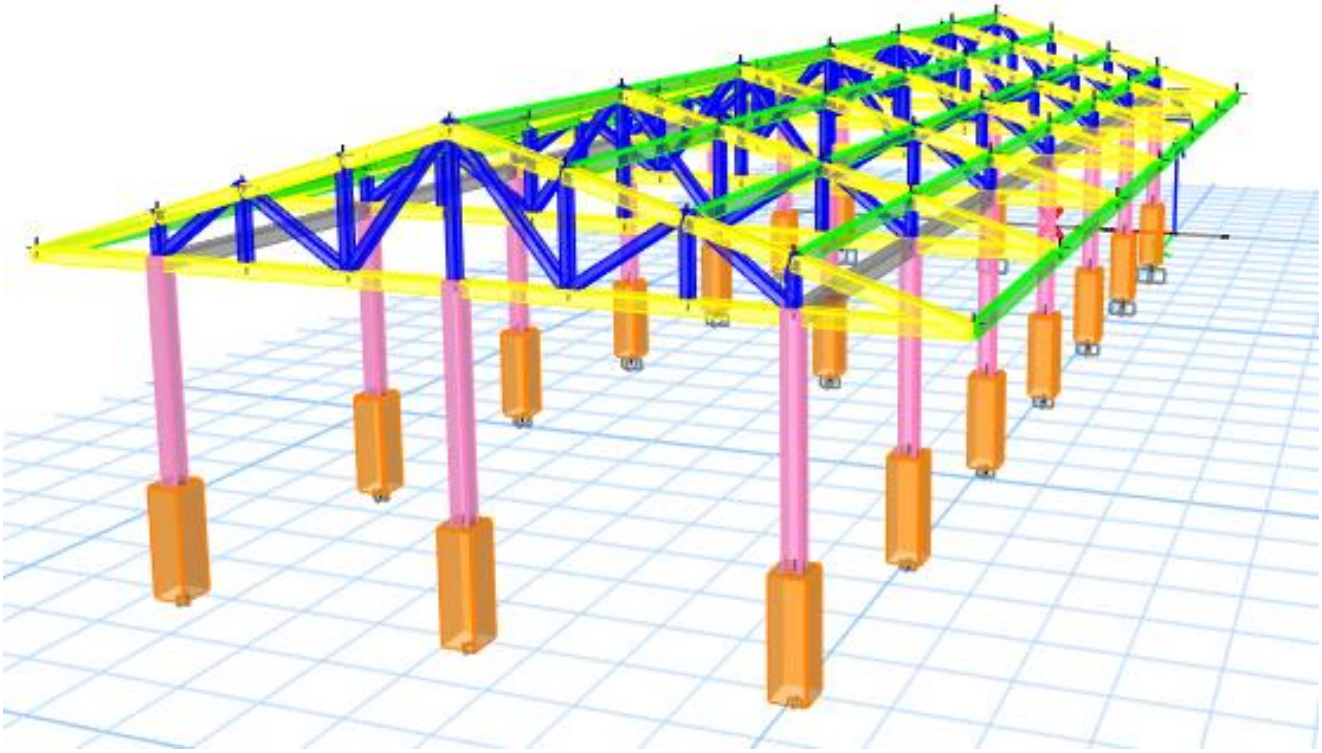
ANÁLISIS Y DISEÑO ESTRUCTURAL DE ADECUACIONES A LA INFRAESTRUCTURA FISICA DEL CENTRO BIOTECNOLOGICO DEL CARIBE

MUNICIPIO DE VALLEDUPAR - DEPARTAMENTO DEL CESAR



CALCULO ESTRUCTURAL

ING. ESNEIDER GARCIA ABELLO
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VALLEDUPAR, ABRIL 2025

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INTRODUCCIÓN

En el presente informe se pretende mostrar el diseño estructural de una Aula educativa en el municipio de Valledupar departamento del cesar, realizado por el INGENIERO ESNEIDER GARCIA ABELLO, la cual es una estructura de acero de un piso con un sistema de pórticos de acero resistentes a momentos, que estará ubicada en el municipio de Valledupar

1. DESCRIPCION DE LA ESTRUCTURA

La estructura está compuesta con pórticos en acero resistentes a momento

EDIFICACION:	Edificios de 1 piso
DIRECCIÓN:	Municipio de Valledupar
PROPIETARIO:	Municipio de Valledupar
PERFIL DEL SUELO	Tipo D
ZONA DE AMENAZA SISMICA	Baja
Aa=	0.10
Av=	0.10
Fa=	1.6
Fv=	2.4
GRUPO DE USO	II
I=	1.1
MATERIAL	Concreto 21 MPa y acero 350MPa
SISTEMA ESTRUCTURAL	Pórticos de acero resistente a momento

2. MATERIALES

CONCRETO	**f 'c** =21MPa
REFUERZO CORRUGADO	420 MPa
ACERO GRADO 50	350MPa
GROUT DE RELLENO Y NIVELACIÓN, DE BAJA RETRACCIÓN	F'C > 28MPA

3. TIPO DE ESTRRUCTURA

El tipo de estructura para resistir cargas laterales (Sísmicas y Viento) y cargas verticales es el de Estructura de pórticos de acero resistentes a momentos; cuyo uso está definido en el decreto 926 de 2010, Norma Colombiana de Diseño y Construcción Sismo Resistente para zonas de amenaza sísmica baja. El diseño se ajusta en un todo a la mencionada norma, en especial lo concerniente al diseño sísmico.

4. CAPACIDAD DE DISIPACIÓN DE ENERGIA

En el municipio de Valledupar se localiza en una zona de amenaza sísmica baja y el sistema estructural de todas las estructuras corresponde a Pórticos en acero Resistentes a Momento, de acuerdo con la tabla A.3-3 se define el grado de disipación de energía de la estructura.

En la tabla mencionada se determina que, para pórticos en acero, con capacidad moderada de disipación de energía (DMO), el uso en zona de amenaza sísmica moderada es permitido por lo que se toma entonces el siguiente valor de Ro:

Ro=5.0 En donde: Ro = coeficiente de capacidad de disipación de energía básico definido para cada sistema estructural y cada grado de capacidad de disipación de energía del material estructural.

Coeficiente de Capacidad de Disipación de Energía Básico (R_0):	5.0
Coeficiente de Reducción (ϕ_a):	0.9
Coeficiente de Reducción (ϕ_p):	0.9
Coeficiente de Reducción (ϕ_r):	1.0
Coeficiente de Capacidad de Disipación de Energía de Diseño ($R = \phi_a\phi_p\phi_r R_0$):	4.05

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Tabla A.3-3
Sistema estructural de pórtico resistente a momentos (Nota 1)

C. SISTEMA DE PÓRTICO RESISTENTE A MOMENTOS		Valor R_0 (Nota 2)	Valor Ω_0 (Nota 4)	zonas de amenaza sísmica					
				Alta		Intermedia		baja	
Sistema resistencia sísmica (fuerzas horizontales)	Sistema resistencia para cargas verticales			uso permit	altura máx.	uso permit	altura máx.	uso permit	altura máx.
1. Pórticos resistentes a momentos con capacidad especial de disipación de energía (*DES*)									
a. De concreto (*DES*)	el mismo	7.0	3.0	si	sin límite	si	sin límite	si	sin límite
b. De acero (*DES*)	el mismo	7.0 (Nota-3)	3.0	si	sin límite	si	sin límite	si	sin límite
c. Mixtos	Pórticos de acero o mixtos resistentes o no a momentos	7.0	3.0	si	sin límite	si	sin límite	si	sin límite
d. De acero con cerchas dúctiles (*DES*)	Pórticos de acero resistentes o no a momentos	6.0	3.0	si	30 m	si	45 m	si	sin límite
2. Pórticos resistentes a momentos con capacidad moderada de disipación de energía (*DMO*)									
a. De concreto (*DMO*)	el mismo	5.0	3.0	no se permite		si	sin límite	si	sin límite
b. De acero (*DMO*)	el mismo	5.0 (Nota-3)	3.0	no se permite		si	sin límite	si	sin límite
c. Mixtos con conexiones rígidas (*DMO*)	Pórticos de acero o mixtos resistentes o no a momentos	5.0	3.0	no se permite		si	sin límite	si	sin límite

Se establece un factor de reducción de 4.05 para las fuerzas de sismo que se usarán en el diseño de los elementos.

5. ISOMETRIA DE LA ESTRUCTURA

5.1 ESTRCUTURA DE AULA

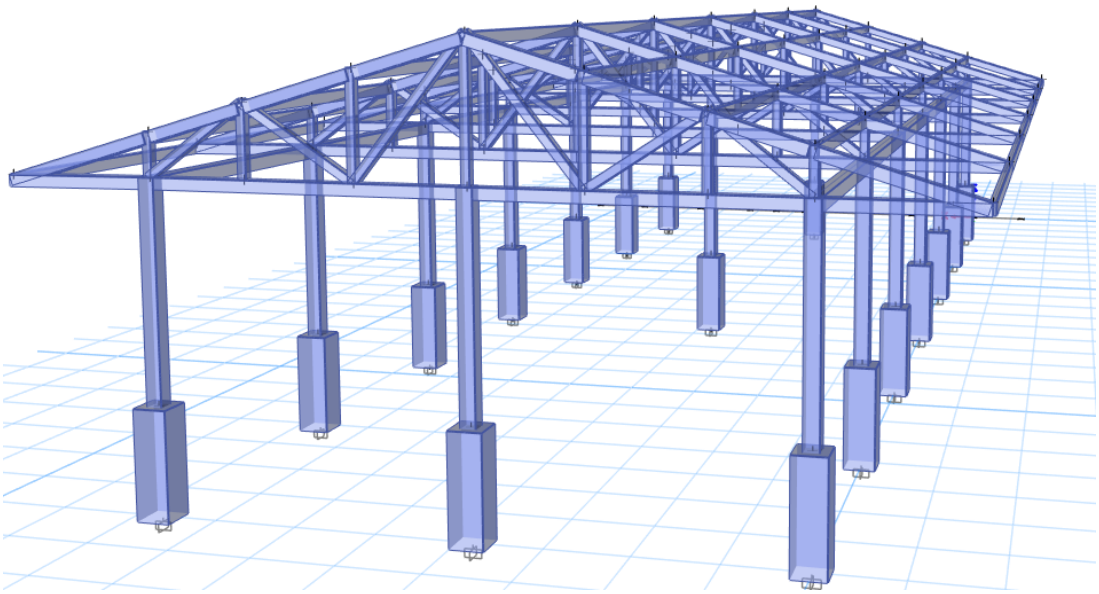


Ilustración 1. isometría de la estructura

6. ESPECTRO DE DISEÑO

Para el desarrollo del cálculo estructural es necesario definir los movimientos de diseño para lo cual es necesario tener en cuenta las consideraciones impuestas en la norma sismo resistente vigente NSR10.

TIPO DE ANALISIS: DINAMICO

Datos		Unidad	Página
Ubicación de la Estructura-CIUDAD	**valledupar**		
Departamento	**Cesar**		
Altura del edificio	**4.25**	[m]	Título A
Numero de Pisos	**1.00**		
Tipo de Perfil del Suelo:	**D**		Tabla A.2.4-3
Grupo de Uso Edificación:	**II**		A.2.5.1
Sistema estructural de resistencia sísmica	**2**		Tabla A.4.2-1
Porticos resistentes a momentos de acero estructural que resisten la totalidad de las fuerzas sismicas y que no estan limitados o adheridos a componentes mas rigidos, estructurales o no estructurales, que limiten los desplazamientos horizontales al verse sometidos a las fuerzas sismicas			

Zona de Amenaza Sísmica:	**Baja**		APÉNDICE A-4
Coeficiente de Aceleracion (Aa):	**0.1**		APÉNDICE A-4
Coeficiente de Velocidad (Av):	**0.1**		APÉNDICE A-4
Coeficiente de Amplificación de Sitio (Fa):	**1.6**		Tabla A.2.4-3
Coeficiente de Amplificación de Sitio (Fv):	**2.4**		Tabla A.2.4-4
Coeficiente de Importancia (I):	**1.1**		A.2.5.1
Espectro de Diseño (Sa):	**Gráfico**		Título A
Período de Vibración Inicial (To):	**0.15**	[s]	Título A
Período de Vibración Corto (Tc):	**0.72**	[s]	Título A
Período de Vibración Largo (T_L):	**5.76**	[s]	Título A

Coeficiente (C_t):	**0.072**		Tabla A.4.2-1
Exponente (α):	**0.8**		Tabla A.4.2-1
Período de Vibración Aproximado ($Ta = C_t h^{\alpha}$):	**0.23**	[s]	Form. A.4.2-3
Coeficiente (Cu):	**1.462**		Form. A.4.2-2
Tmax= Cu*Ta	**0.33**	[s]	Form. A.4.2-2

Se puede identificar que el valor de T (periodo fundamental) calculado con el software de diseño no es mayor que el periodo de vibración aproximado indicado por la norma y asi mismo no es mayor que el máximo que permite el reglamento NSR10.

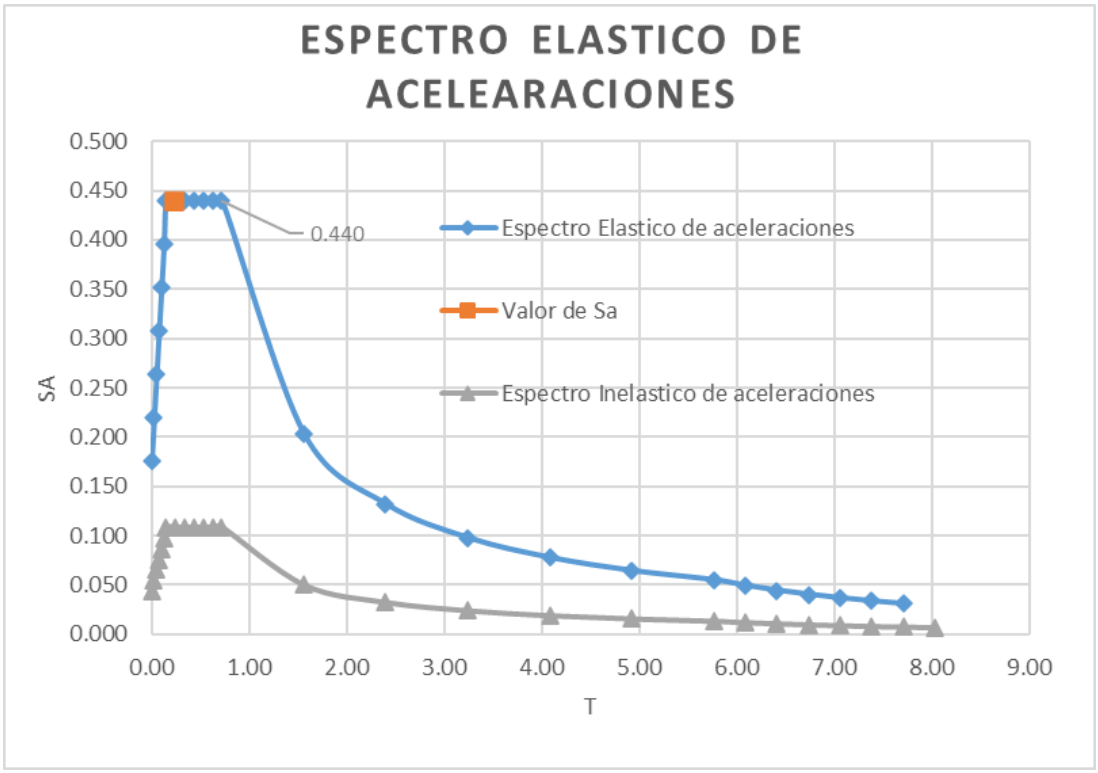


Ilustración 2. Espectro de diseño según nsr-10, para un porcentaje de amortiguamiento del 5%

Base Reactions

File Edit Format-Filter-Sort Select Options

Units: As Noted Hidden Columns: No Sort: None Filter: None

Base Reactions

	Output Case	Case Type	Step Type	FX kgf	FY kgf	FZ kgf	MX kgf-m	MY kgf-m	MZ kgf-m	X m
▶	Dead	LinStatic		0	0	6885.28	79731.48	-19724.95	0	0
	EX	LinRespSpec	Max	2752.39	0.0002039	0	0.0002342	9431.87	31872.73	0
	EY	LinRespSpec	Max	8.568E-05	2432.82	0	8810.8	0	6941.05	0

