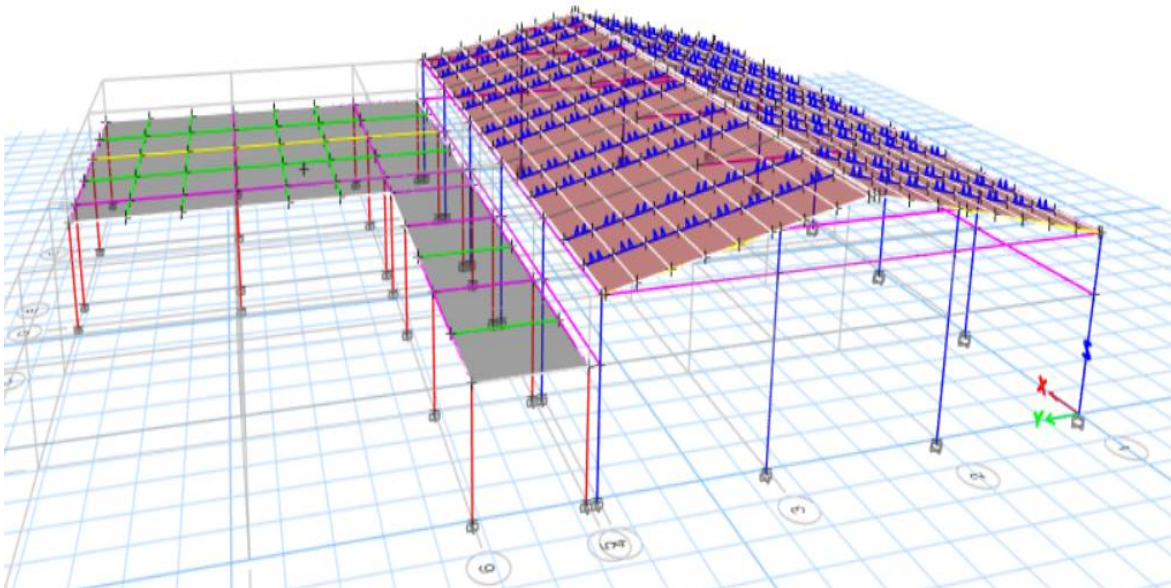


CIUDAD DE CARTAGENA (BOLIVAR)

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN
EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX -
DEPARTAMENTO DE BOLÍVAR

MEMORIAS
DE
CÁLCULOS ESTRUCTURALES



REGLAMENTO COLOMBIANO
DE CONSTRUCCION
SISMO RESISTENTE
NSR-10

Cartagena, Junio de 2025

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DESCRIPCIÓN DEL PROYECTO

Generalidades.

La presente memoria de cálculo corresponde al sistema estructural de las edificaciones de uno y dos niveles que se proyecta construir en un lote de propiedad de la Alcaldía Municipal de Mompo, localizado en el corregimiento Mompo, en el departamento de Bolívar, donde funcionará la Institución Educativa Normal Superior, en el municipio de Mompo, departamento de Bolívar.

La nueva institución educativa estará conformada por varios módulos: el Módulo 1 destinado a aulas de clase; el Módulo 2 para el centro de recursos; el Módulo 3 destinado a tecnología, innovación y aula polivalente; los Módulos 4 y 5 también destinados a aulas de clase; los Módulos 6.1 y 6.2 que albergarán el nivel preescolar; y el Módulo 7, el cual funcionará como cocina y comedor. Adicionalmente, se contempla la construcción de una cancha polideportiva.

Cada uno de los módulos incluye baterías sanitarias, laboratorio, aula tecnológica, unidad administrativa, comedor escolar con cocina integrada, así como demás componentes complementarios requeridos para el adecuado funcionamiento de la institución.

Descripción de las estructuras.

El sistema estructural de las edificaciones está conformado por un pórtico en acero estructural con capacidad moderada de disipación de energía en el rango inelástico (DMO). Este sistema se compone de perfiles tipo HEA para las columnas y perfiles IPE para las vigas, fabricados en acero de calidad Grado 50.

La placa de entrepiso se resuelve mediante una losa maciza de concreto reforzado, vaciada sobre una lámina de acero tipo steel deck, la cual se apoya directamente sobre un sistema de vigas de acero ortogonales y descolgadas. Estas vigas están diseñadas para resistir las cargas gravitacionales y sísmicas a las que estará sometida la estructura. La losa y el sistema de vigas actúan de manera monolítica, conformando un diafragma rígido que se integra como parte estructural del pórtico espacial.

Las vigas principales cumplen la función de soporte para las viguetas, mientras que las vigas secundarias enlazan las columnas en el sentido paralelo a la dirección de las láminas de metal deck y desempeñan un papel fundamental en la resistencia sísmica en esa dirección.

La cubierta de la edificación está conformada por láminas termoacústicas apoyadas sobre un sistema de correas elaboradas en perfiles de lámina delgada conformada en frío. Estas correas, a su vez, se apoyan sobre los perfiles IPE dispuestos en forma inclinada, conformando una cubierta a dos aguas.

La cimentación está compuesta por zapatas individuales unidas entre sí mediante vigas de enlace, todas apoyadas directamente sobre el terreno natural, el cual será previamente tratado conforme a lo establecido en los planos estructurales.

Dado que la estructura hace parte de una institución educativa, la edificación se clasifica dentro del Grupo de Uso III, y se le ha asignado un coeficiente de importancia de 1.25, en concordancia con los requisitos establecidos por la normativa vigente.

Análisis estructural.

El análisis del sistema estructural de la edificación se realizó mediante el uso de un software de elementos finitos, aplicando el método de desplazamientos para modelar el comportamiento global de la estructura. Para el análisis sísmico, se empleó el método del análisis dinámico elástico espectral, en conformidad con lo establecido en el Reglamento Colombiano de Construcción Sismo Resistente – NSR-10, considerando la localización del proyecto en la ciudad de Cartagena (zona de amenaza sísmica baja).

El procedimiento de diseño se basó en la aplicación de los estados límite de resistencia y servicio, siguiendo los requisitos generales definidos en el Capítulo C.2 de la NSR-10, y considerando adicionalmente los lineamientos del Capítulo C.3 para elementos sometidos a solicitaciones sísmicas en sistemas con disipación de energía moderada (DMO), como es el caso del pórtico en concreto reforzado adoptado para esta edificación.

Requisitos de durabilidad:

Para determinar la resistencia del concreto y seleccionar el recubrimiento adecuado del acero de refuerzo, se han considerado las condiciones de exposición a las que estará sometida la estructura a lo largo de su vida útil. Conforme a lo establecido en la Tabla C.4.2.1 "Categorías y clases de exposición" y la Tabla C.4.3.1 "Requisitos para el concreto según la clase de exposición" del reglamento, se determina que, para este caso específico, el concreto estará expuesto a ambientes clasificados como F0, C0, P0 y S0. Adicionalmente, teniendo en cuenta que se trata de una estructura con capacidad moderada de disipación de energía (DMO), se ha especificado una resistencia del concreto de 4.000 psi (28.0 MPa), diseñado con una relación agua/material cementante no superior a 0.50 y fabricado con cemento Portland tipo I.

En cuanto a la estructura metálica, esta será debidamente protegida mediante un tratamiento anticorrosivo, de acuerdo con las especificaciones contenidas en los planos. Asimismo, para su protección contra el fuego, se aplicará pintura intumescente, tal como también se indica en la documentación técnica del proyecto.

Materiales estructurales.

Los elementos que conforman la estructura fueron diseñados con los siguientes materiales:

- **Acero de Refuerzo:** Barras corrugadas de 60.000 Psi para el Refuerzo longitudinal (principal) y Transversal, con diámetros mayores e iguales a 3/8".
- **Concretos:** $F'_c = 280 \text{ Kg/cm}^2$ a los 28 días de edad, para todo el sistema en concreto reforzado. Contenido mínimo de Cemento 350 Kg/m³ $F'_c = 175 \text{ Kg/cm}^2$ para Solados.

- **Mampostería:**

La mampostería será construida con unidades de ladrillo hueco tipo No. 5 y utilizará mortero de pega tipo S. Toda la mampostería deberá ser reforzada y/o confinada, mediante columnas de confinamiento con un área no inferior a 200 cm² y con un espesor igual al del muro que confinan. Estas columnas se vaciarán posteriormente al alzado de los muros y directamente contra ellos. El refuerzo mínimo de estas columnas estará compuesto por cuatro (4) varillas de 3/8" y estribos en varilla No. 2, espaciados a 20 cm, con los primeros seis estribos dispuestos cada 10 cm en la zona adyacente a los elementos horizontales de amarre. Las vigas de amarre, por su parte, se fundirán directamente sobre el muro que confinan, con un ancho igual al del mismo y una sección transversal no inferior a 200 cm². Cualquier modificación en la estructura o en los materiales deberá ser informada previamente al ingeniero calculista.

Análisis de Cargas

- **Cargas muertas:**

La carga muerta cubre todas las cargas de elementos permanentes de construcción incluyendo su estructura, los muros, pisos, cubiertas, cielos rasos, escaleras, equipos fijos, y todas aquellas cargas que no son causadas por la ocupación y uso de la edificación.

