757
Base	1	13	CIM13 Min	8.0966	-19.8051	185.0119	-53.1309	-17.9994	-3.3757
Base	1	13	CIM14 Max	47.3565	23.7474	201.3955	32.2179	58.2733	1.0191
Base	1	13	CIM14 Min	29.1489	-23.0755	185.6058	-60.6581	22.9003	-1.0191
Base	1	13	CIM15	18.6953	-0.6203	93.7477	-5.8433	19.836	0
Base	1	13	COMB9	49.0562	-4.8653	236.4317	-12.8758	52.0495	0
Base	1	13	COMB10	48.7408	4.1569	253.8262	-22.2274	51.7148	0
Base	1	13	COMB11	45.2727	-2.3901	223.2863	-13.8567	48.0351	0
Base	1	13	DER09	49.0562	-4.8653	236.4317	-12.8758	52.0495	0
Base	1	13	DERUD09	49.0562	-4.8653	236.4317	-12.8758	52.0495	0
Base	1	13	DER10	48.7408	4.1569	253.8262	-22.2274	51.7148	0
Base	1	13	DERUD10	48.7408	4.1569	253.8262	-22.2274	51.7148	0
Base	1	13	DER11	45.2727	-2.3901	223.2863	-13.8567	48.0351	0
Base	1	13	DERUD11	45.2727	-2.3901	223.2863	-13.8567	48.0351	0
Base	2	15	D	7.877	1.0338	47.0849	-11.8882	8.2715	0.0153
Base	2	15	L	0.259	4.1254	-2.2291	-7.0318	0.2708	0.0007
Base	2	15	LR	0.0009	-4.0073	8.4055	4.2102	0.0021	-0.0002
Base	2	15	EX Max	73.4419	66.9416	27.1215	131.9026	146.091	16.5501
Base	2	15	EY Max	0.0108	97.0043	29.9331	193.2635	0.025	0.0026
Base	2	15	DISX Max	27.1605	24.7565	10.0301	48.7805	54.0277	6.1206
Base	2	15	DISY Max	0.004	35.8731	11.0696	71.4707	0.0092	0.001
Base	2	15	W	0	0	0	0	0	0
Base	2	15	G	0.1313	-5.9518	15.6964	4.9044	0.1396	-0.0001
Base	2	15	DERUX Max	9.4168	10.4812	4.1678	20.6607	18.7729	2.6041
Base	2	15	DERUY Max	0.0019	16.9879	5.242	33.8453	0.0044	0.0005
Base	2	15	COMB1	11.0278	1.4473	65.9188	-16.6434	11.5801	0.0214
Base	2	15	COMB2	9.8672	5.8376	57.138	-23.4116	10.36	0.0194
Base	2	15	COMB3	9.7129	-1.0456	67.7215	-14.5614	10.1999	0.0188
Base	2	15	COMB4	9.7119	3.3624	58.4755	-19.1925	10.1976	0.019
Base	2	15	COMB5 Max	36.8731	40.8844	67.6237	48.9241	64.227	6.14
Base	2	15	COMB5 Min	-17.4503	-30.1524	40.9217	-91.5194	-43.834	-6.1018
Base	2	15	COMB6 Max	17.8635	48.6661	68.3513	64.8072	26.4141	1.8563
Base	2	15	COMB6 Min	1.5593	-37.9341	40.1941	-107.4024	-6.021	-1.818
Base	2	15	COMB7 Max	15.2415	44.2305	56.455	75.4055	23.6619	1.8509
Base	2	15	COMB7 Min	-1.0628	-42.3696	28.2978	-96.8042	-8.7732	-1.8234
Base	2	15	COMB8 Max	34.251	36.4489	55.7274	59.5224	61.4748	6.1347
Base	2	15	COMB8 Min	-20.0723	-34.588	29.0254	-80.9211	-46.5862	-6.1071
Base	2	15	ENVE Max	36.8731	48.6661	68.3513	75.4055	64.227	6.14
Base	2	15	ENVE Min	-20.0723	-42.3696	28.2978	-107.4024	-46.5862	-6.1071

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	CIM01	7.877	1.0338	47.0849	-11.8882	8.2715	0.0153
Base	2	15	CIM02	8.136	5.1592	44.8558	-18.92	8.5422	0.016
Base	2	15	CIM03	7.8779	-2.9735	55.4904	-7.678	8.2736	0.0151
Base	2	15	CIM04	8.0719	1.1224	51.7171	-14.0044	8.4761	0.0157
Base	2	15	CIM05 Max	26.8902	25.8967	56.4306	37.267	46.0928	4.2999
Base	2	15	CIM05 Min	-11.1361	-23.8291	37.7392	-61.0434	-29.5499	-4.2693
Base	2	15	CIM06 Max	13.5835	31.3438	56.9399	48.3852	19.6238	1.3013
Base	2	15	CIM06 Min	2.1705	-29.2762	37.2299	-72.1616	-3.0808	-1.2707
Base	2	15	CIM07 Max	22.4676	19.9831	58.8042	23.2846	37.1123	3.2598
Base	2	15	CIM07 Min	-6.3238	-17.7382	44.6301	-51.2934	-20.1601	-3.2284
Base	2	15	CIM08 Max	12.4197	24.0962	59.1888	31.6799	17.1254	0.9955
Base	2	15	CIM08 Min	3.7241	-21.8514	44.2455	-59.6887	-0.1732	-0.9641
Base	2	15	DER01	11.0278	1.4473	65.9188	-16.6434	11.5801	0.0214
Base	2	15	DER02	9.8672	5.8376	57.138	-23.4116	10.36	0.0194
Base	2	15	DER03	9.7129	-1.0456	67.7215	-14.5614	10.1999	0.0188
Base	2	15	DER04	9.7119	3.3624	58.4755	-19.1925	10.1976	0.019
Base	2	15	DER05 Max	83.1533	72.3076	81.3942	110.605	156.2876	16.5692
Base	2	15	DER05 Min	-63.7305	-61.5756	27.1513	-153.2002	-135.8945	-16.5309
Base	2	15	DER06 Max	9.7222	102.3703	84.2059	171.9659	10.2215	0.0217
Base	2	15	DER06 Min	9.7006	-91.6383	24.3396	-214.5611	10.1716	0.0165
Base	2	15	DER07 Max	80.5313	67.872	69.4979	121.2032	153.5353	16.5638
Base	2	15	DER07 Min	-66.3526	-66.0112	15.2549	-142.6019	-138.6467	-16.5363
Base	2	15	DER08 Max	7.1001	97.9347	72.3095	182.5642	7.4693	0.0164
Base	2	15	DER08 Min	7.0786	-96.0739	12.4433	-203.9629	7.4194	0.0112
Base	2	15	DERUD01	11.0278	1.4473	65.9188	-16.6434	11.5801	0.0214
Base	2	15	DERUD02	9.8672	5.8376	57.138	-23.4116	10.36	0.0194
Base	2	15	DERUD03	9.7129	-1.0456	67.7215	-14.5614	10.1999	0.0188
Base	2	15	DERUD04	9.7119	3.3624	58.4755	-19.1925	10.1976	0.019
Base	2	15	DERUD05 Max	19.1282	15.8472	58.4405	-0.6369	28.9694	2.6232
Base	2	15	DERUD05 Min	0.2946	-5.1152	50.105	-41.9583	-8.5764	-2.585
Base	2	15	DERUD06 Max	9.7133	22.3539	59.5148	12.5477	10.2009	0.0196
Base	2	15	DERUD06 Min	9.7095	-11.6219	49.0307	-55.1429	10.1922	0.0187
Base	2	15	DERUD07 Max	16.5061	11.4116	46.5441	9.9614	26.2172	2.6179
Base	2	15	DERUD07 Min	-2.3275	-9.5508	38.2086	-31.3601	-11.3286	-2.5903
Base	2	15	DERUD08 Max	7.0912	17.9183	47.6184	23.1459	7.4487	0.0142
Base	2	15	DERUD08 Min	7.0874	-16.0575	37.1343	-44.5446	7.44	0.0133
Base	2	15	VIG01 Max	64.0348	76.4029	80.9747	119.1459	118.2576	12.2609
Base	2	15	VIG01 Min	-44.6119	-65.6709	27.5707	-161.7411	-97.8645	-12.2226
Base	2	15	VIG02 Max	26.0157	91.9661	82.4299	150.9121	42.6316	3.6934
Base	2	15	VIG02 Min	-6.5929	-81.2341	26.1155	-193.5073	-22.2386	-3.6552
Base	2	15	VIG03 Max	61.4127	71.9673	69.0784	129.7441	115.5054	12.2555
Base	2	15	VIG03 Min	-47.234	-70.1065	15.6744	-151.1428	-100.6167	-12.228
Base	2	15	VIG04 Max	23.3936	87.5305	70.5336	161.5103	39.8794	3.6881
Base	2	15	VIG04 Min	-9.2149	-85.6697	14.2192	-182.909	-24.9908	-3.6605
Base	2	15	COL1 Max	91.1964	111.9213	94.3257	189.3676	172.2881	18.3817
Base	2	15	COL1 Min	-71.7736	-101.1893	14.2197	-231.9628	-151.895	-18.3435
Base	2	15	COL2 Max	34.1678	135.2662	96.5085	237.0169	58.8492	5.5306
Base	2	15	COL2 Min	-14.745	-124.5342	12.0369	-279.6121	-38.4561	-5.4923
Base	2	15	COL3 Max	88.5744	107.4857	82.4294	199.9659	169.5359	18.3764
Base	2	15	COL3 Min	-74.3957	-105.6249	2.3234	-221.3646	-154.6472	-18.3488
Base	2	15	COL4 Max	31.5457	130.8306	84.6122	247.6152	56.097	5.5252
Base	2	15	COL4 Min	-17.3671	-128.9698	0.1406	-269.0139	-41.2083	-5.4977
Base	2	15	CIM09 Max	23.7394	25.4832	37.5966	42.0223	42.7842	4.2938
Base	2	15	CIM09 Min	-14.287	-24.2426	18.9052	-56.2881	-32.8585	-4.2754
Base	2	15	CIM10 Max	10.4327	30.9303	38.1059	53.1405	16.3152	1.2952
Base	2	15	CIM10 Min	-0.9803	-29.6898	18.3959	-67.4063	-6.3894	-1.2768
Base	2	15	CIM11	8.0083	-4.918	62.7813	-6.9838	8.411	0.0152
Base	2	15	CIM12	8.1697	-0.336	57.1853	-13.4837	8.5792	0.0158
Base	2	15	CIM13 Max	22.5654	18.5247	64.2724	23.8053	37.2154	3.2599
Base	2	15	CIM13 Min	-6.226	-19.1966	50.0982	-50.7727	-20.057	-3.2283

