



PROYECTO

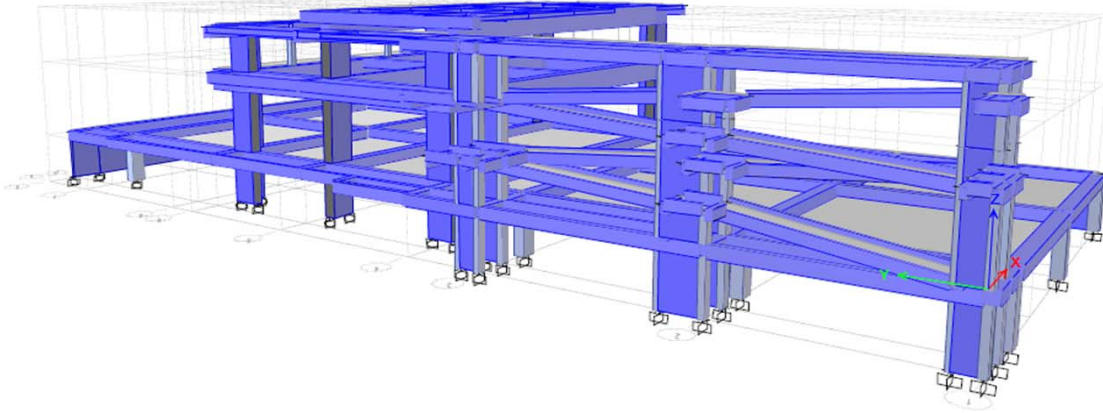
COLEGIO Y TEATRO EL ENSUEÑO

MODULO XIV

**ANALISIS Y DISEÑO ESTRUCTURAL
V.2.**

Propietario:	SEC. EDUCACION Y SEC. CULTURA	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

MEMORIA DE CALCULOS



1.0 DESCRIPCION DE PROYECTO.

El modulo XIV del colegio es una edificación con dos niveles de losas aligeradas, un sótano y una cubierta, soportada en porticos y vigas de concreto, cimentados en caissons.

2.0 UBICACION

Bogota - Cundinamarca.

3.0 TIPO DE SISTEMA - ESTRUCTURAL

Porticos de concreto.



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4.0 GEOMETRIA

4.1 NIVELES

N-3.21	Sotano 1
N-0.10	Losa primer piso
N+4.68	Losa segundo piso
N+8.30	Cubierta

4.2 EJES LONGITUDINALES

EJES 7G-8H

4.3 EJES TRANSVERSALES

EJES G1-G11

4.4 TIPOS DE LOSA

Losa Aligerada (H=60cm)

4.5 TIPOS DE CIMENTACION

Caissons

5.0 ESPECIFICACIONES DE MATERIALES

5.1 CONCRETO

$f'c = 21 \text{ Mpa}$	Cimentacion y losas.
$f'c = 28 \text{ Mpa}$	Pantallas y columnas.

5.2 ACERO DE REFUERZO

$F_y = 420 \text{ Mpa}$	$\varnothing \geq 3/8"$
$F_y = 260 \text{ Mpa}$	$\varnothing \leq 1/4"$
$F_y = 420 \text{ Mpa}$	Mallas electrosoldadas

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5.3 ACERO ESTRUCTURAL

Perfiles Laminados y Platinas ASTM A-572 gr50 ($F_y=350$ Mpa)
 Perfiles Tubulares ASTM A-588 ($F_y=350$ Mpa)
 Acero de Steel Deck -Lamina Colaborante ASTM A-570 ($F_y=232$ Mpa)
 Acero de Elementos Formados en Frio ($F_y=350$ Mpa)
 Uniones:
 Pernos de Anclaje Astm A-307 (Pernos B-7)
 Tornillos de Alta Resistencia ASTM A-325
 Soldaduras E70XX

6.0 RESUMEN DE CARGAS

N-0.10

CM: 790 kg/m² CG: 100 kg/m²
 CV: 200 kg/m²

N+4.68

CM: 818 kg/m²
 CV: 200 kg/m²

N+8.30

CM: 718 kg/m² CG: 100 kg/m²
 CV: 200 kg/m²

7.0 CALCULO DEL COEFICIENTE R

SISTEMA ESTRUCTURAL :
 GRADO DE DISIPACION DE ENERGIA:

R_o:

Ω_o:

IRREGULARIDADES: (ver Anexo)

Planta

Alzada

Redundancia

Ø_p:

Ø_a:

Ø_r:

Porticos de concreto

DMO

5

3.0

1

1

0.75

FACTOR R:

3.75



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8.0 PARAMETROS ESTUDIO DE SUELOS

Estudio de suelos realizado por el GRUPO CAÑASGORDAS: Ing. Carlos Julio Echeverry

8.1 ESPECTRO DE DISEÑO

Zona de Amenaza Sísmica:
Aceleración Pico Efectiva
Velocidad Pico Efectiva

	Intermedia
Aa:	0.15
Av:	0.2

8.2 RECOMENDACIONES DE CIMENTACION

Caissons a 22mts.

9.0 REVISION DE DERIVAS

Deriva Maxima en el Sentido Longitudinal:	0.30%	<=	1.00%	OK!
Deriva Maxima en el Sentido Transversal:	0.11%	<=	1.00%	OK!

9.2 UMBRAL DE DAÑO

Deriva Maxima en el Sentido Longitudinal:	0.17%	<=	0.40%	OK!
Deriva Maxima en el Sentido Transversal:	0.06%	<=	0.40%	OK!



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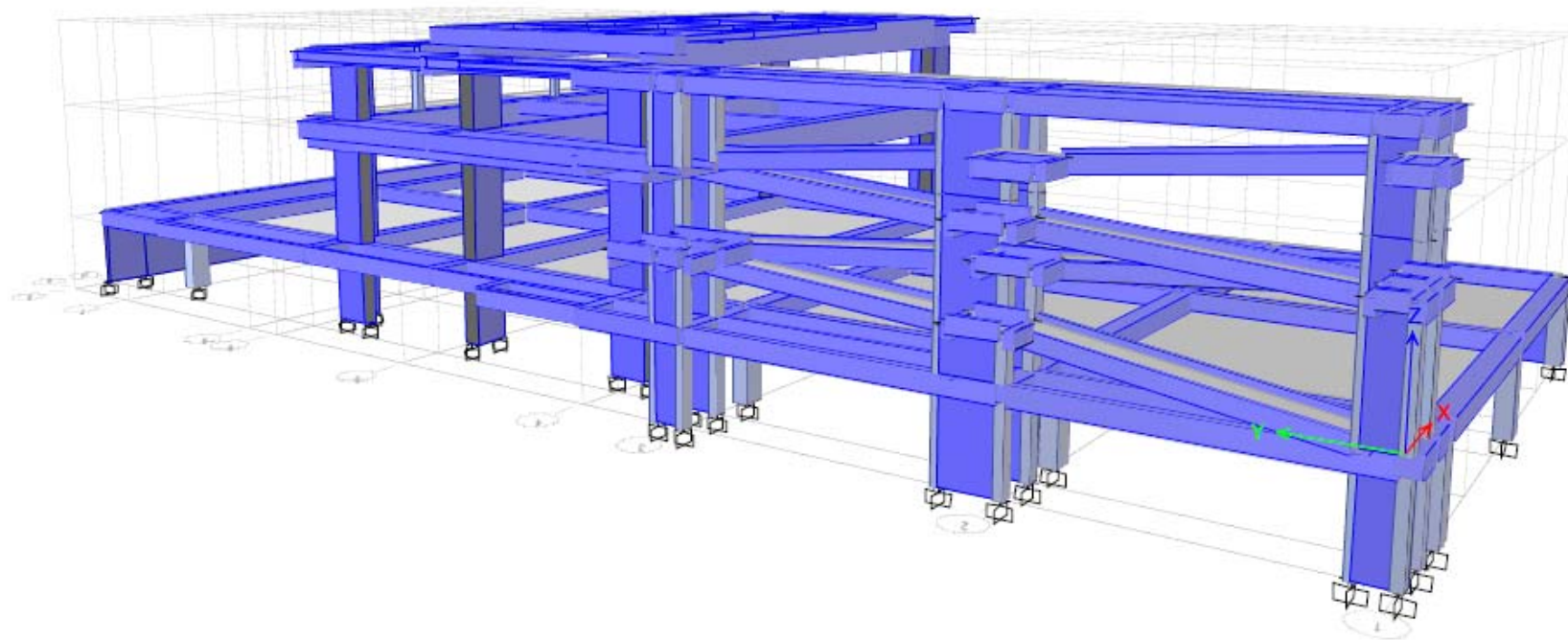
ANEXOS

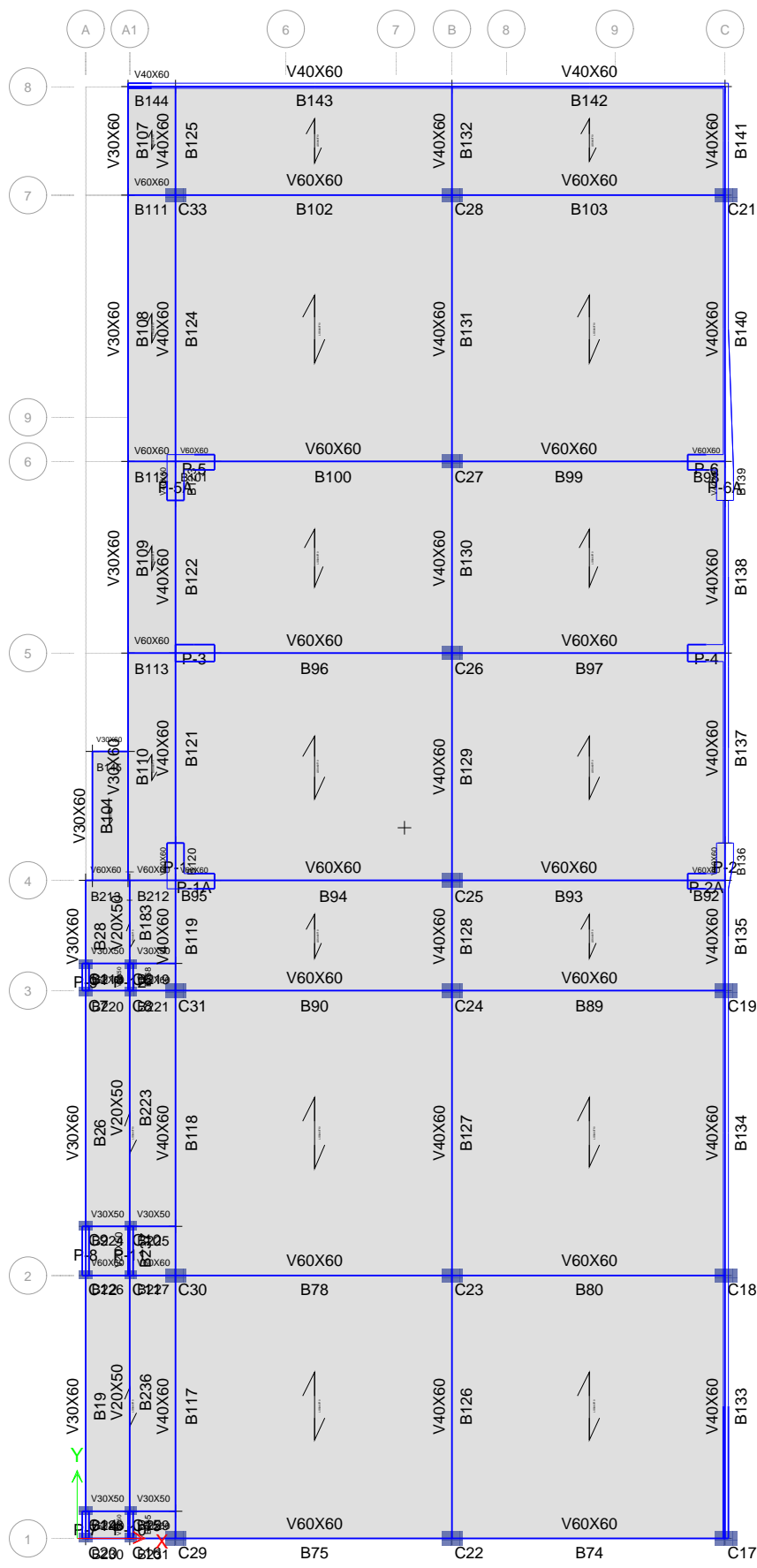
- 1. ESQUEMAS DEL MODELO**
- 2. AVALUO DE CARGAS**
 - 2.1. AVALUO DE CARGAS VERTICALES
 - 2.2. ESPECTRO DE DISEÑO
 - 2.3. REVISION DE IRREGULARIDADES
 - 2.4. COMBINACIONES DE CARGA
 - 2.5. ANALISIS DE VIENTO
 - 2.6. AJUSTE DE CORTANTE SISMICA EN LA BASE
 - 2.7. RESUMEN DE CARGAS SISMICAS
- 3. ANALISIS ESTRUCTURAL**
- 4. CHEQUEO DE DERIVAS**
- 5. DISEÑO DE ELEMENTOS ESTRUCTURALES**
 - 5.1. DISEÑO DE PANTALLAS
 - 5.2. DISEÑO DE COLUMNAS
 - 5.3. DISEÑO DE VIGAS
 - 5.4. DISEÑO DE ESTRUCTURA METALICA
 - 5.5. CHEQUEO DE CONFINAMIENTO
 - 5.6. CHEQUEO DE COLUMNA FUERTE-VIGA DEBIL
- 6. REACCIONES DE CIMENTACION**
- 7. DISEÑO DE ELEMENTOS NO ESTRUCTURALES**

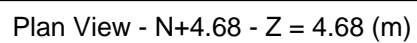


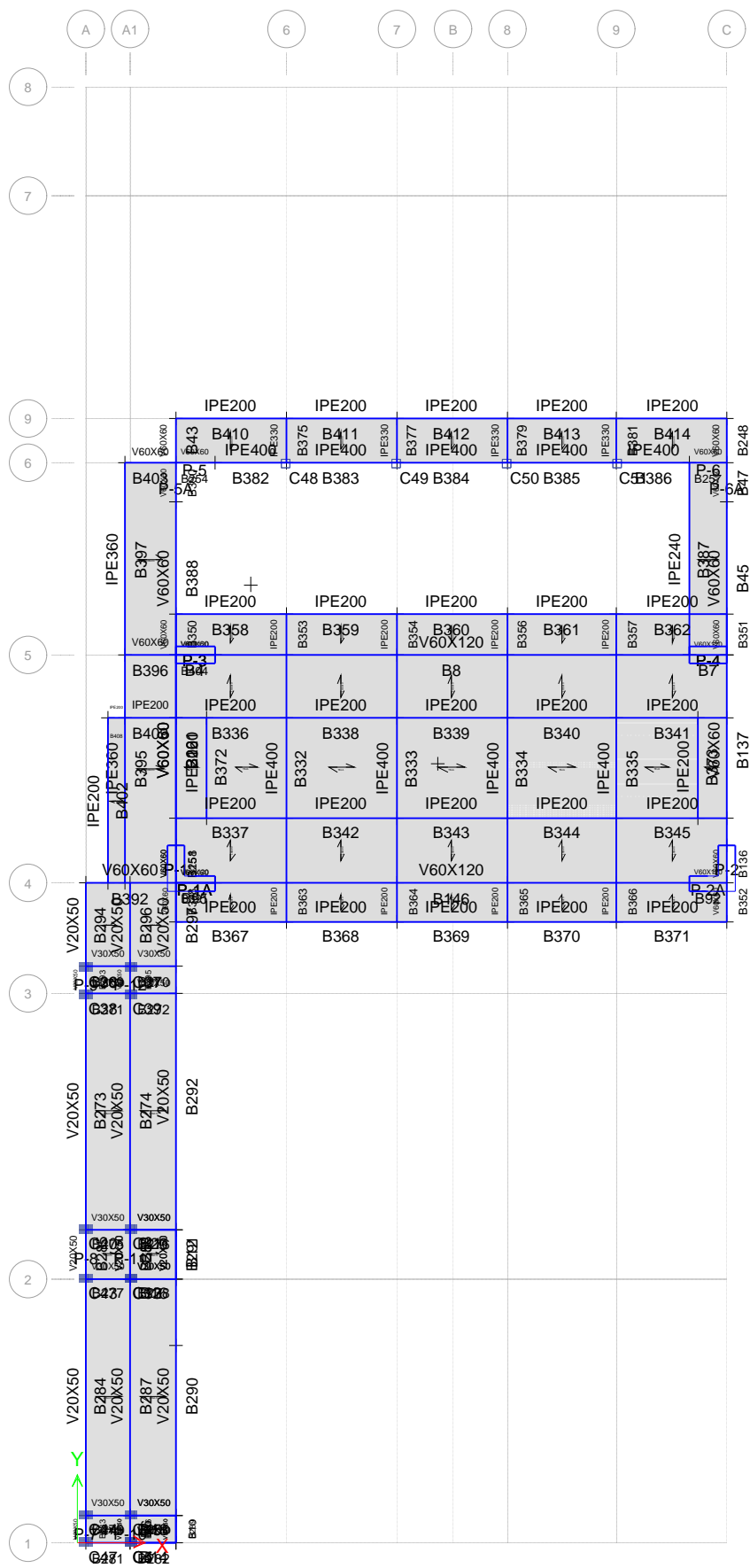
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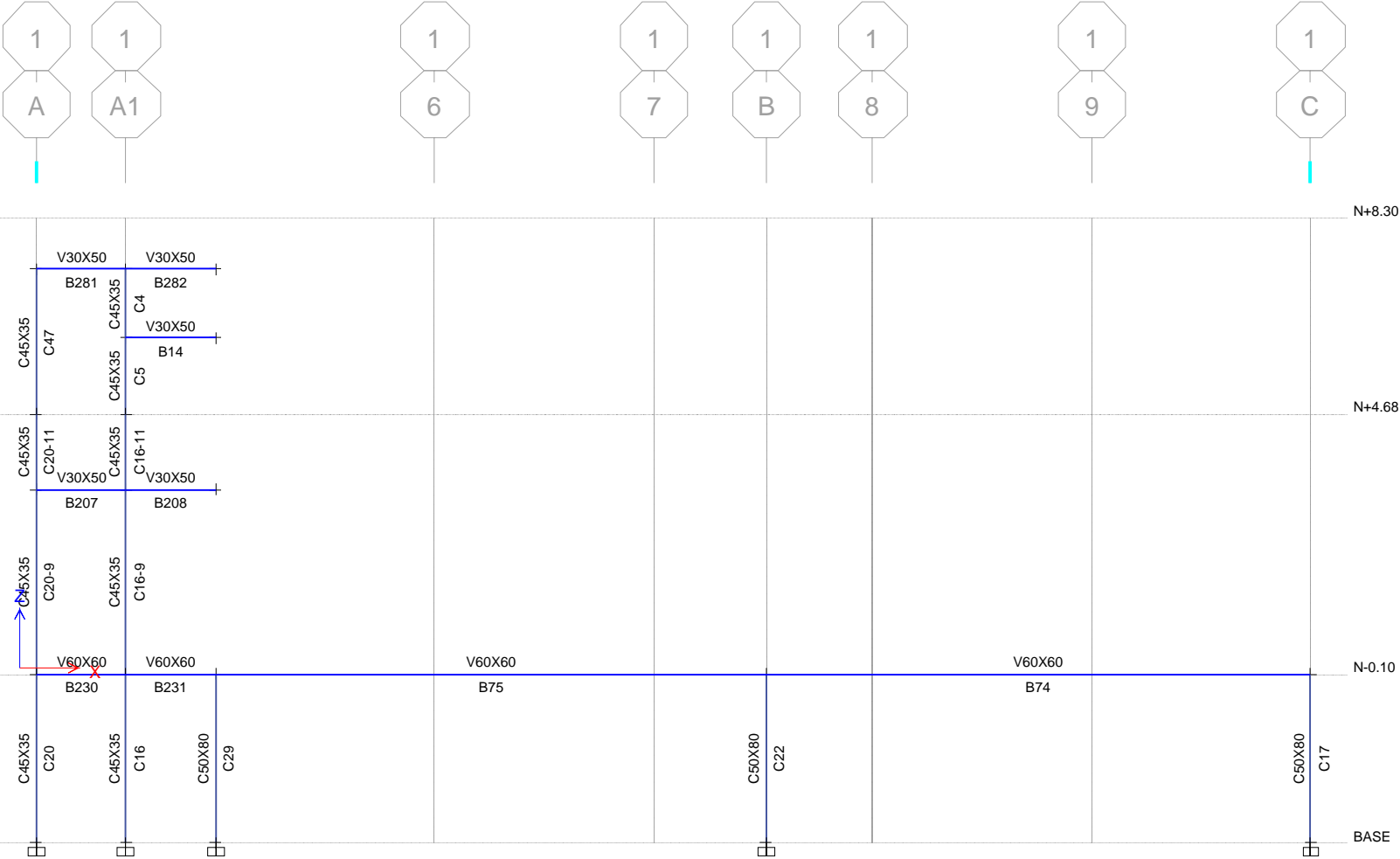
ANEXO 1. ESQUEMAS DEL MODELO

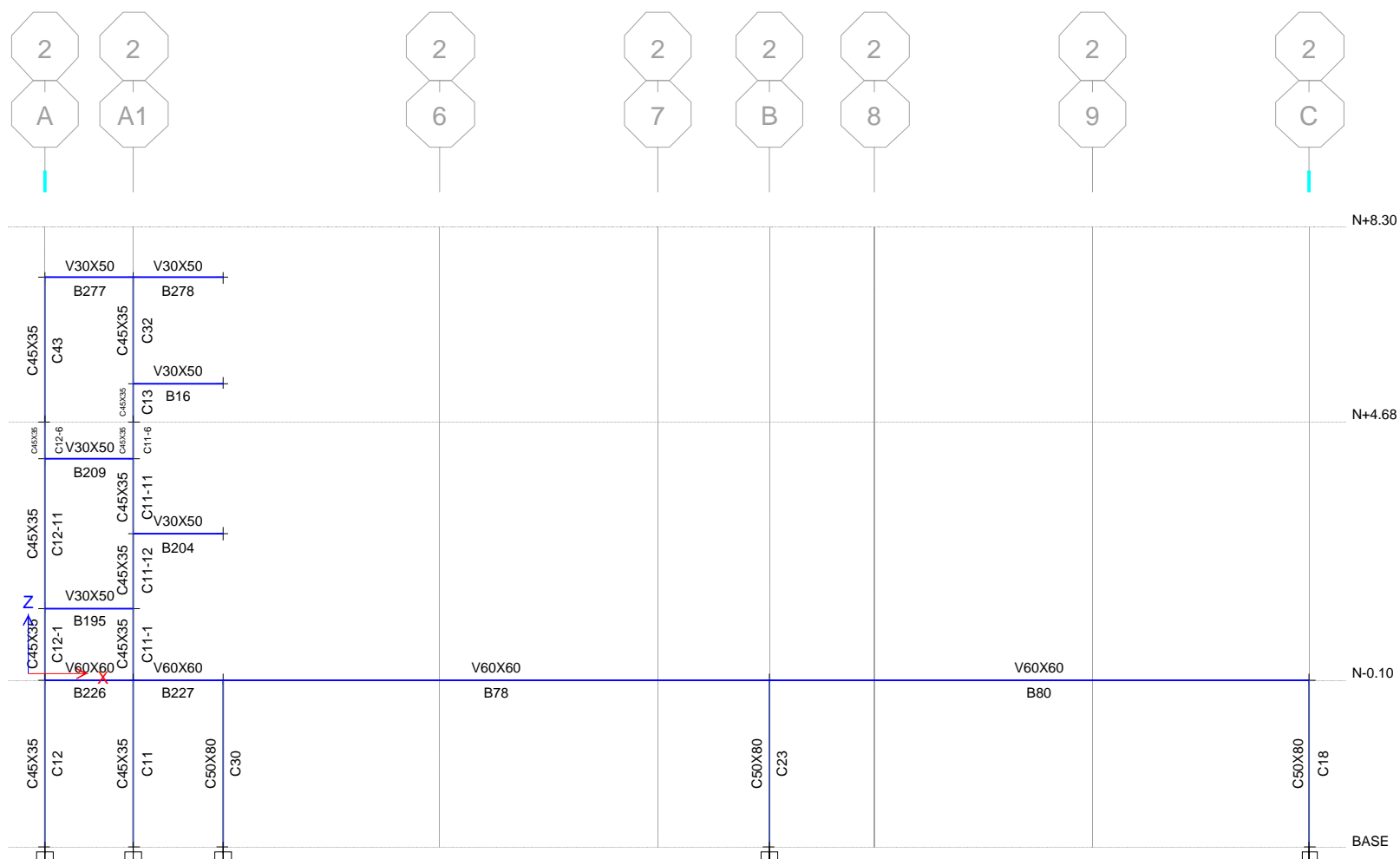


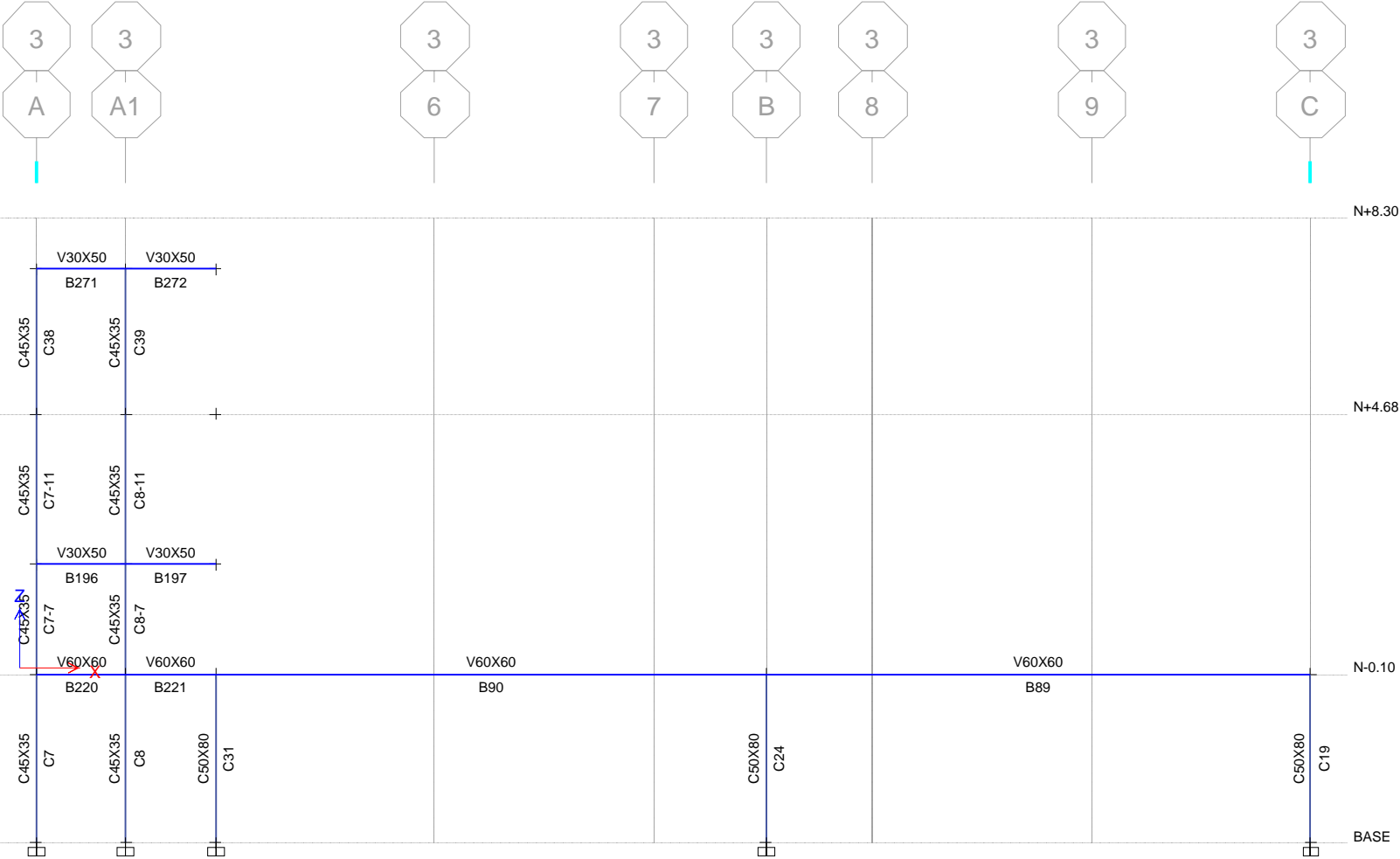


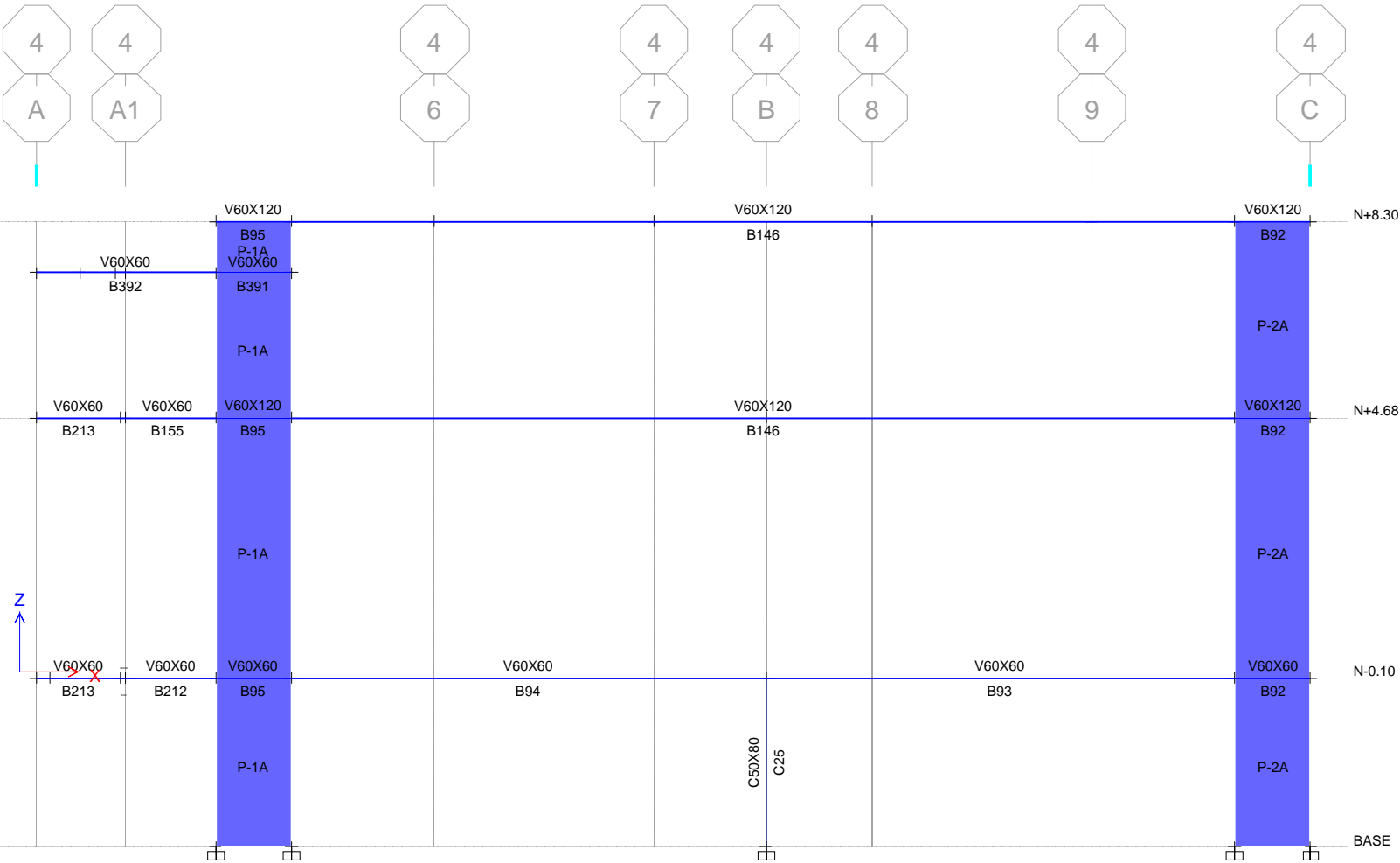


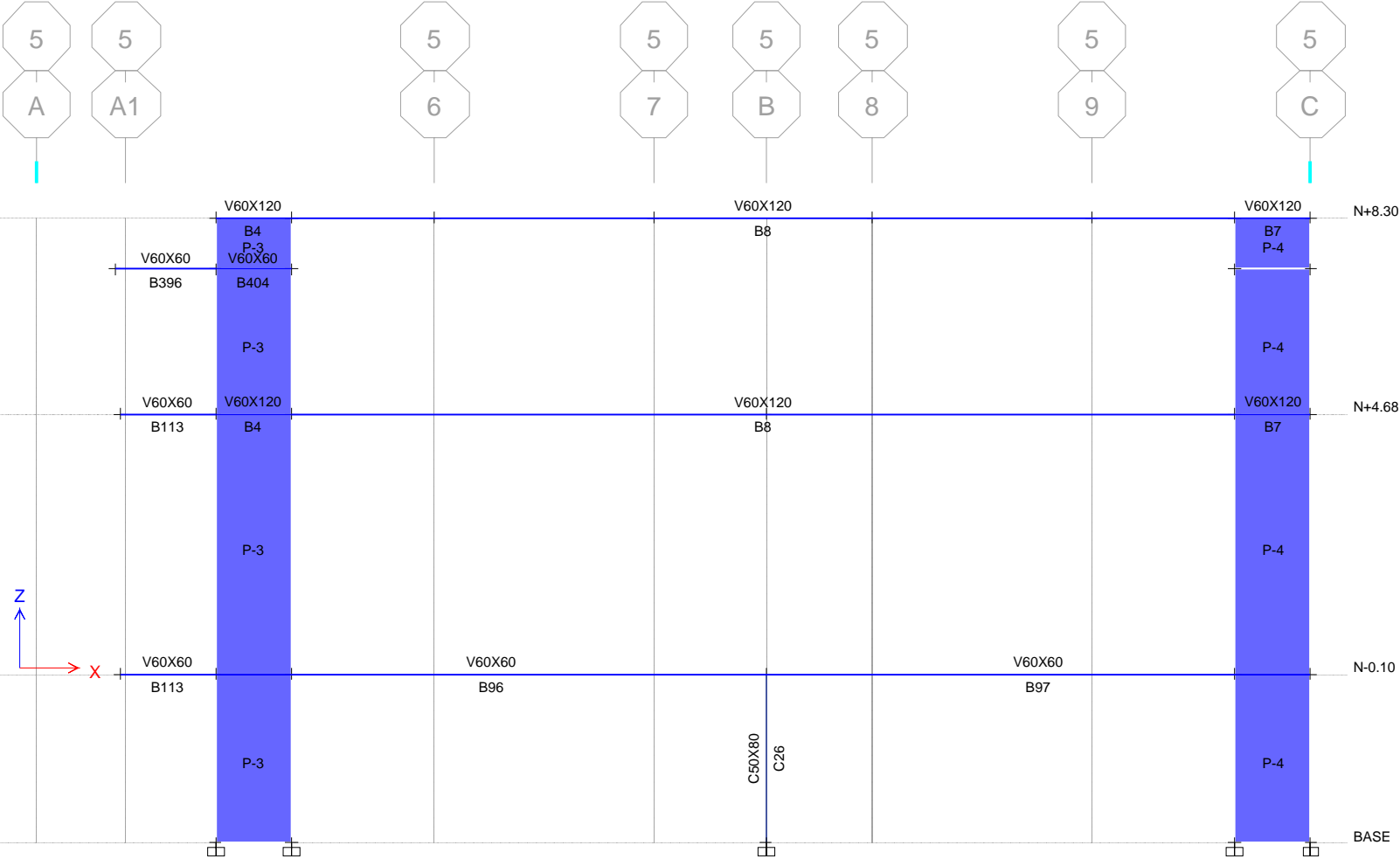


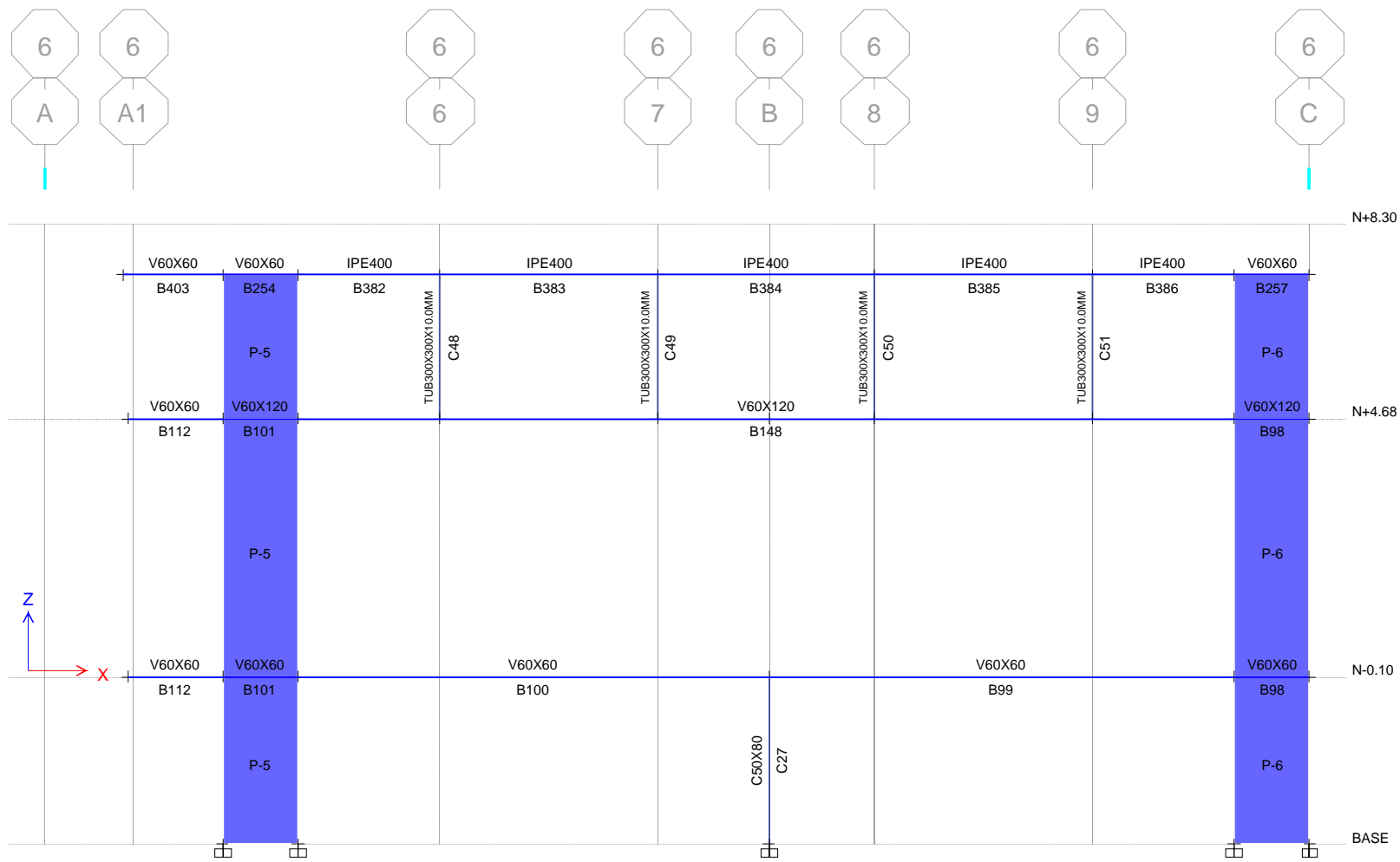


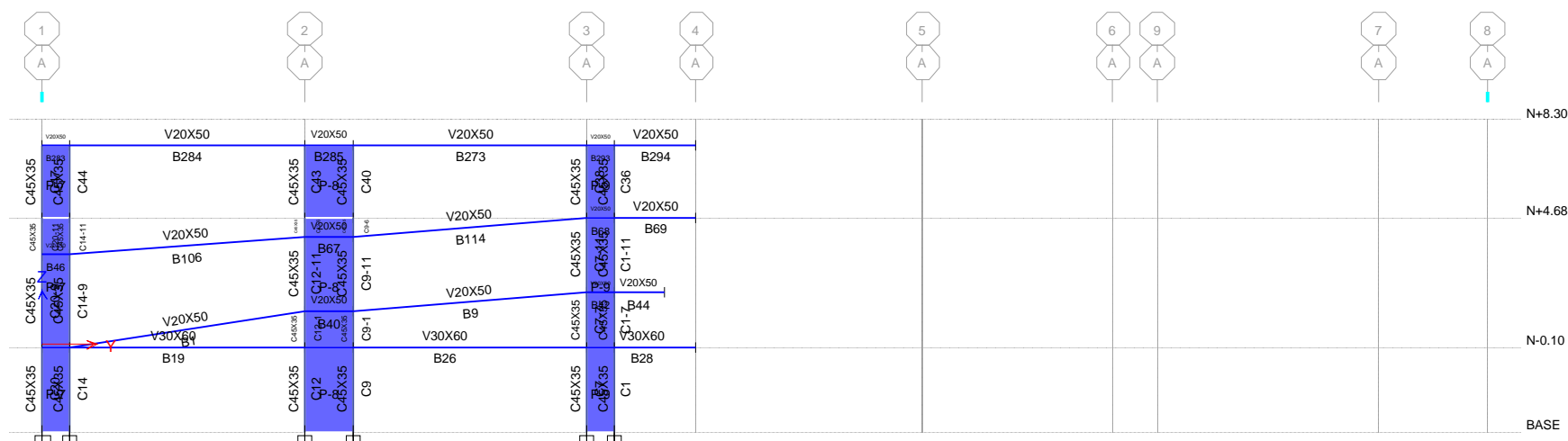


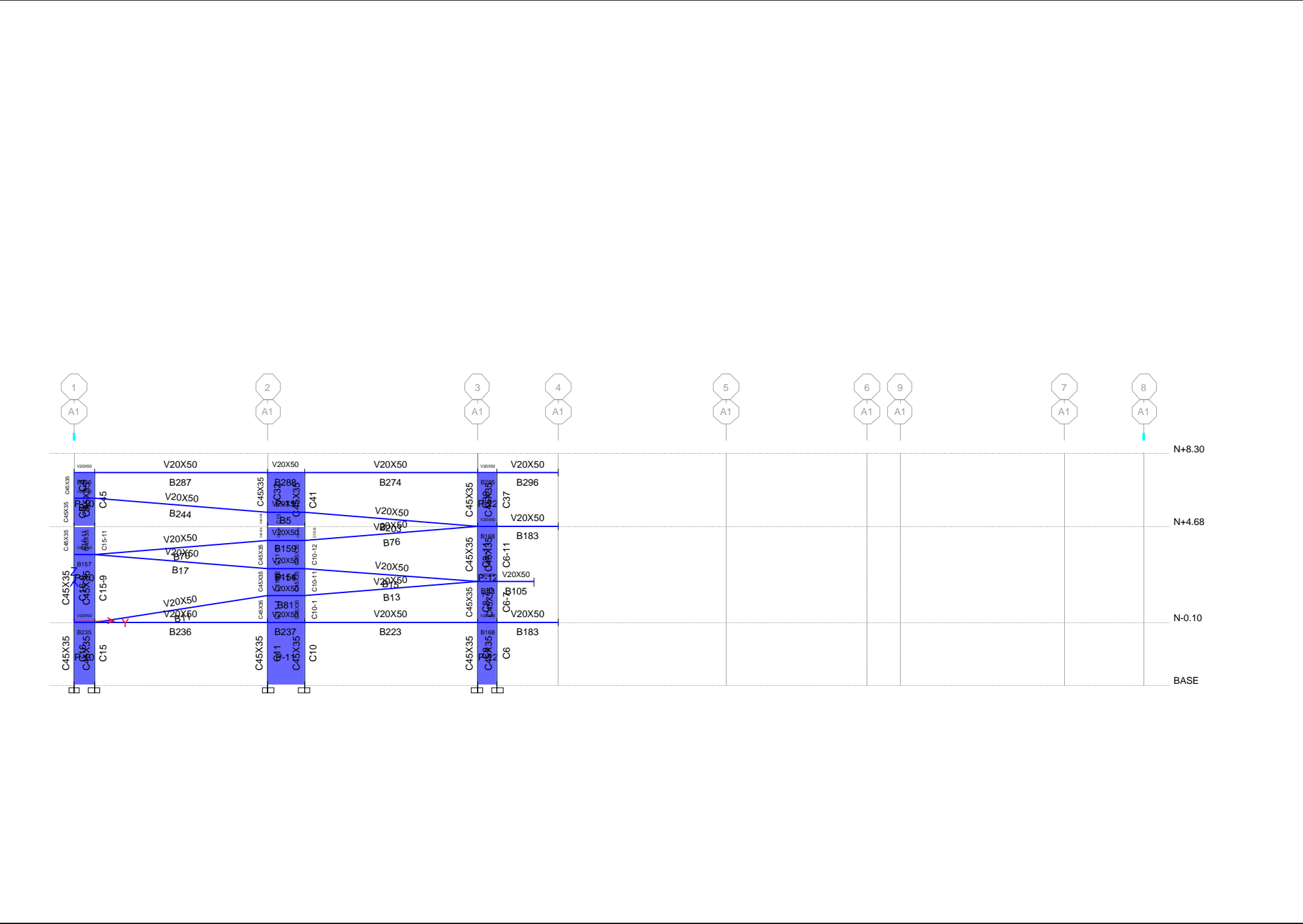


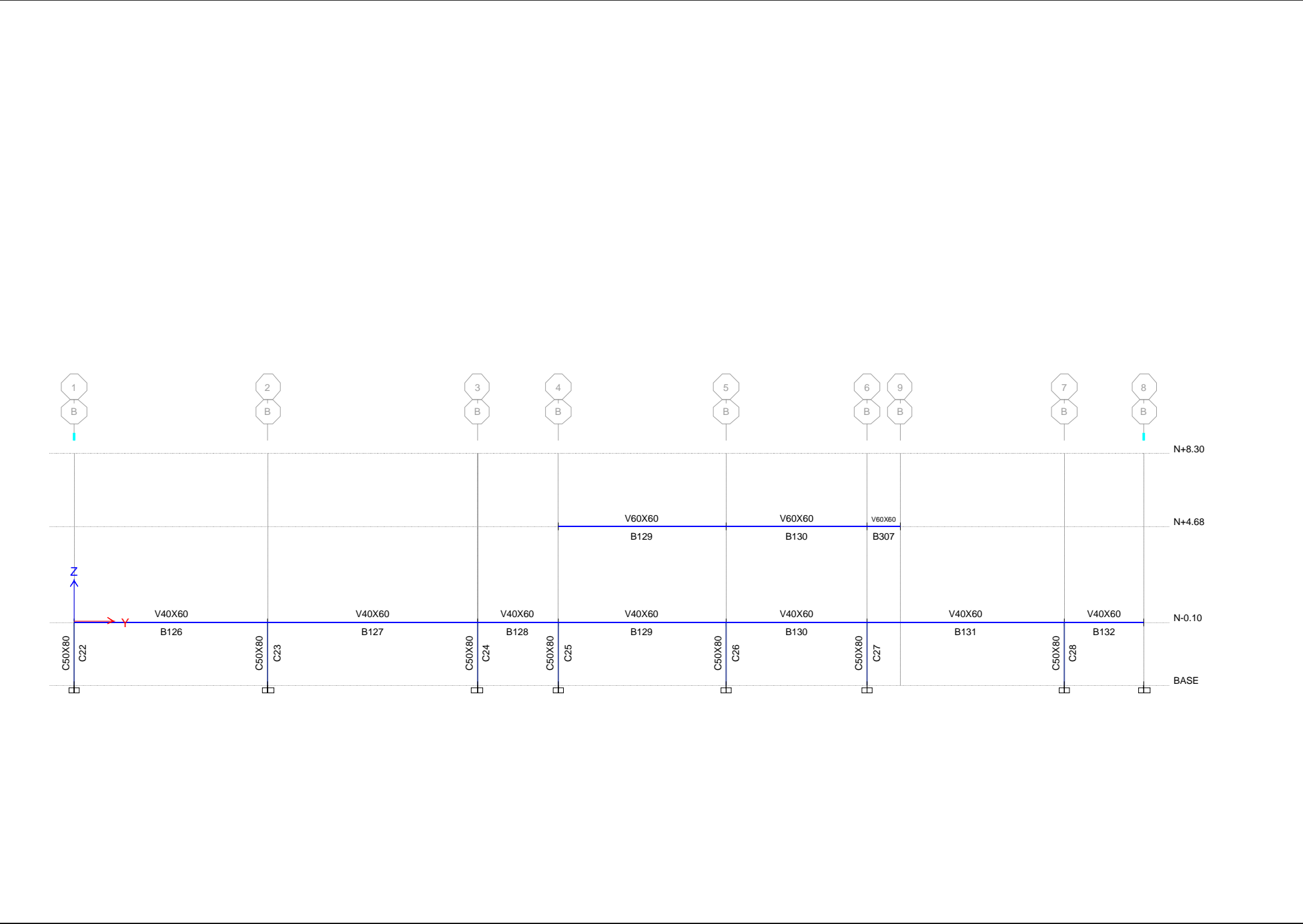


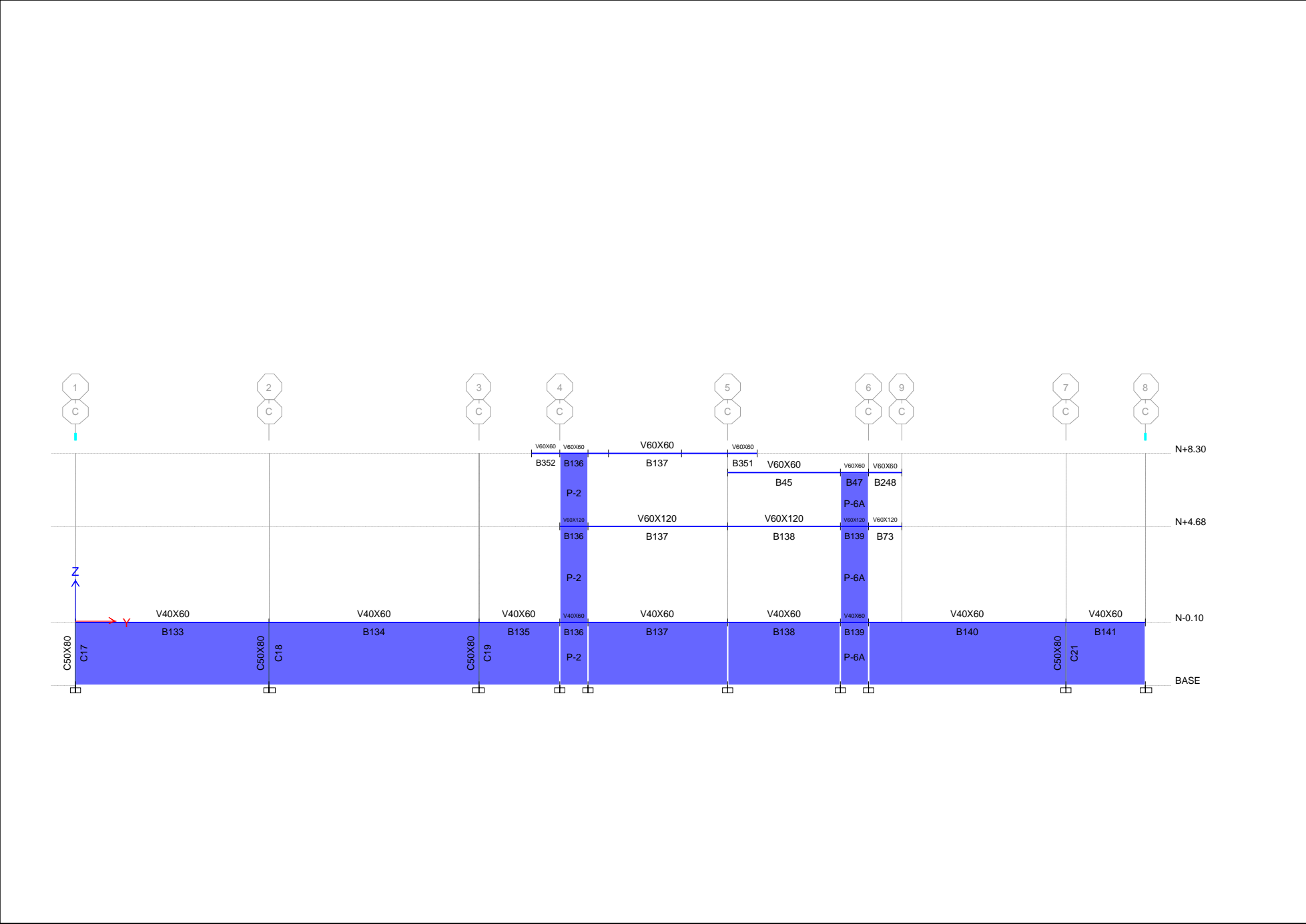


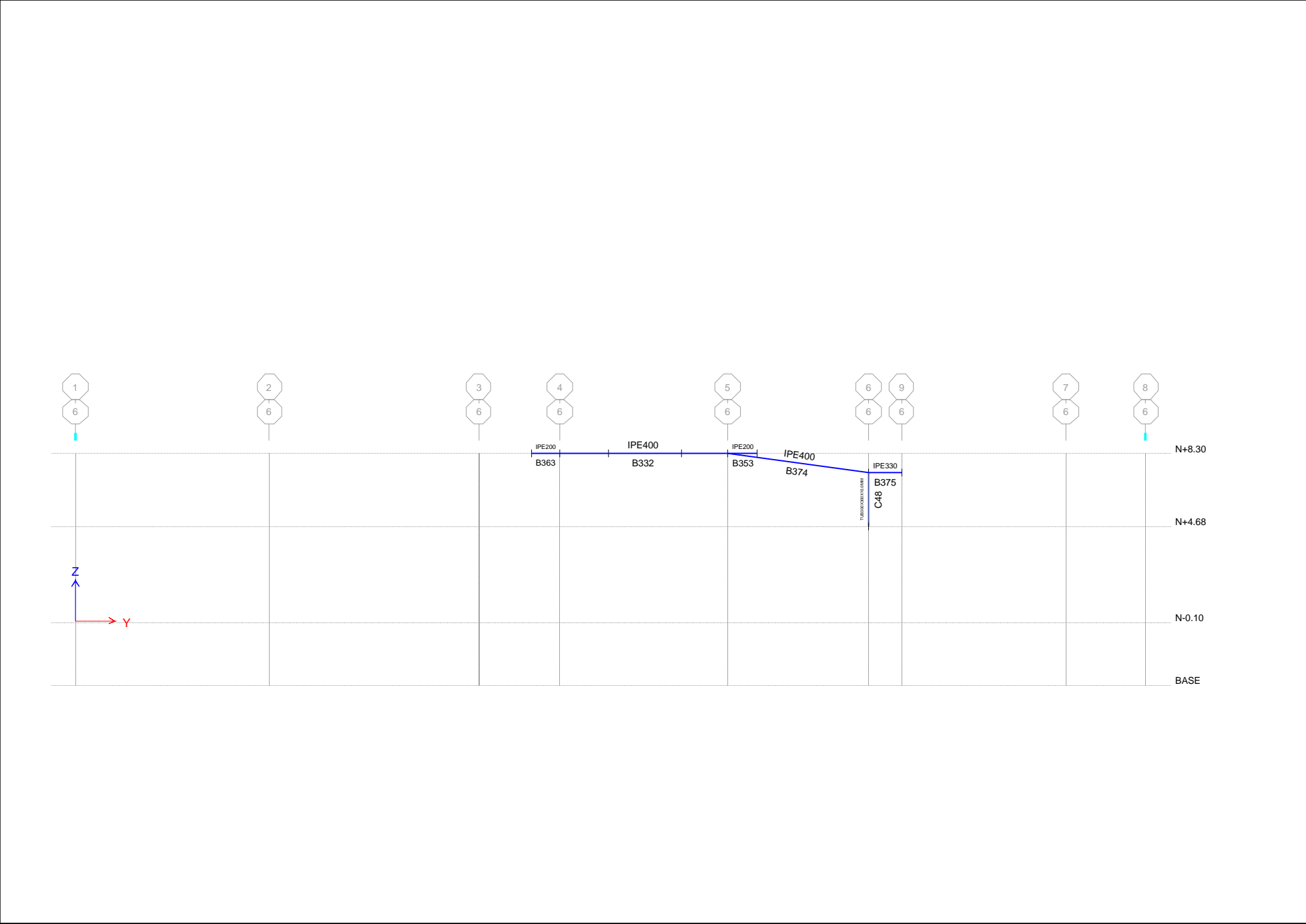














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ANEXO 2 . AVALUO DE CARGAS



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ANEXO 2.1. AVALUO DE CARGAS VERTICALES



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AVALUO DE CARGAS LOSA - N-0.10 **NORMA NSR-10**

PESO DE LA LOSA

T:	60	Cm	(Espesor total de losa)
T^{sup}:	10	Cm	(Espesor Loseta Superior)
T^{inf}:	0	Cm	(Espesor Loseta Superior)
Sep:	100	Cm	(Separacion de Viguetas entre ejes)
t^{vig}:	15	Cm	(Ancho de Vigüeta)
Sep:	300	Cm	(separacion de Riostras)
t^{rios}:	10	Cm	(ancho de Riostra)

Peso Loseta Superior:	240.00	Kg/m2
Peso Loseta Inferior:	0.00	Kg/m2
Peso Viguetas:	180.00	Kg/m2
Peso Riostras:	40.00	Kg/m2
Peso Casetón:	30.00	Kg/m2

Peso Acabados	150.00	Kg/m2
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Peso Divisiones	150.00	Kg/m2
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CM:	790	Kg/m2	Total Carga Muerta
	7.90	KN/m2	

CARGAS VIVAS - REF: CAPITULO B-4

CM:	500	Kg/m2	Total Carga Viva
	5.0	KN/m2	

CARGA DE GRANIZO - REF: CAPITULO B-4

CM:	100	Kg/m2	Total Carga de Granizo
	1.0	KN/m2	

FACTORES DE CARGA

Wu:	1.4D	1106.00	Kg/m2
Wu:	1.2D+1.6L+0.5G	1798.00	Kg/m2
Wu:	1.2D+1.6G+1.0L	1608.00	Kg/m2

FC:	1.29
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PESO DE MUROS

Altura Libre:	3.00	mt
Ancho del Muro:	12	cm

Peso del muro por metro lineal:	648	kg/m	Muro en Arcilla
	792	kg/m	Muro en Bloque de Concreto



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AVALUO DE CARGAS LOSA - N+4.68 **NORMA NSR-10**

PESO DE LA LOSA

T:	60	Cm	(Espesor total de losa)
T^{sup}:	8	Cm	(Espesor Loseta Superior)
T^{inf}:	0	Cm	(Espesor Loseta Superior)
Sep:	97	Cm	(Separacion de Viguetas entre ejes)
t^{vig}:	12	Cm	(Ancho de Vigueta)
Sep:	300	Cm	(separacion de Riostras)
t^{rios}:	10	Cm	(ancho de Riostra)

Peso Loseta Superior:	192.00	Kg/m²
Peso Loseta Inferior:	0.00	Kg/m²
Peso Viguetas:	154.39	Kg/m²
Peso Riostras:	41.60	Kg/m²
Peso Casetón:	30.00	Kg/m²

Peso Acabados **150.00** **Kg/m²**

Peso Divisiones **250.00** **Kg/m²**

CM: **818** **Kg/m²** **Total Carga Muerta**
8.18 **KN/m²**

CARGAS VIVAS - REF: CAPITULO B-4

CM: **500** **Kg/m²** **Total Carga Viva**
5.0 **KN/m²**

FACTORES DE CARGA

Wu: **1.4D** **1145.19** **Kg/m²**

Wu: **1.2D+1.6L** **1781.59** **Kg/m²**

FC: **1.35**

PESO DE MUROS

Altura Libre: **3.00** **mt**
Ancho del Muro: **12** **cm**

Peso del muro por metro lineal: **648** **kg/m** Muro en Arcilla
792 **kg/m** Muro en Bloque de Concreto



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AVALUO DE CARGAS LOSA - N+8.30 NORMA NSR-10

PESO DE LA LOSA

T:	60	Cm	(Espesor total de losa)
T^{sup}:	8	Cm	(Espesor Loseta Superior)
T^{inf}:	0	Cm	(Espesor Loseta Superior)
Sep:	97	Cm	(Separacion de Viguetas entre ejes)
t^{vig}:	12	Cm	(Ancho de Vigüeta)
Sep:	300	Cm	(separacion de Riostras)
t^{rios}:	10	Cm	(ancho de Riostra)

Peso Loseta Superior:	192.00	Kg/m²
Peso Loseta Inferior:	0.00	Kg/m²
Peso Viguetas:	154.39	Kg/m²
Peso Riostras:	41.60	Kg/m²
Peso Casetón:	30.00	Kg/m²

Peso Acabados **150.00** **Kg/m²**

Peso Divisiones **150.00** **Kg/m²**

CM:	718	Kg/m²	Total Carga Muerta
	7.18	KN/m²	

CARGAS VIVAS - REF: CAPITULO B-4

CM:	200	Kg/m²	Total Carga Viva
	2.0	KN/m²	

CARGA DE GRANIZO - REF: CAPITULO B-4

CM:	100	Kg/m²	Total Carga de Granizo
	1.0	KN/m²	

FACTORES DE CARGA

Wu:	1.4D	1005.19	Kg/m²
Wu:	1.2D+1.6L+0.5G	1231.59	Kg/m²
Wu:	1.2D+1.6G+1.0L	1221.59	Kg/m²

FC: **1.21**

PESO DE MUROS

Altura Libre:	3.00	mt
Ancho del Muro:	12	cm

Peso del muro por metro lineal:	648	kg/m	Muro en Arcilla
	792	kg/m	Muro en Bloque de Concreto



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ANEXO 2.2 ESPECTRO DE DISEÑO



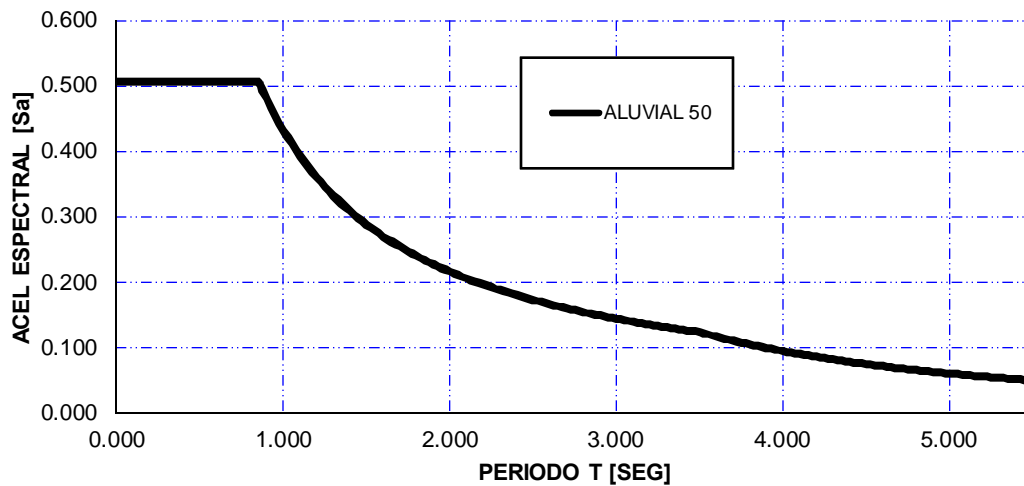
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ESPECTRO DE DISEÑO MICROZONIFICACIÓN SÍSMICA BOGOTA

BOGOTA		ALUVIAL50	
Aa =	0.15	Fa :	1.35
Av =	0.20	Fv :	1.80
		Tc (s):	0.85
		TL (s):	3.50
		Ao (g):	0.20
		I:	1.00

A.6.2.1.2 →

ESPECTRO DE DISEÑO



Aceleraciones Espectrales para diferentes Periodos

	T [seg]	Sa [g]
Modo 1:		
Modo 2:		
Modo 3:		
Modo 4:		
Modo 5:		
Modo 6:		
Modo 7:		
Modo 8:		
Modo 9:		
Modo 10:		

NOTA: El literal **A.6.2.1.2** permite que al calcular desplazamientos horizontales se use el coeficiente de importancia con un valor igual a la unidad ($I=1.0$).

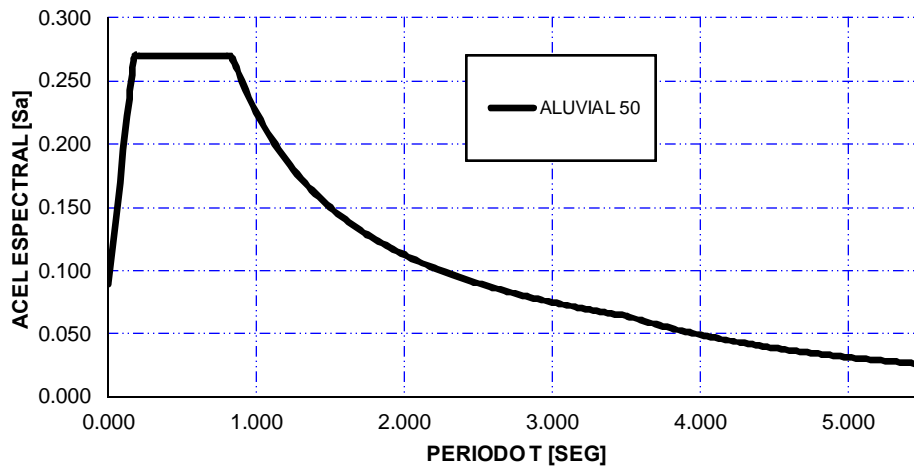


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UMBRAL DE DAÑO MICROZONIFICACIÓN SÍSMICA BOGOTA

BOGOTA		ALUVIAL50	
Ae =	0.13	Fa :	1.50
		Fv :	2.50
		Tc (s):	0.83
		TL (s):	3.50
		Ao (g):	0.09

ESPECTRO PARA UMBRAL DE DAÑO



Aceleraciones Espectrales para diferentes Períodos

	T [seg]	Sa [g]
Modo 1:		
Modo 2:		
Modo 3:		
Modo 4:		
Modo 5:		
Modo 6:		
Modo 7:		
Modo 8:		
Modo 9:		
Modo 10:		



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ANEXO 2.3. REVISION DE IRREGULARIDADES

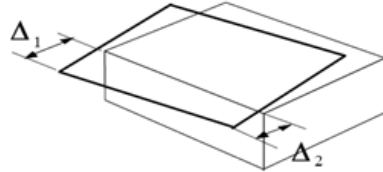


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REVISION DE IRREGULARIDADES NORMA NSR-10

IRREGULARIDADES EN PLANTA, Referencia Tabla A.3-6, Figura A.3-1

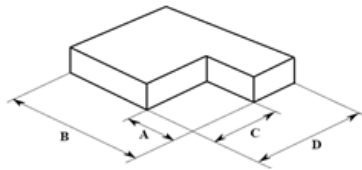
Tipo 1P



Tipo 1aP - Irregularidad Torsional $\phi_p=0.9$
Tipo 1bP - Irregularidad Torsional Extrema $\phi_p=0.8$

Δ_1 : % ϕ_p :
 Δ_2 : %

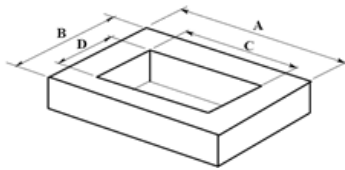
Tipo 2P



Tipo 2P - Retrocesos en las esquinas

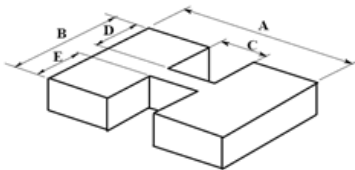
A: m
B: m ϕ_p :
C: m
D: m

Tipo 3P



Tipo 3P - Irregularidad del diafragma

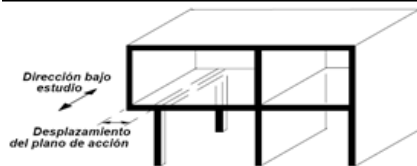
A: m
B: m ϕ_p :
C: m
D: m



Tipo 3P - Irregularidad del diafragma

A: m
B: m ϕ_p :
C: m
D: m
E: m

Tipo 4P



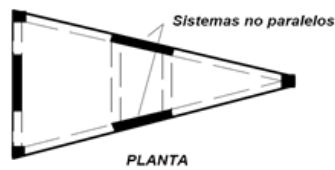
Tipo 4P - Desplazamiento del planos de acción $\phi_p=0.8$

ϕ_p :



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENC	Revisó:	ING. JUAN C. PATINO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
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Tipo 5P

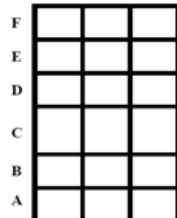


Tipo 5P - Sistemas no paralelos $\phi_p=0.9$

ϕ_p : **1.0**

IRREGULARIDADES EN ALZADA, Referencia Tabla A.3-7, Figura A.3-2

Tipo 1A.