CARGAS EN SEGUNDO PISO Y TERCER PISO

Carga por Acabados: 0.47 kN/m²

Carga por Cubierta Liviana

Cubierta econoroof: 0.05 kN/m²

Peso de correas metalicas: 0.18 kN/m²

Cielo raso + luminarias: 0.15 kN/m²

carga total: 0.38 kN/ m²

Carga por Muros sobre viga en salones

Espesor de muros: 0.15 m

Espesor de pañete en una cara: 0.00 m

Densidad de mampostería: 13.00 kN/m³

Densidad mortero de pañete: 21.00 kN/m³

Altura Fachada: 3.00 m

Carga: 5.85 kN/m

Carga por muros divisorios

Longitud de muros no estructurales: 14.66 m

Espesor de muros: 0.15 m

Densidad de mampostería: 13.00 kN/m³

Altura de pisos: 3.00 m

Área: 52.80 m²

Carga: 1.62 kN/m²

Carga por Muros sobre viga en baños

Espesor de muros: 0.15 m

Espesor de pañete en una cara: 0.02 m

Densidad de mampostería: 13.00 kN/m³

Densidad mortero de pañete: 21.00 kN/m³

Altura Fachada: 3.00 m

Carga: 7.11 kN/m

Carga por barandas

Carga: 0.75 kN/m

- **Cargas Vivas:**

Son aquellas cargas producidas por el uso y ocupación de la edificación.

Balcones	5.00 kN/m ²
Vivienda	1.80 kN/m ²
Escaleras	3.00 kN/m ²
Cubiertas	0.50 kN/m ²

Combinaciones de Carga:

Las combinaciones de cargas fueron tomadas del título B del Reglamento Colombiano de Construcción Sismorresistente NSR 10, donde para cargas de servicio se utilizaron las consignadas en el artículo B.2.3, y para cargas de diseño se utilizaron las descritas en el artículo B.2.4.

En las siguientes combinaciones, las cargas sísmicas vienen divididas por el factor de disipación de energía R, tal como la norma lo expresa en el artículo B.2.4.2.1, en el título B del Reglamento Colombiano de Construcción Sismorresistente NSR 10.

- 1.1. DISE 1: 1.4 peso propio + 1.4 sobrecarga permanente
- 1.2. DISE 2: 1.2 peso propio + 1.2 sobrecarga permanente + 1.6 carga viva
- 1.3. DISE 3: 1.2 peso propio + 1.2 sobrecarga permanente + 0.5 carga viva + 0.2 sismo x
- 1.4. DISE 4: 1.2 peso propio + 1.2 sobrecarga permanente + 0.5 carga viva + 0.2 sismo y
- 1.5. DISE 5: 0.9 peso propio + 0.9 sobrecarga permanente + 0.2 sismo x
- 1.6. DISE 6: 0.9 peso propio + 0.9 sobrecarga permanente + 0.2 sismo y
- 1.7. DISE 7: 1.2 peso propio + 1.2 sobrecarga permanente + 1.6 carga viva + 0.8 viento 1
- 1.8. DISE 8: 1.2 peso propio + 1.2 sobrecarga permanente + 1.6 carga viva + 0.8 viento 2
- 1.9. DISE 9: 1.2 peso propio + 1.2 sobrecarga permanente + 0.5 carga viva + 1.3 viento 1
- 1.10. DISE 10: 1.2 peso propio+ 1.2 sobrecarga permanente+ 0.5 carga viva + 1.3 viento 2
- 1.11. DISE 11: 0.9 peso propio + 0.9 sobrecarga permanente + 1.3 viento 1
- 1.12. DISE 11: 0.9 peso propio + 0.9 sobrecarga permanente + 1.3 viento 2

Análisis sísmico de la estructura

Datos	Unidad	Página
Ubicación de la Estructura-CIUDAD	Mompós	
Departamento	Bolívar	
Altura del edificio	7.00	[m] Título A
Numero de Pisos	2.00	
Tipo de Perfil del Suelo:	D	Tabla A.2.4-3
Grupo de Uso Edificación:	III	A.2.5.1
Sistema estructural de resistencia sísmica	2	d Tabla A.4.2-1

pórticos resistentes a momentos de acero estructural que resisten la totalidad de las fuerzas sísmicas y que no están limitados o adheridos a componentes mas rígidos, estructurales o no estructurales, que limiten los desplazamientos horizontales al verse sometidos a las fuerzas sísmicas

Parametros sísmicos

Zona de Amenaza Sísmica:	Intermedia	APÉNDICE A-4
Coeficiente de Aceleracion (Aa):	0.10	APÉNDICE A-4
Coeficiente de Velocidad (Av):	0.15	APÉNDICE A-4
Coeficiente de Amplificación de Sitio (Fa):	1.60	Tabla A.2.4-3
Coeficiente de Amplificación de Sitio (Fv):	2.20	Tabla A.2.4-4
Coeficiente de Importancia (I):	1.25	A.2.5.1
Espectro de Diseño (Sa):	Gráfico	Título A
Período de Vibración Inicial (To):	0.21	[s] Título A
Período de Vibración Corto (Tc):	0.99	[s] Título A
Período de Vibración Largo (TL):	5.28	[s] Título A

parámetros adicionales

Coeficiente (Ct):	0.072	Tabla A.4.2-1
Exponente (a):	0.8	Tabla A.4.2-1
Período de Vibración Aproximado (Ta = Ctha):	0.34	[s] Form. A.4.2-3
Coeficiente (Cu):	1.35	Form. A.4.2-2
Tmax= Cu*Ta	0.46	[s] Form. A.4.2-2

Capacidad de Disipación de Energía:	Moderada	
Coeficiente de Capacidad de Disipación de Energía Básico (R_0):	5.0	A.3.3.3-Tabla A.3-1 a Tabla A.3-4
Coeficiente de Reducción (f_a):	1.0	tabla A.3-7,
Coeficiente de Reducción (f_p):	1.0	tabla A.3-6,
Coeficiente de Reducción (f_r):	1.0	A.3.3.8
Coeficiente de Capacidad de Disipación de Energía de Diseño ($R = f_a f_p f_r R_0$):	5.00	form. A.3.3-1

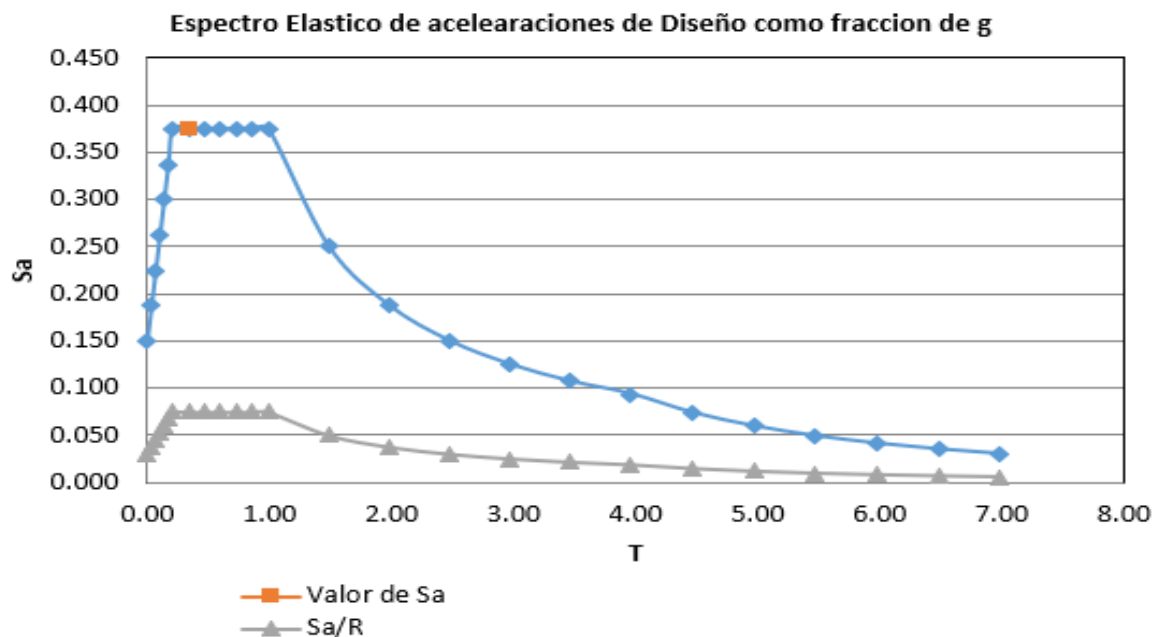


Ilustración 1. Espectro elástico de aceleraciones de Diseño como fracción de g

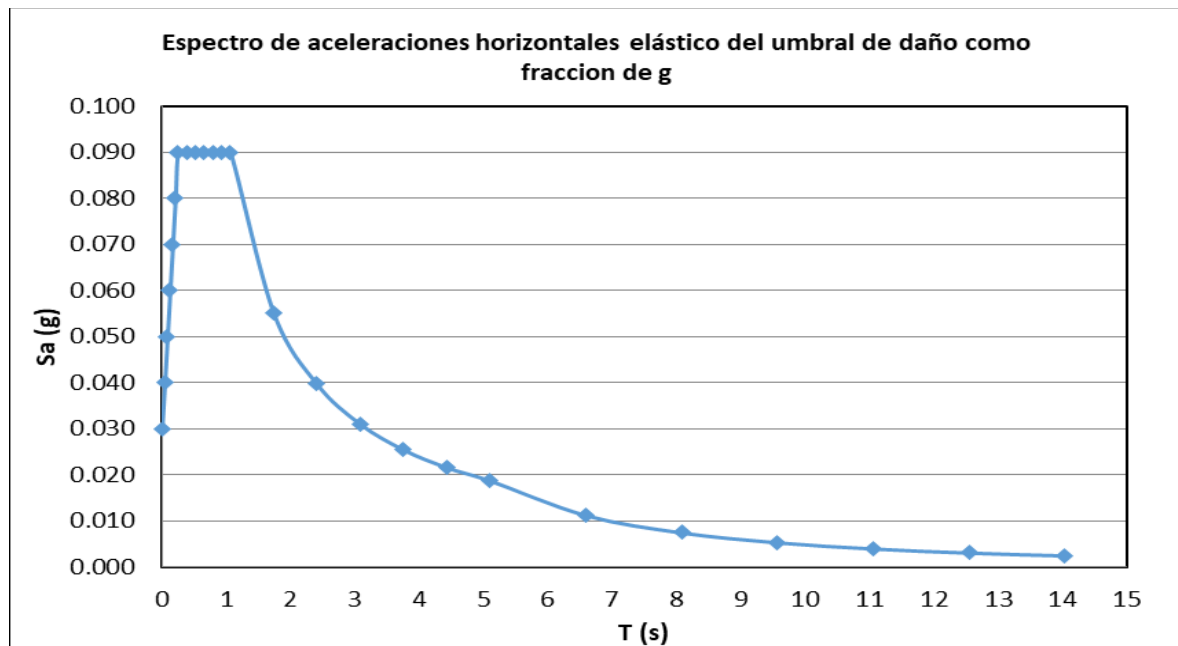


Ilustración 2. Espectro de aceleraciones horizontales elástico del umbral de daño como fracción de g