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	2	15	CIM14 Max	12.5175	22.6378	64.657	32.2006	17.2286	0.9956
Base	2	15	CIM14 Min	3.8219	-23.3098	49.7137	-59.1681	-0.0701	-0.964
Base	2	15	CIM15	4.7262	0.6203	28.2509	-7.1329	4.9629	0.0092
Base	2	15	COMB9	9.9324	4.8653	60.7835	-23.0645	10.4288	0.0195
Base	2	15	COMB10	9.9215	-4.1569	79.387	-13.4505	10.4198	0.019
Base	2	15	COMB11	9.7771	2.3901	62.1209	-18.8454	10.2663	0.0191
Base	2	15	DER09	9.9324	4.8653	60.7835	-23.0645	10.4288	0.0195
Base	2	15	DERUD09	9.9324	4.8653	60.7835	-23.0645	10.4288	0.0195
Base	2	15	DER10	9.9215	-4.1569	79.387	-13.4505	10.4198	0.019
Base	2	15	DERUD10	9.9215	-4.1569	79.387	-13.4505	10.4198	0.019
Base	2	15	DER11	9.7771	2.3901	62.1209	-18.8454	10.2663	0.0191
Base	2	15	DERUD11	9.7771	2.3901	62.1209	-18.8454	10.2663	0.0191
Base	3	16	D	-31.1588	-1.0338	156.2461	-9.7389	-33.06	0
Base	3	16	L	-6.3058	-4.1254	21.9091	1.6349	-6.6905	0
Base	3	16	LR	4.248E-05	4.0073	8.4045	-4.2136	4.507E-05	0
Base	3	16	EX Max	153.8529	73.3875	34.2726	139.7298	298.8999	17.2225
Base	3	16	EY Max	0.0005	97.2913	29.9331	194.7456	0.0005	0
Base	3	16	DISX Max	56.8983	27.1403	12.6748	51.6752	110.5399	6.3693
Base	3	16	DISY Max	0.0002	35.9792	11.0696	72.0188	0.0002	0
Base	3	16	W	0	0	0	0	0	0
Base	3	16	G	-3.1528	5.9518	27.7636	-7.6098	-3.3452	0
Base	3	16	DERUX Max	24.8125	11.549	5.3286	21.9466	48.1887	2.6982
Base	3	16	DERUY Max	0.0001	17.0381	5.242	34.1048	0.0001	0
Base	3	16	COMB1	-43.6223	-1.4473	218.7446	-13.6345	-46.284	0
Base	3	16	COMB2	-47.4798	-5.8376	226.7522	-11.1777	-50.3769	0
Base	3	16	COMB3	-43.6962	1.0456	222.8517	-16.7936	-46.3625	0
Base	3	16	COMB4	-43.6963	-3.3624	213.6067	-12.1586	-46.3625	0
Base	3	16	COMB5 Max	13.202	32.5681	225.4001	63.229	64.1774	6.3693
Base	3	16	COMB5 Min	-100.5946	-43.3001	193.4088	-83.3327	-156.9025	-6.3693
Base	3	16	COMB6 Max	-26.6266	38.7553	224.2765	77.4695	-13.2004	1.9108
Base	3	16	COMB6 Min	-60.766	-49.4873	194.5325	-97.5731	-79.5247	-1.9108
Base	3	16	COMB7 Max	-10.9732	43.1909	155.4935	78.7563	3.4082	1.9108
Base	3	16	COMB7 Min	-45.1126	-45.0518	125.7495	-96.2863	-62.9162	-1.9108
Base	3	16	COMB8 Max	28.8554	37.0037	156.6172	64.5158	80.7859	6.3693
Base	3	16	COMB8 Min	-84.9412	-38.8645	124.6259	-82.0459	-140.294	-6.3693
Base	3	16	ENVE Max	28.8554	43.1909	226.7522	78.7563	80.7859	6.3693
Base	3	16	ENVE Min	-100.5946	-49.4873	124.6259	-97.5731	-156.9025	-6.3693
Base	3	16	CIM01	-31.1588	-1.0338	156.2461	-9.7389	-33.06	0
Base	3	16	CIM02	-37.4646	-5.1592	178.1552	-8.104	-39.7505	0
Base	3	16	CIM03	-31.1587	2.9735	164.6506	-13.9525	-33.06	0
Base	3	16	CIM04	-35.8881	-1.1224	178.9814	-11.673	-38.0779	0
Base	3	16	CIM05 Max	8.67	25.5201	167.4431	41.5577	44.318	4.4585
Base	3	16	CIM05 Min	-70.9876	-27.5877	145.0492	-61.0355	-110.438	-4.4585
Base	3	16	CIM06 Max	-19.21	29.8511	166.6565	51.526	-9.8465	1.3375
Base	3	16	CIM06 Min	-43.1076	-31.9187	145.8357	-71.0038	-56.2735	-1.3375
Base	3	16	CIM07 Max	-5.732	19.0186	187.4701	27.2379	20.5083	3.3757
Base	3	16	CIM07 Min	-66.0442	-21.2635	170.4926	-50.5838	-96.6641	-3.3757
Base	3	16	CIM08 Max	-26.7843	22.289	186.8762	34.765	-20.3914	1.0191
Base	3	16	CIM08 Min	-44.9919	-24.5339	171.0865	-58.1109	-55.7644	-1.0191
Base	3	16	DER01	-43.6223	-1.4473	218.7446	-13.6345	-46.284	0
Base	3	16	DER02	-47.4798	-5.8376	226.7522	-11.1777	-50.3769	0
Base	3	16	DER03	-43.6962	1.0456	222.8517	-16.7936	-46.3625	0
Base	3	16	DER04	-43.6963	-3.3624	213.6067	-12.1586	-46.3625	0
Base	3	16	DER05 Max	110.1566	68.0215	243.6771	129.678	252.5373	17.2225
Base	3	16	DER05 Min	-197.5492	-78.7535	175.1318	-149.7816	-345.2624	-17.2225
Base	3	16	DER06 Max	-43.6958	91.9253	239.3376	184.6937	-46.362	0
Base	3	16	DER06 Min	-43.6968	-102.6573	179.4713	-204.7974	-46.3631	0
Base	3	16	DER07 Max	125.81	72.457	174.8941	130.9648	269.1459	17.2225
Base	3	16	DER07 Min	-181.8958	-74.3179	106.3489	-148.4948	-328.6539	-17.2225
Base	3	16	DER08 Max	-28.0424	96.3609	170.5546	185.9805	-29.7535	0