Ilustración 3. verificación del cortante basal en las dos direcciones

7. PERIODO FUNDAMENTAL DE LA ESTRUCTURA

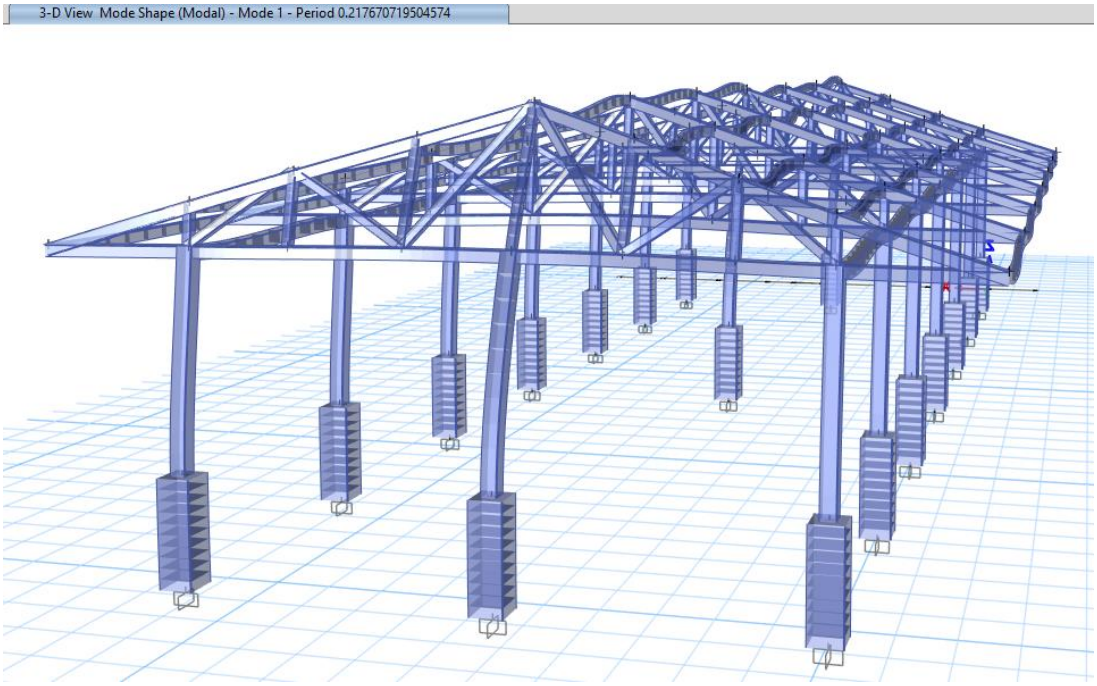


Ilustración 4. periodo fundamental de la estructura

8. CARGAS **(el peso propio se tiene lo tiene en cuenta el software de diseño)**

8.1 CUBIERTA CARGA MUERTA

Teja	10 kgf/m2
Instalaciones	10 kgf/m2
TOTAL	20kgf / m2

8.2 CUBIERTA CARGA MUERTA

Carga viva	50 kgf/m2
TOTAL	50kgf / m2

8.3 ANALISI DE VIENTO

Carga de viento (según análisis)	40 kgf/m2
TOTAL	40 kgf / m2

9. ANALISIS DE VIENTO DE LA ESTRUCTURA

CORPACERO Pioneros, Líderes y Expertos	Memorias de cálculo **ANALISIS DE CARGAS DE VIENTO NSR - 10 (Procedimiento Analítico)**	Fecha abril 24 / 2025
	Proyecto **CUBIERTA VALLEDUPAR**	Aprobó

Fuerzas de Viento NSR-10

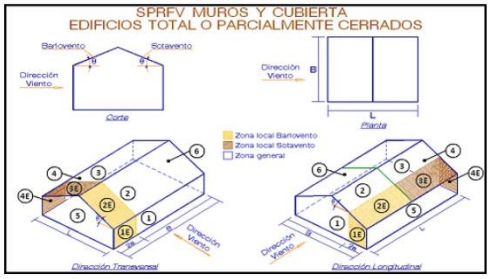
Análisis para Etapa:	Funcionamiento
Tipo Edificación:	Sistema Principal Resistente a la Fuerza de Viento
Sistema Estructural:	Porticos en Acero
Clasificación de la Estructura:	Parcialmente Cerrado
Altura media de Cubierta (m):	4.25
Dimensión Horizontal de la Estructura (Paralela al Viento) (L) (m):	8.57
Dimensión Horizontal de la Estructura (Normal al Viento) (B) (m):	20
Ángulo de la Cubierta a Sotavento (°):	11
Angulo de la Cubierta a Barlovento (°)	11
Velocidad de Viento Básica (Km/h) (Ver Mapa):	100
Grupo de Uso de la Estructura:	I
Región de la Estructura (m):	Región con huracanes de V ≤ 45 m/s
Rugosidad del Terreno:	Rugosidad B
Categoria de Exposición:	B
La Estructura cumple TODOS los Efectos Topográficos (Ver Ayuda):	No

NOTA: Estas memorias de cálculo deben ser revisadas y aprobadas por un Ingeniero Calculista.

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CORPACERO Pioneros, Líderes y Expertos	Memorias de cálculo **ANALISIS DE CARGAS DE VIENTO NSR - 10 (Procedimiento Analítico)**	Fecha abril 24 / 2025
	Proyecto **CUBIERTA VALLEDUPAR**	Aprobó

TIPO DE ESTRUCTURA: **Sistema Principal Resistente a la Fuerza de Viento**



Altura Media de la Estructura (h) (m):	4.25
Dimensión Horizontal de la Estructura (Paralela al Viento) (L) (m):	8.57
Dimensión Horizontal de la Estructura (Normal al Viento) (B) (m):	20
Ángulo de Inclinación de la Cubierta (Barlovento) :	11
Ángulo de Inclinación de la Cubierta (Sotavento) :	11
Periódo del Edificio (T) (seg):	0.23
Clasificación de la Estructura:	
ESTRUCTURA:	RIGIDA
EDIFICIO:	Parcialmente Cerrado
EDIFICIO:	Bajo
Velocidad de Viento Básica (Según Mapa) (V) (m/s):	28
Factor de Dirección de Viento (Kd):	0.85
Uso de la Estructura (grupo):	I
Tipo de Región de la Estructura (Clase):	Región con huracanes de V ≤ 45 m/s
Factor de Importancia (I):	1
Rugosidad de Terreno :	Rugosidad B
Altura de la Estructura por encima del Terreno (Z) (m):	9
Exponente para la ley potencial de la velocidad de ráfaga de 3 seg. (α) (-):	7
Altura nominal de la Capa Atmosférica Limite (Zg) (m):	365.8
Categoría de Exposición :	B
Coeficiente de Exposición de Presión por Velocidad (Kh):	0.7

NOTA: Estas memorias de cálculo deben ser revisadas y aprobadas por un Ingeniero Calculista.

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Su Estructura cumple TODOS los Efectos Topográficos:	No
Factor Topográfico (Kzt):	1
Altura Equivalente de la Estructura (Zb) (m):	9
Factor de Escala de Longitud Integral (l) (m):	97.5
Exponente para la Ley Potencial (εb) (-):	1/3
Longitud Integral a Escala de la Turbulencia (Lzb) (m):	94.14
Factor de Respuesta del Entorno (Q) (-):	0.89
Intensidad de Turbulencia a la Altura zb (Izb) (-):	0.305
Factor Pico para Respuesta del Entorno y Viento respectivamente (gQ = gv) (-):	3.4
Velocidad de Viento Promedia por una hora a una altura z (Vbzb) (m/s):	12.272
Coeficiente de Amortiguamiento Critico (β) (-):	0.01
Frecuencia Natural del Edificio (η1) (Hz):	4.37
Frecuencia para RL (ηRL) (Hz):	46.995
Frecuencia para RB (ηRB) (Hz):	32.76
Frecuencia para Rh (ηRh) (Hz):	6.961
Factor de Respuesta para L (RL) (-):	0.021
Factor de Respuesta para B (RB) (-):	0.03
Factor de Respuesta para h (Rh) (-):	0.133
Frecuencia Reducida (N1) (-):	33.52
Valor (Rn) (-):	0.015
Factor de Respuesta de Resonancia (R) (-):	0.056
Factor Pico para Respuesta de Resonancia (gR) (-):	4.527
Presión de Velocidad (qh) (Kg/m²):	28.489
Factor de Efecto Ráfaga (G) (-):	0.86
Coeficiente de Presión Interna (GCpi+) (-):	0.55
Coeficiente de Presión Interna (GCpi-) (-):	-0.55
a (m):	1

NOTA: Estas memorias de cálculo deben ser revisadas y aprobadas por un Ingeniero Calculista.

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Presión de Diseño para Sotavento en FACHADA, para Muros LATERALES y para CUBIERTA Edificios Bajos:

COEF. PRESIÓN PARA SOTAVENTO FACHADAS Y MUROS LATERALES (4),(4E),(5),(6)						
Interna	GCpi +	0.55	Externa	Local Sotavento	Gral. Sotavento	Laterales
	GCpi -	-0.55		-0.514	-0.346	-0.450

PRESIÓN DE DISEÑO PARA SOTAVENTO EN FACHADAS				
En Zona Local con GCpi + (kg/m²) (4E)	-30.312		En Zona Gral. con GCpi + (kg/m²) (4)	-25.526
En Zona Local con GCpi - (kg/m²) (4E)	1.026		En Zona Gral. con GCpi - (kg/m²) (4)	5.812

PRESIÓN DE DISEÑO PARA MUROS LATERALES (5),(6)				
Con GCpi + (kg/m²)	-28.489		Con GCpi - (kg/m²)	2.849

COEFICIENTES DE PRESIÓN PARA CUBIERTA (2),(2E),(3),(3E)						
Interna			Externa			
GCpi +	GCpi -		Local Barlov.	Local Sotav.	Gral. Barlov.	Gral. Sotav.
0.55	-0.55		-1.07	-0.594	-0.69	-0.414

PRESIÓN DE DISEÑO PARA CUBIERTA				
Presión de Diseño para Barlovento			Presión de Diseño para Sotavento	
En Zona Local con GCpi + (kg/m²) (2E)	-46.152		En Zona Local con GCpi + (kg/m²) (3E)	-32.591
En Zona Local con GCpi - (kg/m²) (2E)	-14.814		En Zona Local con GCpi - (kg/m²) (3E)	-1.254
En Zona Gral. con GCpi + (kg/m²) (2)	-35.326		En Zona Gral. con GCpi + (kg/m²) (3)	-27.463
En Zona Gral. con GCpi - (kg/m²) (2)	-3.988		En Zona Gral. con GCpi - (kg/m²) (3)	3.875

Presión de Diseño para Barlovento en FACHADA Edificios Bajos:

Coeficientes de Presión	Interna (1),(1E)	GCpi +	0.55	Externa	Local (1E)	0.686
		GCpi -	-0.55		General (1)	0.452
	ALTURA DE ANÁLISIS, Z (m)					
PRESIONES DE DISEÑO	0.531	1.062	1.594	2.125	3.188	4.25
Coef. Exposición de presión, Kz (-)	0.697	0.697	0.697	0.697	0.697	0.697
P. por Velocidad, qz (kg/m²)	28.489	28.489	28.489	28.489	28.489	28.489
P. Dis. Zona Local con GCpi+ (kg/m²) (1E)	3.875	3.875	3.875	3.875	3.875	3.875
P. Dis. Zona Local con GCpi- (kg/m²) (1E)	35.212	35.212	35.212	35.212	35.212	35.212
P. Dis. Zona Gral. con GCpi+ (kg/m²) (1)	-2.792	-2.792	-2.792	-2.792	-2.792	-2.792
P. Dis. Zona Gral. con GCpi- (kg/m²) (1)	28.546	28.546	28.546	28.546	28.546	28.546

*El NSR-10 (B.6.1.3) estipula que la presión de diseño no será menor de 0.40kN/m² (40 kg/m²)

NOTA: Estas memorias de cálculo deben ser revisadas y aprobadas por un Ingeniero Calculista.

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10. VERIFICACION DE DERIVAS MENOR AL 1% H EN “X &Y”

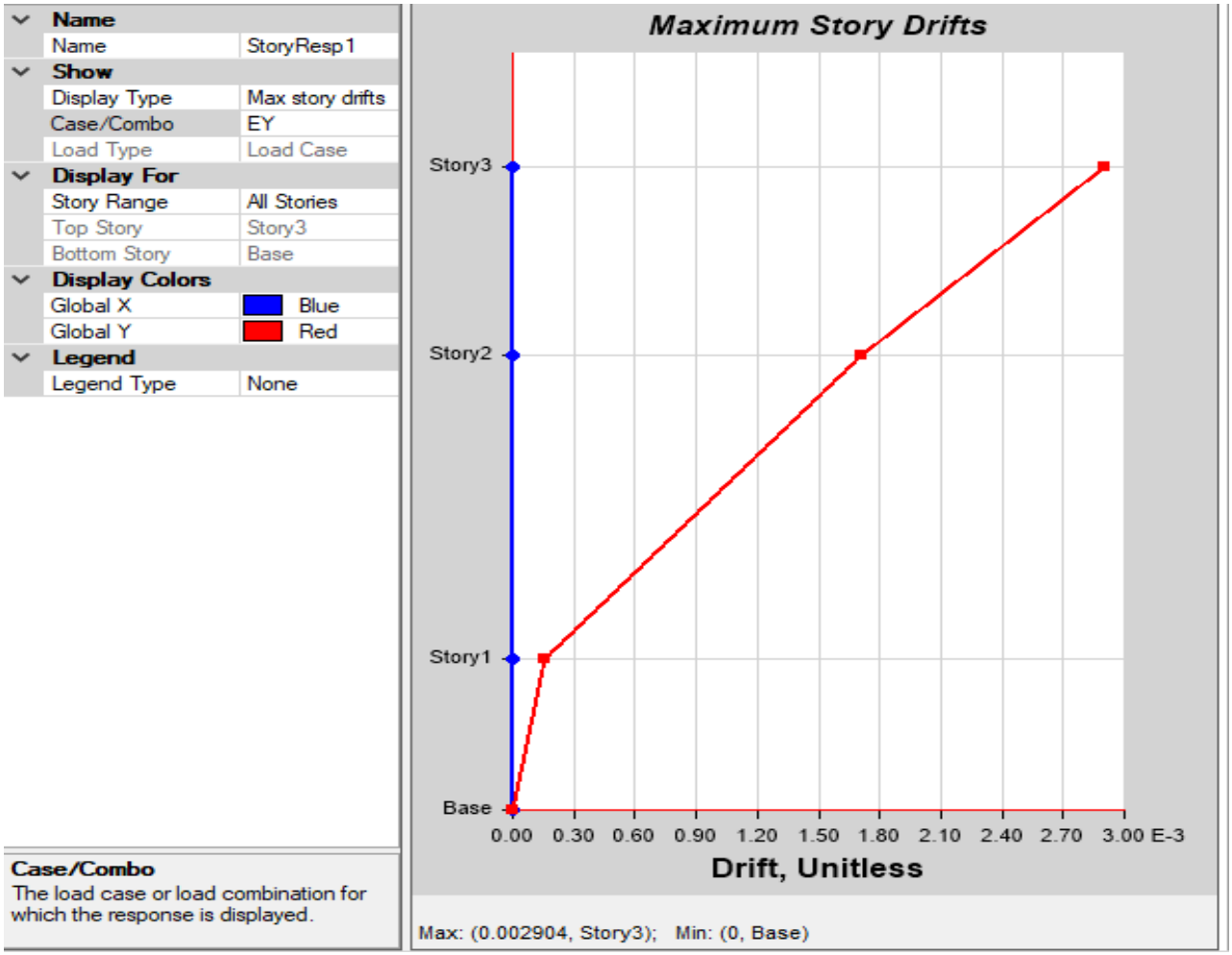


Ilustración 5. Derivas menos al 1% en el sentido Y

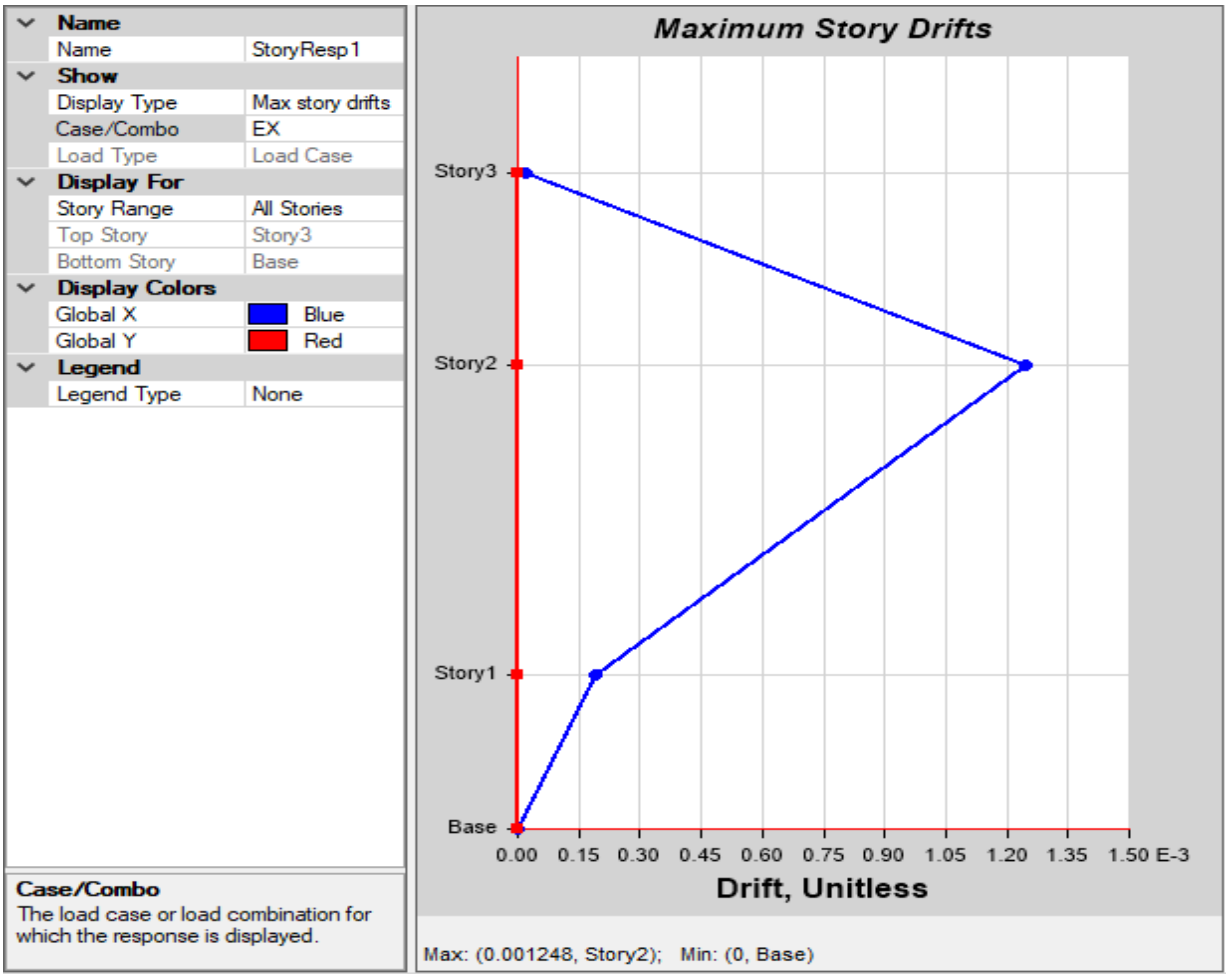


Ilustración 6. Derivas menos al 1% en el sentido X

TABLE: Story Max Over Avg Drifts						
Story	**Output Case**	**Case Type**	**Step Type**	**Direction**	**Max Drift**	**Verificación**
Story3	EX	LinRespSpec	Max	X	0.003%	**CUMPLE**
Story3	EY	LinRespSpec	Max	Y	0.363%	**CUMPLE**
Story2	EX	LinRespSpec	Max	X	0.250%	**CUMPLE**
Story2	EY	LinRespSpec	Max	Y	0.342%	**CUMPLE**
Story1	EX	LinRespSpec	Max	X	0.019%	**CUMPLE**
Story1	EY	LinRespSpec	Max	Y	0.016%	**CUMPLE**