Vista General



Ilustración 3. Vista general de la institución educativa normal superior

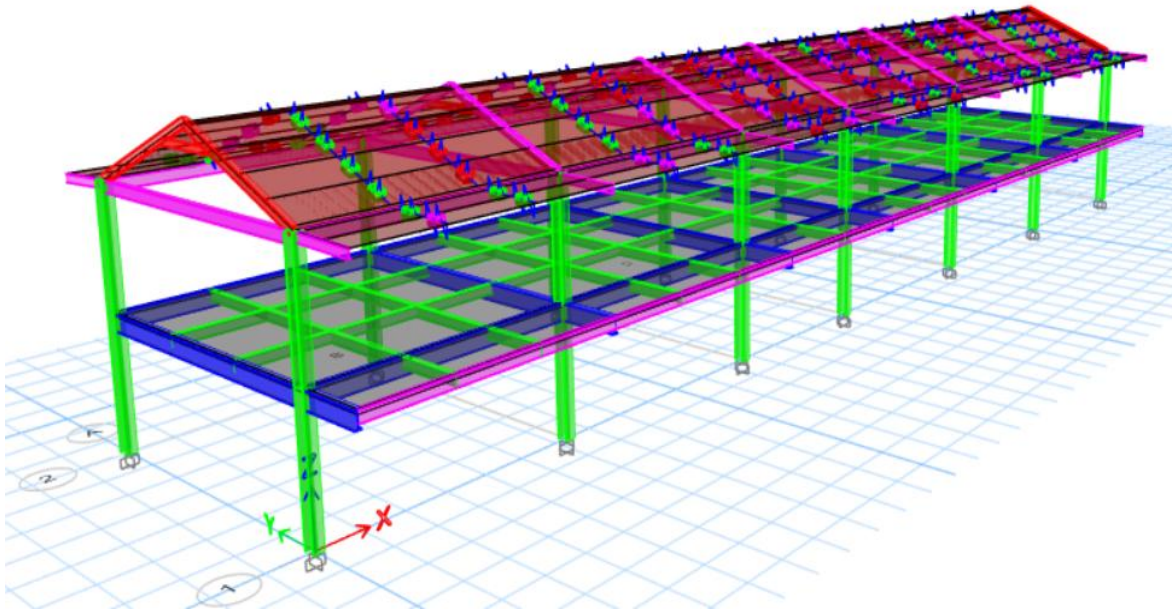


Ilustración 4. Modulo 1.

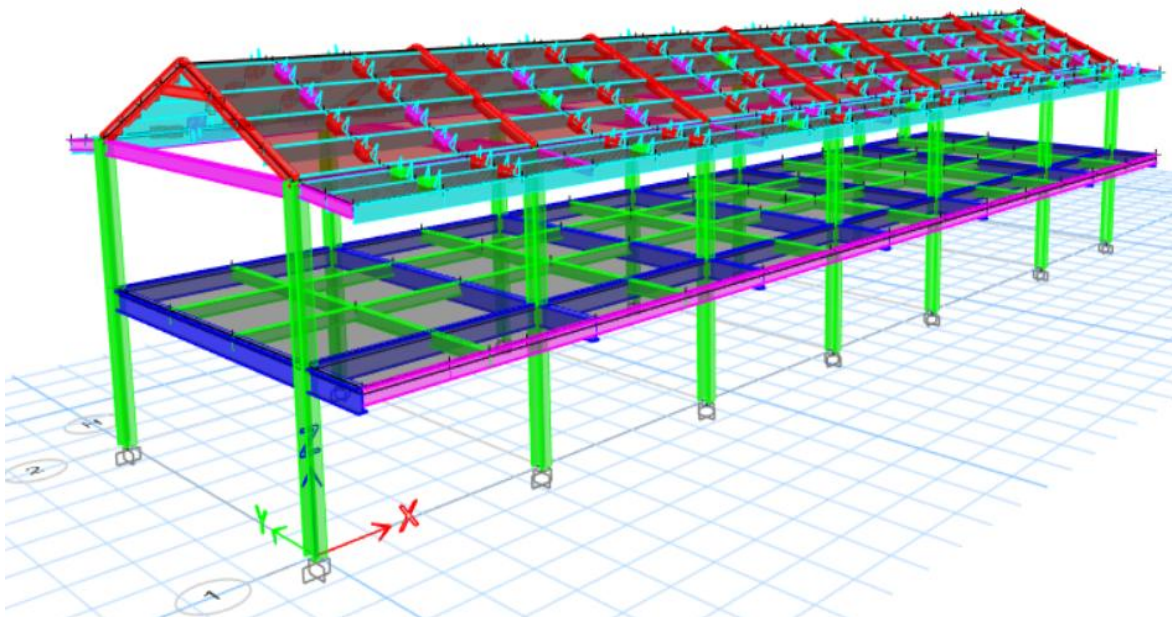


Ilustración 5. Modulo 2.

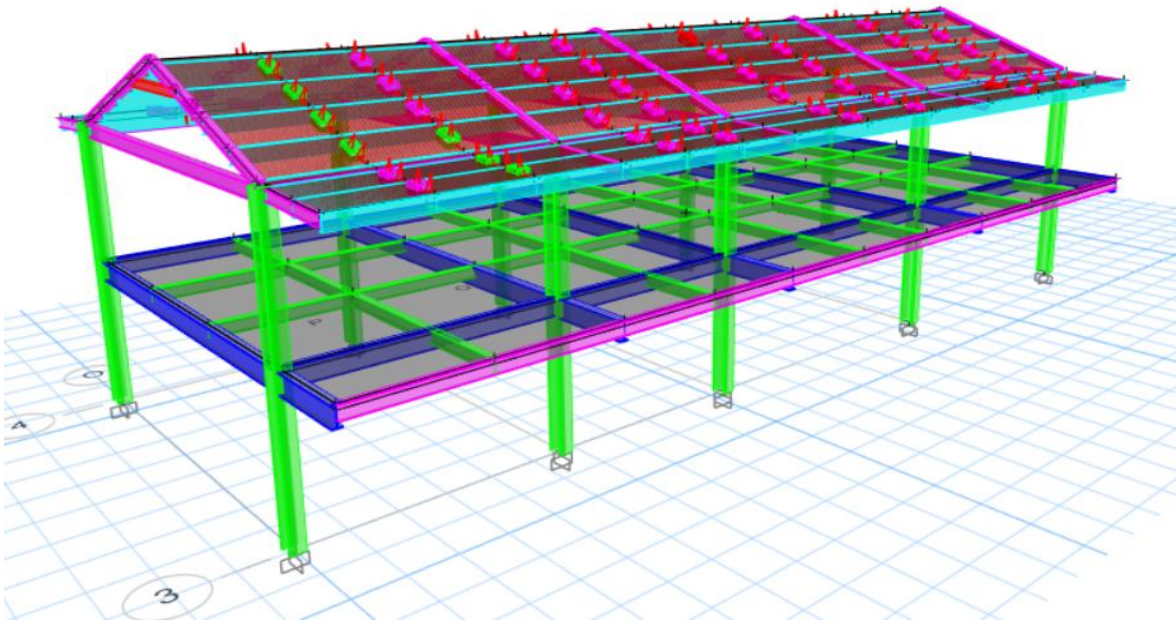


Ilustración 6. Modulo 3.

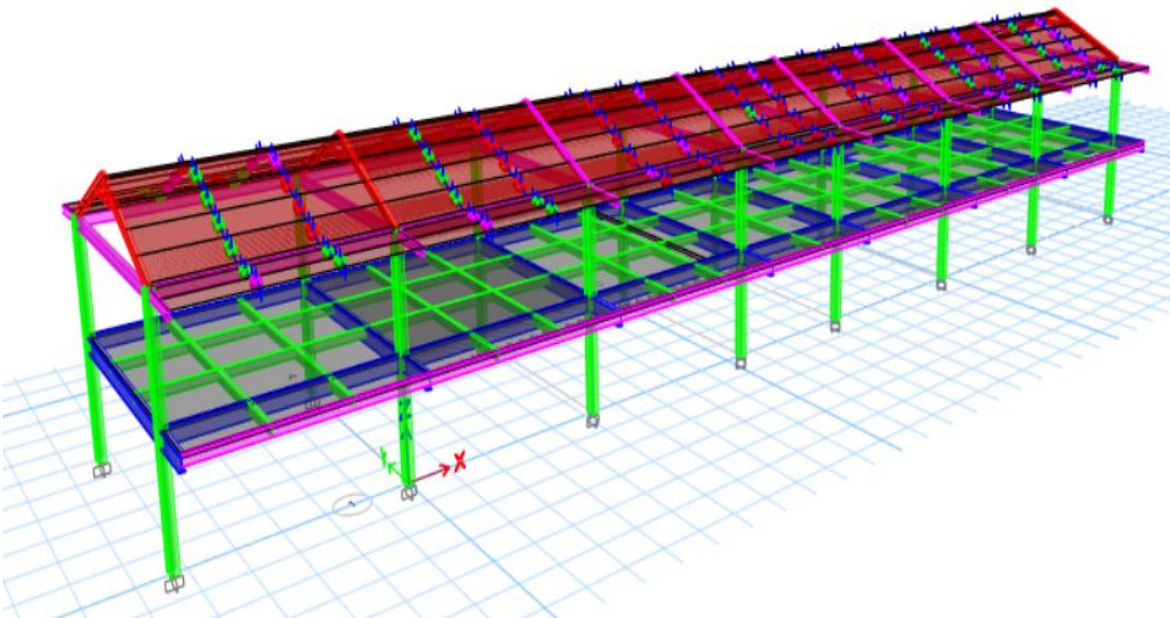


Ilustración 7. Modulo 4 y 5.