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	3	16	DER08 Min	-28.0434	-98.2217	110.6884	-203.5106	-29.7546	0
Base	3	16	DERUD01	-43.6223	-1.4473	218.7446	-13.6345	-46.284	0
Base	3	16	DERUD02	-47.4798	-5.8376	226.7522	-11.1777	-50.3769	0
Base	3	16	DERUD03	-43.6962	1.0456	222.8517	-16.7936	-46.3625	0
Base	3	16	DERUD04	-43.6963	-3.3624	213.6067	-12.1586	-46.3625	0
Base	3	16	DERUD05 Max	-18.8838	6.183	214.7331	11.8948	1.8262	2.6982
Base	3	16	DERUD05 Min	-68.5088	-16.915	204.0759	-31.9984	-94.5513	-2.6982
Base	3	16	DERUD06 Max	-43.6962	11.6721	214.6465	24.053	-46.3625	0
Base	3	16	DERUD06 Min	-43.6964	-22.4041	204.1624	-44.1566	-46.3626	0
Base	3	16	DERUD07 Max	-3.2304	10.6186	145.9501	13.1816	18.4347	2.6982
Base	3	16	DERUD07 Min	-52.8554	-12.4794	135.2929	-30.7116	-77.9428	-2.6982
Base	3	16	DERUD08 Max	-28.0428	16.1077	145.8636	25.3398	-29.7539	0
Base	3	16	DERUD08 Min	-28.043	-17.9686	135.3795	-42.8698	-29.7541	0
Base	3	16	VIG01 Max	70.1003	70.5022	241.3958	136.5099	174.7174	12.7385
Base	3	16	VIG01 Min	-157.493	-81.2342	177.4132	-156.6135	-267.4425	-12.7385
Base	3	16	VIG02 Max	-9.557	82.8767	239.1485	164.9908	19.9618	3.8216
Base	3	16	VIG02 Min	-77.8357	-93.6087	179.6605	-185.0945	-112.6869	-3.8216
Base	3	16	VIG03 Max	85.7537	74.9378	172.6128	137.7967	191.3259	12.7385
Base	3	16	VIG03 Min	-141.8396	-76.7986	108.6302	-155.3267	-250.8339	-12.7385
Base	3	16	VIG04 Max	6.0964	87.3123	170.3655	166.2776	36.5703	3.8216
Base	3	16	VIG04 Min	-62.1822	-89.1731	110.8775	-183.8077	-96.0783	-3.8216
Base	3	16	COL1 Max	126.9987	108.4363	257.3914	209.7907	285.2573	19.1078
Base	3	16	COL1 Min	-214.3913	-119.1683	161.4175	-229.8944	-377.9824	-19.1078
Base	3	16	COL2 Max	7.5127	126.998	254.0204	252.5121	53.124	5.7323
Base	3	16	COL2 Min	-94.9053	-137.73	164.7885	-272.6158	-145.8491	-5.7323
Base	3	16	COL3 Max	142.6521	112.8719	188.6085	211.0775	301.8659	19.1078
Base	3	16	COL3 Min	-198.7379	-114.7327	92.6345	-228.6076	-361.3739	-19.1078
Base	3	16	COL4 Max	23.1661	131.4336	185.2375	253.7989	69.7325	5.7323
Base	3	16	COL4 Min	-79.2519	-133.2944	96.0055	-271.329	-129.2405	-5.7323
Base	3	16	CIM09 Max	21.1336	25.9336	104.9446	45.4532	57.542	4.4585
Base	3	16	CIM09 Min	-58.5241	-27.1742	82.5507	-57.1399	-97.214	-4.4585
Base	3	16	CIM10 Max	-6.7465	30.2647	104.1581	55.4216	3.3775	1.3375
Base	3	16	CIM10 Min	-30.644	-31.5052	83.3373	-67.1083	-43.0495	-1.3375
Base	3	16	CIM11	-34.3116	4.918	184.0097	-17.3487	-36.4052	0
Base	3	16	CIM12	-38.2527	0.336	193.5007	-14.2201	-40.5868	0
Base	3	16	CIM13 Max	-8.0966	20.4771	201.9894	24.6908	17.9994	3.3757
Base	3	16	CIM13 Min	-68.4088	-19.8051	185.0119	-53.1309	-99.173	-3.3757
Base	3	16	CIM14 Max	-29.1489	23.7474	201.3955	32.2179	-22.9003	1.0191
Base	3	16	CIM14 Min	-47.3565	-23.0755	185.6058	-60.6581	-58.2733	-1.0191
Base	3	16	CIM15	-18.6953	-0.6203	93.7477	-5.8433	-19.836	0
Base	3	16	COMB9	-49.0562	-4.8653	236.4317	-12.8758	-52.0495	0
Base	3	16	COMB10	-48.7408	4.1569	253.8262	-22.2274	-51.7148	0
Base	3	16	COMB11	-45.2727	-2.3901	223.2863	-13.8567	-48.0351	0
Base	3	16	DER09	-49.0562	-4.8653	236.4317	-12.8758	-52.0495	0
Base	3	16	DERUD09	-49.0562	-4.8653	236.4317	-12.8758	-52.0495	0
Base	3	16	DER10	-48.7408	4.1569	253.8262	-22.2274	-51.7148	0
Base	3	16	DERUD10	-48.7408	4.1569	253.8262	-22.2274	-51.7148	0
Base	3	16	DER11	-45.2727	-2.3901	223.2863	-13.8567	-48.0351	0
Base	3	16	DERUD11	-45.2727	-2.3901	223.2863	-13.8567	-48.0351	0
Base	4	18	D	-7.877	1.0338	47.0849	-11.8882	-8.2715	-0.0153
Base	4	18	L	-0.259	4.1254	-2.2291	-7.0318	-0.2708	-0.0007
Base	4	18	LR	-0.0009	-4.0073	8.4055	4.2102	-0.0021	0.0002
Base	4	18	EX Max	73.4419	66.9416	27.1215	131.9026	146.091	16.5501
Base	4	18	EY Max	0.0108	97.0043	29.9331	193.2635	0.025	0.0026
Base	4	18	DISX Max	27.1605	24.7565	10.0301	48.7805	54.0277	6.1206
Base	4	18	DISY Max	0.004	35.8731	11.0696	71.4707	0.0092	0.001
Base	4	18	W	0	0	0	0	0	0
Base	4	18	G	-0.1313	-5.9518	15.6964	4.9044	-0.1396	0.0001
Base	4	18	DERUX Max	9.4168	10.4812	4.1678	20.6607	18.7729	2.6041
Base	4	18	DERUY Max	0.0019	16.9879	5.242	33.8453	0.0044	0.0005

Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	COMB1	-11.0278	1.4473	65.9188	-16.6434	-11.5801	-0.0214
Base	4	18	COMB2	-9.8672	5.8376	57.138	-23.4116	-10.36	-0.0194
Base	4	18	COMB3	-9.7129	-1.0456	67.7215	-14.5614	-10.1999	-0.0188
Base	4	18	COMB4	-9.7119	3.3624	58.4755	-19.1925	-10.1976	-0.019
Base	4	18	COMB5 Max	17.4503	40.8844	67.6237	48.9241	43.834	6.1018
Base	4	18	COMB5 Min	-36.8731	-30.1524	40.9217	-91.5194	-64.227	-6.14
Base	4	18	COMB6 Max	-1.5593	48.6661	68.3513	64.8072	6.021	1.818
Base	4	18	COMB6 Min	-17.8635	-37.9341	40.1941	-107.4024	-26.4141	-1.8563
Base	4	18	COMB7 Max	1.0628	44.2305	56.455	75.4055	8.7732	1.8234
Base	4	18	COMB7 Min	-15.2415	-42.3696	28.2978	-96.8042	-23.6619	-1.8509
Base	4	18	COMB8 Max	20.0723	36.4489	55.7274	59.5224	46.5862	6.1071
Base	4	18	COMB8 Min	-34.251	-34.588	29.0254	-80.9211	-61.4748	-6.1347
Base	4	18	ENVE Max	20.0723	48.6661	68.3513	75.4055	46.5862	6.1071
Base	4	18	ENVE Min	-36.8731	-42.3696	28.2978	-107.4024	-64.227	-6.14
Base	4	18	CIM01	-7.877	1.0338	47.0849	-11.8882	-8.2715	-0.0153
Base	4	18	CIM02	-8.136	5.1592	44.8558	-18.92	-8.5422	-0.016
Base	4	18	CIM03	-7.8779	-2.9735	55.4904	-7.678	-8.2736	-0.0151
Base	4	18	CIM04	-8.0719	1.1224	51.7171	-14.0044	-8.4761	-0.0157
Base	4	18	CIM05 Max	11.1361	25.8967	56.4306	37.267	29.5499	4.2693
Base	4	18	CIM05 Min	-26.8902	-23.8291	37.7392	-61.0434	-46.0928	-4.2999
Base	4	18	CIM06 Max	-2.1705	31.3438	56.9399	48.3852	3.0808	1.2707
Base	4	18	CIM06 Min	-13.5835	-29.2762	37.2299	-72.1616	-19.6238	-1.3013
Base	4	18	CIM07 Max	6.3238	19.9831	58.8042	23.2846	20.1601	3.2284
Base	4	18	CIM07 Min	-22.4676	-17.7382	44.6301	-51.2934	-37.1123	-3.2598
Base	4	18	CIM08 Max	-3.7241	24.0962	59.1888	31.6799	0.1732	0.9641
Base	4	18	CIM08 Min	-12.4197	-21.8514	44.2455	-59.6887	-17.1254	-0.9955
Base	4	18	DER01	-11.0278	1.4473	65.9188	-16.6434	-11.5801	-0.0214
Base	4	18	DER02	-9.8672	5.8376	57.138	-23.4116	-10.36	-0.0194
Base	4	18	DER03	-9.7129	-1.0456	67.7215	-14.5614	-10.1999	-0.0188
Base	4	18	DER04	-9.7119	3.3624	58.4755	-19.1925	-10.1976	-0.019
Base	4	18	DER05 Max	63.7305	72.3076	81.3942	110.605	135.8945	16.5309
Base	4	18	DER05 Min	-83.1533	-61.5756	27.1513	-153.2002	-156.2876	-16.5692
Base	4	18	DER06 Max	-9.7006	102.3703	84.2059	171.9659	-10.1716	-0.0165
Base	4	18	DER06 Min	-9.7222	-91.6383	24.3396	-214.5611	-10.2215	-0.0217
Base	4	18	DER07 Max	66.3526	67.872	69.4979	121.2032	138.6467	16.5363
Base	4	18	DER07 Min	-80.5313	-66.0112	15.2549	-142.6019	-153.5353	-16.5638
Base	4	18	DER08 Max	-7.0786	97.9347	72.3095	182.5642	-7.4194	-0.0112
Base	4	18	DER08 Min	-7.1001	-96.0739	12.4433	-203.9629	-7.4693	-0.0164
Base	4	18	DERUD01	-11.0278	1.4473	65.9188	-16.6434	-11.5801	-0.0214
Base	4	18	DERUD02	-9.8672	5.8376	57.138	-23.4116	-10.36	-0.0194
Base	4	18	DERUD03	-9.7129	-1.0456	67.7215	-14.5614	-10.1999	-0.0188
Base	4	18	DERUD04	-9.7119	3.3624	58.4755	-19.1925	-10.1976	-0.019
Base	4	18	DERUD05 Max	-0.2946	15.8472	58.4405	-0.6369	8.5764	2.585
Base	4	18	DERUD05 Min	-19.1282	-5.1152	50.105	-41.9583	-28.9694	-2.6232
Base	4	18	DERUD06 Max	-9.7095	22.3539	59.5148	12.5477	-10.1922	-0.0187
Base	4	18	DERUD06 Min	-9.7133	-11.6219	49.0307	-55.1429	-10.2009	-0.0196
Base	4	18	DERUD07 Max	2.3275	11.4116	46.5441	9.9614	11.3286	2.5903
Base	4	18	DERUD07 Min	-16.5061	-9.5508	38.2086	-31.3601	-26.2172	-2.6179
Base	4	18	DERUD08 Max	-7.0874	17.9183	47.6184	23.1459	-7.44	-0.0133
Base	4	18	DERUD08 Min	-7.0912	-16.0575	37.1343	-44.5446	-7.4487	-0.0142
Base	4	18	VIG01 Max	44.6119	76.4029	80.9747	119.1459	97.8645	12.2226
Base	4	18	VIG01 Min	-64.0348	-65.6709	27.5707	-161.7411	-118.2576	-12.2609
Base	4	18	VIG02 Max	6.5929	91.9661	82.4299	150.9121	22.2386	3.6552
Base	4	18	VIG02 Min	-26.0157	-81.2341	26.1155	-193.5073	-42.6316	-3.6934
Base	4	18	VIG03 Max	47.234	71.9673	69.0784	129.7441	100.6167	12.228
Base	4	18	VIG03 Min	-61.4127	-70.1065	15.6744	-151.1428	-115.5054	-12.2555
Base	4	18	VIG04 Max	9.2149	87.5305	70.5336	161.5103	24.9908	3.6605
Base	4	18	VIG04 Min	-23.3936	-85.6697	14.2192	-182.909	-39.8794	-3.6881
Base	4	18	COL1 Max	71.7736	111.9213	94.3257	189.3676	151.895	18.3435
Base	4	18	COL1 Min	-91.1964	-101.1893	14.2197	-231.9628	-172.2881	-18.3817