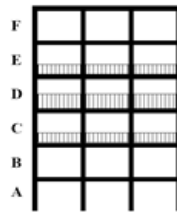


Tipo 1aA - Piso Flexible $\phi_p=0.9$

Tipo 1bA - Piso Flexible Extremo $\phi_p=0.8$

Kc: ϕ_a : **1.0**
Kd:
Ke:
Kf:

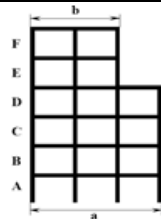
Tipo 2A.



Tipo 2A - Distribucion de Masa $\phi_p=0.9$

Mc: ϕ_a : **1.0**
Md:
Me:

Tipo 3A.



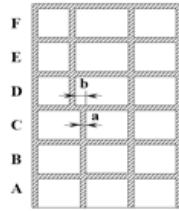
Tipo 3A - Geometrica $\phi_p=0.9$

a: m ϕ_a : **1.0**
b: m



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Tipo 4A.

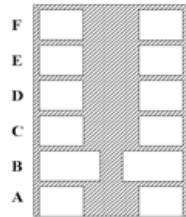


Tipo 4A - Desplazamiento del plano de acción $\phi_a=0.8$

a: m ϕ_a :

b: m

Tipo 5A.



Tipo 5aA - Piso Débil $\phi_p=0.9$
 Tipo 5bA - Piso débil Extremo $\phi_p=0.8$

RpB: ϕ_a :

RpC:

IRREGULARIDAD POR AUSENCIA DE REDUNDANCIA, Referencia A.3.3.8

ϕ_r :

RESUMEN

ϕ_p :

ϕ_a :

ϕ_r :



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Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
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ANEXO 2.4. COMBINACIONES DE CARGA



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

COMBINACIONES DE CARGA - SISMO NORMA NSR-10

Ro:	5	$R = Ro * \phi_p * \phi_a * \phi_r =$	3.75
ϕ_p:	1	$E = I * (1/R) * SISMO =$	0.333 * SISMO
ϕ_a:	1		
ϕ_r:	0.75		
I:	1.25	$0.3E = I * (1/R) * SISMO * 0.3 =$	0.100 * SISMO

COMBINACIONES DE CARGA - DISEÑO DE ELEMENTOS

COMBO	D	L	SISMOX	SISMOY
C1:	1.4			
C2:	1.2	1.6		
C3:	1.2	1	0.333	0.100
C4:	1.2	1	0.333	-0.100
C5:	1.2	1	-0.333	0.100
C6:	1.2	1	-0.333	-0.100
C7:	1.2	1	0.100	0.333
C8:	1.2	1	0.100	-0.333
C9:	1.2	1	-0.100	0.333
C10:	1.2	1	-0.100	-0.333
C11:	0.9		0.333	0.100
C12:	0.9		0.333	-0.100
C13:	0.9		-0.333	0.100
C14:	0.9		-0.333	-0.100
C15:	0.9		0.100	0.333
C16:	0.9		0.100	-0.333
C17:	0.9		-0.100	0.333
C18:	0.9		-0.100	-0.333

1.4D
1.2D+1.6L
1.2D+1.0L+1.0E
0.9D+1.0E

Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
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COMBINACIONES DE CARGA - CIMENTACION NORMA NSR-10

Ro:	5	$R = R_o * \phi_p * \phi_a * \phi_r =$	3.75
ϕ_p:	1		
ϕ_a:	1	$0.7E = 0.7 * I * (1/R) * SISMO =$	0.233 * SISMO
ϕ_r:	0.75		
I:	1.25	$0.75 * 0.7E = 0.75 * 0.7 * I * (1/R) * SISMO =$	0.175 * SISMO

COMBINACIONES DE CARGA - DISEÑO DE ELEMENTOS

COMBO	D	L	SISMOX	SISMOY
CIM1:	1			
CIM2:	1	1		
CIM3:	1		0.233	0.070
CIM4:	1		0.070	0.233
CIM5:	1	0.75	0.175	0.053
CIM6:	1	0.75	0.053	0.175
CIM7:	0.6		0.233	0.070
CIM8:	0.6		0.070	0.233

D
D+L
D+0.7E
D+0.75L+0.75(0.7E)
0.6D+0.7E



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
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RESISTENCIA AL CORTANTE COLUMNAS **C.21.3.3.2.b - NORMA NSR-10**

R_o :	5	$R = R_o * \phi_p * \phi_a * \phi_r =$	3.75
ϕ_p :	1	$\Omega * E = 3 * I * (1/R) * SISMO =$	1.000 * SISMO
ϕ_a :	1		
ϕ_r :	0.75		
I :	1.25	$\Omega * 0.3E = \Omega * I * (1/R) * SISMO * 0.3 =$	0.300 * SISMO

COMBINACIONES DE CARGA - DISEÑO DE ELEMENTOS

COMBO	D	L	SISMOX	SISMOY
VnC:1	1.3	1	1.000	0.300
VnC:2	1.3	1	1.000	-0.300
VnC:3	1.1	1	-1.000	0.300
VnC:4	1.1	1	-1.000	-0.300
VnC:5	1.3	1	0.300	1.000
VnC:6	1.1	1	0.300	-1.000
VnC:7	1.3	1	-0.300	1.000
VnC:8	1.1	1	-0.300	-1.000
VnC:9	1.0		1.000	0.300
VnC:10	1.0		1.000	-0.300
VnC:11	0.8		-1.000	0.300
VnC:12	0.8		-1.000	-0.300
VnC:13	1.0		0.300	1.000
VnC:14	0.8		0.300	-1.000
VnC:15	1.0		-0.300	1.000
VnC:16	0.8		-0.300	-1.000

1.2D+1.0L+ Ω *E
 $\pm 0.5 * A_a * F_a * D$

0.9D+ Ω *E
 $\pm 0.5 * A_a * F_a * D$



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

RESISTENCIA AL CORTANTE VIGAS C.21.3.3.1.b - NORMA NSR-10

R_o :	5	$R = R_o * \phi_p * \phi_a * \phi_r =$	3.75
ϕ_p :	1	$2 * E = 2 * I * (1/R) * SISMO =$	0.667 * SISMO
ϕ_a :	1		
ϕ_r :	0.75		
I :	1.25	$2 * 0.3E = 2 * I * (1/R) * SISMO * 0.3 =$	0.200 * SISMO

COMBINACIONES DE CARGA - DISEÑO DE ELEMENTOS

COMBO	D	L	SISMOX	SISMOY
VnV:1	1.2	1	0.667	0.200
VnV:2	1.2	1	0.667	-0.200
VnV:3	1.2	1	-0.667	0.200
VnV:4	1.2	1	-0.667	-0.200
VnV:5	1.2	1	0.200	0.667
VnV:6	1.2	1	0.200	-0.667
VnV:7	1.2	1	-0.200	0.667
VnV:8	1.2	1	-0.200	-0.667
VnV:9	0.9		0.667	0.200
VnV:10	0.9		0.667	-0.200
VnV:11	0.9		-0.667	0.200
VnV:12	0.9		-0.667	-0.200
VnV:13	0.9		0.200	0.667
VnV:14	0.9		0.200	-0.667
VnV:15	0.9		-0.200	0.667
VnV:16	0.9		-0.200	-0.667

1.2D+1.0L+2*E

0.9D+2*E



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
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ANEXO 2.5. ANALISIS DE VIENTO

ANÁLISIS DE CARGA DE VIENTO

NSR -10 Edificaciones cerradas con $h \leq 18\text{m}$ y cubiertas con $\theta \leq 45^\circ$

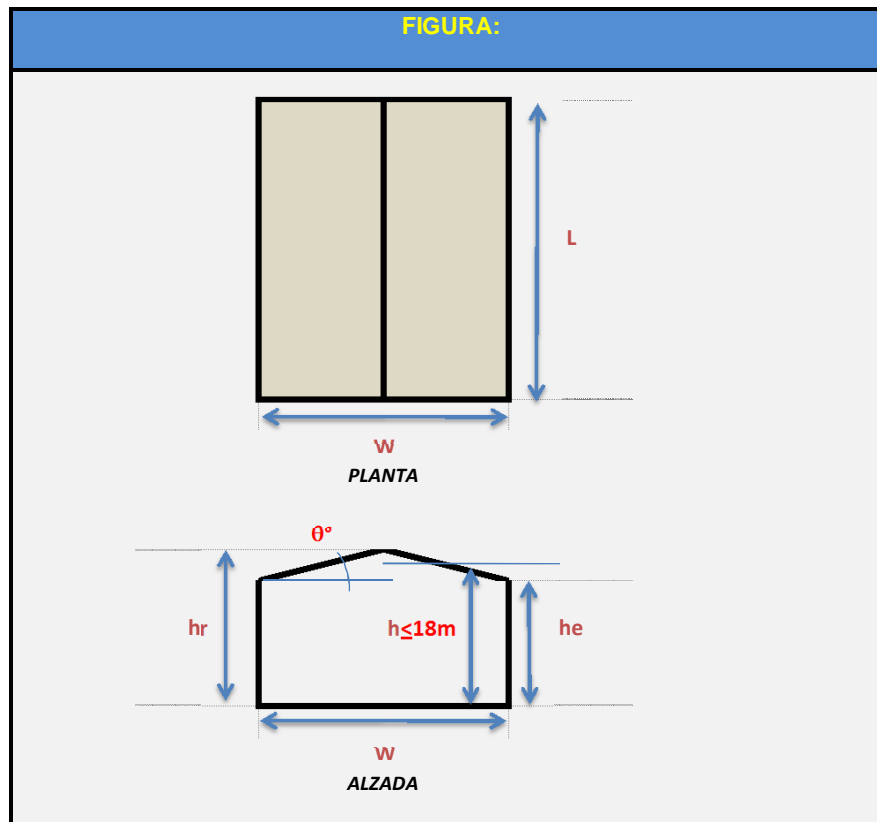
Método 1: Procedimiento simplificado (B.6.4)

proyecto:	Colegio y Teatro El Ensueño	Ingeniero:	Juan Carlos Patiño
Proyecto No.:	2765	Fecha:	ABRIL - 2016

Datos de entrada:

Velocidad del viento, $V =$	22 m/s (80Km/h)	(Figura B.6.4-1)
Factor de Importancia, $I =$	III	(Ver Tabla A.2.5-1 / Según grupo de uso)
Categoría de exposición =	C	(B.6.5.6.3)
Altura de la cumbrera, $h_r =$	8.30	m ($h_r \geq h_e$)
Altura de la cornisa, $h_e =$	8.30	m ($h_e \leq h_r$)
Ancho del edificio, $W =$	15.35	m (Perpendicular a la cumbrera)
Dimension Horizontal del Edificio, $L =$	21.90	m (Paralelo a la cumbrera)
Tipo de cubierta =	plana	(plana - 1 agua - 2 aguas)
Factor topografico, $K_{zt} =$	1.00	(B.6.5.7 Y Figura 6.5-1)
C&R en fachada =	Correas	(correas de fachada, tejas de fachadas o fijaciones)
C&R Area efectiva en fachada =	6.75	m ² (Componentes/revestimientos)
C&R en cubierta =	Correas	(correas de cubierta, tejas de cubiertas o fijaciones)
C&R Area efectiva en cubierta =	12.00	m ² (Componentes/revestimientos)
Area efectiva en aleros =	0.00	m ² (Componentes/revestimientos)
Region propensa a huracanes?	No	

FIGURA:



Parámetros resultantes y presiones netas de diseño

Para la dirección transversal:

(viento perpendicular a la cumbre)

Angulo de inclinación de la cubierta, $\theta = 0.00^\circ$
 Altura media del edificio, $h = 8.30$ m ($h = h_e$ para $\theta < 10^\circ$)
 Factor de ajuste, $\lambda = 1.377$ (Ajustes por altura y exposición)
 Factor de importancia, $I = 1.15$ (Tabla A.2.5-1)
 $a = 1.535$ m (use: " $2 \cdot a$ " para SPRFV, " a " para Componentes y Revestimientos)

Presiones de viento neta Transversales para SPRFV, p_s (KN/m ²)				
Ubicación	Dirección	Zona	Cas. Carg. 1	Cas. Carg. 2
A = Zona final del muro	Horizontal	A	0.30	0.00
B = Zona final de la cubierta	Horizontal	B	-0.16	0.00
C = Zona interior del muro	Horizontal	C	0.19	0.00
D = Zona interior de la cubierta	Horizontal	D	-0.09	0.00
E = Zona final de cubierta a barlovento	Vertical	E	-0.36	0.00
F = Zona final de cubierta a sotavento	Vertical	F	-0.21	0.00
G = Zona interior de cubierta a barlovento	Vertical	G	-0.25	0.00
H = Zona interior de cubierta a sotavento	Vertical	H	-0.16	0.00

$p_s = \lambda \cdot K_{zt} \cdot I \cdot p_{s10}$
 (p_{s10} de la Fig. 6.4-2)

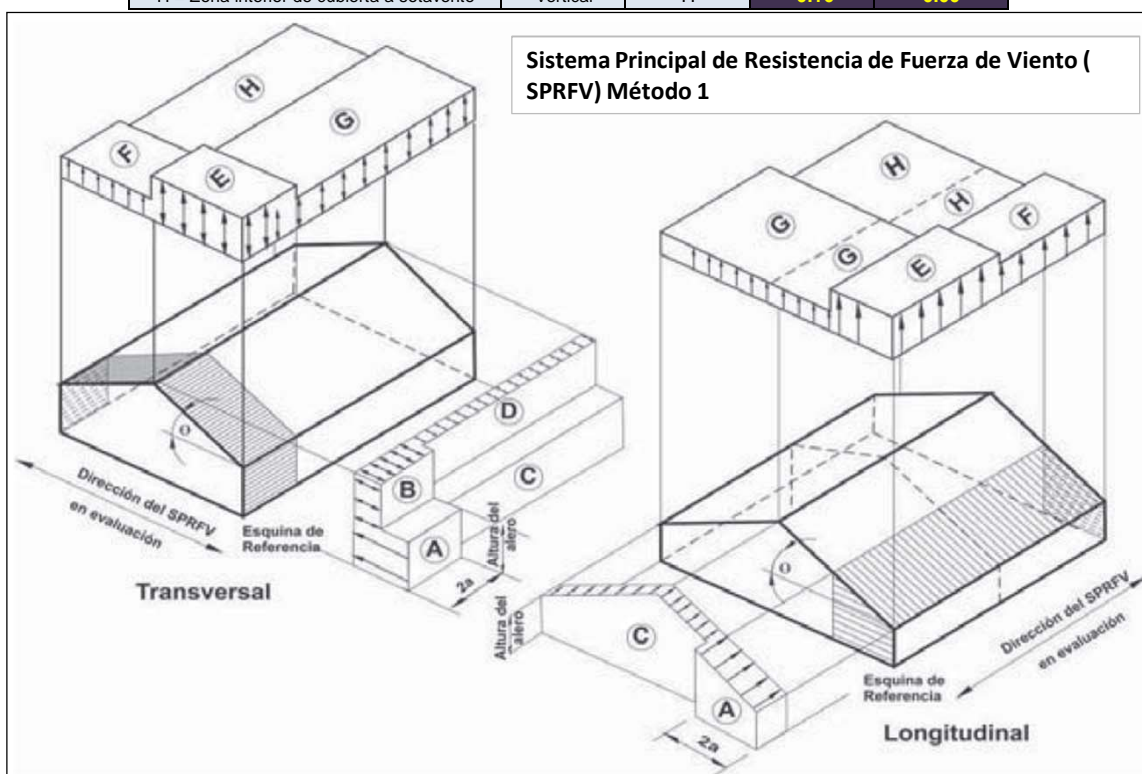
Para la dirección longitudinal:

(viento paralelo a la cubierta)

Angulo de inclinación de la cubierta, $\theta = 0.00^\circ$ (asumido)
 Altura media del edificio, $h = 8.30$ m ($h = (h_r + h_e)/2$)
 Factor de ajuste, $\lambda = 1.377$ (Ajustes por altura y exposición)
 $a = 1.54$ m (use: " $2 \cdot a$ " para SPRFV, " a " para Componentes y Revestimientos)

Presiones de viento neta Longitudinales para SPRFV, p_s (KN/m ²)				
Ubicación	Dirección	Zona	Cas. Carg. 1	Cas. Carg. 2
A = Zona final del muro	Horizontal	A	0.30	0.00
B = Zona final de la cubierta	Horizontal	B	0.00	0.00
C = Zona interior del muro	Horizontal	C	0.19	0.00
D = Zona interior de la cubierta	Horizontal	D	0.00	0.00
E = Zona final de cubierta a barlovento	Vertical	E	-0.36	0.00
F = Zona final de cubierta a sotavento	Vertical	F	-0.21	0.00
G = Zona interior de cubierta a barlovento	Vertical	G	-0.25	0.00
H = Zona interior de cubierta a sotavento	Vertical	H	-0.16	0.00

$p_s = \lambda \cdot K_{zt} \cdot I \cdot p_{s10}$
 (p_{s10} de la Fig. 6.4-2)



Parámetros resultantes y presiones netas de diseño

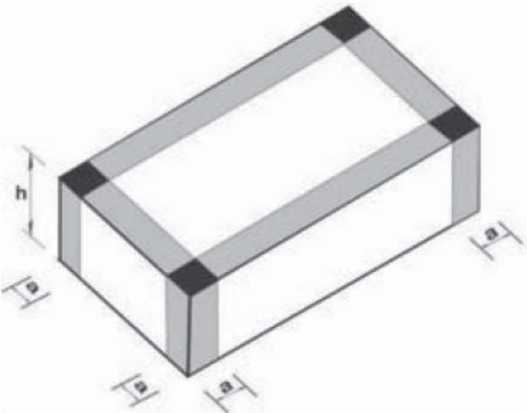
Para componentes y revestimientos: Las presiones calculadas se aplican en la dirección normal a la superficie

Angulo de inclinación de la cubierta, $\theta = 0.00^\circ$
Altura media del edificio, $h = 8.30$ m ($h = (h_r + h_e)/2$)
Factor de ajuste, $\lambda = 1.377$ (Ajustes por altura y exposición)
 $a = 1.54$ m (use: "2*a" para SPRFV, "a" para Componentes y Revestimientos)

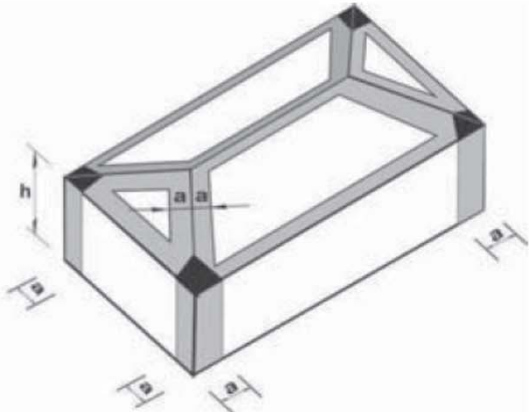
Componentes y Revestimientos Presiones netas de viento de diseño , (KN/m2)				
Item	Localización	Zona	Pos. (+)	Neg. (-)
Fachada - Correas	Zonas interiores Fachadas	4	0.30	-0.33
	Zonas finales Fachadas	5	0.30	-0.37
Cubierta - Correas	Zonas interiores Cubiertas	1	0.11	-0.30
	Zonas finales Cubiertas	2	0.11	-0.36
	Zonas esquineras Cubiertas	3	0.11	-0.36
Alero	Zonas finales Aleros	2	---	0.00
	Zonas esquineras Aleros	3	---	0.00

$p_{net} = \lambda \cdot K_{zt} \cdot I \cdot p_{net10}$
(p_{net10} de Fig. B.6.4-3)

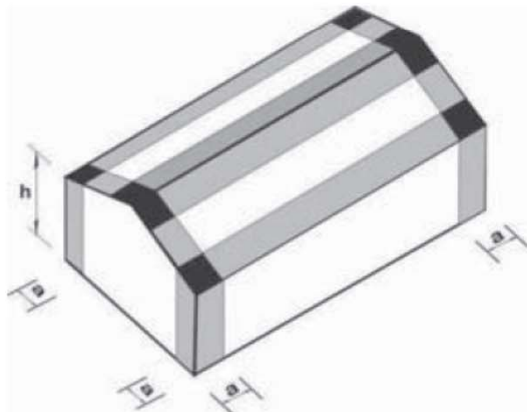
Componentes y Revestimientos – Método 1



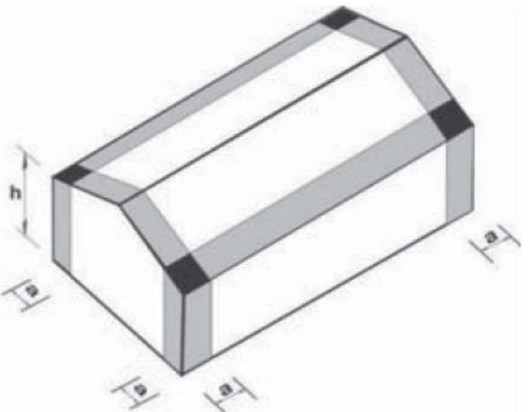
Cubierta Plana



Cubierta a Cuatro Aguas ($7^\circ < \theta \leq 27^\circ$)



Cubierta a Dos Aguas ($\theta \leq 7^\circ$)



Cubierta a Dos Aguas ($7^\circ < \theta \leq 45^\circ$)



Zonas Interiores
Cubiertas – Zona 1
Muros – Zona 4



Zonas Finales
Cubiertas – Zona 2
Muros – Zona 5



Zonas Esquineras
Cubiertas – Zona 3

CONDICIONES DEL PROCEDIMIENTO SIMPLIFICADO (NSR-10):

B.6.4.1.1 — Sistema Principal de Resistencia de Fuerzas de Viento (SPRFV) — Para el diseño del SPRFV el edificio debe cumplir todas las siguientes condiciones:

- (a) El edificio sea de diafragma simple como se define en la sección B.6.2.
- (b) El edificio sea bajo de acuerdo con la sección B.6.2.
- (c) El edificio sea cerrado como se define en la sección B.6.2 y cumpla las provisiones de zonas propensas a huracanes de acuerdo con la sección B.6.5.9.3.
- (d) El edificio sea de forma regular como se define en la sección B.6.2.
- (e) El edificio no sea clasificado como flexible como se define en la sección B.6.2.
- (f) Las características de respuesta del edificio sean tales que el mismo no esté sujeto a cargas por viento a través de él, a generación de vórtices, a inestabilidad por golpeteo o aleteo, y no esté ubicado en un sitio en el que se puedan presentar efectos de canalización o sacudimiento por la estela de obstrucciones en barlovento, que obliguen a consideraciones especiales.
- (g) El edificio tenga una sección transversal aproximadamente simétrica en cada dirección y tenga una cubierta plana o cubierta a dos o cuatro aguas con ángulo de inclinación $\theta \leq 45^\circ$
- (h) El edificio esta eximido de los casos de carga torsional indicados en la Nota 5 de la fig. B.6.5-7, o estos casos no controlan el diseño de ninguno de los elementos del SPRFV del edificio.

B.6.4.1.2 — Componentes y Revestimientos — Para el diseño de los componentes y elementos de revestimiento, el edificio debe cumplir todas las siguientes condiciones:

- (a) La altura promedio h es igual o menor a 18.0 m.
- (b) El edificio es cerrado como se define en la sección B.6.2 y cumple las provisiones de zonas propensas a huracanes de acuerdo con la sección B.6.5.9.3.
- (c) El edificio es de forma regular como se define en la sección B.6.2.
- (d) El edificio tiene una cubierta plana, una cubierta a dos aguas con $\theta \leq 45^\circ$ o una cubierta a cuatro aguas con $\theta \leq 27^\circ$.

B.6.4.2.1.1 - Presiones Mínimas (SPRFV) - Los efectos de carga de las presiones de viento de diseño de la sección B.6.4.2.1 no serán menores que el caso de carga mínima de la sección B.6.1.3.1, suponiendo presiones p_s , de +0.40 kN/m² para las zonas A, B, C y D y de 0 kN/m² para las zonas E, F, G y H.

B.6.4.2.2.1 — Presiones Mínimas (C&R) - Las presiones de viento de diseño positivas y negativas, P_{net} de la sección B.6.4.2.2 no serán menores a +0.4 kN/m² y -0.4 kN/m², respectivamente.

Referencias:

Capítulo B.6 - NSR 10

ASCE 7-05 Standard, "Minimum Design Loads for Buildings and Other Structures"

Guide to the Use of the Wind Load Provisions of ASCE 7-02



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
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ANEXO 2.6. AJUSTE DE CORTANTE SISMICA EN LA BASE

Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

AJUSTE DE CORTANTE SISMICA EN LA BASE

1. Calculo del periodo aproximado según A.4.2.2 $T_a = C_t h^\alpha$

Tabla A.4.2-1

Valor de los parámetros C_t y α para el cálculo del período aproximado T_a

Sistema estructural de resistencia sísmica	C_t	α
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	0.9
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	0.8
Pórticos arriostrados de acero estructural con diagonales excéntricas 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
Alternativamente, para estructuras que tengan muros estructurales de concreto reforzado o mampostería estructural, pueden emplearse los siguientes parámetros C_t y α , donde C_w se calcula utilizando la ecuación A.4.2-4.	$\frac{0.0062}{\sqrt{C_w}}$	1.00

Ct:	0.047
h:	8.3
α:	0.9

Coeficiente para el calcular el periodo de la estructura
altura en metros, medida desde la base, del piso mas alto del edificio
Exponente del periodo aproximado

Ta: 0.316 Seg

2. Valor de la aceleración espectral (ver anexo Espectro de Diseño)

Sa: 0.478 g

3. Valor del exponente k

Valores de entrada - Etabs	Sa:	0.48
	k:	1.00

k: 1.00 Seg

4. Valor del periodo máximo de la estructura (Análisis Dinámico)

$T < C_u T_a$ T : periodo de la estructura del análisis dinámico

$C_u = 1.75 - 1.2 A_v F_v > 1.2$

Av:	0.2
Fv:	1.95

Cu: 1.28 **CuTa:** 0.40



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

T1: 0.2576 Seg Período Fundamental del análisis dinámico (Etabs)
T2: 0.2222 Seg Período Fundamental del análisis dinámico (Etabs)
Sa: 0.478 g

5. Cortantes Sísmicas en la Base

Vu: 632.8 Ton Cortante Basal según FHE (Etabs)
0.8Vu: 506.24 Ton Edificio Regular
0.9Vu: 569.52 Ton Edificio Irregular

6. Ajuste de resultados (gravedad)

Vux: 688.26 Ton
Vuy: 698.21 Ton

Edificio Regular

gx: 9.80
gy: 9.80

Edificio Irregular

gx: 9.80
gy: 9.80

TABLE: Base Reactions									
Load Case/Combo	FX	FY	FZ	MX	MY	MZ	X	Y	Z
	tonf	tonf	tonf	tonf-m	tonf-m	tonf-m	m	m	m
FHE	-580.211	0	0	0	-5313.817	16385.176	0	0	-3.21
FHEU	-316.810	0	0	0	-2901.478	8946.717	0	0	-3.21
SISMOX Max	764.587	228.550	0	1568.752	5642.160	20062.455	0	0	-3.21
SISMOY Max	228.550	654.337	0	5349.776	1767.649	6404.063	0	0	-3.21
UMBRALX Max	413.161	127.129	0	880.977	3060.811	10845.517	0	0	-3.21
UMBRALY Max	127.129	354.124	0	2904.913	995.388	3433.757	0	0	-3.21

FUENTE: Modelacion en Etabs



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

ANEXO 2.7. RESUMEN DE CARGAS SISMICAS



Propietario: SEC. EDUCACION Y SEC. CULTURA
Proyecto: COLEGIO Y TEATRO EL ENSUEÑO
Localización: BOGOTA - CUNDINAMARCA
Contenido: MODULO XIV - M. DE CALCULOS

Calculó: ING. FABIO RIVERA
Revisó: ING. JUAN C. PATINO
Hoja:
Fecha: ABRIL - 2016

FUENTE DE MASA

Tipo de carga	% de participacion
Muerta	100%
Viva	10%


MASA POR PISO

Nivel	Masa (Ton/g)
N+7.75	30.93
N+4.15	73.16
N+0.00	155.06

FUERZAS SISMICAS POR PISO (Ton, m)

NIVEL	CARGA	P	VX	VY	T	MX	MY
N+8.30	FHE	0	-222.819	0	6164.553	0	-739.790
N+8.30	FHEU	0	-121.665	0	3366.001	0	-403.944
N+8.30	SISMOX M	0	230.481	78.992	6594.550	267.584	772.778
N+8.30	SISMOY M	0	86.785	233.245	2179.680	792.399	291.019
N+8.30	UMBRALX	0	124.474	44.061	3574.343	149.024	416.603
N+8.30	UMBRALY	0	49.423	126.583	1190.801	429.828	165.698
N+4.68	FHE	0	-580.211	0	16385.176	0	-3509.361
N+4.68	FHEU	0	-316.810	0	8946.717	0	-1916.199
N+4.68	SISMOX M	0	572.883	163.194	15972.957	967.322	3449.682
N+4.68	SISMOY M	0	190.887	560.357	5158.903	3378.724	1136.951
N+4.68	UMBRALX	0	311.108	91.539	8659.461	544.459	1872.424
N+4.68	UMBRALY	0	107.834	304.325	2772.099	1836.869	640.906
N-0.10	FHE	0	-580.211	0	16385.176	0	-5313.817
N-0.10	FHEU	0	-316.810	0	8946.717	0	-2901.478
N-0.10	SISMOX M	0	764.587	228.550	20062.455	1568.752	5642.160
N-0.10	SISMOY M	0	228.550	654.337	6404.063	5349.776	1767.649
N-0.10	UMBRALX	0	413.161	127.129	10845.517	880.977	3060.811
N-0.10	UMBRALY	0	127.129	354.124	3433.757	2904.913	995.388

NOTA: El analisis se hace por el metodo dinamico con el ajuste de cortante en la base.

	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 1 DE 1
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 3. ANALISIS ESTRUCTURAL

1 Structure Data

Story Data

Name	Height m	Elevation m	Master Story	Similar To	Splice Story
N+8.30	3.62	8.3	Yes	None	No
N+4.68	4.78	4.68	No	N+8.30	No
N-0.10	3.11	-0.1	No	N+8.30	No
BASE	0	-3.21	No	None	No

Grid Systems

Name	Type	Story Range	X Origin m	Y Origin m	Rotation deg	Bubble Size m	Color
G1	Cartesian	Default	0	0	0	1.25	ffa0a0a0

Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate m
G1	X	A	Yes	End	0.3
G1	X	A1	Yes	End	1.95
G1	X	6	Yes	End	7.63
G1	X	7	Yes	End	11.66
G1	X	B	Yes	End	13.73
G1	X	8	Yes	End	15.69
G1	X	9	Yes	End	19.72
G1	X	C	Yes	End	23.75
G1	Y	1	Yes	Start	0
G1	Y	2	Yes	Start	9.65
G1	Y	3	Yes	Start	20.05
G1	Y	4	Yes	Start	24.08
G1	Y	5	Yes	Start	32.43
G1	Y	6	Yes	Start	39.43
G1	Y	9	Yes	Start	41.06
G1	Y	7	Yes	Start	49.23
G1	Y	8	Yes	Start	53.21

Joint Coordinates Data

Label	X m	Y m	ΔZ Below m
48	23.75	0	0
49	23.75	9.65	0
50	23.75	20.05	0
51	23.75	32.43	0
60	23.75	49.23	0
61	13.73	0	0
62	13.73	9.65	0
63	13.73	20.05	0
64	13.73	24.08	0
65	13.73	32.43	0
66	13.73	39.43	0
67	13.73	49.23	0
68	3.6	0	0
69	3.6	9.65	0
70	3.6	20.05	0

Label	X m	Y m	ΔZ Below m
71	3.6	32.43	0
72	3.6	49.23	0
75	23.75	24.08	0
76	22.35	24.08	0
77	23.75	25.48	0
78	23.75	39.43	0
79	23.75	38.03	0
80	22.35	39.43	0
81	3.6	24.08	0
82	5	24.08	0
83	3.6	25.48	0
84	3.6	39.43	0
85	3.6	38.03	0
86	5	39.43	0
87	0.55	24.08	0
88	0.55	28.85	0
91	1.85	49.23	0
92	1.85	53.21	0
93	1.85	39.43	0
94	1.85	32.43	0
95	1.85	24.08	0
96	3.6	53.21	0
97	13.73	53.21	0
98	23.75	53.21	0
99	1.85	28.85	0
2	5	32.43	0
3	22.35	32.43	0
134	3.6	41.06	0
135	23.75	41.06	0
6	0.3	0	0
9	0.3	9.65	0
10	0.3	20.05	0
11	0.3	24.08	0
12	1.95	0	0
13	1.95	20.05	0
14	1.95	24.08	0
55	1.95	1	0
57	1.95	9.65	0
58	1.95	11.45	0
100	1.95	21.05	0
130	0.3	21.05	0
131	0.3	11.45	0
132	0.3	1	0
130-2	0.3	21.05	2.76667
10-2	0.3	20.05	2.76667
131-1	0.3	11.45	3.45833
131-5	0.3	11.45	0.69167
9-1	0.3	9.65	3.45833
9-5	0.3	9.65	0.69167
132-4	0.3	1	1.38333
6-4	0.3	0	1.38333
133-1	0.3	22.9	2.76667
100-2	1.95	21.05	2.76667
13-2	1.95	20.05	2.76667

Label	X m	Y m	ΔZ Below m
58-1	1.95	11.45	3.45833
58-3	1.95	11.45	2.075
58-5	1.95	11.45	0.69167
57-1	1.95	9.65	3.45833
57-3	1.95	9.65	2.075
57-5	1.95	9.65	0.69167
55-4	1.95	1	1.38333
12-4	1.95	0	1.38333
136-1	1.95	22.9	2.76667
144	3.6	1	0
145	3.6	11.45	0
146	3.6	21.05	0
68-4	3.6	0	1.38333
69-3	3.6	9.65	2.075
70-2	3.6	20.05	2.76667
146-2	3.6	21.05	2.76667
145-3	3.6	11.45	2.075
144-4	3.6	1	1.38333
147-1	3.6	22.9	2.76667
58-6	1.95	11.45	2.9083
57-6	1.95	9.65	2.9083
55-7	1.95	1	2.2166
69-6	3.6	9.65	2.9083
145-6	3.6	11.45	2.9083
144-7	3.6	1	2.2166
7	3.6	32.43	0.95
17	3.6	39.43	0.95
18	3.6	41.06	0.95
52	23.75	32.43	0.95
53	23.75	38.03	0.95
54	23.75	39.43	0.95
56	23.75	41.06	0.95
74	22.35	32.43	0.95
102	5	32.43	0.95
104	3.6	38.03	0.95
137	22.35	39.43	0.95
147	5	39.43	0.95
148	3.6	24.08	0.95
161	3.6	25.48	0.95
178	0.3	0	0.95
179	0.3	9.65	0.95
180	0.3	20.05	0.95
181	1.95	0	0.95
182	1.95	1	0.95
183	1.95	9.65	0.95
184	1.95	11.45	0.95
185	1.95	20.05	0.95
186	1.95	21.05	0.95
187	0.3	21.05	0.95
188	0.3	11.45	0.95
189	0.3	1	0.95
190	3.6	20.05	0.95
191	3.6	21.05	0.95
192	3.6	11.45	0.95

Label	X m	Y m	ΔZ Below m
193	3.6	9.65	0.95
194	3.6	1	0.95
195	3.6	0	0.95
196	0.3	24.08	0.95
197	1.95	24.08	0.95
208	13.73	41.06	0
213	3.6	26.48	0
218	23.75	26.48	0
219	3.6	30.13	0
228	23.75	30.13	0
234	7.63	32.43	0
235	11.66	32.43	0
236	15.69	32.43	0
237	19.72	32.43	0
238	7.63	24.08	0
239	11.66	24.08	0
240	15.69	24.08	0
241	19.72	24.08	0
242	7.63	30.13	0
243	7.63	26.48	0
244	11.66	30.13	0
245	15.69	30.13	0
246	19.72	30.13	0
247	11.66	26.48	0
248	15.69	26.48	0
249	19.72	26.48	0
256	3.6	33.905	0
257	7.63	33.905	0
258	11.66	33.905	0
259	15.69	33.905	0
260	19.72	33.905	0
261	23.75	33.905	0
262	3.6	22.705	0
263	7.63	22.705	0
264	11.66	22.705	0
265	15.69	22.705	0
266	19.72	22.705	0
267	23.75	22.705	0
270	4.7	30.13	0
271	4.7	26.48	0
272	22.65	30.13	0
273	22.65	26.48	0
274	7.63	39.43	0.95
275	7.63	41.06	0.95
276	7.63	39.43	0
277	11.66	39.43	0.95
278	11.66	41.06	0.95
279	11.66	39.43	0
280	15.69	39.43	0.95
281	15.69	41.06	0.95
282	15.69	39.43	0
283	19.72	39.43	0.95
284	19.72	41.06	0.95
285	19.72	39.43	0

Label	X m	Y m	ΔZ Below m
286	5	24.08	0.95
289	3.6	30.13	0.95
290	1.75	39.43	0.95
291	1.75	24.08	0.95
292	1.75	32.43	0.95
299	1.1	24.08	0.95
300	1.1	30.13	0.95
301	1.75	30.13	0.95
1	1.95	0	2.2166
4	3.6	0	2.2166

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	DEAD	1
MsSrc1	No	No	Yes	Yes	No	Yes	Yes	LIVE	0.1

Centers of Mass and Rigidity

Story	Diaphragm	Mass X tonf-s ² /m	Mass Y tonf-s ² /m	XCM m	YCM m	Cumulative X tonf-s ² /m	Cumulative Y tonf-s ² /m	XCCM m	YCCM m	XCR m	YCR m
N-0.10	1ERPISO	155.05869	155.05869	12.0285	26.0501	155.05869	155.05869	12.0285	26.0501	20.989	44.4508
N+4.68	2DOPISO	73.15639	73.15639	12.9255	32.679	73.15639	73.15639	12.9255	32.679	13.5545	33.8119
N+8.30	CUB	24.87094	24.87094	13.1918	28.4514	24.87094	24.87094	13.1918	28.4514	11.6	31.3378
N+8.30	CUB2	1.20558	1.20558	3.6	7.1771	1.20558	1.20558	3.6	7.1771	1.8881	14.302
N+8.30	CUB3	4.84956	4.84956	6.3448	35.0131	4.84956	4.84956	6.3448	35.0131	11.608	31.9675

Mass Summary by Diaphragm

Story	Diaphragm	Mass X tonf-s ² /m	Mass Y tonf-s ² /m	Mass Moment of Inertia tonf-m-s ²	X Mass Center m	Y Mass Center m
N+8.30	CUB	24.87094	24.87094	2073.0321	13.1918	28.4514
N+8.30	CUB2	1.20558	1.20558	26.4853	3.6	7.1771
N+8.30	CUB3	4.84956	4.84956	404.1775	6.3448	35.0131
N+4.68	2DOPISO	73.15639	73.15639	8094.4415	12.9255	32.679
N-0.10	1ERPISO	155.05869	155.05869	48432.0086	12.0285	26.0501

Mass Summary by Story

Story	UX tonf-s ² /m	UY tonf-s ² /m	UZ tonf-s ² /m
N+8.30	32.41339	32.41339	0
N+4.68	91.3629	91.3629	0
N-0.10	155.05869	155.05869	0
BASE	12.19384	12.19384	0

2 Properties

Material Properties - Summary

Name	Type	E tonf/m ²	ν	Unit Weight tonf/m ³	Design Strengths
A615Gr60	Rebar	20389019.1 6	0.3	7.849	Fy=42184.18 tonf/m ² , Fu=63276.27 tonf/m ²
COL	Concrete	2526710	0.2	2.403	Fc=2800 tonf/m ²
CONC	Concrete	2526710	0.2	2.403	Fc=2800 tonf/m ²
RMAT	Rebar	20389019.1 6	0.3	7.849	Fy=42000 tonf/m ² , Fu=63000 tonf/m ²
STEEL	Steel	20389020	0.3	7.8334	Fy=35153.48 tonf/m ² , Fu=45699.53 tonf/m ²

Frame Sections - Summary

Name	Material	Shape
C45X35	COL	Concrete Rectangular
C50X80	COL	Concrete Rectangular
IPE200	STEEL	Steel I/Wide Flange
IPE240	STEEL	Steel I/Wide Flange
IPE330	STEEL	Steel I/Wide Flange
IPE360	STEEL	Steel I/Wide Flange
IPE400	STEEL	Steel I/Wide Flange
TUB300X300X10.0MM	STEEL	Steel Tube
V15X60	CONC	Concrete Rectangular
V20X50	CONC	Concrete Rectangular
V30X50	CONC	Concrete Rectangular
V30X60	CONC	Concrete Rectangular
V40X60	CONC	Concrete Rectangular
V60X120	CONC	Concrete Rectangular
V60X60	CONC	Concrete Rectangular

Shell Sections - Summary

Name	Design Type	Element Type	Material	Total Thickness m	Deck Material	Deck Depth m
LOSA10	Deck	Membrane	CONC	0.1		
LOSA60T10	Deck	Membrane	CONC	0.6	STEEL	0.5
LOSA60T8	Deck	Membrane	CONC	0.6	STEEL	0.52
MUROCON T	Wall	Shell-Thin	CONC	0.2		
PANT60	Wall	Shell-Thin	COL	0.6		
TEJA	Deck	Membrane	STEEL	0.0762	STEEL	0.0762

3 Assignments

Joint Assignments - Summary

Story	Label	Unique Name	Diaphragm	Restraints
N+8.30	51	115	CUB	
N+8.30	71	111	CUB	
N+8.30	75	97	CUB	
N+8.30	76	96	CUB	
N+8.30	77	98	CUB	
N+8.30	81	94	CUB	
N+8.30	82	95	CUB	
N+8.30	83	105	CUB	
N+8.30	2	113	CUB	
N+8.30	3	114	CUB	
N+8.30	58-6	354	From Area	
N+8.30	57-6	355	From Area	
N+8.30	55-7	356	From Area	
N+8.30	69-6	359	From Area	
N+8.30	145-6	360	From Area	
N+8.30	144-7	361	From Area	
N+8.30	7	151	CUB3	
N+8.30	17	155	CUB3	
N+8.30	18	157	CUB3	
N+8.30	52	216	CUB3	
N+8.30	53	217	CUB3	
N+8.30	54	218	CUB3	
N+8.30	56	219	CUB3	
N+8.30	74	222	CUB3	
N+8.30	102	225	CUB3	
N+8.30	104	226	CUB3	
N+8.30	137	231	CUB3	
N+8.30	147	232	CUB3	
N+8.30	148	233	CUB3	
N+8.30	161	234	CUB3	
N+8.30	178	294	CUB2	
N+8.30	179	295	CUB2	
N+8.30	180	296	CUB3	
N+8.30	181	297	CUB2	
N+8.30	182	298	CUB2	
N+8.30	183	299	CUB2	
N+8.30	184	300	CUB2	
N+8.30	185	301	CUB3	
N+8.30	186	302	CUB3	
N+8.30	187	303	CUB3	
N+8.30	188	304	CUB2	
N+8.30	189	305	CUB2	
N+8.30	190	343	CUB3	
N+8.30	191	345	CUB3	
N+8.30	192	362	CUB2	
N+8.30	193	363	CUB2	
N+8.30	194	364	CUB2	
N+8.30	195	365	CUB2	
N+8.30	196	366	CUB3	
N+8.30	197	367	CUB3	
N+8.30	213	139	CUB	

Story	Label	Unique Name	Diaphragm	Restraints
N+8.30	218	376	CUB	
N+8.30	219	137	CUB	
N+8.30	228	372	CUB	
N+8.30	234	258	CUB	
N+8.30	235	259	CUB	
N+8.30	236	260	CUB	
N+8.30	237	261	CUB	
N+8.30	238	262	CUB	
N+8.30	239	263	CUB	
N+8.30	240	264	CUB	
N+8.30	241	265	CUB	
N+8.30	242	266	CUB	
N+8.30	243	267	CUB	
N+8.30	244	268	CUB	
N+8.30	245	269	CUB	
N+8.30	246	270	CUB	
N+8.30	247	373	CUB	
N+8.30	248	374	CUB	
N+8.30	249	375	CUB	
N+8.30	256	383	CUB	
N+8.30	257	384	CUB	
N+8.30	258	385	CUB	
N+8.30	259	386	CUB	
N+8.30	260	387	CUB	
N+8.30	261	388	CUB	
N+8.30	262	389	CUB	
N+8.30	263	390	CUB	
N+8.30	264	391	CUB	
N+8.30	265	392	CUB	
N+8.30	266	393	CUB	
N+8.30	267	394	CUB	
N+8.30	270	397	CUB	
N+8.30	271	398	CUB	
N+8.30	272	399	CUB	
N+8.30	273	400	CUB	
N+8.30	274	401	CUB3	
N+8.30	275	402	CUB3	
N+8.30	277	404	CUB3	
N+8.30	278	405	CUB3	
N+8.30	280	407	CUB3	
N+8.30	281	408	CUB3	
N+8.30	283	410	CUB3	
N+8.30	284	411	CUB3	
N+8.30	286	413	CUB3	
N+8.30	289	425	CUB3	
N+8.30	290	106	CUB3	
N+8.30	291	107	CUB3	
N+8.30	292	108	CUB3	
N+8.30	299	424	CUB3	
N+8.30	300	420	CUB3	
N+8.30	301	426	CUB3	
N+8.30	1	99	From Area	
N+8.30	4	100	From Area	
N+4.68	51	119	2DOFISO	

Story	Label	Unique Name	Diaphragm	Restraints
N+4.68	64	430	2DOPIISO	
N+4.68	65	432	2DOPIISO	
N+4.68	66	431	2DOPIISO	
N+4.68	70	342	From Area	
N+4.68	71	112	2DOPIISO	
N+4.68	75	82	2DOPIISO	
N+4.68	76	81	2DOPIISO	
N+4.68	77	83	2DOPIISO	
N+4.68	78	85	2DOPIISO	
N+4.68	79	84	2DOPIISO	
N+4.68	80	86	2DOPIISO	
N+4.68	81	79	2DOPIISO	
N+4.68	82	80	2DOPIISO	
N+4.68	83	90	2DOPIISO	
N+4.68	84	88	2DOPIISO	
N+4.68	85	89	2DOPIISO	
N+4.68	86	87	2DOPIISO	
N+4.68	93	91	2DOPIISO	
N+4.68	94	93	2DOPIISO	
N+4.68	95	92	2DOPIISO	
N+4.68	2	116	2DOPIISO	
N+4.68	3	118	2DOPIISO	
N+4.68	134	245	2DOPIISO	
N+4.68	135	248	2DOPIISO	
N+4.68	6	317	From Area	
N+4.68	9	313	From Area	
N+4.68	10	308	From Area	
N+4.68	11	353	2DOPIISO	
N+4.68	12	316	From Area	
N+4.68	13	309	From Area	
N+4.68	14	338	2DOPIISO	
N+4.68	55	315	From Area	
N+4.68	57	312	From Area	
N+4.68	58	311	From Area	
N+4.68	100	307	From Area	
N+4.68	130	306	From Area	
N+4.68	131	310	From Area	
N+4.68	132	314	From Area	
N+4.68	130-2	318	From Area	
N+4.68	10-2	319	From Area	
N+4.68	131-1	320	From Area	
N+4.68	131-5	321	From Area	
N+4.68	9-1	322	From Area	
N+4.68	9-5	323	From Area	
N+4.68	132-4	324	From Area	
N+4.68	6-4	325	From Area	
N+4.68	133-1	326	From Area	
N+4.68	100-2	327	From Area	
N+4.68	13-2	328	From Area	
N+4.68	58-1	329	From Area	
N+4.68	58-3	330	From Area	
N+4.68	58-5	331	From Area	
N+4.68	57-1	332	From Area	
N+4.68	57-3	333	From Area	

Story	Label	Unique Name	Diaphragm	Restraints
N+4.68	57-5	334	From Area	
N+4.68	55-4	335	From Area	
N+4.68	12-4	336	From Area	
N+4.68	136-1	337	From Area	
N+4.68	146	344	From Area	
N+4.68	68-4	346	From Area	
N+4.68	69-3	347	From Area	
N+4.68	70-2	348	From Area	
N+4.68	146-2	349	From Area	
N+4.68	145-3	350	From Area	
N+4.68	144-4	351	From Area	
N+4.68	147-1	352	From Area	
N+4.68	208	429	2DOPIISO	
N+4.68	276	403	2DOPIISO	
N+4.68	279	406	2DOPIISO	
N+4.68	282	409	2DOPIISO	
N+4.68	285	412	2DOPIISO	
N-0.10	48	36	1ERPISO	
N-0.10	49	37	1ERPISO	
N-0.10	50	38	1ERPISO	
N-0.10	51	59	1ERPISO	
N-0.10	60	39	1ERPISO	
N-0.10	61	40	1ERPISO	
N-0.10	62	41	1ERPISO	
N-0.10	63	42	1ERPISO	
N-0.10	64	43	1ERPISO	
N-0.10	65	44	1ERPISO	
N-0.10	66	45	1ERPISO	
N-0.10	67	46	1ERPISO	
N-0.10	68	47	1ERPISO	
N-0.10	69	48	1ERPISO	
N-0.10	70	49	1ERPISO	
N-0.10	71	58	1ERPISO	
N-0.10	72	50	1ERPISO	
N-0.10	75	55	1ERPISO	
N-0.10	76	54	1ERPISO	
N-0.10	77	75	1ERPISO	
N-0.10	78	61	1ERPISO	
N-0.10	79	76	1ERPISO	
N-0.10	80	60	1ERPISO	
N-0.10	81	57	1ERPISO	
N-0.10	82	56	1ERPISO	
N-0.10	83	71	1ERPISO	
N-0.10	84	63	1ERPISO	
N-0.10	85	72	1ERPISO	
N-0.10	86	62	1ERPISO	
N-0.10	87	65	1ERPISO	
N-0.10	88	64	1ERPISO	
N-0.10	91	66	1ERPISO	
N-0.10	92	67	1ERPISO	
N-0.10	93	68	1ERPISO	
N-0.10	94	69	1ERPISO	
N-0.10	95	70	1ERPISO	
N-0.10	96	73	1ERPISO	

Story	Label	Unique Name	Diaphragm	Restraints
N-0.10	97	74	1ERPISO	
N-0.10	98	77	1ERPISO	
N-0.10	99	78	1ERPISO	
N-0.10	2	213	1ERPISO	
N-0.10	3	214	1ERPISO	
N-0.10	6	51	1ERPISO	
N-0.10	9	52	1ERPISO	
N-0.10	10	53	1ERPISO	
N-0.10	11	271	1ERPISO	
N-0.10	12	272	1ERPISO	
N-0.10	13	277	1ERPISO	
N-0.10	14	273	1ERPISO	
N-0.10	55	274	1ERPISO	
N-0.10	57	275	1ERPISO	
N-0.10	58	276	1ERPISO	
N-0.10	100	278	1ERPISO	
N-0.10	130	279	1ERPISO	
N-0.10	131	280	1ERPISO	
N-0.10	132	281	1ERPISO	
N-0.10	144	339	1ERPISO	
N-0.10	145	340	1ERPISO	
N-0.10	146	341	1ERPISO	
BASE	48	1	From Area	UX; UY; UZ; RX; RY; RZ
BASE	49	2	From Area	UX; UY; UZ; RX; RY; RZ
BASE	50	3	From Area	UX; UY; UZ; RX; RY; RZ
BASE	51	4	From Area	UX; UY; UZ; RX; RY; RZ
BASE	60	5	From Area	UX; UY; UZ; RX; RY; RZ
BASE	61	6	From Area	UX; UY; UZ; RX; RY; RZ
BASE	62	7	From Area	UX; UY; UZ; RX; RY; RZ
BASE	63	8	From Area	UX; UY; UZ; RX; RY; RZ
BASE	64	9	From Area	UX; UY; UZ; RX; RY; RZ
BASE	65	10	From Area	UX; UY; UZ; RX; RY; RZ
BASE	66	11	From Area	UX; UY; UZ; RX; RY; RZ
BASE	67	12	From Area	UX; UY; UZ; RX; RY; RZ
BASE	68	13	From Area	UX; UY; UZ; RX; RY; RZ
BASE	69	14	From Area	UX; UY; UZ; RX; RY; RZ
BASE	70	15	From Area	UX; UY; UZ; RX; RY; RZ
BASE	71	33	From Area	UX; UY; UZ; RX; RY; RZ
BASE	72	16	From Area	UX; UY; UZ; RX; RY; RZ
BASE	75	17	From Area	UX; UY; UZ; RX; RY; RZ
BASE	76	18	From Area	UX; UY; UZ; RX; RY; RZ
BASE	77	19	From Area	UX; UY; UZ; RX; RY; RZ
BASE	78	20	From Area	UX; UY; UZ; RX; RY; RZ
BASE	79	21	From Area	UX; UY; UZ; RX; RY; RZ
BASE	80	22	From Area	UX; UY; UZ; RX; RY; RZ
BASE	81	23	From Area	UX; UY; UZ; RX; RY; RZ
BASE	82	24	From Area	UX; UY; UZ; RX; RY; RZ
BASE	83	25	From Area	UX; UY; UZ; RX; RY; RZ
BASE	84	26	From Area	UX; UY; UZ; RX; RY; RZ
BASE	85	27	From Area	UX; UY; UZ; RX; RY; RZ
BASE	86	28	From Area	UX; UY; UZ; RX; RY; RZ
BASE	92	32	From Area	UX; UY; UZ; RX; RY; RZ
BASE	96	31	From Area	UX; UY; UZ; RX; RY; RZ
BASE	97	30	From Area	UX; UY; UZ; RX; RY; RZ

Story	Label	Unique Name	Diaphragm	Restraints
BASE	98	29	From Area	UX; UY; UZ; RX; RY; RZ
BASE	2	34	From Area	UX; UY; UZ; RX; RY; RZ
BASE	3	35	From Area	UX; UY; UZ; RX; RY; RZ
BASE	6	293	From Area	UX; UY; UZ; RX; RY; RZ
BASE	9	287	From Area	UX; UY; UZ; RX; RY; RZ
BASE	10	284	From Area	UX; UY; UZ; RX; RY; RZ
BASE	12	292	From Area	UX; UY; UZ; RX; RY; RZ
BASE	13	285	From Area	UX; UY; UZ; RX; RY; RZ
BASE	55	291	From Area	UX; UY; UZ; RX; RY; RZ
BASE	57	289	From Area	UX; UY; UZ; RX; RY; RZ
BASE	58	288	From Area	UX; UY; UZ; RX; RY; RZ
BASE	100	283	From Area	UX; UY; UZ; RX; RY; RZ
BASE	130	282	From Area	UX; UY; UZ; RX; RY; RZ
BASE	131	286	From Area	UX; UY; UZ; RX; RY; RZ
BASE	132	290	From Area	UX; UY; UZ; RX; RY; RZ

Frame Assignments - Summary

Story	Label	Unique Name	Design Type	Length m	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing m	Min Number Stations	Releases
N+8.30	C36	263	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C37	264	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C38	265	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C39	266	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C40	267	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C41	268	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C43	270	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C44	271	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C45	272	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C47	274	Column	2.67	C45X35	C45X35	90		3	No
N+8.30	C48	446	Column	2.67	TUB300X300X10.0MM	TUB300X300X10.0MM			3	No
N+8.30	C49	449	Column	2.67	TUB300X300X10.0MM	TUB300X300X10.0MM			3	No
N+8.30	C50	452	Column	2.67	TUB300X300X10.0MM	TUB300X300X10.0MM			3	No
N+8.30	C51	455	Column	2.67	TUB300X300X10.0MM	TUB300X300X10.0MM			3	No
N+8.30	C4	98	Column	1.2666	C45X35	C45X35	90		3	No
N+8.30	C5	95	Column	1.4034	C45X35	C45X35	90		3	No
N+8.30	C13	99	Column	0.7117	C45X35	C45X35	90		3	No
N+8.30	C32	100	Column	1.9583	C45X35	C45X35	90		3	No
N+4.68	C9-1	392	Column	1.32167	C45X35	C45X35	90		3	No
N+4.68	C9-6	390	Column	0.69167	C45X35	C45X35	90		3	No
N+4.68	C12-1	394	Column	1.32167	C45X35	C45X35	90		3	No
N+4.68	C12-6	391	Column	0.69167	C45X35	C45X35	90		3	No
N+4.68	C10-1	404	Column	1.32167	C45X35	C45X35	90		3	No
N+4.68	C10-6	407	Column	0.69167	C45X35	C45X35	90		3	No
N+4.68	C11-1	414	Column	1.32167	C45X35	C45X35	90		3	No
N+4.68	C11-6	409	Column	0.69167	C45X35	C45X35	90		3	No
N+4.68	C7-7	398	Column	2.01333	C45X35	C45X35	90		3	No
N+4.68	C1-7	396	Column	2.01333	C45X35	C45X35	90		3	No
N+4.68	C14-9	386	Column	3.39667	C45X35	C45X35	90		3	No
N+4.68	C20-9	388	Column	3.39667	C45X35	C45X35	90		3	No
N+4.68	C14-11	387	Column	1.38333	C45X35	C45X35	90		3	No
N+4.68	C20-11	389	Column	1.38333	C45X35	C45X35	90		3	No
N+4.68	C9-11	393	Column	2.76667	C45X35	C45X35	90		3	No

Story	Label	Unique Name	Design Type	Length m	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing m	Min Number Stations	Releases
N+4.68	C12-11	395	Column	2.76667	C45X35	C45X35	90		3	No
N+4.68	C1-11	397	Column	2.76667	C45X35	C45X35	90		3	No
N+4.68	C7-11	399	Column	2.76667	C45X35	C45X35	90		3	No
N+4.68	C8-7	402	Column	2.01333	C45X35	C45X35	90		3	No
N+4.68	C6-7	400	Column	2.01333	C45X35	C45X35	90		3	No
N+4.68	C15-9	410	Column	3.39667	C45X35	C45X35	90		3	No
N+4.68	C16-9	412	Column	3.39667	C45X35	C45X35	90		3	No
N+4.68	C6-11	401	Column	2.76667	C45X35	C45X35	90		3	No
N+4.68	C8-11	403	Column	2.76667	C45X35	C45X35	90		3	No
N+4.68	C10-11	405	Column	1.38333	C45X35	C45X35	90		3	No
N+4.68	C10-12	406	Column	1.38333	C45X35	C45X35	90		3	No
N+4.68	C11-11	408	Column	1.38333	C45X35	C45X35	90		3	No
N+4.68	C15-11	411	Column	1.38333	C45X35	C45X35	90		3	No
N+4.68	C16-11	413	Column	1.38333	C45X35	C45X35	90		3	No
N+4.68	C11-12	415	Column	1.38333	C45X35	C45X35	90		3	No
N-0.10	C17	1	Column	3.11	C50X80	C50X80			11	No
N-0.10	C18	2	Column	3.11	C50X80	C50X80			11	No
N-0.10	C19	3	Column	3.11	C50X80	C50X80			11	No
N-0.10	C21	4	Column	3.11	C50X80	C50X80			11	No
N-0.10	C22	5	Column	3.11	C50X80	C50X80			11	No
N-0.10	C23	6	Column	3.11	C50X80	C50X80			11	No
N-0.10	C24	7	Column	3.11	C50X80	C50X80			11	No
N-0.10	C25	8	Column	3.11	C50X80	C50X80			11	No
N-0.10	C26	9	Column	3.11	C50X80	C50X80			11	No
N-0.10	C27	10	Column	3.11	C50X80	C50X80			11	No
N-0.10	C28	11	Column	3.11	C50X80	C50X80			11	No
N-0.10	C29	12	Column	3.11	C50X80	C50X80			11	No
N-0.10	C30	13	Column	3.11	C50X80	C50X80			11	No
N-0.10	C31	14	Column	3.11	C50X80	C50X80			11	No
N-0.10	C33	15	Column	3.11	C50X80	C50X80			11	No
N-0.10	C1	251	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C6	252	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C7	253	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C8	254	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C9	255	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C10	256	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C11	257	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C12	258	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C14	259	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C15	260	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C16	261	Column	3.11	C45X35	C45X35	90		3	No
N-0.10	C20	262	Column	3.11	C45X35	C45X35	90		3	No
N+8.30	B92	90	Beam	1.4	V60X120	V60X120			11	No
N+8.30	B95	88	Beam	1.4	V60X120	V60X120			11	No
N+8.30	B121	202	Beam	6.95	V60X60	V60X60		0.5		No
N+8.30	B136	91	Beam	1.4	V60X60	V60X60			11	No
N+8.30	B137	200	Beam	6.95	V60X60	V60X60		0.5		No
N+8.30	B146	89	Beam	17.35	V60X120	V60X120			11	No
N+8.30	B151	97	Beam	1.4	V60X60	V60X60			11	No
N+8.30	B4	107	Beam	1.4	V60X120	V60X120		0.5		No
N+8.30	B7	109	Beam	1.4	V60X120	V60X120		0.5		No
N+8.30	B8	108	Beam	17.35	V60X120	V60X120		0.5		No

Story	Label	Unique Name	Design Type	Length m	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing m	Min Number Stations	Releases
N+8.30	B115	311	Beam	8.6294	V20X50	V20X50			3	No
N+8.30	B116	313	Beam	8.67761	V20X50	V20X50			3	No
N+8.30	B203	315	Beam	8.6294	V20X50	V20X50			3	No
N+8.30	B244	317	Beam	8.67761	V20X50	V20X50			3	No
N+8.30	B43	456	Beam	1.63	V60X60	V60X60		0.5		No
N+8.30	B45	207	Beam	5.6	V60X60	V60X60		0.5		No
N+8.30	B47	208	Beam	1.4	V60X60	V60X60		0.5		No
N+8.30	B248	462	Beam	1.63	V60X60	V60X60		0.5		No
N+8.30	B254	219	Beam	1.4	V60X60	V60X60		0.5		No
N+8.30	B257	222	Beam	1.4	V60X60	V60X60		0.5		No
N+8.30	B258	223	Beam	1.4	V60X60	V60X60		0.5		No
N+8.30	B260	225	Beam	6.95	V60X60	V60X60		0.5		No
N+8.30	B269	340	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B270	341	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B271	342	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B272	343	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B273	344	Beam	8.6	V20X50	V20X50		0.5		No
N+8.30	B274	345	Beam	8.6	V20X50	V20X50		0.5		No
N+8.30	B275	346	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B276	347	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B277	348	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B278	349	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B279	350	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B280	351	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B281	352	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B282	353	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B283	354	Beam	1	V20X50	V20X50		0.5		No
N+8.30	B284	355	Beam	8.65	V20X50	V20X50		0.5		No
N+8.30	B285	356	Beam	1.8	V20X50	V20X50		0.5		No
N+8.30	B286	357	Beam	1	V20X50	V20X50		0.5		No
N+8.30	B287	358	Beam	8.65	V20X50	V20X50		0.5		No
N+8.30	B288	359	Beam	1.8	V20X50	V20X50		0.5		No
N+8.30	B289	360	Beam	1	V20X50	V20X50		0.5		No
N+8.30	B290	361	Beam	8.65	V20X50	V20X50		0.5		No
N+8.30	B291	362	Beam	1.8	V20X50	V20X50		0.5		No
N+8.30	B292	363	Beam	9.6	V20X50	V20X50		0.5		No
N+8.30	B293	364	Beam	1	V20X50	V20X50		0.5		No
N+8.30	B294	365	Beam	3.03	V20X50	V20X50		0.5		Yes
N+8.30	B295	366	Beam	1	V20X50	V20X50		0.5		No
N+8.30	B296	367	Beam	3.03	V20X50	V20X50		0.5		Yes
N+8.30	B297	368	Beam	3.03	V20X50	V20X50		0.5		Yes
N+8.30	B332	235	Beam	8.35	IPE400	IPE400		0.5		No
N+8.30	B333	236	Beam	8.35	IPE400	IPE400		0.5		No
N+8.30	B334	237	Beam	8.35	IPE400	IPE400		0.5		No
N+8.30	B335	238	Beam	8.35	IPE400	IPE400		0.5		No
N+8.30	B336	125	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B337	126	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B338	239	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B339	240	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B340	241	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B341	242	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B342	243	Beam	4.03	IPE200	IPE200		0.5		Yes