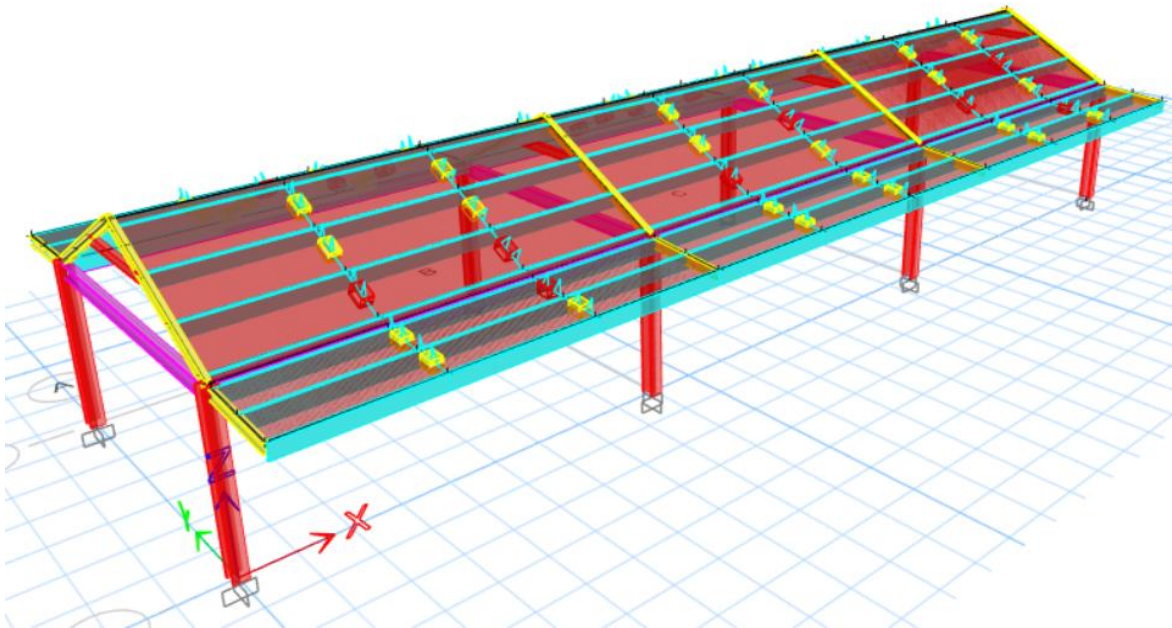


Ilustración 8. Modulo 6.1 y 6.2.

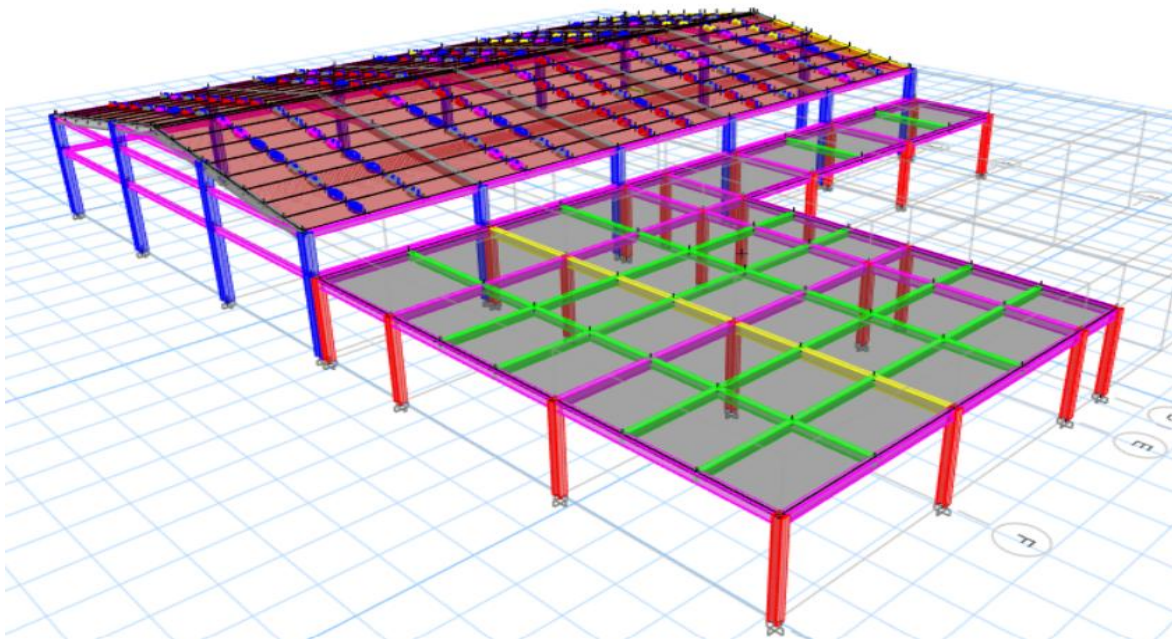


Ilustración 9. Modulo 7.

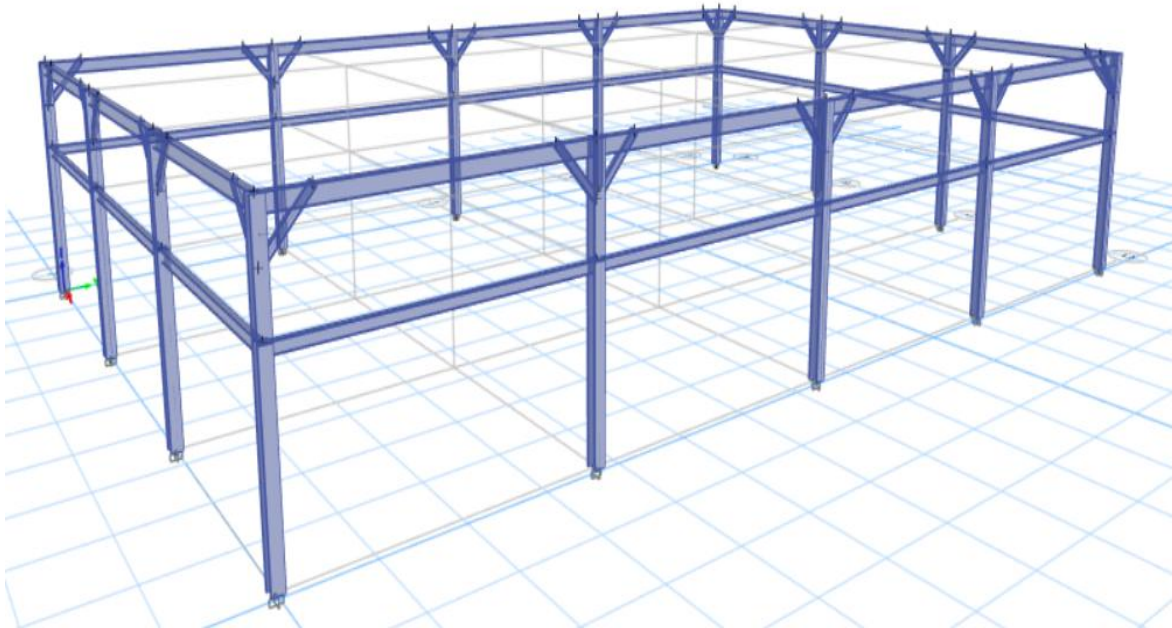


Ilustración 10. Estructura metálica cubierta cancha.



VISTA EN PERSPECTIVA

Ilustración 11. Estructura metálica cubierta cancha.

Calculo y corrección del cortante basal.

Modulo 1

CALCULO DEL CORTANTE BASAL SEGÚN NSR10 DE LA EDIFICACION

MODELO INICIAL

Response Spectrum Accelerations

Units: kN-m

Spec	Mode	Period	DampRatio	U1	U2	U3
SISMOX	1	0.429	0.05	3.6788	0	0
SISMOX	2	0.288	0.05	3.6788	0	0
SISMOX	3	0.262	0.05	3.6788	0	0
SISMOX	4	0.092	0.05	3.6788	0	0
SISMOX	5	0.072	0.05	3.6788	0	0
SISMOX	6	0.07	0.05	3.6788	0	0
SISMOY	1	0.429	0.05	0	3.6788	0
SISMOY	2	0.288	0.05	0	3.6788	0
SISMOY	3	0.262	0.05	0	3.6788	0
SISMOY	4	0.092	0.05	0	3.6788	0
SISMOY	5	0.072	0.05	0	3.6788	0
SISMOY	6	0.07	0.05	0	3.6788	0

MODELO INICIAL

Center Mass Rigidity

Story	MassX	MassY
CUBIERTA	47.5156	47.5156
PISO 2	310.5917	310.5917
Base	2.6842	2.6842
	360.7915	360.7915

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA NSR10 A.5

$S_a =$	0.375		obtenido del modelo
$g =$	9.81	m/s ²	
$M =$	360.79	Mg	masa obtenida del modelo
$V_s =$	1327.28	kN	