Story	Joint Label	Unique Name	Load Case/Combo	FX kN	FY kN	FZ kN	MX kN-m	MY kN-m	MZ kN-m
Base	4	18	COL2 Max	14.745	135.2662	96.5085	237.0169	38.4561	5.4923
Base	4	18	COL2 Min	-34.1678	-124.5342	12.0369	-279.6121	-58.8492	-5.5306
Base	4	18	COL3 Max	74.3957	107.4857	82.4294	199.9659	154.6472	18.3488
Base	4	18	COL3 Min	-88.5744	-105.6249	2.3234	-221.3646	-169.5359	-18.3764
Base	4	18	COL4 Max	17.3671	130.8306	84.6122	247.6152	41.2083	5.4977
Base	4	18	COL4 Min	-31.5457	-128.9698	0.1406	-269.0139	-56.097	-5.5252
Base	4	18	CIM09 Max	14.287	25.4832	37.5966	42.0223	32.8585	4.2754
Base	4	18	CIM09 Min	-23.7394	-24.2426	18.9052	-56.2881	-42.7842	-4.2938
Base	4	18	CIM10 Max	0.9803	30.9303	38.1059	53.1405	6.3894	1.2768
Base	4	18	CIM10 Min	-10.4327	-29.6898	18.3959	-67.4063	-16.3152	-1.2952
Base	4	18	CIM11	-8.0083	-4.918	62.7813	-6.9838	-8.411	-0.0152
Base	4	18	CIM12	-8.1697	-0.336	57.1853	-13.4837	-8.5792	-0.0158
Base	4	18	CIM13 Max	6.226	18.5247	64.2724	23.8053	20.057	3.2283
Base	4	18	CIM13 Min	-22.5654	-19.1966	50.0982	-50.7727	-37.2154	-3.2599
Base	4	18	CIM14 Max	-3.8219	22.6378	64.657	32.2006	0.0701	0.964
Base	4	18	CIM14 Min	-12.5175	-23.3098	49.7137	-59.1681	-17.2286	-0.9956
Base	4	18	CIM15	-4.7262	0.6203	28.2509	-7.1329	-4.9629	-0.0092
Base	4	18	COMB9	-9.9324	4.8653	60.7835	-23.0645	-10.4288	-0.0195
Base	4	18	COMB10	-9.9215	-4.1569	79.387	-13.4505	-10.4198	-0.019
Base	4	18	COMB11	-9.7771	2.3901	62.1209	-18.8454	-10.2663	-0.0191
Base	4	18	DER09	-9.9324	4.8653	60.7835	-23.0645	-10.4288	-0.0195
Base	4	18	DERUD09	-9.9324	4.8653	60.7835	-23.0645	-10.4288	-0.0195
Base	4	18	DER10	-9.9215	-4.1569	79.387	-13.4505	-10.4198	-0.019
Base	4	18	DERUD10	-9.9215	-4.1569	79.387	-13.4505	-10.4198	-0.019
Base	4	18	DER11	-9.7771	2.3901	62.1209	-18.8454	-10.2663	-0.0191
Base	4	18	DERUD11	-9.7771	2.3901	62.1209	-18.8454	-10.2663	-0.0191

5.4 Modal Results

Table 5.8 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad <sup>2</sup> /sec <sup>2</sup>
Modal	1	0.245	4.076	25.6093	655.8368
Modal	2	0.207	4.839	30.4043	924.4222
Modal	3	0.163	6.121	38.4572	1478.9576
Modal	4	0.052	19.182	120.5248	14526.2338
Modal	5	0.019	52.711	331.191	109687.4482
Modal	6	0.018	55.386	348.0003	121104.1905
Modal	7	0.015	65.942	414.3234	171663.8497

Table 5.9 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.245	0.6558	0	0	0.6558	0	0
Modal	2	0.207	0	1	0	0.6558	1	0
Modal	3	0.163	0.3436	0	0	0.9994	1	0
Modal	4	0.052	0.0006	0	0	1	1	0
Modal	5	0.019	0	0	0	1	1	0
Modal	6	0.018	0	1.864E-05	0	1	1	0
Modal	7	0.015	0	0	0	1	1	0

Table 5.9 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0	0.6558	0.369	0	0.6558	0.369
Modal	2	1	0	0	1	0.6558	0.369
Modal	3	0	0.3436	0.6304	1	0.9994	0.9994
Modal	4	0	0.0006	0.0006	1	1	1
Modal	5	0	0	1.395E-05	1	1	1
Modal	6	1.864E-05	0	0	1	1	1

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	7	0	0	0	1	1	1

**Table 5.10 - Modal Load Participation Ratios**

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

**Table 5.11 - Modal Direction Factors**

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.245	0.664	0	0	0.336
Modal	2	0.207	0	1	0	0
Modal	3	0.163	0.346	0	0	0.654
Modal	4	0.052	0.01	0	0	0.99
Modal	5	0.019	0	0	0	1
Modal	6	0.018	0	1	0	0
Modal	7	0.015	0	1	0	0

## 6 Design Data

This chapter provides design data and results.

### 6.1 Concrete Frame Design

**Table 6.1 - Concrete Frame Preferences - ACI 318-08**

Item	Value
Multi-Response Design	Step-by-Step
Seismic Design Category	D
# Interaction Curves	24
# Interaction Points	11
Minimum Eccentricity	Yes
Phi (Tension)	0.9
Phi (Compression Tied)	0.65
Phi (Compression Spiral)	0.7
Phi (Shear and Torsion)	0.85
Phi (Shear Seismic)	0.6
Phi (Shear Joint)	0.85
Pattern Live Load Factor	0.75
D/C Ratio Limit	0.95