11. COMBINACIONES DE CARGAS TITULO B

B.2.4.2 — COMBINACIONES BÁSICAS — El diseño de las estructuras, sus componentes y cimentaciones debe hacerse de tal forma que sus resistencias de diseño igualen o excedan los efectos producidos por las cargas mayoradas en las siguientes combinaciones:

$1.4(D+F)$	**(B.2.4-1)**
$1.2(D+F+T)+1.6(L+H)+0.5(L_r \text{ ó } G \text{ ó } L_e)$	**(B.2.4-2)**
$1.2D+1.6(L_r \text{ ó } G \text{ ó } L_e)+(L \text{ ó } 0.8W)$	**(B.2.4-3)**
$1.2D+1.6W+1.0L+0.5(L_r \text{ ó } G \text{ ó } L_e)$	**(B.2.4-4)**
$1.2D+1.0E+1.0L$	**(B.2.4-5)**
$0.9D+1.6W+1.6H$	**(B.2.4-6)**
$0.9D+1.0E+1.6H$	**(B.2.4-7)**

12. VERIFICACIÓN DE ELEMENTOS METALICOS

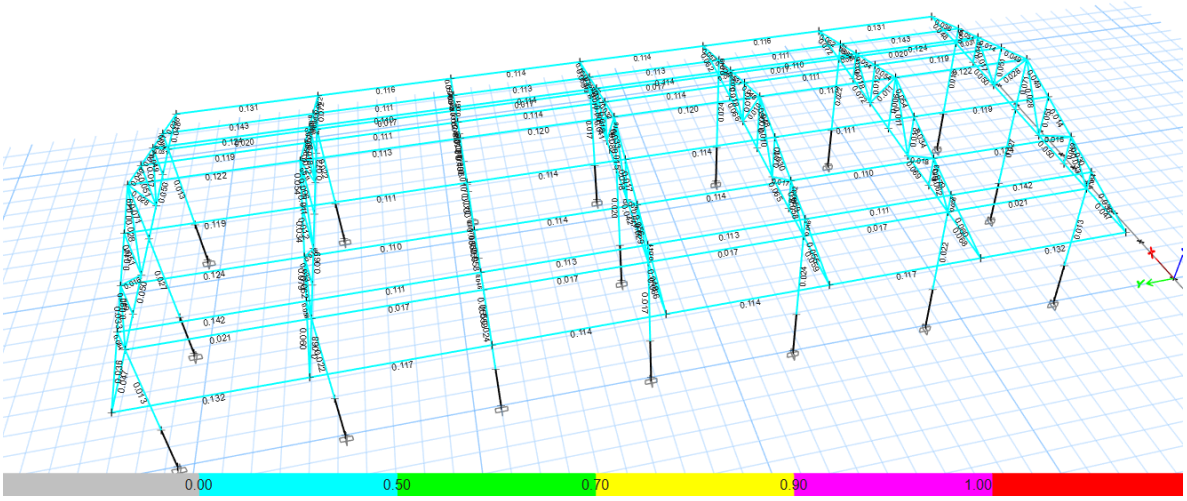


Ilustración 7 índices de sobre esfuerzos de elementos metálicos

TABLE: Steel Frame Design Summary - AISC 360-16					
Story	Label	Design Type	Design Section	PMM Combo	PMM Ratio
Story3	C19	Column	120X120X5mm	1.2D+1L+1W(C)	0.071
Story3	C19	Column	120X120X5mm	1.2D+1L+1W(T)	0.012
Story3	C22	Column	120X120X5mm	1.2D+1L+1W(C)	0.082
Story3	C22	Column	120X120x5mm	1.2D+1L+1W(T)	0.005
Story3	C25	Column	120X120X5mm	1.2D+1L+1W(C)	0.071
Story3	C25	Column	120x120X5mm	1.2D+1L+1W(T)	0.012
Story3	C5	Column	120X120X5mm	1.2D+1L+1W(C)	0.049
Story3	C5	Column	120X120X5mm	1.2D+1L+1W(T)	0.018
Story3	C10	Column	120X120X5mm	1.2D+1L+1W(C)	0.051
Story3	C10	Column	120X120X5mm	1.2D+1L+1W(T)	0.018
Story3	C17	Column	120X120X5mm	1.2D+1L+1W(C)	0.084
Story3	C17	Column	120X120X5mm	1.2D+1L+1W(T)	0.032
Story3	C21	Column	120X120X5mm	1.2D+1L+1W(C)	0.051
Story3	C21	Column	120X120X5mm	1.2D+1L+1W(T)	0.018
Story3	C24	Column	120X120X5mm	1.2D+1L+1W(C)	0.049
Story3	C24	Column	120X120X5mm	1.2D+1L+1W(T)	0.018
Story3	C32	Column	120X120X5mm	1.2D+1L+1W(C)	0.084
Story3	C32	Column	120X120X5mm	1.2D+1L+1W(T)	0.032
Story3	C2	Column	120X120X5mm	(T)	0.006
Story3	C3	Column	120X120X5mm	1.2D+1L+1W(C)	0.033
Story3	C3	Column	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	C4	Column	120X120X5mm	1.2D+1L+1W(C)	0.012
Story3	C4	Column	120X120X5mm	1.2D+1L+1W(T)	0.004
Story3	C6	Column	120X120X5mm	1.2D+1L+1W(C)	0.058
Story3	C6	Column	120X120X5mm	1.2D+1L+1W(T)	0.021
Story3	C7	Column	120X120X5mm	1.2D+1L+1W(C)	0.012
Story3	C7	Column	120X120X5mm	1.2D+1L+1W(T)	0.004
Story3	C8	Column	120X120X5mm	1.2D+1L+1W(C)	0.033
Story3	C8	Column	120X120X5mm	1.2D+1L+1W(T)	0.01
Story3	C9	Column	120X120X5mm	1.2D+1L+1W(C)	0.062
Story3	C9	Column	120X120X5mm	1.2D+1L+1W(T)	0.023
Story3	C11	Column	120X120X5mm	(T)	0.006
Story3	C20	Column	120X120X5mm	1.2D+1L+1W(C)	0.032
Story3	C20	Column	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	C23	Column	120X120X5mm	1.3D+1L+0.25EY(C)	0.01

Story3	C23	Column	120X120X5mm	1.3D+1L+0.25EY(T)	0.003
Story3	C28	Column	120X120X5mm	1.3D+1L+0.25EX(C)	0.046
Story3	C28	Column	120X120X5mm	1.3D+1L+0.25EX(T)	0.013
Story3	C35	Column	120X120X5mm	1.3D+1L+0.25EY(C)	0.01
Story3	C35	Column	120X120X5mm	1.3D+1L+0.25EY(T)	0.003
Story3	C36	Column	120X120X5mm	1.2D+1L+1W(C)	0.032
Story3	C36	Column	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	C37	Column	120X120X5mm	1.3D+1L+0.25EX(C)	0.049
Story3	C37	Column	120X120X5mm	1.3D+1L+0.25EX(T)	0.014
Story3	C38	Column	120X120X5mm	1.2D+1L+1W(C)	0.017
Story3	C38	Column	120X120X5mm	1.2D+1L+1W(T)	0.008
Story3	C39	Column	120X120X5mm	1.3D+1L+0.25EY(C)	0.018
Story3	C39	Column	120X120X5mm	1.3D+1L+0.25EY(T)	0.004
Story3	C40	Column	120X120X5mm	1.3D+1L+0.25EX(C)	0.041
Story3	C40	Column	120X120X5mm	1.3D+1L+0.25EX(T)	0.013
Story3	C41	Column	120X120X5mm	1.3D+1L+0.25EY(C)	0.018
Story3	C41	Column	120X120X5mm	1.3D+1L+0.25EY(T)	0.004
Story3	C42	Column	120X120X5mm	1.2D+1L+1W(C)	0.017
Story3	C42	Column	120X120X5mm	1.2D+1L+1W(T)	0.007
Story3	C43	Column	120X120X5mm	1.3D+1L+0.25EX(C)	0.043
Story3	C43	Column	120X120X5mm	1.3D+1L+0.25EX(T)	0.013
Story3	C44	Column	120X120X5mm	(T)	0.006
Story3	C45	Column	120X120X5mm	1.2D+1L+1W(C)	0.032
Story3	C45	Column	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	C46	Column	120X120X5mm	1.3D+1L+0.25EY(C)	0.01
Story3	C46	Column	120X120X5mm	1.3D+1L+0.25EY(T)	0.003
Story3	C47	Column	120X120X5mm	1.3D+1L+0.25EX(C)	0.046
Story3	C47	Column	120X120X5mm	1.3D+1L+0.25EX(T)	0.013
Story3	C48	Column	120X120X5mm	1.3D+1L+0.25EY(C)	0.01
Story3	C48	Column	120X120X5mm	1.3D+1L+0.25EY(T)	0.003
Story3	C49	Column	120X120X5mm	1.2D+1L+1W(C)	0.032
Story3	C49	Column	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	C50	Column	120X120X5mm	1.3D+1L+0.25EX(C)	0.049
Story3	C50	Column	120X120X5mm	1.3D+1L+0.25EX(T)	0.014
Story3	C51	Column	120X120X5mm	(T)	0.006
Story3	C52	Column	120X120X5mm	1.2D+1L+1W(C)	0.033
Story3	C52	Column	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	C53	Column	120X120X5mm	1.2D+1L+1W(C)	0.012

Story3	C53	Column	120X120X5mm	1.2D+1L+1W(T)	0.004
Story3	C54	Column	120X120X5mm	1.2D+1L+1W(C)	0.058
Story3	C54	Column	120X120X5mm	1.2D+1L+1W(T)	0.021
Story3	C55	Column	120X120X5mm	1.2D+1L+1W(C)	0.012
Story3	C55	Column	120X120X5mm	1.2D+1L+1W(T)	0.004
Story3	C56	Column	120X120X5mm	1.2D+1L+1W(C)	0.033
Story3	C56	Column	120X120X5mm	1.2D+1L+1W(T)	0.01
Story3	C57	Column	120X120X5mm	1.2D+1L+1W(C)	0.062
Story3	C57	Column	120X120X5mm	1.2D+1L+1W(T)	0.023
Story3	C58	Column	120X120X5mm	1.2D+1L+1W(C)	0.049
Story3	C58	Column	120X120X5mm	1.2D+1L+1W(T)	0.018
Story3	C59	Column	120X120X5mm	1.2D+1L+1W(C)	0.051
Story3	C59	Column	120X120X5mm	1.2D+1L+1W(T)	0.018
Story3	C60	Column	120X120X5mm	1.2D+1L+1W(C)	0.084
Story3	C60	Column	120X120X5mm	1.2D+1L+1W(T)	0.032
Story3	C61	Column	120X120X5mm	1.2D+1L+1W(C)	0.051
Story3	C61	Column	120X120X5mm	1.2D+1L+1W(T)	0.018
Story3	C62	Column	120X120X5mm	1.2D+1L+1W(C)	0.049
Story3	C62	Column	120X120X5mm	1.2D+1L+1W(T)	0.018
Story3	C63	Column	120x120X5mm	1.2D+1L+1W(C)	0.084
Story3	C63	Column	120X120X5mm	1.2D+1L+1W(T)	0.032
Story2	C1	Column	250x250x8mm	1.3D+1L+0.25EY(C)	0.013
Story2	C1	Column	250x250x8mm	1.3D+1L+0.25EY(T)	0.002
Story2	C12	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.022
Story2	C12	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.003
Story2	C13	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.024
Story2	C13	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.002
Story2	C14	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.017
Story2	C14	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.003
Story2	C15	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.024
Story2	C15	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.002
Story2	C16	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.022
Story2	C16	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.003
Story2	C18	Column	250x250x8mm	1.3D+1L+0.25EY(C)	0.013
Story2	C18	Column	250x250x8mm	1.3D+1L+0.25EY(T)	0.002
Story2	C19	Column	250x250x8mm	1.3D+1L+0.25EY(C)	0.027
Story2	C19	Column	250x250x8mm	1.3D+1L+0.25EY(T)	0.006
Story2	C22	Column	250x250x8mm	1.3D+1L+0.25EY(C)	0.02

Story2	C22	Column	250x250x8mm	1.3D+1L+0.25EY(T)	0.001
Story2	C25	Column	250x250x8mm	1.3D+1L+0.25EY(C)	0.027
Story2	C25	Column	250x250x8mm	1.3D+1L+0.25EY(T)	0.006
Story2	C26	Column	250x250x8mm	1.3D+1L+0.25EY(C)	0.013
Story2	C26	Column	250x250x8mm	1.3D+1L+0.25EY(T)	0.002
Story2	C27	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.022
Story2	C27	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.003
Story2	C29	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.024
Story2	C29	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.002
Story2	C30	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.017
Story2	C30	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.003
Story2	C31	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.024
Story2	C31	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.002
Story2	C33	Column	250x250x8mm	1.3D+1L+0.25EX(C)	0.022
Story2	C33	Column	250x250x8mm	1.3D+1L+0.25EX(T)	0.003
Story2	C34	Column	250x250x8mm	1.3D+1L+0.25EY(C)	0.013
Story2	C34	Column	250x250x8mm	1.3D+1L+0.25EY(T)	0.002
Story3	B1	Beam	120X120X5mm	1.2D+1L+1W(C)	0.047
Story3	B1	Beam	120X120X5mm	1.2D+1L+1W(T)	0.013
Story3	B7	Beam	120X120X5mm	0.9D-1W(C)	0.014
Story3	B7	Beam	120X120X5mm	0.9D-1W(T)	0.036
Story3	B8	Beam	120X120X5mm	0.9D-1W(C)	0.008
Story3	B8	Beam	120X120X5mm	0.9D-1W(T)	0.031
Story3	B9	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.014
Story3	B10	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.049
Story3	B10	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.049
Story3	B11	Beam	120X120X5mm	0.9D-1W(C)	0.014
Story3	B11	Beam	120X120X5mm	0.9D-1W(T)	0.036
Story3	B12	Beam	120X120X5mm	0.9D-1W(C)	0.008
Story3	B12	Beam	120X120X5mm	0.9D-1W(T)	0.03
Story3	B13	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.014
Story3	B14	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.049
Story3	B14	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.049
Story3	B25	Beam	120X120X5mm	1.2D+1L+1W(C)	0.068
Story3	B25	Beam	120X120X5mm	1.2D+1L+1W(T)	0.021
Story3	B29	Beam	120X120X5mm	0.9D-1W(C)	0.021
Story3	B29	Beam	120X120X5mm	0.9D-1W(T)	0.062
Story3	B30	Beam	120X120X5mm	0.9D-1W(C)	0.027