ESTRUCTURA REGULAR **SI**

CORTANTE BASAL DE ESTRUCTURA POR FUERZAS HORIZONTALES	$V_s =$	1317.39	kN
--	---------	----------------	----

RELACION ENTRE CORTANTES	0.99	veces
--------------------------	------	-------

MODULO 1
FUERZA HORIZONTAL EQUIVALENTE NSR10 A.4

Periodo fundamental de la edificación

$T_a = C t h_n^a$	$\alpha =$	0.80
	$C_t =$	0.072
	$h_n =$	7.00 m

NSR10 CAPITULO A.4

$$T_a = 0.34 \text{ s}$$

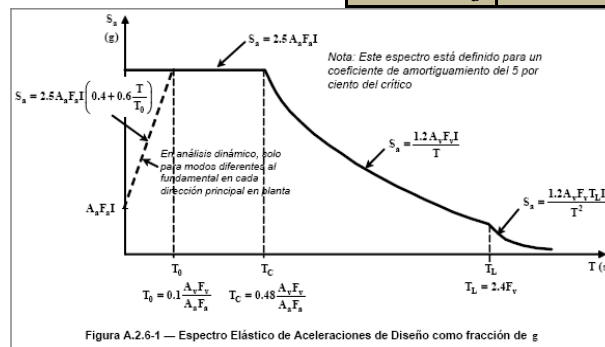
Parametros sísmicos

Municipio:	Mompos
Zona:	Intermedia
A_a :	0.10
A_v :	0.15
Tipo de suelo:	C
F_a :	1.20
F_v :	1.65
Grupo de uso:	III
Importancia, I:	1.25

Máxima aceleración horizontal de diseño

$S_a = 2.5 A_a F_a I$	$S_a =$	0.375 g
$S_a = 1.2 A_v F_v I / T$	$S_a =$	1.087 g
$S_a = 1.2 A_v F_v T_L I / T^2$	$S_a =$	12.605 g

$$S_a = 0.375 \text{ s}$$



Cálculo de fuerzas sísmicas en la estructura

$$V_s = 1317.39 \text{ kN}$$

$$k = 1.00$$

NIVEL	h_x	Carga real	Masa	$m_x h_x^k$	C_{vx}	F_x
CUBIERTA	7.00	466.13 kN	47.52 Mg	332.6	0.227	298.84 kN
PISO2	3.65	3046.90 kN	310.59 Mg	1133.7	0.773	1018.55 kN
S		3513.03 kN	358.11 Mg	1466.3	1.00	1317.39 kN

MODELO SIN AJUSTE AL CORTANTE BASAL

Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	1302.998	0.5339
SISMOYDER	All	All	0.5339	1234.5248

	F1	F2	Total	Factor	g corregido
$V_{s(x)}=$	1302.998	0	1303.00	0.815	7.994 No requiere corrección
$V_{s(y)}=$	0	1234.5248	1234.52	0.860	8.438 No requiere corrección

Nota: No se realiza ajuste de los resultados de acuerdo con A.5.4.5 (b) NSR-10

MODELO AJUSTADO AL CORTANTE BASAL - COMPROBACION

Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	1348.47	3.3852
SISMOYDER	All	All	2.9495	1348.4768

	F1	F2	Total	Comprobación
$V_{s(x)}=$	1348.47	0	1348.47	1194.6
$V_{s(y)}=$	0	1348.4768	1348.48	1194.6

Modulo 2

CALCULO DEL CORTANTE BASAL SEGÚN NSR10 DE LA EDIFICACION

MODELO INICIAL

Response Spectrum Accelerations

Units: kN-m

Spec	Mode	Period	DampRatio	U1	U2	U3
SISMOX	1	0.447	0.05	3.6773	0	0
SISMOX	2	0.315	0.05	3.6773	0	0
SISMOX	3	0.285	0.05	3.6773	0	0
SISMOX	4	0.186	0.05	3.6773	0	0
SISMOX	5	0.167	0.05	3.6773	0	0
SISMOX	6	0.142	0.05	3.6773	0	0
SISMOY	1	0.447	0.05	0	3.6773	0
SISMOY	2	0.315	0.05	0	3.6773	0
SISMOY	3	0.285	0.05	0	3.6773	0
SISMOY	4	0.186	0.05	0	3.6773	0
SISMOY	5	0.167	0.05	0	3.6773	0
SISMOY	6	0.142	0.05	0	3.6773	0

MODELO INICIAL
Center Mass Rigidity

Story	MassX	MassY
CUBIERTA	74.214808	74.2148
PISO 2	272.6768	272.677
Base	2.6850951	2.6851
	349.5767	349.577

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA NSR10 A.5

$S_a =$	0.375	
$g =$	9.81	m/s^2
$M =$	349.58	Mg
$V_s =$	1285.50	kN

obtenido del modelo

masa obtenida del modelo

ESTRUCTURA REGULAR

SI

CORTANTE BASAL DE ESTRUCTURA POR FUERZAS HORIZONTALES	$V_s =$	1276.13	kN
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RELACION ENTRE CORTANTES	0.99	veces
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MODULO 2
FUERZA HORIZONTAL EQUIVALENTE NSR10 A.4

Periodo fundamental de la edificación

$T_a = C t h_n^a$	$\alpha =$	0.80
	$C_t =$	0.072
	$h_n =$	7.00 m

NSR10 CAPITULO A.4

$T_a =$	0.34 s
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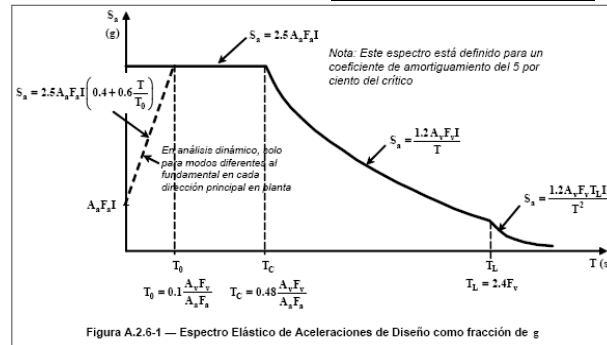
Parametros sísmicos

Municipio:	Mompox
Zona:	Intermedia
$A_a:$	0.10
$A_v:$	0.15
Tipo de suelo:	C
$F_a:$	1.20
$F_v:$	1.65
Grupo de uso:	III
Importancia, I:	1.25

Máxima aceleración horizontal de diseño

$S_a = 2.5 A_s F_a I$	$S_a =$	0.375 g
$S_a = 1.2 A_s F_v I / T$	$S_a =$	1.087 g
$S_a = 1.2 A_s F_v T_L I / T^2$	$S_a =$	12.605 g

$S_a =$	0.375 s
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Cálculo de fuerzas sísmicas en la estructura

$V_s =$	1276.13 kN
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$k = 1.00$

NIVEL	h_x	Carga real	Masa	$m_x h_x^k$	C_{vx}	F_x
CUBIERTA	7.00	728.05 kN	74.21 Mg	519.5	0.343	437.66 kN
PISO2	3.65	2674.96 kN	272.68 Mg	995.3	0.657	838.47 kN
S		3403.01 kN	346.89 Mg	1514.8	1.00	1276.13 kN

MODELO SIN AJUSTE AL CORTANTE BASAL

Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	1254.39	14.354973
SISMOYDER	All	All	14.355	1022.04112

	F1	F2	Total	Factor	g corregido	
$V_{s(x)} =$	1254.39097	0	1254.39	0.820	8.043	No requiere corrección
$V_{s(y)} =$	0	1022.041	1022.04	1.006	9.871	Se aplica en SISMOY

Nota: No se realiza ajuste de los resultados de acuerdo con A.5.4.5 (b) NSR-10

MODELO AJUSTADO AL CORTANTE BASAL - COMPROBACION

Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	1254.39	14.354973
SISMOYDER	All	All	14.4501	1028.8159

	F1	F2	Total	Comprobación	
$V_{s(x)} =$	1254.391	0	1254.39	1028.4	OK
$V_{s(y)} =$	0	1028.8159	1028.82	1028.4	OK

Modulo 3
CALCULO DEL CORTANTE BASAL SEGÚN NSR10 DE LA EDIFICACION

MODELO INICIAL
Response Spectrum Accelerations

Units: kN-m

Spec	Mode	Period	DampRatio	U1	U2	U3
SISMOX	1	0.451	0.05	3678.75	0	0
SISMOX	2	0.306	0.05	3678.75	0	0
SISMOX	3	0.274	0.05	3678.75	0	0
SISMOX	4	0.144	0.05	3678.75	0	0
SISMOX	5	0.138	0.05	3678.75	0	0
SISMOX	6	0.123	0.05	3678.75	0	0
SISMOX	7	0.115	0.05	3678.75	0	0
SISMOX	8	0.107	0.05	3678.75	0	0
SISMOX	9	0.098	0.05	3678.75	0	0
SISMOX	10	0.092	0.05	3678.75	0	0
SISMOX	11	0.023	0.05	3678.75	0	0
SISMOX	12	0.022	0.05	3678.75	0	0
SISMOY	1	0.451	0.05	0	3678.75	0
SISMOY	2	0.306	0.05	0	3678.75	0
SISMOY	3	0.274	0.05	0	3678.75	0
SISMOY	4	0.144	0.05	0	3678.75	0
SISMOY	5	0.138	0.05	0	3678.75	0
SISMOY	6	0.123	0.05	0	3678.75	0
SISMOY	7	0.115	0.05	0	3678.75	0
SISMOY	8	0.107	0.05	0	3678.75	0
SISMOY	9	0.098	0.05	0	3678.75	0
SISMOY	10	0.092	0.05	0	3678.75	0
SISMOY	11	0.023	0.05	0	3678.75	0
SISMOY	12	0.022	0.05	0	3678.75	0

MODELO INICIAL
Center Mass Rigidity

Story	MassX	MassY
CUBIERTA	34.134484	34.1345
PISO 2	191.70133	191.701
Base	1.9179531	1.91795
	227.75377	227.754