Story	Label	Unique Name	Design Type	Length m	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing m	Min Number Stations	Releases
N+8.30	B343	244	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B344	245	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B345	246	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B348	418	Beam	1.375	V60X60	V60X60		0.5		No
N+8.30	B350	420	Beam	1.475	V60X60	V60X60		0.5		No
N+8.30	B351	421	Beam	1.475	V60X60	V60X60		0.5		No
N+8.30	B352	422	Beam	1.375	V60X60	V60X60		0.5		No
N+8.30	B353	423	Beam	1.475	IPE200	IPE200		0.5		No
N+8.30	B354	424	Beam	1.475	IPE200	IPE200		0.5		No
N+8.30	B356	426	Beam	1.475	IPE200	IPE200		0.5		No
N+8.30	B357	427	Beam	1.475	IPE200	IPE200		0.5		No
N+8.30	B358	428	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B359	429	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B360	430	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B361	431	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B362	432	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B363	433	Beam	1.375	IPE200	IPE200		0.5		No
N+8.30	B364	434	Beam	1.375	IPE200	IPE200		0.5		No
N+8.30	B365	435	Beam	1.375	IPE200	IPE200		0.5		No
N+8.30	B366	436	Beam	1.375	IPE200	IPE200		0.5		No
N+8.30	B367	437	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B368	438	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B369	439	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B370	440	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B371	441	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B372	442	Beam	3.65	IPE200	IPE200		0.5		Yes
N+8.30	B373	443	Beam	3.65	IPE200	IPE200		0.5		Yes
N+8.30	B374	444	Beam	7.06417	IPE400	IPE400			3	Yes
N+8.30	B375	445	Beam	1.63	IPE330	IPE330		0.5		No
N+8.30	B376	447	Beam	7.06417	IPE400	IPE400			3	No
N+8.30	B377	448	Beam	1.63	IPE330	IPE330		0.5		No
N+8.30	B378	450	Beam	7.06417	IPE400	IPE400			3	No
N+8.30	B379	451	Beam	1.63	IPE330	IPE330		0.5		No
N+8.30	B380	453	Beam	7.06417	IPE400	IPE400			3	No
N+8.30	B381	454	Beam	1.63	IPE330	IPE330		0.5		No
N+8.30	B382	457	Beam	2.63	IPE400	IPE400		0.5		No
N+8.30	B383	458	Beam	4.03	IPE400	IPE400		0.5		No
N+8.30	B384	459	Beam	4.03	IPE400	IPE400		0.5		No
N+8.30	B385	460	Beam	4.03	IPE400	IPE400		0.5		No
N+8.30	B386	461	Beam	2.63	IPE400	IPE400		0.5		No
N+8.30	B387	463	Beam	7	IPE240	IPE240		0.5		Yes
N+8.30	B388	464	Beam	5.6	V60X60	V60X60		0.5		No
N+8.30	B390	205	Beam	1.4	V60X60	V60X60		0.5		No
N+8.30	B391	466	Beam	1.4	V60X60	V60X60		0.5		No
N+8.30	B392	369	Beam	3.3	V60X60	V60X60		0.5		No
N+8.30	B395	474	Beam	8.35	IPE360	IPE360		0.5		Yes
N+8.30	B396	103	Beam	1.85	V60X60	V60X60		0.5		No
N+8.30	B397	106	Beam	7	IPE360	IPE360		0.5		Yes
N+8.30	B402	470	Beam	6.05	IPE200	IPE200		0.5		Yes
N+8.30	B403	471	Beam	1.85	V60X60	V60X60		0.5		No
N+8.30	B404	472	Beam	1.4	V60X60	V60X60		0.5		No
N+8.30	B408	476	Beam	0.65	IPE200	IPE200		0.5		No

Story	Label	Unique Name	Design Type	Length m	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing m	Min Number Stations	Releases
N+8.30	B409	477	Beam	1.85	IPE200	IPE200		0.5		Yes
N+8.30	B410	478	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B411	479	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B412	480	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B413	481	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B414	482	Beam	4.03	IPE200	IPE200		0.5		Yes
N+8.30	B5	74	Beam	1.8	V20X50	V20X50		0.5		No
N+8.30	B6	77	Beam	1	V20X50	V20X50		0.5		No
N+8.30	B10	80	Beam	1	V20X50	V20X50		0.5		No
N+8.30	B12	84	Beam	1.8	V20X50	V20X50		0.5		No
N+8.30	B14	92	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B16	93	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B18	94	Beam	1.65	V30X50	V30X50		0.5		No
N+8.30	B20	101	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B92	75	Beam	1.4	V60X120	V60X120			11	No
N+4.68	B95	73	Beam	1.4	V60X120	V60X120			11	No
N+4.68	B98	79	Beam	1.4	V60X120	V60X120			11	No
N+4.68	B101	81	Beam	1.4	V60X120	V60X120			11	No
N+4.68	B112	85	Beam	1.75	V60X60	V60X60			11	No
N+4.68	B113	104	Beam	1.75	V60X60	V60X60		0.5		No
N+4.68	B121	199	Beam	6.95	V60X120	V60X120		0.5		No
N+4.68	B122	169	Beam	5.6	V60X120	V60X120		0.5		No
N+4.68	B129	491	Beam	8.35	V60X60	V60X60		0.5		No
N+4.68	B130	492	Beam	7	V60X60	V60X60		0.5		No
N+4.68	B136	76	Beam	1.4	V60X120	V60X120			11	No
N+4.68	B137	114	Beam	6.95	V60X120	V60X120		0.5		No
N+4.68	B138	168	Beam	5.6	V60X120	V60X120		0.5		No
N+4.68	B139	78	Beam	1.4	V60X120	V60X120			11	No
N+4.68	B146	485	Beam	17.35	V60X120	V60X120		0.5		No
N+4.68	B148	487	Beam	17.35	V60X120	V60X120		0.5		No
N+4.68	B149	82	Beam	1.4	V60X120	V60X120			11	No
N+4.68	B151	83	Beam	1.4	V60X120	V60X120			11	No
N+4.68	B155	86	Beam	1.75	V60X60	V60X60			11	No
N+4.68	B2	105	Beam	7	V15X60	V15X60		0.5		No
N+4.68	B3	87	Beam	8.35	V15X60	V15X60			11	No
N+4.68	B4	110	Beam	1.4	V60X120	V60X120		0.5		No
N+4.68	B7	113	Beam	1.4	V60X120	V60X120		0.5		No
N+4.68	B8	489	Beam	17.35	V60X120	V60X120		0.5		No
N+4.68	B72	226	Beam	1.63	V60X120	V60X120		0.5		No
N+4.68	B73	228	Beam	1.63	V60X120	V60X120		0.5		No
N+4.68	B40	276	Beam	1.8	V20X50	V20X50		0.5		No
N+4.68	B42	278	Beam	1	V20X50	V20X50		0.5		No
N+4.68	B44	279	Beam	1.85	V20X50	V20X50		0.5		No
N+4.68	B46	303	Beam	1	V20X50	V20X50		0.5		No
N+4.68	B67	305	Beam	1.8	V20X50	V20X50		0.5		No
N+4.68	B68	307	Beam	1	V20X50	V20X50		0.5		No
N+4.68	B69	308	Beam	3.03	V20X50	V20X50		0.5		No
N+4.68	B81	281	Beam	1.8	V20X50	V20X50		0.5		No
N+4.68	B83	283	Beam	1	V20X50	V20X50		0.5		No
N+4.68	B105	284	Beam	1.85	V20X50	V20X50		0.5		No
N+4.68	B154	286	Beam	1.8	V20X50	V20X50		0.5		No
N+4.68	B157	288	Beam	1	V20X50	V20X50		0.5		No

Story	Label	Unique Name	Design Type	Length m	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing m	Min Number Stations	Releases
N+4.68	B159	290	Beam	1.8	V20X50	V20X50		0.5		No
N+4.68	B168	292	Beam	1	V20X50	V20X50		0.5		No
N+4.68	B183	293	Beam	3.03	V20X50	V20X50		0.5		No
N+4.68	B186	297	Beam	1	V20X50	V20X50		0.5		No
N+4.68	B187	298	Beam	1.85	V20X50	V20X50		0.5		No
N+4.68	B188	300	Beam	1.8	V20X50	V20X50		0.5		No
N+4.68	B189	302	Beam	1	V20X50	V20X50		0.5		No
N+4.68	B190	309	Beam	3.03	V20X50	V20X50		0.5		No
N+4.68	B191	310	Beam	1	V20X50	V20X50		0.5		No
N+4.68	B194	319	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B195	320	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B196	321	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B197	322	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B198	323	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B199	324	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B200	325	Beam	1.65	V15X60	V15X60		0.5		No
N+4.68	B201	326	Beam	1.65	V15X60	V15X60		0.5		No
N+4.68	B202	327	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B204	328	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B205	329	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B206	330	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B207	331	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B208	332	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B209	333	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B210	334	Beam	1.65	V30X50	V30X50		0.5		No
N+4.68	B213	335	Beam	1.55	V60X60	V60X60		0.5		No
N+4.68	B1	275	Beam	8.75039	V20X50	V20X50			3	No
N+4.68	B9	277	Beam	8.62777	V20X50	V20X50			3	No
N+4.68	B11	280	Beam	8.75039	V20X50	V20X50			3	No
N+4.68	B13	282	Beam	8.62777	V20X50	V20X50			3	No
N+4.68	B15	285	Beam	8.62777	V20X50	V20X50			3	No
N+4.68	B17	287	Beam	8.67761	V20X50	V20X50			3	No
N+4.68	B70	289	Beam	8.67761	V20X50	V20X50			3	No
N+4.68	B76	291	Beam	8.62777	V20X50	V20X50			3	No
N+4.68	B77	299	Beam	8.62777	V20X50	V20X50			3	No
N+4.68	B91	301	Beam	8.67761	V20X50	V20X50			3	No
N+4.68	B106	304	Beam	8.67761	V20X50	V20X50			3	No
N+4.68	B114	306	Beam	8.62777	V20X50	V20X50			3	No
N+4.68	B307	493	Beam	1.63	V60X60	V60X60		0.5		No
N-0.10	B74	16	Beam	10.02	V60X60	V60X60			11	No
N-0.10	B75	17	Beam	10.13	V60X60	V60X60			11	No
N-0.10	B78	18	Beam	10.13	V60X60	V60X60			11	No
N-0.10	B80	19	Beam	10.02	V60X60	V60X60			11	No
N-0.10	B89	20	Beam	10.02	V60X60	V60X60			11	No
N-0.10	B90	21	Beam	10.13	V60X60	V60X60			11	No
N-0.10	B92	22	Beam	1.4	V60X60	V60X60			11	No
N-0.10	B93	23	Beam	8.62	V60X60	V60X60			11	No
N-0.10	B94	24	Beam	8.73	V60X60	V60X60			11	No
N-0.10	B95	25	Beam	1.4	V60X60	V60X60			11	No
N-0.10	B96	26	Beam	10.13	V60X60	V60X60			11	No
N-0.10	B97	27	Beam	10.02	V60X60	V60X60			11	No
N-0.10	B98	28	Beam	1.4	V60X60	V60X60			11	No

Story	Label	Unique Name	Design Type	Length m	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing m	Min Number Stations	Releases
N-0.10	B99	29	Beam	8.62	V60X60	V60X60			11	No
N-0.10	B100	30	Beam	8.73	V60X60	V60X60			11	No
N-0.10	B101	31	Beam	1.4	V60X60	V60X60			11	No
N-0.10	B102	32	Beam	10.13	V60X60	V60X60			11	No
N-0.10	B103	33	Beam	10.02	V60X60	V60X60			11	No
N-0.10	B104	34	Beam	4.77	V30X60	V30X60			11	Yes
N-0.10	B107	35	Beam	3.98	V30X60	V30X60			11	Yes
N-0.10	B108	36	Beam	9.8	V30X60	V30X60			11	No
N-0.10	B109	37	Beam	7	V30X60	V30X60			11	No
N-0.10	B110	38	Beam	8.35	V30X60	V30X60			11	Yes
N-0.10	B111	39	Beam	1.75	V60X60	V60X60			11	No
N-0.10	B112	40	Beam	1.75	V60X60	V60X60			11	No
N-0.10	B113	41	Beam	1.75	V60X60	V60X60			11	No
N-0.10	B117	44	Beam	9.65	V40X60	V40X60			11	No
N-0.10	B118	45	Beam	10.4	V40X60	V40X60			11	No
N-0.10	B119	46	Beam	4.03	V40X60	V40X60			11	No
N-0.10	B120	47	Beam	1.4	V40X60	V40X60			11	No
N-0.10	B121	48	Beam	6.95	V40X60	V40X60			11	No
N-0.10	B122	49	Beam	5.6	V40X60	V40X60			11	No
N-0.10	B123	50	Beam	1.4	V40X60	V40X60			11	No
N-0.10	B124	51	Beam	9.8	V40X60	V40X60			11	No
N-0.10	B125	52	Beam	3.98	V40X60	V40X60			11	No
N-0.10	B126	53	Beam	9.65	V40X60	V40X60			11	No
N-0.10	B127	54	Beam	10.4	V40X60	V40X60			11	No
N-0.10	B128	55	Beam	4.03	V40X60	V40X60			11	No
N-0.10	B129	56	Beam	8.35	V40X60	V40X60			11	No
N-0.10	B130	57	Beam	7	V40X60	V40X60			11	No
N-0.10	B131	58	Beam	9.8	V40X60	V40X60			11	No
N-0.10	B132	59	Beam	3.98	V40X60	V40X60			11	No
N-0.10	B133	60	Beam	9.65	V40X60	V40X60			11	No
N-0.10	B134	61	Beam	10.4	V40X60	V40X60			11	No
N-0.10	B135	62	Beam	4.03	V40X60	V40X60			11	No
N-0.10	B136	63	Beam	1.4	V40X60	V40X60			11	No
N-0.10	B137	64	Beam	6.95	V40X60	V40X60			11	No
N-0.10	B138	65	Beam	5.6	V40X60	V40X60			11	No
N-0.10	B139	66	Beam	1.4	V40X60	V40X60			11	No
N-0.10	B140	67	Beam	9.8	V40X60	V40X60			11	No
N-0.10	B141	68	Beam	3.98	V40X60	V40X60			11	No
N-0.10	B142	69	Beam	10.02	V40X60	V40X60			11	No
N-0.10	B143	70	Beam	10.13	V40X60	V40X60			11	No
N-0.10	B144	71	Beam	1.75	V40X60	V40X60			11	No
N-0.10	B145	72	Beam	1.3	V30X60	V30X60			11	Yes
N-0.10	B19	42	Beam	9.65	V30X60	V30X60			11	No
N-0.10	B26	43	Beam	10.4	V30X60	V30X60			11	No
N-0.10	B28	247	Beam	4.03	V30X60	V30X60		0.5		No
N-0.10	B168	384	Beam	1	V20X50	V20X50		0.5		No
N-0.10	B183	385	Beam	3.03	V20X50	V20X50		0.5		No
N-0.10	B212	379	Beam	1.65	V60X60	V60X60		0.5		No
N-0.10	B213	377	Beam	1.55	V60X60	V60X60		0.5		No
N-0.10	B218	248	Beam	1.65	V30X50	V30X50		0.5		No
N-0.10	B219	296	Beam	1.65	V30X50	V30X50		0.5		No
N-0.10	B220	375	Beam	1.65	V60X60	V60X60		0.5		No

Story	Label	Unique Name	Design Type	Length m	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing m	Min Number Stations	Releases
N-0.10	B221	376	Beam	1.65	V60X60	V60X60		0.5		No
N-0.10	B223	383	Beam	8.6	V20X50	V20X50		0.5		No
N-0.10	B224	249	Beam	1.65	V30X50	V30X50		0.5		No
N-0.10	B225	295	Beam	1.65	V30X50	V30X50		0.5		No
N-0.10	B226	373	Beam	1.65	V60X60	V60X60		0.5		No
N-0.10	B227	374	Beam	1.65	V60X60	V60X60		0.5		No
N-0.10	B228	250	Beam	1.65	V30X50	V30X50		0.5		No
N-0.10	B229	294	Beam	1.65	V30X50	V30X50		0.5		No
N-0.10	B230	371	Beam	1.65	V60X60	V60X60		0.5		No
N-0.10	B231	372	Beam	1.65	V60X60	V60X60		0.5		No
N-0.10	B235	380	Beam	1	V20X50	V20X50		0.5		No
N-0.10	B236	381	Beam	8.65	V20X50	V20X50		0.5		No
N-0.10	B237	382	Beam	1.8	V20X50	V20X50		0.5		No
N-0.10	B243	378	Beam	0.1	V60X60	V60X60		0.5		No

Shell Assignments - Summary

Story	Label	Unique Name	Section	Axis Angle deg	Pier
N+8.30	W1	18	PANT60		P-2A
N+8.30	W2	19	PANT60		P-2
N+8.30	W12	20	PANT60		P-6A
N+8.30	W14	89	PANT60		P-4
N+8.30	W18	145	PANT60		P-4
N+8.30	W19	146	PANT60		P-3
N+8.30	W20	147	PANT60		P-3
N+8.30	W33	148	PANT60		P-5A
N+8.30	W35	150	PANT60		P-6
N+8.30	W37	152	PANT60		P-5
N+8.30	W39	98	MUROCONT		P-9
N+8.30	W40	99	MUROCONT		P-12
N+8.30	W41	100	MUROCONT		P-8
N+8.30	W42	101	MUROCONT		P-11
N+8.30	W43	102	MUROCONT		P-7
N+8.30	W44	103	MUROCONT		P-10
N+8.30	W45	190	PANT60		P-1
N+8.30	W46	191	PANT60		P-1
N+8.30	W47	193	PANT60		P-1A
N+8.30	W48	194	PANT60		P-1A
N+4.68	W1	9	PANT60		P-2A
N+4.68	W2	10	PANT60		P-2
N+4.68	W3	11	PANT60		P-6A
N+4.68	W15	12	PANT60		P-6
N+4.68	W16	13	PANT60		P-1A
N+4.68	W17	14	PANT60		P-1
N+4.68	W21	15	PANT60		P-5A
N+4.68	W22	16	PANT60		P-5
N+4.68	W4	64	PANT60		P-3
N+4.68	W5	65	PANT60		P-4
N+4.68	W6	104	MUROCONT		P-9
N+4.68	W7	105	MUROCONT		P-12
N+4.68	W8	106	MUROCONT		P-8

Story	Label	Unique Name	Section	Axis Angle deg	Pier
N+4.68	W9	107	MUROCONT		P-11
N+4.68	W10	108	MUROCONT		P-7
N+4.68	W11	109	MUROCONT		P-10
N-0.10	W1	1	PANT60		P-2A
N-0.10	W2	2	PANT60		P-2
N-0.10	W3	3	PANT60		P-6A
N-0.10	W15	4	PANT60		P-6
N-0.10	W16	5	PANT60		P-1A
N-0.10	W17	6	PANT60		P-1
N-0.10	W21	7	PANT60		P-5A
N-0.10	W22	8	PANT60		P-5
N-0.10	W23	48	MUROCONT		
N-0.10	W24	49	MUROCONT		
N-0.10	W25	50	MUROCONT		
N-0.10	W26	51	MUROCONT		
N-0.10	W27	52	MUROCONT		
N-0.10	W28	53	MUROCONT		
N-0.10	W29	54	MUROCONT		
N-0.10	W30	55	MUROCONT		
N-0.10	W31	56	MUROCONT		
N-0.10	W32	57	MUROCONT		
N-0.10	W4	60	PANT60		P-3
N-0.10	W5	61	PANT60		P-4
N-0.10	W6	92	MUROCONT		P-9
N-0.10	W7	93	MUROCONT		P-12
N-0.10	W8	94	MUROCONT		P-8
N-0.10	W9	95	MUROCONT		P-11
N-0.10	W10	96	MUROCONT		P-7
N-0.10	W11	97	MUROCONT		P-10
N+8.30	F81	141	LOSA10		
N+8.30	F82	143	LOSA10		
N+8.30	F83	110	LOSA10		
N+8.30	F84	111	LOSA10		
N+8.30	F85	112	LOSA10		
N+8.30	F86	113	LOSA10		
N+8.30	F87	114	LOSA10		
N+8.30	F88	115	LOSA10		
N+8.30	F89	116	LOSA10		
N+8.30	F90	117	LOSA10		
N+8.30	F91	118	LOSA10		
N+8.30	F92	119	LOSA10		
N+8.30	F93	120	LOSA10		
N+8.30	F94	121	LOSA10		
N+8.30	F118	156	LOSA10	90	
N+8.30	F119	157	LOSA10	90	
N+8.30	F120	158	LOSA10	90	
N+8.30	F121	159	LOSA10	90	
N+8.30	F122	160	LOSA10	90	
N+8.30	F123	161	LOSA10	90	
N+8.30	F124	162	LOSA10	90	
N+8.30	F125	163	LOSA10	90	
N+8.30	F126	164	LOSA10	90	
N+8.30	F127	165	LOSA10	90	

Story	Label	Unique Name	Section	Axis Angle deg	Pier
N+8.30	F129	167	TEJA		
N+8.30	F130	168	TEJA		
N+8.30	F131	169	TEJA		
N+8.30	F133	171	LOSA10	90	
N+8.30	F134	172	LOSA10	90	
N+8.30	F135	173	LOSA10	90	
N+8.30	F136	174	LOSA10	90	
N+8.30	F137	175	LOSA10	90	
N+8.30	F138	176	LOSA10	90	
N+8.30	F139	177	LOSA10	90	
N+8.30	F140	178	LOSA10	90	
N+8.30	F141	179	LOSA10	90	
N+8.30	F142	180	LOSA10	90	
N+8.30	F143	181	LOSA10		
N+8.30	F144	182	TEJA		
N+8.30	F145	183	TEJA		
N+8.30	F146	184	LOSA10		
N+8.30	F147	185	LOSA10	90	
N+8.30	F148	186	LOSA10	90	
N+8.30	F149	187	LOSA10	90	
N+8.30	F150	188	LOSA10	90	
N+8.30	F151	189	LOSA10	90	
N+8.30	F152	192	LOSA10		
N+8.30	F153	26	LOSA10		
N+8.30	F154	69	LOSA10		
N+8.30	F156	196	LOSA10		
N+8.30	F5	144	LOSA10		
N+8.30	F28	22	LOSA10		
N+4.68	F14	205	LOSA60T8	90	
N+4.68	F21	203	LOSA60T8	90	
N+4.68	F22	202	LOSA60T8	90	
N+4.68	F23	204	LOSA60T8	90	
N+4.68	F24	66	LOSA60T8	90	
N+4.68	F25	17	LOSA60T8	90	
N+4.68	F63	123	LOSA10		
N+4.68	F64	125	LOSA10		
N+4.68	F65	126	LOSA10		
N+4.68	F66	127	LOSA10		
N+4.68	F67	129	LOSA10		
N+4.68	F68	131	LOSA10		
N+4.68	F69	132	LOSA10		
N+4.68	F70	133	LOSA10		
N+4.68	F71	134	LOSA10		
N+4.68	F72	136	LOSA10		
N+4.68	F73	138	LOSA10		
N+4.68	F74	139	LOSA10		
N+4.68	F75	140	LOSA10		
N+4.68	F1	122	LOSA10		
N+4.68	F6	124	LOSA10		
N+4.68	F11	128	LOSA10		
N+4.68	F78	130	LOSA10		
N+4.68	F79	135	LOSA10		
N+4.68	F80	137	LOSA10		

Story	Label	Unique Name	Section	Axis Angle deg	Pier
N+4.68	F104	200	LOSA60T8	90	
N+4.68	F105	201	LOSA60T8	90	
N-0.10	F7	28	LOSA60T10	90	
N-0.10	F8	29	LOSA60T10	90	
N-0.10	F9	30	LOSA60T10	90	
N-0.10	F10	31	LOSA60T10	90	
N-0.10	F12	33	LOSA60T10	90	
N-0.10	F13	34	LOSA60T10	90	
N-0.10	F14	35	LOSA60T10	90	
N-0.10	F15	36	LOSA60T10	90	
N-0.10	F16	37	LOSA60T10	90	
N-0.10	F17	38	LOSA60T10	90	
N-0.10	F18	39	LOSA60T10	90	
N-0.10	F19	40	LOSA60T10	90	
N-0.10	F20	41	LOSA60T10	90	
N-0.10	F21	42	LOSA60T10	90	
N-0.10	F22	43	LOSA60T10	90	
N-0.10	F23	44	LOSA60T10	90	
N-0.10	F24	45	LOSA60T10	90	
N-0.10	F25	46	LOSA60T10	90	
N-0.10	F27	47	LOSA60T10	90	
N-0.10	F2	27	LOSA60T10	90	
N-0.10	F3	32	LOSA60T10	90	
N-0.10	F4	91	LOSA60T10	90	

4 Loads

Load Patterns

Name	Type	Self Weight Multiplier	Auto Load
DEAD	Dead	1	
LIVE	Live	0	
FHE	Seismic	0	User Coefficient
FHEU	Seismic	0	User Coefficient
VIENTO	Wind	0	None

Auto Seismic - User Coefficients

Load Pattern	Type	Direction	Top Story	Bottom Story	C	K	Weight Used tonf	Base Shear tonf
FHE	Seismic	X	N+8.30	N-0.10	0.478	1	1213.8307	580.2111
FHEU	Seismic	X	N+8.30	N-0.10	0.261	1	1213.8307	316.8098

Response Spectrum Function - User

Name	Period sec	Acceleration	Damping %
MICROBOG	0	0.478	5
MICROBOG	0.025	0.478	
MICROBOG	0.05	0.478	
MICROBOG	0.075	0.478	
MICROBOG	0.1	0.478	
MICROBOG	0.125	0.478	
MICROBOG	0.15	0.478	
MICROBOG	0.175	0.478	
MICROBOG	0.2	0.478	
MICROBOG	0.225	0.478	
MICROBOG	0.25	0.478	
MICROBOG	0.275	0.478	
MICROBOG	0.3	0.478	
MICROBOG	0.325	0.478	
MICROBOG	0.35	0.478	
MICROBOG	0.375	0.478	
MICROBOG	0.4	0.478	
MICROBOG	0.425	0.478	
MICROBOG	0.45	0.478	
MICROBOG	0.475	0.478	
MICROBOG	0.5	0.478	
MICROBOG	0.525	0.478	
MICROBOG	0.55	0.478	
MICROBOG	0.575	0.478	
MICROBOG	0.65	0.478	
MICROBOG	0.675	0.478	
MICROBOG	0.7	0.478	
MICROBOG	0.725	0.478	
MICROBOG	0.75	0.478	
MICROBOG	0.775	0.478	
MICROBOG	0.8	0.478	
MICROBOG	0.825	0.478	

Name	Period sec	Accelerati on	Damping %
MICROBOG	0.85	0.478	
MICROBOG	0.875	0.472	
MICROBOG	0.9	0.465	
MICROBOG	0.925	0.459	
MICROBOG	0.95	0.452	
MICROBOG	0.975	0.447	
MICROBOG	1	0.441	
MICROBOG	1.025	0.436	
MICROBOG	1.05	0.431	
MICROBOG	1.075	0.426	
MICROBOG	1.1	0.421	
MICROBOG	1.125	0.416	
MICROBOG	1.15	0.407	
MICROBOG	1.175	0.398	
MICROBOG	1.2	0.39	
MICROBOG	1.225	0.382	
MICROBOG	1.25	0.374	
MICROBOG	1.275	0.367	
MICROBOG	1.3	0.36	
MICROBOG	1.325	0.353	
MICROBOG	1.35	0.347	
MICROBOG	1.375	0.34	
MICROBOG	1.4	0.334	
MICROBOG	1.425	0.328	
MICROBOG	1.45	0.323	
MICROBOG	1.475	0.317	
MICROBOG	1.5	0.312	
MICROBOG	1.525	0.307	
MICROBOG	1.55	0.302	
MICROBOG	1.575	0.297	
MICROBOG	1.6	0.293	
MICROBOG	1.625	0.288	
MICROBOG	1.65	0.284	
MICROBOG	1.675	0.279	
MICROBOG	1.7	0.275	
MICROBOG	1.725	0.271	
MICROBOG	1.75	0.267	
MICROBOG	1.775	0.264	
MICROBOG	1.8	0.26	
MICROBOG	1.825	0.256	
MICROBOG	1.85	0.253	
MICROBOG	1.875	0.25	
MICROBOG	1.9	0.246	
MICROBOG	1.925	0.243	
MICROBOG	1.95	0.24	
MICROBOG	1.975	0.237	
MICROBOG	2	0.234	
MICROBOG	2.025	0.231	
MICROBOG	2.05	0.228	
MICROBOG	2.075	0.226	
MICROBOG	2.1	0.223	
MICROBOG	2.125	0.22	
MICROBOG	2.15	0.218	
MICROBOG	2.175	0.215	

Name	Period sec	Accelerati on	Damping %
MICROBOG	2.2	0.213	
MICROBOG	2.225	0.21	
MICROBOG	2.25	0.208	
MICROBOG	2.275	0.206	
MICROBOG	2.3	0.203	
MICROBOG	2.325	0.201	
MICROBOG	2.35	0.199	
MICROBOG	2.375	0.197	
MICROBOG	2.4	0.195	
MICROBOG	2.425	0.193	
MICROBOG	2.45	0.191	
MICROBOG	2.475	0.189	
MICROBOG	2.5	0.187	
MICROBOG	2.525	0.185	
MICROBOG	2.55	0.184	
MICROBOG	2.575	0.182	
MICROBOG	2.6	0.18	
MICROBOG	2.625	0.178	
MICROBOG	2.65	0.177	
MICROBOG	2.675	0.175	
MICROBOG	2.7	0.173	
MICROBOG	2.725	0.172	
MICROBOG	2.75	0.17	
MICROBOG	2.775	0.169	
MICROBOG	2.8	0.167	
MICROBOG	2.825	0.166	
MICROBOG	2.85	0.164	
MICROBOG	2.875	0.163	
MICROBOG	2.9	0.161	
MICROBOG	2.925	0.16	
MICROBOG	2.95	0.159	
MICROBOG	2.975	0.157	
MICROBOG	3	0.156	
MICROBOG	3.025	0.155	
MICROBOG	3.05	0.153	
MICROBOG	3.075	0.152	
MICROBOG	3.1	0.151	
MICROBOG	3.125	0.15	
MICROBOG	3.15	0.149	
MICROBOG	3.175	0.147	
MICROBOG	3.2	0.146	
MICROBOG	3.225	0.145	
MICROBOG	3.25	0.144	
MICROBOG	3.275	0.143	
MICROBOG	3.3	0.142	
MICROBOG	3.325	0.141	
MICROBOG	3.35	0.14	
MICROBOG	3.375	0.139	
MICROBOG	3.4	0.138	
MICROBOG	3.425	0.137	
MICROBOG	3.45	0.136	
MICROBOG	3.475	0.135	
MICROBOG	3.5	0.134	
MICROBOG	3.525	0.132	

Name	Period sec	Accelerati on	Damping %
MICROBOG	3.55	0.13	
MICROBOG	3.575	0.128	
MICROBOG	3.6	0.126	
MICROBOG	3.625	0.125	
MICROBOG	3.65	0.123	
MICROBOG	3.675	0.121	
MICROBOG	3.7	0.12	
MICROBOG	3.725	0.118	
MICROBOG	3.75	0.116	
MICROBOG	3.775	0.115	
MICROBOG	3.8	0.113	
MICROBOG	3.825	0.112	
MICROBOG	3.85	0.111	
MICROBOG	3.875	0.109	
MICROBOG	3.9	0.108	
MICROBOG	3.925	0.106	
MICROBOG	3.95	0.105	
MICROBOG	3.975	0.104	
MICROBOG	4	0.102	
MICROBOG	4.025	0.101	
MICROBOG	4.05	0.1	
MICROBOG	4.075	0.099	
MICROBOG	4.1	0.097	
MICROBOG	4.125	0.096	
MICROBOG	4.15	0.095	
MICROBOG	4.175	0.094	
MICROBOG	4.2	0.093	
MICROBOG	4.225	0.092	
MICROBOG	4.25	0.091	
MICROBOG	4.275	0.09	
MICROBOG	4.3	0.089	
MICROBOG	4.325	0.088	
MICROBOG	4.35	0.087	
MICROBOG	4.375	0.086	
MICROBOG	4.4	0.085	
MICROBOG	4.425	0.084	
MICROBOG	4.45	0.083	
MICROBOG	4.475	0.082	
MICROBOG	4.5	0.081	
MICROBOG	4.525	0.08	
MICROBOG	4.55	0.079	
MICROBOG	4.575	0.078	
MICROBOG	4.6	0.077	
MICROBOG	4.625	0.077	
MICROBOG	4.65	0.076	
MICROBOG	4.675	0.075	
MICROBOG	4.7	0.074	
MICROBOG	4.725	0.073	
MICROBOG	4.75	0.073	
MICROBOG	4.775	0.072	
MICROBOG	4.8	0.071	
MICROBOG	4.825	0.07	
MICROBOG	4.85	0.07	
MICROBOG	4.875	0.069	

Name	Period sec	Accelerati on	Damping %
MICROBOG	4.9	0.068	
MICROBOG	4.925	0.068	
MICROBOG	4.95	0.067	
MICROBOG	4.975	0.066	
MICROBOG	5	0.066	
MICROBOG	5.025	0.065	
MICROBOG	5.05	0.064	
MICROBOG	5.075	0.064	
MICROBOG	5.1	0.063	
MICROBOG	5.125	0.062	
MICROBOG	5.15	0.062	
MICROBOG	5.175	0.061	
MICROBOG	5.2	0.061	
MICROBOG	5.225	0.06	
MICROBOG	5.25	0.059	
MICROBOG	5.275	0.059	
MICROBOG	5.3	0.058	
MICROBOG	5.325	0.058	
MICROBOG	5.35	0.057	
MICROBOG	5.375	0.057	
MICROBOG	5.4	0.056	
MICROBOG	5.425	0.056	
MICROBOG	5.45	0.055	
MICROBOG	5.475	0.055	
MICROBOG	5.5	0.054	
UMBMICROBOG	0	0.261	2
UMBMICROBOG	0.025	0.261	
UMBMICROBOG	0.05	0.261	
UMBMICROBOG	0.075	0.261	
UMBMICROBOG	0.1	0.261	
UMBMICROBOG	0.125	0.261	
UMBMICROBOG	0.15	0.261	
UMBMICROBOG	0.175	0.261	
UMBMICROBOG	0.2	0.261	
UMBMICROBOG	0.225	0.261	
UMBMICROBOG	0.25	0.261	
UMBMICROBOG	0.275	0.261	
UMBMICROBOG	0.3	0.261	
UMBMICROBOG	0.325	0.261	
UMBMICROBOG	0.35	0.261	
UMBMICROBOG	0.375	0.261	
UMBMICROBOG	0.4	0.261	
UMBMICROBOG	0.425	0.261	
UMBMICROBOG	0.45	0.261	
UMBMICROBOG	0.475	0.261	
UMBMICROBOG	0.5	0.261	
UMBMICROBOG	0.525	0.261	
UMBMICROBOG	0.55	0.261	
UMBMICROBOG	0.575	0.261	
UMBMICROBOG	0.6	0.261	
UMBMICROBOG	0.625	0.261	
UMBMICROBOG	0.65	0.261	
UMBMICROBOG	0.675	0.261	
UMBMICROBOG	0.7	0.261	

Name	Period sec	Accelerati on	Damping %
UMBMICROBOG	0.725	0.261	
UMBMICROBOG	0.75	0.261	
UMBMICROBOG	0.775	0.261	
UMBMICROBOG	0.8	0.261	
UMBMICROBOG	0.825	0.261	
UMBMICROBOG	0.85	0.258	
UMBMICROBOG	0.875	0.255	
UMBMICROBOG	0.9	0.251	
UMBMICROBOG	0.925	0.248	
UMBMICROBOG	0.95	0.244	
UMBMICROBOG	0.975	0.241	
UMBMICROBOG	1	0.239	
UMBMICROBOG	1.025	0.236	
UMBMICROBOG	1.05	0.231	
UMBMICROBOG	1.075	0.226	
UMBMICROBOG	1.1	0.221	
UMBMICROBOG	1.125	0.216	
UMBMICROBOG	1.15	0.211	
UMBMICROBOG	1.175	0.207	
UMBMICROBOG	1.2	0.203	
UMBMICROBOG	1.225	0.198	
UMBMICROBOG	1.25	0.194	
UMBMICROBOG	1.275	0.191	
UMBMICROBOG	1.3	0.187	
UMBMICROBOG	1.325	0.183	
UMBMICROBOG	1.35	0.18	
UMBMICROBOG	1.375	0.177	
UMBMICROBOG	1.4	0.174	
UMBMICROBOG	1.425	0.171	
UMBMICROBOG	1.45	0.168	
UMBMICROBOG	1.475	0.165	
UMBMICROBOG	1.5	0.162	
UMBMICROBOG	1.525	0.159	
UMBMICROBOG	1.55	0.157	
UMBMICROBOG	1.575	0.154	
UMBMICROBOG	1.6	0.152	
UMBMICROBOG	1.625	0.15	
UMBMICROBOG	1.65	0.147	
UMBMICROBOG	1.675	0.145	
UMBMICROBOG	1.7	0.143	
UMBMICROBOG	1.725	0.141	
UMBMICROBOG	1.75	0.139	
UMBMICROBOG	1.775	0.137	
UMBMICROBOG	1.8	0.135	
UMBMICROBOG	1.825	0.133	
UMBMICROBOG	1.85	0.131	
UMBMICROBOG	1.875	0.13	
UMBMICROBOG	1.9	0.128	
UMBMICROBOG	1.925	0.126	
UMBMICROBOG	1.95	0.125	
UMBMICROBOG	1.975	0.123	
UMBMICROBOG	2	0.122	
UMBMICROBOG	2.025	0.12	
UMBMICROBOG	2.05	0.119	

Name	Period sec	Accelerati on	Damping %
UMBMICROBOG	2.075	0.117	
UMBMICROBOG	2.1	0.116	
UMBMICROBOG	2.125	0.114	
UMBMICROBOG	2.15	0.113	
UMBMICROBOG	2.175	0.112	
UMBMICROBOG	2.2	0.11	
UMBMICROBOG	2.225	0.109	
UMBMICROBOG	2.25	0.108	
UMBMICROBOG	2.275	0.107	
UMBMICROBOG	2.3	0.106	
UMBMICROBOG	2.325	0.105	
UMBMICROBOG	2.35	0.103	
UMBMICROBOG	2.375	0.102	
UMBMICROBOG	2.4	0.101	
UMBMICROBOG	2.425	0.1	
UMBMICROBOG	2.45	0.099	
UMBMICROBOG	2.475	0.098	
UMBMICROBOG	2.5	0.097	
UMBMICROBOG	2.525	0.096	
UMBMICROBOG	2.55	0.095	
UMBMICROBOG	2.575	0.094	
UMBMICROBOG	2.6	0.093	
UMBMICROBOG	2.625	0.093	
UMBMICROBOG	2.65	0.092	
UMBMICROBOG	2.675	0.091	
UMBMICROBOG	2.7	0.09	
UMBMICROBOG	2.725	0.089	
UMBMICROBOG	2.75	0.088	
UMBMICROBOG	2.775	0.088	
UMBMICROBOG	2.8	0.087	
UMBMICROBOG	2.825	0.086	
UMBMICROBOG	2.85	0.085	
UMBMICROBOG	2.875	0.085	
UMBMICROBOG	2.9	0.084	
UMBMICROBOG	2.925	0.083	
UMBMICROBOG	2.95	0.082	
UMBMICROBOG	2.975	0.082	
UMBMICROBOG	3	0.081	
UMBMICROBOG	3.025	0.08	
UMBMICROBOG	3.05	0.08	
UMBMICROBOG	3.075	0.079	
UMBMICROBOG	3.1	0.078	
UMBMICROBOG	3.125	0.078	
UMBMICROBOG	3.15	0.077	
UMBMICROBOG	3.175	0.077	
UMBMICROBOG	3.2	0.076	
UMBMICROBOG	3.225	0.075	
UMBMICROBOG	3.25	0.075	
UMBMICROBOG	3.275	0.074	
UMBMICROBOG	3.3	0.074	
UMBMICROBOG	3.325	0.073	
UMBMICROBOG	3.35	0.073	
UMBMICROBOG	3.375	0.072	
UMBMICROBOG	3.4	0.071	

Name	Period sec	Accelerati on	Damping %
UMBMICROBOG	3.425	0.071	
UMBMICROBOG	3.45	0.07	
UMBMICROBOG	3.475	0.07	
UMBMICROBOG	3.5	0.069	
UMBMICROBOG	3.525	0.068	
UMBMICROBOG	3.55	0.067	
UMBMICROBOG	3.575	0.067	
UMBMICROBOG	3.6	0.066	
UMBMICROBOG	3.625	0.065	
UMBMICROBOG	3.65	0.064	
UMBMICROBOG	3.675	0.063	
UMBMICROBOG	3.7	0.062	
UMBMICROBOG	3.725	0.061	
UMBMICROBOG	3.75	0.06	
UMBMICROBOG	3.775	0.06	
UMBMICROBOG	3.8	0.059	
UMBMICROBOG	3.825	0.058	
UMBMICROBOG	3.85	0.057	
UMBMICROBOG	3.875	0.057	
UMBMICROBOG	3.9	0.056	
UMBMICROBOG	3.925	0.055	
UMBMICROBOG	3.95	0.055	
UMBMICROBOG	3.975	0.054	
UMBMICROBOG	4	0.053	
UMBMICROBOG	4.025	0.052	
UMBMICROBOG	4.05	0.052	
UMBMICROBOG	4.075	0.051	
UMBMICROBOG	4.1	0.051	
UMBMICROBOG	4.125	0.05	
UMBMICROBOG	4.15	0.049	
UMBMICROBOG	4.175	0.049	
UMBMICROBOG	4.2	0.048	
UMBMICROBOG	4.225	0.048	
UMBMICROBOG	4.25	0.047	
UMBMICROBOG	4.275	0.047	
UMBMICROBOG	4.3	0.046	
UMBMICROBOG	4.325	0.045	
UMBMICROBOG	4.35	0.045	
UMBMICROBOG	4.375	0.044	
UMBMICROBOG	4.4	0.044	
UMBMICROBOG	4.425	0.043	
UMBMICROBOG	4.45	0.043	
UMBMICROBOG	4.475	0.042	
UMBMICROBOG	4.5	0.042	
UMBMICROBOG	4.525	0.042	
UMBMICROBOG	4.55	0.041	
UMBMICROBOG	4.575	0.041	
UMBMICROBOG	4.6	0.04	
UMBMICROBOG	4.625	0.04	
UMBMICROBOG	4.65	0.039	
UMBMICROBOG	4.675	0.039	
UMBMICROBOG	4.7	0.039	
UMBMICROBOG	4.725	0.038	
UMBMICROBOG	4.75	0.038	

Name	Period sec	Accelerati on	Damping %
UMBMICROBOG	4.775	0.037	
UMBMICROBOG	4.8	0.037	
UMBMICROBOG	4.825	0.037	
UMBMICROBOG	4.85	0.036	
UMBMICROBOG	4.875	0.036	
UMBMICROBOG	4.9	0.035	
UMBMICROBOG	4.925	0.035	
UMBMICROBOG	4.95	0.035	
UMBMICROBOG	4.975	0.034	
UMBMICROBOG	5	0.034	
UMBMICROBOG	5.025	0.034	
UMBMICROBOG	5.05	0.033	
UMBMICROBOG	5.075	0.033	
UMBMICROBOG	5.1	0.033	
UMBMICROBOG	5.125	0.032	
UMBMICROBOG	5.15	0.032	
UMBMICROBOG	5.175	0.032	
UMBMICROBOG	5.2	0.031	
UMBMICROBOG	5.225	0.031	
UMBMICROBOG	5.25	0.031	
UMBMICROBOG	5.275	0.031	
UMBMICROBOG	5.3	0.03	
UMBMICROBOG	5.325	0.03	
UMBMICROBOG	5.35	0.03	
UMBMICROBOG	5.375	0.029	
UMBMICROBOG	5.4	0.029	
UMBMICROBOG	5.425	0.029	
UMBMICROBOG	5.45	0.029	
UMBMICROBOG	5.475	0.028	
UMBMICROBOG	5.5	0.028	

Load Cases - Summary

Name	Type
Modal	Modal - Eigen
DEAD	Linear Static
LIVE	Linear Static
FHE	Linear Static
FHEU	Linear Static
VIENTO	Linear Static
SISMOX	Response Spectrum
SISMOY	Response Spectrum
UMBRALX	Response Spectrum
UMBRALY	Response Spectrum
~TorsionSISMOX	Linear Static
~TorsionSISMOY	Linear Static
~TorsionUMBRALX	Linear Static
~TorsionUMBRALY	Linear Static

Load Cases - Static - Linear

Name	Stiffness From	Mass Source	Load Type	Load Name	Scale Factor	Design Load Type
DEAD	Preset P-delta	MsSrc1	Load Pattern	DEAD	1	Program Determined
LIVE	Preset P-delta	MsSrc1	Load Pattern	LIVE	1	Program Determined
FHE	Preset P-delta	MsSrc1	Load Pattern	FHE	1	Program Determined
FHEU	Preset P-delta	MsSrc1	Load Pattern	FHEU	1	Program Determined
VIENTO	Preset P-delta	MsSrc1	Load Pattern	VIENTO	1	Program Determined
~TorsionSISMO X	Preset P-delta	MsSrc1	Load Pattern	~SISMOXEC C	1	Program Determined
~TorsionSISMO Y	Preset P-delta	MsSrc1	Load Pattern	~SISMOYEC C	1	Program Determined
~TorsionUMBR ALX	Preset P-delta	MsSrc1	Load Pattern	~UMBRALXEC C	1	Program Determined
~TorsionUMBR ALY	Preset P-delta	MsSrc1	Load Pattern	~UMBRALYEC C	1	Program Determined

Load Cases - Modal - Eigen

Name	Stiffness From	Mass Source	Max Number Modes	Min Number Modes	Frequency Shift cyc/sec	Cutoff Frequency cyc/sec	Convergence Tolerance	Auto Shift?	Design Load Type
Modal	Preset P-delta	MsSrc1	12	12	0	0	1E-07	Yes	Program Determined

Load Cases - Response Spectrum (Part 1 of 2)

Name	Mass Source	Load Type	Load Name	Function	Scale Factor	Coordinate System	Angle deg	Modal Case	Modal Combination Method	Include Rigid Response	Directional Combination Method
SISMOX	Previous (MsSrc1)	Acceleration	U1	MICROBOG	9.8	Global	0	Modal	CQC	No	SRSS
SISMOY	Previous (MsSrc1)	Acceleration	U2	MICROBOG	9.8	Global	0	Modal	CQC	No	SRSS
UMBRALX	Previous (MsSrc1)	Acceleration	U1	UMBMICROBOG	9.8		0	Modal	CQC	No	SRSS
UMBRALY	Previous (MsSrc1)	Acceleration	U2	UMBMICROBOG	9.8	Global	0	Modal	CQC	No	SRSS

Load Cases - Response Spectrum (Part 2 of 2)

Name	Design Load Type	Eccentricity Ratio	Eccentricity Overrides	Constant Damping
SISMOX	Program Determined	0.05	No	0.05
SISMOY	Program Determined	0.05	No	0.05
UMBRALX	Program Determined	0.05	No	0.02
UMBRALY	Program Determined	0.05	No	0.02

P-delta Options

Automatic
Method

None

Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
C1	DEAD	1.4	Linear Add	No
C2	DEAD	1.2	Linear Add	No
C2	LIVE	1.6		No
C3	DEAD	1.2	Linear Add	No
C3	LIVE	1		No
C3	SISMOX	0.333		No
C3	SISMOY	0.1		No
C4	DEAD	1.2	Linear Add	No
C4	LIVE	1		No
C4	SISMOX	0.333		No
C4	SISMOY	-0.1		No
C5	DEAD	1.2	Linear Add	No
C5	LIVE	1		No
C5	SISMOX	-0.333		No
C5	SISMOY	0.1		No
C6	DEAD	1.2	Linear Add	No
C6	LIVE	1		No
C6	SISMOX	-0.333		No
C6	SISMOY	-0.1		No
C7	DEAD	1.2	Linear Add	No
C7	LIVE	1		No
C7	SISMOX	0.1		No
C7	SISMOY	0.333		No
C8	DEAD	1.2	Linear Add	No
C8	LIVE	1		No
C8	SISMOX	0.1		No
C8	SISMOY	-0.333		No
C9	DEAD	1.2	Linear Add	No
C9	LIVE	1		No
C9	SISMOX	-0.1		No
C9	SISMOY	0.333		No
C10	DEAD	1.2	Linear Add	No
C10	LIVE	1		No
C10	SISMOX	-0.1		No
C10	SISMOY	-0.333		No
C11	DEAD	0.9	Linear Add	No
C11	SISMOX	0.333		No
C11	SISMOY	0.1		No
C12	DEAD	0.9	Linear Add	No
C12	SISMOX	0.333		No
C12	SISMOY	-0.1		No
C13	DEAD	0.9	Linear Add	No
C13	SISMOX	-0.333		No
C13	SISMOY	0.1		No
C14	DEAD	0.9	Linear Add	No
C14	SISMOX	-0.333		No
C14	SISMOY	-0.1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
C15	DEAD	0.9	Linear Add	No
C15	SISMOX	0.1		No
C15	SISMOY	0.333		No
C16	DEAD	0.9	Linear Add	No
C16	SISMOX	0.1		No
C16	SISMOY	-0.333		No
C17	DEAD	0.9	Linear Add	No
C17	SISMOX	-0.1		No
C17	SISMOY	0.333		No
C18	DEAD	0.9	Linear Add	No
C18	SISMOX	-0.1		No
C18	SISMOY	-0.333		No
ENVOL	C1	1	Envelope	No
ENVOL	C2	1		No
ENVOL	C7	1		No
ENVOL	C8	1		No
ENVOL	C9	1		No
ENVOL	C10	1		No
ENVOL	C11	1		No
ENVOL	C12	1		No
ENVOL	C13	1		No
ENVOL	C14	1		No
ENVOL	C15	1		No
ENVOL	C16	1		No
ENVOL	C17	1		No
ENVOL	C18	1		No
CIM1	DEAD	1	Linear Add	No
CIM2	DEAD	1	Linear Add	No
CIM2	LIVE	1		No
CIM3	DEAD	1	Linear Add	No
CIM3	SISMOX	0.233		No
CIM3	SISMOY	0.07		No
CIM4	DEAD	1	Linear Add	No
CIM4	SISMOX	0.07		No
CIM4	SISMOY	0.233		No
CIM5	DEAD	1	Linear Add	No
CIM5	LIVE	0.75		No
CIM5	SISMOX	0.175		No
CIM5	SISMOY	0.053		No
CIM6	DEAD	1	Linear Add	No
CIM6	LIVE	0.75		No
CIM6	SISMOX	0.053		No
CIM6	SISMOY	0.175		No
CIM7	DEAD	0.6	Linear Add	No
CIM7	SISMOX	0.233		No
CIM7	SISMOY	0.07		No
CIM8	DEAD	0.6	Linear Add	No
CIM8	SISMOX	0.07		No
CIM8	SISMOY	0.233		No
ENVCIM	CIM1	1	Envelope	No
ENVCIM	CIM2	1		No
ENVCIM	CIM3	1		No
ENVCIM	CIM4	1		No

Name	Load Case/Combo	Scale Factor	Type	Auto
ENVCIM	CIM5	1		No
ENVCIM	CIM6	1		No
ENVCIM	CIM7	1		No
ENVCIM	CIM8	1		No
D1	DEAD	0.9	Linear Add	No
D1	SISMOX	1		No
D1	SISMOY	0.3		No
D2	DEAD	0.9	Linear Add	No
D2	SISMOX	1		No
D2	SISMOY	-0.3		No
D3	DEAD	0.9	Linear Add	No
D3	SISMOX	-1		No
D3	SISMOY	0.3		No
D4	DEAD	0.9	Linear Add	No
D4	SISMOX	-1		No
D4	SISMOY	-0.3		No
D5	DEAD	0.9	Linear Add	No
D5	SISMOX	0.3		No
D5	SISMOY	1		No
D6	DEAD	0.9	Linear Add	No
D6	SISMOX	0.3		No
D6	SISMOY	-1		No
D7	DEAD	0.9	Linear Add	No
D7	SISMOX	-0.3		No
D7	SISMOY	1		No
D8	DEAD	0.9	Linear Add	No
D8	SISMOX	-0.3		No
D8	SISMOY	-1		No
DU1	DEAD	0.9	Linear Add	No
DU1	UMBRALX	1		No
DU1	UMBRALY	0.3		No
DU2	DEAD	0.9	Linear Add	No
DU2	UMBRALX	1		No
DU2	UMBRALY	-0.3		No
DU3	DEAD	0.9	Linear Add	No
DU3	UMBRALX	-1		No
DU3	UMBRALY	0.3		No
DU4	DEAD	0.9	Linear Add	No
DU4	UMBRALX	-1		No
DU4	UMBRALY	-0.3		No
DU5	DEAD	0.9	Linear Add	No
DU5	UMBRALX	0.3		No
DU5	UMBRALY	1		No
DU6	DEAD	0.9	Linear Add	No
DU6	UMBRALX	0.3		No
DU6	UMBRALY	-1		No
DU7	DEAD	0.9	Linear Add	No
DU7	UMBRALX	-0.3		No
DU7	UMBRALY	1		No
DU8	DEAD	0.9	Linear Add	No
DU8	UMBRALX	-0.3		No
DU8	UMBRALY	-1		No
VNC1	DEAD	1.3	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
VNC1	LIVE	1		No
VNC1	SISMOX	1		No
VNC1	SISMOY	0.3		No
VNC2	DEAD	1.3	Linear Add	No
VNC2	LIVE	1		No
VNC2	SISMOX	1		No
VNC2	SISMOY	-0.3		No
VNC3	DEAD	1.1	Linear Add	No
VNC3	LIVE	1		No
VNC3	SISMOX	-1		No
VNC3	SISMOY	0.3		No
VNC4	DEAD	1.1	Linear Add	No
VNC4	LIVE	1		No
VNC4	SISMOX	-1		No
VNC4	SISMOY	-0.3		No
VNC5	DEAD	1.3	Linear Add	No
VNC5	LIVE	1		No
VNC5	SISMOX	0.3		No
VNC5	SISMOY	1		No
VNC6	DEAD	1.3	Linear Add	No
VNC6	LIVE	1		No
VNC6	SISMOX	-0.3		No
VNC6	SISMOY	1		No
VNC7	DEAD	1.1	Linear Add	No
VNC7	LIVE	1		No
VNC7	SISMOX	0.3		No
VNC7	SISMOY	-1		No
VNC8	DEAD	1.1	Linear Add	No
VNC8	LIVE	1		No
VNC8	SISMOX	-0.3		No
VNC8	SISMOY	-1		No
VNC9	DEAD	1	Linear Add	No
VNC9	SISMOX	1		No
VNC9	SISMOY	0.3		No
VNC10	DEAD	1	Linear Add	No
VNC10	SISMOX	1		No
VNC10	SISMOY	-0.3		No
VNC11	DEAD	0.8	Linear Add	No
VNC11	SISMOX	-1		No
VNC11	SISMOY	0.3		No
VNC12	DEAD	0.8	Linear Add	No
VNC12	SISMOX	-1		No
VNC12	SISMOY	-0.3		No
VNC13	DEAD	1	Linear Add	No
VNC13	SISMOX	0.3		No
VNC13	SISMOY	1		No
VNC14	DEAD	1	Linear Add	No
VNC14	SISMOX	-0.3		No
VNC14	SISMOY	1		No
VNC15	DEAD	0.8	Linear Add	No
VNC15	SISMOX	0.3		No
VNC15	SISMOY	-1		No
VNC16	DEAD	0.8	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
VNC16	SISMOX	-0.3		No
VNC16	SISMOY	-1		No
VNV1	DEAD	1.2	Linear Add	No
VNV1	LIVE	1		No
VNV1	SISMOX	0.667		No
VNV1	SISMOY	0.2		No
VNV2	DEAD	1.2	Linear Add	No
VNV2	LIVE	1		No
VNV2	SISMOX	0.667		No
VNV2	SISMOY	-0.2		No
VNV3	DEAD	1.2	Linear Add	No
VNV3	LIVE	1		No
VNV3	SISMOX	-0.667		No
VNV3	SISMOY	0.2		No
VNV4	DEAD	1.2	Linear Add	No
VNV4	LIVE	1		No
VNV4	SISMOX	-0.667		No
VNV4	SISMOY	-0.2		No
VNV5	DEAD	1.2	Linear Add	No
VNV5	LIVE	1		No
VNV5	SISMOX	0.2		No
VNV5	SISMOY	0.667		No
VNV6	DEAD	1.2	Linear Add	No
VNV6	LIVE	1		No
VNV6	SISMOX	-0.2		No
VNV6	SISMOY	0.667		No
VNV7	DEAD	1.2	Linear Add	No
VNV7	LIVE	1		No
VNV7	SISMOX	0.2		No
VNV7	SISMOY	-0.667		No
VNV8	DEAD	1.2	Linear Add	No
VNV8	LIVE	1		No
VNV8	SISMOX	-0.2		No
VNV8	SISMOY	-0.667		No
VNV9	DEAD	0.9	Linear Add	No
VNV9	SISMOX	0.667		No
VNV9	SISMOY	0.2		No
VNV10	DEAD	0.9	Linear Add	No
VNV10	SISMOX	0.667		No
VNV10	SISMOY	-0.2		No
VNV11	DEAD	0.9	Linear Add	No
VNV11	SISMOX	-0.667		No
VNV11	SISMOY	0.2		No
VNV12	DEAD	0.9	Linear Add	No
VNV12	SISMOX	-0.667		No
VNV12	SISMOY	-0.2		No
VNV13	DEAD	0.9	Linear Add	No
VNV13	SISMOX	0.2		No
VNV13	SISMOY	0.667		No
VNV14	DEAD	0.9	Linear Add	No
VNV14	SISMOX	0.2		No
VNV14	SISMOY	-0.667		No
VNV15	DEAD	0.9	Linear Add	No

Name	Load Case/Combo	Scale Factor	Type	Auto
VNV15	SISMOX	-0.2		No
VNV15	SISMOY	0.667		No
VNV16	DEAD	0.9	Linear Add	No
VNV16	SISMOX	-0.2		No
VNV16	SISMOY	-0.667		No

5 Analysis Results

Modal Periods and Frequencies

Case	Mode	Period sec	Frequenc y cyc/sec	Circular Frequenc y rad/sec	Eigenvalu e rad ² /sec ²
Modal	1	0.277	3.612	22.6971	515.158
Modal	2	0.196	5.099	32.0352	1026.2528
Modal	3	0.196	5.114	32.1331	1032.5365
Modal	4	0.146	6.87	43.168	1863.4749
Modal	5	0.084	11.902	74.783	5592.4921
Modal	6	0.078	12.835	80.643	6503.2947
Modal	7	0.053	18.765	117.9036	13901.2492
Modal	8	0.05	19.887	124.9538	15613.4609
Modal	9	0.048	20.977	131.8012	17371.5523
Modal	10	0.046	21.507	135.1315	18260.5306
Modal	11	0.044	22.715	142.7225	20369.7214
Modal	12	0.036	27.765	174.4518	30433.4393

Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.277	0.5296	0.0331	0	0.5296	0.0331	0
Modal	2	0.196	0.0377	0.1575	0	0.5673	0.1905	0
Modal	3	0.196	0.0002	0.3153	0	0.5675	0.5058	0
Modal	4	0.146	0.0027	1.306E-05	0	0.5702	0.5058	0
Modal	5	0.084	0.0102	0.0006	0	0.5804	0.5064	0
Modal	6	0.078	0.2241	0.0133	0	0.8046	0.5197	0
Modal	7	0.053	0.0252	0.1441	0	0.8298	0.6638	0
Modal	8	0.05	0.0006	0.0009	0	0.8304	0.6647	0
Modal	9	0.048	1.195E-05	0.0003	0	0.8304	0.6651	0
Modal	10	0.046	0.0055	0.0041	0	0.8358	0.6692	0
Modal	11	0.044	0.0118	0.0036	0	0.8476	0.6728	0
Modal	12	0.036	0.0196	0.0258	0	0.8672	0.6986	0

Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0.0175	0.4122	0.0369	0.0175	0.4122	0.0369
Modal	2	0.1529	0.0814	0.1728	0.1703	0.4936	0.2097
Modal	3	0.3817	0.0033	0.0334	0.5521	0.4968	0.243
Modal	4	0.0134	0.0162	0.1448	0.5654	0.5131	0.3878
Modal	5	2.08E-06	0.015	0.0022	0.5654	0.5281	0.39
Modal	6	0.0574	0.2875	0.0886	0.6229	0.8156	0.4786
Modal	7	0.0904	0.0124	0.0095	0.7133	0.8279	0.4881
Modal	8	0.0009	2.295E-05	0.0018	0.7142	0.828	0.4898
Modal	9	4.02E-05	0.0006	0.0115	0.7142	0.8286	0.5013
Modal	10	0.0003	0.0191	0.1114	0.7145	0.8477	0.6127
Modal	11	0.007	0.0052	0.0407	0.7215	0.853	0.6534
Modal	12	0.0142	0.022	0.0001	0.7357	0.875	0.6535

Modal Participation Factors


Case	Mode	Period sec	UX tonf-m	UY tonf-m	UZ tonf-m	RX tonf-m	RY tonf-m	RZ tonf-m	Modal Mass tonf-m-s ²	Modal Stiffness tonf-m
Modal	1	0.277	12.152556	-3.037057	0	6.59051	32.020629	50.949116	1	515.15803
Modal	2	0.196	-3.241271	-6.626317	0	19.499961	-14.229948	110.272757	1	1026.25276
Modal	3	0.196	-0.234765	-9.375697	0	30.815323	-2.84974	-48.44922	1	1032.53649
Modal	4	0.146	0.86135	0.060355	0	5.767473	6.352496	-100.945178	1	1863.4749
Modal	5	0.084	-1.690448	0.419205	0	0.071926	6.108634	-12.356068	1	5592.49215
Modal	6	0.078	7.90525	-1.925717	0	-11.953905	-26.741767	78.974188	1	6503.29474
Modal	7	0.053	-2.651316	-6.338653	0	-14.994202	5.551094	25.832274	1	13901.2492
Modal	8	0.05	0.409335	0.500374	0	1.515629	-0.23893	-11.130516	1	15613.4608 6
Modal	9	0.048	-0.057733	-0.310161	0	0.316229	1.264926	-28.453124	1	17371.5523
Modal	10	0.046	-1.234696	-1.070226	0	0.841682	6.900504	-88.534026	1	18260.5306 1
Modal	11	0.044	1.812992	1.0088	0	4.16013	-3.604293	-53.533274	1	20369.7213 5
Modal	12	0.036	-2.336231	-2.682034	0	-5.946291	7.404856	-2.870124	1	30433.4392 5

Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	99.75	96.72
Modal	Acceleration	UY	98.76	91.86
Modal	Acceleration	UZ	0	0

Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.277	0.857	0.047	0	0.096
Modal	2	0.196	0.071	0.187	0	0.742
Modal	3	0.196	0.007	0.608	0	0.385
Modal	4	0.146	0.331	0.142	0	0.527
Modal	5	0.084	0.024	0	0	0.976
Modal	6	0.078	0.616	0.091	0	0.293
Modal	7	0.053	0.186	0.714	0	0.1
Modal	8	0.05	0.016	0.013	0	0.971
Modal	9	0.048	0.002	0.006	0	0.992
Modal	10	0.046	0.535	0.263	0	0.202
Modal	11	0.044	0.332	0.15	0	0.518
Modal	12	0.036	0.355	0.168	0	0.477

	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 1 DE 1
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 4. CHEQUEO DE DERIVAS


Story Drifts

Story	Load Case/Combo	Label	Item	Drift	X m	Y m	Z m
N+8.30	D1 Max	75	Max Drift X	0.001585	23.75	24.08	8.3
N+8.30	D1 Max	71	Max Drift Y	0.000772	3.6	32.43	8.3
N+8.30	D1 Min	75	Max Drift X	0.001817	23.75	24.08	8.3
N+8.30	D1 Min	71	Max Drift Y	0.000686	3.6	32.43	8.3
N+8.30	D2 Max	75	Max Drift X	0.001585	23.75	24.08	8.3
N+8.30	D2 Max	71	Max Drift Y	0.000772	3.6	32.43	8.3
N+8.30	D2 Min	75	Max Drift X	0.001817	23.75	24.08	8.3
N+8.30	D2 Min	71	Max Drift Y	0.000686	3.6	32.43	8.3
N+8.30	D3 Max	75	Max Drift X	0.001585	23.75	24.08	8.3
N+8.30	D3 Max	71	Max Drift Y	0.000772	3.6	32.43	8.3
N+8.30	D3 Min	75	Max Drift X	0.001817	23.75	24.08	8.3
N+8.30	D3 Min	71	Max Drift Y	0.000686	3.6	32.43	8.3
N+8.30	D4 Max	75	Max Drift X	0.001585	23.75	24.08	8.3
N+8.30	D4 Max	71	Max Drift Y	0.000772	3.6	32.43	8.3
N+8.30	D4 Min	75	Max Drift X	0.001817	23.75	24.08	8.3
N+8.30	D4 Min	71	Max Drift Y	0.000686	3.6	32.43	8.3
N+8.30	D5 Max	75	Max Drift X	0.000841	23.75	24.08	8.3
N+8.30	D5 Max	51	Max Drift Y	0.001059	23.75	32.43	8.3
N+8.30	D5 Min	75	Max Drift X	0.001074	23.75	24.08	8.3
N+8.30	D5 Min	71	Max Drift Y	0.000954	3.6	32.43	8.3
N+8.30	D6 Max	75	Max Drift X	0.000841	23.75	24.08	8.3
N+8.30	D6 Max	51	Max Drift Y	0.001059	23.75	32.43	8.3
N+8.30	D6 Min	75	Max Drift X	0.001074	23.75	24.08	8.3
N+8.30	D6 Min	71	Max Drift Y	0.000954	3.6	32.43	8.3
N+8.30	D7 Max	75	Max Drift X	0.000841	23.75	24.08	8.3
N+8.30	D7 Max	51	Max Drift Y	0.001059	23.75	32.43	8.3
N+8.30	D7 Min	75	Max Drift X	0.001074	23.75	24.08	8.3
N+8.30	D7 Min	71	Max Drift Y	0.000954	3.6	32.43	8.3
N+8.30	D8 Max	75	Max Drift X	0.000841	23.75	24.08	8.3
N+8.30	D8 Max	51	Max Drift Y	0.001059	23.75	32.43	8.3
N+8.30	D8 Min	75	Max Drift X	0.001074	23.75	24.08	8.3
N+8.30	D8 Min	71	Max Drift Y	0.000954	3.6	32.43	8.3
N+8.30	DU1 Max	75	Max Drift X	0.000811	23.75	24.08	8.3
N+8.30	DU1 Max	71	Max Drift Y	0.000445	3.6	32.43	8.3
N+8.30	DU1 Min	75	Max Drift X	0.001043	23.75	24.08	8.3
N+8.30	DU1 Min	71	Max Drift Y	0.000359	3.6	32.43	8.3
N+8.30	DU2 Max	75	Max Drift X	0.000811	23.75	24.08	8.3
N+8.30	DU2 Max	71	Max Drift Y	0.000445	3.6	32.43	8.3
N+8.30	DU2 Min	75	Max Drift X	0.001043	23.75	24.08	8.3
N+8.30	DU2 Min	71	Max Drift Y	0.000359	3.6	32.43	8.3
N+8.30	DU3 Max	75	Max Drift X	0.000811	23.75	24.08	8.3
N+8.30	DU3 Max	71	Max Drift Y	0.000445	3.6	32.43	8.3
N+8.30	DU3 Min	75	Max Drift X	0.001043	23.75	24.08	8.3
N+8.30	DU3 Min	71	Max Drift Y	0.000359	3.6	32.43	8.3
N+8.30	DU4 Max	75	Max Drift X	0.000811	23.75	24.08	8.3
N+8.30	DU4 Max	71	Max Drift Y	0.000445	3.6	32.43	8.3
N+8.30	DU4 Min	75	Max Drift X	0.001043	23.75	24.08	8.3
N+8.30	DU4 Min	71	Max Drift Y	0.000359	3.6	32.43	8.3
N+8.30	DU5 Max	75	Max Drift X	0.000413	23.75	24.08	8.3
N+8.30	DU5 Max	51	Max Drift Y	0.00061	23.75	32.43	8.3
N+8.30	DU5 Min	75	Max Drift X	0.000646	23.75	24.08	8.3
N+8.30	DU5 Min	71	Max Drift Y	0.000499	3.6	32.43	8.3
N+8.30	DU6 Max	75	Max Drift X	0.000413	23.75	24.08	8.3