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 1 of 2)**

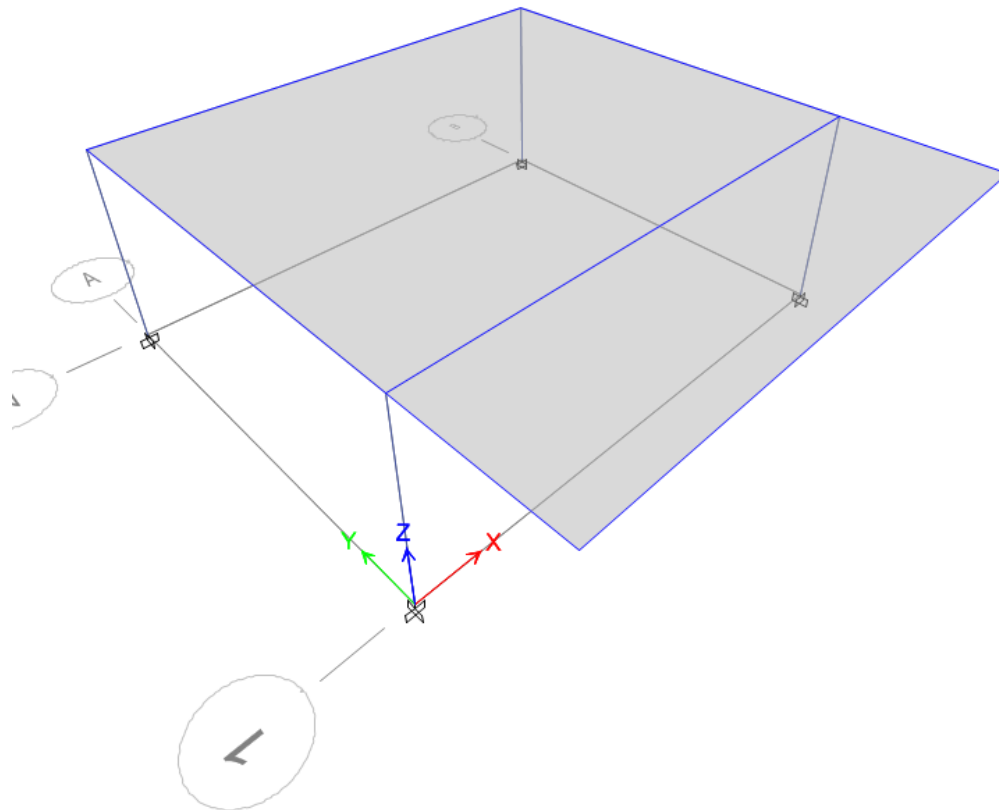
Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor	KMajor	KMinor	CmMajor	CmMinor
N1	C1	7	Column	Program Determined	0.880924	0.846154	0.846154	1	1	1	1
N1	C2	8	Column	Program Determined	0.984836	0.846154	0.846154	1	1	1	1
N1	C3	9	Column	Program Determined	0.880924	0.846154	0.846154	1	1	1	1
N1	C4	10	Column	Program Determined	0.984836	0.846154	0.846154	1	1	1	1

**Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 2 of 2)**

Story	Label	Unique Name	DnsMajor	DnsMinor	DsMajor	DsMinor
N1	C1	7	1	1	1	1
N1	C2	8	1	1	1	1
N1	C3	9	1	1	1	1
N1	C4	10	1	1	1	1

**Table 6.3 - Concrete Beam Overwrites - ACI 318-08**

Story	Label	Unique Name	Design Type	Design Section	LLRF	LMajor	LMinor
N1	B1	13	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B2	14	Beam	Program Determined	0.830494	0.95122	0.95122
N1	B4	16	Beam	Program Determined	1	0.95122	0.95122
N1	B6	18	Beam	Program Determined	1	0.95122	0.95122
N1	B8	2	Beam	Program Determined	1	0.916667	0.916667
N1	B15	22	Beam	Program Determined	1	1	1
N1	B17	4	Beam	Program Determined	1	0.916667	0.916667



## Project Report

Model File: 004 2017 EDUCACION MODULO 4A DMO - E, Revision 0  
06/04/2017

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## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

Table 1.1 - Story Data

Name	Height mm	Elevation mm	Master Story	Similar To	Splice Story
N1	3250	3250	Yes	None	No
Base	0	0	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size mm	Color
G1	Cartesian	Default	0	0	0	1250	Gray

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0
G1	X	B	Yes	End	8.2
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	6.7

### 1.3 Point Coordinates

Table 1.4 - Joint Coordinates Data

Label	X mm	Y mm	$\Delta Z$ Below mm
1	0	0	0
2	0	6700	0
3	8200	0	0
4	8200	6700	0
10	0	-2400	0
9	8200	-2400	0

### 1.4 Line Connectivity

Table 1.5 - Column Connectivity Data

Column	I-End Point	J-End Point	I-End Story
C1	1	1	Below
C2	2	2	Below
C3	3	3	Below
C4	4	4	Below

Table 1.6 - Beam Connectivity Data

Beam	I-End Point	J-End Point	Curve Type
B1	1	2	None
B2	3	4	None
B4	1	3	None
B6	2	4	None
B8	10	1	None
B15	10	9	None
B17	9	3	None



1.5 Area Connectivity

Table 1.7 - Floor Connectivity Data

Floor	Number of Edges	Edge Number	Point 1	Point 2	Curve Type
F1	4	1	9	3	None
		2	3	1	None
		3	1	10	None
		4	10	9	None
F5	4	1	3	4	None
		2	4	2	None
		3	2	1	None
		4	1	3	None

1.6 Mass

Table 1.8 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	D	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	L	0.3

Table 1.9 - Centers of Mass and Rigidity

Story	Diaphragm	Mass X kg	Mass Y kg	XCM m	YCM m	Cumulative X kg	Cumulative Y kg	XCCM m	YCCM m	XCR m	YCR m
N1	D1	27287.35	27287.35	4.1	-0.7365	27287.35	27287.35	4.1	-0.7365	4.1	2.7692

Table 1.10 - Mass Summary by Diaphragm

Story	Diaphragm	Mass X kg	Mass Y kg	Mass Moment of Inertia ton-m <sup>2</sup>	X Mass Center m	Y Mass Center m
N1	D1	27287.35	27287.35	492.1313	4.1	-0.7365

Table 1.11 - Mass Summary by Story

Story	UX kg	UY kg	UZ kg
N1	36412.6	36412.6	0
Base	2498.55	2498.55	0

1.7 Groups

Table 1.12 - Group Definitions

Name	Color
All	Yellow

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E MPa	$\nu$	Unit Weight kN/m <sup>3</sup>	Design Strengths
A416Gr270	Tendon	196500.6	0	76.9729	Fy=1689.91 MPa, Fu=1861.58 MPa
A615Gr60	Rebar	199947.98	0.3	76.9729	Fy=413.69 MPa, Fu=620.53 MPa
CONC00	Concrete	25267.13	0.2	0	Fc=28 MPa
CONC21	Concrete	21538	0.2	23.56	Fc=21 MPa
RMAT	Rebar	199947.98	0.3	76.9729	Fy=420 MPa, Fu=630 MPa

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
C40X40	CONC21	Concrete Rectangular
V30X50	CONC21	Concrete Rectangular
VB20X50	CONC21	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness mm
CUB	Slab	Membrane		5
LOSA	Slab	Membrane		5

### 2.4 Reinforcement Sizes

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter mm	Area cm <sup>2</sup>
#2	6.4	0.3
#3	9.5	0.7
#5	15.9	2
#6	19.1	2.8
#8	25.4	5.1
#9	28.7	6.5
15M	16	2

### 2.5 Tendon Sections

**Table 2.5 - Tendon Section Properties**

Name	Material	StrandArea cm <sup>2</sup>	Color
Tendon1	A416Gr270	1	Yellow

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	Unique Name	Diaphragm	Restraints
N1	1	2	D1	
N1	2	14	Disconnected	
N1	3	6	D1	
N1	4	17	Disconnected	
N1	10	25	D1	
N1	9	26	D1	
Base	1	13	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	2	15	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	3	16	Disconnected	UX; UY; UZ; RX; RY; RZ
Base	4	18	Disconnected	UX; UY; UZ; RX; RY; RZ

#### 3.2 Frame Assignments

**Table 3.2 - Frame Assignments - Summary**

Story	Label	Unique Name	Design Type	Length mm	Analysis Section	Design Section	Min Number Stations
N1	C1	7	Column	3250	C40X40	C40X40	11
N1	C2	8	Column	3250	C40X40	C40X40	11
N1	C3	9	Column	3250	C40X40	C40X40	11
N1	C4	10	Column	3250	C40X40	C40X40	11
N1	B1	13	Beam	6700	V30X50	V30X50	11
N1	B2	14	Beam	6700	V30X50	V30X50	11
N1	B4	16	Beam	8200	V30X50	V30X50	11
N1	B6	18	Beam	8200	V30X50	V30X50	11
N1	B8	2	Beam	2400	V30X50	V30X50	11
N1	B15	22	Beam	8200	VB20X50	VB20X50	11
N1	B17	4	Beam	2400	V30X50	V30X50	11