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA NSR10 A.5

$S_a =$	0.375	
$g =$	9.81	m/s ²
$M =$	227.75	Mg
$V_s =$	837.85	kN

obtenido del modelo

masa obtenida del modelo

ESTRUCTURA REGULAR

SI

CORTANTE BASAL DE ESTRUCTURA POR FUERZAS HORIZONTALES	$V_s =$	830.79	kN
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MODULO 3
FUERZA HORIZONTAL EQUIVALENTE NSR10 A.4

Periodo fundamental de la edificación

$T_a = C t h_n^a$	$\alpha =$	0.80
	$C_t =$	0.072
	$h_n =$	7.00 m

NSR10 CAPITULO A.4

$T_a =$	0.34 s
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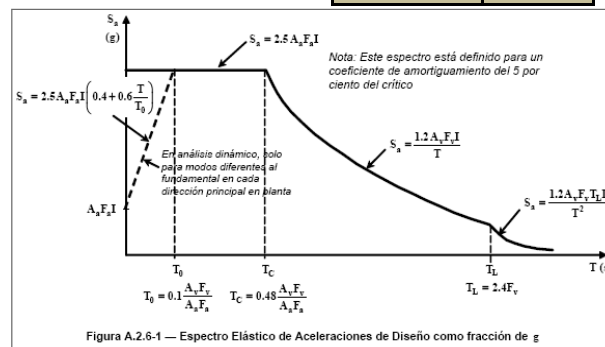
Parametros sísmicos

Municipio:	Mompox
Zona:	Intermedia
A_a :	0.10
A_v :	0.15
Tipo de suelo:	C
F_a :	1.20
F_v :	1.65
Grupo de uso:	III
Importancia, I:	1.25

Máxima aceleración horizontal de diseño

$S_a = 2.5 A_a F_a I$	$S_a =$	0.375 g
$S_a = 1.2 A_v F_v I / T$	$S_a =$	1.087 g
$S_a = 1.2 A_v F_v T_L / T^2$	$S_a =$	12.605 g

$S_a =$	0.375 s
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Cálculo de fuerzas sísmicas en la estructura

$V_s =$	830.79 kN
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$k = 1.00$

NIVEL	h_x	Carga real	Masa	$m_x h_x^k$	C_{vx}	F_x
CUBIERTA	7.00	334.86 kN	34.13 Mg	238.9	0.255	211.49 kN
PISO2	3.65	1880.59 kN	191.70 Mg	699.7	0.745	619.31 kN
S		2215.45 kN	225.84 Mg	938.7	1.00	830.79 kN

MODELO SIN AJUSTE AL CORTANTE BASAL

Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	816.511	6.557985
SISMOYDER	All	All	6.55799	687.686886

	F1	F2	Total	Factor	g corregido
$V_{s(x)}=$	816.510825	0	816.51	0.821	8.053
$V_{s(y)}=$	0	687.686886	687.69	0.975	9.562

Nota: No se realiza ajuste de los resultados de acuerdo con A.5.4.5 (b) NSR-10

Modulo 4 y 5

CALCULO DEL CORTANTE BASAL SEGÚN NSR10 DE LA EDIFICACION

MODELO INICIAL

Response Spectrum Accelerations

Units: kN-m

Spec	Mode	Period	DampRatio	U1	U2	U3
SISMOX	1	0.483	0.05	3678.75	0	0
SISMOX	2	0.322	0.05	3678.75	0	0
SISMOX	3	0.295	0.05	3678.75	0	0
SISMOX	4	0.102	0.05	3678.75	0	0
SISMOX	5	0.081	0.05	3678.75	0	0
SISMOX	6	0.078	0.05	3678.75	0	0
SISMOY	1	0.483	0.05	0	3678.75	0
SISMOY	2	0.322	0.05	0	3678.75	0
SISMOY	3	0.295	0.05	0	3678.75	0
SISMOY	4	0.102	0.05	0	3678.75	0
SISMOY	5	0.081	0.05	0	3678.75	0
SISMOY	6	0.078	0.05	0	3678.75	0

MODELO INICIAL

Center Mass Rigidity

Story	MassX	MassY
CUBIERTA	61.865588	61.8656
PISO 2	384.18668	384.187
Base	3.0687642	3.06876
	449.12103	449.121

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA NSR10 A.5

$S_a =$	0.375	
$g =$	9.81	m/s^2
$M =$	449.12	Mg
$V_s =$	1652.20	kN

obtenido del modelo

masa obtenida del modelo

ESTRUCTURA REGULAR

SI

CORTANTE BASAL DE ESTRUCTURA POR FUERZAS HORIZONTALES	$V_s =$	1640.91	kN
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MODULO 4 y 5

FUERZA HORIZONTAL EQUIVALENTE NSR10 A.4

Periodo fundamental de la edificación

$T_a = C_t h_n^a$	$\alpha =$	0.80
	$C_t =$	0.072
	$h_n =$	7.00 m

NSR10 CAPITULO A.4

$T_a =$	0.34 s
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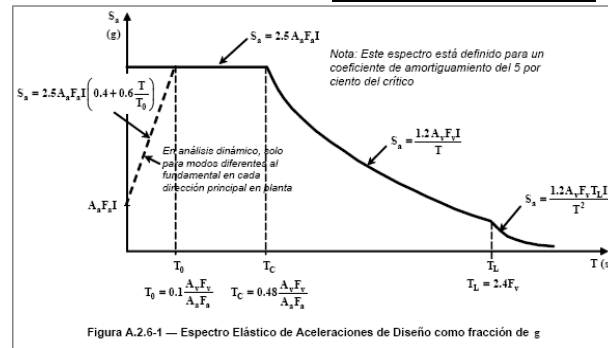
Parametros sísmicos

Municipio:	Mompox
Zona:	Intermedia
$A_a:$	0.10
$A_v:$	0.15
Tipo de suelo:	C
$F_a:$	1.20
$F_v:$	1.65
Grupo de uso:	III
Importancia, I:	1.25

Máxima aceleración horizontal de diseño

$S_a = 2.5 A_a F_a I$	$S_a =$	0.375 g
$S_a = 1.2 A_v F_v I / T$	$S_a =$	1.087 g
$S_a = 1.2 A_v F_v T_L / T^2$	$S_a =$	12.605 g

$S_a =$	0.375 s
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Cálculo de fuerzas sísmicas en la estructura

$V_s = 1640.91 \text{ kN}$

$k = 1.00$

NIVEL	h_x	Carga real	Masa	$m_x h_x^k$	C_{vx}	F_x
CUBIERTA	7.00	606.90 kN	61.87 Mg	433.1	0.236	387.18 kN
PISO2	3.65	3768.87 kN	384.19 Mg	1402.3	0.764	1253.73 kN
S		4375.77 kN	446.05 Mg	1835.3	1.00	1640.91 kN

MODELO SIN AJUSTE AL CORTANTE BASAL
Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	1622.64	1.027107
SISMOYDER	All	All	1.02711	1530.93977

	F1	F2	Total	Factor	g corregido
$V_{s(x)} =$	1622.6358	0	1622.64	0.815	7.991 No requiere corrección
$V_{s(y)} =$	0	1530.93977	1530.94	0.863	8.470 No requiere corrección

Nota: No se realiza ajuste de los resultados de acuerdo con A.5.4.5 (b) NSR-10

Modulo 6
CALCULO DEL CORTANTE BASAL SEGÚN NSR10 DE LA EDIFICACION

MODELO INICIAL
Response Spectrum Accelerations

Units: kN-m

Spec	Mode	Period	DampRatio	U1	U2	U3
SISMOX	1	0.2	0.05	3.6788	0	0
SISMOX	2	0.192	0.05	3.6788	0	0
SISMOX	3	0.151	0.05	3.6788	0	0
SISMOX	4	0.149	0.05	3.6788	0	0
SISMOX	5	0.121	0.05	3.6788	0	0
SISMOX	6	0.121	0.05	3.6788	0	0
SISMOY	1	0.2	0.05	0	3.6788	0
SISMOY	2	0.192	0.05	0	3.6788	0
SISMOY	3	0.151	0.05	0	3.6788	0
SISMOY	4	0.149	0.05	0	3.6788	0
SISMOY	5	0.121	0.05	0	3.6788	0
SISMOY	6	0.121	0.05	0	3.6788	0

MODELO INICIAL
Center Mass Rigidity

Story	MassX	MassY
PISO 2	29.370748	29.3707
Base	0.2662434	0.26624
	29.636991	29.637

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA NSR10 A.5

$S_a =$	0.375	
$g =$	9.81	m/s ²
$M =$	29.64	Mg
$V_s =$	109.03	kN

obtenido del modelo

masa obtenida del modelo

ESTRUCTURA REGULAR

SI

CORTANTE BASAL DE ESTRUCTURA POR FUERZAS HORIZONTALES	$V_s =$	108.05	kN
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MODULO 6
FUERZA HORIZONTAL EQUIVALENTE NSR10 A.4

Periodo fundamental de la edificación

$T_a = C t h_n^a$	$\alpha =$	0.80
	$C_t =$	0.072
	$h_n =$	3.65 m

NSR10 CAPITULO A.4

$T_a =$	0.20 s
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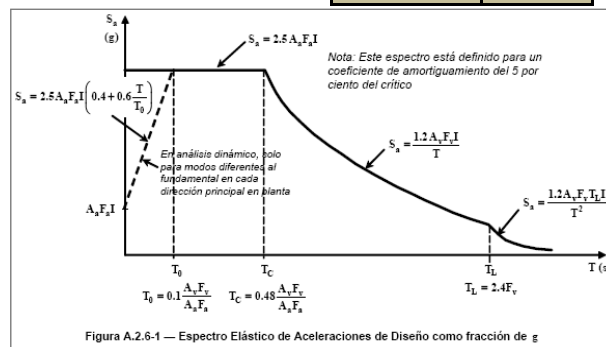
Parametros sísmicos