Story	Load Case/Combo	Label	Item	Drift	X m	Y m	Z m
N+8.30	DU6 Max	51	Max Drift Y	0.00061	23.75	32.43	8.3
N+8.30	DU6 Min	75	Max Drift X	0.000646	23.75	24.08	8.3
N+8.30	DU6 Min	71	Max Drift Y	0.000499	3.6	32.43	8.3
N+8.30	DU7 Max	75	Max Drift X	0.000413	23.75	24.08	8.3
N+8.30	DU7 Max	51	Max Drift Y	0.00061	23.75	32.43	8.3
N+8.30	DU7 Min	75	Max Drift X	0.000646	23.75	24.08	8.3
N+8.30	DU7 Min	71	Max Drift Y	0.000499	3.6	32.43	8.3
N+8.30	DU8 Max	75	Max Drift X	0.000413	23.75	24.08	8.3
N+8.30	DU8 Max	51	Max Drift Y	0.00061	23.75	32.43	8.3
N+8.30	DU8 Min	75	Max Drift X	0.000646	23.75	24.08	8.3
N+8.30	DU8 Min	71	Max Drift Y	0.000499	3.6	32.43	8.3
N+4.68	D1 Max	12	Max Drift X	0.002978	1.95	0	4.68
N+4.68	D1 Max	11	Max Drift Y	0.000827	0.3	24.08	4.68
N+4.68	D1 Min	12	Max Drift X	0.002698	1.95	0	4.68
N+4.68	D1 Min	132	Max Drift Y	0.000792	0.3	1	4.68
N+4.68	D2 Max	12	Max Drift X	0.002978	1.95	0	4.68
N+4.68	D2 Max	11	Max Drift Y	0.000827	0.3	24.08	4.68
N+4.68	D2 Min	12	Max Drift X	0.002698	1.95	0	4.68
N+4.68	D2 Min	132	Max Drift Y	0.000792	0.3	1	4.68
N+4.68	D3 Max	12	Max Drift X	0.002978	1.95	0	4.68
N+4.68	D3 Max	11	Max Drift Y	0.000827	0.3	24.08	4.68
N+4.68	D3 Min	12	Max Drift X	0.002698	1.95	0	4.68
N+4.68	D3 Min	132	Max Drift Y	0.000792	0.3	1	4.68
N+4.68	D4 Max	12	Max Drift X	0.002978	1.95	0	4.68
N+4.68	D4 Max	11	Max Drift Y	0.000827	0.3	24.08	4.68
N+4.68	D4 Min	12	Max Drift X	0.002698	1.95	0	4.68
N+4.68	D4 Min	132	Max Drift Y	0.000792	0.3	1	4.68
N+4.68	D5 Max	12	Max Drift X	0.001681	1.95	0	4.68
N+4.68	D5 Max	11	Max Drift Y	0.000963	0.3	24.08	4.68
N+4.68	D5 Min	12	Max Drift X	0.001401	1.95	0	4.68
N+4.68	D5 Min	11	Max Drift Y	0.000919	0.3	24.08	4.68
N+4.68	D6 Max	12	Max Drift X	0.001681	1.95	0	4.68
N+4.68	D6 Max	11	Max Drift Y	0.000963	0.3	24.08	4.68
N+4.68	D6 Min	12	Max Drift X	0.001401	1.95	0	4.68
N+4.68	D6 Min	11	Max Drift Y	0.000919	0.3	24.08	4.68
N+4.68	D7 Max	12	Max Drift X	0.001681	1.95	0	4.68
N+4.68	D7 Max	11	Max Drift Y	0.000963	0.3	24.08	4.68
N+4.68	D7 Min	12	Max Drift X	0.001401	1.95	0	4.68
N+4.68	D7 Min	11	Max Drift Y	0.000919	0.3	24.08	4.68
N+4.68	D8 Max	12	Max Drift X	0.001681	1.95	0	4.68
N+4.68	D8 Max	11	Max Drift Y	0.000963	0.3	24.08	4.68
N+4.68	D8 Min	12	Max Drift X	0.001401	1.95	0	4.68
N+4.68	D8 Min	11	Max Drift Y	0.000919	0.3	24.08	4.68
N+4.68	DU1 Max	12	Max Drift X	0.00172	1.95	0	4.68
N+4.68	DU1 Max	11	Max Drift Y	0.000465	0.3	24.08	4.68
N+4.68	DU1 Min	12	Max Drift X	0.001439	1.95	0	4.68
N+4.68	DU1 Min	132	Max Drift Y	0.000431	0.3	1	4.68
N+4.68	DU2 Max	12	Max Drift X	0.00172	1.95	0	4.68
N+4.68	DU2 Max	11	Max Drift Y	0.000465	0.3	24.08	4.68
N+4.68	DU2 Min	12	Max Drift X	0.001439	1.95	0	4.68
N+4.68	DU2 Min	132	Max Drift Y	0.000431	0.3	1	4.68
N+4.68	DU3 Max	12	Max Drift X	0.00172	1.95	0	4.68
N+4.68	DU3 Max	11	Max Drift Y	0.000465	0.3	24.08	4.68
N+4.68	DU3 Min	12	Max Drift X	0.001439	1.95	0	4.68

Story	Load Case/Combo	Label	Item	Drift	X m	Y m	Z m
N+4.68	DU3 Min	132	Max Drift Y	0.000431	0.3	1	4.68
N+4.68	DU4 Max	12	Max Drift X	0.00172	1.95	0	4.68
N+4.68	DU4 Max	11	Max Drift Y	0.000465	0.3	24.08	4.68
N+4.68	DU4 Min	12	Max Drift X	0.001439	1.95	0	4.68
N+4.68	DU4 Min	132	Max Drift Y	0.000431	0.3	1	4.68
N+4.68	DU5 Max	12	Max Drift X	0.001009	1.95	0	4.68
N+4.68	DU5 Max	11	Max Drift Y	0.000532	0.3	24.08	4.68
N+4.68	DU5 Min	12	Max Drift X	0.000729	1.95	0	4.68
N+4.68	DU5 Min	11	Max Drift Y	0.000488	0.3	24.08	4.68
N+4.68	DU6 Max	12	Max Drift X	0.001009	1.95	0	4.68
N+4.68	DU6 Max	11	Max Drift Y	0.000532	0.3	24.08	4.68
N+4.68	DU6 Min	12	Max Drift X	0.000729	1.95	0	4.68
N+4.68	DU6 Min	11	Max Drift Y	0.000488	0.3	24.08	4.68
N+4.68	DU7 Max	12	Max Drift X	0.001009	1.95	0	4.68
N+4.68	DU7 Max	11	Max Drift Y	0.000532	0.3	24.08	4.68
N+4.68	DU7 Min	12	Max Drift X	0.000729	1.95	0	4.68
N+4.68	DU7 Min	11	Max Drift Y	0.000488	0.3	24.08	4.68
N+4.68	DU8 Max	12	Max Drift X	0.001009	1.95	0	4.68
N+4.68	DU8 Max	11	Max Drift Y	0.000532	0.3	24.08	4.68
N+4.68	DU8 Min	12	Max Drift X	0.000729	1.95	0	4.68
N+4.68	DU8 Min	11	Max Drift Y	0.000488	0.3	24.08	4.68
N-0.10	D1 Max	12	Max Drift X	0.000978	1.95	0	-0.1
N-0.10	D1 Max	132	Max Drift Y	0.000461	0.3	1	-0.1
N-0.10	D1 Min	12	Max Drift X	0.001125	1.95	0	-0.1
N-0.10	D1 Min	132	Max Drift Y	0.000407	0.3	1	-0.1
N-0.10	D2 Max	12	Max Drift X	0.000978	1.95	0	-0.1
N-0.10	D2 Max	132	Max Drift Y	0.000461	0.3	1	-0.1
N-0.10	D2 Min	12	Max Drift X	0.001125	1.95	0	-0.1
N-0.10	D2 Min	132	Max Drift Y	0.000407	0.3	1	-0.1
N-0.10	D3 Max	12	Max Drift X	0.000978	1.95	0	-0.1
N-0.10	D3 Max	132	Max Drift Y	0.000461	0.3	1	-0.1
N-0.10	D3 Min	12	Max Drift X	0.001125	1.95	0	-0.1
N-0.10	D3 Min	132	Max Drift Y	0.000407	0.3	1	-0.1
N-0.10	D4 Max	12	Max Drift X	0.000978	1.95	0	-0.1
N-0.10	D4 Max	132	Max Drift Y	0.000461	0.3	1	-0.1
N-0.10	D4 Min	12	Max Drift X	0.001125	1.95	0	-0.1
N-0.10	D4 Min	132	Max Drift Y	0.000407	0.3	1	-0.1
N-0.10	D5 Max	12	Max Drift X	0.00054	1.95	0	-0.1
N-0.10	D5 Max	132	Max Drift Y	0.000365	0.3	1	-0.1
N-0.10	D5 Min	12	Max Drift X	0.000687	1.95	0	-0.1
N-0.10	D5 Min	132	Max Drift Y	0.000311	0.3	1	-0.1
N-0.10	D6 Max	12	Max Drift X	0.00054	1.95	0	-0.1
N-0.10	D6 Max	132	Max Drift Y	0.000365	0.3	1	-0.1
N-0.10	D6 Min	12	Max Drift X	0.000687	1.95	0	-0.1
N-0.10	D6 Min	132	Max Drift Y	0.000311	0.3	1	-0.1
N-0.10	D7 Max	12	Max Drift X	0.00054	1.95	0	-0.1
N-0.10	D7 Max	132	Max Drift Y	0.000365	0.3	1	-0.1
N-0.10	D7 Min	12	Max Drift X	0.000687	1.95	0	-0.1
N-0.10	D7 Min	132	Max Drift Y	0.000311	0.3	1	-0.1
N-0.10	D8 Max	12	Max Drift X	0.00054	1.95	0	-0.1
N-0.10	D8 Max	132	Max Drift Y	0.000365	0.3	1	-0.1
N-0.10	D8 Min	12	Max Drift X	0.000687	1.95	0	-0.1
N-0.10	D8 Min	132	Max Drift Y	0.000311	0.3	1	-0.1
N-0.10	DU1 Max	12	Max Drift X	0.0005	1.95	0	-0.1

Story	Load Case/Combo	Label	Item	Drift	X m	Y m	Z m
N-0.10	DU1 Max	132	Max Drift Y	0.000264	0.3	1	-0.1
N-0.10	DU1 Min	12	Max Drift X	0.000646	1.95	0	-0.1
N-0.10	DU1 Min	132	Max Drift Y	0.000211	0.3	1	-0.1
N-0.10	DU2 Max	12	Max Drift X	0.0005	1.95	0	-0.1
N-0.10	DU2 Max	132	Max Drift Y	0.000264	0.3	1	-0.1
N-0.10	DU2 Min	12	Max Drift X	0.000646	1.95	0	-0.1
N-0.10	DU2 Min	132	Max Drift Y	0.000211	0.3	1	-0.1
N-0.10	DU3 Max	12	Max Drift X	0.0005	1.95	0	-0.1
N-0.10	DU3 Max	132	Max Drift Y	0.000264	0.3	1	-0.1
N-0.10	DU3 Min	12	Max Drift X	0.000646	1.95	0	-0.1
N-0.10	DU3 Min	132	Max Drift Y	0.000211	0.3	1	-0.1
N-0.10	DU4 Max	12	Max Drift X	0.0005	1.95	0	-0.1
N-0.10	DU4 Max	132	Max Drift Y	0.000264	0.3	1	-0.1
N-0.10	DU4 Min	12	Max Drift X	0.000646	1.95	0	-0.1
N-0.10	DU4 Min	132	Max Drift Y	0.000211	0.3	1	-0.1
N-0.10	DU5 Max	12	Max Drift X	0.000257	1.95	0	-0.1
N-0.10	DU5 Max	131	Max Drift Y	0.000209	0.3	11.45	-0.1
N-0.10	DU5 Min	12	Max Drift X	0.000403	1.95	0	-0.1
N-0.10	DU5 Min	131	Max Drift Y	0.000155	0.3	11.45	-0.1
N-0.10	DU6 Max	12	Max Drift X	0.000257	1.95	0	-0.1
N-0.10	DU6 Max	131	Max Drift Y	0.000209	0.3	11.45	-0.1
N-0.10	DU6 Min	12	Max Drift X	0.000403	1.95	0	-0.1
N-0.10	DU6 Min	131	Max Drift Y	0.000155	0.3	11.45	-0.1
N-0.10	DU7 Max	12	Max Drift X	0.000257	1.95	0	-0.1
N-0.10	DU7 Max	131	Max Drift Y	0.000209	0.3	11.45	-0.1
N-0.10	DU7 Min	12	Max Drift X	0.000403	1.95	0	-0.1
N-0.10	DU7 Min	131	Max Drift Y	0.000155	0.3	11.45	-0.1
N-0.10	DU8 Max	12	Max Drift X	0.000257	1.95	0	-0.1
N-0.10	DU8 Max	131	Max Drift Y	0.000209	0.3	11.45	-0.1
N-0.10	DU8 Min	12	Max Drift X	0.000403	1.95	0	-0.1
N-0.10	DU8 Min	131	Max Drift Y	0.000155	0.3	11.45	-0.1

	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 1 DE 2
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 5. DISEÑO DE ELEMENTOS ESTRUCTURALES


	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 2 DE 2
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 5.1. DISEÑO DE PANTALLAS

Shear Wall Pier Summary - ACI 318-08

Story	Pier Label	Station	Design Type	Edge Member Left cm	Edge Member Right cm	As Left cm ²	As Right cm ²	Shear Rebar cm ² /cm	Boundary Zone Left cm	Boundary Zone Right cm	Warnings	Errors
N+8.30	P-1	Top	Simplified	60	60	25.12	0	0.15			No Message	No Message
N+8.30	P-1	Bottom	Simplified	60	60	0.81	0	0.15			No Message	No Message
N+4.68	P-1	Top	Simplified	60	60	19.93	10.64	0.15		46	No Message	No Message
N+4.68	P-1	Bottom	Simplified	60	60	17.21	22.81	0.15	46	46	No Message	No Message
N-0.10	P-1	Top	Simplified	60	60	7.95	25.87	0.15	46	46	No Message	No Message
N-0.10	P-1	Bottom	Simplified	60	60	32.42	13.26	0.15	46	46	No Message	No Message
N+8.30	P-1A	Top	Simplified	60	60	37.63	0	0.1802		46	No Message	No Message
N+8.30	P-1A	Bottom	Simplified	60	60	0	43.23	0.15	46		No Message	No Message
N+4.68	P-1A	Top	Simplified	60	60	55.66	0	0.15		46	No Message	No Message
N+4.68	P-1A	Bottom	Simplified	60	60	3.39	57.91	0.15	46		No Message	No Message
N-0.10	P-1A	Top	Simplified	60	60	16.5	23.05	0.15	46	46	No Message	No Message
N-0.10	P-1A	Bottom	Simplified	60	60	27.78	34.27	0.15	46	46	No Message	No Message
N+8.30	P-2A	Top	Simplified	60	60	0	66.88	0.1914	46		No Message	No Message
N+8.30	P-2A	Bottom	Simplified	60	60	61.1	0	0.1914		46	No Message	No Message
N+4.68	P-2A	Top	Simplified	60	60	0	59.51	0.15	46		No Message	No Message
N+4.68	P-2A	Bottom	Simplified	60	60	62.21	7.31	0.15		46	No Message	No Message
N-0.10	P-2A	Top	Simplified	60	60	19.77	20.07	0.15	46	46	No Message	No Message
N-0.10	P-2A	Bottom	Simplified	60	60	24.75	35.85	0.15	46	46	No Message	No Message
N+8.30	P-2	Top	Simplified	60	60	5.13	4.97	0.15			No Message	No Message
N+8.30	P-2	Bottom	Simplified	60	60	6.5	4.07	0.15			No Message	No Message
N+4.68	P-2	Top	Simplified	60	60	25.12	26.41	0.15	46	46	No Message	No Message
N+4.68	P-2	Bottom	Simplified	60	60	39.68	32.25	0.15	46	46	No Message	No Message
N-0.10	P-2	Top	Simplified	60	60	13.67	15.75	0.15			No Message	No Message
N-0.10	P-2	Bottom	Simplified	60	60	11.49	10.33	0.15			No Message	No Message
N+8.30	P-3	Top	Simplified	60	60	61.52	0	0.155		46	No Message	No Message
N+8.30	P-3	Bottom	Simplified	60	60	0	45.16	0.15	46		No Message	No Message
N+4.68	P-3	Top	Simplified	60	60	46.47	17.57	0.1628		46	No Message	No Message
N+4.68	P-3	Bottom	Simplified	60	60	0	38.75	0.1628	46		No Message	No Message
N-0.10	P-3	Top	Simplified	60	60	0	7.98	0.15	46		No Message	No Message
N-0.10	P-3	Bottom	Simplified	60	60	0	0	0.15		46	No Message	No Message
N+8.30	P-4	Top	Simplified	60	60	0	53.77	0.1961	46		No Message	No Message
N+8.30	P-4	Bottom	Simplified	60	60	40.7	0	0.15		46	No Message	No Message
N+4.68	P-4	Top	Simplified	60	60	38.66	73.39	0.2437	46		No Message	No Message
N+4.68	P-4	Bottom	Simplified	60	60	69.52	0	0.2437		46	No Message	No Message
N-0.10	P-4	Top	Simplified	60	60	7.03	5.57	0.15		46	No Message	No Message
N-0.10	P-4	Bottom	Simplified	60	60	8.63	18.46	0.15	46	46	No Message	No Message
N+8.30	P-5	Top	Simplified	60	60	19.59	0.63	0.15			No Message	No Message
N+8.30	P-5	Bottom	Simplified	60	60	0	50.87	0.15	46		No Message	No Message
N+4.68	P-5	Top	Simplified	60	60	79.2	0	0.196		46	No Message	No Message
N+4.68	P-5	Bottom	Simplified	60	60	0	77.72	0.1954	46		No Message	No Message
N-0.10	P-5	Top	Simplified	60	60	3.12	29.04	0.15	46		No Message	No Message
N-0.10	P-5	Bottom	Simplified	60	60	5.92	0	0.15		46	No Message	No Message
N+8.30	P-5A	Top	Simplified	60	60	4.63	0	0.15			No Message	No Message
N+8.30	P-5A	Bottom	Simplified	60	60	6.12	0	0.15			No Message	No Message
N+4.68	P-5A	Top	Simplified	60	60	17.19	18.26	0.15	46	46	No Message	No Message
N+4.68	P-5A	Bottom	Simplified	60	60	18.99	24.21	0.15	46	46	No Message	No Message
N-0.10	P-5A	Top	Simplified	60	60	14.85	5	0.15	46	46	No Message	No Message
N-0.10	P-5A	Bottom	Simplified	60	60	7.32	8.75	0.15	46	46	No Message	No Message
N+8.30	P-6	Top	Simplified	60	60	0	18.27	0.15			No Message	No Message
N+8.30	P-6	Bottom	Simplified	60	60	40.13	0	0.15		46	No Message	No Message
N+4.68	P-6	Top	Simplified	60	60	0	79.94	0.2012	46		No Message	No Message

Story	Pier Label	Station	Design Type	Edge Member Left cm	Edge Member Right cm	As Left cm ²	As Right cm ²	Shear Rebar cm ² /cm	Boundary Zone Left cm	Boundary Zone Right cm	Warnings	Errors
N+4.68	P-6	Bottom	Simplified	60	60	74.73	0	0.2012		46	No Message	No Message
N-0.10	P-6	Top	Simplified	60	60	17.14	19.26	0.15	46	46	No Message	No Message
N-0.10	P-6	Bottom	Simplified	60	60	5.37	10.36	0.15			No Message	No Message
N+8.30	P-6A	Top	Simplified	60	60	3.7	0.17	0.15			No Message	No Message
N+8.30	P-6A	Bottom	Simplified	60	60	5.96	0	0.15			No Message	No Message
N+4.68	P-6A	Top	Simplified	60	60	22.4	30.05	0.15	46		No Message	No Message
N+4.68	P-6A	Bottom	Simplified	60	60	40.17	32.61	0.15	46	46	No Message	No Message
N-0.10	P-6A	Top	Simplified	60	60	17.55	0.11	0.15		46	No Message	No Message
N-0.10	P-6A	Bottom	Simplified	60	60	0	8.41	0.15			No Message	No Message
N+8.30	P-7	Top	Simplified	20	20	3.31	0	0.05			No Message	No Message
N+8.30	P-7	Bottom	Simplified	20	20	0.003889	2.86	0.05			No Message	No Message
N+4.68	P-7	Top	Simplified	20	20	3.77	2.58	0.05			No Message	No Message
N+4.68	P-7	Bottom	Simplified	20	20	5.08	8.9	0.05	10	10	No Message	No Message
N-0.10	P-7	Top	Simplified	20	20	5.73	5.54	0.05	10	10	No Message	No Message
N-0.10	P-7	Bottom	Simplified	20	20	6.93	6.21	0.05	10	10	No Message	No Message
N+8.30	P-8	Top	Simplified	20	20	1.03	0.37	0.05			No Message	No Message
N+8.30	P-8	Bottom	Simplified	20	20	0.25	1.1	0.05			No Message	No Message
N+4.68	P-8	Top	Simplified	20	20	2.05	2.2	0.05			No Message	No Message
N+4.68	P-8	Bottom	Simplified	20	20	3.79	3.73	0.05		10	No Message	No Message
N-0.10	P-8	Top	Simplified	20	20	9.23	6.51	0.05	10		No Message	No Message
N-0.10	P-8	Bottom	Simplified	20	30	10.51	6.43	0.05	10	15	No Message	No Message
N+8.30	P-9	Top	Simplified	20	20	1.43	2.09	0.05			No Message	No Message
N+8.30	P-9	Bottom	Simplified	20	20	2.43	1.12	0.05			No Message	No Message
N+4.68	P-9	Top	Simplified	20	20	3.09	1.04	0.05			No Message	No Message
N+4.68	P-9	Bottom	Simplified	20	20	0.77	3.03	0.05	10		No Message	No Message
N-0.10	P-9	Top	Simplified	20	20	3.42	4.19	0.05	10	10	No Message	No Message
N-0.10	P-9	Bottom	Simplified	20	20	5.94	4.39	0.05	10	10	No Message	No Message
N+8.30	P-10	Top	Simplified	20	20	4.67	0.17	0.05		10	No Message	No Message
N+8.30	P-10	Bottom	Simplified	20	20	0	0.64	0.05	10		No Message	No Message
N+4.68	P-10	Top	Simplified	20	20	3	0	0.05		10	No Message	No Message
N+4.68	P-10	Bottom	Simplified	20	20	0	5.41	0.05	10		No Message	No Message
N-0.10	P-10	Top	Simplified	20	20	4.59	2.98	0.05	10	10	No Message	No Message
N-0.10	P-10	Bottom	Simplified	20	20	4.58	5.14	0.05	10	10	No Message	No Message
N+8.30	P-11	Top	Simplified	20	20	0.18	0	0.05			No Message	No Message
N+8.30	P-11	Bottom	Simplified	20	20	0	0	0.05			No Message	No Message
N+4.68	P-11	Top	Simplified	20	20	1.04	1.27	0.05			No Message	No Message
N+4.68	P-11	Bottom	Simplified	30	20	1.23	3.01	0.05	15	10	No Message	No Message
N-0.10	P-11	Top	Simplified	20	20	6.15	8.83	0.05	10	10	No Message	No Message
N-0.10	P-11	Bottom	Simplified	20	30	6.15	8.83	0.05	10	15	No Message	No Message
N+8.30	P-12	Top	Simplified	20	20	0	3.55	0.05	10		No Message	No Message
N+8.30	P-12	Bottom	Simplified	20	20	3.04	0	0.05		10	No Message	No Message
N+4.68	P-12	Top	Simplified	20	20	1.89	5.43	0.05	10		No Message	No Message
N+4.68	P-12	Bottom	Simplified	20	20	3.05	1.6	0.05	10	10	No Message	No Message
N-0.10	P-12	Top	Simplified	20	20	2.36	2.55	0.05	10	10	No Message	No Message
N-0.10	P-12	Bottom	Simplified	20	20	3.89	2.89	0.05	10	10	No Message	No Message

	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 1 DE 1
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 5.2. DISEÑO DE COLUMNAS

Concrete Column Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Station cm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm ²	As cm ²
N+8.30	C36	263	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C36	263	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C36	263	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C37	264	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C37	264	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C37	264	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C38	265	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C38	265	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C38	265	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C39	266	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C39	266	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C39	266	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C40	267	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C40	267	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C40	267	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C41	268	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C41	268	71.17	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C41	268	71.17	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C41	268	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C41	268	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C43	270	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C43	270	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C43	270	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C44	271	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C44	271	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C44	271	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C45	272	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C45	272	71.17	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C45	272	71.17	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C45	272	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C45	272	140.34	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C45	272	140.34	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C45	272	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C47	274	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C47	274	108.5	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C47	274	217	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C4	98	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C4	98	38.33	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C4	98	76.66	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C5	95	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C5	95	45.17	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C5	95	90.34	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C13	99	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C13	99	10.585	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C13	99	21.17	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C32	100	0	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C32	100	72.915	C45X35	Design	No Message		C18	13.5	13.5
N+8.30	C32	100	145.83	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C9-1	392	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C9-1	392	41.083	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C9-1	392	82.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C9-6	390	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C9-6	390	34.583	C45X35	Design	No Message		C18	13.5	13.5

Story	Label	Unique Name	Station cm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm ²	As cm ²
N+4.68	C9-6	390	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-1	394	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-1	394	41.083	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-1	394	82.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-6	391	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-6	391	34.583	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-6	391	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-1	404	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-1	404	41.083	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-1	404	82.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-6	407	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-6	407	34.583	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-6	407	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-1	414	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-1	414	41.083	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-1	414	82.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-6	409	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-6	409	34.583	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-6	409	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-7	398	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-7	398	75.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-7	398	132.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-7	398	132.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-7	398	151.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C1-7	396	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C1-7	396	75.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C1-7	396	151.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C14-9	386	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C14-9	386	144.833	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C14-9	386	289.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C20-9	388	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C20-9	388	144.833	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C20-9	388	289.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C14-11	387	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C14-11	387	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C14-11	387	138.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C20-11	389	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C20-11	389	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C20-11	389	138.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C9-11	393	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C9-11	393	113.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C9-11	393	226.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-11	395	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-11	395	113.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-11	395	207.5	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-11	395	207.5	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C12-11	395	226.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C1-11	397	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C1-11	397	113.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C1-11	397	226.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-11	399	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-11	399	113.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-11	399	207.5	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C7-11	399	207.5	C45X35	Design	No Message		C18	13.5	13.5

Story	Label	Unique Name	Station cm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm ²	As cm ²
N+4.68	C7-11	399	226.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-7	402	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-7	402	75.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-7	402	132.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-7	402	132.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-7	402	151.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C6-7	400	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C6-7	400	75.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C6-7	400	151.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C15-9	410	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C15-9	410	144.833	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C15-9	410	270.5	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C15-9	410	270.5	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C15-9	410	289.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C16-9	412	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C16-9	412	144.833	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C16-9	412	289.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C6-11	401	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C6-11	401	113.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C6-11	401	226.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-11	403	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-11	403	113.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-11	403	207.5	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-11	403	207.5	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C8-11	403	226.667	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-11	405	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-11	405	44.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-11	405	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-11	405	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-11	405	88.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-12	406	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-12	406	44.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C10-12	406	88.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-11	408	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-11	408	44.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-11	408	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-11	408	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-11	408	88.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C15-11	411	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C15-11	411	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C15-11	411	138.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C16-11	413	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C16-11	413	69.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C16-11	413	138.333	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-12	415	0	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-12	415	44.167	C45X35	Design	No Message		C18	13.5	13.5
N+4.68	C11-12	415	88.333	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C17	1	0	C50X80	Design	No Message		C18	40	40
N-0.10	C17	1	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C17	1	251	C50X80	Design	No Message		C18	40	40
N-0.10	C18	2	0	C50X80	Design	No Message		C18	40	40
N-0.10	C18	2	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C18	2	251	C50X80	Design	No Message		C2	40	60.55
N-0.10	C19	3	0	C50X80	Design	No Message		C18	40	40

Story	Label	Unique Name	Station cm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm ²	As cm ²
N-0.10	C19	3	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C19	3	251	C50X80	Design	No Message		C2	40	42.82
N-0.10	C21	4	0	C50X80	Design	No Message		C18	40	40
N-0.10	C21	4	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C21	4	251	C50X80	Design	No Message		C2	40	45.02
N-0.10	C22	5	0	C50X80	Design	No Message		C18	40	40
N-0.10	C22	5	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C22	5	251	C50X80	Design	No Message		C18	40	40
N-0.10	C23	6	0	C50X80	Design	No Message		C18	40	40
N-0.10	C23	6	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C23	6	251	C50X80	Design	No Message		C18	40	40
N-0.10	C24	7	0	C50X80	Design	No Message		C18	40	40
N-0.10	C24	7	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C24	7	251	C50X80	Design	No Message		C18	40	40
N-0.10	C25	8	0	C50X80	Design	No Message		C18	40	40
N-0.10	C25	8	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C25	8	251	C50X80	Design	No Message		C18	40	40
N-0.10	C26	9	0	C50X80	Design	No Message		C18	40	40
N-0.10	C26	9	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C26	9	251	C50X80	Design	No Message		C18	40	40
N-0.10	C27	10	0	C50X80	Design	No Message		C18	40	40
N-0.10	C27	10	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C27	10	251	C50X80	Design	No Message		C18	40	40
N-0.10	C28	11	0	C50X80	Design	No Message		C18	40	40
N-0.10	C28	11	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C28	11	251	C50X80	Design	No Message		C18	40	40
N-0.10	C29	12	0	C50X80	Design	No Message		C18	40	40
N-0.10	C29	12	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C29	12	251	C50X80	Design	No Message		C18	40	40
N-0.10	C30	13	0	C50X80	Design	No Message		C18	40	40
N-0.10	C30	13	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C30	13	251	C50X80	Design	No Message		C18	40	40
N-0.10	C31	14	0	C50X80	Design	No Message		C18	40	40
N-0.10	C31	14	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C31	14	251	C50X80	Design	No Message		C18	40	40
N-0.10	C33	15	0	C50X80	Design	No Message		C18	40	40
N-0.10	C33	15	125.5	C50X80	Design	No Message		C18	40	40
N-0.10	C33	15	251	C50X80	Design	No Message		C18	40	40
N-0.10	C1	251	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C1	251	130.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C1	251	261	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C6	252	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C6	252	130.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C6	252	261	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C7	253	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C7	253	125.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C7	253	251	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C8	254	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C8	254	125.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C8	254	251	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C9	255	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C9	255	130.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C9	255	261	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C10	256	0	C45X35	Design	No Message		C18	13.5	13.5

Story	Label	Unique Name	Station cm	Design Section	Design/Check	Status	PMM Ratio	PMM Combo	As,min cm ²	As cm ²
N-0.10	C10	256	130.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C10	256	261	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C11	257	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C11	257	125.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C11	257	251	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C12	258	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C12	258	125.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C12	258	251	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C14	259	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C14	259	130.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C14	259	261	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C15	260	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C15	260	130.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C15	260	261	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C16	261	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C16	261	125.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C16	261	251	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C20	262	0	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C20	262	125.5	C45X35	Design	No Message		C18	13.5	13.5
N-0.10	C20	262	251	C45X35	Design	No Message		C18	13.5	13.5

Concrete Column Summary - ACI 318-08 (Part 2 of 2)


Story	Label	Unique Name	Station cm	Mid Bar As cm²	Corner Bar As cm²	V Major Combo	At V Major cm²/cm	V Minor Combo	At V Minor cm²/cm	Warnings	Errors
N+8.30	C36	263	0	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C36	263	108.5	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C36	263	217	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C37	264	0	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C37	264	108.5	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C37	264	217	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C38	265	0	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C38	265	108.5	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C38	265	217	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C39	266	0	2.25	2.25	VNC16	0.0377	VNC2	0.0319	No Message	No Message
N+8.30	C39	266	108.5	2.25	2.25	VNC16	0.0377	VNC2	0.0319	No Message	No Message
N+8.30	C39	266	217	2.25	2.25	VNC16	0.0377	VNC2	0.0319	No Message	No Message
N+8.30	C40	267	0	2.25	2.25	VNC16	0.0377	VNC2	0.0273	No Message	No Message
N+8.30	C40	267	108.5	2.25	2.25	VNC16	0.0377	VNC2	0.0273	No Message	No Message
N+8.30	C40	267	217	2.25	2.25	VNC16	0.0377	VNC2	0.0273	No Message	No Message
N+8.30	C41	268	0	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C41	268	71.17	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C41	268	71.17	2.97	2.97	VNC16	0.0377	VNC2	0.0308	No Message	No Message
N+8.30	C41	268	108.5	2.25	2.25	VNC16	0.0377	VNC2	0.0308	No Message	No Message
N+8.30	C41	268	217	2.25	2.25	VNC16	0.0377	VNC2	0.0314	No Message	No Message
N+8.30	C43	270	0	2.25	2.25	VNC16	0.0377	VNC4	0.0307	No Message	No Message
N+8.30	C43	270	108.5	2.25	2.25	VNC16	0.0377	VNC4	0.0307	No Message	No Message
N+8.30	C43	270	217	2.25	2.25	VNC16	0.0377	VNC4	0.0307	No Message	No Message
N+8.30	C44	271	0	2.25	2.25	VNC16	0.0377	VNC2	0.0302	No Message	No Message
N+8.30	C44	271	108.5	2.25	2.25	VNC16	0.0377	VNC2	0.0302	No Message	No Message
N+8.30	C44	271	217	2.25	2.25	VNC16	0.0377	VNC2	0.0302	No Message	No Message
N+8.30	C45	272	0	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C45	272	71.17	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C45	272	71.17	2.25	2.25	VNC8	0.0525	VNC10	0.033	No Message	No Message
N+8.30	C45	272	108.5	2.25	2.25	VNC6	0.0548	VNC10	0.033	No Message	No Message
N+8.30	C45	272	140.34	2.25	2.25	VNC16	0.0377	VNC4	0.0272	No Message	No Message
N+8.30	C45	272	140.34	2.25	2.25	VNC16	0.0377	VNC4	0.0272	No Message	No Message
N+8.30	C45	272	217	2.25	2.25	VNC16	0.0377	VNC4	0.0272	No Message	No Message
N+8.30	C47	274	0	2.25	2.25	VNC16	0.0377	VNC2	0.0383	No Message	No Message
N+8.30	C47	274	108.5	2.25	2.25	VNC16	0.0377	VNC2	0.0383	No Message	No Message
N+8.30	C47	274	217	2.55	2.55	VNC16	0.0377	VNC2	0.0383	No Message	No Message
N+8.30	C4	98	0	2.25	2.25	VNC16	0.0377	VNC10	0.0361	No Message	No Message
N+8.30	C4	98	38.33	2.25	2.25	VNC16	0.0377	VNC10	0.0361	No Message	No Message
N+8.30	C4	98	76.66	2.26	2.26	VNC16	0.0377	VNC10	0.0361	No Message	No Message
N+8.30	C5	95	0	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C5	95	45.17	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C5	95	90.34	2.25	2.25	VNC16	0.0377	VNC16	0.0251	No Message	No Message
N+8.30	C13	99	0	2.25	2.25	VNC16	0.0377	VNC2	0.0604	No Message	No Message
N+8.30	C13	99	10.585	2.25	2.25	VNC16	0.0377	VNC2	0.0604	No Message	No Message
N+8.30	C13	99	21.17	2.25	2.25	VNC16	0.0377	VNC2	0.0604	No Message	No Message
N+8.30	C32	100	0	2.25	2.25	VNC16	0.0377	VNC14	0.0578	No Message	No Message
N+8.30	C32	100	72.915	2.25	2.25	VNC16	0.0377	VNC14	0.0578	No Message	No Message
N+8.30	C32	100	145.83	2.25	2.25	VNC16	0.0377	VNC14	0.0578	No Message	No Message
N+4.68	C9-1	392	0	3.36	3.36	VNC16	0.0377	VNC2	0.0549	No Message	No Message
N+4.68	C9-1	392	41.083	2.85	2.85	VNC16	0.0377	VNC2	0.0549	No Message	No Message
N+4.68	C9-1	392	82.167	2.31	2.31	VNC16	0.0377	VNC2	0.0549	No Message	No Message

Story	Label	Unique Name	Station cm	Mid Bar As cm²	Corner Bar As cm²	V Major Combo	At V Major cm²/cm	V Minor Combo	At V Minor cm²/cm	Warnings	Errors
N+4.68	C9-6	390	0	3.18	3.18	VNC16	0.0377	VNC2	0.0559	No Message	No Message
N+4.68	C9-6	390	34.583	2.67	2.67	VNC16	0.0377	VNC2	0.0559	No Message	No Message
N+4.68	C9-6	390	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.0559	No Message	No Message
N+4.68	C12-1	394	0	2.5	2.5	VNC16	0.0377	VNC2	0.0576	No Message	No Message
N+4.68	C12-1	394	41.083	2.25	2.25	VNC16	0.0377	VNC2	0.0576	No Message	No Message
N+4.68	C12-1	394	82.167	2.25	2.25	VNC16	0.0377	VNC2	0.0576	No Message	No Message
N+4.68	C12-6	391	0	2.25	2.25	VNC16	0.0377	VNC2	0.0778	No Message	No Message
N+4.68	C12-6	391	34.583	2.25	2.25	VNC16	0.0377	VNC2	0.0778	No Message	No Message
N+4.68	C12-6	391	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.0778	No Message	No Message
N+4.68	C10-1	404	0	3.12	3.12	VNC16	0.0377	VNC2	0.0908	No Message	No Message
N+4.68	C10-1	404	41.083	2.25	2.25	VNC16	0.0377	VNC2	0.0908	No Message	No Message
N+4.68	C10-1	404	82.167	2.25	2.25	VNC16	0.0377	VNC2	0.0908	No Message	No Message
N+4.68	C10-6	407	0	2.25	2.25	VNC16	0.0377	VNC2	0.0679	No Message	No Message
N+4.68	C10-6	407	34.583	2.25	2.25	VNC16	0.0377	VNC2	0.0679	No Message	No Message
N+4.68	C10-6	407	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.0679	No Message	No Message
N+4.68	C11-1	414	0	4.29	4.29	VNC16	0.0377	VNC2	0.1061	No Message	No Message
N+4.68	C11-1	414	41.083	3.47	3.47	VNC16	0.0377	VNC2	0.1061	No Message	No Message
N+4.68	C11-1	414	82.167	2.25	2.25	VNC16	0.0377	VNC2	0.1061	No Message	No Message
N+4.68	C11-6	409	0	3.07	3.07	VNC16	0.0377	VNC2	0.145	No Message	No Message
N+4.68	C11-6	409	34.583	2.25	2.25	VNC16	0.0377	VNC2	0.145	No Message	No Message
N+4.68	C11-6	409	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.145	No Message	No Message
N+4.68	C7-7	398	0	2.25	2.25	VNC16	0.0377	VNC2	0.0367	No Message	No Message
N+4.68	C7-7	398	75.667	2.25	2.25	VNC16	0.0377	VNC2	0.0367	No Message	No Message
N+4.68	C7-7	398	132.167	2.25	2.25	VNC16	0.0377	VNC2	0.0367	No Message	No Message
N+4.68	C7-7	398	132.167	2.25	2.25	VNC2	0.0629	VNC2	0.0474	No Message	No Message
N+4.68	C7-7	398	151.333	2.25	2.25	VNC2	0.0629	VNC2	0.0474	No Message	No Message
N+4.68	C1-7	396	0	2.25	2.25	VNC16	0.0377	VNC2	0.0321	No Message	No Message
N+4.68	C1-7	396	75.667	2.25	2.25	VNC16	0.0377	VNC2	0.0321	No Message	No Message
N+4.68	C1-7	396	151.333	2.25	2.25	VNC16	0.0377	VNC2	0.0321	No Message	No Message
N+4.68	C14-9	386	0	5.24	5.24	VNC16	0.0377	VNC2	0.077	No Message	No Message
N+4.68	C14-9	386	144.833	2.25	2.25	VNC16	0.0377	VNC2	0.077	No Message	No Message
N+4.68	C14-9	386	289.667	3.74	3.74	VNC16	0.0377	VNC2	0.077	No Message	No Message
N+4.68	C20-9	388	0	5.64	5.64	VNC16	0.0377	VNC4	0.0891	No Message	No Message
N+4.68	C20-9	388	144.833	2.25	2.25	VNC16	0.0377	VNC4	0.0891	No Message	No Message
N+4.68	C20-9	388	289.667	3.66	3.66	VNC16	0.0377	VNC4	0.0891	No Message	No Message
N+4.68	C14-11	387	0	3.75	3.75	VNC16	0.0377	VNC2	0.0743	No Message	No Message
N+4.68	C14-11	387	69.167	2.31	2.31	VNC16	0.0377	VNC2	0.0743	No Message	No Message
N+4.68	C14-11	387	138.333	2.25	2.25	VNC16	0.0377	VNC2	0.0743	No Message	No Message
N+4.68	C20-11	389	0	3.17	3.17	VNC16	0.0377	VNC2	0.0682	No Message	No Message
N+4.68	C20-11	389	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.0682	No Message	No Message
N+4.68	C20-11	389	138.333	2.25	2.25	VNC16	0.0377	VNC2	0.0682	No Message	No Message
N+4.68	C9-11	393	0	5.51	5.51	VNC16	0.0377	VNC2	0.0978	No Message	No Message
N+4.68	C9-11	393	113.333	2.64	2.64	VNC16	0.0377	VNC2	0.0978	No Message	No Message
N+4.68	C9-11	393	226.667	3.82	3.82	VNC16	0.0377	VNC2	0.0978	No Message	No Message
N+4.68	C12-11	395	0	4.94	4.94	VNC16	0.0377	VNC2	0.1103	No Message	No Message
N+4.68	C12-11	395	113.333	2.25	2.25	VNC16	0.0377	VNC2	0.1103	No Message	No Message
N+4.68	C12-11	395	207.5	2.68	2.68	VNC16	0.0377	VNC2	0.1103	No Message	No Message
N+4.68	C12-11	395	207.5	2.25	2.25	VNC16	0.0377	VNC2	0.1564	No Message	No Message
N+4.68	C12-11	395	226.667	2.64	2.64	VNC16	0.0377	VNC2	0.1564	No Message	No Message
N+4.68	C1-11	397	0	3.37	3.37	VNC16	0.0377	VNC2	0.0456	No Message	No Message
N+4.68	C1-11	397	113.333	2.25	2.25	VNC16	0.0377	VNC2	0.0456	No Message	No Message
N+4.68	C1-11	397	226.667	2.25	2.25	VNC16	0.0377	VNC2	0.0456	No Message	No Message

Story	Label	Unique Name	Station cm	Mid Bar As cm²	Corner Bar As cm²	V Major Combo	At V Major cm²/cm	V Minor Combo	At V Minor cm²/cm	Warnings	Errors
N+4.68	C7-11	399	0	3.24	3.24	VNC16	0.0377	VNC2	0.0512	No Message	No Message
N+4.68	C7-11	399	113.333	2.25	2.25	VNC16	0.0377	VNC2	0.0512	No Message	No Message
N+4.68	C7-11	399	207.5	2.25	2.25	VNC16	0.0377	VNC2	0.0512	No Message	No Message
N+4.68	C7-11	399	207.5	2.25	2.25	VNC16	0.0377	VNC2	0.0315	No Message	No Message
N+4.68	C7-11	399	226.667	2.25	2.25	VNC16	0.0377	VNC2	0.0315	No Message	No Message
N+4.68	C8-7	402	0	2.61	2.61	VNC16	0.0377	VNC2	0.0709	No Message	No Message
N+4.68	C8-7	402	75.667	2.25	2.25	VNC16	0.0377	VNC2	0.0709	No Message	No Message
N+4.68	C8-7	402	132.167	2.25	2.25	VNC16	0.0377	VNC2	0.0709	No Message	No Message
N+4.68	C8-7	402	132.167	2.25	2.25	VNC16	0.0377	VNC2	0.0968	No Message	No Message
N+4.68	C8-7	402	151.333	2.25	2.25	VNC16	0.0377	VNC2	0.0968	No Message	No Message
N+4.68	C6-7	400	0	2.25	2.25	VNC16	0.0377	VNC2	0.0548	No Message	No Message
N+4.68	C6-7	400	75.667	2.25	2.25	VNC16	0.0377	VNC2	0.0548	No Message	No Message
N+4.68	C6-7	400	151.333	2.25	2.25	VNC16	0.0377	VNC2	0.0548	No Message	No Message
N+4.68	C15-9	410	0	4.54	4.54	VNC16	0.0377	VNC2	0.0764	No Message	No Message
N+4.68	C15-9	410	144.833	2.25	2.25	VNC16	0.0377	VNC2	0.0764	No Message	No Message
N+4.68	C15-9	410	270.5	2.25	2.25	VNC16	0.0377	VNC2	0.0764	No Message	No Message
N+4.68	C15-9	410	270.5	2.49	2.49	VNC2	0.0886	VNC2	0.1098	No Message	No Message
N+4.68	C15-9	410	289.667	3.15	3.15	VNC2	0.0886	VNC2	0.1098	No Message	No Message
N+4.68	C16-9	412	0	6.41	6.41	VNC16	0.0377	VNC2	0.1028	No Message	No Message
N+4.68	C16-9	412	144.833	2.56	2.56	VNC16	0.0377	VNC2	0.1028	No Message	No Message
N+4.68	C16-9	412	289.667	3.45	3.45	VNC16	0.0377	VNC2	0.1028	No Message	No Message
N+4.68	C6-11	401	0	2.95	2.95	VNC16	0.0377	VNC2	0.0473	No Message	No Message
N+4.68	C6-11	401	113.333	2.25	2.25	VNC16	0.0377	VNC2	0.0473	No Message	No Message
N+4.68	C6-11	401	226.667	2.25	2.25	VNC16	0.0377	VNC2	0.0473	No Message	No Message
N+4.68	C8-11	403	0	3.36	3.36	VNC16	0.0377	VNC2	0.0603	No Message	No Message
N+4.68	C8-11	403	113.333	2.25	2.25	VNC16	0.0377	VNC2	0.0603	No Message	No Message
N+4.68	C8-11	403	207.5	2.25	2.25	VNC16	0.0377	VNC2	0.0603	No Message	No Message
N+4.68	C8-11	403	207.5	2.25	2.25	VNC16	0.0377	VNC2	0.0372	No Message	No Message
N+4.68	C8-11	403	226.667	2.25	2.25	VNC16	0.0377	VNC2	0.0372	No Message	No Message
N+4.68	C10-11	405	0	3.71	3.71	VNC16	0.0377	VNC2	0.1029	No Message	No Message
N+4.68	C10-11	405	44.167	2.75	2.75	VNC16	0.0377	VNC2	0.1029	No Message	No Message
N+4.68	C10-11	405	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.1029	No Message	No Message
N+4.68	C10-11	405	69.167	2.59	2.59	VNC6	0.0394	VNC2	0.0869	No Message	No Message
N+4.68	C10-11	405	88.333	2.25	2.25	VNC6	0.0394	VNC2	0.0869	No Message	No Message
N+4.68	C10-12	406	0	3.05	3.05	VNC16	0.0377	VNC2	0.1994	No Message	No Message
N+4.68	C10-12	406	44.167	2.25	2.25	VNC16	0.0377	VNC2	0.1994	No Message	No Message
N+4.68	C10-12	406	88.333	2.76	2.76	VNC16	0.0377	VNC2	0.1994	No Message	No Message
N+4.68	C11-11	408	0	2.25	2.25	VNC16	0.0377	VNC2	0.1112	No Message	No Message
N+4.68	C11-11	408	44.167	2.25	2.25	VNC16	0.0377	VNC2	0.1112	No Message	No Message
N+4.68	C11-11	408	69.167	2.75	2.75	VNC16	0.0377	VNC2	0.1112	No Message	No Message
N+4.68	C11-11	408	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.144	No Message	No Message
N+4.68	C11-11	408	88.333	2.93	2.93	VNC16	0.0377	VNC2	0.144	No Message	No Message
N+4.68	C15-11	411	0	3.55	3.55	VNC16	0.0377	VNC2	0.1286	No Message	No Message
N+4.68	C15-11	411	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.1286	No Message	No Message
N+4.68	C15-11	411	138.333	2.25	2.25	VNC16	0.0377	VNC2	0.1286	No Message	No Message
N+4.68	C16-11	413	0	3.2	3.2	VNC16	0.0377	VNC2	0.0967	No Message	No Message
N+4.68	C16-11	413	69.167	2.25	2.25	VNC16	0.0377	VNC2	0.0967	No Message	No Message
N+4.68	C16-11	413	138.333	2.25	2.25	VNC16	0.0377	VNC2	0.0967	No Message	No Message
N+4.68	C11-12	415	0	5.25	5.25	VNC16	0.0377	VNC2	0.1858	No Message	No Message
N+4.68	C11-12	415	44.167	3.6	3.6	VNC16	0.0377	VNC2	0.1858	No Message	No Message
N+4.68	C11-12	415	88.333	2.38	2.38	VNC16	0.0377	VNC2	0.1858	No Message	No Message
N-0.10	C17	1	0	3.49	3.49	VNC2	0.2302	VNC16	0.067	No Message	No Message

Story	Label	Unique Name	Station cm	Mid Bar As cm²	Corner Bar As cm²	V Major Combo	At V Major cm²/cm	V Minor Combo	At V Minor cm²/cm	Warnings	Errors
N-0.10	C17	1	125.5	2.22	2.22	VNC2	0.2302	VNC16	0.067	No Message	No Message
N-0.10	C17	1	251	2.22	2.22	VNC2	0.2302	VNC16	0.067	No Message	No Message
N-0.10	C18	2	0	3.68	3.68	VNC2	0.1896	VNC16	0.067	No Message	No Message
N-0.10	C18	2	125.5	2.22	2.22	VNC2	0.1899	VNC16	0.067	No Message	No Message
N-0.10	C18	2	251	3.02	3.02	VNC2	0.1902	VNC16	0.067	No Message	No Message
N-0.10	C19	3	0	2.92	2.92	VNC12	0.1427	VNC16	0.067	No Message	No Message
N-0.10	C19	3	125.5	2.22	2.22	VNC12	0.1427	VNC16	0.067	No Message	No Message
N-0.10	C19	3	251	2.22	2.22	VNC12	0.1427	VNC16	0.067	No Message	No Message
N-0.10	C21	4	0	2.22	2.22	VNC2	0.0809	VNC16	0.067	No Message	No Message
N-0.10	C21	4	125.5	2.22	2.22	VNC2	0.0821	VNC16	0.067	No Message	No Message
N-0.10	C21	4	251	2.47	2.47	VNC2	0.0833	VNC16	0.067	No Message	No Message
N-0.10	C22	5	0	3.04	3.04	VNC10	0.1775	VNC16	0.067	No Message	No Message
N-0.10	C22	5	125.5	2.22	2.22	VNC10	0.1775	VNC16	0.067	No Message	No Message
N-0.10	C22	5	251	2.22	2.22	VNC10	0.1775	VNC16	0.067	No Message	No Message
N-0.10	C23	6	0	2.22	2.22	VNC16	0.0418	VNC16	0	No Message	No Message
N-0.10	C23	6	125.5	2.22	2.22	VNC16	0.0418	VNC16	0	No Message	No Message
N-0.10	C23	6	251	2.22	2.22	VNC16	0.0418	VNC16	0	No Message	No Message
N-0.10	C24	7	0	2.22	2.22	VNC12	0.1137	VNC16	0.067	No Message	No Message
N-0.10	C24	7	125.5	2.22	2.22	VNC12	0.1137	VNC16	0.067	No Message	No Message
N-0.10	C24	7	251	2.22	2.22	VNC12	0.1137	VNC16	0.067	No Message	No Message
N-0.10	C25	8	0	2.22	2.22	VNC12	0.1272	VNC16	0.067	No Message	No Message
N-0.10	C25	8	125.5	2.22	2.22	VNC12	0.1272	VNC16	0.067	No Message	No Message
N-0.10	C25	8	251	2.22	2.22	VNC10	0.1287	VNC16	0.067	No Message	No Message
N-0.10	C26	9	0	2.22	2.22	VNC12	0.0958	VNC16	0.067	No Message	No Message
N-0.10	C26	9	125.5	2.22	2.22	VNC12	0.0958	VNC16	0.067	No Message	No Message
N-0.10	C26	9	251	2.22	2.22	VNC12	0.0958	VNC16	0.067	No Message	No Message
N-0.10	C27	10	0	2.22	2.22	VNC12	0.0418	VNC16	0	No Message	No Message
N-0.10	C27	10	125.5	2.22	2.22	VNC12	0.0418	VNC16	0	No Message	No Message
N-0.10	C27	10	251	2.22	2.22	VNC12	0.0418	VNC16	0	No Message	No Message
N-0.10	C28	11	0	2.22	2.22	VNC16	0.0418	VNC16	0.067	No Message	No Message
N-0.10	C28	11	125.5	2.22	2.22	VNC16	0.0418	VNC16	0.067	No Message	No Message
N-0.10	C28	11	251	2.22	2.22	VNC16	0.0418	VNC16	0.067	No Message	No Message
N-0.10	C29	12	0	5.01	5.01	VNC2	0.3433	VNC2	0.0685	No Message	No Message
N-0.10	C29	12	125.5	2.22	2.22	VNC2	0.3433	VNC2	0.0685	No Message	No Message
N-0.10	C29	12	251	2.93	2.93	VNC2	0.3433	VNC2	0.0685	No Message	No Message
N-0.10	C30	13	0	4.08	4.08	VNC10	0.3034	VNC16	0.067	No Message	No Message
N-0.10	C30	13	125.5	2.22	2.22	VNC10	0.3034	VNC16	0.067	No Message	No Message
N-0.10	C30	13	251	3.16	3.16	VNC10	0.3034	VNC16	0.067	No Message	No Message
N-0.10	C31	14	0	3.3	3.3	VNC4	0.2728	VNC16	0.067	No Message	No Message
N-0.10	C31	14	125.5	2.22	2.22	VNC4	0.2728	VNC16	0.067	No Message	No Message
N-0.10	C31	14	251	2.22	2.22	VNC4	0.2728	VNC16	0.067	No Message	No Message
N-0.10	C33	15	0	2.22	2.22	VNC16	0.0418	VNC10	0.0797	No Message	No Message
N-0.10	C33	15	125.5	2.22	2.22	VNC16	0.0418	VNC10	0.0797	No Message	No Message
N-0.10	C33	15	251	2.22	2.22	VNC16	0.0418	VNC10	0.0797	No Message	No Message
N-0.10	C1	251	0	3.65	3.65	VNC16	0.0377	VNC2	0.0298	No Message	No Message
N-0.10	C1	251	130.5	2.79	2.79	VNC16	0.0377	VNC2	0.0298	No Message	No Message
N-0.10	C1	251	261	2.84	2.84	VNC16	0.0377	VNC2	0.0298	No Message	No Message
N-0.10	C6	252	0	2.25	2.25	VNC16	0.0377	VNC2	0.0341	No Message	No Message
N-0.10	C6	252	130.5	2.25	2.25	VNC16	0.0377	VNC2	0.0341	No Message	No Message
N-0.10	C6	252	261	2.25	2.25	VNC16	0.0377	VNC2	0.0341	No Message	No Message
N-0.10	C7	253	0	2.25	2.25	VNC16	0.0377	VNC2	0.0393	No Message	No Message
N-0.10	C7	253	125.5	2.25	2.25	VNC16	0.0377	VNC2	0.0393	No Message	No Message

Story	Label	Unique Name	Station cm	Mid Bar As cm ²	Corner Bar As cm ²	V Major Combo	At V Major cm ² /cm	V Minor Combo	At V Minor cm ² /cm	Warnings	Errors
N-0.10	C7	253	251	2.25	2.25	VNC16	0.0377	VNC2	0.0393	No Message	No Message
N-0.10	C8	254	0	3.42	3.42	VNC16	0.0377	VNC2	0.0462	No Message	No Message
N-0.10	C8	254	125.5	2.25	2.25	VNC16	0.0377	VNC2	0.0462	No Message	No Message
N-0.10	C8	254	251	2.54	2.54	VNC16	0.0377	VNC2	0.0462	No Message	No Message
N-0.10	C9	255	0	5.34	5.34	VNC16	0.0377	VNC2	0.0392	No Message	No Message
N-0.10	C9	255	130.5	4.09	4.09	VNC16	0.0377	VNC2	0.0392	No Message	No Message
N-0.10	C9	255	261	4.11	4.11	VNC16	0.0377	VNC2	0.0392	No Message	No Message
N-0.10	C10	256	0	3.1	3.1	VNC16	0.0377	VNC2	0.0474	No Message	No Message
N-0.10	C10	256	130.5	2.25	2.25	VNC16	0.0377	VNC2	0.0474	No Message	No Message
N-0.10	C10	256	261	2.46	2.46	VNC16	0.0377	VNC2	0.0474	No Message	No Message
N-0.10	C11	257	0	5.43	5.43	VNC16	0.0377	VNC2	0.0599	No Message	No Message
N-0.10	C11	257	125.5	3.68	3.68	VNC16	0.0377	VNC2	0.0599	No Message	No Message
N-0.10	C11	257	251	4.14	4.14	VNC16	0.0377	VNC2	0.0599	No Message	No Message
N-0.10	C12	258	0	3.46	3.46	VNC16	0.0377	VNC2	0.0481	No Message	No Message
N-0.10	C12	258	125.5	2.46	2.46	VNC16	0.0377	VNC2	0.0481	No Message	No Message
N-0.10	C12	258	251	2.84	2.84	VNC16	0.0377	VNC2	0.0481	No Message	No Message
N-0.10	C14	259	0	5.02	5.02	VNC16	0.0377	VNC2	0.0458	No Message	No Message
N-0.10	C14	259	130.5	3.78	3.78	VNC16	0.0377	VNC2	0.0458	No Message	No Message
N-0.10	C14	259	261	3.79	3.79	VNC16	0.0377	VNC2	0.0458	No Message	No Message
N-0.10	C15	260	0	2.25	2.25	VNC16	0.0377	VNC4	0.0544	No Message	No Message
N-0.10	C15	260	130.5	2.25	2.25	VNC16	0.0377	VNC4	0.0544	No Message	No Message
N-0.10	C15	260	261	2.25	2.25	VNC16	0.0377	VNC4	0.0544	No Message	No Message
N-0.10	C16	261	0	5.15	5.15	VNC16	0.0377	VNC2	0.0741	No Message	No Message
N-0.10	C16	261	125.5	2.97	2.97	VNC16	0.0377	VNC2	0.0741	No Message	No Message
N-0.10	C16	261	251	3.87	3.87	VNC16	0.0377	VNC2	0.0741	No Message	No Message
N-0.10	C20	262	0	3.48	3.48	VNC16	0.0377	VNC2	0.0573	No Message	No Message
N-0.10	C20	262	125.5	2.25	2.25	VNC16	0.0377	VNC2	0.0573	No Message	No Message
N-0.10	C20	262	251	2.63	2.63	VNC16	0.0377	VNC2	0.0573	No Message	No Message

	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 1 DE 1
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 5.3. DISEÑO DE VIGAS

Concrete Beam Summary - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm ²	As Top cm ²	As Bottom Combo	As,min Bottom cm ²	As Bottom cm ²
N+8.30	B92	90	0	V60X120	No Message	C6	7.5	7.5	C6	3.73	3.73
N+8.30	B92	90	70	V60X120	No Message	C6	4.38	4.38	C6	1.86	1.86
N+8.30	B92	90	140	V60X120	No Message	C6	1.84	1.84	C6	0.92	0.92
N+8.30	B95	88	0	V60X120	No Message	C6	6.66	6.66	C6	3.32	3.32
N+8.30	B95	88	70	V60X120	No Message	ENVOL	22.1	22.1	C6	10.79	10.79
N+8.30	B95	88	140	V60X120	No Message	C6	22.1	33.51	C6	21.82	21.82
N+8.30	B121	202	0	V60X60	No Message	ENVOL	10.43	10.43	ENVOL	5.16	5.16
N+8.30	B121	202	100	V60X60	No Message	ENVOL	3.77	3.77	ENVOL	3.14	3.14
N+8.30	B121	202	100	V60X60	No Message	ENVOL	3.77	3.77	ENVOL	3.14	3.14
N+8.30	B121	202	347.5	V60X60	No Message	ENVOL	2.85	2.85	C2	4.34	4.34
N+8.30	B121	202	465	V60X60	No Message	ENVOL	2.85	2.85	ENVOL	4.44	4.44
N+8.30	B121	202	465	V60X60	No Message	ENVOL	2.85	2.85	ENVOL	4.44	4.44
N+8.30	B121	202	695	V60X60	No Message	ENVOL	11.05	11.05	ENVOL	5.73	5.73
N+8.30	B136	91	0	V60X60	No Message	ENVOL	0.18	0.18	ENVOL	0.09	0.09
N+8.30	B136	91	70	V60X60	No Message	ENVOL	0.11	0.11	ENVOL	0.11	0.11
N+8.30	B136	91	140	V60X60	No Message	ENVOL	0.43	0.43	ENVOL	0.21	0.21
N+8.30	B137	200	0	V60X60	No Message	ENVOL	10.42	10.42	ENVOL	5.16	5.16
N+8.30	B137	200	100	V60X60	No Message	ENVOL	3.98	3.98	ENVOL	3.63	3.63
N+8.30	B137	200	100	V60X60	No Message	ENVOL	3.98	3.98	ENVOL	3.63	3.63
N+8.30	B137	200	347.5	V60X60	No Message	ENVOL	3.13	3.13	C2	4.07	4.07
N+8.30	B137	200	465	V60X60	No Message	ENVOL	3.13	3.13	ENVOL	3.85	3.85
N+8.30	B137	200	465	V60X60	No Message	ENVOL	3.13	3.13	ENVOL	3.85	3.85
N+8.30	B137	200	695	V60X60	No Message	ENVOL	11.05	11.05	ENVOL	6.3	6.3
N+8.30	B146	89	0	V60X120	No Message	C6	22.1	43.36	ENVOL	22.1	22.1
N+8.30	B146	89	263	V60X120	No Message	C6	15.16	15.16	C6	13.89	13.89
N+8.30	B146	89	263	V60X120	No Message	C6	15.16	15.16	C6	13.89	13.89
N+8.30	B146	89	666	V60X120	No Message	C6	13.89	13.89	ENVOL	22.1	22.1
N+8.30	B146	89	666	V60X120	No Message	C6	13.89	13.89	ENVOL	22.1	22.1
N+8.30	B146	89	867.5	V60X120	No Message	C6	13.89	13.89	C2	22.1	22.54
N+8.30	B146	89	1069	V60X120	No Message	C6	13.89	13.89	ENVOL	22.1	22.1
N+8.30	B146	89	1069	V60X120	No Message	C6	13.89	13.89	ENVOL	22.1	22.1
N+8.30	B146	89	1472	V60X120	No Message	C6	15.63	15.63	C6	13.89	13.89
N+8.30	B146	89	1472	V60X120	No Message	C6	15.63	15.63	C6	13.89	13.89
N+8.30	B146	89	1735	V60X120	No Message	C6	22.1	43.63	ENVOL	22.1	22.1
N+8.30	B151	97	0	V60X60	No Message	ENVOL	3.89	3.89	ENVOL	1.94	1.94
N+8.30	B151	97	70	V60X60	No Message	ENVOL	2.23	2.23	ENVOL	0.97	0.97
N+8.30	B151	97	140	V60X60	No Message	C6	1.61	1.61	C6	0.8	0.8
N+8.30	B4	107	0	V60X120	No Message	C6	3.86	3.86	C6	1.92	1.92
N+8.30	B4	107	70	V60X120	No Message	ENVOL	22.1	22.1	C6	11.55	11.55
N+8.30	B4	107	140	V60X120	No Message	C6	22.1	35.97	C6	22.1	22.1
N+8.30	B7	109	0	V60X120	No Message	C6	22.1	31.2	C6	20.35	20.35
N+8.30	B7	109	70	V60X120	No Message	C6	22.07	22.07	C6	10.07	10.07
N+8.30	B7	109	140	V60X120	No Message	C6	3.87	3.87	C6	1.93	1.93
N+8.30	B8	108	0	V60X120	No Message	C6	22.1	46.94	C6	22.1	22.69
N+8.30	B8	108	263	V60X120	No Message	C6	15.15	15.15	C6	14.89	14.89
N+8.30	B8	108	263	V60X120	No Message	C6	15.15	15.15	C6	14.89	14.89
N+8.30	B8	108	666	V60X120	No Message	C6	14.89	14.89	C2	22.1	26.43
N+8.30	B8	108	666	V60X120	No Message	C6	14.89	14.89	C2	22.1	26.43
N+8.30	B8	108	867.5	V60X120	No Message	C6	14.89	14.89	C2	22.1	27.91
N+8.30	B8	108	1069	V60X120	No Message	C6	14.89	14.89	C2	22.1	25.68
N+8.30	B8	108	1069	V60X120	No Message	C6	14.89	14.89	C2	22.1	25.68
N+8.30	B8	108	1472	V60X120	No Message	C6	14.89	14.89	C6	14.89	14.89
N+8.30	B8	108	1472	V60X120	No Message	C6	14.89	14.89	C6	14.89	14.89
N+8.30	B8	108	1735	V60X120	No Message	C6	22.1	40.75	ENVOL	22.1	22.1