Story3	B30	Beam	120X120x5mm	0.9D-1W(T)	0.082
Story3	B31	Beam	120X120X5mm	1.2D+1L+1W(C)	0.034
Story3	B31	Beam	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	B32	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.054
Story3	B32	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.009
Story3	B33	Beam	120X120X5mm	0.9D-1W(C)	0.02
Story3	B33	Beam	120X120X5mm	0.9D-1W(T)	0.06
Story3	B34	Beam	120X120X5mm	0.9D-1W(C)	0.026
Story3	B34	Beam	120X120X5mm	0.9D-1W(T)	0.079
Story3	B35	Beam	120X120X5mm	1.2D+1L+1W(C)	0.034
Story3	B35	Beam	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	B36	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.054
Story3	B36	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.009
Story3	B37	Beam	120X120X5mm	1.2D+1L+1W(C)	0.059
Story3	B37	Beam	120X120X5mm	1.2D+1L+1W(T)	0.017
Story3	B41	Beam	120X120X5mm	0.9D-1W(C)	0.019
Story3	B41	Beam	120X120X5mm	0.9D-1W(T)	0.057
Story3	B42	Beam	120X120X5mm	0.9D-1W(C)	0.023
Story3	B42	Beam	120X120X5mm	0.9D-1W(T)	0.072
Story3	B43	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.031
Story3	B43	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.007
Story3	B44	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.048
Story3	B44	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.007
Story3	B45	Beam	120X120X5mm	0.9D-1W(C)	0.018
Story3	B45	Beam	120x120X5mm	0.9D-1W(T)	0.055
Story3	B46	Beam	120X120X5mm	0.9D-1W(C)	0.022
Story3	B46	Beam	120X120X5mm	0.9D-1W(T)	0.069
Story3	B47	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.03
Story3	B47	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.007
Story3	B48	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.048
Story3	B48	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.007
Story3	B49	Beam	120X120X5mm	1.2D+1L+1W(C)	0.066
Story3	B49	Beam	120X120X5mm	1.2D+1L+1W(T)	0.019
Story3	B53	Beam	120X120X5mm	0.9D-1W(C)	0.017
Story3	B53	Beam	120X120X5mm	0.9D-1W(T)	0.05
Story3	B54	Beam	120X120X5mm	0.9D-1W(C)	0.02
Story3	B54	Beam	120X120X5mm	0.9D-1W(T)	0.059
Story3	B55	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.017

Story3	B56	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.032
Story3	B56	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.012
Story3	B57	Beam	120X120X5mm	0.9D-1W(C)	0.016
Story3	B57	Beam	120X120X5mm	0.9D-1W(T)	0.048
Story3	B58	Beam	120X120X5mm	0.9D-1W(C)	0.019
Story3	B58	Beam	120X120X5mm	0.9D-1W(T)	0.056
Story3	B59	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.017
Story3	B59	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.005
Story3	B60	Beam	120X120X5mm	0.8D+1EY(C)	0.026
Story3	B60	Beam	120X120X5mm	0.8D+1EY(T)	0.033
Story3	B61	Beam	120X120X5mm	1.2D+1L+1W(C)	0.059
Story3	B61	Beam	120X120X5mm	1.2D+1L+1W(T)	0.017
Story3	B65	Beam	120X120X5mm	0.9D-1W(C)	0.019
Story3	B65	Beam	120X120X5mm	0.9D-1W(T)	0.057
Story3	B66	Beam	120X120X5mm	0.9D-1W(C)	0.023
Story3	B66	Beam	120X120X5mm	0.9D-1W(T)	0.072
Story3	B67	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.031
Story3	B67	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.007
Story3	B68	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.048
Story3	B68	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.007
Story3	B69	Beam	120X120X5mm	0.9D-1W(C)	0.018
Story3	B69	Beam	120X120X5mm	0.9D-1W(T)	0.055
Story3	B70	Beam	120X120X5mm	0.9D-1W(C)	0.022
Story3	B70	Beam	120X120X5mm	0.9D-1W(T)	0.069
Story3	B71	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.03
Story3	B71	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.007
Story3	B72	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.048
Story3	B72	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.007
Story3	B73	Beam	120X120X5mm	1.2D+1L+1W(C)	0.068
Story3	B73	Beam	120X120X5mm	1.2D+1L+1W(T)	0.021
Story3	B77	Beam	120X120X5mm	0.9D-1W(C)	0.021
Story3	B77	Beam	120X120X5mm	0.9D-1W(T)	0.062
Story3	B78	Beam	120X120X5mm	0.9D-1W(C)	0.027
Story3	B78	Beam	120X120X5mm	0.9D-1W(T)	0.082
Story3	B79	Beam	120X120X5mm	1.2D+1L+1W(C)	0.034
Story3	B79	Beam	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	B80	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.054
Story3	B80	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.009

Story3	B81	Beam	120X120X5mm	0.9D-1W(C)	0.02
Story3	B81	Beam	120X120X5mm	0.9D-1W(T)	0.06
Story3	B82	Beam	120X120X5mm	0.9D-1W(C)	0.026
Story3	B82	Beam	120X120X5mm	0.9D-1W(T)	0.079
Story3	B83	Beam	120X120X5mm	1.2D+1L+1W(C)	0.034
Story3	B83	Beam	120X120X5mm	1.2D+1L+1W(T)	0.009
Story3	B84	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.054
Story3	B84	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.009
Story3	B85	Beam	120X120X5mm	1.2D+1L+1W(C)	0.047
Story3	B85	Beam	120X120X5mm	1.2D+1L+1W(T)	0.013
Story3	B89	Beam	120X120X5mm	0.9D-1W(C)	0.014
Story3	B89	Beam	120X120X5mm	0.9D-1W(T)	0.036
Story3	B90	Beam	120X120X5mm	0.9D-1W(C)	0.008
Story3	B90	Beam	120X120X5mm	0.9D-1W(T)	0.031
Story3	B91	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.014
Story3	B92	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.049
Story3	B92	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.049
Story3	B93	Beam	120X120X5mm	0.9D-1W(C)	0.014
Story3	B93	Beam	120X120X5mm	0.9D-1W(T)	0.036
Story3	B94	Beam	120X120X5mm	0.9D-1W(C)	0.008
Story3	B94	Beam	120X120X5mm	0.9D-1W(T)	0.03
Story3	B95	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.014
Story3	B96	Beam	120X120X5mm	1.3D+1L+0.25EY(C)	0.049
Story3	B96	Beam	120X120X5mm	1.3D+1L+0.25EY(T)	0.049
Story2	B2	Beam	120X120X5mm	1.2D+1L+1W(C)	0.05
Story2	B2	Beam	120X120X5mm	1.2D+1L+1W(T)	0.016
Story2	B3	Beam	120X120X5mm	1.2D+1L+1W(C)	0.05
Story2	B3	Beam	120X120X5mm	1.2D+1L+1W(T)	0.016
Story2	B4	Beam	120X120X5mm	1.2D+1L+1W(C)	0.048
Story2	B4	Beam	120X120X5mm	1.2D+1L+1W(T)	0.013
Story2	B26	Beam	120X120X5mm	0.9D-1W(C)	0.021
Story2	B26	Beam	120X120X5mm	0.9D-1W(T)	0.069
Story2	B27	Beam	120X120X5mm	0.9D-1W(C)	0.023
Story2	B27	Beam	120X120X5mm	0.9D-1W(T)	0.072
Story2	B28	Beam	120X120X5mm	1.2D+1L+1W(C)	0.072
Story2	B28	Beam	120X120X5mm	1.2D+1L+1W(T)	0.022
Story2	B38	Beam	120X120X5mm	0.8D+1EX(C)	0.033
Story2	B38	Beam	120X120X5mm	0.8D+1EX(T)	0.065

Story2	B39	Beam	120X120X5mm	0.8D+1EX(C)	0.032
Story2	B39	Beam	120X120X5mm	0.8D+1EX(T)	0.066
Story2	B40	Beam	120X120X5mm	1.2D+1L+1W(C)	0.062
Story2	B40	Beam	120X120X5mm	1.2D+1L+1W(T)	0.018
Story2	B50	Beam	120X120X5mm	1.3D+1L+0.25EX(C)	0.042
Story2	B50	Beam	120X120X5mm	1.3D+1L+0.25EX(T)	0.017
Story2	B51	Beam	120X120X5mm	1.3D+1L+0.25EX(C)	0.041
Story2	B51	Beam	120X120X5mm	1.3D+1L+0.25EX(T)	0.017
Story2	B52	Beam	120X120X5mm	1.2D+1L+1W(C)	0.069
Story2	B52	Beam	120X120X5mm	1.2D+1L+1W(T)	0.02
Story2	B62	Beam	120X120X5mm	0.8D+1EX(C)	0.033
Story2	B62	Beam	120X120X5mm	0.8D+1EX(T)	0.065
Story2	B63	Beam	120X120X5mm	0.8D+1EX(C)	0.032
Story2	B63	Beam	120X120X5mm	0.8D+1EX(T)	0.066
Story2	B64	Beam	120X120X5mm	1.2D+1L+1W(C)	0.062
Story2	B64	Beam	120X120X5mm	1.2D+1L+1W(T)	0.018
Story2	B74	Beam	120X120X5mm	0.9D-1W(C)	0.021
Story2	B74	Beam	120X120X5mm	0.9D-1W(T)	0.069
Story2	B75	Beam	120X120X5mm	0.9D-1W(C)	0.023
Story2	B75	Beam	120X120X5mm	0.9D-1W(T)	0.072
Story2	B76	Beam	120X120X5mm	1.2D+1L+1W(C)	0.072
Story2	B76	Beam	120X120X5mm	1.2D+1L+1W(T)	0.022
Story2	B86	Beam	120X120X5mm	1.2D+1L+1W(C)	0.05
Story2	B86	Beam	120X120X5mm	1.2D+1L+1W(T)	0.016
Story2	B87	Beam	120X120X5mm	1.2D+1L+1W(C)	0.05
Story2	B87	Beam	120X120X5mm	1.2D+1L+1W(T)	0.016
Story2	B88	Beam	120X120X5mm	1.2D+1L+1W(C)	0.048
Story2	B88	Beam	120X120X5mm	1.2D+1L+1W(T)	0.013
Story3	D1	Brace	120X120X5mm	1.2D+1L+1W(C)	0.033
Story3	D1	Brace	120X120X5mm	1.2D+1L+1W(T)	0.011
Story3	D2	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D2	Brace	120X120X5mm	0.9D-1W(T)	0.016
Story3	D3	Brace	120X120X5mm	0.9D-1W(C)	0.01
Story3	D3	Brace	120X120X5mm	0.9D-1W(T)	0.028
Story3	D4	Brace	120X120X5mm	0.9D-1W(C)	0.01
Story3	D4	Brace	120X120X5mm	0.9D-1W(T)	0.028
Story3	D5	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D5	Brace	120X120X5mm	0.9D-1W(T)	0.017

Story3	D6	Brace	120X120X5mm	1.2D+1L+1W(C)	0.031
Story3	D6	Brace	120X120X5mm	1.2D+1L+1W(T)	0.01
Story3	D7	Brace	120X120X5mm	1.2D+1L+1W(C)	0.062
Story3	D7	Brace	120X120X5mm	1.2D+1L+1W(T)	0.016
Story3	D8	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D8	Brace	120X120X5mm	0.9D-1W(T)	0.018
Story3	D9	Brace	120X120X5mm	0.9D-1W(C)	0.002
Story3	D9	Brace	120X120X5mm	0.9D-1W(T)	0.011
Story3	D10	Brace	120X120X5mm	0.9D-1W(C)	0.002
Story3	D10	Brace	120X120X5mm	0.9D-1W(T)	0.011
Story3	D11	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D11	Brace	120X120X5mm	0.9D-1W(T)	0.018
Story3	D12	Brace	120X120X5mm	1.2D+1L+1W(C)	0.064
Story3	D12	Brace	120X120X5mm	1.2D+1L+1W(T)	0.016
Story3	D13	Brace	120X120X5mm	1.2D+1L+1W(C)	0.058
Story3	D13	Brace	120X120X5mm	1.2D+1L+1W(T)	0.014
Story3	D14	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D14	Brace	120X120X5mm	0.9D-1W(T)	0.017
Story3	D15	Brace	120X120X5mm	0.9D-1W(C)	0.002
Story3	D15	Brace	120X120X5mm	0.9D-1W(T)	0.01
Story3	D16	Brace	120X120X5mm	0.9D-1W(C)	0.002
Story3	D16	Brace	120X120X5mm	0.9D-1W(T)	0.01
Story3	D17	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D17	Brace	120X120X5mm	0.9D-1W(T)	0.018
Story3	D18	Brace	120X120X5mm	1.2D+1L+1W(C)	0.061
Story3	D18	Brace	120X120X5mm	1.2D+1L+1W(T)	0.015
Story3	D19	Brace	120X120X5mm	1.2D+1L+1W(C)	0.029
Story3	D19	Brace	120x120X5mm	1.2D+1L+1W(T)	0.007
Story3	D20	Brace	120X120X5mm	0.8D+1EX(C)	0.003
Story3	D20	Brace	120X120X5mm	0.8D+1EX(T)	0.008
Story3	D21	Brace	120X120X5mm	0.9D-1W(C)	0.003
Story3	D21	Brace	120X120X5mm	0.9D-1W(T)	0.015
Story3	D22	Brace	120X120X5mm	0.9D-1W(C)	0.003
Story3	D22	Brace	120X120X5mm	0.9D-1W(T)	0.016
Story3	D23	Brace	120X120X5mm	0.8D+1EY(C)	0.007
Story3	D23	Brace	120X120X5mm	0.8D+1EY(T)	0.008
Story3	D24	Brace	120X120X5mm	1.2D+1L+1W(C)	0.031
Story3	D24	Brace	120X120X5mm	1.2D+1L+1W(T)	0.008

Story3	D25	Brace	120X120X5mm	1.2D+1L+1W(C)	0.058
Story3	D25	Brace	120X120X5mm	1.2D+1L+1W(T)	0.014
Story3	D26	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D26	Brace	120X120X5mm	0.9D-1W(T)	0.017
Story3	D27	Brace	120X120X5mm	0.9D-1W(C)	0.002
Story3	D27	Brace	120X120X5mm	0.9D-1W(T)	0.01
Story3	D28	Brace	120X120X5mm	0.9D-1W(C)	0.002
Story3	D28	Brace	120X120X5mm	0.9D-1W(T)	0.01
Story3	D29	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D29	Brace	120X120X5mm	0.9D-1W(T)	0.018
Story3	D30	Brace	120X120x5mm	1.2D+1L+1W(C)	0.061
Story3	D30	Brace	120X120X5mm	1.2D+1L+1W(T)	0.015
Story3	D31	Brace	120X120X5mm	1.2D+1L+1W(C)	0.062
Story3	D31	Brace	120X120X5mm	1.2D+1L+1W(T)	0.016
Story3	D32	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D32	Brace	120X120X5mm	0.9D-1W(T)	0.018
Story3	D33	Brace	120X120X5mm	0.9D-1W(C)	0.002
Story3	D33	Brace	120X120X5mm	0.9D-1W(T)	0.011
Story3	D34	Brace	120X120X5mm	0.9D-1W(C)	0.002
Story3	D34	Brace	120X120X5mm	0.9D-1W(T)	0.011
Story3	D35	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D35	Brace	120X120X5mm	0.9D-1W(T)	0.018
Story3	D36	Brace	120X120X5mm	1.2D+1L+1W(C)	0.064
Story3	D36	Brace	120X120X5mm	1.2D+1L+1W(T)	0.016
Story3	D37	Brace	120X120X5mm	1.2D+1L+1W(C)	0.033
Story3	D37	Brace	120X120X5mm	1.2D+1L+1W(T)	0.011
Story3	D38	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D38	Brace	120X120X5mm	0.9D-1W(T)	0.016
Story3	D39	Brace	120X120X5mm	0.9D-1W(C)	0.01
Story3	D39	Brace	120X120X5mm	0.9D-1W(T)	0.028
Story3	D40	Brace	120X120X5mm	0.9D-1W(C)	0.01
Story3	D40	Brace	120X120X5mm	0.9D-1W(T)	0.028
Story3	D41	Brace	120X120X5mm	0.9D-1W(C)	0.007
Story3	D41	Brace	120X120X5mm	0.9D-1W(T)	0.017
Story3	D42	Brace	120X120X5mm	1.2D+1L+1W(C)	0.031
Story3	D42	Brace	120X120X5mm	1.2D+1L+1W(T)	0.01