Municipio:	Mompox
Zona:	Intermedia
$A_a:$	0.10
$A_v:$	0.15
Tipo de suelo:	C
$F_a:$	1.20
$F_v:$	1.65
Grupo de uso:	III
Importancia, I:	1.25

Máxima aceleración horizontal de diseño

$S_a = 2.5 A_a F_a I$	$S_a =$	0.375 g
$S_a = 1.2 A_v F_v I / T$	$S_a =$	1.830 g
$S_a = 1.2 A_v F_v T_L / T^2$	$S_a =$	35.730 g

$S_a =$	0.375 s
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Cálculo de fuerzas sísmicas en la estructura

$V_s =$	108.05 kN
---------	-----------

$k = 1.00$

NIVEL	h_x	Carga real	Masa	$m_x h_x^k$	C_{vx}	F_x
Piso 1	3.65	288.13 kN	29.37 Mg	107.2	1.000	108.05 kN
S		288.13 kN	29.37 Mg	107.2	1.00	108.05 kN

MODELO SIN AJUSTE AL CORTANTE BASAL

Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	85.4147	0.00028194
SISMOYDER	All	All	0.00028	83.490948

	F1	F2	Total	Factor	g corregido
$V_{s(x)}=$	85.414689	0	85.41	1.021	10.018
$V_{s(y)}=$	0	83.490948	83.49	1.045	10.248

Nota: Se realiza ajuste de los resultados de acuerdo con A.5.4.5 (b) NSR-10

MODELO AJUSTADO AL CORTANTE BASAL - COMPROBACION

Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	87.2266	0.00028792
SISMOYDER	All	All	0.00029	87.235425

	F1	F2	Total	Comprobación
$V_{s(x)}=$	87.226596	0	87.23	87.2
$V_{s(y)}=$	0	87.235425	87.24	87.2

OK

OK

Modulo 7
CALCULO DEL CORTANTE BASAL SEGÚN NSR10 DE LA EDIFICACION

MODELO INICIAL
Response Spectrum Accelerations

Units: kN-m

Spec	Mode	Period	DampRatio	U1	U2	U3
SISMOX	1	0.513	0.05	3.6788	0	0
SISMOX	2	0.428	0.05	3.6788	0	0
SISMOX	3	0.317	0.05	3.6788	0	0
SISMOX	4	0.288	0.05	3.6788	0	0
SISMOX	5	0.248	0.05	3.6788	0	0
SISMOX	6	0.248	0.05	3.6788	0	0
SISMOX	7	0.243	0.05	3.6788	0	0
SISMOX	8	0.219	0.05	3.6788	0	0
SISMOX	9	0.196	0.05	3.6788	0	0
SISMOX	10	0.193	0.05	3.6788	0	0
SISMOX	11	0.172	0.05	3.6788	0	0
SISMOX	12	0.164	0.05	3.6788	0	0
SISMOY	1	0.513	0.05	0	3.6788	0
SISMOY	2	0.428	0.05	0	3.6788	0
SISMOY	3	0.317	0.05	0	3.6788	0
SISMOY	4	0.288	0.05	0	3.6788	0
SISMOY	5	0.248	0.05	0	3.6788	0
SISMOY	6	0.248	0.05	0	3.6788	0
SISMOY	7	0.243	0.05	0	3.6788	0
SISMOY	8	0.219	0.05	0	3.6788	0
SISMOY	9	0.196	0.05	0	3.6788	0
SISMOY	10	0.193	0.05	0	3.6788	0
SISMOY	11	0.172	0.05	0	3.6788	0
SISMOY	12	0.164	0.05	0	3.6788	0

MODELO INICIAL
Center Mass Rigidity

Story	MassX	MassY
Cubierta	78.27605	78.2761
PISO 1	126.29943	126.299
Base	5.1729111	5.17291
	209.7484	209.748

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA NSR10 A.5

$S_a =$	0.375	
$g =$	9.81	m/s ²
$M =$	209.75	Mg
$V_s =$	771.62	kN

obtenido del modelo

masa obtenida del modelo

ESTRUCTURA REGULAR

SI

CORTANTE BASAL DE ESTRUCTURA POR FUERZAS HORIZONTALES	$V_s =$	752.58	kN
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MODULO 7
FUERZA HORIZONTAL EQUIVALENTE NSR10 A.4

Periodo fundamental de la edificación

$T_a = C t h_n^a$	$\alpha =$	0.80
	$C_t =$	0.072
	$h_n =$	3.65 m

NSR10 CAPITULO A.4

$T_a =$	0.20 s
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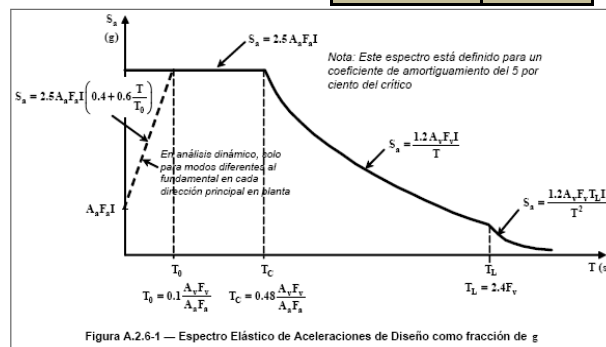
Parametros sísmicos

Municipio:	Mompox
Zona:	Intermedia
$A_a:$	0.10
$A_v:$	0.15
Tipo de suelo:	C
$F_a:$	1.20
$F_v:$	1.65
Grupo de uso:	III
Importancia, I:	1.25

Máxima aceleración horizontal de diseño

$S_a = 2.5 A_a F_a I$	$S_a =$	0.375 g
$S_a = 1.2 A_v F_v I / T$	$S_a =$	1.830 g
$S_a = 1.2 A_v F_v T_L I / T^2$	$S_a =$	35.730 g

$S_a =$	0.375 s
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Cálculo de fuerzas sísmicas en la estructura

$V_s =$	752.58 kN
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$k = 1.00$

NIVEL	h_x	Carga real	Masa	$m_x h_x^k$	C_{vx}	F_x
Piso 2	3.65	767.89 kN	78.28 Mg	285.7	0.620	466.42 kN
Piso 1	3.65	1239.00 kN	126.30 Mg	461.0	1.000	752.58 kN
S		1239.00 kN	204.58 Mg	461.0	1.00	752.58 kN

MODELO SIN AJUSTE AL CORTANTE BASAL
Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	519.398	33.916113
SISMOYDER	All	All	33.9161	493.568568

	F1	F2	Total	Factor	g corregido
$V_{s(x)}=$	519.398298	0	519.40	1.188	11.659 Se aplica en SISMOX
$V_{s(y)}=$	0	493.568568	493.57	1.251	12.269 Se aplica en SISMOY

Nota: Se realiza ajuste de los resultados de acuerdo con A.5.4.5 (b) NSR-10

MODELO AJUSTADO AL CORTANTE BASAL - COMPROBACION
Reacciones en la base extraídas del modelo

Spec	Mode	Dir	F1	F2
SISMOXDER	All	All	617.348	40.312233
SISMOYDER	All	All	42.4204	617.338395

	F1	F2	Total	Comprobación	
$V_{s(x)}=$	617.348205	0	617.35	617.3	OK
$V_{s(y)}=$	0	617.3384	617.34	617.3	OK

Cálculo de derivas.

PROYECTO: MODULO 1
CÁLCULO DE DERIVAS (ESPECTRO NORMAL NSR-10)

STORY DATA			
Name	Height	Elevation	Master Story
Story2	2.60	5.20	
Story1	2.60	2.60	Yes
Base	0.00	0.00	No

Estructuras de	Deriva Maxima	Usada
Concreto reforzado, metalicas y de madera	1.0 % (0.010 hpi)	Si
mamposteria	0.5 % (0.005 hpi)	

$$\Delta_{\max}^i = \sqrt{\sum_{j=1}^2 \left(\partial_{\text{tot},j}^i - \partial_{\text{tot},j}^{i-1} \right)^2}$$