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N+8.30	B115	311	0	V20X50	No Message	ENVOL	0	0	C6	1.35	1.35
N+8.30	B115	311	431.47	V20X50	No Message	ENVOL	3.01	3.01	ENVOL	3.01	5.8
N+8.30	B115	311	862.94	V20X50	No Message	ENVOL	3.01	9.82	ENVOL	3.01	4.65
N+8.30	B116	313	0	V20X50	No Message	ENVOL	3.01	6.85	ENVOL	3.01	3.3
N+8.30	B116	313	433.881	V20X50	No Message	ENVOL	2.17	2.17	C2	3.01	5.77
N+8.30	B116	313	867.761	V20X50	No Message	ENVOL	3.01	4.25	ENVOL	2.77	2.77
N+8.30	B203	315	14.797	V20X50	No Message	ENVOL	3.01	6.17	ENVOL	3.01	3.01
N+8.30	B203	315	438.868	V20X50	No Message	ENVOL	2.09	2.09	C2	3.01	4.81
N+8.30	B203	315	862.94	V20X50	No Message	ENVOL	3.01	6.62	ENVOL	3.01	3.19
N+8.30	B244	317	14.81	V20X50	No Message	ENVOL	3.01	6.4	ENVOL	3.01	3.09
N+8.30	B244	317	441.286	V20X50	No Message	ENVOL	2.07	2.07	C2	3.01	4.88
N+8.30	B244	317	867.761	V20X50	No Message	ENVOL	3.01	6.52	ENVOL	3.01	3.15
N+8.30	B43	456	0	V60X60	No Message	ENVOL	5.32	5.32	ENVOL	2.65	2.65
N+8.30	B43	456	81.5	V60X60	No Message	ENVOL	2.16	2.16	ENVOL	1.32	1.32
N+8.30	B43	456	163	V60X60	No Message	ENVOL	0.0004879	0.0004879	ENVOL	0	0
N+8.30	B45	207	0	V60X60	No Message	ENVOL	6.48	6.48	ENVOL	7.39	7.39
N+8.30	B45	207	280	V60X60	No Message	ENVOL	3.87	3.87	ENVOL	3.87	3.87
N+8.30	B45	207	560	V60X60	No Message	ENVOL	11.05	11.91	ENVOL	7.81	7.81
N+8.30	B47	208	0	V60X60	No Message	ENVOL	1.17	1.17	ENVOL	0.58	0.58
N+8.30	B47	208	70	V60X60	No Message	ENVOL	0.37	0.37	ENVOL	0.29	0.29
N+8.30	B47	208	140	V60X60	No Message	ENVOL	0.42	0.42	ENVOL	0.21	0.21
N+8.30	B248	462	0	V60X60	No Message	ENVOL	5.32	5.32	ENVOL	2.65	2.65
N+8.30	B248	462	81.5	V60X60	No Message	ENVOL	2.16	2.16	ENVOL	1.32	1.32
N+8.30	B248	462	163	V60X60	No Message	ENVOL	0.000492	0.000492	ENVOL	0	0
N+8.30	B254	219	0	V60X60	No Message	ENVOL	0.89	0.89	ENVOL	0.45	0.45
N+8.30	B254	219	70	V60X60	No Message	ENVOL	0.27	0.27	ENVOL	0.22	0.22
N+8.30	B254	219	140	V60X60	No Message	ENVOL	0.21	0.21	ENVOL	0.1	0.1
N+8.30	B257	222	0	V60X60	No Message	C6	0.27	0.27	C6	0.14	0.14
N+8.30	B257	222	70	V60X60	No Message	C6	0.09	0.09	C6	0.09	0.09
N+8.30	B257	222	140	V60X60	No Message	C6	0.35	0.35	C6	0.18	0.18
N+8.30	B258	223	0	V60X60	No Message	ENVOL	0	0	C6	0.29	0.29
N+8.30	B258	223	70	V60X60	No Message	ENVOL	0.2	0.2	ENVOL	0.2	0.2
N+8.30	B258	223	140	V60X60	No Message	ENVOL	0.79	0.79	ENVOL	0.39	0.39
N+8.30	B260	225	0	V60X60	No Message	ENVOL	10.42	10.42	ENVOL	5.15	5.15
N+8.30	B260	225	347.5	V60X60	No Message	ENVOL	2.56	2.56	ENVOL	2.56	2.56
N+8.30	B260	225	465	V60X60	No Message	ENVOL	2.56	2.56	ENVOL	2.67	2.67
N+8.30	B260	225	695	V60X60	No Message	ENVOL	7.63	7.63	ENVOL	3.78	3.78
N+8.30	B269	340	22.5	V30X50	No Message	C6	2.04	2.04	C6	1.01	1.01
N+8.30	B269	340	82.5	V30X50	No Message	ENVOL	1.37	1.37	C6	0.74	0.74
N+8.30	B269	340	142.5	V30X50	No Message	C6	2.99	2.99	C6	1.48	1.48
N+8.30	B270	341	22.5	V30X50	No Message	ENVOL	4.52	4.52	ENVOL	2.24	2.24
N+8.30	B270	341	93.75	V30X50	No Message	ENVOL	2.25	2.25	ENVOL	1.11	1.11
N+8.30	B270	341	165	V30X50	No Message	ENVOL	0.32	0.32	ENVOL	0.16	0.16
N+8.30	B271	342	22.5	V30X50	No Message	C6	2.04	2.04	C6	1.01	1.01
N+8.30	B271	342	82.5	V30X50	No Message	ENVOL	2.37	2.37	C6	1.15	1.15
N+8.30	B271	342	142.5	V30X50	No Message	C6	4.52	4.52	C6	2.31	2.31
N+8.30	B272	343	22.5	V30X50	No Message	ENVOL	4.52	5.92	ENVOL	3.87	3.87
N+8.30	B272	343	93.75	V30X50	No Message	ENVOL	3.5	3.5	ENVOL	1.91	1.91
N+8.30	B272	343	165	V30X50	No Message	ENVOL	0	0	ENVOL	0.59	0.59
N+8.30	B273	344	15	V20X50	No Message	ENVOL	3.01	4.82	ENVOL	3.01	3.01
N+8.30	B273	344	430	V20X50	No Message	ENVOL	1.61	1.61	C2	3.01	4.04
N+8.30	B273	344	845	V20X50	No Message	ENVOL	3.01	5.02	ENVOL	3.01	3.01
N+8.30	B274	345	15	V20X50	No Message	ENVOL	3.01	8.97	ENVOL	3.01	4.27
N+8.30	B274	345	430	V20X50	No Message	ENVOL	2.84	2.84	C2	3.01	7.9

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N+8.30	B274	345	845	V20X50	No Message	ENVOL	3.01	9.15	ENVOL	3.01	4.35
N+8.30	B275	346	22.5	V30X50	No Message	C6	1.95	1.95	C6	0.97	0.97
N+8.30	B275	346	82.5	V30X50	No Message	ENVOL	0.94	0.94	C6	0.56	0.56
N+8.30	B275	346	142.5	V30X50	No Message	C6	2.25	2.25	C6	1.12	1.12
N+8.30	B276	347	22.5	V30X50	No Message	ENVOL	4.52	7.01	ENVOL	4.52	4.52
N+8.30	B276	347	93.75	V30X50	No Message	ENVOL	4.5	4.5	ENVOL	2.25	2.25
N+8.30	B276	347	165	V30X50	No Message	ENVOL	0.16	0.16	ENVOL	0.08	0.08
N+8.30	B277	348	22.5	V30X50	No Message	C6	1.82	1.82	ENVOL	1.48	1.48
N+8.30	B277	348	82.5	V30X50	No Message	ENVOL	1.88	1.88	C6	1.04	1.04
N+8.30	B277	348	142.5	V30X50	No Message	C6	4.24	4.24	C6	2.1	2.1
N+8.30	B278	349	22.5	V30X50	No Message	ENVOL	4.52	7	ENVOL	4.52	4.52
N+8.30	B278	349	93.75	V30X50	No Message	ENVOL	4.43	4.43	ENVOL	2.25	2.25
N+8.30	B278	349	165	V30X50	No Message	ENVOL	0.07	0.07	ENVOL	0.16	0.16
N+8.30	B279	350	22.5	V30X50	No Message	ENVOL	0.94	0.94	C6	2.23	2.23
N+8.30	B279	350	82.5	V30X50	No Message	ENVOL	1.89	1.89	C6	1.23	1.23
N+8.30	B279	350	142.5	V30X50	No Message	ENVOL	4.52	4.52	C6	2.47	2.47
N+8.30	B280	351	22.5	V30X50	No Message	ENVOL	4.52	5.76	ENVOL	3.76	3.76
N+8.30	B280	351	93.75	V30X50	No Message	ENVOL	3.26	3.26	ENVOL	1.86	1.86
N+8.30	B280	351	165	V30X50	No Message	ENVOL	0	0	ENVOL	0.81	0.81
N+8.30	B281	352	22.5	V30X50	No Message	ENVOL	0.62	0.62	C6	3.07	3.07
N+8.30	B281	352	82.5	V30X50	No Message	C6	1.37	1.37	ENVOL	1.1	1.1
N+8.30	B281	352	142.5	V30X50	No Message	ENVOL	4.49	4.49	ENVOL	2.22	2.22
N+8.30	B282	353	22.5	V30X50	No Message	ENVOL	1.41	1.41	ENVOL	0.7	0.7
N+8.30	B282	353	93.75	V30X50	No Message	ENVOL	1.02	1.02	ENVOL	0.35	0.35
N+8.30	B282	353	165	V30X50	No Message	ENVOL	0.81	0.81	ENVOL	0.4	0.4
N+8.30	B283	354	15	V20X50	No Message	C6	0.03	0.03	C6	0.01	0.01
N+8.30	B283	354	50	V20X50	No Message	ENVOL	0.07	0.07	ENVOL	0.06	0.06
N+8.30	B283	354	85	V20X50	No Message	ENVOL	0.24	0.24	ENVOL	0.12	0.12
N+8.30	B284	355	15	V20X50	No Message	ENVOL	3.01	4.93	ENVOL	3.01	3.01
N+8.30	B284	355	432.5	V20X50	No Message	ENVOL	1.58	1.58	C2	3.01	4.12
N+8.30	B284	355	850	V20X50	No Message	ENVOL	3.01	4.84	ENVOL	3.01	3.01
N+8.30	B285	356	15	V20X50	No Message	ENVOL	0.37	0.37	ENVOL	0.18	0.18
N+8.30	B285	356	90	V20X50	No Message	ENVOL	0.09	0.09	ENVOL	0.09	0.09
N+8.30	B285	356	165	V20X50	No Message	ENVOL	0.34	0.34	ENVOL	0.17	0.17
N+8.30	B286	357	15	V20X50	No Message	ENVOL	0.05	0.05	ENVOL	0.04	0.04
N+8.30	B286	357	50	V20X50	No Message	ENVOL	0.1	0.1	ENVOL	0.1	0.1
N+8.30	B286	357	85	V20X50	No Message	ENVOL	0.39	0.39	ENVOL	0.19	0.19
N+8.30	B287	358	15	V20X50	No Message	ENVOL	3.01	8.73	ENVOL	3.01	4.16
N+8.30	B287	358	432.5	V20X50	No Message	ENVOL	2.94	2.94	C2	3.01	8.03
N+8.30	B287	358	850	V20X50	No Message	ENVOL	3.01	9.52	ENVOL	3.01	4.52
N+8.30	B288	359	15	V20X50	No Message	ENVOL	0.61	0.61	ENVOL	0.31	0.31
N+8.30	B288	359	90	V20X50	No Message	ENVOL	0.15	0.15	C2	0.24	0.24
N+8.30	B288	359	165	V20X50	No Message	ENVOL	0.48	0.48	ENVOL	0.24	0.24
N+8.30	B289	360	0	V20X50	No Message	ENVOL	1.72	1.72	ENVOL	0.85	0.85
N+8.30	B289	360	50	V20X50	No Message	ENVOL	1.77	1.77	ENVOL	0.52	0.52
N+8.30	B289	360	100	V20X50	No Message	ENVOL	2.12	2.12	ENVOL	1.05	1.05
N+8.30	B290	361	0	V20X50	No Message	ENVOL	3.01	3.37	ENVOL	2.21	2.21
N+8.30	B290	361	432.5	V20X50	No Message	ENVOL	1.69	1.69	C2	3.01	4.95
N+8.30	B290	361	865	V20X50	No Message	ENVOL	3.01	5.27	ENVOL	3.01	3.01
N+8.30	B291	362	0	V20X50	No Message	ENVOL	3.01	3.95	ENVOL	2.58	2.58
N+8.30	B291	362	90	V20X50	No Message	ENVOL	3.01	3.61	ENVOL	1.29	1.29
N+8.30	B291	362	180	V20X50	No Message	ENVOL	3.01	4.01	ENVOL	2.62	2.62
N+8.30	B292	363	0	V20X50	No Message	ENVOL	3.01	4.99	ENVOL	3.01	3.01
N+8.30	B292	363	480	V20X50	No Message	ENVOL	1.6	1.6	C2	3.01	4.67
N+8.30	B292	363	860	V20X50	No Message	ENVOL	3.01	4.04	ENVOL	1.6	1.6

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N+8.30	B292	363	860	V20X50	No Message	ENVOL	3.01	3.01	ENVOL	1.6	1.6
N+8.30	B292	363	960	V20X50	No Message	ENVOL	3.01	3.01	ENVOL	1.56	1.56
N+8.30	B293	364	15	V20X50	No Message	ENVOL	0.25	0.25	ENVOL	0.12	0.12
N+8.30	B293	364	50	V20X50	No Message	C6	0.19	0.19	ENVOL	0.07	0.07
N+8.30	B293	364	85	V20X50	No Message	ENVOL	0.28	0.28	ENVOL	0.14	0.14
N+8.30	B294	365	15	V20X50	No Message	ENVOL	3.01	6.13	ENVOL	3.01	3.01
N+8.30	B294	365	159	V20X50	No Message	ENVOL	2.95	2.95	ENVOL	1.95	1.95
N+8.30	B294	365	303	V20X50	No Message	ENVOL	0	0	ENVOL	0	0
N+8.30	B295	366	15	V20X50	No Message	ENVOL	0.46	0.46	ENVOL	0.23	0.23
N+8.30	B295	366	50	V20X50	No Message	ENVOL	0.21	0.21	ENVOL	0.12	0.12
N+8.30	B295	366	85	V20X50	No Message	ENVOL	0.23	0.23	ENVOL	0.11	0.11
N+8.30	B296	367	15	V20X50	No Message	ENVOL	3.01	4.09	ENVOL	2.67	2.67
N+8.30	B296	367	159	V20X50	No Message	ENVOL	1.32	1.32	ENVOL	1.32	1.32
N+8.30	B296	367	303	V20X50	No Message	ENVOL	0	0	ENVOL	0	0
N+8.30	B297	368	0	V20X50	No Message	ENVOL	2.38	2.38	ENVOL	1.18	1.18
N+8.30	B297	368	151.5	V20X50	No Message	ENVOL	0.59	0.59	ENVOL	0.59	0.59
N+8.30	B297	368	303	V20X50	No Message	ENVOL	0	0	ENVOL	0	0
N+8.30	B348	418	0	V60X60	No Message	ENVOL	0.0009664	0.0009664	ENVOL	0.0004832	0.0004832
N+8.30	B348	418	68.75	V60X60	No Message	ENVOL	1.08	1.08	ENVOL	0.64	0.64
N+8.30	B348	418	137.5	V60X60	No Message	ENVOL	2.59	2.59	ENVOL	1.29	1.29
N+8.30	B350	420	0	V60X60	No Message	ENVOL	2.92	2.92	ENVOL	1.46	1.46
N+8.30	B350	420	73.75	V60X60	No Message	ENVOL	1.21	1.21	ENVOL	0.73	0.73
N+8.30	B350	420	147.5	V60X60	No Message	ENVOL	0.001194	0.001194	ENVOL	0.0005972	0.0005972
N+8.30	B351	421	0	V60X60	No Message	ENVOL	2.92	2.92	ENVOL	1.46	1.46
N+8.30	B351	421	73.75	V60X60	No Message	ENVOL	1.21	1.21	ENVOL	0.73	0.73
N+8.30	B351	421	147.5	V60X60	No Message	ENVOL	0.001199	0.001199	ENVOL	0.0005995	0.0005995
N+8.30	B352	422	0	V60X60	No Message	ENVOL	0.0009658	0.0009658	ENVOL	0.0004829	0.0004829
N+8.30	B352	422	68.75	V60X60	No Message	ENVOL	1.08	1.08	ENVOL	0.64	0.64
N+8.30	B352	422	137.5	V60X60	No Message	ENVOL	2.59	2.59	ENVOL	1.29	1.29
N+8.30	B388	464	0	V60X60	No Message	ENVOL	6.42	6.42	ENVOL	5.99	5.99
N+8.30	B388	464	280	V60X60	No Message	ENVOL	4.34	4.34	ENVOL	4.34	4.34
N+8.30	B388	464	560	V60X60	No Message	ENVOL	11.05	13.38	ENVOL	8.75	8.75
N+8.30	B390	205	0	V60X60	No Message	ENVOL	1.4	1.4	ENVOL	0.7	0.7
N+8.30	B390	205	70	V60X60	No Message	ENVOL	0.36	0.36	ENVOL	0.35	0.35
N+8.30	B390	205	140	V60X60	No Message	C6	0.39	0.39	C6	0.19	0.19
N+8.30	B391	466	0	V60X60	No Message	ENVOL	2.01	2.01	ENVOL	1	1
N+8.30	B391	466	70	V60X60	No Message	ENVOL	0.5	0.5	ENVOL	0.5	0.5
N+8.30	B391	466	140	V60X60	No Message	ENVOL	0	0	C6	1.21	1.21
N+8.30	B392	369	0	V60X60	No Message	ENVOL	0	0	C6	0.36	0.36
N+8.30	B392	369	80	V60X60	No Message	ENVOL	6.21	6.21	ENVOL	6.21	6.21
N+8.30	B392	369	80	V60X60	No Message	ENVOL	6.21	6.21	ENVOL	6.21	6.21
N+8.30	B392	369	99.623	V60X60	No Message	ENVOL	6.21	6.21	ENVOL	6.21	6.21
N+8.30	B392	369	99.623	V60X60	No Message	ENVOL	6.21	6.21	ENVOL	6.21	6.21
N+8.30	B392	369	145	V60X60	No Message	ENVOL	6.21	6.21	ENVOL	6.21	6.21
N+8.30	B392	369	145	V60X60	No Message	ENVOL	6.21	6.21	ENVOL	6.21	6.21
N+8.30	B392	369	165	V60X60	No Message	ENVOL	6.21	6.21	ENVOL	6.21	6.21
N+8.30	B392	369	165	V60X60	No Message	ENVOL	6.21	6.21	ENVOL	6.21	6.21
N+8.30	B392	369	330	V60X60	No Message	ENVOL	11.05	19.41	ENVOL	11.05	11.05
N+8.30	B396	103	0	V60X60	No Message	ENVOL	0.03	0.03	ENVOL	0.01	0.01
N+8.30	B396	103	92.5	V60X60	No Message	ENVOL	11.05	11.05	ENVOL	6	6
N+8.30	B396	103	185	V60X60	No Message	ENVOL	11.05	18.73	ENVOL	11.05	11.05
N+8.30	B403	471	0	V60X60	No Message	ENVOL	0	0	ENVOL	0	0
N+8.30	B403	471	92.5	V60X60	No Message	ENVOL	4.21	4.21	ENVOL	2.4	2.4
N+8.30	B403	471	185	V60X60	No Message	ENVOL	9.73	9.73	ENVOL	4.82	4.82
N+8.30	B404	472	0	V60X60	No Message	ENVOL	1.96	1.96	ENVOL	0.98	0.98

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N+8.30	B404	472	70	V60X60	No Message	ENVOL	0.49	0.49	ENVOL	0.49	0.49
N+8.30	B404	472	140	V60X60	No Message	ENVOL	0	0	C6	1.18	1.18
N+8.30	B5	74	15	V20X50	No Message	ENVOL	0.17	0.17	ENVOL	0.11	0.11
N+8.30	B5	74	97.5	V20X50	No Message	ENVOL	0.04	0.04	ENVOL	0.12	0.12
N+8.30	B5	74	180	V20X50	No Message	ENVOL	0.18	0.18	ENVOL	0.09	0.09
N+8.30	B6	77	15	V20X50	No Message	ENVOL	0.44	0.44	ENVOL	0.22	0.22
N+8.30	B6	77	57.5	V20X50	No Message	ENVOL	0.11	0.11	ENVOL	0.11	0.11
N+8.30	B6	77	100	V20X50	No Message	ENVOL	0.13	0.13	ENVOL	0.36	0.36
N+8.30	B10	80	0	V20X50	No Message	ENVOL	1.98	1.98	ENVOL	0.98	0.98
N+8.30	B10	80	50	V20X50	No Message	ENVOL	2.33	2.33	ENVOL	0.68	0.68
N+8.30	B10	80	100	V20X50	No Message	ENVOL	2.78	2.78	ENVOL	1.37	1.37
N+8.30	B12	84	0	V20X50	No Message	ENVOL	3.01	5.3	ENVOL	3.01	3.01
N+8.30	B12	84	90	V20X50	No Message	ENVOL	3.01	6.08	ENVOL	2.26	2.26
N+8.30	B12	84	180	V20X50	No Message	ENVOL	3.01	7.17	ENVOL	3.01	3.45
N+8.30	B14	92	22.5	V30X50	No Message	ENVOL	0.62	0.62	ENVOL	0.31	0.31
N+8.30	B14	92	93.75	V30X50	No Message	ENVOL	0.63	0.63	ENVOL	0.24	0.24
N+8.30	B14	92	165	V30X50	No Message	ENVOL	0.95	0.95	ENVOL	0.47	0.47
N+8.30	B16	93	22.5	V30X50	No Message	ENVOL	4.52	7.27	ENVOL	4.52	4.52
N+8.30	B16	93	93.75	V30X50	No Message	ENVOL	4.52	4.52	ENVOL	2.33	2.33
N+8.30	B16	93	165	V30X50	No Message	ENVOL	0.24	0.24	ENVOL	0.12	0.12
N+8.30	B18	94	0	V30X50	No Message	ENVOL	4.52	7.83	ENVOL	4.52	4.52
N+8.30	B18	94	82.5	V30X50	No Message	ENVOL	4.44	4.44	ENVOL	2.51	2.51
N+8.30	B18	94	165	V30X50	No Message	ENVOL	0	0	ENVOL	0.98	0.98
N+8.30	B20	101	0	V30X50	No Message	ENVOL	4.52	10.93	ENVOL	4.52	5.26
N+8.30	B20	101	82.5	V30X50	No Message	ENVOL	4.52	5.03	ENVOL	3.44	3.44
N+8.30	B20	101	165	V30X50	No Message	ENVOL	0	0	ENVOL	0.41	0.41
N+4.68	B92	75	0	V60X120	No Message	C6	4.32	4.32	C6	2.15	2.15
N+4.68	B92	75	70	V60X120	No Message	C6	2.15	2.15	C6	1.08	1.08
N+4.68	B92	75	140	V60X120	No Message	C6	1.38	1.38	C6	0.69	0.69
N+4.68	B95	73	0	V60X120	No Message	ENVOL	2.07	2.07	ENVOL	1.03	1.03
N+4.68	B95	73	70	V60X120	No Message	C6	3.14	3.14	C6	1.42	1.42
N+4.68	B95	73	140	V60X120	No Message	C6	5.7	5.7	C6	2.84	2.84
N+4.68	B98	79	0	V60X120	No Message	ENVOL	6.55	6.55	ENVOL	3.26	3.26
N+4.68	B98	79	70	V60X120	No Message	C6	3.37	3.37	ENVOL	1.63	1.63
N+4.68	B98	79	140	V60X120	No Message	ENVOL	1.82	1.82	ENVOL	0.91	0.91
N+4.68	B101	81	0	V60X120	No Message	ENVOL	2.28	2.28	ENVOL	1.14	1.14
N+4.68	B101	81	70	V60X120	No Message	ENVOL	3.9	3.9	ENVOL	1.78	1.78
N+4.68	B101	81	140	V60X120	No Message	ENVOL	7.16	7.16	ENVOL	3.57	3.57
N+4.68	B112	85	0	V60X60	No Message	C6	0.03	0.03	C6	0.01	0.01
N+4.68	B112	85	87.5	V60X60	No Message	ENVOL	4.19	4.19	ENVOL	3.06	3.06
N+4.68	B112	85	175	V60X60	No Message	ENVOL	11.05	11.05	ENVOL	6.16	6.16
N+4.68	B113	104	0	V60X60	No Message	ENVOL	0	0	ENVOL	0.04	0.04
N+4.68	B113	104	87.5	V60X60	No Message	ENVOL	8.77	8.77	ENVOL	6.13	6.13
N+4.68	B113	104	175	V60X60	No Message	ENVOL	11.05	19.14	ENVOL	11.05	11.05
N+4.68	B121	199	0	V60X120	No Message	ENVOL	18.38	18.38	ENVOL	10.79	10.79
N+4.68	B121	199	347.5	V60X120	No Message	ENVOL	4.53	4.53	ENVOL	6.51	6.51
N+4.68	B121	199	695	V60X120	No Message	ENVOL	5.41	5.41	ENVOL	7.26	7.26
N+4.68	B122	169	0	V60X120	No Message	ENVOL	4.9	4.9	ENVOL	10.66	10.66
N+4.68	B122	169	280	V60X120	No Message	ENVOL	6.04	6.04	ENVOL	6.04	6.04
N+4.68	B122	169	560	V60X120	No Message	ENVOL	22.1	22.1	ENVOL	12.16	12.16
N+4.68	B129	491	0	V60X60	No Message	ENVOL	8.11	8.11	ENVOL	4.02	4.02
N+4.68	B129	491	417.5	V60X60	No Message	ENVOL	2	2	ENVOL	4.03	4.03
N+4.68	B129	491	835	V60X60	No Message	ENVOL	0.63	0.63	ENVOL	3.97	3.97
N+4.68	B130	492	0	V60X60	No Message	ENVOL	0.3	0.3	ENVOL	4.55	4.55
N+4.68	B130	492	350	V60X60	No Message	ENVOL	2.75	2.75	ENVOL	2.75	2.75

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm ²	As Top cm ²	As Bottom Combo	As,min Bottom cm ²	As Bottom cm ²
N+4.68	B130	492	700	V60X60	No Message	ENVOL	11.05	11.05	ENVOL	5.53	5.53
N+4.68	B136	76	0	V60X120	No Message	ENVOL	0.29	0.29	ENVOL	0.15	0.15
N+4.68	B136	76	70	V60X120	No Message	ENVOL	0.33	0.33	ENVOL	0.4	0.4
N+4.68	B136	76	140	V60X120	No Message	ENVOL	0.82	0.82	ENVOL	0.41	0.41
N+4.68	B137	114	0	V60X120	No Message	ENVOL	15.25	15.25	ENVOL	11.66	11.66
N+4.68	B137	114	347.5	V60X120	No Message	ENVOL	3.77	3.77	ENVOL	7.4	7.4
N+4.68	B137	114	695	V60X120	No Message	ENVOL	8.53	8.53	ENVOL	4.25	4.25
N+4.68	B138	168	0	V60X120	No Message	ENVOL	7.33	7.33	ENVOL	7.59	7.59
N+4.68	B138	168	280	V60X120	No Message	ENVOL	6.14	6.14	ENVOL	6.14	6.14
N+4.68	B138	168	560	V60X120	No Message	ENVOL	22.1	22.1	ENVOL	12.35	12.35
N+4.68	B139	78	0	V60X120	No Message	ENVOL	1.45	1.45	ENVOL	0.73	0.73
N+4.68	B139	78	70	V60X120	No Message	ENVOL	0.84	0.84	ENVOL	0.38	0.38
N+4.68	B139	78	140	V60X120	No Message	ENVOL	0.72	0.72	ENVOL	0.36	0.36
N+4.68	B146	485	0	V60X120	No Message	C6	22.1	77.59	C6	22.1	36.56
N+4.68	B146	485	867.5	V60X120	No Message	ENVOL	22.1	22.1	C2	22.1	50.91
N+4.68	B146	485	873	V60X120	No Message	ENVOL	22.1	22.1	C2	22.1	50.97
N+4.68	B146	485	873	V60X120	No Message	ENVOL	22.1	22.1	C2	22.1	50.95
N+4.68	B146	485	1735	V60X120	No Message	C6	22.1	71.65	C6	22.1	33.93
N+4.68	B148	487	0	V60X120	No Message	ENVOL	22.1	100.43	ENVOL	22.1	46.35
N+4.68	B148	487	263	V60X120	No Message	C6	22.1	23.19	ENVOL	22.1	22.41
N+4.68	B148	487	263	V60X120	No Message	C6	22.1	26.95	ENVOL	22.1	22.41
N+4.68	B148	487	666	V60X120	No Message	ENVOL	22.1	22.41	C2	22.1	52.95
N+4.68	B148	487	666	V60X120	No Message	ENVOL	22.1	22.41	C2	22.1	50.58
N+4.68	B148	487	867.5	V60X120	No Message	ENVOL	22.1	22.41	C2	22.1	60.29
N+4.68	B148	487	873	V60X120	No Message	ENVOL	22.1	22.41	C2	22.1	60.4
N+4.68	B148	487	873	V60X120	No Message	ENVOL	22.1	22.41	C2	22.1	60.35
N+4.68	B148	487	1069	V60X120	No Message	ENVOL	22.1	22.41	C2	22.1	47.69
N+4.68	B148	487	1069	V60X120	No Message	ENVOL	22.1	22.41	C2	22.1	49.26
N+4.68	B148	487	1472	V60X120	No Message	ENVOL	22.1	22.41	ENVOL	22.1	22.41
N+4.68	B148	487	1472	V60X120	No Message	ENVOL	22.1	22.41	ENVOL	22.1	22.41
N+4.68	B148	487	1735	V60X120	No Message	ENVOL	22.1	90.44	ENVOL	22.1	42.12
N+4.68	B149	82	0	V60X120	No Message	ENVOL	0.58	0.58	ENVOL	0.29	0.29
N+4.68	B149	82	70	V60X120	No Message	ENVOL	0.85	0.85	ENVOL	0.37	0.37
N+4.68	B149	82	140	V60X120	No Message	ENVOL	1.45	1.45	ENVOL	0.72	0.72
N+4.68	B151	83	0	V60X120	No Message	ENVOL	1.09	1.09	ENVOL	0.55	0.55
N+4.68	B151	83	70	V60X120	No Message	ENVOL	0.59	0.59	ENVOL	0.31	0.31
N+4.68	B151	83	140	V60X120	No Message	C6	0.45	0.45	C6	0.23	0.23
N+4.68	B155	86	0	V60X60	No Message	C6	1.39	1.39	ENVOL	0.97	0.97
N+4.68	B155	86	10	V60X60	No Message	ENVOL	5.32	5.32	ENVOL	5.32	5.32
N+4.68	B155	86	10	V60X60	No Message	ENVOL	5.32	5.32	ENVOL	5.32	5.32
N+4.68	B155	86	87.5	V60X60	No Message	ENVOL	9.23	9.23	ENVOL	5.32	5.32
N+4.68	B155	86	175	V60X60	No Message	ENVOL	11.05	16.51	ENVOL	10.75	10.75
N+4.68	B2	105	0	V15X60	No Message	ENVOL	2.78	3.03	ENVOL	1.99	1.99
N+4.68	B2	105	350	V15X60	No Message	ENVOL	0.99	0.99	ENVOL	1.92	1.92
N+4.68	B2	105	700	V15X60	No Message	ENVOL	2.78	2.78	ENVOL	1.5	1.5
N+4.68	B3	87	0	V15X60	No Message	ENVOL	2.78	3.19	ENVOL	2.09	2.09
N+4.68	B3	87	417.5	V15X60	No Message	ENVOL	1.27	1.27	ENVOL	2.78	2.78
N+4.68	B3	87	835	V15X60	No Message	ENVOL	2.78	3.92	ENVOL	2.56	2.56
N+4.68	B4	110	0	V60X120	No Message	ENVOL	2.8	2.8	ENVOL	1.4	1.4
N+4.68	B4	110	70	V60X120	No Message	ENVOL	4.31	4.31	ENVOL	2.09	2.09
N+4.68	B4	110	140	V60X120	No Message	ENVOL	8.4	8.4	ENVOL	4.18	4.18
N+4.68	B7	113	0	V60X120	No Message	ENVOL	7.85	7.85	ENVOL	3.91	3.91
N+4.68	B7	113	70	V60X120	No Message	ENVOL	3.7	3.7	ENVOL	1.95	1.95
N+4.68	B7	113	140	V60X120	No Message	ENVOL	2.11	2.11	ENVOL	1.05	1.05
N+4.68	B8	489	0	V60X120	No Message	ENVOL	22.1	117.02	ENVOL	22.1	53.13

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N+4.68	B8	489	867.5	V60X120	No Message	ENVOL	22.1	25.55	C2	22.1	82.6
N+4.68	B8	489	873	V60X120	No Message	ENVOL	22.1	25.55	C2	22.1	82.64
N+4.68	B8	489	873	V60X120	No Message	ENVOL	22.1	25.55	C2	22.1	82.71
N+4.68	B8	489	1735	V60X120	No Message	ENVOL	22.1	109.7	ENVOL	22.1	50.17
N+4.68	B72	226	0	V60X120	No Message	ENVOL	4.59	4.59	ENVOL	2.29	2.29
N+4.68	B72	226	81.5	V60X120	No Message	ENVOL	2.07	2.07	ENVOL	1.14	1.14
N+4.68	B72	226	163	V60X120	No Message	ENVOL	0	0	ENVOL	0	0
N+4.68	B73	228	0	V60X120	No Message	ENVOL	4.55	4.55	ENVOL	2.27	2.27
N+4.68	B73	228	81.5	V60X120	No Message	ENVOL	2.05	2.05	ENVOL	1.13	1.13
N+4.68	B73	228	163	V60X120	No Message	ENVOL	0	0	ENVOL	0	0
N+4.68	B40	276	15	V20X50	No Message	ENVOL	0.43	0.43	ENVOL	0.22	0.22
N+4.68	B40	276	90	V20X50	No Message	ENVOL	0.13	0.13	C2	0.18	0.18
N+4.68	B40	276	165	V20X50	No Message	ENVOL	0.51	0.51	ENVOL	0.26	0.26
N+4.68	B42	278	15	V20X50	No Message	C6	0.72	0.72	C6	0.36	0.36
N+4.68	B42	278	50	V20X50	No Message	C6	0.31	0.31	C6	0.18	0.18
N+4.68	B42	278	85	V20X50	No Message	ENVOL	0.19	0.19	ENVOL	0.1	0.1
N+4.68	B44	279	15	V20X50	No Message	ENVOL	2.3	2.3	ENVOL	1.14	1.14
N+4.68	B44	279	100	V20X50	No Message	C6	0.66	0.66	ENVOL	0.57	0.57
N+4.68	B44	279	185	V20X50	No Message	ENVOL	0.04	0.04	C6	0.03	0.03
N+4.68	B46	303	15	V20X50	No Message	ENVOL	0.49	0.49	ENVOL	0.24	0.24
N+4.68	B46	303	50	V20X50	No Message	ENVOL	0.21	0.21	ENVOL	0.12	0.12
N+4.68	B46	303	85	V20X50	No Message	ENVOL	0.2	0.2	ENVOL	0.12	0.12
N+4.68	B67	305	15	V20X50	No Message	ENVOL	0.45	0.45	ENVOL	0.22	0.22
N+4.68	B67	305	90	V20X50	No Message	ENVOL	0.11	0.11	C2	0.17	0.17
N+4.68	B67	305	165	V20X50	No Message	ENVOL	0.34	0.34	ENVOL	0.17	0.17
N+4.68	B68	307	15	V20X50	No Message	ENVOL	0.06	0.06	ENVOL	0.03	0.03
N+4.68	B68	307	50	V20X50	No Message	ENVOL	0.02	0.02	C2	0.04	0.04
N+4.68	B68	307	85	V20X50	No Message	C6	0.06	0.06	C6	0.03	0.03
N+4.68	B69	308	15	V20X50	No Message	ENVOL	3.01	4.88	ENVOL	3.01	3.01
N+4.68	B69	308	159	V20X50	No Message	ENVOL	1.57	1.57	ENVOL	1.57	1.57
N+4.68	B69	308	303	V20X50	No Message	ENVOL	0.3	0.3	C6	2.47	2.47
N+4.68	B81	281	15	V20X50	No Message	ENVOL	0.55	0.55	ENVOL	0.28	0.28
N+4.68	B81	281	90	V20X50	No Message	ENVOL	0.14	0.14	C2	0.17	0.17
N+4.68	B81	281	165	V20X50	No Message	ENVOL	0.52	0.52	ENVOL	0.26	0.26
N+4.68	B83	283	15	V20X50	No Message	ENVOL	1.03	1.03	ENVOL	0.51	0.51
N+4.68	B83	283	50	V20X50	No Message	ENVOL	0.56	0.56	ENVOL	0.26	0.26
N+4.68	B83	283	85	V20X50	No Message	ENVOL	0.62	0.62	ENVOL	0.31	0.31
N+4.68	B105	284	15	V20X50	No Message	C6	2.45	2.45	C6	1.21	1.21
N+4.68	B105	284	100	V20X50	No Message	C6	0.63	0.63	C6	0.6	0.6
N+4.68	B105	284	185	V20X50	No Message	ENVOL	0	0	C6	0.17	0.17
N+4.68	B154	286	15	V20X50	No Message	ENVOL	0.62	0.62	ENVOL	0.31	0.31
N+4.68	B154	286	90	V20X50	No Message	ENVOL	0.17	0.17	ENVOL	0.17	0.17
N+4.68	B154	286	165	V20X50	No Message	ENVOL	0.67	0.67	ENVOL	0.33	0.33
N+4.68	B157	288	15	V20X50	No Message	C6	0.75	0.75	C6	0.37	0.37
N+4.68	B157	288	50	V20X50	No Message	C6	0.43	0.43	C6	0.19	0.19
N+4.68	B157	288	85	V20X50	No Message	ENVOL	0.36	0.36	ENVOL	0.18	0.18
N+4.68	B159	290	15	V20X50	No Message	ENVOL	0.46	0.46	ENVOL	0.23	0.23
N+4.68	B159	290	90	V20X50	No Message	ENVOL	0.11	0.11	C2	0.17	0.17
N+4.68	B159	290	165	V20X50	No Message	ENVOL	0.4	0.4	ENVOL	0.2	0.2
N+4.68	B168	292	15	V20X50	No Message	ENVOL	0.09	0.09	ENVOL	0.04	0.04
N+4.68	B168	292	50	V20X50	No Message	ENVOL	0.02	0.02	C2	0.04	0.04
N+4.68	B168	292	85	V20X50	No Message	C6	0.05	0.05	C6	0.03	0.03
N+4.68	B183	293	15	V20X50	No Message	ENVOL	3.01	3.13	ENVOL	2.05	2.05
N+4.68	B183	293	159	V20X50	No Message	ENVOL	1.02	1.02	ENVOL	1.02	1.02
N+4.68	B183	293	303	V20X50	No Message	ENVOL	3.01	3.01	ENVOL	1.55	1.55

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N+4.68	B186	297	0	V20X50	No Message	ENVOL	3.01	3.6	ENVOL	2.35	2.35
N+4.68	B186	297	50	V20X50	No Message	ENVOL	3.01	3.22	ENVOL	1.17	1.17
N+4.68	B186	297	100	V20X50	No Message	ENVOL	3.01	3.12	ENVOL	2.04	2.04
N+4.68	B187	298	0	V20X50	No Message	C6	0.14	0.14	C6	0.07	0.07
N+4.68	B187	298	92.5	V20X50	No Message	ENVOL	1.06	1.06	ENVOL	0.79	0.79
N+4.68	B187	298	185	V20X50	No Message	ENVOL	3.01	3.01	ENVOL	1.59	1.59
N+4.68	B188	300	0	V20X50	No Message	ENVOL	3.01	4.82	ENVOL	3.01	3.01
N+4.68	B188	300	90	V20X50	No Message	ENVOL	3.01	4.32	ENVOL	1.55	1.55
N+4.68	B188	300	180	V20X50	No Message	ENVOL	3.01	4.73	ENVOL	3.01	3.01
N+4.68	B189	302	0	V20X50	No Message	ENVOL	2.92	2.92	ENVOL	1.44	1.44
N+4.68	B189	302	50	V20X50	No Message	ENVOL	2.4	2.4	ENVOL	0.72	0.72
N+4.68	B189	302	100	V20X50	No Message	ENVOL	2.23	2.23	ENVOL	1.11	1.11
N+4.68	B190	309	0	V20X50	No Message	ENVOL	3.01	11.62	ENVOL	3.01	5.44
N+4.68	B190	309	151.5	V20X50	No Message	ENVOL	3.01	4.35	ENVOL	3.01	3.01
N+4.68	B190	309	303	V20X50	No Message	C6	0.65	0.65	C6	0.32	0.32
N+4.68	B191	310	0	V20X50	No Message	C6	0.65	0.65	C6	0.32	0.32
N+4.68	B191	310	50	V20X50	No Message	C6	0.33	0.33	C6	0.66	0.66
N+4.68	B191	310	100	V20X50	No Message	ENVOL	0	0	C6	1.35	1.35
N+4.68	B194	319	22.5	V30X50	No Message	C6	4.52	4.52	ENVOL	3.21	3.21
N+4.68	B194	319	82.5	V30X50	No Message	C6	1.27	1.27	C6	1.27	1.27
N+4.68	B194	319	142.5	V30X50	No Message	ENVOL	3.12	3.12	ENVOL	4.52	4.52
N+4.68	B195	320	22.5	V30X50	No Message	C6	4.51	4.51	ENVOL	3.71	3.71
N+4.68	B195	320	82.5	V30X50	No Message	C6	1.25	1.25	C6	1.25	1.25
N+4.68	B195	320	142.5	V30X50	No Message	ENVOL	3.9	3.9	ENVOL	4.52	4.52
N+4.68	B196	321	22.5	V30X50	No Message	C6	4.4	4.4	ENVOL	2.37	2.37
N+4.68	B196	321	82.5	V30X50	No Message	ENVOL	1.67	1.67	C6	1.26	1.26
N+4.68	B196	321	142.5	V30X50	No Message	C6	4.52	4.52	C6	2.53	2.53
N+4.68	B197	322	22.5	V30X50	No Message	ENVOL	4.52	7.45	ENVOL	4.52	4.52
N+4.68	B197	322	93.75	V30X50	No Message	ENVOL	4.42	4.42	ENVOL	2.39	2.39
N+4.68	B197	322	165	V30X50	No Message	ENVOL	0	0	ENVOL	0.62	0.62
N+4.68	B198	323	22.5	V30X50	No Message	C6	3.84	3.84	ENVOL	2.06	2.06
N+4.68	B198	323	82.5	V30X50	No Message	C6	0.95	0.95	C6	0.95	0.95
N+4.68	B198	323	142.5	V30X50	No Message	C6	3.35	3.35	ENVOL	2.53	2.53
N+4.68	B199	324	22.5	V30X50	No Message	ENVOL	4.52	4.52	ENVOL	2.46	2.46
N+4.68	B199	324	93.75	V30X50	No Message	ENVOL	2.52	2.52	ENVOL	1.22	1.22
N+4.68	B199	324	165	V30X50	No Message	ENVOL	0.28	0.28	ENVOL	0.14	0.14
N+4.68	B200	325	0	V15X60	No Message	C6	0.09	0.09	C6	0.05	0.05
N+4.68	B200	325	82.5	V15X60	No Message	C6	0.05	0.05	ENVOL	0.07	0.07
N+4.68	B200	325	165	V15X60	No Message	C6	0.19	0.19	ENVOL	0.12	0.12
N+4.68	B201	326	0	V15X60	No Message	C6	0.14	0.14	ENVOL	0.1	0.1
N+4.68	B201	326	82.5	V15X60	No Message	C6	0.15	0.15	ENVOL	0.07	0.07
N+4.68	B201	326	165	V15X60	No Message	ENVOL	0.29	0.29	ENVOL	0.15	0.15
N+4.68	B202	327	22.5	V30X50	No Message	ENVOL	4.52	7.98	ENVOL	4.52	4.52
N+4.68	B202	327	93.75	V30X50	No Message	ENVOL	4.52	4.52	ENVOL	2.55	2.55
N+4.68	B202	327	165	V30X50	No Message	ENVOL	0.12	0.12	ENVOL	0.09	0.09
N+4.68	B204	328	22.5	V30X50	No Message	ENVOL	4.52	8.52	ENVOL	4.52	4.52
N+4.68	B204	328	93.75	V30X50	No Message	ENVOL	4.52	4.52	ENVOL	2.72	2.72
N+4.68	B204	328	165	V30X50	No Message	ENVOL	0.04	0.04	ENVOL	0.27	0.27
N+4.68	B205	329	22.5	V30X50	No Message	ENVOL	4.29	4.29	C6	4.52	4.83
N+4.68	B205	329	82.5	V30X50	No Message	C6	2.39	2.39	C6	2.39	2.39
N+4.68	B205	329	142.5	V30X50	No Message	C6	4.52	7.44	C6	4.52	4.52
N+4.68	B206	330	22.5	V30X50	No Message	ENVOL	4.52	7.19	ENVOL	4.52	4.52
N+4.68	B206	330	93.75	V30X50	No Message	ENVOL	4.06	4.06	ENVOL	2.31	2.31
N+4.68	B206	330	165	V30X50	No Message	ENVOL	0	0	ENVOL	1	1
N+4.68	B207	331	22.5	V30X50	No Message	ENVOL	4.52	4.52	C6	4.52	5.17

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N+4.68	B207	331	82.5	V30X50	No Message	C6	1.91	1.91	C6	1.91	1.91
N+4.68	B207	331	142.5	V30X50	No Message	C6	4.52	5.91	ENVOL	4.52	4.52
N+4.68	B208	332	22.5	V30X50	No Message	ENVOL	1.44	1.44	ENVOL	0.72	0.72
N+4.68	B208	332	93.75	V30X50	No Message	ENVOL	1.14	1.14	ENVOL	0.36	0.36
N+4.68	B208	332	165	V30X50	No Message	ENVOL	1.03	1.03	ENVOL	0.52	0.52
N+4.68	B209	333	22.5	V30X50	No Message	ENVOL	4.52	4.52	ENVOL	4.52	4.52
N+4.68	B209	333	82.5	V30X50	No Message	C6	1.61	1.61	C6	1.61	1.61
N+4.68	B209	333	142.5	V30X50	No Message	ENVOL	4.52	4.52	C6	4.52	4.96
N+4.68	B210	334	22.5	V30X50	No Message	ENVOL	4.52	4.52	ENVOL	4	4
N+4.68	B210	334	82.5	V30X50	No Message	C6	1.55	1.55	C6	1.55	1.55
N+4.68	B210	334	142.5	V30X50	No Message	ENVOL	4.44	4.44	C6	4.52	4.76
N+4.68	B213	335	0	V60X60	No Message	ENVOL	0.04	0.04	C6	0.23	0.23
N+4.68	B213	335	77.5	V60X60	No Message	C6	0.38	0.38	ENVOL	0.62	0.62
N+4.68	B213	335	155	V60X60	No Message	C6	1.39	1.39	ENVOL	0.99	0.99
N+4.68	B1	275	14.323	V20X50	No Message	ENVOL	3.01	6.06	ENVOL	3.01	3.01
N+4.68	B1	275	437.519	V20X50	No Message	ENVOL	2	2	C2	3.01	4.83
N+4.68	B1	275	860.715	V20X50	No Message	ENVOL	3.01	6.3	ENVOL	3.01	3.05
N+4.68	B9	277	14.808	V20X50	No Message	ENVOL	3.01	5.98	ENVOL	3.01	3.01
N+4.68	B9	277	431.388	V20X50	No Message	ENVOL	1.93	1.93	C2	3.01	4.72
N+4.68	B9	277	847.969	V20X50	No Message	ENVOL	3.01	6.07	ENVOL	3.01	3.01
N+4.68	B11	280	14.323	V20X50	No Message	ENVOL	3.01	5.99	ENVOL	3.01	3.01
N+4.68	B11	280	437.519	V20X50	No Message	ENVOL	2.03	2.03	C2	3.01	4.82
N+4.68	B11	280	860.715	V20X50	No Message	ENVOL	3.01	6.39	ENVOL	3.01	3.09
N+4.68	B13	282	14.808	V20X50	No Message	ENVOL	3.01	5.91	ENVOL	3.01	3.01
N+4.68	B13	282	431.388	V20X50	No Message	ENVOL	1.93	1.93	C2	3.01	4.74
N+4.68	B13	282	847.969	V20X50	No Message	ENVOL	3.01	6.05	ENVOL	3.01	3.01
N+4.68	B15	285	14.808	V20X50	No Message	ENVOL	3.01	6.09	ENVOL	3.01	3.01
N+4.68	B15	285	431.388	V20X50	No Message	ENVOL	1.94	1.94	C2	3.01	4.74
N+4.68	B15	285	847.969	V20X50	No Message	ENVOL	3.01	5.87	ENVOL	3.01	3.01
N+4.68	B17	287	14.81	V20X50	No Message	ENVOL	3.01	6.37	ENVOL	3.01	3.08
N+4.68	B17	287	433.88	V20X50	No Message	ENVOL	2.02	2.02	C2	3.01	4.79
N+4.68	B17	287	852.951	V20X50	No Message	ENVOL	3.01	5.8	ENVOL	3.01	3.01
N+4.68	B70	289	14.81	V20X50	No Message	ENVOL	3.01	5.83	ENVOL	3.01	3.01
N+4.68	B70	289	433.88	V20X50	No Message	ENVOL	2.01	2.01	C2	3.01	4.79
N+4.68	B70	289	852.951	V20X50	No Message	ENVOL	3.01	6.35	ENVOL	3.01	3.07
N+4.68	B76	291	14.808	V20X50	No Message	ENVOL	3.01	5.84	ENVOL	3.01	3.01
N+4.68	B76	291	431.388	V20X50	No Message	ENVOL	1.96	1.96	C2	3.01	4.72
N+4.68	B76	291	847.969	V20X50	No Message	ENVOL	3.01	6.18	ENVOL	3.01	3.01
N+4.68	B77	299	0	V20X50	No Message	ENVOL	3.01	5.33	ENVOL	3.01	3.01
N+4.68	B77	299	431.388	V20X50	No Message	ENVOL	1.92	1.92	C2	3.01	5.56
N+4.68	B77	299	862.777	V20X50	No Message	ENVOL	3.01	6.03	ENVOL	3.01	3.01
N+4.68	B91	301	0	V20X50	No Message	ENVOL	3.01	6.4	ENVOL	3.01	3.09
N+4.68	B91	301	433.88	V20X50	No Message	ENVOL	2.03	2.03	C2	3.01	5.84
N+4.68	B91	301	867.761	V20X50	No Message	ENVOL	3.01	4.48	ENVOL	2.92	2.92
N+4.68	B106	304	14.81	V20X50	No Message	ENVOL	3.01	6.08	ENVOL	3.01	3.01
N+4.68	B106	304	433.88	V20X50	No Message	ENVOL	1.94	1.94	C2	3.01	4.78
N+4.68	B106	304	852.951	V20X50	No Message	ENVOL	3.01	6.11	ENVOL	3.01	3.01
N+4.68	B114	306	14.808	V20X50	No Message	ENVOL	3.01	6	ENVOL	3.01	3.01
N+4.68	B114	306	431.388	V20X50	No Message	ENVOL	1.95	1.95	C2	3.01	4.7
N+4.68	B114	306	847.969	V20X50	No Message	ENVOL	3.01	6.13	ENVOL	3.01	3.01
N+4.68	B307	493	0	V60X60	No Message	ENVOL	11.05	12.06	ENVOL	7.91	7.91
N+4.68	B307	493	81.5	V60X60	No Message	ENVOL	7.68	7.68	ENVOL	3.92	3.92
N+4.68	B307	493	163	V60X60	No Message	ENVOL	0	0	ENVOL	0	0
N-0.10	B74	16	40	V60X60	No Message	ENVOL	11.05	34.44	ENVOL	11.05	16.35
N-0.10	B74	16	501	V60X60	No Message	ENVOL	10.65	10.65	C2	11.05	28.26

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N-0.10	B74	16	962	V60X60	No Message	ENVOL	11.05	24.51	ENVOL	11.05	11.82
N-0.10	B75	17	40	V60X60	No Message	ENVOL	11.05	29.06	ENVOL	11.05	13.92
N-0.10	B75	17	506.5	V60X60	No Message	ENVOL	10.03	10.03	C2	11.05	28.71
N-0.10	B75	17	973	V60X60	No Message	ENVOL	11.05	32.27	ENVOL	11.05	15.37
N-0.10	B78	18	40	V60X60	No Message	ENVOL	11.05	60.95	ENVOL	11.05	27.72
N-0.10	B78	18	506.5	V60X60	No Message	ENVOL	11.05	15.3	C2	11.05	62.44
N-0.10	B78	18	973	V60X60	No Message	ENVOL	11.05	69.04	ENVOL	11.05	32.09
N-0.10	B80	19	40	V60X60	No Message	ENVOL	11.05	70.13	ENVOL	11.05	32.7
N-0.10	B80	19	501	V60X60	No Message	ENVOL	11.05	15.57	C2	11.05	61.39
N-0.10	B80	19	962	V60X60	No Message	ENVOL	11.05	54.76	ENVOL	11.05	25.05
N-0.10	B89	20	40	V60X60	No Message	ENVOL	11.05	50.99	ENVOL	11.05	23.5
N-0.10	B89	20	501	V60X60	No Message	ENVOL	11.05	11.36	C2	11.05	42.77
N-0.10	B89	20	962	V60X60	No Message	ENVOL	11.05	38.04	ENVOL	11.05	17.95
N-0.10	B90	21	40	V60X60	No Message	ENVOL	11.05	42.84	ENVOL	11.05	20.04
N-0.10	B90	21	506.5	V60X60	No Message	ENVOL	11.05	11.11	C2	11.05	43.6
N-0.10	B90	21	973	V60X60	No Message	ENVOL	11.05	49.72	ENVOL	11.05	22.96
N-0.10	B92	22	0	V60X60	No Message	ENVOL	1.7	1.7	ENVOL	0.85	0.85
N-0.10	B92	22	70	V60X60	No Message	ENVOL	0.42	0.42	C2	0.86	0.86
N-0.10	B92	22	140	V60X60	No Message	ENVOL	1.25	1.25	ENVOL	0.63	0.63
N-0.10	B93	23	40	V60X60	No Message	ENVOL	11.05	30.28	ENVOL	11.05	14.48
N-0.10	B93	23	451	V60X60	No Message	ENVOL	11.05	11.05	C2	11.05	28.25
N-0.10	B93	23	862	V60X60	No Message	ENVOL	11.05	39.72	ENVOL	11.05	18.68
N-0.10	B94	24	0	V60X60	No Message	ENVOL	11.05	44.26	ENVOL	11.05	20.65
N-0.10	B94	24	416.5	V60X60	No Message	ENVOL	11.05	11.05	C2	11.05	28.78
N-0.10	B94	24	833	V60X60	No Message	ENVOL	11.05	28.96	ENVOL	11.05	13.87
N-0.10	B95	25	0	V60X60	No Message	ENVOL	1.52	1.52	ENVOL	0.76	0.76
N-0.10	B95	25	70	V60X60	No Message	ENVOL	0.41	0.41	C2	0.78	0.78
N-0.10	B95	25	140	V60X60	No Message	ENVOL	1.66	1.66	ENVOL	0.83	0.83
N-0.10	B96	26	0	V60X60	No Message	ENVOL	1.68	1.68	ENVOL	0.84	0.84
N-0.10	B96	26	140	V60X60	No Message	ENVOL	11.05	11.05	ENVOL	11.05	11.05
N-0.10	B96	26	140	V60X60	No Message	ENVOL	11.05	54.89	ENVOL	11.05	11.05
N-0.10	B96	26	486.5	V60X60	No Message	ENVOL	11.05	11.05	C2	11.05	24.01
N-0.10	B96	26	973	V60X60	No Message	ENVOL	11.05	35.88	ENVOL	11.05	16.99
N-0.10	B97	27	40	V60X60	No Message	ENVOL	11.05	36.68	ENVOL	11.05	17.34
N-0.10	B97	27	521	V60X60	No Message	ENVOL	11.05	11.05	C2	11.05	32.38
N-0.10	B97	27	862	V60X60	No Message	ENVOL	11.05	49.91	ENVOL	11.05	11.05
N-0.10	B97	27	862	V60X60	No Message	ENVOL	11.05	11.05	C2	11.05	12.65
N-0.10	B97	27	1002	V60X60	No Message	ENVOL	1.58	1.58	ENVOL	0.79	0.79
N-0.10	B98	28	0	V60X60	No Message	ENVOL	2.16	2.16	ENVOL	1.08	1.08
N-0.10	B98	28	70	V60X60	No Message	ENVOL	0.54	0.54	C2	1.14	1.14
N-0.10	B98	28	140	V60X60	No Message	ENVOL	1.7	1.7	ENVOL	0.85	0.85
N-0.10	B99	29	40	V60X60	No Message	ENVOL	11.05	39.79	ENVOL	11.05	18.71
N-0.10	B99	29	451	V60X60	No Message	ENVOL	11.05	12.16	C2	11.05	38.24
N-0.10	B99	29	862	V60X60	No Message	ENVOL	11.05	55.18	ENVOL	11.05	25.22
N-0.10	B100	30	0	V60X60	No Message	ENVOL	11.05	59.82	ENVOL	11.05	27.12
N-0.10	B100	30	416.5	V60X60	No Message	ENVOL	11.05	13.03	C2	11.05	39.1
N-0.10	B100	30	833	V60X60	No Message	ENVOL	11.05	39.3	ENVOL	11.05	18.5
N-0.10	B101	31	0	V60X60	No Message	ENVOL	1.8	1.8	ENVOL	0.9	0.9
N-0.10	B101	31	70	V60X60	No Message	ENVOL	0.55	0.55	C2	1.09	1.09
N-0.10	B101	31	140	V60X60	No Message	ENVOL	2.21	2.21	ENVOL	1.1	1.1
N-0.10	B102	32	40	V60X60	No Message	ENVOL	11.05	39.35	ENVOL	11.05	18.52
N-0.10	B102	32	506.5	V60X60	No Message	ENVOL	11.05	11.05	C2	11.05	41.56
N-0.10	B102	32	973	V60X60	No Message	ENVOL	11.05	48.3	ENVOL	11.05	22.37
N-0.10	B103	33	40	V60X60	No Message	ENVOL	11.05	48.06	ENVOL	11.05	22.27
N-0.10	B103	33	501	V60X60	No Message	ENVOL	11.05	11.05	C2	11.05	40.74

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm ²	As Top cm ²	As Bottom Combo	As,min Bottom cm ²	As Bottom cm ²
N-0.10	B103	33	962	V60X60	No Message	ENVOL	11.05	36.56	ENVOL	11.05	17.29
N-0.10	B104	34	0	V30X60	No Message	ENVOL	0	0	ENVOL	0	0
N-0.10	B104	34	238.5	V30X60	No Message	ENVOL	5.52	5.52	ENVOL	3.24	3.24
N-0.10	B104	34	477	V30X60	No Message	ENVOL	5.52	10.13	ENVOL	5.52	5.52
N-0.10	B107	35	0	V30X60	No Message	ENVOL	2.81	2.81	ENVOL	1.4	1.4
N-0.10	B107	35	199	V30X60	No Message	ENVOL	0.73	0.73	ENVOL	0.7	0.7
N-0.10	B107	35	398	V30X60	No Message	ENVOL	0	0	ENVOL	0	0
N-0.10	B108	36	0	V30X60	No Message	C6	3.54	3.54	C6	1.76	1.76
N-0.10	B108	36	490	V30X60	No Message	C6	0.88	0.88	ENVOL	1.9	1.9
N-0.10	B108	36	980	V30X60	No Message	ENVOL	2.3	2.3	ENVOL	1.15	1.15
N-0.10	B109	37	0	V30X60	No Message	C6	2.28	2.28	C6	1.14	1.14
N-0.10	B109	37	350	V30X60	No Message	C6	0.66	0.66	C6	0.66	0.66
N-0.10	B109	37	700	V30X60	No Message	C6	2.64	2.64	C6	1.31	1.31
N-0.10	B110	38	0	V30X60	No Message	ENVOL	4.74	4.74	ENVOL	2.35	2.35
N-0.10	B110	38	358	V30X60	No Message	ENVOL	1.17	1.17	C2	4.23	4.23
N-0.10	B110	38	358	V30X60	No Message	ENVOL	1.17	1.17	C2	4.23	4.23
N-0.10	B110	38	417.5	V30X60	No Message	ENVOL	1.17	1.17	C2	4.12	4.12
N-0.10	B110	38	835	V30X60	No Message	ENVOL	0	0	ENVOL	0	0
N-0.10	B111	39	0	V60X60	No Message	ENVOL	0.48	0.48	ENVOL	0.24	0.24
N-0.10	B111	39	67.5	V60X60	No Message	ENVOL	4.51	4.51	ENVOL	3.05	3.05
N-0.10	B111	39	135	V60X60	No Message	ENVOL	11.05	11.05	ENVOL	6.14	6.14
N-0.10	B112	40	0	V60X60	No Message	ENVOL	0	0	C6	0.22	0.22
N-0.10	B112	40	87.5	V60X60	No Message	ENVOL	5.79	5.79	ENVOL	4.82	4.82
N-0.10	B112	40	175	V60X60	No Message	ENVOL	11.05	14.91	ENVOL	9.73	9.73
N-0.10	B113	41	0	V60X60	No Message	C6	0.08	0.08	C6	0.04	0.04
N-0.10	B113	41	87.5	V60X60	No Message	ENVOL	7.29	7.29	ENVOL	5.35	5.35
N-0.10	B113	41	175	V60X60	No Message	ENVOL	11.05	16.62	ENVOL	10.82	10.82
N-0.10	B117	44	25	V40X60	No Message	C6	4.78	4.78	C6	2.37	2.37
N-0.10	B117	44	100	V40X60	No Message	ENVOL	1.19	1.19	ENVOL	1.19	1.19
N-0.10	B117	44	100	V40X60	No Message	ENVOL	1.19	1.19	ENVOL	1.19	1.19
N-0.10	B117	44	482.5	V40X60	No Message	ENVOL	1.19	1.19	C2	2.53	2.53
N-0.10	B117	44	940	V40X60	No Message	ENVOL	4.82	4.82	ENVOL	2.39	2.39
N-0.10	B118	45	25	V40X60	No Message	C6	6.21	6.21	C6	3.08	3.08
N-0.10	B118	45	180	V40X60	No Message	C6	1.53	1.53	C2	1.93	1.93
N-0.10	B118	45	180	V40X60	No Message	C6	1.53	1.53	C6	1.53	1.53
N-0.10	B118	45	520	V40X60	No Message	C6	1.53	1.53	C2	3.17	3.17
N-0.10	B118	45	1015	V40X60	No Message	ENVOL	4.5	4.5	ENVOL	2.23	2.23
N-0.10	B119	46	25	V40X60	No Message	C6	3.01	3.01	C6	1.5	1.5
N-0.10	B119	46	100	V40X60	No Message	ENVOL	0.87	0.87	ENVOL	0.87	0.87
N-0.10	B119	46	100	V40X60	No Message	ENVOL	0.9	0.9	ENVOL	1.11	1.11
N-0.10	B119	46	214	V40X60	No Message	ENVOL	0.87	0.87	ENVOL	0.87	0.87
N-0.10	B119	46	403	V40X60	No Message	ENVOL	3.52	3.52	ENVOL	2.36	2.36
N-0.10	B120	47	0	V40X60	No Message	C6	0.12	0.12	C6	0.06	0.06
N-0.10	B120	47	70	V40X60	No Message	C6	0.07	0.07	ENVOL	0.1	0.1
N-0.10	B120	47	140	V40X60	No Message	C6	0.27	0.27	C6	0.14	0.14
N-0.10	B121	48	0	V40X60	No Message	ENVOL	6.86	6.86	ENVOL	3.39	3.39
N-0.10	B121	48	347.5	V40X60	No Message	ENVOL	1.69	1.69	ENVOL	2.51	2.51
N-0.10	B121	48	695	V40X60	No Message	ENVOL	5.2	5.2	ENVOL	2.58	2.58
N-0.10	B122	49	0	V40X60	No Message	C6	4.08	4.08	C6	2.03	2.03
N-0.10	B122	49	280	V40X60	No Message	C6	1.89	1.89	C6	1.89	1.89
N-0.10	B122	49	560	V40X60	No Message	ENVOL	7.37	7.37	C6	3.8	3.8
N-0.10	B123	50	0	V40X60	No Message	ENVOL	0.24	0.24	ENVOL	0.12	0.12
N-0.10	B123	50	70	V40X60	No Message	ENVOL	0.06	0.06	ENVOL	0.08	0.08
N-0.10	B123	50	140	V40X60	No Message	ENVOL	0.19	0.19	ENVOL	0.09	0.09
N-0.10	B124	51	0	V40X60	No Message	C6	4.65	4.65	C6	2.31	2.31

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N-0.10	B124	51	477.5	V40X60	No Message	C6	1.15	1.15	ENVOL	2.35	2.35
N-0.10	B124	51	955	V40X60	No Message	C6	3.65	3.65	C6	1.81	1.81
N-0.10	B125	52	25	V40X60	No Message	C6	1.59	1.59	C6	0.8	0.8
N-0.10	B125	52	211.5	V40X60	No Message	C6	0.42	0.42	C6	0.42	0.42
N-0.10	B125	52	398	V40X60	No Message	C6	1.67	1.67	C6	0.84	0.84
N-0.10	B126	53	25	V40X60	No Message	C6	2.59	2.59	C6	1.29	1.29
N-0.10	B126	53	482.5	V40X60	No Message	ENVOL	0.98	0.98	ENVOL	2.22	2.22
N-0.10	B126	53	940	V40X60	No Message	ENVOL	3.94	3.94	ENVOL	1.96	1.96
N-0.10	B127	54	25	V40X60	No Message	ENVOL	4.11	4.11	ENVOL	2.04	2.04
N-0.10	B127	54	520	V40X60	No Message	ENVOL	1.02	1.02	ENVOL	2.54	2.54
N-0.10	B127	54	1015	V40X60	No Message	ENVOL	3.63	3.63	ENVOL	1.8	1.8
N-0.10	B128	55	25	V40X60	No Message	C6	1.47	1.47	C6	0.73	0.73
N-0.10	B128	55	201.5	V40X60	No Message	ENVOL	0.39	0.39	ENVOL	0.39	0.39
N-0.10	B128	55	378	V40X60	No Message	ENVOL	1.56	1.56	ENVOL	0.78	0.78
N-0.10	B129	56	25	V40X60	No Message	ENVOL	2.17	2.17	ENVOL	1.08	1.08
N-0.10	B129	56	417.5	V40X60	No Message	ENVOL	0.64	0.64	ENVOL	1.68	1.68
N-0.10	B129	56	810	V40X60	No Message	ENVOL	2.59	2.59	ENVOL	1.29	1.29
N-0.10	B130	57	25	V40X60	No Message	ENVOL	1.84	1.84	ENVOL	0.92	0.92
N-0.10	B130	57	350	V40X60	No Message	ENVOL	0.59	0.59	ENVOL	0.85	0.85
N-0.10	B130	57	675	V40X60	No Message	ENVOL	2.38	2.38	ENVOL	1.19	1.19
N-0.10	B131	58	25	V40X60	No Message	ENVOL	3.38	3.38	ENVOL	1.68	1.68
N-0.10	B131	58	490	V40X60	No Message	ENVOL	0.84	0.84	ENVOL	2.35	2.35
N-0.10	B131	58	955	V40X60	No Message	ENVOL	3.21	3.21	ENVOL	1.6	1.6
N-0.10	B132	59	25	V40X60	No Message	ENVOL	1.15	1.15	ENVOL	0.57	0.57
N-0.10	B132	59	211.5	V40X60	No Message	C6	0.4	0.4	C6	0.4	0.4
N-0.10	B132	59	398	V40X60	No Message	C6	1.59	1.59	C6	0.79	0.79
N-0.10	B133	60	25	V40X60	No Message	ENVOL	3.38	3.38	ENVOL	1.68	1.68
N-0.10	B133	60	482.5	V40X60	No Message	ENVOL	0.86	0.86	ENVOL	2.04	2.04
N-0.10	B133	60	940	V40X60	No Message	ENVOL	3.47	3.47	ENVOL	1.73	1.73
N-0.10	B134	61	25	V40X60	No Message	ENVOL	4.07	4.07	ENVOL	2.02	2.02
N-0.10	B134	61	520	V40X60	No Message	ENVOL	1.01	1.01	ENVOL	2.35	2.35
N-0.10	B134	61	1015	V40X60	No Message	ENVOL	4.04	4.04	ENVOL	2.01	2.01
N-0.10	B135	62	25	V40X60	No Message	ENVOL	1.26	1.26	ENVOL	0.63	0.63
N-0.10	B135	62	214	V40X60	No Message	ENVOL	0.36	0.36	ENVOL	0.62	0.62
N-0.10	B135	62	403	V40X60	No Message	ENVOL	1.43	1.43	ENVOL	0.96	0.96
N-0.10	B136	63	0	V40X60	No Message	C6	0.23	0.23	C6	0.11	0.11
N-0.10	B136	63	70	V40X60	No Message	ENVOL	0.09	0.09	ENVOL	0.09	0.09
N-0.10	B136	63	140	V40X60	No Message	ENVOL	0.35	0.35	ENVOL	0.18	0.18
N-0.10	B137	64	0	V40X60	No Message	ENVOL	5.09	5.09	ENVOL	2.53	2.53
N-0.10	B137	64	347.5	V40X60	No Message	ENVOL	1.26	1.26	ENVOL	2.42	2.42
N-0.10	B137	64	695	V40X60	No Message	ENVOL	4.66	4.66	ENVOL	2.31	2.31
N-0.10	B138	65	0	V40X60	No Message	ENVOL	2.9	2.9	ENVOL	1.44	1.44
N-0.10	B138	65	280	V40X60	No Message	ENVOL	1.01	1.01	ENVOL	1.47	1.47
N-0.10	B138	65	560	V40X60	No Message	ENVOL	4.1	4.1	ENVOL	2.04	2.04
N-0.10	B139	66	0	V40X60	No Message	ENVOL	0.38	0.38	ENVOL	0.19	0.19
N-0.10	B139	66	70	V40X60	No Message	ENVOL	0.09	0.09	ENVOL	0.09	0.09
N-0.10	B139	66	140	V40X60	No Message	ENVOL	0.17	0.17	ENVOL	0.08	0.08
N-0.10	B140	67	0	V40X60	No Message	ENVOL	3.99	3.99	ENVOL	1.98	1.98
N-0.10	B140	67	477.5	V40X60	No Message	ENVOL	0.99	0.99	ENVOL	2.15	2.15
N-0.10	B140	67	955	V40X60	No Message	ENVOL	3.64	3.64	ENVOL	1.81	1.81
N-0.10	B141	68	25	V40X60	No Message	ENVOL	0.58	0.58	ENVOL	0.29	0.29
N-0.10	B141	68	211.5	V40X60	No Message	ENVOL	0.16	0.16	ENVOL	0.31	0.31
N-0.10	B141	68	398	V40X60	No Message	ENVOL	0.66	0.66	ENVOL	0.33	0.33
N-0.10	B142	69	0	V40X60	No Message	ENVOL	7.37	17.68	ENVOL	7.37	8.5
N-0.10	B142	69	501	V40X60	No Message	ENVOL	5.57	5.57	C2	7.37	12.82