13. VERIFICACIÓN DE INDICE DE SOBRE ESFUERZOS EN LOS ELEMENTOS DE CORREAS

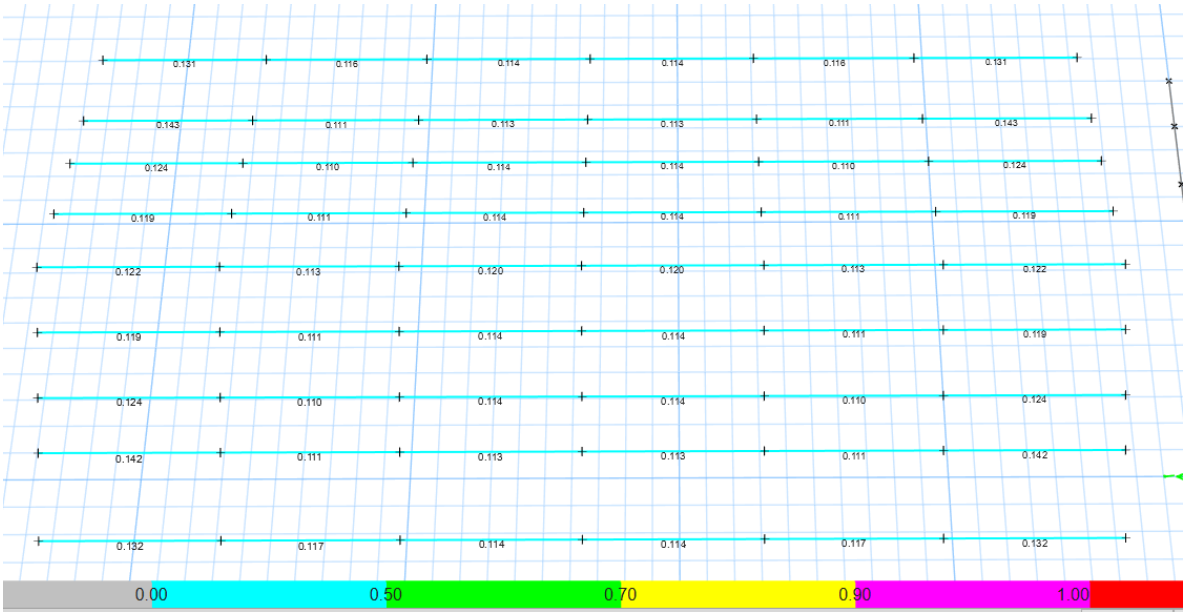


Ilustración 8 índices de esfuerzos de correas 100x50X2mm

TABLE: Steel Frame Design Summary - AISC 360-16						
Story	**Label**	**Design Type**	**Design Section**	**PMM Combo**	**PMM Ratio**	**P Ratio**
Story3	B97	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.132	0.0004694
Story3	B97	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.049	0
Story3	B98	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.117	0.0002285
Story3	B98	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.044	0
Story3	B99	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.000366
Story3	B99	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B100	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.000366
Story3	B100	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B101	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.117	0.0002285
Story3	B101	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.044	0
Story3	B102	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.132	0.0004694
Story3	B102	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.049	0
Story3	B109	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.143	0.018
Story3	B109	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.049	0.002
Story3	B110	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.111	0.007

Story3	B110	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.039	0.001
Story3	B111	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.113	0.006
Story3	B111	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.041	0.001
Story3	B112	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.113	0.006
Story3	B112	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.041	0.001
Story3	B113	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.111	0.007
Story3	B113	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.039	0.001
Story3	B114	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.143	0.018
Story3	B114	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.049	0.002
Story3	B115	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.124	0.005
Story3	B115	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.045	0.0004634
Story3	B116	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.11	0.004
Story3	B116	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.04	0.0003937
Story3	B117	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.004
Story3	B117	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.041	0.0003695
Story3	B118	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.004
Story3	B118	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.041	0.0003695
Story3	B119	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.11	0.004
Story3	B119	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.04	0.0003937
Story3	B120	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.124	0.005
Story3	B120	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.045	0.0004634
Story3	B121	Beam	CORREA 80X40X4mm	0.9D-1W(C)	0.045	0.0004044
Story3	B121	Beam	CORREA 80X40X4mm	0.9D-1W(T)	0.119	0.0003117
Story3	B122	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.111	0.0003745
Story3	B122	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B123	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.001
Story3	B123	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B124	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.001
Story3	B124	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B125	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.111	0.0003745
Story3	B125	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B126	Beam	CORREA 80X40X4mm	0.9D-1W(C)	0.045	0.0004044
Story3	B126	Beam	CORREA 80X40X4mm	0.9D-1W(T)	0.119	0.0003117
Story3	B127	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.122	0.009
Story3	B127	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.044	0.001
Story3	B128	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.113	0.006
Story3	B128	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.041	0.001
Story3	B129	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.12	0.006

Story3	B129	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0.001
Story3	B130	Beam	CORREA 80X40x4mm	1.2D+1L+1W(C)	0.12	0.006
Story3	B130	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0.001
Story3	B131	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.113	0.006
Story3	B131	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.041	0.001
Story3	B132	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.122	0.009
Story3	B132	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.044	0.001
Story3	B133	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.142	0.017
Story3	B133	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.048	0.002
Story3	B134	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.111	0.008
Story3	B134	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.039	0.001
Story3	B135	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.113	0.006
Story3	B135	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.04	0.001
Story3	B136	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.113	0.006
Story3	B136	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.04	0.001
Story3	B137	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.111	0.008
Story3	B137	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.039	0.001
Story3	B138	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.142	0.017
Story3	B138	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.048	0.002
Story3	B139	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.124	0.005
Story3	B139	Beam	CORREA 80X40x4mm	1.2D+1L+1W(T)	0.045	0.0004876
Story3	B140	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.11	0.004
Story3	B140	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.04	0.0004115
Story3	B141	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.004
Story3	B141	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.041	0.0003867
Story3	B142	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.004
Story3	B142	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.041	0.0003867
Story3	B143	Beam	CORREA 80X40x4mm	1.2D+1L+1W(C)	0.11	0.004
Story3	B143	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.04	0.0004115
Story3	B144	Beam	CORREA 80X40x4mm	1.2D+1L+1W(C)	0.124	0.005
Story3	B144	Beam	CORREA 80X40x4mm	1.2D+1L+1W(T)	0.045	0.0004876
Story3	B145	Beam	CORREA 80X40X4mm	0.9D-1W(C)	0.045	0.0004118
Story3	B145	Beam	CORREA 80X40X4mm	0.9D-1W(T)	0.119	0.0003172
Story3	B146	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.111	0.000374
Story3	B146	Beam	CORREA 80X40x4mm	1.2D+1L+1W(T)	0.042	0
Story3	B147	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.001
Story3	B147	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B148	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.001

Story3	B148	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B149	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.111	0.000374
Story3	B149	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.042	0
Story3	B150	Beam	CORREA 80X40X4mm	0.9D-1W(C)	0.045	0.0004118
Story3	B150	Beam	CORREA 80X40X4mm	0.9D-1W(T)	0.119	0.0003172
Story2	B103	Beam	CORREA 80X40x4mm	1.2D+1L+1W(C)	0.131	0.0004247
Story2	B103	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.049	0
Story2	B104	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.116	0.000176
Story2	B104	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.044	0
Story2	B105	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.0003142
Story2	B105	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.043	0
Story2	B106	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.114	0.0003142
Story2	B106	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.043	0
Story2	B107	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.116	0.000176
Story2	B107	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.044	0
Story2	B108	Beam	CORREA 80X40X4mm	1.2D+1L+1W(C)	0.131	0.0004247
Story2	B108	Beam	CORREA 80X40X4mm	1.2D+1L+1W(T)	0.049	0

14. DISEÑO DE PLACA BASE

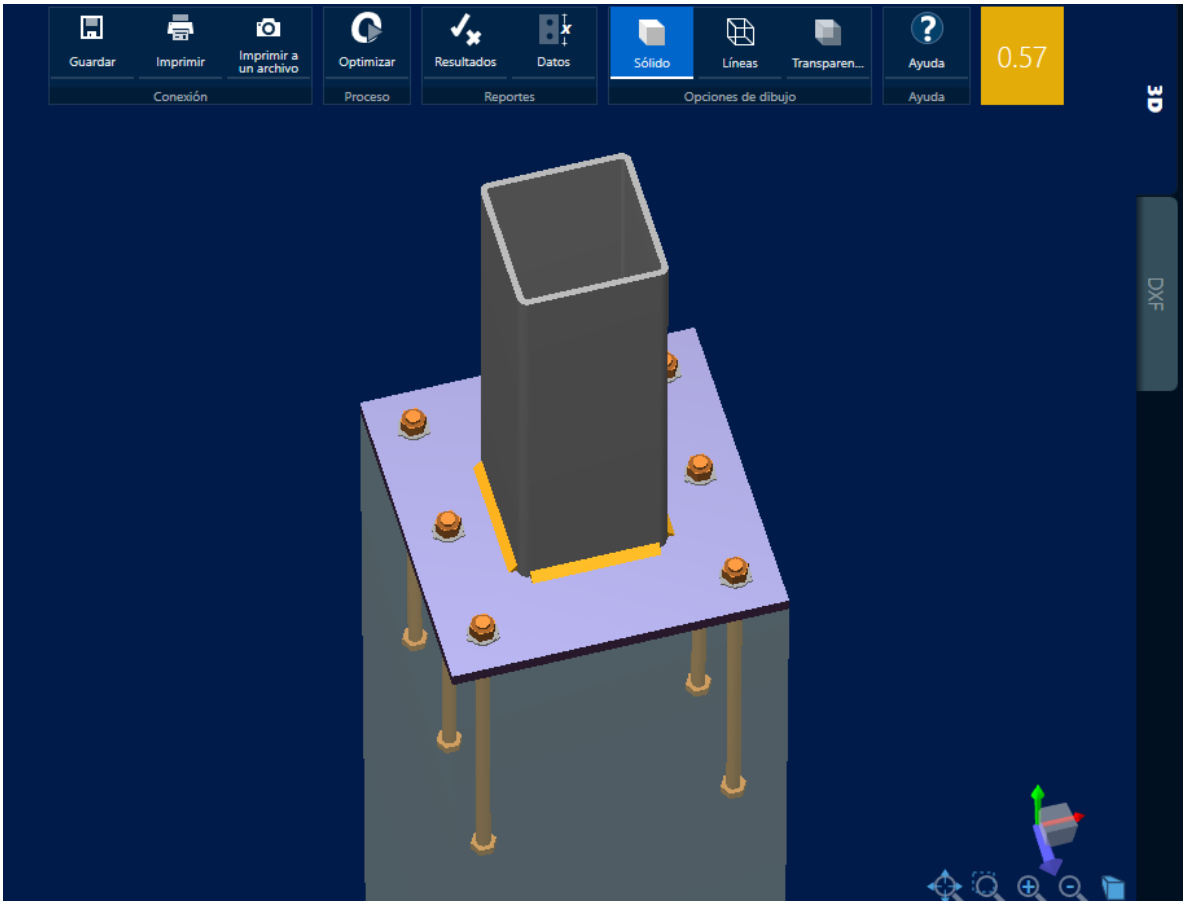


Ilustración 9. modelo matemático para diseño de placa base

No ha sido posible leer el archivo "<>" **RAM Connection Standalone**

Sistema de unidades: Inglés
Fecha Actual:24/04/2025 7:51 p. m.

Conexiones Metálicas
Resultados

Conexión: 1 - Pinned BP

Familia: Columna - Base (CB)
Tipo: Base plate
Descripción: Base de columna

Código de diseño: AISC 360-22 LRFD, ACI 318-08

Solicitaciones

Descripción	Pu [kip]	Mu22 [kip*ft]	Mu33 [kip*ft]	Vu2 [kip]	Vu3 [kip]	Tipo de carga
1.4D	1.08	-0.07	0.00	0.00	0.02	Design
1.2D+1.6L	1.68	-0.22	-0.07	-0.01	0.04	Design
1.2D+1L+1W	1.77	-0.24	-0.08	-0.02	0.05	Design
1.2D+1L-1W	1.02	-0.08	-0.01	0.00	0.02	Design
0.9D+1W	1.07	-0.13	-0.04	-0.01	0.02	Design
0.9D-1W	0.32	0.03	0.03	0.01	-0.01	Design
1.3D+1L+0.25FX	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L-0.25FX	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L+0.25FY	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L-0.25FY	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L-0.3EX+1EY	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L+0.3EX-EY	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L+0.3EX+1EY	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L-0.3EX-1EY	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L-0.3EY+EX	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L+0.3EY-EX	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L+0.3EY+1EX	1.48	-0.17	-0.05	-0.01	0.03	Design
1.3D+1L-0.3EY-1EX	1.48	-0.17	-0.05	-0.01	0.03	Design
0.8D+0.25EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.25EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.25FY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.25FY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EX+1EY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EX-1EY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EX+1EY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EX-1EY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EY+1EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EY-1EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EY+1EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EY-1EX	0.62	-0.04	0.00	0.00	0.01	Design
1.3D+1L+0.25EX	1.51	-0.16	0.27	0.04	0.03	Design
1.3D+1L+0.25EX	1.45	-0.17	-0.37	-0.05	0.03	Design
1.3D+1L+0.25EY	1.52	0.35	-0.04	-0.01	0.10	Design
1.3D+1L+0.25EY	1.43	-0.69	-0.05	-0.01	-0.04	Design
0.8D+1EX	0.65	-0.04	0.32	0.05	0.01	Design
0.8D+1EX	0.59	-0.05	-0.32	-0.05	0.01	Design
0.8D+1EY	0.66	0.47	0.00	0.00	0.08	Design
0.8D+1EY	0.58	-0.56	-0.01	0.00	-0.06	Design
DStlD1	1.01	-0.10	-0.02	0.00	0.02	Design
DStlD2	1.48	-0.20	-0.07	-0.01	0.04	Design
B232	1.48	-0.20	-0.07	-0.01	0.04	Design
B236X	1.50	-0.20	0.15	0.02	0.04	Design
B236X	1.46	-0.21	-0.28	-0.04	0.04	Design
B236Y	1.51	0.15	-0.06	-0.01	0.09	Design
B236Y	1.45	-0.55	-0.07	-0.01	-0.01	Design

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1.4D	1.40	0.00	0.07	0.01	0.00	Design
1.2D+1.6L	3.61	-0.06	0.20	0.03	0.01	Design
1.2D+1L+1W	3.92	-0.06	0.21	0.04	0.01	Design
1.2D+1L-1W	1.50	-0.01	0.07	0.01	0.00	Design
0.9D+1W	2.11	-0.03	0.11	0.02	0.01	Design
0.9D-1W	-0.31	0.03	-0.03	0.00	-0.01	Design
1.3D+1L+0.25FX	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L-0.25FX	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L+0.25FY	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L-0.25FY	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L-0.3EX+1EY	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L+0.3EX-EY	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L+0.3EX+1EY	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L-0.3EX-1EY	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L-0.3EY+EX	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L+0.3EY-EX	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L+0.3EY+1EX	2.81	-0.03	0.15	0.02	0.01	Design
1.3D+1L-0.3EY-1EX	2.81	-0.03	0.15	0.02	0.01	Design
0.8D+0.25EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.25EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.25FY	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.25FY	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.3EX+1EY	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.3EX-1EY	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.3EX+1EY	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.3EX-1EY	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.3EY+1EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.3EY-1EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.3EY+1EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.3EY-1EX	0.80	0.00	0.04	0.01	0.00	Design
1.3D+1L+0.25EX	2.86	-0.03	0.97	0.14	0.01	Design
1.3D+1L+0.25EX	2.76	-0.04	-0.67	-0.09	0.01	Design
1.3D+1L+0.25EY	2.83	0.58	0.15	0.03	0.09	Design
1.3D+1L+0.25EY	2.79	-0.65	0.14	0.02	-0.08	Design
0.8D+1EX	0.85	0.00	0.86	0.12	0.00	Design
0.8D+1EX	0.75	0.00	-0.78	-0.11	0.00	Design
0.8D+1EY	0.82	0.61	0.04	0.01	0.09	Design
0.8D+1EY	0.78	-0.61	0.03	0.01	-0.09	Design
DStlD1	1.75	-0.02	0.09	0.02	0.00	Design
DStlD2	3.26	-0.05	0.18	0.03	0.01	Design
B232	3.26	-0.05	0.18	0.03	0.01	Design
B236X	3.30	-0.05	0.74	0.11	0.01	Design
B236X	3.23	-0.05	-0.38	-0.05	0.01	Design
B236Y	3.28	0.37	0.18	0.03	0.07	Design
B236Y	3.25	-0.47	0.18	0.03	-0.05	Design
1.4D	1.38	0.00	0.06	0.01	0.00	Design
1.2D+1.6L	3.47	-0.03	0.19	0.03	0.01	Design
1.2D+1L+1W	3.76	-0.04	0.20	0.03	0.01	Design
1.2D+1L-1W	1.47	-0.01	0.07	0.01	0.00	Design
0.9D+1W	2.03	-0.02	0.11	0.02	0.00	Design
0.9D-1W	-0.25	0.01	-0.02	0.00	0.00	Design
1.3D+1L+0.25FX	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L-0.25FX	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L+0.25FY	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L-0.25FY	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L-0.3EX+1EY	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L+0.3EX-EY	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L+0.3EX+1EY	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L-0.3EX-1EY	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L-0.3EY+EX	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L+0.3EY-EX	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L+0.3EY+1EX	2.71	-0.02	0.14	0.02	0.00	Design
1.3D+1L-0.3EY-1EX	2.71	-0.02	0.14	0.02	0.00	Design
0.8D+0.25EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.25EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.25FY	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.25FY	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.3EX+1EY	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.3EX-1EY	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.3EX+1EY	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.3EX-1EY	0.79	0.00	0.04	0.01	0.00	Design