#### 3.3 Shell Assignments

**Table 3.3 - Shell Assignments - Summary**

Story	Label	Unique Name	Section	Axis Angle deg
N1	F1	3	LOSA	90
N1	F5	5	CUB	

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
D	Dead	1	
L	Live	0	
LR	Live	0	
W	Wind	0	None
G	Snow	0	

### 4.2 Applied Loads

#### 4.2.1 Line Loads

**Table 4.2 - Frame Loads - Distributed**

Story	Label	Unique Name	Design Type	Load Pattern	Load Type	Direction	Relative Distance Start	Relative Distance End	Absolute Distance Start mm	Absolute Distance End mm	Force at Start kN/m	Force at End kN/m
N1	B1	13	Beam	D	Force	Gravity	0	1	0	6700	4.4	0
N1	B2	14	Beam	D	Force	Gravity	0	1	0	6700	4.4	0
N1	B4	16	Beam	D	Force	Gravity	0	1	0	8200	4.4	4.4
N1	B15	22	Beam	D	Force	Gravity	0	1	0	8200	1.55	1.55

#### 4.2.2 Area Loads

**Table 4.3 - Shell Loads - Uniform**

Story	Label	Unique Name	Load Pattern	Direction	Load kN/m <sup>2</sup>
N1	F1	3	D	Gravity	4.3
N1	F5	5	D	Gravity	0.64
N1	F1	3	LR	Gravity	2
N1	F5	5	LR	Gravity	0.5
N1	F1	3	G	Gravity	1
N1	F5	5	G	Gravity	1

### 4.3 Functions

#### 4.3.1 Response Spectrum Functions

**Table 4.4 - Response Spectrum Function - User**

Name	Period sec	Acceleration	Damping %
Umbral	0	0.08	2
Umbral	0.01	0.086	
Umbral	0.02	0.093	
Umbral	0.03	0.099	
Umbral	0.04	0.106	
Umbral	0.05	0.112	
Umbral	0.06	0.118	
Umbral	0.07	0.125	
Umbral	0.08	0.131	
Umbral	0.09	0.138	
Umbral	0.1	0.144	
Umbral	0.11	0.15	
Umbral	0.12	0.157	
Umbral	0.13	0.163	
Umbral	0.14	0.17	

Name	Period sec	Acceleration	Damping %
Umbral	0.15	0.176	
Umbral	0.16	0.182	
Umbral	0.17	0.189	
Umbral	0.18	0.195	
Umbral	0.19	0.202	
Umbral	0.2	0.208	
Umbral	0.21	0.214	
Umbral	0.22	0.221	
Umbral	0.23	0.227	
Umbral	0.24	0.234	
Umbral	0.25	0.24	
Umbral	0.26	0.24	
Umbral	0.27	0.24	
Umbral	0.28	0.24	
Umbral	0.29	0.24	
Umbral	0.3	0.24	
Umbral	0.31	0.24	
Umbral	0.32	0.24	
Umbral	0.33	0.24	
Umbral	0.34	0.24	
Umbral	0.35	0.24	
Umbral	0.36	0.24	
Umbral	0.37	0.24	
Umbral	0.38	0.24	
Umbral	0.39	0.24	
Umbral	0.4	0.24	
Umbral	0.41	0.24	
Umbral	0.42	0.24	
Umbral	0.43	0.24	
Umbral	0.44	0.24	
Umbral	0.45	0.24	
Umbral	0.46	0.24	
Umbral	0.47	0.24	
Umbral	0.48	0.24	
Umbral	0.49	0.24	
Umbral	0.5	0.24	
Umbral	0.51	0.24	
Umbral	0.52	0.24	
Umbral	0.53	0.24	
Umbral	0.54	0.24	
Umbral	0.55	0.24	
Umbral	0.56	0.24	
Umbral	0.57	0.24	
Umbral	0.58	0.24	
Umbral	0.59	0.24	
Umbral	0.6	0.24	
Umbral	0.61	0.24	
Umbral	0.62	0.24	
Umbral	0.63	0.24	
Umbral	0.64	0.24	
Umbral	0.65	0.24	
Umbral	0.66	0.24	
Umbral	0.67	0.24	
Umbral	0.68	0.24	
Umbral	0.69	0.24	
Umbral	0.7	0.24	
Umbral	0.71	0.24	
Umbral	0.72	0.24	
Umbral	0.73	0.24	
Umbral	0.74	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	0.75	0.24	
Umbral	0.76	0.24	
Umbral	0.77	0.24	
Umbral	0.78	0.24	
Umbral	0.79	0.24	
Umbral	0.8	0.24	
Umbral	0.81	0.24	
Umbral	0.82	0.24	
Umbral	0.83	0.24	
Umbral	0.84	0.24	
Umbral	0.85	0.24	
Umbral	0.86	0.24	
Umbral	0.87	0.24	
Umbral	0.88	0.24	
Umbral	0.89	0.24	
Umbral	0.9	0.24	
Umbral	0.91	0.24	
Umbral	0.92	0.24	
Umbral	0.93	0.24	
Umbral	0.94	0.24	
Umbral	0.95	0.24	
Umbral	0.96	0.24	
Umbral	0.97	0.24	
Umbral	0.98	0.24	
Umbral	0.99	0.24	
Umbral	1	0.24	
Umbral	1.01	0.24	
Umbral	1.02	0.24	
Umbral	1.03	0.24	
Umbral	1.04	0.24	
Umbral	1.05	0.24	
Umbral	1.06	0.24	
Umbral	1.07	0.24	
Umbral	1.08	0.24	
Umbral	1.09	0.24	
Umbral	1.1	0.24	
Umbral	1.11	0.24	
Umbral	1.12	0.24	
Umbral	1.13	0.24	
Umbral	1.14	0.24	
Umbral	1.15	0.24	
Umbral	1.16	0.24	
Umbral	1.17	0.24	
Umbral	1.18	0.24	
Umbral	1.19	0.24	
Umbral	1.2	0.24	
Umbral	1.21	0.24	
Umbral	1.22	0.24	
Umbral	1.23	0.24	
Umbral	1.24	0.24	
Umbral	1.25	0.24	
Umbral	1.26	0.24	
Umbral	1.27	0.24	
Umbral	1.28	0.24	
Umbral	1.29	0.24	
Umbral	1.3	0.24	
Umbral	1.31	0.24	
Umbral	1.32	0.24	
Umbral	1.33	0.24	
Umbral	1.34	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.35	0.24	
Umbral	1.36	0.24	
Umbral	1.37	0.24	
Umbral	1.38	0.24	
Umbral	1.39	0.24	
Umbral	1.4	0.24	
Umbral	1.41	0.24	
Umbral	1.42	0.24	
Umbral	1.43	0.24	
Umbral	1.44	0.24	
Umbral	1.45	0.24	
Umbral	1.46	0.24	
Umbral	1.47	0.24	
Umbral	1.48	0.24	
Umbral	1.49	0.24	
Umbral	1.5	0.24	
Umbral	1.51	0.24	
Umbral	1.52	0.24	
Umbral	1.53	0.24	
Umbral	1.54	0.24	
Umbral	1.55	0.24	
Umbral	1.56	0.24	
Umbral	1.57	0.24	
Umbral	1.58	0.24	
Umbral	1.59	0.24	
Umbral	1.6	0.24	
Umbral	1.61	0.24	
Umbral	1.62	0.24	
Umbral	1.63	0.24	
Umbral	1.64	0.24	
Umbral	1.65	0.24	
Umbral	1.66	0.24	
Umbral	1.67	0.24	
Umbral	1.68	0.24	
Umbral	1.69	0.24	
Umbral	1.7	0.24	
Umbral	1.71	0.24	
Umbral	1.72	0.24	
Umbral	1.73	0.24	
Umbral	1.74	0.24	
Umbral	1.75	0.24	
Umbral	1.76	0.24	
Umbral	1.77	0.24	
Umbral	1.78	0.24	
Umbral	1.79	0.24	
Umbral	1.8	0.24	
Umbral	1.81	0.24	
Umbral	1.82	0.24	
Umbral	1.83	0.24	
Umbral	1.84	0.24	
Umbral	1.85	0.24	
Umbral	1.86	0.24	
Umbral	1.87	0.24	
Umbral	1.88	0.24	
Umbral	1.89	0.24	
Umbral	1.9	0.24	
Umbral	1.91	0.24	
Umbral	1.92	0.24	
Umbral	1.93	0.24	
Umbral	1.94	0.24	