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm²	As Top cm²	As Bottom Combo	As,min Bottom cm²	As Bottom cm²
N-0.10	B142	69	1002	V40X60	No Message	ENVOL	7.37	17.02	ENVOL	7.37	8.2
N-0.10	B143	70	0	V40X60	No Message	ENVOL	7.37	17.71	ENVOL	7.37	8.52
N-0.10	B143	70	506.5	V40X60	No Message	ENVOL	5.64	5.64	C2	7.37	13.1
N-0.10	B143	70	1013	V40X60	No Message	ENVOL	7.37	17.9	ENVOL	7.37	8.61
N-0.10	B144	71	0	V40X60	No Message	ENVOL	0.47	0.47	ENVOL	0.24	0.24
N-0.10	B144	71	87.5	V40X60	No Message	ENVOL	0.34	0.34	ENVOL	0.34	0.34
N-0.10	B144	71	175	V40X60	No Message	ENVOL	1.38	1.38	ENVOL	0.69	0.69
N-0.10	B145	72	0	V30X60	No Message	ENVOL	0	0	ENVOL	0	0
N-0.10	B145	72	65	V30X60	No Message	ENVOL	0	0	ENVOL	0.61	0.61
N-0.10	B145	72	130	V30X60	No Message	ENVOL	0	0	ENVOL	0	0
N-0.10	B19	42	15	V30X60	No Message	ENVOL	0.03	0.03	ENVOL	0.01	0.01
N-0.10	B19	42	100	V30X60	No Message	C6	0.87	0.87	C6	0.87	0.87
N-0.10	B19	42	100	V30X60	No Message	C6	3.14	3.14	C6	0.87	0.87
N-0.10	B19	42	482.5	V30X60	No Message	C6	0.87	0.87	C6	1.32	1.32
N-0.10	B19	42	950	V30X60	No Message	C6	3.53	3.53	C6	1.75	1.75
N-0.10	B26	43	15	V30X60	No Message	ENVOL	0.12	0.12	C6	0.07	0.07
N-0.10	B26	43	180	V30X60	No Message	C6	0.91	0.91	C6	0.91	0.91
N-0.10	B26	43	180	V30X60	No Message	C6	3.1	3.1	C6	0.91	0.91
N-0.10	B26	43	520	V30X60	No Message	C6	0.91	0.91	ENVOL	1.22	1.22
N-0.10	B26	43	1025	V30X60	No Message	C6	3.68	3.68	C6	1.83	1.83
N-0.10	B28	247	15	V30X60	No Message	C6	0.05	0.05	C6	0.02	0.02
N-0.10	B28	247	100	V30X60	No Message	C6	0.67	0.67	C6	0.67	0.67
N-0.10	B28	247	100	V30X60	No Message	C6	5.52	8.56	C6	0.67	0.67
N-0.10	B28	247	209	V30X60	No Message	ENVOL	5.52	5.75	C6	0.67	0.67
N-0.10	B28	247	403	V30X60	No Message	C6	2.69	2.69	C6	1.34	1.34
N-0.10	B168	384	15	V20X50	No Message	ENVOL	0.01	0.01	ENVOL	0.004734	0.004734
N-0.10	B168	384	50	V20X50	No Message	C6	0.00251	0.00251	C6	0.01	0.01
N-0.10	B168	384	85	V20X50	No Message	C6	0.01	0.01	C6	0.01	0.01
N-0.10	B183	385	15	V20X50	No Message	ENVOL	2.27	2.27	ENVOL	1.13	1.13
N-0.10	B183	385	159	V20X50	No Message	ENVOL	1.43	1.43	ENVOL	0.63	0.63
N-0.10	B183	385	303	V20X50	No Message	ENVOL	2.54	2.54	ENVOL	1.26	1.26
N-0.10	B212	379	0	V60X60	No Message	C6	4.42	4.42	C6	2.2	2.2
N-0.10	B212	379	82.5	V60X60	No Message	ENVOL	11.05	11.05	ENVOL	6.71	6.71
N-0.10	B212	379	165	V60X60	No Message	ENVOL	11.05	21.03	ENVOL	11.05	11.05
N-0.10	B213	377	0	V60X60	No Message	ENVOL	0	0	ENVOL	1.19	1.19
N-0.10	B213	377	25	V60X60	No Message	C6	0.99	0.99	ENVOL	1.71	1.71
N-0.10	B213	377	25	V60X60	No Message	C6	0.99	0.99	ENVOL	1.71	1.71
N-0.10	B213	377	77.5	V60X60	No Message	C6	0.99	0.99	C6	0.99	0.99
N-0.10	B213	377	155	V60X60	No Message	C6	4	4	C6	1.99	1.99
N-0.10	B218	248	22.5	V30X50	No Message	C6	2.67	2.67	C6	1.32	1.32
N-0.10	B218	248	82.5	V30X50	No Message	C6	0.66	0.66	C6	0.66	0.66
N-0.10	B218	248	142.5	V30X50	No Message	ENVOL	0.62	0.62	C6	2.24	2.24
N-0.10	B219	296	22.5	V30X50	No Message	C6	1.67	1.67	C6	0.83	0.83
N-0.10	B219	296	93.75	V30X50	No Message	ENVOL	1.39	1.39	C6	0.77	0.77
N-0.10	B219	296	165	V30X50	No Message	C6	3.13	3.13	C6	1.55	1.55
N-0.10	B220	375	22.5	V60X60	No Message	C6	2.76	2.76	ENVOL	1.88	1.88
N-0.10	B220	375	82.5	V60X60	No Message	ENVOL	0.82	0.82	C6	3.26	3.26
N-0.10	B220	375	142.5	V60X60	No Message	ENVOL	0	0	ENVOL	3.32	3.32
N-0.10	B221	376	22.5	V60X60	No Message	C6	3.74	3.74	ENVOL	2.2	2.2
N-0.10	B221	376	73.75	V60X60	No Message	ENVOL	8.54	8.54	C6	4.52	4.52
N-0.10	B221	376	125	V60X60	No Message	C6	11.05	13.97	C6	9.13	9.13
N-0.10	B223	383	15	V20X50	No Message	ENVOL	1.59	1.59	ENVOL	0.79	0.79
N-0.10	B223	383	430	V20X50	No Message	ENVOL	0.54	0.54	ENVOL	0.82	0.82
N-0.10	B223	383	845	V20X50	No Message	ENVOL	2.17	2.17	ENVOL	1.08	1.08
N-0.10	B224	249	22.5	V30X50	No Message	C6	3.23	3.23	C6	1.6	1.6

Story	Label	Unique Name	Station cm	Design Section	Status	As Top Combo	As,min Top cm ²	As Top cm ²	As Bottom Combo	As,min Bottom cm ²	As Bottom cm ²
N-0.10	B224	249	82.5	V30X50	No Message	C6	0.8	0.8	C6	0.8	0.8
N-0.10	B224	249	142.5	V30X50	No Message	C6	1.66	1.66	ENVOL	1.41	1.41
N-0.10	B225	295	22.5	V30X50	No Message	ENVOL	4.52	4.52	C6	2.61	2.61
N-0.10	B225	295	93.75	V30X50	No Message	C6	1.6	1.6	C6	1.3	1.3
N-0.10	B225	295	165	V30X50	No Message	ENVOL	1.79	1.79	ENVOL	0.89	0.89
N-0.10	B226	373	22.5	V60X60	No Message	C6	3.58	3.58	ENVOL	2.17	2.17
N-0.10	B226	373	82.5	V60X60	No Message	C6	1.09	1.09	C6	4	4
N-0.10	B226	373	142.5	V60X60	No Message	ENVOL	0	0	C6	4.37	4.37
N-0.10	B227	374	22.5	V60X60	No Message	C6	5.44	5.44	ENVOL	4.69	4.69
N-0.10	B227	374	73.75	V60X60	No Message	ENVOL	11.05	11.05	C6	6.29	6.29
N-0.10	B227	374	125	V60X60	No Message	C6	11.05	19.68	ENVOL	11.05	11.05
N-0.10	B228	250	22.5	V30X50	No Message	C6	3.73	3.73	ENVOL	3.02	3.02
N-0.10	B228	250	82.5	V30X50	No Message	C6	0.92	0.92	C6	1.33	1.33
N-0.10	B228	250	142.5	V30X50	No Message	ENVOL	2.21	2.21	C6	2.28	2.28
N-0.10	B229	294	22.5	V30X50	No Message	C6	4.05	4.05	C6	2.01	2.01
N-0.10	B229	294	93.75	V30X50	No Message	C6	1	1	C6	1	1
N-0.10	B229	294	165	V30X50	No Message	C6	2.6	2.6	C6	1.29	1.29
N-0.10	B230	371	22.5	V60X60	No Message	C6	5.28	5.28	ENVOL	4.62	4.62
N-0.10	B230	371	82.5	V60X60	No Message	ENVOL	1.6	1.6	C6	3.94	3.94
N-0.10	B230	371	142.5	V60X60	No Message	ENVOL	0	0	ENVOL	3.49	3.49
N-0.10	B231	372	22.5	V60X60	No Message	ENVOL	3.83	3.83	C6	5.99	5.99
N-0.10	B231	372	73.75	V60X60	No Message	C6	4.84	4.84	C6	3.82	3.82
N-0.10	B231	372	125	V60X60	No Message	C6	11.05	11.73	C6	7.69	7.69
N-0.10	B235	380	15	V20X50	No Message	C6	0.02	0.02	C6	0.01	0.01
N-0.10	B235	380	50	V20X50	No Message	C6	0.01	0.01	C6	0.01	0.01
N-0.10	B235	380	85	V20X50	No Message	C6	0.03	0.03	C6	0.01	0.01
N-0.10	B236	381	15	V20X50	No Message	C6	1.57	1.57	C6	0.78	0.78
N-0.10	B236	381	432.5	V20X50	No Message	C6	0.53	0.53	ENVOL	0.84	0.84
N-0.10	B236	381	850	V20X50	No Message	C6	2.15	2.15	C6	1.06	1.06
N-0.10	B237	382	15	V20X50	No Message	C6	0.08	0.08	C6	0.04	0.04
N-0.10	B237	382	90	V20X50	No Message	C6	0.02	0.02	ENVOL	0.05	0.05
N-0.10	B237	382	165	V20X50	No Message	ENVOL	0.05	0.05	C6	0.04	0.04
N-0.10	B243	378	0	V60X60	No Message	C6	3.86	3.86	C6	1.92	1.92
N-0.10	B243	378	5	V60X60	No Message	C6	4.26	4.26	C6	1.16	1.16
N-0.10	B243	378	10	V60X60	No Message	C6	4.68	4.68	C6	2.33	2.33

Concrete Beam Summary - ACI 318-08 (Part 2 of 2)

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	At Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+8.30	B92	90	0	4.63	VNV8	0.1289	VNV16	0	VNV16	0	No Message
N+8.30	B92	90	70	2.31	VNV8	0.122	VNV16	0	VNV16	0	No Message
N+8.30	B92	90	140	1.09	VNV8	0.1289	VNV16	0	VNV16	0	No Message
N+8.30	B95	88	0	3.89	VNV1	0	VNV16	0	VNV16	0	No Message
N+8.30	B95	88	70	13.24	VNV1	0.5056	VNV16	0	VNV16	0	No Message
N+8.30	B95	88	140	22.1	VNV1	0	VNV16	0	VNV16	0	No Message
N+8.30	B121	202	0	7.64	VNV16	0.0803	VNV16	0	VNV16	0	No Message
N+8.30	B121	202	100	6.63	VNV16	0.0743	VNV16	0	VNV16	0	No Message
N+8.30	B121	202	100	6.63	VNV16	0.0661	VNV16	0	VNV16	0	No Message
N+8.30	B121	202	347.5	4.11	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B121	202	465	6.2	VNV16	0.0544	VNV16	0	VNV16	0	No Message
N+8.30	B121	202	465	6.2	VNV16	0.0624	VNV16	0	VNV16	0	No Message
N+8.30	B121	202	695	8.28	VNV16	0.0763	VNV16	0	VNV16	0	No Message
N+8.30	B136	91	0	0.09	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B136	91	70	0.14	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B136	91	140	0.28	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B137	200	0	7.84	VNV16	0.0829	VNV16	0	VNV16	0	No Message
N+8.30	B137	200	100	7.46	VNV16	0.0769	VNV16	0	VNV16	0	No Message
N+8.30	B137	200	100	7.46	VNV16	0.0687	VNV16	0	VNV16	0	No Message
N+8.30	B137	200	347.5	4.42	VNV16	0.0506	VNV16	0	VNV16	0	No Message
N+8.30	B137	200	465	5.55	VNV16	0.057	VNV16	0	VNV16	0	No Message
N+8.30	B137	200	465	5.55	VNV16	0.065	VNV16	0	VNV16	0	No Message
N+8.30	B137	200	695	8.91	VNV16	0.0789	VNV16	0	VNV16	0	No Message
N+8.30	B146	89	0	25.84	VNV8	0.08	VNV16	29.88	VNV8	0.0307	No Message
N+8.30	B146	89	263	17.23	VNV8	0.0538	VNV16	29.88	VNV8	0.0307	No Message
N+8.30	B146	89	263	17.23	VNV16	0.0502	VNV8	29.88	VNV4	0.0165	No Message
N+8.30	B146	89	666	22.1	VNV16	0.0502	VNV8	29.88	VNV4	0.0165	No Message
N+8.30	B146	89	666	22.1	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B146	89	867.5	22.1	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B146	89	1069	22.42	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B146	89	1069	22.42	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B146	89	1472	17.23	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B146	89	1472	17.23	VNV8	0.0538	VNV16	29.88	VNV8	0.0282	No Message
N+8.30	B146	89	1735	26.32	VNV8	0.08	VNV16	29.88	VNV8	0.0282	No Message
N+8.30	B151	97	0	2.88	VNV8	0.086	VNV8	13.88	VNV4	0.0178	No Message
N+8.30	B151	97	70	1.44	VNV16	0.0804	VNV8	13.88	VNV4	0.0178	No Message
N+8.30	B151	97	140	1.07	VNV8	0.086	VNV8	13.88	VNV4	0.0178	No Message
N+8.30	B4	107	0	2.24	VNV8	0.4982	VNV16	0	VNV16	0	No Message
N+8.30	B4	107	70	13.39	VNV8	0.4912	VNV16	0	VNV16	0	No Message
N+8.30	B4	107	140	22.1	VNV8	0.4982	VNV16	0	VNV16	0	No Message
N+8.30	B7	109	0	22.1	VNV8	0.4488	VNV16	0	VNV16	0	No Message
N+8.30	B7	109	70	11.91	VNV8	0.4418	VNV16	0	VNV16	0	No Message
N+8.30	B7	109	140	2.28	VNV8	0.4488	VNV16	0	VNV16	0	No Message
N+8.30	B8	108	0	26.37	VNV8	0.0927	VNV8	29.88	VNV8	0.0186	No Message
N+8.30	B8	108	263	17.26	VNV8	0.0665	VNV8	29.88	VNV8	0.0186	No Message
N+8.30	B8	108	263	17.26	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B8	108	666	24.31	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B8	108	666	24.31	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B8	108	867.5	24.17	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B8	108	1069	25.55	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B8	108	1069	25.55	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B8	108	1472	17.26	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B8	108	1472	17.26	VNV8	0.0672	VNV16	29.88	VNV8	0.019	No Message
N+8.30	B8	108	1735	23.48	VNV8	0.0934	VNV16	29.88	VNV8	0.019	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+8.30	B115	311	0	1.76	VNV8	0.0216	VNV16	0	VNV16	0	No Message
N+8.30	B115	311	431.47	5.22	VNV16	0	VNV16	0	VNV16	0	No Message
N+8.30	B115	311	862.94	4.2	VNV4	0.0305	VNV16	0	VNV16	0	No Message
N+8.30	B116	313	0	3.24	VNV8	0.021	VNV16	0	VNV16	0	No Message
N+8.30	B116	313	433.881	3.95	VNV16	0	VNV16	0	VNV16	0	No Message
N+8.30	B116	313	867.761	2.96	VNV8	0.0206	VNV16	0	VNV16	0	No Message
N+8.30	B203	315	14.797	3.42	VNV8	0.0222	VNV16	0	VNV16	0	No Message
N+8.30	B203	315	438.868	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+8.30	B203	315	862.94	3.62	VNV8	0.0222	VNV16	0	VNV16	0	No Message
N+8.30	B244	317	14.81	3.52	VNV8	0.0225	VNV16	0	VNV16	0	No Message
N+8.30	B244	317	441.286	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+8.30	B244	317	867.761	3.62	VNV8	0.0225	VNV16	0	VNV16	0	No Message
N+8.30	B43	456	0	2.44	VNV8	0.0584	VNV16	0	VNV16	0	No Message
N+8.30	B43	456	81.5	1.22	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B43	456	163	0	VNV8	0.0584	VNV16	0	VNV16	0	No Message
N+8.30	B45	207	0	11.05	VNV8	0.1194	VNV16	0	VNV16	0	No Message
N+8.30	B45	207	280	5.52	VNV16	0.0798	VNV16	0	VNV16	0	No Message
N+8.30	B45	207	560	11.05	VNV8	0.1194	VNV16	0	VNV16	0	No Message
N+8.30	B47	208	0	0.76	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B47	208	70	0.38	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B47	208	140	0.21	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B248	462	0	2.44	VNV8	0.0584	VNV16	0	VNV16	0	No Message
N+8.30	B248	462	81.5	1.22	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B248	462	163	0	VNV8	0.0584	VNV16	0	VNV16	0	No Message
N+8.30	B254	219	0	0.47	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B254	219	70	0.23	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B254	219	140	0.12	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B257	222	0	0.15	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B257	222	70	0.1	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B257	222	140	0.2	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B258	223	0	0.36	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B258	223	70	0.3	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B258	223	140	0.5	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B260	225	0	7.8	VNV8	0.0779	VNV16	0	VNV16	0	No Message
N+8.30	B260	225	347.5	3.87	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B260	225	465	4.23	VNV8	0.0601	VNV16	0	VNV16	0	No Message
N+8.30	B260	225	465	4.22	VNV8	0.0527	VNV16	0	VNV16	0	No Message
N+8.30	B260	225	695	7.98	VNV8	0.0754	VNV16	0	VNV16	0	No Message
N+8.30	B269	340	22.5	2.1	VNV8	0.0883	VNV16	0	VNV16	0	No Message
N+8.30	B269	340	82.5	1.06	VNV16	0.0865	VNV16	0	VNV16	0	No Message
N+8.30	B269	340	142.5	2.14	VNV8	0.0883	VNV16	0	VNV16	0	No Message
N+8.30	B270	341	22.5	2.31	VNV8	0.0561	VNV12	5.42	VNV8	0.0385	No Message
N+8.30	B270	341	93.75	1.15	VNV16	0.054	VNV12	5.42	VNV8	0.0385	No Message
N+8.30	B270	341	165	0.26	VNV8	0.0561	VNV12	5.42	VNV8	0.0385	No Message
N+8.30	B271	342	22.5	2.15	VNV8	0.0917	VNV16	0	VNV16	0	No Message
N+8.30	B271	342	82.5	1.47	VNV16	0.0899	VNV16	0	VNV16	0	No Message
N+8.30	B271	342	142.5	2.97	VNV8	0.0917	VNV16	0	VNV16	0	No Message
N+8.30	B272	343	22.5	3.55	VNV4	0.0713	VNV8	7.41	VNV8	0.0596	No Message
N+8.30	B272	343	93.75	1.76	VNV4	0.0692	VNV8	7.41	VNV8	0.0596	No Message
N+8.30	B272	343	165	0.73	VNV4	0.0713	VNV8	7.41	VNV8	0.0596	No Message
N+8.30	B273	344	15	3.01	VNV16	0.0337	VNV8	4.41	VNV4	0.0004	No Message
N+8.30	B273	344	430	2.95	VNV16	0.017	VNV8	4.41	VNV4	0.0004	No Message
N+8.30	B273	344	845	3.01	VNV16	0.0337	VNV8	4.41	VNV4	0.0004	No Message
N+8.30	B274	345	15	4.26	VNV8	0.0425	VNV16	0	VNV16	0	No Message
N+8.30	B274	345	430	3.96	VNV16	0.0167	VNV16	0	VNV16	0	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+8.30	B274	345	845	4.33	VNV8	0.0425	VNV16	0	VNV16	0	No Message
N+8.30	B275	346	22.5	2.27	VNV8	0.0814	VNV16	0	VNV16	0	No Message
N+8.30	B275	346	82.5	0.89	VNV16	0.0796	VNV16	0	VNV16	0	No Message
N+8.30	B275	346	142.5	2.44	VNV8	0.0814	VNV16	0	VNV16	0	No Message
N+8.30	B276	347	22.5	4.3	VNV8	0.0774	VNV12	5.06	VNV8	0.0395	No Message
N+8.30	B276	347	93.75	2.13	VNV16	0.0752	VNV12	5.06	VNV8	0.0395	No Message
N+8.30	B276	347	165	0.18	VNV8	0.0774	VNV12	5.06	VNV8	0.0395	No Message
N+8.30	B277	348	22.5	3.11	VNV8	0.1043	VNV16	0	VNV16	0	No Message
N+8.30	B277	348	82.5	1.35	VNV16	0.1025	VNV16	0	VNV16	0	No Message
N+8.30	B277	348	142.5	2.72	VNV8	0.1043	VNV16	0	VNV16	0	No Message
N+8.30	B278	349	22.5	4.37	VNV8	0.0793	VNV8	6.23	VNV8	0.0501	No Message
N+8.30	B278	349	93.75	2.16	VNV8	0.0771	VNV8	6.23	VNV8	0.0501	No Message
N+8.30	B278	349	165	0.25	VNV8	0.0793	VNV8	6.23	VNV8	0.0501	No Message
N+8.30	B279	350	22.5	3.67	VNV8	0.1118	VNV16	6.36	VNV8	0.0146	No Message
N+8.30	B279	350	82.5	1.45	VNV16	0.11	VNV16	6.36	VNV8	0.0146	No Message
N+8.30	B279	350	142.5	2.92	VNV8	0.1118	VNV16	6.36	VNV8	0.0146	No Message
N+8.30	B280	351	22.5	3.54	VNV1	0.0724	VNV8	8.16	VNV8	0.0656	No Message
N+8.30	B280	351	93.75	1.75	VNV1	0.0703	VNV8	8.16	VNV8	0.0656	No Message
N+8.30	B280	351	165	0.85	VNV1	0.0724	VNV8	8.16	VNV8	0.0656	No Message
N+8.30	B281	352	22.5	4.52	VNV8	0.1227	VNV16	6.36	VNV8	0.0139	No Message
N+8.30	B281	352	82.5	1.31	VNV16	0.1209	VNV16	6.36	VNV8	0.0139	No Message
N+8.30	B281	352	142.5	2.64	VNV8	0.1227	VNV16	6.36	VNV8	0.0139	No Message
N+8.30	B282	353	22.5	0.8	VNV5	0.0256	VNV8	5.94	VNV8	0.0478	No Message
N+8.30	B282	353	93.75	0.4	VNV5	0.0234	VNV8	5.94	VNV8	0.0478	No Message
N+8.30	B282	353	165	0.41	VNV5	0.0256	VNV8	5.94	VNV8	0.0478	No Message
N+8.30	B283	354	15	0.02	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B283	354	50	0.07	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B283	354	85	0.13	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B284	355	15	3.01	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B284	355	432.5	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+8.30	B284	355	850	3.01	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B285	356	15	0.19	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B285	356	90	0.09	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B285	356	165	0.18	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B286	357	15	0.08	VNV16	0.0167	VNV4	4.21	VNV8	0.0104	No Message
N+8.30	B286	357	50	0.1	VNV16	0.0167	VNV4	4.21	VNV8	0.0104	No Message
N+8.30	B286	357	85	0.2	VNV16	0.0167	VNV4	4.21	VNV8	0.0104	No Message
N+8.30	B287	358	15	4.26	VNV8	0.0434	VNV16	0	VNV16	0	No Message
N+8.30	B287	358	432.5	4.08	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B287	358	850	4.51	VNV8	0.0434	VNV16	0	VNV16	0	No Message
N+8.30	B288	359	15	0.29	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B288	359	90	0.15	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B288	359	165	0.21	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B289	360	0	0.88	VNV1	0	VNV8	4.5	VNV8	0.0431	No Message
N+8.30	B289	360	50	0.62	VNV1	0	VNV8	4.5	VNV8	0.0431	No Message
N+8.30	B289	360	100	1.24	VNV1	0	VNV8	4.5	VNV8	0.0431	No Message
N+8.30	B290	361	0	2.47	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B290	361	432.5	3.19	VNV16	0	VNV16	0	VNV16	0	No Message
N+8.30	B290	361	865	3.01	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B291	362	0	2.48	VNV8	0.0625	VNV4	4.21	VNV8	0.0121	No Message
N+8.30	B291	362	90	1.23	VNV8	0.0551	VNV4	4.21	VNV8	0.0121	No Message
N+8.30	B291	362	180	2.4	VNV8	0.0625	VNV4	4.21	VNV8	0.0121	No Message
N+8.30	B292	363	0	3.01	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B292	363	480	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+8.30	B292	363	860	1.56	VNV16	0.0167	VNV16	0	VNV16	0	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+8.30	B292	363	860	1.56	VNV16	0	VNV8	3.79	VNV8	0.0363	No Message
N+8.30	B292	363	960	1.51	VNV16	0	VNV8	3.79	VNV8	0.0363	No Message
N+8.30	B293	364	15	0.14	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B293	364	50	0.08	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B293	364	85	0.17	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B294	365	15	3.67	VNV8	0.052	VNV16	3.46	VNV4	0.0262	No Message
N+8.30	B294	365	159	2.4	VNV16	0.0401	VNV16	3.46	VNV4	0.0262	No Message
N+8.30	B294	365	303	0	VNV8	0.052	VNV16	3.46	VNV4	0.0262	No Message
N+8.30	B295	366	15	0.23	VNV8	0.0192	VNV16	4.24	VNV8	0.0148	No Message
N+8.30	B295	366	50	0.11	VNV12	0.0167	VNV16	4.24	VNV8	0.0148	No Message
N+8.30	B295	366	85	0.14	VNV8	0.0192	VNV16	4.24	VNV8	0.0148	No Message
N+8.30	B296	367	15	3.01	VNV8	0.0501	VNV16	3.34	VNV4	0.0305	No Message
N+8.30	B296	367	159	1.72	VNV8	0.0291	VNV16	3.34	VNV4	0.0305	No Message
N+8.30	B296	367	303	0	VNV8	0.0501	VNV16	3.34	VNV4	0.0305	No Message
N+8.30	B297	368	0	1.45	VNV8	0.0281	VNV16	3.73	VNV4	0.025	No Message
N+8.30	B297	368	151.5	0.72	VNV16	0.0155	VNV16	3.73	VNV4	0.025	No Message
N+8.30	B297	368	303	0	VNV8	0.0281	VNV16	3.73	VNV4	0.025	No Message
N+8.30	B348	418	0	0.0004511	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B348	418	68.75	0.61	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B348	418	137.5	1.22	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B350	420	0	1.37	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B350	420	73.75	0.69	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B350	420	147.5	0.0005508	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B351	421	0	1.37	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B351	421	73.75	0.69	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B351	421	147.5	0.0005529	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B352	422	0	0.0004502	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B352	422	68.75	0.61	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B352	422	137.5	1.22	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B388	464	0	11.05	VNV8	0.1347	VNV16	0	VNV16	0	No Message
N+8.30	B388	464	280	5.97	VNV16	0.0836	VNV16	0	VNV16	0	No Message
N+8.30	B388	464	560	11.05	VNV8	0.1347	VNV16	0	VNV16	0	No Message
N+8.30	B390	205	0	0.88	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B390	205	70	0.44	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B390	205	140	0.22	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B391	466	0	1.03	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B391	466	70	0.51	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B391	466	140	1.42	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	0	0.41	VNV8	0.1692	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	80	6.82	VNV8	0.1602	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	80	6.82	VNV8	0.1399	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	99.623	6.82	VNV8	0.1377	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	99.623	6.82	VNV8	0.1377	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	145	6.82	VNV8	0.1327	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	145	6.82	VNV8	0.1258	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	165	6.82	VNV8	0.128	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	165	6.82	VNV8	0.1358	VNV16	0	VNV16	0	No Message
N+8.30	B392	369	330	11.05	VNV8	0.1542	VNV16	0	VNV16	0	No Message
N+8.30	B396	103	0	0.01	VNV8	0.16	VNV16	0	VNV16	0	No Message
N+8.30	B396	103	92.5	5.67	VNV16	0.1497	VNV16	0	VNV16	0	No Message
N+8.30	B396	103	185	11.05	VNV8	0.16	VNV16	0	VNV16	0	No Message
N+8.30	B403	471	0	0	VNV8	0.0899	VNV16	0	VNV16	0	No Message
N+8.30	B403	471	92.5	2.25	VNV16	0.0796	VNV16	0	VNV16	0	No Message
N+8.30	B403	471	185	4.51	VNV8	0.0899	VNV16	0	VNV16	0	No Message
N+8.30	B404	472	0	0.99	VNV8	0.0434	VNV12	13.88	VNV8	0.0345	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+8.30	B404	472	70	0.49	VNV16	0.0392	VNV12	13.88	VNV8	0.0345	No Message
N+8.30	B404	472	140	1.33	VNV8	0.0434	VNV12	13.88	VNV8	0.0345	No Message
N+8.30	B5	74	15	0.25	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B5	74	97.5	0.13	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B5	74	180	0.21	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+8.30	B6	77	15	0.3	VNV8	0.0237	VNV16	4.37	VNV8	0.0113	No Message
N+8.30	B6	77	57.5	0.15	VNV16	0.0221	VNV16	4.37	VNV8	0.0113	No Message
N+8.30	B6	77	100	0.54	VNV8	0.0237	VNV16	4.37	VNV8	0.0113	No Message
N+8.30	B10	80	0	1.06	VNV1	0	VNV8	5.34	VNV8	0.0511	No Message
N+8.30	B10	80	50	0.73	VNV1	0	VNV8	5.34	VNV8	0.0511	No Message
N+8.30	B10	80	100	1.46	VNV1	0	VNV8	5.34	VNV8	0.0511	No Message
N+8.30	B12	84	0	3.01	VNV8	0.085	VNV12	3.83	VNV8	0.0195	No Message
N+8.30	B12	84	90	2.04	VNV16	0.0817	VNV12	3.83	VNV8	0.0195	No Message
N+8.30	B12	84	180	3.1	VNV8	0.085	VNV12	3.83	VNV8	0.0195	No Message
N+8.30	B14	92	22.5	0.33	VNV1	0.0175	VNV8	7.17	VNV8	0.0576	No Message
N+8.30	B14	92	93.75	0.25	VNV1	0.0153	VNV8	7.17	VNV8	0.0576	No Message
N+8.30	B14	92	165	0.49	VNV1	0.0175	VNV8	7.17	VNV8	0.0576	No Message
N+8.30	B16	93	22.5	4.52	VNV1	0	VNV8	7.55	VNV8	0.0607	No Message
N+8.30	B16	93	93.75	2.41	VNV1	0	VNV8	7.55	VNV8	0.0607	No Message
N+8.30	B16	93	165	0.17	VNV1	0	VNV8	7.55	VNV8	0.0607	No Message
N+8.30	B18	94	0	4.52	VNV1	0.0834	VNV8	9.9	VNV8	0.0795	No Message
N+8.30	B18	94	82.5	2.4	VNV1	0.0809	VNV8	9.9	VNV8	0.0795	No Message
N+8.30	B18	94	165	1	VNV1	0.0834	VNV8	9.9	VNV8	0.0795	No Message
N+8.30	B20	101	0	5.26	VNV1	0	VNV8	10.21	VNV8	0.0821	No Message
N+8.30	B20	101	82.5	3.44	VNV1	0	VNV8	10.21	VNV8	0.0821	No Message
N+8.30	B20	101	165	0.54	VNV1	0	VNV8	10.21	VNV8	0.0821	No Message
N+4.68	B92	75	0	2.48	VNV8	0.0858	VNV16	0	VNV16	0	No Message
N+4.68	B92	75	70	1.24	VNV16	0.0679	VNV16	0	VNV16	0	No Message
N+4.68	B92	75	140	0.79	VNV8	0.0858	VNV16	0	VNV16	0	No Message
N+4.68	B95	73	0	1.09	VNV8	0.1073	VNV16	0	VNV16	0	No Message
N+4.68	B95	73	70	1.61	VNV16	0.0894	VNV16	0	VNV16	0	No Message
N+4.68	B95	73	140	3.24	VNV8	0.1073	VNV16	0	VNV16	0	No Message
N+4.68	B98	79	0	3.52	VNV8	0.1131	VNV16	0	VNV16	0	No Message
N+4.68	B98	79	70	1.76	VNV16	0.0948	VNV16	0	VNV16	0	No Message
N+4.68	B98	79	140	0.98	VNV8	0.1131	VNV16	0	VNV16	0	No Message
N+4.68	B101	81	0	1.21	VNV8	0.1224	VNV16	0	VNV16	0	No Message
N+4.68	B101	81	70	1.9	VNV16	0.1041	VNV16	0	VNV16	0	No Message
N+4.68	B101	81	140	3.8	VNV8	0.1224	VNV16	0	VNV16	0	No Message
N+4.68	B112	85	0	0.01	VNV8	0.1362	VNV12	12.93	VNV8	0.0385	No Message
N+4.68	B112	85	87.5	2.86	VNV16	0.1015	VNV12	12.93	VNV8	0.0385	No Message
N+4.68	B112	85	175	5.76	VNV8	0.1362	VNV12	12.93	VNV8	0.0385	No Message
N+4.68	B113	104	0	0.05	VNV8	0.2165	VNV8	13.88	VNV4	0.0143	No Message
N+4.68	B113	104	87.5	5.59	VNV16	0.1566	VNV8	13.88	VNV4	0.0143	No Message
N+4.68	B113	104	175	11.05	VNV8	0.2165	VNV8	13.88	VNV4	0.0143	No Message
N+4.68	B121	199	0	22.1	VNV8	0.1084	VNV16	0	VNV16	0	No Message
N+4.68	B121	199	347.5	10.54	VNV16	0.0876	VNV16	0	VNV16	0	No Message
N+4.68	B121	199	695	13.22	VNV8	0.1084	VNV16	0	VNV16	0	No Message
N+4.68	B122	169	0	17.65	VNV8	0.1567	VNV16	0	VNV16	0	No Message
N+4.68	B122	169	280	10.17	VNV16	0.1399	VNV16	0	VNV16	0	No Message
N+4.68	B122	169	560	22.1	VNV8	0.1567	VNV16	0	VNV16	0	No Message
N+4.68	B129	491	0	4.69	VNV8	0.0516	VNV16	0	VNV16	0	No Message
N+4.68	B129	491	417.5	4.28	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B129	491	835	4.22	VNV8	0.0516	VNV16	0	VNV16	0	No Message
N+4.68	B130	492	0	4.32	VNV8	0.0565	VNV16	0	VNV16	0	No Message
N+4.68	B130	492	350	3	VNV16	0.0502	VNV16	0	VNV16	0	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+4.68	B130	492	700	6.04	VNV8	0.0565	VNV16	0	VNV16	0	No Message
N+4.68	B136	76	0	0.24	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B136	76	70	0.76	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B136	76	140	0.92	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B137	114	0	22.1	VNV8	0.1138	VNV16	0	VNV16	0	No Message
N+4.68	B137	114	347.5	11.49	VNV16	0.084	VNV16	0	VNV16	0	No Message
N+4.68	B137	114	695	8.55	VNV8	0.1138	VNV16	0	VNV16	0	No Message
N+4.68	B138	168	0	14.75	VNV8	0.1578	VNV16	0	VNV16	0	No Message
N+4.68	B138	168	280	10.41	VNV16	0.1338	VNV16	0	VNV16	0	No Message
N+4.68	B138	168	560	22.4	VNV8	0.1578	VNV16	0	VNV16	0	No Message
N+4.68	B139	78	0	1.39	VNV16	0.0502	VNV8	29.88	VNV4	0.0197	No Message
N+4.68	B139	78	70	0.92	VNV16	0.0502	VNV8	29.88	VNV4	0.0197	No Message
N+4.68	B139	78	140	0.47	VNV16	0.0502	VNV8	29.88	VNV4	0.0197	No Message
N+4.68	B146	485	0	42.98	VNV8	0.215	VNV16	29.88	VNV8	0.0251	No Message
N+4.68	B146	485	867.5	32.46	VNV12	0.0166	VNV16	29.88	VNV8	0.0251	No Message
N+4.68	B146	485	873	32.58	VNV12	0.0166	VNV16	29.88	VNV8	0.0251	No Message
N+4.68	B146	485	873	32.53	VNV12	0.0502	VNV16	29.88	VNV8	0.0251	No Message
N+4.68	B146	485	1735	40.32	VNV8	0.2151	VNV16	29.88	VNV8	0.0251	No Message
N+4.68	B148	487	0	51.05	VNV8	0.3056	VNV16	0	VNV16	0	No Message
N+4.68	B148	487	263	24.59	VNV8	0.2369	VNV16	0	VNV16	0	No Message
N+4.68	B148	487	263	24.59	VNV8	0.2109	VNV16	0	VNV16	0	No Message
N+4.68	B148	487	666	39.3	VNV8	0.1055	VNV16	0	VNV16	0	No Message
N+4.68	B148	487	666	38.88	VNV8	0.0837	VNV8	29.88	VNV8	0.0187	No Message
N+4.68	B148	487	867.5	46.49	VNV16	0.0502	VNV8	29.88	VNV8	0.0187	No Message
N+4.68	B148	487	873	46.68	VNV16	0.0502	VNV8	29.88	VNV8	0.0187	No Message
N+4.68	B148	487	873	46.64	VNV16	0.0502	VNV8	29.88	VNV8	0.0185	No Message
N+4.68	B148	487	1069	41.36	VNV8	0.0829	VNV8	29.88	VNV8	0.0185	No Message
N+4.68	B148	487	1069	41.11	VNV8	0.1041	VNV16	0	VNV16	0	No Message
N+4.68	B148	487	1472	24.59	VNV8	0.2095	VNV16	0	VNV16	0	No Message
N+4.68	B148	487	1472	24.59	VNV8	0.2356	VNV16	0	VNV16	0	No Message
N+4.68	B148	487	1735	47.19	VNV8	0.3043	VNV16	0	VNV16	0	No Message
N+4.68	B149	82	0	0.39	VNV16	0.0502	VNV8	29.88	VNV4	0.0208	No Message
N+4.68	B149	82	70	0.9	VNV16	0.0502	VNV8	29.88	VNV4	0.0208	No Message
N+4.68	B149	82	140	1.37	VNV16	0.0502	VNV8	29.88	VNV4	0.0208	No Message
N+4.68	B151	83	0	1.16	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B151	83	70	0.72	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B151	83	140	0.3	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B155	86	0	2.08	VNV8	0.2484	VNV8	13.69	VNV8	0.067	No Message
N+4.68	B155	86	10	6.37	VNV8	0.2439	VNV8	13.69	VNV8	0.067	No Message
N+4.68	B155	86	10	6.37	VNV8	0.2305	VNV8	17.32	VNV8	0.0847	No Message
N+4.68	B155	86	87.5	6.37	VNV8	0.1979	VNV8	17.32	VNV8	0.0847	No Message
N+4.68	B155	86	175	11.05	VNV8	0.2375	VNV8	17.32	VNV8	0.0847	No Message
N+4.68	B2	105	0	1.78	VNV16	0.0126	VNV16	0	VNV16	0	No Message
N+4.68	B2	105	350	2.07	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B2	105	700	1.74	VNV16	0.0126	VNV16	0	VNV16	0	No Message
N+4.68	B3	87	0	2.18	VNV16	0.0126	VNV16	0	VNV16	0	No Message
N+4.68	B3	87	417.5	2.78	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B3	87	835	2.22	VNV16	0.0126	VNV16	0	VNV16	0	No Message
N+4.68	B4	110	0	1.37	VNV8	0.1464	VNV8	30.7	VNV8	0.0946	No Message
N+4.68	B4	110	70	2.17	VNV16	0.1185	VNV8	30.7	VNV8	0.0946	No Message
N+4.68	B4	110	140	4.34	VNV8	0.1464	VNV8	30.7	VNV8	0.0946	No Message
N+4.68	B7	113	0	4.1	VNV8	0.1371	VNV8	30.37	VNV8	0.0936	No Message
N+4.68	B7	113	70	2.05	VNV16	0.1093	VNV8	30.37	VNV8	0.0936	No Message
N+4.68	B7	113	140	1.06	VNV8	0.1371	VNV8	30.37	VNV8	0.0936	No Message
N+4.68	B8	489	0	56.89	VNV8	0.3659	VNV16	0	VNV16	0	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+4.68	B8	489	867.5	48.55	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B8	489	873	48.73	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B8	489	873	48.81	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B8	489	1735	54.35	VNV8	0.3661	VNV16	0	VNV16	0	No Message
N+4.68	B72	226	0	1.97	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B72	226	81.5	0.98	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B72	226	163	0	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B73	228	0	1.95	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B73	228	81.5	0.97	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B73	228	163	0	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N+4.68	B40	276	15	0.32	VNV8	0.0202	VNV16	0	VNV16	0	No Message
N+4.68	B40	276	90	0.21	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B40	276	165	0.43	VNV8	0.0202	VNV16	0	VNV16	0	No Message
N+4.68	B42	278	15	0.42	VNV8	0.0289	VNV16	0	VNV16	0	No Message
N+4.68	B42	278	50	0.21	VNV16	0.0252	VNV16	0	VNV16	0	No Message
N+4.68	B42	278	85	0.23	VNV8	0.0289	VNV16	0	VNV16	0	No Message
N+4.68	B44	279	15	1.21	VNV8	0.0327	VNV16	0	VNV16	0	No Message
N+4.68	B44	279	100	0.6	VNV8	0.0238	VNV16	0	VNV16	0	No Message
N+4.68	B44	279	185	0.06	VNV8	0.0327	VNV16	0	VNV16	0	No Message
N+4.68	B46	303	15	0.27	VNV8	0.0228	VNV16	0	VNV16	0	No Message
N+4.68	B46	303	50	0.14	VNV16	0.0191	VNV16	0	VNV16	0	No Message
N+4.68	B46	303	85	0.26	VNV8	0.0228	VNV16	0	VNV16	0	No Message
N+4.68	B67	305	15	0.31	VNV8	0.0173	VNV16	0	VNV16	0	No Message
N+4.68	B67	305	90	0.15	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B67	305	165	0.23	VNV8	0.0173	VNV16	0	VNV16	0	No Message
N+4.68	B68	307	15	0.03	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B68	307	50	0.03	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B68	307	85	0.03	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B69	308	15	3.07	VNV8	0.0659	VNV16	3.62	VNV4	0.0216	No Message
N+4.68	B69	308	159	2.02	VNV16	0.0507	VNV16	3.62	VNV4	0.0216	No Message
N+4.68	B69	308	303	3.01	VNV8	0.0659	VNV16	3.62	VNV4	0.0216	No Message
N+4.68	B81	281	15	0.4	VNV8	0.0225	VNV16	0	VNV16	0	No Message
N+4.68	B81	281	90	0.21	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B81	281	165	0.52	VNV8	0.0225	VNV16	0	VNV16	0	No Message
N+4.68	B83	283	15	0.61	VNV8	0.0442	VNV16	0	VNV16	0	No Message
N+4.68	B83	283	50	0.31	VNV16	0.0399	VNV16	0	VNV16	0	No Message
N+4.68	B83	283	85	0.47	VNV8	0.0442	VNV16	0	VNV16	0	No Message
N+4.68	B105	284	15	1.36	VNV8	0.0386	VNV16	0	VNV16	0	No Message
N+4.68	B105	284	100	0.68	VNV8	0.0282	VNV16	0	VNV16	0	No Message
N+4.68	B105	284	185	0.23	VNV8	0.0386	VNV16	0	VNV16	0	No Message
N+4.68	B154	286	15	0.64	VNV8	0.0263	VNV16	0	VNV16	0	No Message
N+4.68	B154	286	90	0.26	VNV16	0.0184	VNV16	0	VNV16	0	No Message
N+4.68	B154	286	165	0.58	VNV8	0.0263	VNV16	0	VNV16	0	No Message
N+4.68	B157	288	15	0.43	VNV8	0.03	VNV8	4.08	VNV4	0.0122	No Message
N+4.68	B157	288	50	0.21	VNV16	0.0257	VNV8	4.08	VNV4	0.0122	No Message
N+4.68	B157	288	85	0.23	VNV8	0.03	VNV8	4.08	VNV4	0.0122	No Message
N+4.68	B159	290	15	0.34	VNV8	0.0183	VNV16	0	VNV16	0	No Message
N+4.68	B159	290	90	0.17	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B159	290	165	0.27	VNV8	0.0183	VNV16	0	VNV16	0	No Message
N+4.68	B168	292	15	0.04	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B168	292	50	0.03	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B168	292	85	0.03	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N+4.68	B183	293	15	3.01	VNV8	0.0584	VNV16	3.85	VNV4	0.0184	No Message
N+4.68	B183	293	159	1.59	VNV16	0.0408	VNV16	3.85	VNV4	0.0184	No Message
N+4.68	B183	293	303	2.47	VNV8	0.0584	VNV16	3.85	VNV4	0.0184	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+4.68	B186	297	0	2.3	VNV1	0.0935	VNV8	3.47	VNV8	0.0333	No Message
N+4.68	B186	297	50	1.14	VNV1	0.0882	VNV8	3.47	VNV8	0.0333	No Message
N+4.68	B186	297	100	1.98	VNV1	0.0935	VNV8	3.47	VNV8	0.0333	No Message
N+4.68	B187	298	0	0.08	VNV8	0.0367	VNV16	3.99	VNV4	0.0206	No Message
N+4.68	B187	298	92.5	0.75	VNV16	0.0269	VNV16	3.99	VNV4	0.0206	No Message
N+4.68	B187	298	185	1.51	VNV8	0.0367	VNV16	3.99	VNV4	0.0206	No Message
N+4.68	B188	300	0	2.81	VNV8	0.0728	VNV4	4	VNV8	0.0156	No Message
N+4.68	B188	300	90	1.4	VNV16	0.0633	VNV4	4	VNV8	0.0156	No Message
N+4.68	B188	300	180	2.84	VNV8	0.0728	VNV4	4	VNV8	0.0156	No Message
N+4.68	B189	302	0	1.51	VNV1	0	VNV4	5.56	VNV4	0.0532	No Message
N+4.68	B189	302	50	0.75	VNV1	0	VNV4	5.56	VNV4	0.0532	No Message
N+4.68	B189	302	100	1.09	VNV1	0	VNV4	5.56	VNV4	0.0532	No Message
N+4.68	B190	309	0	5.68	VNV8	0.0753	VNV16	3.93	VNV4	0.0222	No Message
N+4.68	B190	309	151.5	3.01	VNV16	0.0593	VNV16	3.93	VNV4	0.0222	No Message
N+4.68	B190	309	303	0.42	VNV8	0.0753	VNV16	3.93	VNV4	0.0222	No Message
N+4.68	B191	310	0	0.42	VNV8	0.048	VNV16	3.93	VNV4	0.0222	No Message
N+4.68	B191	310	50	0.94	VNV16	0.0427	VNV16	3.93	VNV4	0.0222	No Message
N+4.68	B191	310	100	1.76	VNV8	0.048	VNV16	3.93	VNV4	0.0222	No Message
N+4.68	B194	319	22.5	5.39	VNV8	0.182	VNV16	0	VNV16	0	No Message
N+4.68	B194	319	82.5	2.24	VNV16	0.1801	VNV16	0	VNV16	0	No Message
N+4.68	B194	319	142.5	6.95	VNV8	0.182	VNV16	0	VNV16	0	No Message
N+4.68	B195	320	22.5	5.91	VNV8	0.1828	VNV16	0	VNV16	0	No Message
N+4.68	B195	320	82.5	2.34	VNV16	0.181	VNV16	0	VNV16	0	No Message
N+4.68	B195	320	142.5	7.28	VNV8	0.1828	VNV16	0	VNV16	0	No Message
N+4.68	B196	321	22.5	4.52	VNV8	0.1479	VNV16	0	VNV16	0	No Message
N+4.68	B196	321	82.5	2.1	VNV16	0.1461	VNV16	0	VNV16	0	No Message
N+4.68	B196	321	142.5	4.52	VNV8	0.1479	VNV16	0	VNV16	0	No Message
N+4.68	B197	322	22.5	4.52	VNV4	0.0868	VNV8	7.31	VNV8	0.0587	No Message
N+4.68	B197	322	93.75	2.25	VNV4	0.0847	VNV8	7.31	VNV8	0.0587	No Message
N+4.68	B197	322	165	0.66	VNV4	0.0868	VNV8	7.31	VNV8	0.0587	No Message
N+4.68	B198	323	22.5	4.52	VNV8	0.1289	VNV16	0	VNV16	0	No Message
N+4.68	B198	323	82.5	1.62	VNV16	0.127	VNV16	0	VNV16	0	No Message
N+4.68	B198	323	142.5	4.52	VNV8	0.1289	VNV16	0	VNV16	0	No Message
N+4.68	B199	324	22.5	2.28	VNV8	0.0548	VNV12	6.07	VNV8	0.027	No Message
N+4.68	B199	324	93.75	1.13	VNV16	0.0526	VNV12	6.07	VNV8	0.027	No Message
N+4.68	B199	324	165	0.14	VNV8	0.0548	VNV12	6.07	VNV8	0.027	No Message
N+4.68	B200	325	0	0.07	VNV16	0.0126	VNV16	0	VNV16	0	No Message
N+4.68	B200	325	82.5	0.12	VNV16	0.0126	VNV16	0	VNV16	0	No Message
N+4.68	B200	325	165	0.27	VNV16	0.0126	VNV16	0	VNV16	0	No Message
N+4.68	B201	326	0	0.21	VNV16	0.0126	VNV8	3.47	VNV4	0.0129	No Message
N+4.68	B201	326	82.5	0.11	VNV16	0.0126	VNV8	3.47	VNV4	0.0129	No Message
N+4.68	B201	326	165	0.16	VNV16	0.0126	VNV8	3.47	VNV4	0.0129	No Message
N+4.68	B202	327	22.5	4.52	VNV8	0.0914	VNV8	6.31	VNV8	0.0507	No Message
N+4.68	B202	327	93.75	2.54	VNV8	0.0892	VNV8	6.31	VNV8	0.0507	No Message
N+4.68	B202	327	165	0.2	VNV8	0.0914	VNV8	6.31	VNV8	0.0507	No Message
N+4.68	B204	328	22.5	4.52	VNV1	0	VNV8	7.92	VNV8	0.0636	No Message
N+4.68	B204	328	93.75	2.66	VNV1	0	VNV8	7.92	VNV8	0.0636	No Message
N+4.68	B204	328	165	0.39	VNV1	0	VNV8	7.92	VNV8	0.0636	No Message
N+4.68	B205	329	22.5	8.89	VNV1	0	VNV16	0	VNV16	0	No Message
N+4.68	B205	329	82.5	3.93	VNV1	0	VNV16	0	VNV16	0	No Message
N+4.68	B205	329	142.5	7.95	VNV1	0	VNV16	0	VNV16	0	No Message
N+4.68	B206	330	22.5	4.5	VNV1	0	VNV4	9.61	VNV4	0.0772	No Message
N+4.68	B206	330	93.75	2.23	VNV1	0	VNV4	9.61	VNV4	0.0772	No Message
N+4.68	B206	330	165	1	VNV1	0	VNV4	9.61	VNV4	0.0772	No Message
N+4.68	B207	331	22.5	9.52	VNV1	0	VNV16	0	VNV16	0	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N+4.68	B207	331	82.5	3.47	VNV1	0	VNV16	0	VNV16	0	No Message
N+4.68	B207	331	142.5	8.99	VNV1	0	VNV16	0	VNV16	0	No Message
N+4.68	B208	332	22.5	0.8	VNV1	0.0268	VNV4	7.41	VNV4	0.0595	No Message
N+4.68	B208	332	93.75	0.4	VNV1	0.0246	VNV4	7.41	VNV4	0.0595	No Message
N+4.68	B208	332	165	0.51	VNV1	0.0268	VNV4	7.41	VNV4	0.0595	No Message
N+4.68	B209	333	22.5	8.49	VNV8	0.2356	VNV16	0	VNV16	0	No Message
N+4.68	B209	333	82.5	3.11	VNV16	0.2338	VNV16	0	VNV16	0	No Message
N+4.68	B209	333	142.5	9.81	VNV8	0.2356	VNV16	0	VNV16	0	No Message
N+4.68	B210	334	22.5	6.68	VNV8	0.2222	VNV16	0	VNV16	0	No Message
N+4.68	B210	334	82.5	2.83	VNV16	0.2203	VNV16	0	VNV16	0	No Message
N+4.68	B210	334	142.5	8.88	VNV8	0.2222	VNV16	0	VNV16	0	No Message
N+4.68	B213	335	0	0.34	VNV8	0.0351	VNV16	13.88	VNV4	0.0321	No Message
N+4.68	B213	335	77.5	1.13	VNV16	0.0305	VNV16	13.88	VNV4	0.0321	No Message
N+4.68	B213	335	155	2.1	VNV8	0.0351	VNV16	13.88	VNV4	0.0321	No Message
N+4.68	B1	275	14.323	3.05	VNV8	0.0195	VNV16	4.41	VNV16	0.0009	No Message
N+4.68	B1	275	437.519	3.01	VNV16	0	VNV16	4.41	VNV16	0.0009	No Message
N+4.68	B1	275	860.715	3.17	VNV8	0.0195	VNV16	4.41	VNV16	0.0009	No Message
N+4.68	B9	277	14.808	3.12	VNV8	0.0196	VNV16	0	VNV16	0	No Message
N+4.68	B9	277	431.388	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B9	277	847.969	3.16	VNV8	0.0196	VNV16	0	VNV16	0	No Message
N+4.68	B11	280	14.323	3.01	VNV8	0.0195	VNV16	4.41	VNV12	0.002	No Message
N+4.68	B11	280	437.519	3.01	VNV16	0	VNV16	4.41	VNV12	0.002	No Message
N+4.68	B11	280	860.715	3.18	VNV8	0.0195	VNV16	4.41	VNV12	0.002	No Message
N+4.68	B13	282	14.808	3.1	VNV8	0.0196	VNV16	0	VNV16	0	No Message
N+4.68	B13	282	431.388	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B13	282	847.969	3.17	VNV8	0.0196	VNV16	0	VNV16	0	No Message
N+4.68	B15	285	14.808	3.23	VNV8	0.0199	VNV16	0	VNV16	0	No Message
N+4.68	B15	285	431.388	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B15	285	847.969	3.16	VNV8	0.0199	VNV16	0	VNV16	0	No Message
N+4.68	B17	287	14.81	3.36	VNV8	0.0204	VNV16	0	VNV16	0	No Message
N+4.68	B17	287	433.88	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B17	287	852.951	3.11	VNV8	0.0204	VNV16	0	VNV16	0	No Message
N+4.68	B70	289	14.81	3.15	VNV8	0.0207	VNV16	4.41	VNV8	0.0018	No Message
N+4.68	B70	289	433.88	3.01	VNV16	0	VNV16	4.41	VNV8	0.0018	No Message
N+4.68	B70	289	852.951	3.41	VNV8	0.0207	VNV16	4.41	VNV8	0.0018	No Message
N+4.68	B76	291	14.808	3.24	VNV8	0.0207	VNV16	4.41	VNV8	0.0013	No Message
N+4.68	B76	291	431.388	3.01	VNV16	0	VNV16	4.41	VNV8	0.0013	No Message
N+4.68	B76	291	847.969	3.41	VNV8	0.0207	VNV16	4.41	VNV8	0.0013	No Message
N+4.68	B77	299	0	3.01	VNV8	0.0189	VNV16	0	VNV16	0	No Message
N+4.68	B77	299	431.388	3.75	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B77	299	862.777	3.01	VNV8	0.0189	VNV16	0	VNV16	0	No Message
N+4.68	B91	301	0	3.01	VNV8	0.0197	VNV16	0	VNV16	0	No Message
N+4.68	B91	301	433.88	4.06	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B91	301	867.761	2.94	VNV8	0.0197	VNV16	0	VNV16	0	No Message
N+4.68	B106	304	14.81	3.3	VNV8	0.0207	VNV16	0	VNV16	0	No Message
N+4.68	B106	304	433.88	3.01	VNV16	0	VNV16	0	VNV16	0	No Message
N+4.68	B106	304	852.951	3.33	VNV8	0.0207	VNV16	0	VNV16	0	No Message
N+4.68	B114	306	14.808	3.34	VNV8	0.0209	VNV16	4.41	VNV16	0.0006	No Message
N+4.68	B114	306	431.388	3.01	VNV16	0	VNV16	4.41	VNV16	0.0006	No Message
N+4.68	B114	306	847.969	3.41	VNV8	0.0209	VNV16	4.41	VNV4	0.0013	No Message
N+4.68	B307	493	0	6.58	VNV8	0.1137	VNV16	0	VNV16	0	No Message
N+4.68	B307	493	81.5	3.27	VNV16	0.1088	VNV16	0	VNV16	0	No Message
N+4.68	B307	493	163	0	VNV8	0.1137	VNV16	0	VNV16	0	No Message
N-0.10	B74	16	40	16.46	VNV4	0.1579	VNV16	0	VNV16	0	No Message
N-0.10	B74	16	501	17.54	VNV16	0.0502	VNV16	0	VNV16	0	No Message


Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N-0.10	B74	16	962	12.84	VNV8	0.1554	VNV16	0	VNV16	0	No Message
N-0.10	B75	17	40	13.43	VNV8	0.1535	VNV16	0	VNV16	0	No Message
N-0.10	B75	17	506.5	17.79	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B75	17	973	15.04	VNV8	0.1535	VNV16	0	VNV16	0	No Message
N-0.10	B78	18	40	24.21	VNV8	0.4005	VNV16	0	VNV16	0	No Message
N-0.10	B78	18	506.5	35.81	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B78	18	973	28.16	VNV8	0.4005	VNV16	0	VNV16	0	No Message
N-0.10	B80	19	40	29.29	VNV4	0.3997	VNV16	0	VNV16	0	No Message
N-0.10	B80	19	501	35.2	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B80	19	962	23.24	VNV8	0.398	VNV16	0	VNV16	0	No Message
N-0.10	B89	20	40	21.29	VNV8	0.2642	VNV16	0	VNV16	0	No Message
N-0.10	B89	20	501	25.34	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B89	20	962	16.85	VNV8	0.2642	VNV16	0	VNV16	0	No Message
N-0.10	B90	21	40	17.79	VNV8	0.2655	VNV16	0	VNV16	0	No Message
N-0.10	B90	21	506.5	25.62	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B90	21	973	20.43	VNV8	0.2655	VNV16	0	VNV16	0	No Message
N-0.10	B92	22	0	0.75	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B92	22	70	0.42	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B92	22	140	0.59	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B93	23	40	14.48	VNV8	0.2207	VNV16	0	VNV16	0	No Message
N-0.10	B93	23	451	17.44	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B93	23	862	19.09	VNV8	0.2207	VNV16	0	VNV16	0	No Message
N-0.10	B94	24	0	20.76	VNV8	0.2273	VNV16	0	VNV16	0	No Message
N-0.10	B94	24	416.5	17.52	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B94	24	833	13.92	VNV8	0.2273	VNV16	0	VNV16	0	No Message
N-0.10	B95	25	0	0.71	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B95	25	70	0.37	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B95	25	140	0.74	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B96	26	0	0.72	VNV8	0.0064	VNV12	13.16	VNV8	0.034	No Message
N-0.10	B96	26	140	10.38	VNV16	0	VNV12	13.16	VNV8	0.034	No Message
N-0.10	B96	26	140	10.38	VNV4	0.2856	VNV16	0	VNV16	0	No Message
N-0.10	B96	26	486.5	18.68	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B96	26	973	15.93	VNV4	0.2416	VNV16	0	VNV16	0	No Message
N-0.10	B97	27	40	16.25	VNV4	0.2429	VNV16	0	VNV16	0	No Message
N-0.10	B97	27	521	18.76	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B97	27	862	10.59	VNV4	0.2739	VNV16	0	VNV16	0	No Message
N-0.10	B97	27	862	10.59	VNV12	0.0198	VNV12	13.88	VNV8	0.0345	No Message
N-0.10	B97	27	1002	0.72	VNV12	0.0198	VNV12	13.88	VNV8	0.0345	No Message
N-0.10	B98	28	0	0.92	VNV16	0.059	VNV16	0	VNV16	0	No Message
N-0.10	B98	28	70	0.52	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B98	28	140	0.75	VNV16	0.059	VNV16	0	VNV16	0	No Message
N-0.10	B99	29	40	16.99	VNV8	0.3111	VNV16	0	VNV16	0	No Message
N-0.10	B99	29	451	22.12	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B99	29	862	23.19	VNV8	0.3111	VNV16	0	VNV16	0	No Message
N-0.10	B100	30	0	24.89	VNV8	0.3188	VNV16	0	VNV16	0	No Message
N-0.10	B100	30	416.5	22.47	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B100	30	833	16.79	VNV8	0.3188	VNV16	0	VNV16	0	No Message
N-0.10	B101	31	0	0.78	VNV16	0.0601	VNV16	0	VNV16	0	No Message
N-0.10	B101	31	70	0.48	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B101	31	140	0.95	VNV16	0.0601	VNV16	0	VNV16	0	No Message
N-0.10	B102	32	40	15.9	VNV8	0.2461	VNV16	0	VNV16	0	No Message
N-0.10	B102	32	506.5	24.46	VNV16	0.0502	VNV16	0	VNV16	0	No Message
N-0.10	B102	32	973	18.94	VNV8	0.2461	VNV16	0	VNV16	0	No Message
N-0.10	B103	33	40	18.89	VNV8	0.2419	VNV16	0	VNV16	0	No Message
N-0.10	B103	33	501	24.14	VNV16	0.0502	VNV16	0	VNV16	0	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N-0.10	B103	33	962	14.84	VNV8	0.2419	VNV16	0	VNV16	0	No Message
N-0.10	B104	34	0	0	VNV8	0.0365	VNV16	0	VNV16	0	No Message
N-0.10	B104	34	238.5	2.87	VNV16	0.0294	VNV16	0	VNV16	0	No Message
N-0.10	B104	34	477	5.52	VNV8	0.0365	VNV16	0	VNV16	0	No Message
N-0.10	B107	35	0	1.34	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B107	35	199	0.67	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B107	35	398	0	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B108	36	0	1.94	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B108	36	490	1.77	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B108	36	980	1.35	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B109	37	0	1.42	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B109	37	350	0.78	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B109	37	700	1.56	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B110	38	0	2.33	VNV8	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B110	38	358	3.87	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B110	38	358	3.87	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B110	38	417.5	3.8	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B110	38	835	0	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B111	39	0	0.21	VNV8	0.175	VNV12	13.88	VNV4	0.0158	No Message
N-0.10	B111	39	67.5	2.75	VNV16	0.1339	VNV12	13.88	VNV4	0.0158	No Message
N-0.10	B111	39	135	5.52	VNV8	0.175	VNV12	13.88	VNV4	0.0158	No Message
N-0.10	B112	40	0	0.25	VNV8	0.1861	VNV16	13.88	VNV12	0.0258	No Message
N-0.10	B112	40	87.5	4.28	VNV16	0.1224	VNV16	13.88	VNV12	0.0258	No Message
N-0.10	B112	40	175	8.63	VNV8	0.1861	VNV16	13.88	VNV12	0.0258	No Message
N-0.10	B113	41	0	0.06	VNV8	0.1939	VNV12	13.43	VNV8	0.0372	No Message
N-0.10	B113	41	87.5	4.81	VNV16	0.1353	VNV12	13.43	VNV8	0.0372	No Message
N-0.10	B113	41	175	9.72	VNV8	0.1939	VNV12	13.43	VNV8	0.0372	No Message
N-0.10	B117	44	25	3.16	VNV12	0.0757	VNV16	9.17	VNV4	0.0441	No Message
N-0.10	B117	44	100	1.57	VNV12	0.0729	VNV16	9.17	VNV4	0.0441	No Message
N-0.10	B117	44	100	1.57	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B117	44	482.5	2.21	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B117	44	940	2.73	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B118	45	25	3.73	VNV4	0.0243	VNV16	9.92	VNV4	0.0281	No Message
N-0.10	B118	45	180	1.86	VNV4	0.0166	VNV16	9.92	VNV4	0.0281	No Message
N-0.10	B118	45	180	1.86	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B118	45	520	2.68	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B118	45	1015	2.49	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B119	46	25	2.29	VNV4	0.0638	VNV8	8.98	VNV8	0.0546	No Message
N-0.10	B119	46	100	1.56	VNV4	0.06	VNV8	8.98	VNV8	0.0546	No Message
N-0.10	B119	46	100	2.03	VNV16	0.0437	VNV16	9.92	VNV4	0.0296	No Message
N-0.10	B119	46	214	1.56	VNV8	0.0449	VNV16	9.92	VNV4	0.0296	No Message
N-0.10	B119	46	403	5.16	VNV8	0.0525	VNV16	9.92	VNV4	0.0296	No Message
N-0.10	B120	47	0	0.08	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B120	47	70	0.11	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B120	47	140	0.16	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B121	48	0	4.43	VNV16	0.0506	VNV16	0	VNV16	0	No Message
N-0.10	B121	48	347.5	2.42	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B121	48	695	3.48	VNV16	0.0506	VNV16	0	VNV16	0	No Message
N-0.10	B122	49	0	3.94	VNV8	0.0607	VNV16	0	VNV16	0	No Message
N-0.10	B122	49	280	2.66	VNV16	0.035	VNV16	0	VNV16	0	No Message
N-0.10	B122	49	560	5.36	VNV8	0.0607	VNV16	0	VNV16	0	No Message
N-0.10	B123	50	0	0.12	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B123	50	70	0.07	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B123	50	140	0.09	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B124	51	0	2.97	VNV8	0.0106	VNV8	9.92	VNV4	0.0133	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N-0.10	B124	51	477.5	2.54	VNV8	0.0106	VNV8	9.92	VNV4	0.0133	No Message
N-0.10	B124	51	955	2.23	VNV8	0.0106	VNV8	9.92	VNV4	0.0133	No Message
N-0.10	B125	52	25	1.18	VNV16	0.0335	VNV8	9.4	VNV4	0.0208	No Message
N-0.10	B125	52	211.5	0.66	VNV16	0.0335	VNV8	9.4	VNV4	0.0208	No Message
N-0.10	B125	52	398	1.57	VNV16	0.0335	VNV8	9.4	VNV4	0.0208	No Message
N-0.10	B126	53	25	1.49	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B126	53	482.5	1.94	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B126	53	940	2.04	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B127	54	25	2.02	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B127	54	520	2.21	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B127	54	1015	1.82	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B128	55	25	1.01	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B128	55	201.5	0.53	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B128	55	378	1.06	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B129	56	25	1.26	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B129	56	417.5	1.47	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B129	56	810	1.49	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B130	57	25	1.16	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B130	57	350	0.74	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B130	57	675	1.43	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B131	58	25	1.75	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B131	58	490	2.08	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B131	58	955	1.63	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B132	59	25	0.85	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B132	59	211.5	0.58	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B132	59	398	1.15	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B133	60	25	1.58	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B133	60	482.5	1.75	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B133	60	940	1.62	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B134	61	25	1.86	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B134	61	520	2.05	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B134	61	1015	1.82	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B135	62	25	0.93	VNV8	0.025	VNV16	9.92	VNV4	0.0282	No Message
N-0.10	B135	62	214	0.91	VNV16	0.0175	VNV16	9.92	VNV4	0.0282	No Message
N-0.10	B135	62	403	2.14	VNV8	0.025	VNV16	9.92	VNV4	0.0282	No Message
N-0.10	B136	63	0	0.17	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B136	63	70	0.12	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B136	63	140	0.23	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B137	64	0	2.87	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B137	64	347.5	2.32	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B137	64	695	2.4	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B138	65	0	1.72	VNV16	0.0388	VNV16	0	VNV16	0	No Message
N-0.10	B138	65	280	1.54	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B138	65	560	2.47	VNV16	0.0388	VNV16	0	VNV16	0	No Message
N-0.10	B139	66	0	0.24	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B139	66	70	0.12	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B139	66	140	0.13	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B140	67	0	2.15	VNV4	0.008	VNV4	9.92	VNV4	0.0127	No Message
N-0.10	B140	67	477.5	2.03	VNV4	0.008	VNV4	9.92	VNV4	0.0127	No Message
N-0.10	B140	67	955	1.84	VNV4	0.008	VNV4	9.92	VNV4	0.0127	No Message
N-0.10	B141	68	25	0.33	VNV16	0.0086	VNV16	9.92	VNV4	0.0246	No Message
N-0.10	B141	68	211.5	0.32	VNV16	0.0086	VNV16	9.92	VNV4	0.0246	No Message
N-0.10	B141	68	398	0.39	VNV16	0.0086	VNV16	9.92	VNV4	0.0246	No Message
N-0.10	B142	69	0	7.37	VNV8	0.05	VNV16	0	VNV16	0	No Message
N-0.10	B142	69	501	7.37	VNV16	0	VNV16	0	VNV16	0	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N-0.10	B142	69	1002	7.37	VNV8	0.05	VNV16	0	VNV16	0	No Message
N-0.10	B143	70	0	7.41	VNV8	0.0511	VNV16	0	VNV16	0	No Message
N-0.10	B143	70	506.5	7.37	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B143	70	1013	7.48	VNV8	0.0511	VNV16	0	VNV16	0	No Message
N-0.10	B144	71	0	0.26	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B144	71	87.5	0.31	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B144	71	175	0.62	VNV16	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B145	72	0	0	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B145	72	65	0.52	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B145	72	130	0	VNV16	0	VNV16	0	VNV16	0	No Message
N-0.10	B19	42	15	0.02	VNV16	0.0251	VNV4	7.22	VNV12	0.0161	No Message
N-0.10	B19	42	100	1.2	VNV16	0.0251	VNV4	7.22	VNV12	0.0161	No Message
N-0.10	B19	42	100	1.64	VNV8	0.0328	VNV16	0	VNV16	0	No Message
N-0.10	B19	42	482.5	1.54	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B19	42	950	2.42	VNV8	0.0298	VNV16	0	VNV16	0	No Message
N-0.10	B26	43	15	0.16	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B26	43	180	1.25	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B26	43	180	1.42	VNV8	0.0335	VNV16	0	VNV16	0	No Message
N-0.10	B26	43	520	1.5	VNV16	0.0251	VNV16	0	VNV16	0	No Message
N-0.10	B26	43	1025	2.52	VNV8	0.0307	VNV16	0	VNV16	0	No Message
N-0.10	B28	247	15	0.04	VNV8	0.0391	VNV4	7.64	VNV4	0.0129	No Message
N-0.10	B28	247	100	0.79	VNV8	0.0366	VNV4	7.64	VNV4	0.0129	No Message
N-0.10	B28	247	100	0.79	VNV8	0.0663	VNV12	6.49	VNV8	0.0342	No Message
N-0.10	B28	247	209	0.79	VNV8	0.063	VNV12	6.49	VNV8	0.0342	No Message
N-0.10	B28	247	403	1.58	VNV8	0.0572	VNV12	6.49	VNV8	0.0342	No Message
N-0.10	B168	384	15	0.01	VNV16	0.0167	VNV12	4.13	VNV4	0.0118	No Message
N-0.10	B168	384	50	0.01	VNV16	0.0167	VNV12	4.13	VNV4	0.0118	No Message
N-0.10	B168	384	85	0.01	VNV16	0.0167	VNV12	4.13	VNV4	0.0118	No Message
N-0.10	B183	385	15	1.62	VNV8	0.0291	VNV16	3.81	VNV4	0.0218	No Message
N-0.10	B183	385	159	0.82	VNV16	0.0262	VNV16	3.81	VNV4	0.0218	No Message
N-0.10	B183	385	303	1.66	VNV8	0.0291	VNV16	3.81	VNV4	0.0218	No Message
N-0.10	B212	379	0	2.64	VNV1	0	VNV8	21.68	VNV8	0.106	No Message
N-0.10	B212	379	82.5	7	VNV1	0	VNV8	21.68	VNV8	0.106	No Message
N-0.10	B212	379	165	11.05	VNV1	0	VNV8	21.68	VNV8	0.106	No Message
N-0.10	B213	377	0	1.27	VNV8	0.1072	VNV16	13.88	VNV4	0.035	No Message
N-0.10	B213	377	25	1.83	VNV8	0.1046	VNV16	13.88	VNV4	0.035	No Message
N-0.10	B213	377	25	1.83	VNV1	0	VNV4	23.13	VNV4	0.1131	No Message
N-0.10	B213	377	77.5	1.2	VNV1	0	VNV4	23.13	VNV4	0.1131	No Message
N-0.10	B213	377	155	2.41	VNV1	0	VNV4	23.13	VNV4	0.1131	No Message
N-0.10	B218	248	22.5	2.45	VNV8	0.1101	VNV16	0	VNV16	0	No Message
N-0.10	B218	248	82.5	1.05	VNV8	0.1038	VNV16	0	VNV16	0	No Message
N-0.10	B218	248	142.5	3.47	VNV8	0.1101	VNV16	0	VNV16	0	No Message
N-0.10	B219	296	22.5	1.71	VNV8	0.0729	VNV12	5.8	VNV8	0.0199	No Message
N-0.10	B219	296	93.75	1	VNV8	0.0655	VNV12	5.8	VNV8	0.0199	No Message
N-0.10	B219	296	165	2	VNV8	0.0729	VNV12	5.8	VNV8	0.0199	No Message
N-0.10	B220	375	22.5	4.13	VNV8	0.1452	VNV16	0	VNV16	0	No Message
N-0.10	B220	375	82.5	4.55	VNV16	0.1202	VNV16	0	VNV16	0	No Message
N-0.10	B220	375	142.5	3.78	VNV8	0.1452	VNV16	0	VNV16	0	No Message
N-0.10	B221	376	22.5	4.94	VNV8	0.3619	VNV12	13.76	VNV8	0.0326	No Message
N-0.10	B221	376	73.75	5.49	VNV16	0.3405	VNV12	13.76	VNV8	0.0326	No Message
N-0.10	B221	376	125	11.05	VNV8	0.3619	VNV12	13.76	VNV8	0.0326	No Message
N-0.10	B223	383	15	1.1	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N-0.10	B223	383	430	0.71	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N-0.10	B223	383	845	1.39	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N-0.10	B224	249	22.5	3.38	VNV8	0.1325	VNV16	0	VNV16	0	No Message

Story	Label	Unique Name	Station cm	As Bottom cm ²	V Combo	At Shear cm ² /cm	Torsion Long Combo	AI Torsion cm ²	Torsion Tran Combo	At Torsion cm ² /cm	Warnings
N-0.10	B224	249	82.5	1.3	VNV16	0.1004	VNV16	0	VNV16	0	No Message
N-0.10	B224	249	142.5	2.94	VNV8	0.1325	VNV16	0	VNV16	0	No Message
N-0.10	B225	295	22.5	3.26	VNV8	0.106	VNV16	5.22	VNV4	0.0305	No Message
N-0.10	B225	295	93.75	1.62	VNV16	0.0678	VNV16	5.22	VNV4	0.0305	No Message
N-0.10	B225	295	165	1.03	VNV8	0.106	VNV16	5.22	VNV4	0.0305	No Message
N-0.10	B226	373	22.5	4.89	VNV8	0.1895	VNV16	0	VNV16	0	No Message
N-0.10	B226	373	82.5	5.88	VNV16	0.161	VNV16	0	VNV16	0	No Message
N-0.10	B226	373	142.5	5.51	VNV8	0.1895	VNV16	0	VNV16	0	No Message
N-0.10	B227	374	22.5	9.73	VNV1	0	VNV16	13.88	VNV4	0.0168	No Message
N-0.10	B227	374	73.75	7.64	VNV1	0	VNV16	13.88	VNV4	0.0168	No Message
N-0.10	B227	374	125	11.65	VNV1	0	VNV16	13.88	VNV4	0.0168	No Message
N-0.10	B228	250	22.5	4.81	VNV8	0.1617	VNV16	0	VNV16	0	No Message
N-0.10	B228	250	82.5	1.86	VNV16	0.1317	VNV16	0	VNV16	0	No Message
N-0.10	B228	250	142.5	4.52	VNV8	0.1617	VNV16	0	VNV16	0	No Message
N-0.10	B229	294	22.5	3.74	VNV8	0.1196	VNV16	5.52	VNV4	0.0262	No Message
N-0.10	B229	294	93.75	1.59	VNV16	0.084	VNV16	5.52	VNV4	0.0262	No Message
N-0.10	B229	294	165	1.82	VNV8	0.1196	VNV16	5.52	VNV4	0.0262	No Message
N-0.10	B230	371	22.5	9.6	VNV8	0.1939	VNV16	0	VNV16	0	No Message
N-0.10	B230	371	82.5	6.41	VNV16	0.1879	VNV16	0	VNV16	0	No Message
N-0.10	B230	371	142.5	3.66	VNV8	0.1939	VNV16	0	VNV16	0	No Message
N-0.10	B231	372	22.5	10.72	VNV8	0.4232	VNV16	13.88	VNV4	0.0274	No Message
N-0.10	B231	372	73.75	5.24	VNV16	0.4181	VNV16	13.88	VNV4	0.0274	No Message
N-0.10	B231	372	125	10.59	VNV8	0.4232	VNV16	13.88	VNV4	0.0274	No Message
N-0.10	B235	380	15	0.01	VNV8	0.0017	VNV16	4.02	VNV4	0.0214	No Message
N-0.10	B235	380	50	0.01	VNV16	0.001	VNV16	4.02	VNV4	0.0214	No Message
N-0.10	B235	380	85	0.02	VNV8	0.0017	VNV16	4.02	VNV4	0.0214	No Message
N-0.10	B236	381	15	1.08	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N-0.10	B236	381	432.5	0.73	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N-0.10	B236	381	850	1.36	VNV16	0.0167	VNV16	0	VNV16	0	No Message
N-0.10	B237	382	15	0.06	VNV16	0.0167	VNV12	4.22	VNV4	0.0121	No Message
N-0.10	B237	382	90	0.07	VNV16	0.0167	VNV12	4.22	VNV4	0.0121	No Message
N-0.10	B237	382	165	0.09	VNV16	0.0167	VNV12	4.22	VNV4	0.0121	No Message
N-0.10	B243	378	0	2.32	VNV1	0	VNV4	23.13	VNV4	0.1131	No Message
N-0.10	B243	378	5	1.38	VNV1	0	VNV4	23.13	VNV4	0.1131	No Message
N-0.10	B243	378	10	2.76	VNV1	0	VNV4	23.13	VNV4	0.1131	No Message

	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 1 DE 1
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 5.4. DISEÑO DE ESTRUCTURA METALICA

Steel Frame Summary - AISC 360-05 (Part 1 of 2)

Story	Label	Unique Name	Design Type	Design Section	Status	PMM Combo	PMM Ratio	P Ratio	M Major Ratio	M Minor Ratio
N+8.30	C48	446	Column	TUB300X300X10.0MM	No Message	C6(C)	0.434	0.013	0.374	0.046
N+8.30	C49	449	Column	TUB300X300X10.0MM	No Message	C6(C)	0.375	0.011	0.294	0.07
N+8.30	C50	452	Column	TUB300X300X10.0MM	No Message	C6(C)	0.303	0.011	0.223	0.069
N+8.30	C51	455	Column	TUB300X300X10.0MM	No Message	C6(C)	0.392	0.013	0.327	0.052
N+8.30	B332	235	Beam	IPE400	No Message	C10(C)	0.218	0	0.218	0
N+8.30	B333	236	Beam	IPE400	No Message	C10(C)	0.206	0	0.206	0
N+8.30	B334	237	Beam	IPE400	No Message	C10(C)	0.206	0	0.206	0
N+8.30	B335	238	Beam	IPE400	No Message	C10(C)	0.219	0	0.219	0
N+8.30	B336	125	Beam	IPE200	No Message	C10(C)	0.326	0	0.326	0
N+8.30	B336		Beam	IPE200	No Message	C6(T)	0.338	0	0.338	0
N+8.30	B337	126	Beam	IPE200	No Message	C6(C)	0.335	0	0.335	0
N+8.30	B337		Beam	IPE200	No Message	C6(T)	0.349	0	0.349	0
N+8.30	B338	239	Beam	IPE200	No Message	C10(C)	0.251	0	0.251	0
N+8.30	B339	240	Beam	IPE200	No Message	C10(C)	0.251	0	0.251	0
N+8.30	B340	241	Beam	IPE200	No Message	C10(C)	0.251	0	0.251	0
N+8.30	B341	242	Beam	IPE200	No Message	C10(C)	0.326	0	0.326	0
N+8.30	B341		Beam	IPE200	No Message	C10(T)	0.338	0	0.338	0
N+8.30	B342	243	Beam	IPE200	No Message	C10(C)	0.262	0	0.262	0
N+8.30	B343	244	Beam	IPE200	No Message	C10(C)	0.262	0	0.262	0
N+8.30	B344	245	Beam	IPE200	No Message	C10(C)	0.262	0	0.262	0
N+8.30	B345	246	Beam	IPE200	No Message	C6(C)	0.335	0	0.335	0
N+8.30	B345		Beam	IPE200	No Message	C10(T)	0.349	0	0.349	0
N+8.30	B353	423	Beam	IPE200	No Message	C10(C)	0.789	0	0.789	0
N+8.30	B354	424	Beam	IPE200	No Message	C10(C)	0.79	0	0.79	0
N+8.30	B356	426	Beam	IPE200	No Message	C10(C)	0.79	0	0.79	0
N+8.30	B357	427	Beam	IPE200	No Message	C10(C)	0.789	0	0.789	0
N+8.30	B358	428	Beam	IPE200	No Message	C10(T)	0.268	0	0.268	0
N+8.30	B359	429	Beam	IPE200	No Message	C10(C)	0.268	0	0.268	0
N+8.30	B360	430	Beam	IPE200	No Message	C10(C)	0.268	0	0.268	0
N+8.30	B361	431	Beam	IPE200	No Message	C10(C)	0.268	0	0.268	0
N+8.30	B362	432	Beam	IPE200	No Message	C10(T)	0.268	0	0.268	0
N+8.30	B363	433	Beam	IPE200	No Message	C10(C)	0.707	0	0.707	0
N+8.30	B364	434	Beam	IPE200	No Message	C10(C)	0.707	0	0.707	0
N+8.30	B365	435	Beam	IPE200	No Message	C10(C)	0.707	0	0.707	0
N+8.30	B366	436	Beam	IPE200	No Message	C10(C)	0.707	0	0.707	0
N+8.30	B367	437	Beam	IPE200	No Message	C10(C)	0.258	0	0.258	0
N+8.30	B367		Beam	IPE200	No Message	C18(T)	0.163	0	0.163	0
N+8.30	B368	438	Beam	IPE200	No Message	C10(C)	0.258	0	0.258	0
N+8.30	B369	439	Beam	IPE200	No Message	C10(C)	0.258	0	0.258	0
N+8.30	B370	440	Beam	IPE200	No Message	C10(C)	0.258	0	0.258	0
N+8.30	B371	441	Beam	IPE200	No Message	C10(T)	0.258	0	0.258	0
N+8.30	B372	442	Beam	IPE200	No Message	C10(C)	0.145	0	0.145	0
N+8.30	B373	443	Beam	IPE200	No Message	C10(C)	0.145	0	0.145	0
N+8.30	B374	444	Beam	IPE400	No Message	C10(C)	0.155	0.012	0.137	0.006
N+8.30	B375	445	Beam	IPE330	No Message	C10(C)	0.359	0	0.359	0
N+8.30	B376	447	Beam	IPE400	No Message	C10(T)	0.132	0.025	0.103	0.004
N+8.30	B377	448	Beam	IPE330	No Message	C6(C)	0.359	0	0.359	0
N+8.30	B378	450	Beam	IPE400	No Message	C10(T)	0.131	0.026	0.103	0.003
N+8.30	B379	451	Beam	IPE330	No Message	C10(C)	0.359	0	0.359	0
N+8.30	B380	453	Beam	IPE400	No Message	C10(C)	0.147	0.012	0.13	0.005
N+8.30	B381	454	Beam	IPE330	No Message	C10(C)	0.359	0	0.359	0
N+8.30	B382	457	Beam	IPE400	No Message	C6(T)	0.294	0	0.294	0
N+8.30	B383	458	Beam	IPE400	No Message	C6(C)	0.169	0	0.169	0

Story	Label	Unique Name	Design Type	Design Section	Status	PMM Combo	PMM Ratio	P Ratio	M Major Ratio	M Minor Ratio
N+8.30	B384	459	Beam	IPE400	No Message	C6(C)	0.068	0	0.068	0
N+8.30	B385	460	Beam	IPE400	No Message	C6(C)	0.149	0	0.149	0
N+8.30	B386	461	Beam	IPE400	No Message	C6(T)	0.255	0	0.255	0
N+8.30	B387	463	Beam	IPE240	No Message	C10(C)	1.053	0	1.053	0
N+8.30	B395	474	Beam	IPE360	No Message	C10(C)	0.693	0	0.693	0
N+8.30	B397	106	Beam	IPE360	No Message	C10(C)	0.312	0	0.312	0
N+8.30	B402	470	Beam	IPE200	No Message	C10(C)	0.761	0	0.761	0
N+8.30	B408	476	Beam	IPE200	No Message	C10(C)	0.355	0	0.355	0
N+8.30	B409	477	Beam	IPE200	No Message	C10(C)	0.347	0	0.347	0
N+8.30	B410	478	Beam	IPE200	No Message	C10(C)	0.441	0	0.441	0
N+8.30	B411	479	Beam	IPE200	No Message	C10(C)	0.441	0	0.441	0
N+8.30	B412	480	Beam	IPE200	No Message	C10(C)	0.441	0	0.441	0
N+8.30	B413	481	Beam	IPE200	No Message	C10(C)	0.441	0	0.441	0
N+8.30	B414	482	Beam	IPE200	No Message	C10(C)	0.441	0	0.441	0

Steel Frame Summary - AISC 360-05 (Part 2 of 2)

Story	Label	Unique Name	V Major Combo	V Major Ratio	V Minor Combo	V Minor Ratio
N+8.30	C48	446	C6	0.1	C10	0.024
N+8.30	C49	449	C6	0.076	C10	0.033
N+8.30	C50	452	C6	0.057	C10	0.033
N+8.30	C51	455	C6	0.087	C10	0.027
N+8.30	B332	235	C10	0.071	C18	0
N+8.30	B333	236	C10	0.068	C18	0
N+8.30	B334	237	C10	0.068	C18	0
N+8.30	B335	238	C10	0.071	C18	0
N+8.30	B336	125	C10	0.108	C18	0
N+8.30	B336					
N+8.30	B337	126	C6	0.111	C18	0
N+8.30	B337					
N+8.30	B338	239	C10	0.074	C18	0
N+8.30	B339	240	C10	0.074	C18	0
N+8.30	B340	241	C10	0.074	C18	0
N+8.30	B341	242	C10	0.108	C18	0
N+8.30	B341					
N+8.30	B342	243	C10	0.077	C18	0
N+8.30	B343	244	C10	0.077	C18	0
N+8.30	B344	245	C10	0.077	C18	0
N+8.30	B345	246	C6	0.111	C18	0
N+8.30	B345					
N+8.30	B353	423	C6	0.159	C18	0
N+8.30	B354	424	C10	0.159	C18	0
N+8.30	B356	426	C10	0.159	C18	0
N+8.30	B357	427	C6	0.159	C18	0
N+8.30	B358	428	C10	0.079	C18	0
N+8.30	B359	429	C10	0.079	C18	0
N+8.30	B360	430	C10	0.079	C18	0
N+8.30	B361	431	C10	0.079	C18	0
N+8.30	B362	432	C10	0.079	C18	0
N+8.30	B363	433	C6	0.153	C18	0
N+8.30	B364	434	C10	0.153	C18	0
N+8.30	B365	435	C10	0.153	C18	0
N+8.30	B366	436	C6	0.153	C18	0
N+8.30	B367	437	C10	0.076	C18	0

Story	Label	Unique Name	V Major Combo	V Major Ratio	V Minor Combo	V Minor Ratio
N+8.30	B367					
N+8.30	B368	438	C10	0.076	C18	0
N+8.30	B369	439	C10	0.076	C18	0
N+8.30	B370	440	C10	0.076	C18	0
N+8.30	B371	441	C10	0.076	C18	0
N+8.30	B372	442	C10	0.047	C18	0
N+8.30	B373	443	C10	0.047	C18	0
N+8.30	B374	444	C10	0.041	C6	0.0001579
N+8.30	B375	445	C6	0.119	C18	0
N+8.30	B376	447	C10	0.033	C6	0.0001159
N+8.30	B377	448	C6	0.119	C18	0
N+8.30	B378	450	C10	0.033	C6	0
N+8.30	B379	451	C6	0.119	C18	0
N+8.30	B380	453	C10	0.039	C6	0.0001328
N+8.30	B381	454	C6	0.119	C18	0
N+8.30	B382	457	C6	0.103	C18	0
N+8.30	B383	458	C6	0.069	C18	0
N+8.30	B384	459	C6	0.033	C18	0
N+8.30	B385	460	C6	0.062	C18	0
N+8.30	B386	461	C6	0.091	C18	0
N+8.30	B387	463	C10	0.223	C18	0
N+8.30	B395	474	C10	0.187	C18	0
N+8.30	B397	106	C10	0.095	C18	0
N+8.30	B402	470	C10	0.149	C18	0
N+8.30	B408	476	C6	0.174	C18	0
N+8.30	B409	477	C10	0.057	C18	0
N+8.30	B410	478	C10	0.13	C18	0
N+8.30	B411	479	C10	0.13	C18	0
N+8.30	B412	480	C10	0.13	C18	0
N+8.30	B413	481	C10	0.13	C18	0
N+8.30	B414	482	C10	0.13	C18	0



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENC	Revisó:	ING. JUAN C. PATINO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

ANEXO 6.5. CHEQUEO DE CONFINAMIENTO



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATINO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

**CHEQUEO DE CONFINAMIENTO
CAPACIDAD MODERADA DE DISIPACION DE ENERGIA (DMO)**

SECCION cm		RECUBRIMIENTO	d (cm)
b	h	4 cm	56
60	60		

CONFINAMIENTO					
VIGAS DMO					
d/4	14				
8db	15.92	5	#	barra menor diametro	DMO
32dv	30.96	4	#	barra del estribo	8db
150 mm	15				
	14.00	USAR			

NO CONFINADO		
VIGAS DMO		
d/2	28	
	25	USAR

Ec (T/m2)	f'c = 28	Mpa
2675250	Wc = 2400	k/m3
2487006		



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

ANEXO 6.6. CHEQUEO DE COLUMNA FUERTE-VIGA DEBIL

Propietario:	SEC. EDUCACION Y SEC. CULTURA	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

CHEQUEO CONDICION COLUMNA FUERTE - VIGA DEBIL

Chequeo de la Condición

$$\sum M_{nc} \geq 1.2 \sum M_{nb}$$

1. Calculo de los momentos resistentes de las vigas

Sentido y-y

Dimensiones de la viga:

Lado Izquierdo		
B:	40	[cm]
H:	60	[cm]
d':	5	[cm]
As-sup:	7.92	[cm ²]
As-inf:	7.92	[cm ²]

Lado Derecho		
B:	40	[cm]
H:	60	[cm]
d':	5	[cm]
As-sup:	7.92	[cm ²]
As-inf:	7.92	[cm ²]

Resistencia del concreto:

280 [kg/cm²]

Resistencia del acero:

4200 [kg/cm²]

Cuantías de acero

Ro1: 0.0036
Ro2: 0.0036

Ro1: 0.0036
Ro2: 0.0036

$$M_n = \rho f_y b d^2 \left(1 - 0.59 \rho \frac{f_y}{f'_c} \right)$$

Momentos Nominales:

Mn1: 17.71 [Ton-m]
Mn2: 17.71 [Ton-m]

Mn1: 17.71 [Ton-m]
Mn2: 17.71 [Ton-m]

Suma de momentos en sentido Horario:

Mn1-izq+Mn2-der: 35.425 [Ton-m]

Suma de momentos en Sentido Contrahorario:

Mn2-izq+Mn1-der: 35.425 [Ton-m]

Maximo: 35.42 [Ton-m]

2. Calculo de los momentos resistentes de las columnas

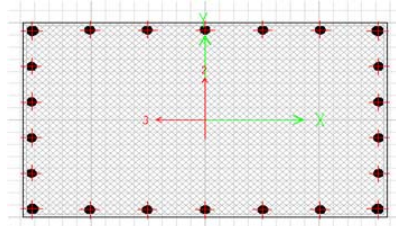
Pn	Mn
[Ton]	[T-m]
-683.58	0.00
-683.58	31.63
-616.45	46.35
-526.69	58.68
-427.05	69.41
-309.07	79.38
-260.36	91.72
-189.41	101.39
-72.67	87.97
45.77	67.88
341.94	0.00

Dimensiones de columna:

50x80

Refuerzo de la columna:

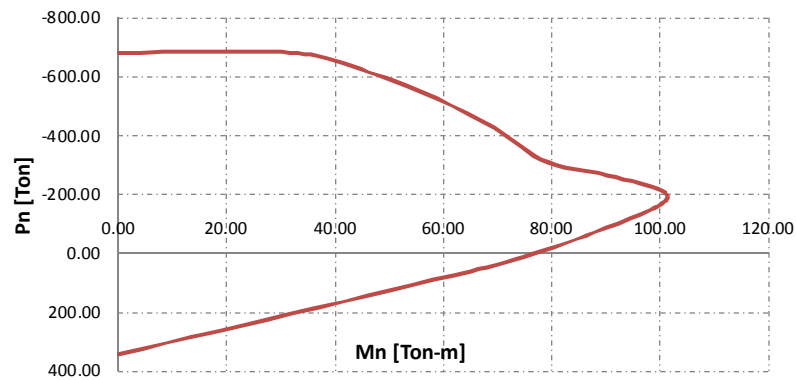
4#8+18#7



REF: SD-SECTION ETABS

Propietario:	SEC. EDUCACION Y SEC. CULTURA	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

DIAGRAMA DE INTERACCION



Pu=	0	Momento Nominal Superior	Pu=	-194.8	Momento Nominal Inferior		
Posición:	9		Posición:	7			
Pu0:	-72.67	Mn-0:	87.97	Pu0:	-260.36	Mn-0:	91.72
Pu1:	45.77	Mn-1:	67.88	Pu1:	-189.41	Mn-1:	101.39
		Mn:	75.65			Mn:	100.7
			[Ton-m]				[Ton-m]

Suma de Momentos en la columna:

Mn-sup+Mn-inf: 176.3 [Ton-m]

3. Chequeo de la condición

$$1.2 \sum M_{nb} = 42.51 \text{ [Ton-m]}$$

$$\sum M_{nc} = 176.3 \text{ [Ton-m]}$$

$$\sum M_{nc} \geq 1.2 \sum M_{nb} \quad \text{OK!}$$

Propietario:	SEC. EDUCACION Y SEC. CULTURA	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

CHEQUEO CONDICION COLUMNA FUERTE - VIGA DEBIL

Chequeo de la Condición

$$\sum M_{nc} \geq 1.2 \sum M_{nb}$$

1. Calculo de los momentos resistentes de las vigas

Sentido x-x

Dimensiones de la viga:

Lado Izquierdo		
B:	60	[cm]
H:	60	[cm]
d':	5	[cm]
As-sup:	77.6	[cm2]
As-inf:	38.8	[cm2]

Lado Derecho		
B:	60	[cm]
H:	60	[cm]
d':	5	[cm]
As-sup:	77.6	[cm2]
As-inf:	38.8	[cm2]

Resistencia del concreto:

280 [kg/cm2]

Resistencia del acero:

4200 [kg/cm2]

Cuantías de acero

Ro1: 0.0235
Ro2: 0.0118

Ro1: 0.0235
Ro2: 0.0118

$$Mn = \rho f_y b d^2 \left(1 - 0.59 \rho \frac{f_y}{f'_c} \right)$$

Momentos Nominales:

Mn1: 142 [Ton-m]
Mn2: 80.3 [Ton-m]

Mn1: 142 [Ton-m]
Mn2: 80.3 [Ton-m]

Suma de momentos en sentido Horario:

Mn1-izq+Mn2-der: 222.25 [Ton-m]

Suma de momentos en Sentido Contrahorario:

Mn2-izq+Mn1-der: 222.25 [Ton-m]

Maximo: 222.3 [Ton-m]

2. Calculo de los momentos resistentes de las columnas

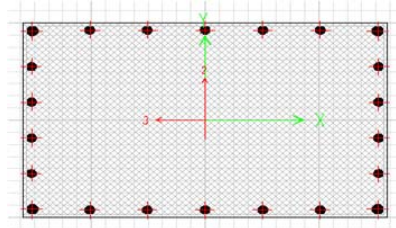
Pn [Ton]	Mn [T-m]
-683.58	0.00
-683.58	49.77
-616.45	72.54
-526.69	92.08
-427.05	108.75
-309.07	124.33
-260.36	144.18
-189.41	159.50
-72.67	136.78
45.77	103.64
341.94	0.00

Dimensiones de columna:

50x80

Refuerzo de la columna:

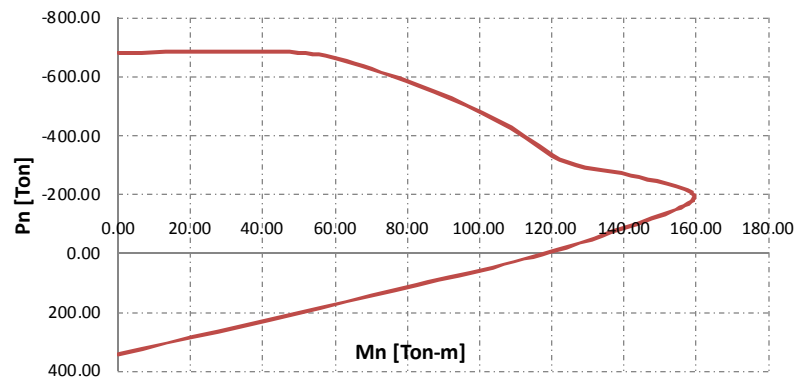
4#8+18#7



REF: SD-SECTION ETABS

Propietario:	SEC. EDUCACION Y SEC. CULTURA	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUENO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

DIAGRAMA DE INTERACCION



Pu=	0	Momento Nominal Superior	Pu=	-194.8	Momento Nominal Inferior
Posición:	9		Posición:	7	
Pu0:	-72.67	Mn-0: 136.78	Pu0:	-260.36	Mn-0: 144.18
Pu1:	45.77	Mn-1: 103.64	Pu1:	-189.41	Mn-1: 159.50
		Mn: 116.4 [Ton-m]			Mn: 158.3 [Ton-m]

Suma de Momentos en la columna:

Mn-sup+Mn-inf: 274.8 [Ton-m]

3. Chequeo de la condición

$$1.2 \sum M_{nb} = 266.70 \text{ [Ton-m]}$$

$$\sum M_{nc} = 274.8 \text{ [Ton-m]}$$

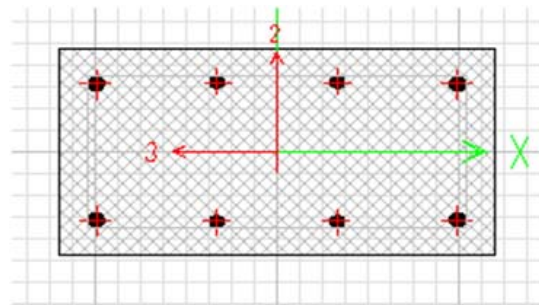
$$\sum M_{nc} \geq 1.2 \sum M_{nb} \quad \text{OK!}$$



Propietario:	FEDERACION DE CAFETEROS	Calculó:	ING. FABIO RIVERA
Proyecto:	ALMACAFE	Revisó:	ING. JUAN R. SOLARTE
Localización:	SOACHA- CUNDINAMARCA	Hoja:	
Contenido:	MEMORIA DE CALCULOS	Fecha:	ABRIL - 2016

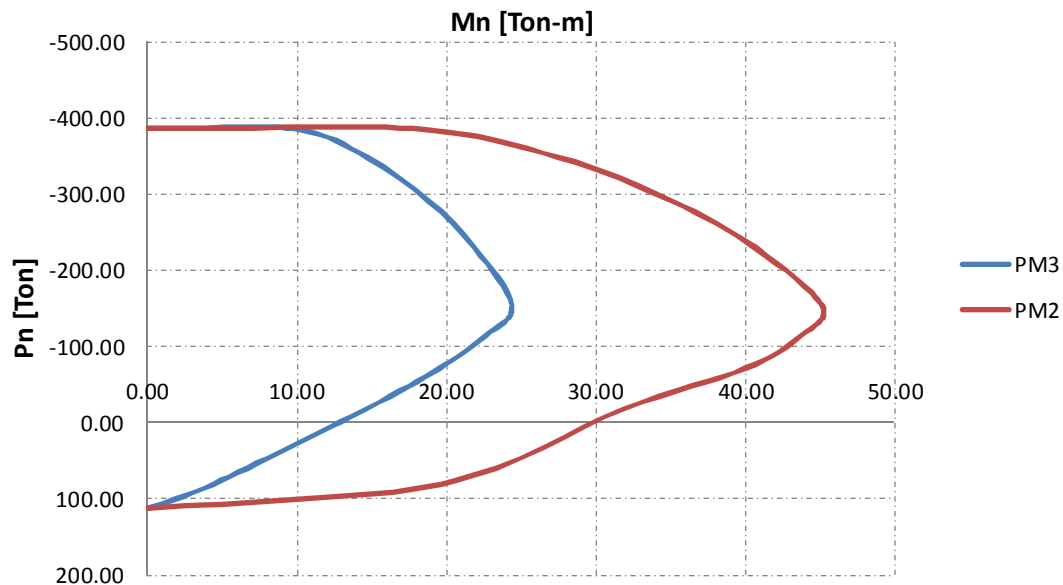
DIAGRAMA DE INTERACCION DE COLUMNAS

Pu [Ton]	M3 [T-m]	M2 [T-m]
-385.59	0.00	0.00
-385.59	9.73	17.75
-348.11	14.69	27.47
-291.27	18.77	35.06
-228.64	21.91	40.69
-153.28	24.38	45.10
-114.26	22.59	43.70
-71.09	19.49	39.94
-17.93	14.60	31.82
80.51	4.40	19.63
112.72	0.00	0.00



REF: SD-SECTION ETABS

DIAGRAMA DE INTERACCION



Pu= **Ton**
Posición: 9


Pu0: -17.93
Pu1: 80.51

M3-0: 14.60
M3-1: 4.40


M2-0: 31.82
M2-1: 19.63

M3: 12.74

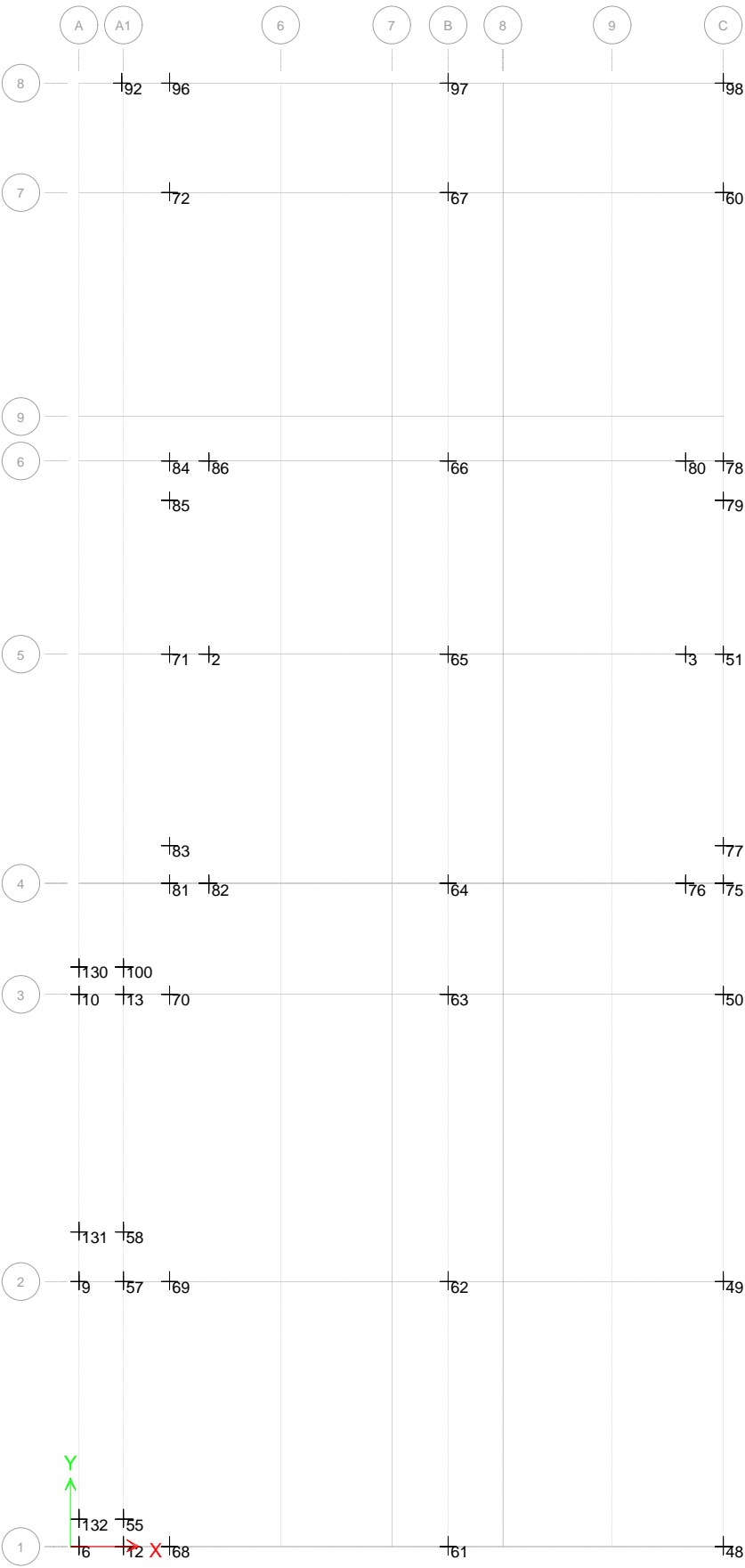
M2: 29.60 [T-m]


	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 1 DE 2
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 6. DISEÑO DE CIMENTACION

	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 2 DE 2
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 6.1. ESQUEMAS DE REACCIONES



	Propietario:	SECRETARIA DE EDUCACION Y SECRETARIA DE CULTURA	Calculó:	ING. FABIO RIVERA
	Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
	Localización:	BOGOTA - CUNDINAMARCA	Hoja:	PAGINA 1 DE 1
	Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	NOVIEMBRE - 2014

ANEXO 6.2. LISTADO DE REACCIONES

Joint Reactions

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	48	1	CIM1	-12.8795	4.897	34.2378	-3.4019	-9.0935	0.0002
BASE	48	1	CIM2	-20.3772	6.3753	46.4095	-3.4833	-15.0716	0.0006
BASE	48	1	CIM3 Max	-6.2969	16.766	40.9461	-1.7022	6.9185	0.0096
BASE	48	1	CIM3 Min	-19.4621	-6.9721	27.5296	-5.1015	-25.1054	-0.0093
BASE	48	1	CIM4 Max	-9.0413	24.818	46.3493	-0.5784	0.241	0.0135
BASE	48	1	CIM4 Min	-16.7177	-15.0241	22.1264	-6.2253	-18.4279	-0.0131
BASE	48	1	CIM5 Max	-13.5551	14.953	48.4252	-2.1817	-1.5419	0.0076
BASE	48	1	CIM5 Min	-23.4505	-2.9416	38.308	-4.7441	-25.6123	-0.0066
BASE	48	1	CIM6 Max	-15.6091	20.9797	52.4693	-1.3406	-6.5398	0.0105
BASE	48	1	CIM6 Min	-21.3965	-8.9683	34.2639	-5.5852	-20.6144	-0.0095
BASE	48	1	CIM7 Max	-1.1451	14.8072	27.251	-0.3415	10.5559	0.0096
BASE	48	1	CIM7 Min	-14.3103	-8.9309	13.8344	-3.7408	-21.468	-0.0093
BASE	48	1	CIM8 Max	-3.8895	22.8593	32.6542	0.7823	3.8784	0.0134
BASE	48	1	CIM8 Min	-11.5659	-16.9829	8.4312	-4.8645	-14.7905	-0.0132
BASE	48	1	ENVCIM Max	-1.1451	24.818	52.4693	0.7823	10.5559	0.0135
BASE	48	1	ENVCIM Min	-23.4505	-16.9829	8.4312	-6.2253	-25.6123	-0.0132
BASE	49	2	CIM1	-26.1096	3.188	63.1303	-0.5727	-21.9938	0.0288
BASE	49	2	CIM2	-42.548	4.7786	87.2782	-0.7369	-36.6509	0.0399
BASE	49	2	CIM3 Max	-20.0044	28.1389	63.4401	2.5408	-6.7576	0.1218
BASE	49	2	CIM3 Min	-32.2149	-21.763	62.8205	-3.6861	-37.2301	-0.0643
BASE	49	2	CIM4 Max	-22.6198	44.2328	63.4223	4.2603	-13.2867	0.0894
BASE	49	2	CIM4 Min	-29.5995	-37.8569	62.8383	-5.4057	-30.7009	-0.0319
BASE	49	2	CIM5 Max	-33.8496	23.1882	81.4743	1.6504	-21.5348	0.1071
BASE	49	2	CIM5 Min	-43.0272	-14.4263	81.0082	-3.0421	-44.4385	-0.0329
BASE	49	2	CIM6 Max	-35.8072	35.2339	81.461	2.9374	-26.4217	0.0828
BASE	49	2	CIM6 Min	-41.0696	-26.472	81.0215	-4.3291	-39.5516	-0.0086
BASE	49	2	CIM7 Max	-9.5606	26.8637	38.1879	2.7698	2.0399	0.1103
BASE	49	2	CIM7 Min	-21.771	-23.0382	37.5684	-3.457	-28.4325	-0.0758
BASE	49	2	CIM8 Max	-12.176	42.9576	38.1702	4.4894	-4.4892	0.0779
BASE	49	2	CIM8 Min	-19.1556	-39.1321	37.5862	-5.1766	-21.9034	-0.0434
BASE	49	2	ENVCIM Max	-9.5606	44.2328	87.2782	4.4894	2.0399	0.1218
BASE	49	2	ENVCIM Min	-43.0272	-39.1321	37.5684	-5.4057	-44.4385	-0.0758
BASE	50	3	CIM1	-19.0834	5.1377	52.3821	0.4864	-15.9217	0.0288
BASE	50	3	CIM2	-30.649	6.2982	70.1947	0.1729	-26.1391	0.0399
BASE	50	3	CIM3 Max	-14.6272	21.3251	61.966	4.387	-4.785	0.1218
BASE	50	3	CIM3 Min	-23.5396	-11.0497	42.7981	-3.4142	-27.0583	-0.0643
BASE	50	3	CIM4 Max	-16.6012	38.4203	60.868	8.4547	-9.7346	0.0894
BASE	50	3	CIM4 Min	-21.5656	-28.1449	43.8962	-7.4818	-22.1088	-0.0319
BASE	50	3	CIM5 Max	-24.4084	18.223	72.951	3.1945	-15.2146	0.1071
BASE	50	3	CIM5 Min	-31.1069	-6.2068	58.5321	-2.692	-31.9548	-0.0329
BASE	50	3	CIM6 Max	-25.8859	31.0181	72.1292	6.2391	-18.9191	0.0828
BASE	50	3	CIM6 Min	-29.6294	-19.0019	59.3539	-5.7365	-28.2503	-0.0086
BASE	50	3	CIM7 Max	-6.9938	19.27	41.0132	4.1925	1.5836	0.1103
BASE	50	3	CIM7 Min	-15.9062	-13.1048	21.8453	-3.6087	-20.6896	-0.0758
BASE	50	3	CIM8 Max	-8.9678	36.3652	39.9152	8.2601	-3.3659	0.0779
BASE	50	3	CIM8 Min	-13.9322	-30.2	22.9433	-7.6764	-15.7401	-0.0434
BASE	50	3	ENVCIM Max	-6.9938	38.4203	72.951	8.4547	1.5836	0.1218
BASE	50	3	ENVCIM Min	-31.1069	-30.2	21.8453	-7.6764	-31.9548	-0.0758
BASE	51	4	CIM1	-22.9719	0.3692	154.7107	1.1251	1.6677	-0.015
BASE	51	4	CIM2	-29.3475	1.1464	197.4887	1.1825	2.5053	-0.0215
BASE	51	4	CIM3 Max	-12.3006	21.0042	203.8972	4.2839	4.9041	0.0938
BASE	51	4	CIM3 Min	-33.6431	-20.2659	105.5241	-2.0338	-1.5687	-0.1237

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	51	4	CIM4 Max	-14.8296	36.0578	182.491	6.3283	3.9728	0.1672
BASE	51	4	CIM4 Min	-31.1141	-35.3194	126.9303	-4.0781	-0.6374	-0.1972
BASE	51	4	CIM5 Max	-19.7288	16.5096	223.7629	3.5492	4.7294	0.0621
BASE	51	4	CIM5 Min	-35.7784	-14.6055	149.8254	-1.2129	-0.1375	-0.1019
BASE	51	4	CIM6 Max	-21.6217	27.7767	207.7411	5.0793	4.0323	0.1171
BASE	51	4	CIM6 Min	-33.8855	-25.8725	165.8472	-2.743	0.5595	-0.1568
BASE	51	4	CIM7 Max	-3.1118	20.8565	142.013	3.8338	4.237	0.0998
BASE	51	4	CIM7 Min	-24.4544	-20.4135	43.6399	-2.4838	-2.2358	-0.1177
BASE	51	4	CIM8 Max	-5.6409	35.9101	120.6068	5.8782	3.3057	0.1732
BASE	51	4	CIM8 Min	-21.9253	-35.4671	65.0461	-4.5282	-1.3045	-0.1912
BASE	51	4	ENVCIM Max	-3.1118	36.0578	223.7629	6.3283	4.9041	0.1732
BASE	51	4	ENVCIM Min	-35.7784	-35.4671	43.6399	-4.5282	-2.2358	-0.1972
BASE	60	5	CIM1	-18.908	-6.1346	48.4188	1.6488	-17.3068	0.0288
BASE	60	5	CIM2	-30.0553	-7.0389	65.0013	1.7363	-27.6931	0.0399
BASE	60	5	CIM3 Max	-17.7416	14.3211	54.0645	4.2238	-14.3732	0.1218
BASE	60	5	CIM3 Min	-20.0744	-26.5902	42.773	-0.9263	-20.2404	-0.0643
BASE	60	5	CIM4 Max	-18.0863	26.7121	54.7737	6.8302	-15.2664	0.0894
BASE	60	5	CIM4 Min	-19.7297	-38.9812	42.0638	-3.5327	-19.3472	-0.0319
BASE	60	5	CIM5 Max	-26.3915	8.6044	65.1054	3.6573	-22.8909	0.1071
BASE	60	5	CIM5 Min	-28.1454	-22.23	56.606	-0.2285	-27.3021	-0.0329
BASE	60	5	CIM6 Max	-26.6495	17.8787	65.6362	5.608	-23.5594	0.0828
BASE	60	5	CIM6 Min	-27.8874	-31.5043	56.0751	-2.1793	-26.6336	-0.0086
BASE	60	5	CIM7 Max	-10.1784	16.7749	34.697	3.5643	-7.4505	0.1103
BASE	60	5	CIM7 Min	-12.5112	-24.1364	23.4055	-1.5858	-13.3176	-0.0758
BASE	60	5	CIM8 Max	-10.5231	29.1659	35.4062	6.1707	-8.3437	0.0779
BASE	60	5	CIM8 Min	-12.1665	-36.5274	22.6963	-4.1922	-12.4245	-0.0434
BASE	60	5	ENVCIM Max	-10.1784	29.1659	65.6362	6.8302	-7.4505	0.1218
BASE	60	5	ENVCIM Min	-30.0553	-38.9812	22.6963	-4.1922	-27.6931	-0.0758
BASE	61	6	CIM1	2.3514	1.4571	50.2591	-1.2937	5.0285	0.0288
BASE	61	6	CIM2	3.2067	1.4566	75.218	-1.2324	6.8831	0.0399
BASE	61	6	CIM3 Max	9.6191	1.9704	50.4465	-0.1949	20.3405	0.1218
BASE	61	6	CIM3 Min	-4.9163	0.9437	50.0717	-2.3925	-10.2835	-0.0643
BASE	61	6	CIM4 Max	6.5868	1.9402	50.3597	-0.2463	13.9577	0.0894
BASE	61	6	CIM4 Min	-1.884	0.9739	50.1585	-2.3412	-3.9007	-0.0319
BASE	61	6	CIM5 Max	8.4556	1.8429	69.1191	-0.421	17.9286	0.1071
BASE	61	6	CIM5 Min	-2.4698	1.0705	68.8375	-2.0745	-5.0896	-0.0329
BASE	61	6	CIM6 Max	6.186	1.8203	69.0542	-0.4595	13.1513	0.0828
BASE	61	6	CIM6 Min	-0.2002	1.0931	68.9024	-2.036	-0.3123	-0.0086
BASE	61	6	CIM7 Max	8.6786	1.3876	30.3428	0.3226	18.3291	0.1103
BASE	61	6	CIM7 Min	-5.8569	0.3609	29.9681	-1.875	-12.2949	-0.0758
BASE	61	6	CIM8 Max	5.6463	1.3574	30.2561	0.2712	11.9463	0.0779
BASE	61	6	CIM8 Min	-2.8245	0.3911	30.0548	-1.8237	-5.9121	-0.0434
BASE	61	6	ENVCIM Max	9.6191	1.9704	75.218	0.3226	20.3405	0.1218
BASE	61	6	ENVCIM Min	-5.8569	0.3609	29.9681	-2.3925	-12.2949	-0.0758
BASE	62	7	CIM1	1.727	0.0288	92.7264	0.1318	3.9943	0.0288
BASE	62	7	CIM2	2.2929	-0.0051	144.4862	0.2264	5.4045	0.0399
BASE	62	7	CIM3 Max	7.744	0.663	93.0146	1.3512	16.6888	0.1218
BASE	62	7	CIM3 Min	-4.2899	-0.6054	92.4382	-1.0876	-8.7001	-0.0643
BASE	62	7	CIM4 Max	5.1572	0.6327	92.9112	1.2997	11.241	0.0894
BASE	62	7	CIM4 Min	-1.7031	-0.5751	92.5416	-1.0361	-3.2524	-0.0319
BASE	62	7	CIM5 Max	6.6738	0.4805	131.7629	1.1202	14.5933	0.1071
BASE	62	7	CIM5 Min	-2.371	-0.4738	131.3296	-0.7147	-4.4894	-0.0329
BASE	62	7	CIM6 Max	4.7377	0.4578	131.6855	1.0817	10.5159	0.0828

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	62	7	CIM6 Min	-0.4349	-0.4511	131.407	-0.6762	-0.4119	-0.0086
BASE	62	7	CIM7 Max	7.0531	0.6515	55.924	1.2985	15.091	0.1103
BASE	62	7	CIM7 Min	-4.9807	-0.6169	55.3477	-1.1403	-10.2979	-0.0758
BASE	62	7	CIM8 Max	4.4664	0.6211	55.8206	1.247	9.6433	0.0779
BASE	62	7	CIM8 Min	-2.3939	-0.5866	55.4511	-1.0889	-4.8501	-0.0434
BASE	62	7	ENVCIM Max	7.744	0.663	144.4862	1.3512	16.6888	0.1218
BASE	62	7	ENVCIM Min	-4.9807	-0.6169	55.3477	-1.1403	-10.2979	-0.0758
BASE	63	8	CIM1	1.4513	-1.4145	69.659	1.5723	3.2523	0.0288
BASE	63	8	CIM2	1.9379	-1.5454	106.8526	1.7638	4.4018	0.0399
BASE	63	8	CIM3 Max	6.1899	-0.6749	69.7755	2.8969	13.1964	0.1218
BASE	63	8	CIM3 Min	-3.2873	-2.1541	69.5424	0.2477	-6.6919	-0.0643
BASE	63	8	CIM4 Max	4.0687	-0.6976	69.8513	2.8531	8.7519	0.0894
BASE	63	8	CIM4 Min	-1.166	-2.1314	69.4666	0.2915	-2.2473	-0.0319
BASE	63	8	CIM5 Max	5.3777	-0.9562	97.642	2.7126	11.5882	0.1071
BASE	63	8	CIM5 Min	-1.7452	-2.0692	97.4663	0.7193	-3.3594	-0.0329
BASE	63	8	CIM6 Max	3.79	-0.9732	97.6987	2.6798	8.2616	0.0828
BASE	63	8	CIM6 Min	-0.1575	-2.0522	97.4096	0.7521	-0.0328	-0.0086
BASE	63	8	CIM7 Max	5.6094	-0.1091	41.9119	2.268	11.8955	0.1103
BASE	63	8	CIM7 Min	-3.8679	-1.5883	41.6789	-0.3812	-7.9928	-0.0758
BASE	63	8	CIM8 Max	3.4881	-0.1318	41.9877	2.2242	7.4509	0.0779
BASE	63	8	CIM8 Min	-1.7466	-1.5656	41.603	-0.3374	-3.5482	-0.0434
BASE	63	8	ENVCIM Max	6.1899	-0.1091	106.8526	2.8969	13.1964	0.1218
BASE	63	8	ENVCIM Min	-3.8679	-2.1541	41.603	-0.3812	-7.9928	-0.0758
BASE	64	9	CIM1	1.4807	0.5313	58.7324	-0.3698	3.0925	0.0288
BASE	64	9	CIM2	1.9553	0.4268	85.6457	-0.2047	4.1585	0.0399
BASE	64	9	CIM3 Max	6.8044	1.2343	58.9841	0.9183	12.9852	0.1218
BASE	64	9	CIM3 Min	-3.8429	-0.1717	58.4807	-1.6578	-6.8001	-0.0643
BASE	64	9	CIM4 Max	4.3385	1.189	58.9312	0.8518	8.4402	0.0894
BASE	64	9	CIM4 Min	-1.3771	-0.1263	58.5336	-1.5913	-2.2551	-0.0319
BASE	64	9	CIM5 Max	5.8376	0.9818	79.1067	0.7232	11.3268	0.1071
BASE	64	9	CIM5 Min	-2.1643	-0.076	78.7281	-1.215	-3.5428	-0.0329
BASE	64	9	CIM6 Max	3.992	0.9479	79.0671	0.6734	7.9251	0.0828
BASE	64	9	CIM6 Min	-0.3187	-0.042	78.7677	-1.1653	-0.1411	-0.0086
BASE	64	9	CIM7 Max	6.2121	1.0218	35.4911	1.0662	11.7481	0.1103
BASE	64	9	CIM7 Min	-4.4352	-0.3842	34.9877	-1.5099	-8.0371	-0.0758
BASE	64	9	CIM8 Max	3.7462	0.9764	35.4382	0.9997	7.2032	0.0779
BASE	64	9	CIM8 Min	-1.9693	-0.3388	35.0407	-1.4434	-3.4921	-0.0434
BASE	64	9	ENVCIM Max	6.8044	1.2343	85.6457	1.0662	12.9852	0.1218
BASE	64	9	ENVCIM Min	-4.4352	-0.3842	34.9877	-1.6578	-8.0371	-0.0758
BASE	65	10	CIM1	1.039	-0.5281	69.0288	0.6876	2.2901	0.0288
BASE	65	10	CIM2	1.3392	-0.5768	102.2318	0.797	3.0429	0.0399
BASE	65	10	CIM3 Max	5.0648	0.0904	69.0967	1.8912	9.738	0.1218
BASE	65	10	CIM3 Min	-2.9868	-1.1466	68.9609	-0.516	-5.1577	-0.0643
BASE	65	10	CIM4 Max	3.1378	0.0248	69.0957	1.8044	6.1866	0.0894
BASE	65	10	CIM4 Min	-1.0597	-1.081	68.9619	-0.4291	-1.6064	-0.0319
BASE	65	10	CIM5 Max	4.2896	-0.0993	93.9821	1.6752	8.4519	0.1071
BASE	65	10	CIM5 Min	-1.7613	-1.0299	93.8799	-0.1359	-2.7425	-0.0329
BASE	65	10	CIM6 Max	2.8473	-0.1484	93.9814	1.6102	5.7938	0.0828
BASE	65	10	CIM6 Min	-0.319	-0.9808	93.8807	-0.0709	-0.0844	-0.0086
BASE	65	10	CIM7 Max	4.6492	0.3016	41.4852	1.6162	8.8219	0.1103
BASE	65	10	CIM7 Min	-3.4024	-0.9353	41.3494	-0.791	-6.0738	-0.0758
BASE	65	10	CIM8 Max	2.7222	0.2361	41.4842	1.5293	5.2705	0.0779
BASE	65	10	CIM8 Min	-1.4753	-0.8698	41.3504	-0.7042	-2.5224	-0.0434

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	65	10	ENVCIM Max	5.0648	0.3016	102.2318	1.8912	9.738	0.1218
BASE	65	10	ENVCIM Min	-3.4024	-1.1466	41.3494	-0.791	-6.0738	-0.0758
BASE	66	11	CIM1	0.7409	0.5438	74.1399	-0.3822	1.6852	0.0288
BASE	66	11	CIM2	0.9113	0.4924	110.5453	-0.2701	2.1907	0.0399
BASE	66	11	CIM3 Max	3.8004	1.162	74.2401	0.8213	7.2244	0.1218
BASE	66	11	CIM3 Min	-2.3186	-0.0745	74.0397	-1.5856	-3.8541	-0.0643
BASE	66	11	CIM4 Max	2.3226	1.1177	74.2759	0.7558	4.5573	0.0894
BASE	66	11	CIM4 Min	-0.8408	-0.0301	74.0038	-1.5201	-1.187	-0.0319
BASE	66	11	CIM5 Max	3.168	0.9704	101.5194	0.6073	6.2271	0.1071
BASE	66	11	CIM5 Min	-1.4305	0.0401	101.3685	-1.2036	-2.0985	-0.0329
BASE	66	11	CIM6 Max	2.0619	0.9372	101.5463	0.5583	4.2309	0.0828
BASE	66	11	CIM6 Min	-0.3244	0.0733	101.3417	-1.1546	-0.1023	-0.0086
BASE	66	11	CIM7 Max	3.5041	0.9445	44.5841	0.9742	6.5503	0.1103
BASE	66	11	CIM7 Min	-2.615	-0.292	44.3837	-1.4328	-4.5281	-0.0758
BASE	66	11	CIM8 Max	2.0263	0.9002	44.62	0.9087	3.8833	0.0779
BASE	66	11	CIM8 Min	-1.1372	-0.2476	44.3479	-1.3673	-1.8611	-0.0434
BASE	66	11	ENVCIM Max	3.8004	1.162	110.5453	0.9742	7.2244	0.1218
BASE	66	11	ENVCIM Min	-2.615	-0.292	44.3479	-1.5856	-4.5281	-0.0758
BASE	67	12	CIM1	0.2595	-1.3804	67.208	1.5383	0.7781	0.0288
BASE	67	12	CIM2	0.2146	-1.5817	102.717	1.8	0.906	0.0399
BASE	67	12	CIM3 Max	1.5613	-0.6186	67.5101	2.8851	3.4502	0.1218
BASE	67	12	CIM3 Min	-1.0423	-2.1422	66.906	0.1915	-1.894	-0.0643
BASE	67	12	CIM4 Max	1.1766	-0.6415	67.5041	2.841	2.6625	0.0894
BASE	67	12	CIM4 Min	-0.6576	-2.1193	66.9119	0.2356	-1.1063	-0.0319
BASE	67	12	CIM5 Max	1.2046	-0.9582	94.0671	2.7479	2.8832	0.1071
BASE	67	12	CIM5 Min	-0.753	-2.1046	93.6125	0.7213	-1.135	-0.0329
BASE	67	12	CIM6 Max	0.9167	-0.9754	94.0626	2.715	2.2936	0.0828
BASE	67	12	CIM6 Min	-0.4651	-2.0875	93.617	0.7542	-0.5454	-0.0086
BASE	67	12	CIM7 Max	1.4575	-0.0664	40.6269	2.2698	3.139	0.1103
BASE	67	12	CIM7 Min	-1.1461	-1.5901	40.0228	-0.4238	-2.2052	-0.0758
BASE	67	12	CIM8 Max	1.0728	-0.0893	40.6209	2.2257	2.3512	0.0779
BASE	67	12	CIM8 Min	-0.7614	-1.5672	40.0287	-0.3797	-1.4175	-0.0434
BASE	67	12	ENVCIM Max	1.5613	-0.0664	102.717	2.8851	3.4502	0.1218
BASE	67	12	ENVCIM Min	-1.1461	-2.1422	40.0228	-0.4238	-2.2052	-0.0758
BASE	68	13	CIM1	11.5232	1.4692	39.7546	-1.1219	13.6306	0.0288
BASE	68	13	CIM2	17.4001	1.8015	59.0608	-1.3218	20.1949	0.0399
BASE	68	13	CIM3 Max	21.783	2.7569	52.0251	1.3366	31.7465	0.1218
BASE	68	13	CIM3 Min	1.2635	0.1816	27.4841	-3.5805	-4.4853	-0.0643
BASE	68	13	CIM4 Max	17.5597	2.2833	46.6767	0.6217	24.2479	0.0894
BASE	68	13	CIM4 Min	5.4868	0.6552	32.8325	-2.8656	3.0134	-0.0319
BASE	68	13	CIM5 Max	23.6426	2.6864	63.4568	0.5767	32.1706	0.1071
BASE	68	13	CIM5 Min	8.2191	0.7504	45.0117	-3.1204	4.9371	-0.0329
BASE	68	13	CIM6 Max	20.4816	2.3319	59.4537	0.0416	26.5581	0.0828
BASE	68	13	CIM6 Min	11.3801	1.1049	49.0149	-2.5853	10.5496	-0.0086
BASE	68	13	CIM7 Max	17.1737	2.1692	36.1233	1.7854	26.2943	0.1103
BASE	68	13	CIM7 Min	-3.3458	-0.4061	11.5823	-3.1317	-9.9375	-0.0758
BASE	68	13	CIM8 Max	12.9504	1.6956	30.7748	1.0705	18.7956	0.0779
BASE	68	13	CIM8 Min	0.8775	0.0675	16.9307	-2.4168	-2.4389	-0.0434
BASE	68	13	ENVCIM Max	23.6426	2.7569	63.4568	1.7854	32.1706	0.1218
BASE	68	13	ENVCIM Min	-3.3458	-0.4061	11.5823	-3.5805	-9.9375	-0.0758
BASE	69	14	CIM1	19.1275	0.0783	70.4076	0.2663	20.314	0.0288
BASE	69	14	CIM2	30.2495	0.3496	109.1259	0.1272	31.6247	0.0399
BASE	69	14	CIM3 Max	28.0323	1.3808	81.5347	2.741	35.7138	0.1218