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0.8D-0.3EY+1EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.3EY-1EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.3EY+1EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.3EY-1EX	0.79	0.00	0.04	0.01	0.00	Design
1.3D+1L+0.25EX	2.77	-0.02	1.11	0.16	0.00	Design
1.3D+1L+0.25EX	2.65	-0.02	-0.83	-0.11	0.00	Design
1.3D+1L+0.25EY	2.72	0.59	0.14	0.02	0.09	Design
1.3D+1L+0.25EY	2.71	-0.63	0.14	0.02	-0.08	Design
0.8D+1EX	0.85	0.00	1.01	0.14	0.00	Design
0.8D+1EX	0.73	0.00	-0.93	-0.13	0.00	Design
0.8D+1EY	0.80	0.61	0.04	0.01	0.09	Design
0.8D+1EY	0.78	-0.61	0.03	0.01	-0.09	Design
DStlD1	1.70	-0.01	0.09	0.02	0.00	Design
DStlD2	3.13	-0.03	0.17	0.03	0.01	Design
B232	3.13	-0.03	0.17	0.03	0.01	Design
B236X	3.17	-0.03	0.83	0.12	0.01	Design
B236X	3.09	-0.03	-0.49	-0.07	0.01	Design
B236Y	3.14	0.38	0.17	0.03	0.07	Design
B236Y	3.13	-0.44	0.17	0.03	-0.05	Design
1.4D	1.22	0.00	-0.01	0.00	0.00	Design
1.2D+1.6L	2.72	0.00	-0.16	-0.03	0.00	Design
1.2D+1L+1W	2.92	0.00	-0.18	-0.03	0.00	Design
1.2D+1L-1W	1.25	0.00	-0.03	-0.01	0.00	Design
0.9D+1W	1.62	0.00	-0.08	-0.02	0.00	Design
0.9D-1W	-0.05	0.00	0.07	0.01	0.00	Design
1.3D+1L+0.25FX	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L-0.25FX	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L+0.25FY	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L-0.25FY	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L-0.3EX+1EY	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L+0.3EX-EY	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L+0.3EX+1EY	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L-0.3EX-1EY	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L-0.3EY+EX	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L+0.3EY-EX	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L+0.3EY+1EX	2.18	0.00	-0.10	-0.02	0.00	Design
1.3D+1L-0.3EY-1EX	2.18	0.00	-0.10	-0.02	0.00	Design
0.8D+0.25EX	0.70	0.00	-0.01	0.00	0.00	Design
0.8D-0.25EX	0.70	0.00	-0.01	0.00	0.00	Design
0.8D+0.25FY	0.70	0.00	-0.01	0.00	0.00	Design
0.8D-0.25FY	0.70	0.00	-0.01	0.00	0.00	Design
0.8D-0.3EX+1EY	0.70	0.00	-0.01	0.00	0.00	Design
0.8D+0.3EX-1EY	0.70	0.00	-0.01	0.00	0.00	Design
0.8D+0.3EX+1EY	0.70	0.00	-0.01	0.00	0.00	Design
0.8D-0.3EX-1EY	0.70	0.00	-0.01	0.00	0.00	Design
0.8D-0.3EY+1EX	0.70	0.00	-0.01	0.00	0.00	Design
0.8D+0.3EY-1EX	0.70	0.00	-0.01	0.00	0.00	Design
0.8D+0.3EY+1EX	0.70	0.00	-0.01	0.00	0.00	Design
0.8D-0.3EY-1EX	0.70	0.00	-0.01	0.00	0.00	Design
1.3D+1L+0.25EX	2.24	0.00	0.63	0.08	0.00	Design
1.3D+1L+0.25EX	2.11	0.00	-0.84	-0.12	0.00	Design
1.3D+1L+0.25EY	2.18	0.60	-0.10	-0.02	0.09	Design
1.3D+1L+0.25EY	2.18	-0.60	-0.10	-0.02	-0.09	Design
0.8D+1EX	0.76	0.00	0.73	0.10	0.00	Design
0.8D+1EX	0.63	0.00	-0.74	-0.10	0.00	Design
0.8D+1EY	0.70	0.60	-0.01	0.00	0.09	Design
0.8D+1EY	0.70	-0.60	-0.01	0.00	-0.09	Design
DStlD1	1.39	0.00	-0.05	-0.01	0.00	Design
DStlD2	2.44	0.00	-0.15	-0.03	0.00	Design
B232	2.44	0.00	-0.15	-0.03	0.00	Design
B236X	2.48	0.00	0.35	0.04	0.00	Design
B236X	2.39	0.00	-0.65	-0.10	0.00	Design
B236Y	2.44	0.41	-0.15	-0.03	0.06	Design
B236Y	2.44	-0.41	-0.15	-0.03	-0.06	Design
1.4D	1.38	0.00	0.06	0.01	0.00	Design
1.2D+1.6L	3.47	0.03	0.19	0.03	-0.01	Design
1.2D+1L+1W	3.76	0.04	0.20	0.03	-0.01	Design
1.2D+1L-1W	1.47	0.01	0.07	0.01	0.00	Design
0.9D+1W	2.03	0.02	0.11	0.02	0.00	Design
0.9D-1W	-0.25	-0.01	-0.02	0.00	0.00	Design
1.3D+1L+0.25FX	2.71	0.02	0.14	0.02	0.00	Design

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1.3D+1L-0.25FX	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L+0.25FY	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L-0.25FY	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L-0.3EX+1EY	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L+0.3EX-EY	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L+0.3EX+1EY	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L-0.3EX-1EY	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L-0.3EY+EX	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L+0.3EY-EX	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L+0.3EY+1EX	2.71	0.02	0.14	0.02	0.00	Design
1.3D+1L-0.3EY-1EX	2.71	0.02	0.14	0.02	0.00	Design
0.8D+0.25EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.25EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.25FY	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.25FY	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.3EX+1EY	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.3EX-1EY	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.3EX+1EY	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.3EX-1EY	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.3EY+1EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.3EY-1EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D+0.3EY+1EX	0.79	0.00	0.04	0.01	0.00	Design
0.8D-0.3EY-1EX	0.79	0.00	0.04	0.01	0.00	Design
1.3D+1L+0.25EX	2.77	0.02	1.11	0.16	0.00	Design
1.3D+1L+0.25EX	2.65	0.02	-0.83	-0.11	0.00	Design
1.3D+1L+0.25EY	2.72	0.63	0.14	0.02	0.08	Design
1.3D+1L+0.25EY	2.71	-0.59	0.14	0.02	-0.09	Design
0.8D+1EX	0.85	0.00	1.01	0.14	0.00	Design
0.8D+1EX	0.73	0.00	-0.93	-0.13	0.00	Design
0.8D+1EY	0.80	0.61	0.04	0.01	0.09	Design
0.8D+1EY	0.78	-0.61	0.03	0.01	-0.09	Design
DStlD1	1.70	0.01	0.09	0.02	0.00	Design
DStlD2	3.13	0.03	0.17	0.03	-0.01	Design
B232	3.13	0.03	0.17	0.03	-0.01	Design
B236X	3.17	0.03	0.83	0.12	-0.01	Design
B236X	3.09	0.03	-0.49	-0.07	-0.01	Design
B236Y	3.14	0.44	0.17	0.03	0.05	Design
B236Y	3.13	-0.38	0.17	0.03	-0.07	Design
1.4D	1.40	0.00	0.07	0.01	0.00	Design
1.2D+1.6L	3.61	0.06	0.20	0.03	-0.01	Design
1.2D+1L+1W	3.92	0.06	0.21	0.04	-0.01	Design
1.2D+1L-1W	1.50	0.01	0.07	0.01	0.00	Design
0.9D+1W	2.11	0.03	0.11	0.02	-0.01	Design
0.9D-1W	-0.31	-0.03	-0.03	0.00	0.01	Design
1.3D+1L+0.25FX	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L-0.25FX	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L+0.25FY	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L-0.25FY	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L-0.3EX+1EY	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L+0.3EX-EY	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L+0.3EX+1EY	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L-0.3EX-1EY	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L-0.3EY+EX	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L+0.3EY-EX	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L+0.3EY+1EX	2.81	0.03	0.15	0.02	-0.01	Design
1.3D+1L-0.3EY-1EX	2.81	0.03	0.15	0.02	-0.01	Design
0.8D+0.25EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.25EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.25FY	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.25FY	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.3EX+1EY	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.3EX-1EY	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.3EX+1EY	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.3EX-1EY	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.3EY+1EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.3EY-1EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D+0.3EY+1EX	0.80	0.00	0.04	0.01	0.00	Design
0.8D-0.3EY-1EX	0.80	0.00	0.04	0.01	0.00	Design
1.3D+1L+0.25EX	2.86	0.04	0.97	0.14	-0.01	Design
1.3D+1L+0.25EX	2.76	0.03	-0.67	-0.09	-0.01	Design
1.3D+1L+0.25EY	2.83	0.65	0.15	0.03	0.08	Design

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1.3D+1L+0.25EY	2.79	-0.58	0.14	0.02	-0.09	Design
0.8D+1EX	0.85	0.00	0.86	0.12	0.00	Design
0.8D+1EX	0.75	0.00	-0.78	-0.11	0.00	Design
0.8D+1EY	0.82	0.61	0.04	0.01	0.09	Design
0.8D+1EY	0.78	-0.61	0.03	0.01	-0.09	Design
DStlD1	1.75	0.02	0.09	0.02	0.00	Design
DStlD2	3.26	0.05	0.18	0.03	-0.01	Design
B232	3.26	0.05	0.18	0.03	-0.01	Design
B236X	3.30	0.05	0.74	0.11	-0.01	Design
B236X	3.23	0.05	-0.38	-0.05	-0.01	Design
B236Y	3.28	0.47	0.18	0.03	0.05	Design
B236Y	3.25	-0.37	0.18	0.03	-0.07	Design
1.4D	1.08	0.07	0.00	0.00	-0.02	Design
1.2D+1.6L	1.68	0.22	-0.07	-0.01	-0.04	Design
1.2D+1L+1W	1.77	0.24	-0.08	-0.02	-0.05	Design
1.2D+1L-1W	1.02	0.08	-0.01	0.00	-0.02	Design
0.9D+1W	1.07	0.13	-0.04	-0.01	-0.02	Design
0.9D-1W	0.32	-0.03	0.03	0.01	0.01	Design
1.3D+1L+0.25FX	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L-0.25FX	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L+0.25FY	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L-0.25FY	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L-0.3EX+1EY	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L+0.3EX-EY	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L+0.3EX+1EY	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L-0.3EX-1EY	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L-0.3EY+EX	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L+0.3EY-EX	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L+0.3EY+1EX	1.48	0.17	-0.05	-0.01	-0.03	Design
1.3D+1L-0.3EY-1EX	1.48	0.17	-0.05	-0.01	-0.03	Design
0.8D+0.25EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.25EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.25FY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.25FY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EX+1EY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EX-1EY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EX+1EY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EX-1EY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EY+1EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EY-1EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EY+1EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EY-1EX	0.62	0.04	0.00	0.00	-0.01	Design
1.3D+1L+0.25EX	1.51	0.17	0.27	0.04	-0.03	Design
1.3D+1L+0.25EX	1.45	0.16	-0.37	-0.05	-0.03	Design
1.3D+1L+0.25EY	1.52	0.69	-0.04	-0.01	0.04	Design
1.3D+1L+0.25EY	1.43	-0.35	-0.05	-0.01	-0.10	Design
0.8D+1EX	0.65	0.05	0.32	0.05	-0.01	Design
0.8D+1EX	0.59	0.04	-0.32	-0.05	-0.01	Design
0.8D+1EY	0.66	0.56	0.00	0.00	0.06	Design
0.8D+1EY	0.58	-0.47	-0.01	0.00	-0.08	Design
DStlD1	1.01	0.10	-0.02	0.00	-0.02	Design
DStlD2	1.48	0.20	-0.07	-0.01	-0.04	Design
B232	1.48	0.20	-0.07	-0.01	-0.04	Design
B236X	1.50	0.21	0.15	0.02	-0.04	Design
B236X	1.46	0.20	-0.28	-0.04	-0.04	Design
B236Y	1.51	0.55	-0.06	-0.01	0.01	Design
B236Y	1.45	-0.15	-0.07	-0.01	-0.09	Design
1.4D	1.10	-0.08	0.00	0.00	0.01	Design
1.2D+1.6L	1.57	-0.92	0.00	0.00	0.12	Design
1.2D+1L+1W	1.64	-1.02	0.00	0.00	0.13	Design
1.2D+1L-1W	1.02	-0.17	0.00	0.00	0.02	Design
0.9D+1W	1.02	-0.47	0.00	0.00	0.06	Design
0.9D-1W	0.39	0.38	0.00	0.00	-0.05	Design
1.3D+1L+0.25FX	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L-0.25FX	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L+0.25FY	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L-0.25FY	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L-0.3EX+1EY	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L+0.3EX-EY	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L+0.3EX+1EY	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L-0.3EX-1EY	1.41	-0.60	0.00	0.00	0.08	Design

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1.3D+1L-0.3EY+EX	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L+0.3EY-EX	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L+0.3EY+1EX	1.41	-0.60	0.00	0.00	0.08	Design
1.3D+1L-0.3EY-1EX	1.41	-0.60	0.00	0.00	0.08	Design
0.8D+0.25EX	0.63	-0.04	0.00	0.00	0.01	Design
0.8D-0.25EX	0.63	-0.04	0.00	0.00	0.01	Design
0.8D+0.25FY	0.63	-0.04	0.00	0.00	0.01	Design
0.8D-0.25FY	0.63	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EX+1EY	0.63	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EX-1EY	0.63	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EX+1EY	0.63	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EX-1EY	0.63	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EY+1EX	0.63	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EY-1EX	0.63	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EY+1EX	0.63	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EY-1EX	0.63	-0.04	0.00	0.00	0.01	Design
1.3D+1L+0.25EX	1.41	-0.60	0.31	0.04	0.08	Design
1.3D+1L+0.25EX	1.41	-0.60	-0.32	-0.04	0.08	Design
1.3D+1L+0.25EY	1.45	0.10	0.00	0.00	0.15	Design
1.3D+1L+0.25EY	1.37	-1.30	0.00	0.00	0.01	Design
0.8D+1EX	0.63	-0.04	0.31	0.04	0.01	Design
0.8D+1EX	0.63	-0.04	-0.31	-0.04	0.01	Design
0.8D+1EY	0.67	0.65	0.00	0.00	0.07	Design
0.8D+1EY	0.59	-0.74	0.00	0.00	-0.06	Design
DStlD1	0.98	-0.32	0.00	0.00	0.04	Design
DStlD2	1.37	-0.85	0.00	0.00	0.11	Design
B232	1.37	-0.85	0.00	0.00	0.11	Design
B236X	1.37	-0.85	0.21	0.03	0.11	Design
B236X	1.37	-0.85	-0.22	-0.03	0.11	Design
B236Y	1.40	-0.38	0.00	0.00	0.16	Design
B236Y	1.34	-1.33	-0.01	0.00	0.06	Design
1.4D	1.16	0.00	0.00	0.00	0.00	Design
1.2D+1.6L	2.37	0.00	-0.01	0.00	0.00	Design
1.2D+1L+1W	2.54	0.00	-0.01	0.00	0.00	Design
1.2D+1L-1W	1.17	0.00	0.00	0.00	0.00	Design
0.9D+1W	1.44	0.00	0.00	0.00	0.00	Design
0.9D-1W	0.06	0.00	0.00	0.00	0.00	Design
1.3D+1L+0.25FX	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L-0.25FX	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L+0.25FY	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L-0.25FY	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L-0.3EX+1EY	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L+0.3EX-EY	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L+0.3EX+1EY	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L-0.3EX-1EY	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L-0.3EY+EX	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L+0.3EY-EX	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L+0.3EY+1EX	1.94	0.00	0.00	0.00	0.00	Design
1.3D+1L-0.3EY-1EX	1.94	0.00	0.00	0.00	0.00	Design
0.8D+0.25EX	0.66	0.00	0.00	0.00	0.00	Design
0.8D-0.25EX	0.66	0.00	0.00	0.00	0.00	Design
0.8D+0.25FY	0.66	0.00	0.00	0.00	0.00	Design
0.8D-0.25FY	0.66	0.00	0.00	0.00	0.00	Design
0.8D-0.3EX+1EY	0.66	0.00	0.00	0.00	0.00	Design
0.8D+0.3EX-1EY	0.66	0.00	0.00	0.00	0.00	Design
0.8D+0.3EX+1EY	0.66	0.00	0.00	0.00	0.00	Design
0.8D-0.3EX-1EY	0.66	0.00	0.00	0.00	0.00	Design
0.8D-0.3EY+1EX	0.66	0.00	0.00	0.00	0.00	Design
0.8D+0.3EY-1EX	0.66	0.00	0.00	0.00	0.00	Design
0.8D+0.3EY+1EX	0.66	0.00	0.00	0.00	0.00	Design
0.8D-0.3EY-1EX	0.66	0.00	0.00	0.00	0.00	Design
1.3D+1L+0.25EX	1.94	0.00	0.71	0.10	0.00	Design
1.3D+1L+0.25EX	1.94	0.00	-0.72	-0.10	0.00	Design
1.3D+1L+0.25EY	1.94	0.78	0.00	0.00	0.08	Design
1.3D+1L+0.25EY	1.94	-0.78	0.00	0.00	-0.08	Design
0.8D+1EX	0.67	0.00	0.71	0.10	0.00	Design
0.8D+1EX	0.66	0.00	-0.71	-0.10	0.00	Design
0.8D+1EY	0.66	0.78	0.00	0.00	0.08	Design
0.8D+1EY	0.66	-0.78	0.00	0.00	-0.08	Design
DStlD1	1.26	0.00	0.00	0.00	0.00	Design
DStlD2	2.12	0.00	-0.01	0.00	0.00	Design