Name	Period sec	Acceleration	Damping %
Umbral	1.95	0.24	
Umbral	1.96	0.24	
Umbral	1.97	0.24	
Umbral	1.98	0.24	
Umbral	1.99	0.24	
Umbral	2	0.24	
Umbral	2.01	0.239	
Umbral	2.02	0.238	
Umbral	2.03	0.236	
Umbral	2.04	0.235	
Umbral	2.05	0.234	
Umbral	2.06	0.233	
Umbral	2.07	0.232	
Umbral	2.08	0.231	
Umbral	2.09	0.23	
Umbral	2.1	0.229	
Umbral	2.11	0.227	
Umbral	2.12	0.226	
Umbral	2.13	0.225	
Umbral	2.14	0.224	
Umbral	2.15	0.223	
Umbral	2.16	0.222	
Umbral	2.17	0.221	
Umbral	2.18	0.22	
Umbral	2.19	0.219	
Umbral	2.2	0.218	
Umbral	2.21	0.217	
Umbral	2.22	0.216	
Umbral	2.23	0.215	
Umbral	2.24	0.214	
Umbral	2.25	0.213	
Umbral	2.26	0.212	
Umbral	2.27	0.211	
Umbral	2.28	0.211	
Umbral	2.29	0.21	
Umbral	2.3	0.209	
Umbral	2.31	0.208	
Umbral	2.32	0.207	
Umbral	2.33	0.206	
Umbral	2.34	0.205	
Umbral	2.35	0.204	
Umbral	2.36	0.203	
Umbral	2.37	0.203	
Umbral	2.38	0.202	
Umbral	2.39	0.201	
Umbral	2.4	0.2	
Umbral	2.41	0.199	
Umbral	2.42	0.198	
Umbral	2.43	0.198	
Umbral	2.44	0.197	
Umbral	2.45	0.196	
Umbral	2.46	0.195	
Umbral	2.47	0.194	
Umbral	2.48	0.194	
Umbral	2.49	0.193	
Umbral	2.5	0.192	
Umbral	2.51	0.191	
Umbral	2.52	0.19	
Umbral	2.53	0.19	
Umbral	2.54	0.189	



Name	Period sec	Acceleration	Damping %
Umbral	2.55	0.188	
Umbral	2.56	0.188	
Umbral	2.57	0.187	
Umbral	2.58	0.186	
Umbral	2.59	0.185	
Umbral	2.6	0.185	
Umbral	2.61	0.184	
Umbral	2.62	0.183	
Umbral	2.63	0.183	
Umbral	2.64	0.182	
Umbral	2.65	0.181	
Umbral	2.66	0.18	
Umbral	2.67	0.18	
Umbral	2.68	0.179	
Umbral	2.69	0.178	
Umbral	2.7	0.178	
Umbral	2.71	0.177	
Umbral	2.72	0.176	
Umbral	2.73	0.176	
Umbral	2.74	0.175	
Umbral	2.75	0.175	
Umbral	2.76	0.174	
Umbral	2.77	0.173	
Umbral	2.78	0.173	
Umbral	2.79	0.172	
Umbral	2.8	0.171	
Umbral	2.81	0.171	
Umbral	2.82	0.17	
Umbral	2.83	0.17	
Umbral	2.84	0.169	
Umbral	2.85	0.168	
Umbral	2.86	0.168	
Umbral	2.87	0.167	
Umbral	2.88	0.167	
Umbral	2.89	0.166	
Umbral	2.9	0.166	
Umbral	2.91	0.165	
Umbral	2.92	0.164	
Umbral	2.93	0.164	
Umbral	2.94	0.163	
Umbral	2.95	0.163	
Umbral	2.96	0.162	
Umbral	2.97	0.162	
Umbral	2.98	0.161	
Umbral	2.99	0.161	
Umbral	3	0.16	
Umbral	3.01	0.159	
Umbral	3.02	0.159	
Umbral	3.03	0.158	
Umbral	3.04	0.158	
Umbral	3.05	0.157	
Umbral	3.06	0.157	
Umbral	3.07	0.156	
Umbral	3.08	0.156	
Umbral	3.09	0.155	
Umbral	3.1	0.155	
Umbral	3.11	0.154	
Umbral	3.12	0.154	
Umbral	3.13	0.153	
Umbral	3.14	0.153	

Name	Period sec	Acceleration	Damping %
Umbral	3.15	0.152	
Umbral	3.16	0.152	
Umbral	3.17	0.151	
Umbral	3.18	0.151	
Umbral	3.19	0.15	
Umbral	3.2	0.15	
Umbral	3.21	0.15	
Umbral	3.22	0.149	
Umbral	3.23	0.149	
Umbral	3.24	0.148	
Umbral	3.25	0.148	
Umbral	3.26	0.147	
Umbral	3.27	0.147	
Umbral	3.28	0.146	
Umbral	3.29	0.146	
Umbral	3.3	0.145	
Umbral	3.31	0.145	
Umbral	3.32	0.145	
Umbral	3.33	0.144	
Umbral	3.34	0.144	
Umbral	3.35	0.143	
Umbral	3.36	0.143	
Umbral	3.37	0.142	
Umbral	3.38	0.142	
Umbral	3.39	0.142	
Umbral	3.4	0.141	
Umbral	3.41	0.141	
Umbral	3.42	0.14	
Umbral	3.43	0.14	
Umbral	3.44	0.14	
Umbral	3.45	0.139	
Umbral	3.46	0.139	
Umbral	3.47	0.138	
Umbral	3.48	0.138	
Umbral	3.49	0.138	
Umbral	3.5	0.137	
Umbral	3.51	0.137	
Umbral	3.52	0.136	
Umbral	3.53	0.136	
Umbral	3.54	0.136	
Umbral	3.55	0.135	
Umbral	3.56	0.135	
Umbral	3.57	0.134	
Umbral	3.58	0.134	
Umbral	3.59	0.134	
Umbral	3.6	0.133	
Umbral	3.61	0.133	
Umbral	3.62	0.133	
Umbral	3.63	0.132	
Umbral	3.64	0.132	
Umbral	3.65	0.132	
Umbral	3.66	0.131	
Umbral	3.67	0.131	
Umbral	3.68	0.13	
Umbral	3.69	0.13	
Umbral	3.7	0.13	
Umbral	3.71	0.129	
Umbral	3.72	0.129	
Umbral	3.73	0.129	
Umbral	3.74	0.128	