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	69	14	CIM3 Min	10.2227	-1.2241	59.2806	-2.2083	4.9142	-0.0643
BASE	69	14	CIM4 Max	24.3613	0.9497	76.7916	2.0725	29.2482	0.0894
BASE	69	14	CIM4 Min	13.8937	-0.7931	64.0237	-1.5399	11.3798	-0.0319
BASE	69	14	CIM5 Max	34.1623	1.261	107.8096	2.0228	40.3721	0.1071
BASE	69	14	CIM5 Min	20.7757	-0.6974	91.083	-1.6988	17.222	-0.0329
BASE	69	14	CIM6 Max	31.4147	0.9384	104.2596	1.5225	35.5327	0.0828
BASE	69	14	CIM6 Min	23.5233	-0.3748	94.633	-1.1985	22.0614	-0.0086
BASE	69	14	CIM7 Max	20.3813	1.3495	53.3716	2.6344	27.5882	0.1103
BASE	69	14	CIM7 Min	2.5717	-1.2555	31.1175	-2.3149	-3.2114	-0.0758
BASE	69	14	CIM8 Max	16.7103	0.9184	48.6286	1.966	21.1226	0.0779
BASE	69	14	CIM8 Min	6.2427	-0.8244	35.8606	-1.6464	3.2542	-0.0434
BASE	69	14	ENVCIM Max	34.1623	1.3808	109.1259	2.741	40.3721	0.1218
BASE	69	14	ENVCIM Min	2.5717	-1.2555	31.1175	-2.3149	-3.2114	-0.0758
BASE	70	15	CIM1	14.0496	-1.0714	53.5584	1.4139	15.068	0.0288
BASE	70	15	CIM2	21.9744	-1.2851	80.5618	1.7589	23.1937	0.0399
BASE	70	15	CIM3 Max	20.6142	0.3246	61.8195	3.9842	26.7237	0.1218
BASE	70	15	CIM3 Min	7.485	-2.4675	45.2972	-1.1565	3.4124	-0.0643
BASE	70	15	CIM4 Max	17.7631	0.0546	58.653	3.4802	21.5932	0.0894
BASE	70	15	CIM4 Min	10.336	-2.1975	48.4638	-0.6525	8.5429	-0.0319
BASE	70	15	CIM5 Max	24.9271	-0.1818	80.0209	3.6057	29.9226	0.1071
BASE	70	15	CIM5 Min	15.0592	-2.2816	67.6009	-0.2605	12.402	-0.0329
BASE	70	15	CIM6 Max	22.7932	-0.3838	77.6508	3.2285	26.0826	0.0828
BASE	70	15	CIM6 Min	17.1931	-2.0796	69.971	0.1167	16.242	-0.0086
BASE	70	15	CIM7 Max	14.9943	0.7532	40.3962	3.4186	20.6965	0.1103
BASE	70	15	CIM7 Min	1.8652	-2.0389	23.8739	-1.722	-2.6148	-0.0758
BASE	70	15	CIM8 Max	12.1433	0.4832	37.2296	2.9147	15.566	0.0779
BASE	70	15	CIM8 Min	4.7162	-1.7689	27.0404	-1.218	2.5157	-0.0434
BASE	70	15	ENVCIM Max	24.9271	0.7532	80.5618	3.9842	29.9226	0.1218
BASE	70	15	ENVCIM Min	1.8652	-2.4675	23.8739	-1.722	-2.6148	-0.0758
BASE	71	33	CIM1	43.3324	-1.2658	117.0045	1.4847	-4.3241	-0.2411
BASE	71	33	CIM2	56.8488	-1.6129	153.5004	1.949	-5.7758	-0.3332
BASE	71	33	CIM3 Max	49.2791	0.4419	131.4841	4.3565	-2.8462	0.5825
BASE	71	33	CIM3 Min	37.3857	-2.9735	102.5249	-1.3872	-5.802	-1.0646
BASE	71	33	CIM4 Max	48.1793	-0.3552	126.9636	3.1951	-2.8701	0.4184
BASE	71	33	CIM4 Min	38.4855	-2.1764	107.0453	-0.2257	-5.7781	-0.9005
BASE	71	33	CIM5 Max	57.9422	-0.2427	155.2629	3.9916	-4.3008	0.3092
BASE	71	33	CIM5 Min	48.9972	-2.8095	133.49	-0.3257	-6.5249	-0.9296
BASE	71	33	CIM6 Max	57.1191	-0.8393	151.8795	3.1223	-4.3187	0.1864
BASE	71	33	CIM6 Min	49.8204	-2.2129	136.8734	0.5436	-6.5071	-0.8067
BASE	71	33	CIM7 Max	31.9461	0.9482	84.6823	3.7627	-1.1165	0.679
BASE	71	33	CIM7 Min	20.0528	-2.4672	55.7231	-1.981	-4.0724	-0.9682
BASE	71	33	CIM8 Max	30.8463	0.1511	80.1618	2.6012	-1.1404	0.5148
BASE	71	33	CIM8 Min	21.1526	-1.6701	60.2435	-0.8196	-4.0485	-0.8041
BASE	71	33	ENVCIM Max	57.9422	0.9482	155.2629	4.3565	-1.1165	0.679
BASE	71	33	ENVCIM Min	20.0528	-2.9735	55.7231	-1.981	-6.5249	-1.0646
BASE	72	16	CIM1	13.4535	-1.7756	49.6154	2.1166	13.1525	0.0288
BASE	72	16	CIM2	22.4616	-2.0067	72.7349	2.479	21.7713	0.0399
BASE	72	16	CIM3 Max	14.3836	-0.083	49.7271	4.9829	15.4757	0.1218
BASE	72	16	CIM3 Min	12.5233	-3.4681	49.5037	-0.7496	10.8294	-0.0643
BASE	72	16	CIM4 Max	14.1528	-0.4061	49.7501	4.4259	14.8321	0.0894
BASE	72	16	CIM4 Min	12.7541	-3.1451	49.4806	-0.1926	11.473	-0.0319
BASE	72	16	CIM5 Max	20.909	-0.6759	67.0391	4.5441	21.3634	0.1071
BASE	72	16	CIM5 Min	19.5101	-3.2219	66.8709	0.2328	17.8697	-0.0329

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	72	16	CIM6 Max	20.7363	-0.9178	67.0564	4.1272	20.8817	0.0828
BASE	72	16	CIM6 Min	19.6828	-2.9801	66.8537	0.6497	18.3515	-0.0086
BASE	72	16	CIM7 Max	9.0022	0.6273	29.8809	4.1362	10.2147	0.1103
BASE	72	16	CIM7 Min	7.142	-2.7579	29.6575	-1.5963	5.5683	-0.0758
BASE	72	16	CIM8 Max	8.7715	0.3042	29.904	3.5792	9.5711	0.0779
BASE	72	16	CIM8 Min	7.3727	-2.4348	29.6345	-1.0393	6.212	-0.0434
BASE	72	16	ENVCIM Max	22.4616	0.6273	72.7349	4.9829	21.7713	0.1218
BASE	72	16	ENVCIM Min	7.142	-3.4681	29.6345	-1.5963	5.5683	-0.0758
BASE	75	17	CIM1	-17.3112	9.4586	76.297	0.6179	2.4889	-0.4634
BASE	75	17	CIM2	-21.3308	10.9618	91.5672	0.6255	3.4245	-0.6334
BASE	75	17	CIM3 Max	0.4092	14.2251	96.2192	5.3965	10.1156	0.8706
BASE	75	17	CIM3 Min	-35.0317	4.692	56.3749	-4.1608	-5.1377	-1.7974
BASE	75	17	CIM4 Max	1.5708	13.2195	98.8562	5.1234	8.1644	0.238
BASE	75	17	CIM4 Min	-36.1933	5.6977	53.7379	-3.8877	-3.1865	-1.1649
BASE	75	17	CIM5 Max	-6.9894	14.1707	102.7459	4.2189	8.9256	0.4116
BASE	75	17	CIM5 Min	-33.6625	7.0013	72.7535	-2.9716	-2.5443	-1.5935
BASE	75	17	CIM6 Max	-6.12	13.418	104.7196	4.0145	7.4652	-0.0618
BASE	75	17	CIM6 Min	-34.5319	7.754	70.7798	-2.7673	-1.0839	-1.12
BASE	75	17	CIM7 Max	7.3337	10.4417	65.7003	5.1494	9.12	1.0559
BASE	75	17	CIM7 Min	-28.1072	0.9086	25.8561	-4.4079	-6.1333	-1.6121
BASE	75	17	CIM8 Max	8.4953	9.436	68.3374	4.8763	7.1688	0.4234
BASE	75	17	CIM8 Min	-29.2688	1.9142	23.2191	-4.1348	-4.1821	-0.9795
BASE	75	17	ENVCIM Max	8.4953	14.2251	104.7196	5.3965	10.1156	1.0559
BASE	75	17	ENVCIM Min	-36.1933	0.9086	23.2191	-4.4079	-6.1333	-1.7974
BASE	76	18	CIM1	23.2967	-0.0575	59.1388	-0.023	1.0211	-0.0028
BASE	76	18	CIM2	29.9638	-0.0719	75.8339	-0.0448	1.4336	-0.0031
BASE	76	18	CIM3 Max	47.9367	0.3276	129.986	0.3006	4.6789	0.0886
BASE	76	18	CIM3 Min	-1.3433	-0.4426	-11.7084	-0.3465	-2.6367	-0.0943
BASE	76	18	CIM4 Max	37.1218	0.4777	96.9408	0.2442	4.3493	0.1868
BASE	76	18	CIM4 Min	9.4715	-0.5927	21.3368	-0.2901	-2.307	-0.1925
BASE	76	18	CIM5 Max	46.8163	0.2218	124.9046	0.204	4.0822	0.066
BASE	76	18	CIM5 Min	9.7777	-0.3584	18.4156	-0.2827	-1.4213	-0.0721
BASE	76	18	CIM6 Max	38.7217	0.3341	100.1714	0.1618	3.8355	0.1395
BASE	76	18	CIM6 Min	17.8722	-0.4707	43.1488	-0.2405	-1.1746	-0.1455
BASE	76	18	CIM7 Max	38.618	0.3506	106.3305	0.3098	4.2705	0.0898
BASE	76	18	CIM7 Min	-10.662	-0.4196	-35.3639	-0.3374	-3.0451	-0.0932
BASE	76	18	CIM8 Max	27.8031	0.5007	73.2853	0.2534	3.9408	0.188
BASE	76	18	CIM8 Min	0.1529	-0.5697	-2.3187	-0.2809	-2.7155	-0.1913
BASE	76	18	ENVCIM Max	47.9367	0.5007	129.986	0.3098	4.6789	0.188
BASE	76	18	ENVCIM Min	-10.662	-0.5927	-35.3639	-0.3465	-3.0451	-0.1925
BASE	77	19	CIM1	0.4514	-2.361	77.5005	1.6926	1.7158	0.4313
BASE	77	19	CIM2	0.6795	-1.1519	94.3653	2.2472	2.4012	0.5882
BASE	77	19	CIM3 Max	1.1215	15.595	137.5837	8.726	5.8867	1.6669
BASE	77	19	CIM3 Min	-0.2186	-20.3169	17.4173	-5.3408	-2.4551	-0.8043
BASE	77	19	CIM4 Max	1.1163	11.1034	111.3863	10.2654	4.2506	1.1007
BASE	77	19	CIM4 Min	-0.2135	-15.8254	43.6146	-6.8802	-0.819	-0.2381
BASE	77	19	CIM5 Max	1.1266	12.0482	135.3077	7.4041	5.3651	1.4776
BASE	77	19	CIM5 Min	0.1183	-14.9565	44.9905	-3.187	-0.9054	-0.3797
BASE	77	19	CIM6 Max	1.1228	8.6865	115.6998	8.5563	4.1405	1.0538
BASE	77	19	CIM6 Min	0.1221	-11.5948	64.5983	-4.3392	0.3192	0.0441
BASE	77	19	CIM7 Max	0.9409	16.5393	106.5835	8.0489	5.2004	1.4944
BASE	77	19	CIM7 Min	-0.3991	-19.3725	-13.5829	-6.0178	-3.1414	-0.9768
BASE	77	19	CIM8 Max	0.9358	12.0478	80.3861	9.5883	3.5643	0.9282

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BASE	77	19	CIM8 Min	-0.394	-14.881	12.6145	-7.5572	-1.5053	-0.4106
BASE	77	19	ENVCIM Max	1.1266	16.5393	137.5837	10.2654	5.8867	1.6669
BASE	77	19	ENVCIM Min	-0.3991	-20.3169	-13.5829	-7.5572	-3.1414	-0.9768
BASE	78	20	CIM1	-19.1778	2.7047	104.5908	-11.1286	0.5774	0.2457
BASE	78	20	CIM2	-26.9687	5.0466	133.4892	-14.2352	0.0886	0.3301
BASE	78	20	CIM3 Max	-0.6925	18.2038	117.9	-5.533	3.0236	0.9086
BASE	78	20	CIM3 Min	-37.6632	-12.7944	91.2815	-16.7241	-1.8689	-0.4173
BASE	78	20	CIM4 Max	-8.2436	17.1364	118.6094	-0.1998	2.1561	0.6272
BASE	78	20	CIM4 Min	-30.1121	-11.727	90.5722	-22.0573	-1.0014	-0.1358
BASE	78	20	CIM5 Max	-11.1264	16.1217	136.2809	-9.2373	2.0498	0.8073
BASE	78	20	CIM5 Min	-38.9156	-7.1995	116.2482	-17.6797	-1.6282	-0.1893
BASE	78	20	CIM6 Max	-16.7781	15.3227	136.8118	-5.2456	1.4005	0.5966
BASE	78	20	CIM6 Min	-33.2639	-6.4005	115.7173	-21.6714	-0.9789	0.0214
BASE	78	20	CIM7 Max	6.9786	17.1219	76.0637	-1.0816	2.7927	0.8104
BASE	78	20	CIM7 Min	-29.992	-13.8763	49.4452	-12.2727	-2.0998	-0.5155
BASE	78	20	CIM8 Max	-0.5725	16.0545	76.7731	4.2516	1.9252	0.5289
BASE	78	20	CIM8 Min	-22.4409	-12.8089	48.7358	-17.6059	-1.2323	-0.2341
BASE	78	20	ENVCIM Max	6.9786	18.2038	136.8118	4.2516	3.0236	0.9086
BASE	78	20	ENVCIM Min	-38.9156	-13.8763	48.7358	-22.0573	-2.0998	-0.5155
BASE	79	21	CIM1	0.4916	12.2725	73.7178	-6.2683	1.0976	-0.2778
BASE	79	21	CIM2	0.6674	15.1053	92.1989	-8.3013	1.4549	-0.3754
BASE	79	21	CIM3 Max	1.0776	17.023	105.7776	-3.6706	3.1329	0.477
BASE	79	21	CIM3 Min	-0.0945	7.5221	41.658	-8.866	-0.9377	-1.0325
BASE	79	21	CIM4 Max	1.0056	19.0642	91.3485	-1.0415	2.2267	0.1137
BASE	79	21	CIM4 Min	-0.0225	5.4809	56.087	-11.4952	-0.0315	-0.6692
BASE	79	21	CIM5 Max	1.0642	17.9758	111.6739	-5.8331	2.8953	0.2162
BASE	79	21	CIM5 Min	0.1826	10.8184	63.4834	-9.7531	-0.1642	-0.9182
BASE	79	21	CIM6 Max	1.0104	19.5036	100.8743	-3.8652	2.2169	-0.0557
BASE	79	21	CIM6 Min	0.2364	9.2907	74.283	-11.7209	0.5141	-0.6463
BASE	79	21	CIM7 Max	0.881	12.114	76.2905	-1.1632	2.6939	0.5881
BASE	79	21	CIM7 Min	-0.2911	2.6131	12.1708	-6.3587	-1.3768	-0.9214
BASE	79	21	CIM8 Max	0.809	14.1552	61.8614	1.4659	1.7876	0.2248
BASE	79	21	CIM8 Min	-0.2191	0.5719	26.5999	-8.9878	-0.4705	-0.5581
BASE	79	21	ENVCIM Max	1.0776	19.5036	111.6739	1.4659	3.1329	0.5881
BASE	79	21	ENVCIM Min	-0.2911	0.5719	12.1708	-11.7209	-1.3768	-1.0325
BASE	80	22	CIM1	19.8546	0.2761	49.9437	-0.4514	0.2294	-0.0028
BASE	80	22	CIM2	24.512	0.3413	62.8446	-0.5824	-0.1427	-0.0031
BASE	80	22	CIM3 Max	30.2506	0.7699	84.9829	-0.25	1.5744	0.0886
BASE	80	22	CIM3 Min	9.4586	-0.2177	14.9046	-0.6529	-1.1156	-0.0943
BASE	80	22	CIM4 Max	28.0393	0.8419	71.7848	-0.2385	1.1802	0.1868
BASE	80	22	CIM4 Min	11.6699	-0.2897	28.1026	-0.6643	-0.7213	-0.1925
BASE	80	22	CIM5 Max	31.1659	0.6967	85.959	-0.398	0.9617	0.066
BASE	80	22	CIM5 Min	15.5293	-0.0467	33.2797	-0.7012	-1.0609	-0.0721
BASE	80	22	CIM6 Max	29.5109	0.7507	76.0807	-0.3895	0.6666	0.1395
BASE	80	22	CIM6 Min	17.1844	-0.1006	43.1581	-0.7098	-0.7658	-0.1455
BASE	80	22	CIM7 Max	22.3088	0.6594	65.0054	-0.0694	1.4827	0.0898
BASE	80	22	CIM7 Min	1.5167	-0.3281	-5.0729	-0.4723	-1.2073	-0.0932
BASE	80	22	CIM8 Max	20.0975	0.7315	51.8073	-0.058	1.0884	0.188
BASE	80	22	CIM8 Min	3.728	-0.4002	8.1251	-0.4837	-0.8131	-0.1913
BASE	80	22	ENVCIM Max	31.1659	0.8419	85.959	-0.058	1.5744	0.188
BASE	80	22	ENVCIM Min	1.5167	-0.4002	-5.0729	-0.7098	-1.2073	-0.1925
BASE	81	23	CIM1	22.8664	23.8679	120.8571	4.0204	1.219	-0.7068
BASE	81	23	CIM2	30.576	28.4989	151.5625	5.5855	2.3114	-0.9686

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BASE	81	23	CIM3 Max	38.256	36.13	128.9425	10.5878	8.4801	1.4379
BASE	81	23	CIM3 Min	7.4767	11.6057	112.7718	-2.547	-6.042	-2.8514
BASE	81	23	CIM4 Max	31.3939	37.8639	134.019	7.4684	6.3581	0.632
BASE	81	23	CIM4 Min	14.3389	9.8718	107.6953	0.5724	-3.92	-2.0455
BASE	81	23	CIM5 Max	40.2152	36.5716	149.9803	10.1298	7.4979	0.709
BASE	81	23	CIM5 Min	17.0821	18.1107	137.792	0.2586	-3.4212	-2.5154
BASE	81	23	CIM6 Max	35.0791	37.8693	153.7799	7.795	5.9096	0.1058
BASE	81	23	CIM6 Min	22.2181	16.8129	133.9924	2.5934	-1.833	-1.9122
BASE	81	23	CIM7 Max	29.1095	26.5829	80.5996	8.9797	7.9925	1.7206
BASE	81	23	CIM7 Min	-1.6698	2.0585	64.4289	-4.1552	-6.5297	-2.5687
BASE	81	23	CIM8 Max	22.2473	28.3168	85.6761	5.8602	5.8705	0.9147
BASE	81	23	CIM8 Min	5.1923	0.3247	59.3524	-1.0358	-4.4077	-1.7628
BASE	81	23	ENVCIM Max	40.2152	37.8693	153.7799	10.5878	8.4801	1.7206
BASE	81	23	ENVCIM Min	-1.6698	0.3247	59.3524	-4.1552	-6.5297	-2.8514
BASE	82	24	CIM1	-22.8361	-0.4326	45.7213	1.1387	0.6647	0.2233
BASE	82	24	CIM2	-26.2753	-0.5996	52.3503	1.5776	1.4783	0.3086
BASE	82	24	CIM3 Max	6.241	0.1984	125.1188	3.6511	4.4361	0.9896
BASE	82	24	CIM3 Min	-51.9132	-1.0636	-33.6762	-1.3738	-3.1067	-0.543
BASE	82	24	CIM4 Max	-0.3614	0.1812	100.1216	2.6206	3.7247	0.8459
BASE	82	24	CIM4 Min	-45.3108	-1.0464	-8.679	-0.3432	-2.3953	-0.3994
BASE	82	24	CIM5 Max	-3.549	-0.083	110.3876	3.3564	4.1113	0.8636
BASE	82	24	CIM5 Min	-47.2821	-1.0326	-9.0015	-0.4207	-1.5616	-0.2891
BASE	82	24	CIM6 Max	-8.4906	-0.0959	91.678	2.585	3.5789	0.7561
BASE	82	24	CIM6 Min	-42.3404	-1.0197	9.708	0.3507	-1.0291	-0.1816
BASE	82	24	CIM7 Max	15.3754	0.3715	106.8303	3.1957	4.1702	0.9003
BASE	82	24	CIM7 Min	-42.7787	-0.8905	-51.9647	-1.8293	-3.3725	-0.6324
BASE	82	24	CIM8 Max	8.7731	0.3543	81.8331	2.1651	3.4588	0.7566
BASE	82	24	CIM8 Min	-36.1764	-0.8734	-26.9675	-0.7987	-2.6612	-0.4887
BASE	82	24	ENVCIM Max	15.3754	0.3715	125.1188	3.6511	4.4361	0.9896
BASE	82	24	ENVCIM Min	-51.9132	-1.0636	-51.9647	-1.8293	-3.3725	-0.6324
BASE	83	25	CIM1	-0.0929	-44.7814	98.7402	2.8634	0.9936	0.4479
BASE	83	25	CIM2	-0.0475	-57.6069	126.1483	3.9916	1.4628	0.6108
BASE	83	25	CIM3 Max	0.4597	-12.4419	174.9976	6.9848	4.5218	1.731
BASE	83	25	CIM3 Min	-0.6456	-77.1208	22.4828	-1.2579	-2.5347	-0.8352
BASE	83	25	CIM4 Max	0.4258	-27.9093	141.4459	5.3022	3.121	1.1431
BASE	83	25	CIM4 Min	-0.6117	-61.6535	56.0344	0.4247	-1.1339	-0.2472
BASE	83	25	CIM5 Max	0.3569	-30.0969	176.6108	6.8074	3.9977	1.5344
BASE	83	25	CIM5 Min	-0.4746	-78.7041	61.9817	0.6117	-1.3066	-0.3943
BASE	83	25	CIM6 Max	0.3315	-41.6737	151.4985	5.548	2.9491	1.0943
BASE	83	25	CIM6 Min	-0.4493	-67.1273	87.094	1.8711	-0.2581	0.0458
BASE	83	25	CIM7 Max	0.4968	5.4706	135.5015	5.8394	4.1244	1.5519
BASE	83	25	CIM7 Min	-0.6084	-59.2083	-17.0133	-2.4033	-2.9322	-1.0144
BASE	83	25	CIM8 Max	0.463	-9.9968	101.9499	4.1568	2.7235	0.9639
BASE	83	25	CIM8 Min	-0.5745	-43.7409	16.5384	-0.7207	-1.5313	-0.4264
BASE	83	25	ENVCIM Max	0.4968	5.4706	176.6108	6.9848	4.5218	1.731
BASE	83	25	ENVCIM Min	-0.6456	-78.7041	-17.0133	-2.4033	-2.9322	-1.0144
BASE	84	26	CIM1	13.3341	-25.7115	110.9578	-0.122	-2.8469	0.0296
BASE	84	26	CIM2	19.8275	-33.1033	146.6301	0.037	-3.0591	0.032
BASE	84	26	CIM3 Max	29.336	-8.7006	140.332	4.9092	-1.1514	0.3152
BASE	84	26	CIM3 Min	-2.6677	-42.7224	81.5836	-5.1532	-4.5425	-0.256
BASE	84	26	CIM4 Max	28.6391	-8.1167	127.5757	2.7625	-1.432	0.5239
BASE	84	26	CIM4 Min	-1.9708	-43.3063	94.3399	-3.0066	-4.2619	-0.4646
BASE	84	26	CIM5 Max	30.2437	-18.4539	159.7898	3.7788	-1.7308	0.2467

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	84	26	CIM5 Min	6.1645	-44.0568	115.6342	-3.7843	-4.2814	-0.184
BASE	84	26	CIM6 Max	29.7221	-18.0168	150.2421	2.1721	-1.9408	0.4029
BASE	84	26	CIM6 Min	6.6861	-44.4939	125.1819	-2.1776	-4.0714	-0.3401
BASE	84	26	CIM7 Max	24.0024	1.584	95.9489	4.958	-0.0126	0.3034
BASE	84	26	CIM7 Min	-8.0014	-32.4378	37.2005	-5.1044	-3.4037	-0.2679
BASE	84	26	CIM8 Max	23.3055	2.1679	83.1926	2.8113	-0.2932	0.512
BASE	84	26	CIM8 Min	-7.3045	-33.0217	49.9568	-2.9577	-3.1231	-0.4765
BASE	84	26	ENVCIM Max	30.2437	2.1679	159.7898	4.958	-0.0126	0.5239
BASE	84	26	ENVCIM Min	-8.0014	-44.4939	37.2005	-5.1532	-4.5425	-0.4765
BASE	85	27	CIM1	-0.4855	31.8405	67.2415	-0.5522	-0.0712	-0.2885
BASE	85	27	CIM2	-0.562	40.4845	84.7906	-0.6369	0.0279	-0.3898
BASE	85	27	CIM3 Max	0.0066	36.4802	83.6528	2.3576	1.4259	0.4953
BASE	85	27	CIM3 Min	-0.9776	27.2008	50.8301	-3.4621	-1.5683	-1.0723
BASE	85	27	CIM4 Max	0.0122	34.9894	82.2585	1.7464	0.7899	0.118
BASE	85	27	CIM4 Min	-0.9833	28.6916	52.2244	-2.8508	-0.9323	-0.695
BASE	85	27	CIM5 Max	-0.1726	41.8118	92.7497	1.5727	1.1284	0.2245
BASE	85	27	CIM5 Min	-0.9132	34.8353	68.057	-2.8041	-1.1221	-0.9535
BASE	85	27	CIM6 Max	-0.1684	40.696	91.7061	1.1152	0.6524	-0.0579
BASE	85	27	CIM6 Min	-0.9174	35.9511	69.1006	-2.3466	-0.6461	-0.6711
BASE	85	27	CIM7 Max	0.2008	23.744	56.7562	2.5785	1.4544	0.6107
BASE	85	27	CIM7 Min	-0.7834	14.4646	23.9335	-3.2412	-1.5399	-0.9569
BASE	85	27	CIM8 Max	0.2064	22.2532	55.3619	1.9673	0.8184	0.2334
BASE	85	27	CIM8 Min	-0.7891	15.9554	25.3278	-2.6299	-0.9038	-0.5796
BASE	85	27	ENVCIM Max	0.2064	41.8118	92.7497	2.5785	1.4544	0.6107
BASE	85	27	ENVCIM Min	-0.9833	14.4646	23.9335	-3.4621	-1.5683	-1.0723
BASE	86	28	CIM1	-35.1558	0.0911	68.8253	0.4527	-2.247	0.2233
BASE	86	28	CIM2	-43.9533	0.078	86.3972	0.6771	-2.2972	0.3086
BASE	86	28	CIM3 Max	-27.12	0.6191	80.339	2.7223	-0.2437	0.9896
BASE	86	28	CIM3 Min	-43.1916	-0.4369	57.3116	-1.8168	-4.2504	-0.543
BASE	86	28	CIM4 Max	-26.8539	0.727	86.5792	1.7709	-0.886	0.8459
BASE	86	28	CIM4 Min	-43.4578	-0.5448	51.0715	-0.8655	-3.608	-0.3994
BASE	86	28	CIM5 Max	-35.7066	0.4788	90.6805	2.3269	-0.7784	0.8636
BASE	86	28	CIM5 Min	-47.8012	-0.3162	73.3279	-1.0849	-3.7908	-0.2891
BASE	86	28	CIM6 Max	-35.5074	0.5596	95.351	1.6148	-1.2592	0.7561
BASE	86	28	CIM6 Min	-48.0004	-0.397	68.6574	-0.3728	-3.31	-0.1816
BASE	86	28	CIM7 Max	-13.0577	0.5827	52.8089	2.5412	0.6551	0.9003
BASE	86	28	CIM7 Min	-29.1293	-0.4733	29.7815	-1.9979	-3.3516	-0.6324
BASE	86	28	CIM8 Max	-12.7915	0.6906	59.049	1.5898	0.0128	0.7566
BASE	86	28	CIM8 Min	-29.3954	-0.5812	23.5413	-1.0466	-2.7092	-0.4887
BASE	86	28	ENVCIM Max	-12.7915	0.727	95.351	2.7223	0.6551	0.9896
BASE	86	28	ENVCIM Min	-48.0004	-0.5812	23.5413	-1.9979	-4.2504	-0.6324
BASE	92	32	CIM1	3.3439	-0.0532	6.695	0.0791	0.5371	-0.0098
BASE	92	32	CIM2	4.5658	-0.0762	8.5873	0.1122	0.7589	-0.0135
BASE	92	32	CIM3 Max	7.972	0.0732	16.3981	0.2901	1.4826	0.0234
BASE	92	32	CIM3 Min	-1.2842	-0.1797	-3.008	-0.1318	-0.4084	-0.0429
BASE	92	32	CIM4 Max	7.8398	0.044	16.1142	0.2452	1.4608	0.0164
BASE	92	32	CIM4 Min	-1.152	-0.1504	-2.7241	-0.0869	-0.3867	-0.0359
BASE	92	32	CIM5 Max	7.7426	0.0247	15.4149	0.2626	1.4149	0.0124
BASE	92	32	CIM5 Min	0.778	-0.1655	0.8135	-0.0547	-0.008	-0.0375
BASE	92	32	CIM6 Max	7.6437	0.0028	15.2025	0.2289	1.3986	0.0071
BASE	92	32	CIM6 Min	0.877	-0.1436	1.0259	-0.0211	0.0083	-0.0322
BASE	92	32	CIM7 Max	6.6345	0.0945	13.72	0.2584	1.2677	0.0273
BASE	92	32	CIM7 Min	-2.6218	-0.1584	-5.686	-0.1635	-0.6232	-0.039

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	92	32	CIM8 Max	6.5023	0.0652	13.4362	0.2135	1.246	0.0203
BASE	92	32	CIM8 Min	-2.4896	-0.1291	-5.4022	-0.1186	-0.6015	-0.032
BASE	92	32	ENVCIM Max	7.972	0.0945	16.3981	0.2901	1.4826	0.0273
BASE	92	32	ENVCIM Min	-2.6218	-0.1797	-5.686	-0.1635	-0.6232	-0.0429
BASE	96	31	CIM1	17.4025	-0.3541	23.7991	0.511	9.837	0
BASE	96	31	CIM2	23.7344	-0.5118	29.983	0.7294	14.5419	0
BASE	96	31	CIM3 Max	51.8266	0.334	33.9846	1.7231	13.5351	0
BASE	96	31	CIM3 Min	-17.0217	-1.0421	13.6136	-0.701	6.1388	0
BASE	96	31	CIM4 Max	51.2623	0.2093	33.5496	1.5073	13.4317	0
BASE	96	31	CIM4 Min	-16.4574	-0.9174	14.0485	-0.4852	6.2422	0
BASE	96	31	CIM5 Max	48.0536	0.0451	36.1005	1.5864	16.1483	0
BASE	96	31	CIM5 Min	-3.7508	-0.9899	20.7735	-0.2368	10.5831	0
BASE	96	31	CIM6 Max	47.6313	-0.0482	35.7749	1.4249	16.0709	0
BASE	96	31	CIM6 Min	-3.3284	-0.8966	21.0991	-0.0752	10.6605	0
BASE	96	31	CIM7 Max	44.8656	0.4756	24.4649	1.5186	9.6004	0
BASE	96	31	CIM7 Min	-23.9827	-0.9005	4.0939	-0.9054	2.204	0
BASE	96	31	CIM8 Max	44.3013	0.3509	24.03	1.3029	9.497	0
BASE	96	31	CIM8 Min	-23.4184	-0.7758	4.5289	-0.6896	2.3074	0
BASE	96	31	ENVCIM Max	51.8266	0.4756	36.1005	1.7231	16.1483	0
BASE	96	31	ENVCIM Min	-23.9827	-1.0421	4.0939	-0.9054	2.204	0
BASE	97	30	CIM1	21.59	-0.4422	38.9188	0.5932	3.0392	0
BASE	97	30	CIM2	27.6263	-0.6455	50.3337	0.8549	3.976	0
BASE	97	30	CIM3 Max	85.5518	0.1827	39.7489	1.7356	10.7525	0
BASE	97	30	CIM3 Min	-42.3719	-1.0671	38.0888	-0.5493	-4.6742	0
BASE	97	30	CIM4 Max	84.1354	0.1575	40.2413	1.691	10.6541	0
BASE	97	30	CIM4 Min	-40.9555	-1.042	37.5964	-0.5046	-4.5757	0
BASE	97	30	CIM5 Max	74.2441	-0.1245	48.1056	1.649	9.5457	0
BASE	97	30	CIM5 Min	-22.0096	-1.0649	46.8544	-0.0701	-2.0621	0
BASE	97	30	CIM6 Max	73.184	-0.1433	48.4741	1.6156	9.472	0
BASE	97	30	CIM6 Min	-20.9495	-1.0461	46.4858	-0.0367	-1.9884	0
BASE	97	30	CIM7 Max	76.9158	0.3596	24.1813	1.4984	9.5369	0
BASE	97	30	CIM7 Min	-51.0079	-0.8903	22.5212	-0.7865	-5.8898	0
BASE	97	30	CIM8 Max	75.4994	0.3344	24.6738	1.4537	9.4384	0
BASE	97	30	CIM8 Min	-49.5914	-0.8651	22.0288	-0.7419	-5.7914	0
BASE	97	30	ENVCIM Max	85.5518	0.3596	50.3337	1.7356	10.7525	0
BASE	97	30	ENVCIM Min	-51.0079	-1.0671	22.0288	-0.7865	-5.8898	0
BASE	98	29	CIM1	2.8274	-0.3926	13.0917	-0.1023	-11.3364	0.003
BASE	98	29	CIM2	2.0336	-0.8937	15.9203	-0.0905	-17.2112	0.0037
BASE	98	29	CIM3 Max	34.5509	3.4537	35.8842	0.8998	-7.3725	0.0101
BASE	98	29	CIM3 Min	-28.896	-4.239	-9.7007	-1.1044	-15.3002	-0.0041
BASE	98	29	CIM4 Max	33.817	6.8407	40.3375	1.8312	-7.3943	0.0073
BASE	98	29	CIM4 Min	-28.1621	-7.6259	-14.154	-2.0357	-15.2785	-0.0013
BASE	98	29	CIM5 Max	26.1017	2.1326	32.3728	0.6625	-12.7598	0.0089
BASE	98	29	CIM5 Min	-21.6376	-3.6695	-1.9466	-0.8493	-18.7251	-0.0018
BASE	98	29	CIM6 Max	25.5524	4.6677	35.706	1.3596	-12.7761	0.0068
BASE	98	29	CIM6 Min	-21.0883	-6.2045	-5.2797	-1.5464	-18.7089	0.0003
BASE	98	29	CIM7 Max	33.42	3.6108	30.6475	0.9407	-2.838	0.0089
BASE	98	29	CIM7 Min	-30.027	-4.0819	-14.9374	-1.0635	-10.7657	-0.0053
BASE	98	29	CIM8 Max	32.6861	6.9977	35.1008	1.8721	-2.8597	0.0061
BASE	98	29	CIM8 Min	-29.2931	-7.4689	-19.3907	-1.9948	-10.7439	-0.0025
BASE	98	29	ENVCIM Max	34.5509	6.9977	40.3375	1.8721	-2.838	0.0101
BASE	98	29	ENVCIM Min	-30.027	-7.6259	-19.3907	-2.0357	-18.7251	-0.0053
BASE	2	34	CIM1	-76.8356	-0.5458	156.6183	1.4384	-3.833	0.2233

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BASE	2	34	CIM2	-101.4559	-0.6928	205.9651	1.8859	-5.0464	0.3086
BASE	2	34	CIM3 Max	-69.8841	0.2026	170.9987	4.175	-2.3552	0.9896
BASE	2	34	CIM3 Min	-83.787	-1.2941	142.2378	-1.2983	-5.3108	-0.543
BASE	2	34	CIM4 Max	-70.4534	0.3137	169.0243	3.06	-2.3794	0.8459
BASE	2	34	CIM4 Min	-83.2178	-1.4052	144.2122	-0.1833	-5.2866	-0.3994
BASE	2	34	CIM5 Max	-90.0712	-0.0927	204.4453	3.831	-3.6311	0.8636
BASE	2	34	CIM5 Min	-100.5305	-1.2194	182.8114	-0.2831	-5.855	-0.2891
BASE	2	34	CIM6 Max	-90.4972	-0.0096	202.9675	2.9965	-3.6492	0.7561
BASE	2	34	CIM6 Min	-100.1044	-1.3025	184.2892	0.5515	-5.8369	-0.1816
BASE	2	34	CIM7 Max	-39.1499	0.4209	108.3514	3.5997	-0.822	0.9003
BASE	2	34	CIM7 Min	-53.0528	-1.0758	79.5905	-1.8737	-3.7776	-0.6324
BASE	2	34	CIM8 Max	-39.7191	0.532	106.377	2.4846	-0.8462	0.7566
BASE	2	34	CIM8 Min	-52.4836	-1.1869	81.5649	-0.7586	-3.7534	-0.4887
BASE	2	34	ENVCIM Max	-39.1499	0.532	205.9651	4.175	-0.822	0.9896
BASE	2	34	ENVCIM Min	-101.4559	-1.4052	79.5905	-1.8737	-5.855	-0.6324
BASE	3	35	CIM1	29.2265	0.1365	70.7286	-0.1762	0.9467	-0.0028
BASE	3	35	CIM2	39.3697	0.1982	94.2253	-0.2605	1.4456	-0.0031
BASE	3	35	CIM3 Max	45.7935	0.7056	119.9282	0.0564	3.3464	0.0886
BASE	3	35	CIM3 Min	12.6594	-0.4327	21.5289	-0.4088	-1.4531	-0.0943
BASE	3	35	CIM4 Max	38.7564	0.97	97.2212	0.0784	2.784	0.1868
BASE	3	35	CIM4 Min	19.6965	-0.6971	44.236	-0.4308	-0.8906	-0.1925
BASE	3	35	CIM5 Max	49.2861	0.6116	125.3271	-0.0644	3.1255	0.066
BASE	3	35	CIM5 Min	24.3817	-0.2461	51.3751	-0.4146	-0.4837	-0.0721
BASE	3	35	CIM6 Max	44.019	0.8094	108.3317	-0.0479	2.7045	0.1395
BASE	3	35	CIM6 Min	29.6488	-0.4439	68.3706	-0.431	-0.0628	-0.1455
BASE	3	35	CIM7 Max	34.1029	0.651	91.6368	0.1269	2.9677	0.0898
BASE	3	35	CIM7 Min	0.9688	-0.4873	-6.7625	-0.3384	-1.8317	-0.0932
BASE	3	35	CIM8 Max	27.0658	0.9154	68.9298	0.1489	2.4053	0.188
BASE	3	35	CIM8 Min	8.006	-0.7517	15.9445	-0.3604	-1.2693	-0.1913
BASE	3	35	ENVCIM Max	49.2861	0.97	125.3271	0.1489	3.3464	0.188
BASE	3	35	ENVCIM Min	0.9688	-0.7517	-6.7625	-0.431	-1.8317	-0.1925
BASE	6	293	CIM1	0.8745	2.6482	6.9705	0.1299	1.2249	-0.0252
BASE	6	293	CIM2	1.2282	3.0232	7.2761	0.2204	1.7112	-0.0346
BASE	6	293	CIM3 Max	2.0902	4.892	14.8742	1.3244	3.4587	0.05
BASE	6	293	CIM3 Min	-0.3413	0.4044	-0.9333	-1.0647	-1.0089	-0.1004
BASE	6	293	CIM4 Max	1.6943	3.9368	16.7595	0.8025	2.635	0.018
BASE	6	293	CIM4 Min	0.0546	1.3596	-2.8185	-0.5428	-0.1852	-0.0685
BASE	6	293	CIM5 Max	2.0538	4.6159	13.1508	1.0956	3.2688	0.0243
BASE	6	293	CIM5 Min	0.2257	1.243	1.2485	-0.7	-0.0896	-0.0888
BASE	6	293	CIM6 Max	1.7574	3.901	14.5619	0.705	2.6523	0.0004
BASE	6	293	CIM6 Min	0.5221	1.9579	-0.1625	-0.3094	0.5269	-0.0648
BASE	6	293	CIM7 Max	1.7405	3.8327	12.086	1.2725	2.9687	0.0601
BASE	6	293	CIM7 Min	-0.6911	-0.6549	-3.7214	-1.1166	-1.4988	-0.0903
BASE	6	293	CIM8 Max	1.3445	2.8775	13.9713	0.7505	2.1451	0.0281
BASE	6	293	CIM8 Min	-0.2951	0.3003	-5.6067	-0.5947	-0.6752	-0.0584
BASE	6	293	ENVCIM Max	2.0902	4.892	16.7595	1.3244	3.4587	0.0601
BASE	6	293	ENVCIM Min	-0.6911	-0.6549	-5.6067	-1.1166	-1.4988	-0.1004
BASE	9	287	CIM1	0.6907	2.1444	21.7957	1.2206	1.0144	-0.0207
BASE	9	287	CIM2	0.9893	2.6246	28.0411	1.6723	1.4336	-0.0283
BASE	9	287	CIM3 Max	1.8643	7.8692	35.5162	4.3429	3.1359	0.0399
BASE	9	287	CIM3 Min	-0.483	-3.5803	8.0753	-1.9017	-1.1071	-0.0813
BASE	9	287	CIM4 Max	1.4637	5.2026	40.0276	2.9373	2.3232	0.0133
BASE	9	287	CIM4 Min	-0.0824	-0.9137	3.5639	-0.4961	-0.2944	-0.0546

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	9	287	CIM5 Max	1.797	6.807	36.8131	3.9061	2.9236	0.0192
BASE	9	287	CIM5 Min	0.0323	-1.7978	16.1464	-0.7872	-0.266	-0.0719
BASE	9	287	CIM6 Max	1.4972	4.8111	40.1898	2.854	2.3153	-0.0008
BASE	9	287	CIM6 Min	0.3322	0.198	12.7698	0.2648	0.3423	-0.052
BASE	9	287	CIM7 Max	1.5881	7.0114	26.7979	3.8547	2.7302	0.0482
BASE	9	287	CIM7 Min	-0.7593	-4.4381	-0.643	-2.39	-1.5129	-0.073
BASE	9	287	CIM8 Max	1.1874	4.3448	31.3093	2.4491	1.9175	0.0215
BASE	9	287	CIM8 Min	-0.3586	-1.7715	-5.1544	-0.9844	-0.7002	-0.0463
BASE	9	287	ENVCIM Max	1.8643	7.8692	40.1898	4.3429	3.1359	0.0482
BASE	9	287	ENVCIM Min	-0.7593	-4.4381	-5.1544	-2.39	-1.5129	-0.0813
BASE	10	284	CIM1	0.4904	5.4603	18.5077	0.2803	0.7127	-0.0158
BASE	10	284	CIM2	0.6907	7.274	24.2569	0.386	0.994	-0.0215
BASE	10	284	CIM3 Max	1.3704	7.1468	28.4218	1.6079	2.256	0.0292
BASE	10	284	CIM3 Min	-0.3896	3.7739	8.5936	-1.0473	-0.8307	-0.0608
BASE	10	284	CIM4 Max	0.9966	6.438	27.9236	1.0129	1.5845	0.0084
BASE	10	284	CIM4 Min	-0.0158	4.4827	9.0917	-0.4523	-0.1592	-0.04
BASE	10	284	CIM5 Max	1.3021	8.0882	30.2788	1.3574	2.0837	0.0137
BASE	10	284	CIM5 Min	-0.0208	5.553	15.3605	-0.6382	-0.2363	-0.0539
BASE	10	284	CIM6 Max	1.0223	7.5577	29.9059	0.9121	1.5811	-0.0018
BASE	10	284	CIM6 Min	0.259	6.0835	15.7334	-0.1929	0.2663	-0.0383
BASE	10	284	CIM7 Max	1.1743	4.9626	21.0187	1.4958	1.9709	0.0355
BASE	10	284	CIM7 Min	-0.5858	1.5898	1.1905	-1.1594	-1.1157	-0.0545
BASE	10	284	CIM8 Max	0.8005	4.2538	20.5205	0.9008	1.2995	0.0147
BASE	10	284	CIM8 Min	-0.212	2.2986	1.6887	-0.5645	-0.4443	-0.0337
BASE	10	284	ENVCIM Max	1.3704	8.0882	30.2788	1.6079	2.256	0.0355
BASE	10	284	ENVCIM Min	-0.5858	1.5898	1.1905	-1.1594	-1.1157	-0.0608
BASE	12	292	CIM1	0.5815	8.1703	25.8878	-0.0985	0.9401	-0.0252
BASE	12	292	CIM2	0.7963	11.2431	35.1935	-0.144	1.288	-0.0346
BASE	12	292	CIM3 Max	2.3702	14.5771	52.9386	1.2488	3.7495	0.05
BASE	12	292	CIM3 Min	-1.2072	1.7635	-1.163	-1.4458	-1.8693	-0.1004
BASE	12	292	CIM4 Max	1.6971	11.5729	41.8449	0.624	2.6496	0.018
BASE	12	292	CIM4 Min	-0.5341	4.7678	9.9307	-0.8211	-0.7694	-0.0685
BASE	12	292	CIM5 Max	2.0872	15.2899	53.1998	0.8799	3.3128	0.0243
BASE	12	292	CIM5 Min	-0.602	5.66	12.5342	-1.1452	-0.9108	-0.0888
BASE	12	292	CIM6 Max	1.5834	13.0413	44.8966	0.4123	2.4896	0.0004
BASE	12	292	CIM6 Min	-0.0982	7.9086	20.8375	-0.6776	-0.0876	-0.0648
BASE	12	292	CIM7 Max	2.1376	11.309	42.5835	1.2882	3.3734	0.0601
BASE	12	292	CIM7 Min	-1.4398	-1.5046	-11.5181	-1.4064	-2.2453	-0.0903
BASE	12	292	CIM8 Max	1.4645	8.3047	31.4898	0.6634	2.2736	0.0281
BASE	12	292	CIM8 Min	-0.7667	1.4997	-0.4244	-0.7817	-1.1454	-0.0584
BASE	12	292	ENVCIM Max	2.3702	15.2899	53.1998	1.2882	3.7495	0.0601
BASE	12	292	ENVCIM Min	-1.4398	-1.5046	-11.5181	-1.4458	-2.2453	-0.1004
BASE	13	285	CIM1	0.1919	6.5727	22.1965	0.1723	0.425	-0.0158
BASE	13	285	CIM2	0.2365	9.0697	29.9973	0.1996	0.556	-0.0215
BASE	13	285	CIM3 Max	1.3848	10.8221	41.1051	1.4082	2.2757	0.0292
BASE	13	285	CIM3 Min	-1.001	2.3233	3.288	-1.0636	-1.4257	-0.0608
BASE	13	285	CIM4 Max	0.8792	9.2037	33.1491	0.8244	1.4728	0.0084
BASE	13	285	CIM4 Min	-0.4954	3.9416	11.244	-0.4798	-0.6228	-0.04
BASE	13	285	CIM5 Max	1.1219	11.6398	42.2593	1.1215	1.9142	0.0137
BASE	13	285	CIM5 Min	-0.6713	5.2511	13.8348	-0.7361	-0.8678	-0.0539
BASE	13	285	CIM6 Max	0.7435	10.4285	36.3046	0.6846	1.3133	-0.0018
BASE	13	285	CIM6 Min	-0.2929	6.4624	19.7896	-0.2991	-0.2668	-0.0383
BASE	13	285	CIM7 Max	1.3081	8.193	32.2264	1.3393	2.1057	0.0355

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	13	285	CIM7 Min	-1.0778	-0.3058	-5.5906	-1.1325	-1.5957	-0.0545
BASE	13	285	CIM8 Max	0.8024	6.5746	24.2705	0.7555	1.3028	0.0147
BASE	13	285	CIM8 Min	-0.5722	1.3126	2.3654	-0.5487	-0.7928	-0.0337
BASE	13	285	ENVCIM Max	1.3848	11.6398	42.2593	1.4082	2.2757	0.0355
BASE	13	285	ENVCIM Min	-1.0778	-0.3058	-5.5906	-1.1325	-1.5957	-0.0608
BASE	55	291	CIM1	0.7549	-6.9576	31.6997	-0.1099	1.0985	0.0315
BASE	55	291	CIM2	1.0233	-9.5096	43.1534	-0.1593	1.4953	0.0432
BASE	55	291	CIM3 Max	1.9923	-4.8978	41.2162	1.2382	3.4086	0.1268
BASE	55	291	CIM3 Min	-0.4824	-9.0173	22.1831	-1.458	-1.2116	-0.0638
BASE	55	291	CIM4 Max	1.56	-5.8223	40.6289	0.6132	2.5258	0.0876
BASE	55	291	CIM4 Min	-0.0501	-8.0928	22.7704	-0.833	-0.3288	-0.0247
BASE	55	291	CIM5 Max	1.8864	-7.3235	47.4497	0.8662	3.1326	0.1119
BASE	55	291	CIM5 Min	0.026	-10.4197	33.1302	-1.1601	-0.3404	-0.0313
BASE	55	291	CIM6 Max	1.5628	-8.0155	47.0102	0.3984	2.4719	0.0826
BASE	55	291	CIM6 Min	0.3496	-9.7277	33.5697	-0.6924	0.3203	-0.0021
BASE	55	291	CIM7 Max	1.6903	-2.1148	28.5363	1.2822	2.9692	0.1142
BASE	55	291	CIM7 Min	-0.7844	-6.2343	9.5033	-1.414	-1.651	-0.0764
BASE	55	291	CIM8 Max	1.258	-3.0393	27.949	0.6572	2.0864	0.0751
BASE	55	291	CIM8 Min	-0.3521	-5.3098	10.0906	-0.7891	-0.7682	-0.0373
BASE	55	291	ENVCIM Max	1.9923	-2.1148	47.4497	1.2822	3.4086	0.1268
BASE	55	291	ENVCIM Min	-0.7844	-10.4197	9.5033	-1.458	-1.651	-0.0764
BASE	57	289	CIM1	0.384	8.19	37.0548	0.3552	0.7184	-0.0207
BASE	57	289	CIM2	0.4976	11.8183	51.9248	0.4081	0.9564	-0.0283
BASE	57	289	CIM3 Max	2.0437	17.6463	73.88	2.9267	3.3277	0.0399
BASE	57	289	CIM3 Min	-1.2757	-1.2663	0.2297	-2.2163	-1.8908	-0.0813
BASE	57	289	CIM4 Max	1.4203	13.3225	59.7686	1.7959	2.2935	0.0133
BASE	57	289	CIM4 Min	-0.6524	3.0575	14.3411	-1.0856	-0.8566	-0.0546
BASE	57	289	CIM5 Max	1.7168	18.0182	75.889	2.3276	2.8582	0.0192
BASE	57	289	CIM5 Min	-0.7784	3.8043	20.5256	-1.5378	-1.0644	-0.0719
BASE	57	289	CIM6 Max	1.2503	14.782	65.3271	1.4813	2.0842	-0.0008
BASE	57	289	CIM6 Min	-0.3119	7.0405	31.0875	-0.6915	-0.2904	-0.052
BASE	57	289	CIM7 Max	1.8901	14.3703	59.058	2.7846	3.0403	0.0482
BASE	57	289	CIM7 Min	-1.4293	-4.5423	-14.5922	-2.3584	-2.1782	-0.073
BASE	57	289	CIM8 Max	1.2667	10.0465	44.9466	1.6539	2.0061	0.0215
BASE	57	289	CIM8 Min	-0.8059	-0.2185	-0.4808	-1.2277	-1.144	-0.0463
BASE	57	289	ENVCIM Max	2.0437	18.0182	75.889	2.9267	3.3277	0.0482
BASE	57	289	ENVCIM Min	-1.4293	-4.5423	-14.5922	-2.3584	-2.1782	-0.0813
BASE	58	288	CIM1	0.7532	-9.3638	52.6067	0.3987	1.0678	0.0265
BASE	58	288	CIM2	1.033	-12.9145	73.3945	0.501	1.4632	0.0364
BASE	58	288	CIM3 Max	1.9088	-3.9523	70.2139	2.9251	3.1858	0.106
BASE	58	288	CIM3 Min	-0.4025	-14.7753	34.9994	-2.1277	-1.0503	-0.0529
BASE	58	288	CIM4 Max	1.494	-6.3451	73.025	1.7851	2.3532	0.0725
BASE	58	288	CIM4 Min	0.0123	-12.3826	32.1883	-0.9878	-0.2176	-0.0194
BASE	58	288	CIM5 Max	1.8318	-7.9596	81.4522	2.3742	2.9565	0.0937
BASE	58	288	CIM5 Min	0.0943	-16.094	54.9429	-1.4234	-0.2278	-0.0258
BASE	58	288	CIM6 Max	1.5214	-9.7505	83.5562	1.521	2.3332	0.0686
BASE	58	288	CIM6 Min	0.4047	-14.3032	52.8389	-0.5702	0.3954	-0.0007
BASE	58	288	CIM7 Max	1.6075	-0.2068	49.1713	2.7656	2.7587	0.0954
BASE	58	288	CIM7 Min	-0.7037	-11.0297	13.9568	-2.2872	-1.4774	-0.0635
BASE	58	288	CIM8 Max	1.1928	-2.5995	51.9824	1.6257	1.9261	0.0619
BASE	58	288	CIM8 Min	-0.289	-8.637	11.1456	-1.1473	-0.6447	-0.03
BASE	58	288	ENVCIM Max	1.9088	-0.2068	83.5562	2.9251	3.1858	0.106
BASE	58	288	ENVCIM Min	-0.7037	-16.094	11.1456	-2.2872	-1.4774	-0.0635

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	100	283	CIM1	0.2309	-7.2375	30.5371	0.172	0.4617	0.022
BASE	100	283	CIM2	0.316	-9.7396	41.1931	0.2026	0.6299	0.0302
BASE	100	283	CIM3 Max	1.0708	-4.4097	45.3985	1.4062	1.9977	0.087
BASE	100	283	CIM3 Min	-0.6089	-10.0653	15.6758	-1.0623	-1.0743	-0.0429
BASE	100	283	CIM4 Max	0.6875	-5.715	41.9872	0.8233	1.3046	0.0587
BASE	100	283	CIM4 Min	-0.2257	-8.76	19.087	-0.4794	-0.3812	-0.0146
BASE	100	283	CIM5 Max	0.9259	-6.9888	49.7051	1.1225	1.7423	0.0769
BASE	100	283	CIM5 Min	-0.3365	-11.2394	27.3531	-0.7326	-0.5665	-0.0207
BASE	100	283	CIM6 Max	0.6391	-7.9658	47.1519	0.6862	1.2235	0.0558
BASE	100	283	CIM6 Min	-0.0497	-10.2624	29.9063	-0.2963	-0.0478	0.0005
BASE	100	283	CIM7 Max	0.9784	-1.5147	33.1836	1.3374	1.813	0.0781
BASE	100	283	CIM7 Min	-0.7013	-7.1703	3.4609	-1.131	-1.259	-0.0517
BASE	100	283	CIM8 Max	0.5952	-2.82	29.7724	0.7545	1.1199	0.0499
BASE	100	283	CIM8 Min	-0.3181	-5.865	6.8722	-0.5482	-0.5659	-0.0235
BASE	100	283	ENVCIM Max	1.0708	-1.5147	49.7051	1.4062	1.9977	0.087
BASE	100	283	ENVCIM Min	-0.7013	-11.2394	3.4609	-1.131	-1.259	-0.0517
BASE	130	282	CIM1	0.2687	-6.7463	28.2732	0.2442	0.5136	0.022
BASE	130	282	CIM2	0.3779	-9.0676	37.7815	0.3439	0.7131	0.0302
BASE	130	282	CIM3 Max	0.9717	-0.6311	55.6457	1.5629	1.9008	0.087
BASE	130	282	CIM3 Min	-0.4342	-12.8616	0.9007	-1.0746	-0.8735	-0.0429
BASE	130	282	CIM4 Max	0.6804	-3.5508	44.9604	0.9722	1.3019	0.0587
BASE	130	282	CIM4 Min	-0.143	-9.9419	11.5859	-0.4839	-0.2747	-0.0146
BASE	130	282	CIM5 Max	0.879	-3.8916	55.9801	1.3101	1.7058	0.0769
BASE	130	282	CIM5 Min	-0.1777	-13.083	14.8288	-0.6722	-0.3793	-0.0207
BASE	130	282	CIM6 Max	0.661	-6.0768	47.9826	0.868	1.2577	0.0558
BASE	130	282	CIM6 Min	0.0402	-10.8977	22.8263	-0.23	0.0689	0.0005
BASE	130	282	CIM7 Max	0.8642	2.0674	44.3364	1.4653	1.6953	0.0781
BASE	130	282	CIM7 Min	-0.5417	-10.163	-10.4086	-1.1722	-1.079	-0.0517
BASE	130	282	CIM8 Max	0.573	-0.8522	33.6511	0.8746	1.0965	0.0499
BASE	130	282	CIM8 Min	-0.2505	-7.2434	0.2767	-0.5815	-0.4801	-0.0235
BASE	130	282	ENVCIM Max	0.9717	2.0674	55.9801	1.5629	1.9008	0.087
BASE	130	282	ENVCIM Min	-0.5417	-13.083	-10.4086	-1.1722	-1.079	-0.0517
BASE	131	286	CIM1	0.5674	-9.5841	38.996	1.1821	0.8942	0.0265
BASE	131	286	CIM2	0.8242	-12.9432	51.8264	1.6562	1.2725	0.0364
BASE	131	286	CIM3 Max	1.5288	2.6314	84.6732	4.1576	2.8009	0.106
BASE	131	286	CIM3 Min	-0.394	-21.7995	-6.6812	-1.7934	-1.0125	-0.0529
BASE	131	286	CIM4 Max	1.2506	-3.0878	67.1098	2.7905	2.1052	0.0725
BASE	131	286	CIM4 Min	-0.1158	-16.0803	10.8823	-0.4263	-0.3168	-0.0194
BASE	131	286	CIM5 Max	1.4829	-2.923	82.9546	3.7739	2.6113	0.0937
BASE	131	286	CIM5 Min	0.0372	-21.2838	14.2831	-0.6986	-0.2554	-0.0258
BASE	131	286	CIM6 Max	1.2747	-7.2037	69.809	2.7507	2.0905	0.0686
BASE	131	286	CIM6 Min	0.2454	-17.0031	27.4287	0.3247	0.2653	-0.0007
BASE	131	286	CIM7 Max	1.3018	6.465	69.0748	3.6848	2.4432	0.0954
BASE	131	286	CIM7 Min	-0.621	-17.9659	-22.2796	-2.2662	-1.3702	-0.0635
BASE	131	286	CIM8 Max	1.0236	0.7458	51.5114	2.3176	1.7475	0.0619
BASE	131	286	CIM8 Min	-0.3428	-12.2467	-4.7162	-0.8991	-0.6744	-0.03
BASE	131	286	ENVCIM Max	1.5288	6.465	84.6732	4.1576	2.8009	0.106
BASE	131	286	ENVCIM Min	-0.621	-21.7995	-22.2796	-2.2662	-1.3702	-0.0635
BASE	132	290	CIM1	0.8383	-2.9427	15.4036	0.1087	1.1937	0.0315
BASE	132	290	CIM2	1.2096	-3.7124	19.3178	0.1931	1.6964	0.0432
BASE	132	290	CIM3 Max	1.7459	3.8791	45.2366	1.3072	3.1379	0.1268
BASE	132	290	CIM3 Min	-0.0692	-9.7646	-14.4293	-1.0899	-0.7505	-0.0638
BASE	132	290	CIM4 Max	1.5084	1.2888	31.4317	0.7822	2.4599	0.0876

Story	Joint Label	Unique Name	Load Case/Comb o	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m
BASE	132	290	CIM4 Min	0.1683	-7.1742	-0.6244	-0.5648	-0.0725	-0.0247
BASE	132	290	CIM5 Max	1.7993	1.6081	40.7602	1.0728	3.0323	0.1119
BASE	132	290	CIM5 Min	0.4343	-8.6481	-4.0816	-0.7288	0.1091	-0.0313
BASE	132	290	CIM6 Max	1.6215	-0.3307	30.4276	0.6799	2.5249	0.0826
BASE	132	290	CIM6 Min	0.6121	-6.7093	6.2509	-0.3358	0.6166	-0.0021
BASE	132	290	CIM7 Max	1.4106	5.0562	39.0751	1.2638	2.6604	0.1142
BASE	132	290	CIM7 Min	-0.4046	-8.5875	-20.5908	-1.1333	-1.228	-0.0764
BASE	132	290	CIM8 Max	1.1731	2.4659	25.2702	0.7387	1.9824	0.0751
BASE	132	290	CIM8 Min	-0.1671	-5.9971	-6.7858	-0.6083	-0.55	-0.0373
BASE	132	290	ENVCIM Max	1.7993	5.0562	45.2366	1.3072	3.1379	0.1268
BASE	132	290	ENVCIM Min	-0.4046	-9.7646	-20.5908	-1.1333	-1.228	-0.0764



Propietario:	SEC. EDUCACION Y SEC. CULTUR	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

ANEXO 8. DISEÑO DE ELEMENTOS NO ESTRUCTURALES



Propietario:	SEC. EDUCACION Y SEC. CULTURA	Calculó:	ING. FABIO RIVERA
Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

DISEÑO DE ELEMENTOS NO ESTRUCTURALES (MUROS)
COLEGIO ENSUEÑO
MUROS PRIMER PISO

REF: CAPITULO A.9 NSR-10

1. Grado de Desempeño requerido: **Superior (Grupo de Uso III)**

2. Criterio de Diseño: **Elementos separados de la Estructura**

3. Fuerzas Sísmicas de Diseño:

$$F_p = \frac{a_x a_p}{R_p} g M_p \geq \frac{A_a I}{2} g M_p$$

a_x = Aceleración del Punto de Soporte (ref: A.9.4.2.1)

$$a_x = A_s + \frac{(S_a - A_s) h_x}{h_{eq}} \quad h_x \leq h_{eq}$$

$$a_x = S_a \frac{h_x}{h_{eq}} \quad h_x \geq h_{eq}$$

a_p = Amplificación Dinámica del Elemento No Estructural (ref: A.9.4.2.2 y Tabla A.9.5-1)

R_p = Capacidad de Disipación de Energía en el Rango Inelástico del Elemento (ref: A.9.4.9 y Tabla A.9.5-1)

Muros de Fachada:

Mampostería Reforzada Separada lateralmente de la Estructura, Apoyada solo Abajo

a_p = **2.5** Rp mínimo: **6**

Muros Divisorios:

Corredores

a_p = **1.0** Rp mínimo: **3**

Muros de Altura Total

a_p = **1.0** Rp mínimo: **1.5**

Muros de Altura Parcial

a_p = **2.5** Rp mínimo: **1.5**

Tipos de Anclaje:

Especiales:	Rp=	6.0
Dúctiles:	Rp=	3.0
No Dúctiles:	Rp=	1.5
Húmedos:	Rp=	0.5

4. Calculo de las Aceleraciones de Piso:

A_a =	0.15	Bogotá (Cundinamarca)	Coefficiente de aceleración Pico-efectiva
A_s =	0.478		Aceleración espectral, para un período de vibración igual a cero.
S_a =	0.478		Aceleración espectral. (referencia FHE)
I =	1.25		Coefficiente de Importancia
h_n =	8.3		Altura desde la base al piso mas alto de la edificación

h_{eq} : **6.23** Altura equivalente del sistema de un GDL, que simula la edificación. ($h_{eq} = 0.75 h_n$)



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Proyecto:	COLEGIO Y TEATRO EL ENSUEÑO	Revisó:	ING. JUAN C. PATIÑO
Localización:	BOGOTA - CUNDINAMARCA	Hoja:	
Contenido:	MODULO XIV - M. DE CALCULOS	Fecha:	ABRIL - 2016

NIVEL	hx	ax
2DO(N+4.15)	4.68	0.598
1ER(N+0.00)	0.00	0.598
BASE	0.00	0.598

5. Diseño de los elementos de reforzamiento

Mampostería de perforación Vertical

Altura del Muro: 3 m

Separación Dóvelas(máx: 150 cms) 1.5 m

Use Separación de: 0.9 m

Espesor del Muro: 0.12 m

Amplificación dinámica: 1

Aceleración del elemento : 0.598 Ver Tabla de Arriba.

Rp- Relacionado con el Anclaje: 3

Masa del Muro: 583.2 kg

$$Fp = \frac{a_x a_p}{R_p} gMp \geq \frac{a_a I}{2} gMp = 116.3 \text{ kg} \quad 54.7 \text{ kg}$$

HIPOTESIS 1. MURO EN VOLADIZO

$$Mu = Fp \cdot h/2 = 174.4 \text{ kg-m}$$

HIPOTESIS 2. MURO SIMPLEMENTE APOYADO

$$Mu = Fp \cdot h/4 = 87.2 \text{ kg-m}$$

HIPOTESIS 3. MURO EMPOTRADO EN LA BASE Y APOYADO SUPERIORMENTE

$$Mu+ = 5Fp \cdot h/32 = 54.5 \text{ kg-m}$$

$$Mu- = 3Fp \cdot h/16 = 65.4 \text{ kg-m} \quad Mmax = 65.4 \text{ kg-m}$$

Diseño de las Dóvelas:

Separación entre dovelas: 120 cm

Espesor del muro: 0.14 m

Recubrimiento a la barra: 7 cm

Nota: f'm=80 kg/cm² y Acero de 4200 kg/cm²

HIPOTESIS 1. MURO EN VOLADIZO

FLEXION

$$a = 117085.5$$

$$b = -3780.0$$

$$c = 3.0$$

$$Ro1: 0.031479$$

$$Ro2: 0.000805$$

$$Ro \text{ max: } 0.0159$$

$$\text{use: } Ro = 0.0008 < Romax = 0.0159 \text{ OK!}$$



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Acero de Refuerzo Longitudinal en cada d6vela:

As= 0.68 cm² use: 4 Ø5mm
3 Ø1/4"
1 Ø3/8"

HIPOTESIS 2. MURO SIMPLEMENTE APOYADO

FLEXION

a= 117085.5

b= -3780.0

c= 1.5

Ro1: 0.031887

use: Ro= 0.0004 < Romax= 0.0159 OK!

Ro2: 0.000397

Ro max: 0.0159

Acero de Refuerzo Longitudinal en cada d6vela:

As= 0.33 cm² use: 2 Ø5mm
2 Ø1/4"
1 Ø3/8"

HIPOTESIS 3. MURO EMPOTRADO EN LA BASE Y APOYADO SUPERIORMENTE

FLEXION

a= 117085.5

b= -3780.0

c= 1.1

Ro1: 0.031987

use: Ro= 0.0003 < Romax= 0.0159 OK!

Ro2: 0.000297

Ro max: 0.0159

Acero de Refuerzo Longitudinal en cada d6vela:

As= 0.25 cm² use: 2 Ø5mm
1 Ø1/4"
1 Ø3/8"

CORTANTE

Fuerza Cortante resistida por el muro:

ØVc= 3384.7 kg

Fuerza Cortante Total Resistida por el muro:

ØV= 3384.7 kg

HIPOTESIS 1. MURO EN VOLADIZO

Vu max= Fp= 116.3 kg ØV= 3384.7 kg OK!

HIPOTESIS 2. MURO SIMPLEMENTE APOYADO

Vu max= Fp/2= 58.1 kg ØV= 3384.7 kg OK!

HIPOTESIS 3. MURO EMPOTRADO EN LA BASE Y APOYADO SUPERIORMENTE

Vu max= 11Fp/16= 79.9 kg ØV= 3384.7 kg OK!