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B232	2.12	0.00	-0.01	0.00	0.00	Design
B236X	2.12	0.00	0.48	0.07	0.00	Design
B236X	2.12	0.00	-0.49	-0.07	0.00	Design
B236Y	2.12	0.53	-0.01	0.00	0.05	Design
B236Y	2.12	-0.53	-0.01	0.00	-0.05	Design
1.4D	1.10	0.08	0.00	0.00	-0.01	Design
1.2D+1.6L	1.57	0.92	0.00	0.00	-0.12	Design
1.2D+1L+1W	1.64	1.02	0.00	0.00	-0.13	Design
1.2D+1L-1W	1.02	0.17	0.00	0.00	-0.02	Design
0.9D+1W	1.02	0.47	0.00	0.00	-0.06	Design
0.9D-1W	0.39	-0.38	0.00	0.00	0.05	Design
1.3D+1L+0.25FX	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L-0.25FX	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L+0.25FY	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L-0.25FY	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L-0.3EX+1EY	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L+0.3EX-EY	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L+0.3EX+1EY	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L-0.3EX-1EY	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L-0.3EY+EX	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L+0.3EY-EX	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L+0.3EY+1EX	1.41	0.60	0.00	0.00	-0.08	Design
1.3D+1L-0.3EY-1EX	1.41	0.60	0.00	0.00	-0.08	Design
0.8D+0.25EX	0.63	0.04	0.00	0.00	-0.01	Design
0.8D-0.25EX	0.63	0.04	0.00	0.00	-0.01	Design
0.8D+0.25FY	0.63	0.04	0.00	0.00	-0.01	Design
0.8D-0.25FY	0.63	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EX+1EY	0.63	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EX-1EY	0.63	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EX+1EY	0.63	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EX-1EY	0.63	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EY+1EX	0.63	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EY-1EX	0.63	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EY+1EX	0.63	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EY-1EX	0.63	0.04	0.00	0.00	-0.01	Design
1.3D+1L+0.25EX	1.41	0.60	0.31	0.04	-0.08	Design
1.3D+1L+0.25EX	1.41	0.60	-0.32	-0.04	-0.08	Design
1.3D+1L+0.25EY	1.45	1.30	0.00	0.00	-0.01	Design
1.3D+1L+0.25EY	1.37	-0.10	0.00	0.00	-0.15	Design
0.8D+1EX	0.63	0.04	0.31	0.04	-0.01	Design
0.8D+1EX	0.63	0.04	-0.31	-0.04	-0.01	Design
0.8D+1EY	0.67	0.74	0.00	0.00	0.06	Design
0.8D+1EY	0.59	-0.65	0.00	0.00	-0.07	Design
DStlD1	0.98	0.32	0.00	0.00	-0.04	Design
DStlD2	1.37	0.85	0.00	0.00	-0.11	Design
B232	1.37	0.85	0.00	0.00	-0.11	Design
B236X	1.37	0.85	0.21	0.03	-0.11	Design
B236X	1.37	0.85	-0.22	-0.03	-0.11	Design
B236Y	1.40	1.33	0.00	0.00	-0.06	Design
B236Y	1.34	0.38	-0.01	0.00	-0.16	Design
1.4D	1.08	-0.08	0.00	0.00	0.02	Design
1.2D+1.6L	1.67	-0.23	0.07	0.01	0.04	Design
1.2D+1L+1W	1.77	-0.25	0.07	0.02	0.05	Design
1.2D+1L-1W	1.02	-0.09	0.01	0.00	0.02	Design
0.9D+1W	1.07	-0.13	0.03	0.01	0.03	Design
0.9D-1W	0.32	0.03	-0.03	-0.01	-0.01	Design
1.3D+1L+0.25FX	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L-0.25FX	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L+0.25FY	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L-0.25FY	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L-0.3EX+1EY	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L+0.3EX-EY	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L+0.3EX+1EY	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L-0.3EX-1EY	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L-0.3EY+EX	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L+0.3EY-EX	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L+0.3EY+1EX	1.47	-0.17	0.04	0.01	0.03	Design
1.3D+1L-0.3EY-1EX	1.47	-0.17	0.04	0.01	0.03	Design
0.8D+0.25EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.25EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.25FY	0.62	-0.04	0.00	0.00	0.01	Design

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0.8D-0.25FY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EX+1EY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EX-1EY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EX+1EY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EX-1EY	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EY+1EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EY-1EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D+0.3EY+1EX	0.62	-0.04	0.00	0.00	0.01	Design
0.8D-0.3EY-1EX	0.62	-0.04	0.00	0.00	0.01	Design
1.3D+1L+0.25EX	1.50	-0.17	0.36	0.05	0.03	Design
1.3D+1L+0.25EX	1.44	-0.18	-0.28	-0.04	0.03	Design
1.3D+1L+0.25EY	1.51	0.34	0.05	0.01	0.10	Design
1.3D+1L+0.25EY	1.43	-0.68	0.04	0.01	-0.04	Design
0.8D+1EX	0.65	-0.04	0.32	0.05	0.01	Design
0.8D+1EX	0.59	-0.05	-0.32	-0.05	0.01	Design
0.8D+1EY	0.66	0.47	0.01	0.00	0.08	Design
0.8D+1EY	0.58	-0.55	0.00	0.00	-0.06	Design
DStlD1	1.01	-0.11	0.02	0.00	0.02	Design
DStlD2	1.47	-0.21	0.06	0.01	0.04	Design
B232	1.47	-0.21	0.06	0.01	0.04	Design
B236X	1.49	-0.21	0.28	0.04	0.04	Design
B236X	1.45	-0.21	-0.15	-0.02	0.04	Design
B236Y	1.50	0.14	0.07	0.01	0.09	Design
B236Y	1.44	-0.56	0.06	0.01	-0.01	Design
1.4D	1.40	0.00	-0.07	-0.01	0.00	Design
1.2D+1.6L	3.59	-0.05	-0.20	-0.03	0.01	Design
1.2D+1L+1W	3.89	-0.06	-0.22	-0.03	0.01	Design
1.2D+1L-1W	1.50	-0.01	-0.07	-0.01	0.00	Design
0.9D+1W	2.09	-0.03	-0.11	-0.02	0.01	Design
0.9D-1W	-0.30	0.03	0.03	0.00	-0.01	Design
1.3D+1L+0.25FX	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L-0.25FX	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L+0.25FY	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L-0.25FY	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L-0.3EX+1EY	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L+0.3EX-EY	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L+0.3EX+1EY	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L-0.3EX-1EY	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L-0.3EY+EX	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L+0.3EY-EX	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L+0.3EY+1EX	2.79	-0.03	-0.15	-0.02	0.01	Design
1.3D+1L-0.3EY-1EX	2.79	-0.03	-0.15	-0.02	0.01	Design
0.8D+0.25EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.25EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.25FY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.25FY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EX+1EY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EX-1EY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EX+1EY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EX-1EY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EY+1EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EY-1EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EY+1EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EY-1EX	0.80	0.00	-0.04	-0.01	0.00	Design
1.3D+1L+0.25EX	2.84	-0.03	0.67	0.09	0.01	Design
1.3D+1L+0.25EX	2.74	-0.04	-0.97	-0.14	0.01	Design
1.3D+1L+0.25EY	2.81	0.57	-0.15	-0.02	0.09	Design
1.3D+1L+0.25EY	2.77	-0.64	-0.16	-0.03	-0.08	Design
0.8D+1EX	0.85	0.00	0.78	0.11	0.00	Design
0.8D+1EX	0.75	0.00	-0.86	-0.12	0.00	Design
0.8D+1EY	0.82	0.61	-0.03	-0.01	0.09	Design
0.8D+1EY	0.78	-0.61	-0.04	-0.01	-0.09	Design
DStlD1	1.74	-0.02	-0.09	-0.02	0.00	Design
DStlD2	3.24	-0.05	-0.18	-0.03	0.01	Design
B232	3.24	-0.05	-0.18	-0.03	0.01	Design
B236X	3.27	-0.05	0.38	0.05	0.01	Design
B236X	3.20	-0.05	-0.74	-0.11	0.01	Design
B236Y	3.25	0.36	-0.18	-0.03	0.07	Design
B236Y	3.23	-0.46	-0.19	-0.03	-0.05	Design
1.4D	1.38	0.00	-0.06	-0.01	0.00	Design
1.2D+1.6L	3.45	-0.03	-0.19	-0.03	0.01	Design

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1.2D+1L+1W	3.73	-0.03	-0.21	-0.03	0.01	Design
1.2D+1L-1W	1.47	-0.01	-0.07	-0.01	0.00	Design
0.9D+1W	2.02	-0.02	-0.11	-0.02	0.00	Design
0.9D-1W	-0.24	0.01	0.03	0.00	0.00	Design
1.3D+1L+0.25FX	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.25FX	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.25FY	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.25FY	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.3EX+1EY	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.3EX-EY	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.3EX+1EY	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.3EX-1EY	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.3EY+EX	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.3EY-EX	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.3EY+1EX	2.70	-0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.3EY-1EX	2.70	-0.02	-0.15	-0.02	0.00	Design
0.8D+0.25EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.25EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.25FY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.25FY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EX+1EY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EX-1EY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EX+1EY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EX-1EY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EY+1EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EY-1EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EY+1EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EY-1EX	0.79	0.00	-0.04	-0.01	0.00	Design
1.3D+1L+0.25EX	2.76	-0.02	0.82	0.11	0.00	Design
1.3D+1L+0.25EX	2.64	-0.02	-1.12	-0.16	0.00	Design
1.3D+1L+0.25EY	2.71	0.58	-0.14	-0.02	0.09	Design
1.3D+1L+0.25EY	2.69	-0.62	-0.15	-0.02	-0.08	Design
0.8D+1EX	0.85	0.00	0.93	0.13	0.00	Design
0.8D+1EX	0.73	0.00	-1.01	-0.14	0.00	Design
0.8D+1EY	0.80	0.60	-0.03	-0.01	0.09	Design
0.8D+1EY	0.78	-0.60	-0.04	-0.01	-0.09	Design
DStlD1	1.69	-0.01	-0.09	-0.01	0.00	Design
DStlD2	3.11	-0.03	-0.18	-0.03	0.01	Design
B232	3.11	-0.03	-0.18	-0.03	0.01	Design
B236X	3.15	-0.03	0.48	0.07	0.01	Design
B236X	3.07	-0.03	-0.83	-0.12	0.01	Design
B236Y	3.11	0.38	-0.17	-0.03	0.06	Design
B236Y	3.10	-0.44	-0.18	-0.03	-0.05	Design
1.4D	1.22	0.00	0.01	0.00	0.00	Design
1.2D+1.6L	2.70	0.00	0.16	0.03	0.00	Design
1.2D+1L+1W	2.91	0.00	0.17	0.03	0.00	Design
1.2D+1L-1W	1.25	0.00	0.03	0.01	0.00	Design
0.9D+1W	1.61	0.00	0.08	0.02	0.00	Design
0.9D-1W	-0.04	0.00	-0.07	-0.01	0.00	Design
1.3D+1L+0.25FX	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L-0.25FX	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L+0.25FY	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L-0.25FY	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L-0.3EX+1EY	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L+0.3EX-EY	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L+0.3EX+1EY	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L-0.3EX-1EY	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L-0.3EY+EX	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L+0.3EY-EX	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L+0.3EY+1EX	2.17	0.00	0.10	0.02	0.00	Design
1.3D+1L-0.3EY-1EX	2.17	0.00	0.10	0.02	0.00	Design
0.8D+0.25EX	0.70	0.00	0.00	0.00	0.00	Design
0.8D-0.25EX	0.70	0.00	0.00	0.00	0.00	Design
0.8D+0.25FY	0.70	0.00	0.00	0.00	0.00	Design
0.8D-0.25FY	0.70	0.00	0.00	0.00	0.00	Design
0.8D-0.3EX+1EY	0.70	0.00	0.00	0.00	0.00	Design
0.8D+0.3EX-1EY	0.70	0.00	0.00	0.00	0.00	Design
0.8D+0.3EX+1EY	0.70	0.00	0.00	0.00	0.00	Design
0.8D-0.3EX-1EY	0.70	0.00	0.00	0.00	0.00	Design
0.8D-0.3EY+1EX	0.70	0.00	0.00	0.00	0.00	Design
0.8D+0.3EY-1EX	0.70	0.00	0.00	0.00	0.00	Design

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0.8D+0.3EY+1EX	0.70	0.00	0.00	0.00	0.00	Design
0.8D-0.3EY-1EX	0.70	0.00	0.00	0.00	0.00	Design
1.3D+1L+0.25EX	2.23	0.00	0.83	0.12	0.00	Design
1.3D+1L+0.25EX	2.10	0.00	-0.63	-0.08	0.00	Design
1.3D+1L+0.25EY	2.17	0.59	0.10	0.02	0.09	Design
1.3D+1L+0.25EY	2.17	-0.59	0.10	0.02	-0.09	Design
0.8D+1EX	0.76	0.00	0.74	0.10	0.00	Design
0.8D+1EX	0.63	0.00	-0.73	-0.10	0.00	Design
0.8D+1EY	0.70	0.59	0.00	0.00	0.09	Design
0.8D+1EY	0.70	-0.59	0.00	0.00	-0.09	Design
DStlD1	1.39	0.00	0.05	0.01	0.00	Design
DStlD2	2.42	0.00	0.14	0.03	0.00	Design
B232	2.42	0.00	0.14	0.03	0.00	Design
B236X	2.47	0.00	0.64	0.10	0.00	Design
B236X	2.38	0.00	-0.35	-0.04	0.00	Design
B236Y	2.42	0.40	0.14	0.03	0.06	Design
B236Y	2.42	-0.40	0.14	0.03	-0.06	Design
1.4D	1.38	0.00	-0.06	-0.01	0.00	Design
1.2D+1.6L	3.45	0.03	-0.19	-0.03	-0.01	Design
1.2D+1L+1W	3.73	0.03	-0.21	-0.03	-0.01	Design
1.2D+1L-1W	1.47	0.01	-0.07	-0.01	0.00	Design
0.9D+1W	2.02	0.02	-0.11	-0.02	0.00	Design
0.9D-1W	-0.24	-0.01	0.03	0.00	0.00	Design
1.3D+1L+0.25FX	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.25FX	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.25FY	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.25FY	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.3EX+1EY	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.3EX-EY	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.3EX+1EY	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.3EX-1EY	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.3EY+EX	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.3EY-EX	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L+0.3EY+1EX	2.70	0.02	-0.15	-0.02	0.00	Design
1.3D+1L-0.3EY-1EX	2.70	0.02	-0.15	-0.02	0.00	Design
0.8D+0.25EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.25EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.25FY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.25FY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EX+1EY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EX-1EY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EX+1EY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EX-1EY	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EY+1EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EY-1EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EY+1EX	0.79	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EY-1EX	0.79	0.00	-0.04	-0.01	0.00	Design
1.3D+1L+0.25EX	2.76	0.02	0.82	0.11	0.00	Design
1.3D+1L+0.25EX	2.64	0.02	-1.12	-0.16	0.00	Design
1.3D+1L+0.25EY	2.71	0.62	-0.14	-0.02	0.08	Design
1.3D+1L+0.25EY	2.69	-0.58	-0.15	-0.02	-0.09	Design
0.8D+1EX	0.85	0.00	0.93	0.13	0.00	Design
0.8D+1EX	0.73	0.00	-1.01	-0.14	0.00	Design
0.8D+1EY	0.80	0.60	-0.03	-0.01	0.09	Design
0.8D+1EY	0.78	-0.60	-0.04	-0.01	-0.09	Design
DStlD1	1.69	0.01	-0.09	-0.01	0.00	Design
DStlD2	3.11	0.03	-0.18	-0.03	-0.01	Design
B232	3.11	0.03	-0.18	-0.03	-0.01	Design
B236X	3.15	0.03	0.48	0.07	-0.01	Design
B236X	3.07	0.03	-0.83	-0.12	-0.01	Design
B236Y	3.11	0.44	-0.17	-0.03	0.05	Design
B236Y	3.10	-0.38	-0.18	-0.03	-0.06	Design
1.4D	1.40	0.00	-0.07	-0.01	0.00	Design
1.2D+1.6L	3.59	0.05	-0.20	-0.03	-0.01	Design
1.2D+1L+1W	3.89	0.06	-0.22	-0.03	-0.01	Design
1.2D+1L-1W	1.50	0.01	-0.07	-0.01	0.00	Design
0.9D+1W	2.09	0.03	-0.11	-0.02	-0.01	Design
0.9D-1W	-0.30	-0.03	0.03	0.00	0.01	Design
1.3D+1L+0.25FX	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L-0.25FX	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L+0.25FY	2.79	0.03	-0.15	-0.02	-0.01	Design

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1.3D+1L-0.25FY	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L-0.3EX+1EY	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L+0.3EX-EY	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L+0.3EX+1EY	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L-0.3EX-1EY	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L-0.3EY+EX	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L+0.3EY-EX	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L+0.3EY+1EX	2.79	0.03	-0.15	-0.02	-0.01	Design
1.3D+1L-0.3EY-1EX	2.79	0.03	-0.15	-0.02	-0.01	Design
0.8D+0.25EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.25EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.25FY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.25FY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EX+1EY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EX-1EY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EX+1EY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EX-1EY	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EY+1EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EY-1EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D+0.3EY+1EX	0.80	0.00	-0.04	-0.01	0.00	Design
0.8D-0.3EY-1EX	0.80	0.00	-0.04	-0.01	0.00	Design
1.3D+1L+0.25EX	2.84	0.04	0.67	0.09	-0.01	Design
1.3D+1L+0.25EX	2.74	0.03	-0.97	-0.14	-0.01	Design
1.3D+1L+0.25EY	2.81	0.64	-0.15	-0.02	0.08	Design
1.3D+1L+0.25EY	2.77	-0.57	-0.16	-0.03	-0.09	Design
0.8D+1EX	0.85	0.00	0.78	0.11	0.00	Design
0.8D+1EX	0.75	0.00	-0.86	-0.12	0.00	Design
0.8D+1EY	0.82	0.61	-0.03	-0.01	0.09	Design
0.8D+1EY	0.78	-0.61	-0.04	-0.01	-0.09	Design
DStlD1	1.74	0.02	-0.09	-0.02	0.00	Design
DStlD2	3.24	0.05	-0.18	-0.03	-0.01	Design
B232	3.24	0.05	-0.18	-0.03	-0.01	Design
B236X	3.27	0.05	0.38	0.05	-0.01	Design
B236X	3.20	0.05	-0.74	-0.11	-0.01	Design
B236Y	3.25	0.46	-0.18	-0.03	0.05	Design
B236Y	3.23	-0.36	-0.19	-0.03	-0.07	Design
1.4D	1.08	0.08	0.00	0.00	-0.02	Design
1.2D+1.6L	1.67	0.23	0.07	0.01	-0.04	Design
1.2D+1L+1W	1.77	0.25	0.07	0.02	-0.05	Design
1.2D+1L-1W	1.02	0.09	0.01	0.00	-0.02	Design
0.9D+1W	1.07	0.13	0.03	0.01	-0.03	Design
0.9D-1W	0.32	-0.03	-0.03	-0.01	0.01	Design
1.3D+1L+0.25FX	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L-0.25FX	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L+0.25FY	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L-0.25FY	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L-0.3EX+1EY	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L+0.3EX-EY	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L+0.3EX+1EY	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L-0.3EX-1EY	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L-0.3EY+EX	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L+0.3EY-EX	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L+0.3EY+1EX	1.47	0.17	0.04	0.01	-0.03	Design
1.3D+1L-0.3EY-1EX	1.47	0.17	0.04	0.01	-0.03	Design
0.8D+0.25EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.25EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.25FY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.25FY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EX+1EY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EX-1EY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EX+1EY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EX-1EY	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EY+1EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EY-1EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D+0.3EY+1EX	0.62	0.04	0.00	0.00	-0.01	Design
0.8D-0.3EY-1EX	0.62	0.04	0.00	0.00	-0.01	Design
1.3D+1L+0.25EX	1.50	0.18	0.36	0.05	-0.03	Design
1.3D+1L+0.25EX	1.44	0.17	-0.28	-0.04	-0.03	Design
1.3D+1L+0.25EY	1.51	0.68	0.05	0.01	0.04	Design
1.3D+1L+0.25EY	1.43	-0.34	0.04	0.01	-0.10	Design
0.8D+1EX	0.65	0.05	0.32	0.05	-0.01	Design

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0.8D+1EX	0.59	0.04	-0.32	-0.05	-0.01	Design
0.8D+1EY	0.66	0.55	0.01	0.00	0.06	Design
0.8D+1EY	0.58	-0.47	0.00	0.00	-0.08	Design
DStlD1	1.01	0.11	0.02	0.00	-0.02	Design
DStlD2	1.47	0.21	0.06	0.01	-0.04	Design
B232	1.47	0.21	0.06	0.01	-0.04	Design
B236X	1.49	0.21	0.28	0.04	-0.04	Design
B236X	1.45	0.21	-0.15	-0.02	-0.04	Design
B236Y	1.50	0.56	0.07	0.01	0.01	Design
B236Y	1.44	-0.14	0.06	0.01	-0.09	Design

Cálculos de diseño

Diseño en el eje mayor
Placa base (AISC 360-22 LRFD)

Consideraciones geométricas

Dimensiones	Unidad	Valor	Min.	Max.	Est.	Referencias
Placa base						
Distancia del ancla al borde	[in]	1.25	0.25	--	✔	
Tamaño de soldadura	[1/16in]	5	2	--	✔	table J2.4

Verificación de diseño

Verificación	Unidad	Capacidad	Solicitación	EC ctrl	Rel.	Referencias
Base de concreto						
Aplastamiento por axial	[Kip/in2]	2.21	0.07	1.3D+1L+...	**0.03**	DG1 3.1.1
Placa base						
Flexión en fluencia (interfaz de aplastamiento)	[Kip*ft/ft]	2.81	0.36	1.3D+1L+...	**0.13**	DG1 Sec 3.1.2
Flexión en fluencia (interfaz de tensión)	[Kip*ft/ft]	2.81	0.64	B236X	**0.23**	DG1 Eq. 3.3.13
Columna						
Resistencia de la soldadura	[Kip/ft]	125.29	2.71	B236X	**0.02**	HSS Manual p. 7-10
Interacción de corte y axial en la soldadura	[Kip/ft]	83.53	7.05	1.3D+1L+...	**0.08**	Sec. J2.4

Relación **0.23**

Anclas

Consideraciones geométricas

Dimensiones	Unidad	Valor	Min.	Max.	Est.	Referencias
Anclas						
Espaciamiento entre anclas	[in]	4.50	2.00	--	✔	Sec. D.8.1
Recubrimiento de concreto	[in]	1.25	1.00	--	✔	Sec. 7.7.1
Longitud efectiva	[in]	12.33	--	39.67	✔	

Verificación de diseño

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Verificación	Unidad	Capacidad	Solicitación	EC ctrl	Rel.	Referencias
Tensión en anclas	[Kip]	6.17	1.13	B236X	0.18	Eq. D-3
Arrancamiento de ancla en tensión	[Kip]	5.97	1.13	B236X	0.19	Sec. D.4.1.1
Arrancamiento de grupo de anclas en tensión	[Kip]	6.12	3.51	1.3D+1L+...	0.57	Sec. D.4.1.1
Extracción por deslizamiento de ancla en tensión	[Kip]	9.13	1.13	B236X	0.12	Sec. D.4.1.1
Desprendimiento lateral de ancla en tensión	[Kip]	2.87	1.13	B236X	0.39	Sec. D.4.1.1
Desprendimiento lateral de grupo de anclas en tensión	[Kip]	11.47	2.21	B236X	0.19	Sec. D.4.1.1
Corte en el ancla	[Kip]	3.21	0.03	1.3D+1L+...	0.01	Eq. D-20
Arrancamiento de ancla a corte	[Kip]	0.64	0.03	1.3D+1L+...	0.04	Sec. D.4.1.1
Arrancamiento de grupo de anclas a corte	[Kip]	0.64	0.03	1.3D+1L+...	0.04	Sec. D.4.1.1
Desprendimiento de ancla a corte	[Kip]	11.93	0.03	1.3D+1L+...	0.00	Sec. D.4.1.1
Desprendimiento de grupo de anclas a corte	[Kip]	19.63	0.16	1.3D+1L+...	0.01	Sec. D.4.1.1
Interacción tensión corte	[Kip]	1.20	0.00	1.4D	0.00	Sec. D.7
Relación	**0.57**					

Diseño en el eje menor
Placa base (AISC 360-22 LRFD)

Consideraciones geométricas

Dimensiones	Unidad	Valor	Min.	Max.	Est.	Referencias
Placa base						
Distancia del ancla al borde	[in]	1.25	0.25	--	✓	
Tamaño de soldadura	[1/16in]	5	2	--	✓	table J2.4

Verificación de diseño

Verificación	Unidad	Capacidad	Solicitación	EC ctrl	Rel.	Referencias
Base de concreto						
Aplastamiento por axial	[Kip/in2]	2.21	0.07	1.3D+1L+...	0.03	DG1 3.1.1
Placa base						
Flexión en fluencia (interfaz de aplastamiento)	[Kip*ft/ft]	2.81	0.39	B236Y	0.14	DG1 Sec 3.1.2
Flexión en fluencia (interfaz de tensión)	[Kip*ft/ft]	2.81	0.64	B236X	0.23	DG1 Eq. 3.3.13
Columna						
Resistencia de la soldadura	[Kip/ft]	125.29	2.71	B236X	0.02	HSS Manual p. 7-10
Interacción de corte y axial en la soldadura	[Kip/ft]	83.53	7.15	B236Y	0.09	Sec. J2.4
Relación	**0.23**					

Anclas

Consideraciones geométricas

Dimensiones	Unidad	Valor	Min.	Max.	Est.	Referencias
Anclas						
Espaciamiento entre anclas	[in]	4.50	2.00	--	✓	Sec. D.8.1
Recubrimiento de concreto	[in]	1.25	3.00	--	✗	Sec. 7.7.1
Longitud efectiva	[in]	12.33	--	39.67	✓	

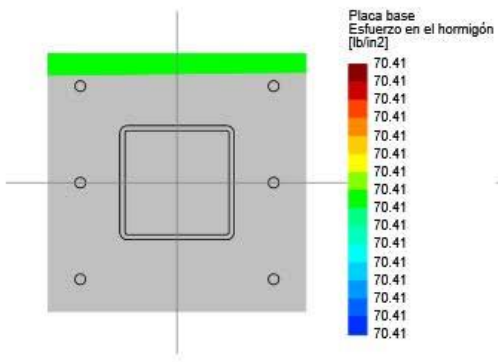
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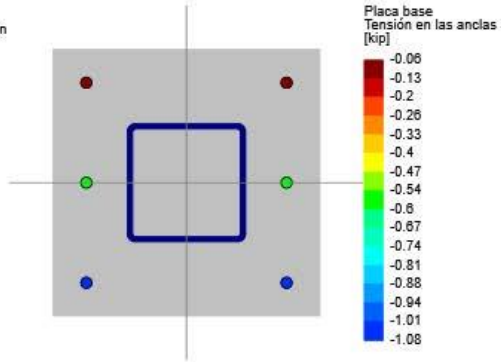
Verificación de diseño

Verificación	Unidad	Capacidad	Solicitación	EC ctrl	Rel.	Referencias
Tensión en anclas	[Kip]	6.17	1.13	B236X	**0.18**	Eq.D-3
Arrancamiento de ancla en tensión	[Kip]	5.97	1.13	B236X	**0.19**	Sec. D.4.1.1
Arrancamiento de grupo de anclas en tensión	[Kip]	6.12	3.51	1.3D+1L+...	**0.57**	Sec. D.4.1.1
Extracción por deslizamiento de ancla en tensión	[Kip]	9.13	1.13	B236X	**0.12**	Sec. D.4.1.1
Desprendimiento lateral de ancla en tensión	[Kip]	2.87	1.13	B236X	**0.39**	Sec. D.4.1.1
Desprendimiento lateral de grupo de anclas en tensión	[Kip]	11.47	2.37	B236Y	**0.21**	Sec. D.4.1.1
Corte en el ancla	[Kip]	3.21	0.03	1.3D+1L+...	**0.01**	Eq.D-20
Arrancamiento de ancla a corte	[Kip]	0.64	0.03	B236Y	**0.04**	Sec. D.4.1.1
Arrancamiento de grupo de anclas a corte	[Kip]	2.05	0.08	B236Y	**0.04**	Sec. D.4.1.1
Desprendimiento de ancla a corte	[Kip]	11.93	0.03	B236Y	**0.00**	Sec. D.4.1.1
Desprendimiento de grupo de anclas a corte	[Kip]	19.63	0.16	B236Y	**0.01**	Sec. D.4.1.1
Interacción tensión corte	[Kip]	1.20	0.00	1.4D	**0.00**	Sec. D.7
Relación	**0.57**					
Relación de resistencia crítica global	**0.57**					

Biaxial

Máxima compresión (1.3D+1L+0.25EX)





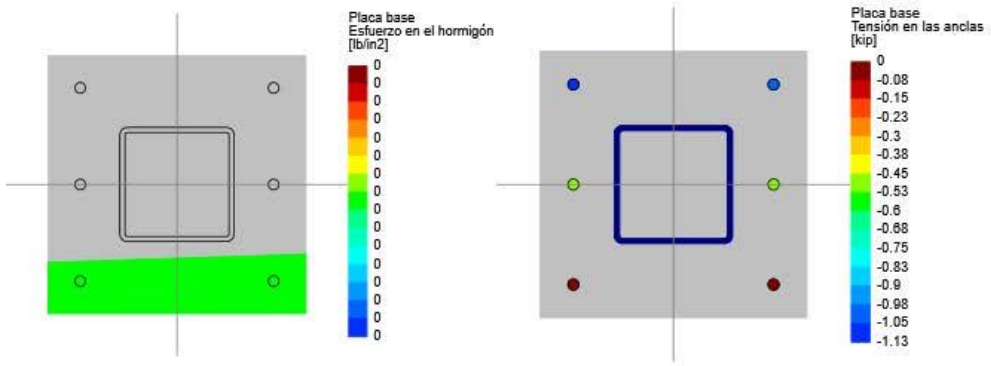
Máximo esfuerzo en el concreto	70.41	[lb/in2]
Mínimo esfuerzo en el concreto	70.41	[lb/in2]
Máxima tensión en las anclas	1.08	[kip]
Mínima tensión en las anclas	0.06	[kip]
Ángulo del eje neutro	0.66	[deg]
Ubicación del eje neutro	0.99	[in]
Longitud de aplastamiento	0.99	[in]

Tensiones en anclas

Ancla	Transversal [in]	Longitudinal [in]	Corte [kip]	Tensión [kip]
1	-4.50	-4.50	-0.03	1.07
2	-4.50	0.00	-0.03	0.56
3	-4.50	4.50	-0.03	0.06
4	4.50	4.50	-0.03	0.07
5	4.50	0.00	-0.03	0.57
6	4.50	-4.50	-0.03	1.08

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Máxima tensión (B236X)



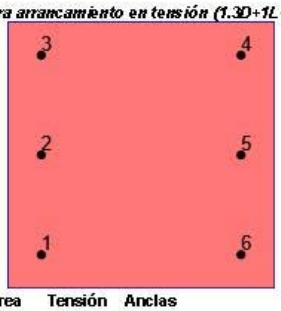
Máximo esfuerzo en el concreto	0.00	[lb/in2]
Mínimo esfuerzo en el concreto	0.00	[lb/in2]
Máxima tensión en las anclas	1.13	[kip]
Mínima tensión en las anclas	0.00	[kip]
Ángulo del eje neutro	-178.15	[deg]
Ubicación del eje neutro	2.76	[in]
Longitud de aplastamiento	2.76	[in]

Tensiones en anclas

Ancla	Transversal [in]	Longitudinal [in]	Corte [kip]	Tensión [kip]
1	-4.50	-4.50	0.02	0.00
2	-4.50	0.00	0.02	0.50
3	-4.50	4.50	0.02	1.13
4	4.50	4.50	0.02	1.09
5	4.50	0.00	0.02	0.46
6	4.50	-4.50	0.02	0.00

Eje mayor

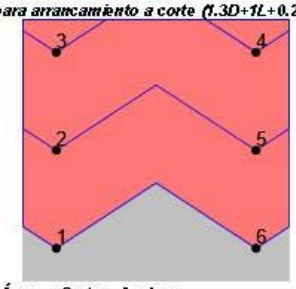
Resultados para arrancamiento en tensión (1.3D+1L+0.25EX)



Grupo	Área [in2]	Tensión [kip]	Anclas
1	144.00	3.51	1, 2, 3, 4, 5, 6

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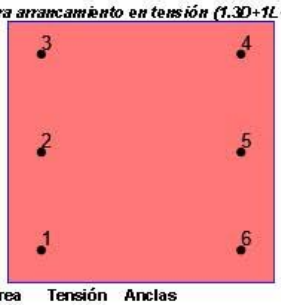
Resultados para arrancamiento a corte (1.3D+1L+0.25EX)



Grupo	Área [in2]	Corte [kip]	Anclas
1	8.44	0.03	3
2	8.44	0.03	4
3	189.00	0.16	1, 2, 3, 4, 5, 6
4	108.00	0.11	2, 3, 4, 5

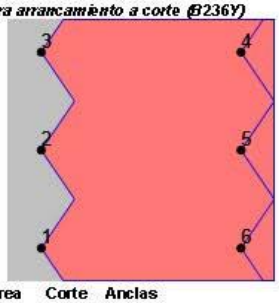
Eje menor

Resultados para arrancamiento en tensión (1.3D+1L+0.25EX)



Grupo	Área [in2]	Tensión [kip]	Anclas
1	144.00	3.51	1, 2, 3, 4, 5, 6

Resultados para arrancamiento a corte (B236Y)



Grupo	Área [in2]	Corte [kip]	Anclas
1	189.00	0.16	1, 2, 3, 4, 5, 6
2	27.00	0.08	4, 5, 6

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