A.6.3-1 NSR-10

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

POINT DISPLACEMENTS										Δ_{max}^i (X)	Δ_{max}^i (Y)	1.0 % hpi	% hpi (X)	% hpi (Y)	obs
Story	Label	ad Case/Com	UX	UY	UZ	RX	RY	RZ				(m)			
Story2	1	DERIVA 1K	0.014073	-0.00034	-0.000887	-0.000187	0.000471	0.001908	0.006341	0.000333	0.026	0.243885	0.0128	O.k	
Story2	1	DERIVA 1K	-0.014177	-0.00118	-0.000955	-0.000236	-0.000351	-0.001903	0.006414	0.000713	0.026	0.25	0.03	O.k	
Story2	1	DERIVA 1Y	0.000486	0.011266	-0.000598	0.000471	0.000075	0.000097	0.000206	0.004902	0.026	0.007923	0.19	O.k	
Story2	1	DERIVA 1Y	-0.00059	-0.01279	-0.001244	-0.000894	0.000045	-0.000091	0.000279	0.005949	0.026	0.01	0.23	O.k	
Story2	1	DERIVA 2X	0.01411	-3.6E-05	-0.000548	-0.000135	0.000446	0.001904	0.006368	0.000053	0.026	0.24	0.00	O.k	
Story2	1	DERIVA 2X	-0.01414	-0.00088	-0.000616	-0.000184	-0.000375	-0.001907	0.006388	0.000506	0.026	0.25	0.02	O.k	
Story2	1	DERIVA 2Y	0.000523	0.011573	-0.000259	0.000523	0.00005	0.000093	0.000233	0.00511	0.026	0.01	0.20	O.k	
Story2	1	DERIVA 2Y	-0.000552	-0.01249	-0.000904	-0.000841	0.00002	-0.000095	0.000252	0.00574	0.026	0.01	0.22	O.k	
Story1	1	DERIVA 1K	0.007732	-9E-06	-0.000573	-0.000072	0.00084	0.001039	1E-05	0.00008	0.026	0.00	0.00	O.k	
Story1	1	DERIVA 1K	-0.007763	-0.00047	-0.000628	-0.000155	-0.000773	-1.04E-03	1.1E-05	0.000099	0.026	0.00	0.00	O.k	
Story1	1	DERIVA 1Y	0.00028	0.006364	-0.000348	0.001044	0.000064	0.000052	0.00001	9.9E-05	0.026	0.00	0.00	O.k	
Story1	1	DERIVA 1Y	-0.000311	-0.00684	-0.000853	-0.001271	0.000003	-0.00005	1.1E-05	0.000098	0.026	0.00	0.00	O.k	
Story1	1	DERIVA 2X	0.007742	0.000089	-0.000362	-0.000055	0.00083	0.001038	0.007742	0.000089	0.026	0.30	0.00	O.k	
Story1	1	DERIVA 2X	-0.007752	-0.00037	-0.000416	-0.000138	-0.000783	-0.001038	0.007752	0.000372	0.026	0.30	0.01	O.k	
Story1	1	DERIVA 2Y	0.00029	0.006463	-0.000136	0.001061	0.000054	0.000051	0.00029	0.006463	0.026	0.01	0.25	O.k	
Story1	1	DERIVA 2Y	-0.0003	-0.00675	-0.000641	-0.001254	-0.000007	-0.000051	0.0003	0.006746	0.026	0.01	0.26	O.k	
Base	1	DERIVA 1K	0	0	0	0	0	0			0.000				
Base	1	DERIVA 1K	0	0	0	0	0	0			0.000				
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000				
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000				
Base	1	DERIVA 2X	0	0	0	0.00E+00	0	0			0.000				
Base	1	DERIVA 2X	0	0	0	0	0	0			0.000				
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000				
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000				
Story2	10	DERIVA 1K	0.011734	0.004893	-0.000262	0.00027	0.000324	0.001908	9E-06	0.000294	0.026	0.00	0.01	O.k	
Story2	10	DERIVA 1K	-0.011802	-0.0064	-0.000662	-0.000153	-0.001031	-0.001903	1E-05	0.000294	0.026	0.00	0.01	O.k	
Story2	10	DERIVA 1Y	0.000442	0.011232	-0.000411	0.000537	-0.000321	0.000097	0.000009	0.000294	0.026	0.00	0.01	O.k	
Story2	10	DERIVA 1Y	-0.00051	-0.01274	-0.000512	-0.00042	-0.000386	-0.000091	0.00001	0.000294	0.026	0.00	0.01	O.k	
Story2	10	DERIVA 2X	0.011743	0.005187	-0.000076	0.000229	0.000503	0.001904	0.005377	0.002346	0.026	0.21	0.09	O.k	
Story2	10	DERIVA 2X	-0.011792	-0.00611	-0.000477	-0.000194	-0.000853	-0.001907	0.005411	0.002795	0.026	0.21	0.11	O.k	
Story2	10	DERIVA 2Y	0.000451	0.011526	-0.000226	0.000496	-0.000143	0.000093	0.000201	0.00518	0.026	0.01	0.20	O.k	
Story2	10	DERIVA 2Y	-0.0005	-0.01245	-0.000327	-0.000461	-0.000208	-0.000095	0.000235	0.005629	0.026	0.01	0.22	O.k	
Story1	10	DERIVA 1K	0.006366	0.002841	-1.54E-04	0.000526	0.001153	0.001039	0.006366	0.002841	0.026	0.24	0.11	O.k	
Story1	10	DERIVA 1K	-0.006381	-0.00331	-0.000456	-0.000396	-0.001506	-0.001037	0.006381	0.003314	0.026	0.25	0.13	O.k	
Story1	10	DERIVA 1Y	0.00025	0.006346	-0.000265	0.00104	-0.000119	0.000052	0.000025	0.006346	0.026	0.01	0.24	O.k	
Story1	10	DERIVA 1Y	-0.000265	-0.00682	-0.000346	-0.00091	-0.000234	-0.00005	0.000265	0.006819	0.026	0.01	0.26	O.k	
Story1	10	DERIVA 2X	0.006367	0.002936	-0.000038	0.000503	0.001216	0.001038	0.006367	0.002936	0.026	0.24	0.11	O.k	
Story1	10	DERIVA 2X	-0.00638	-0.00322	-0.00034	-0.000419	-0.001443	-0.001038	0.00638	0.003219	0.026	0.25	0.12	O.k	
Story1	10	DERIVA 2Y	0.000251	0.00644	-0.000149	0.001017	-0.000056	0.000051	0.000251	0.00644	0.026	0.01	0.25	O.k	
Story1	10	DERIVA 2Y	-0.000264	-0.00672	-0.00023	-0.000933	-0.000172	-0.000051	0.000264	0.006724	0.026	0.01	0.26	O.k	
Base	10	DERIVA 1K	0	0	0	0	0	0			0.000				
Base	10	DERIVA 1K	0	0	0	0	0	0			0.000				
Base	10	DERIVA 1Y	0	0	0	0	0	0			0.000				
Base	10	DERIVA 1Y	0	0	0	0	0	0			0.000				
Base	10	DERIVA 2X	0	0	0	0	0	0			0.000				
Base	10	DERIVA 2X	0	0	0	0	0	0			0.000				
Base	10	DERIVA 2Y	0	0	0	0	0	0			0.000				
Base	10	DERIVA 2Y	0	0	0	0	0	0			0.000				
Story2	11	DERIVA 1K	0.015224	0.004893	-0.000656	0.001291	0.000274	0.001908	0.006988	0.002052	0.026	0.27	0.08	O.k	
Story2	11	DERIVA 1K	-0.015274	-0.0064	-0.001041	0.000526	-0.001799	-0.001903	0.00703	0.003089	0.026	0.27	0.12	O.k	
Story2	11	DERIVA 1Y	0.00068	0.011232	-0.000691	0.001738	-0.000711	0.000097	0.000302	0.004886	0.026	0.01	0.19	O.k	
Story2	11	DERIVA 1Y	-0.00073	-0.01274	-0.001006	0.000079	-0.000813	-0.000091	0.000345	0.005923	0.026	0.01	0.23	O.k	
Story2	11	DERIVA 2X	0.01522	0.005187	-0.000363	0.001042	0.000595	0.001904	0.006987	0.002251	0.026	0.27	0.09	O.k	
Story2	11	DERIVA 2X	-0.015278	-0.00611	-0.000748	0.000277	-0.001478	-0.001907	0.00703	0.00289	0.026	0.27	0.11	O.k	
Story2	11	DERIVA 2Y	0.000676	0.011526	-0.000397	0.001489	-0.00039	0.000093	0.000302	0.005086	0.026	0.01	0.20	O.k	
Story2	11	DERIVA 2Y	-0.000735	-0.01245	-0.000713	-0.00017	-0.000492	-0.000095	0.000346	0.005724	0.026	0.01	0.22	O.k	
Story1	11	DERIVA 1K	0.008236	0.002841	-0.000418	0.001443	0.001604	0.001039	3E-06	9.5E-05	0.026	0.00	0.00	O.k	
Story1	11	DERIVA 1K	-0.008244	-0.00331	-0.000708	-0.000124	-0.002464	-0.001037	4E-06	0.000095	0.026	0.00	0.00	O.k	
Story1	11	DERIVA 1Y	0.000378	0.006346	-0.000444	0.002327	-0.000338	0.000052	4E-06	9.4E-05	0.026	0.00	0.00	O.k	
Story1	11	DERIVA 1Y	-0.000385	-0.00682	-0.000682	-0.001009	-0.000521	-0.00005	4E-06	9.5E-05	0.026	0.00	0.00	O.k	
Story1	11	DERIVA 2X	0.008233	0.002936	-0.000227	0.001225	0.001762	0.001038	0.008233	0.002936	0.026	0.32	0.11	O.k	
Story1	11	DERIVA 2X	-0.008248	-0.00322	-0.000517	-0.000342	-0.002305	-0.001038	0.008248	0.003219	0.026	0.32	0.12	O.k	
Story1	11	DERIVA 2Y	0.000374	0.00644	-0.000253	0.00211	-0.00018	0.000051	0.000374	0.00644	0.026	0.01	0.25	O.k	
Story1	11	DERIVA 2Y	-0.000389	-0.00672	-0.000491	-0.001226	-0.000363	-0.000051	0.000389	0.006724	0.026	0.01	0.26	O.k	
Base	11	DERIVA 1K	0	0	0	0	0	0			0.000				
Base	11	DERIVA 1K	0	0	0	0	0	0			0.000				
Base	11	DERIVA 1Y	0	0	0	0	0	0			0.000				
Base	11	DERIVA 1Y	0	0	0	0	0	0			0.000				
Base	11	DERIVA 2X	0	0	0	0	0	0			0.000				
Base	11	DERIVA 2X	0	0	0	0	0	0			0.000				
Base	11	DERIVA 2Y	0	0	0	0	0	0			0.000				
Base	11	DERIVA 2Y	0	0	0	0	0	0			0.000				
Story2	12	DERIVA 1K	0.014073	0.004436	-0.000243	0.00019	0.001148	0.001908	3.7E-05	0.000317	0.026	0.00	0.01	O.k	
Story2	12	DERIVA 1K	-0.014177	-0.00598	-0.000687	-0.000411	-0.000473	-0.001903	3.7E-05	0.000318	0.026	0.00	0.01	O.k	
Story2	12	DERIVA 1Y	0.000486	0.011303	-0.000181	0.000685	0.000392	0.000097	0.000037	0.000317	0.026	0.00	0.01	O.k	
Story2	12	DERIVA 1Y	-0.00059	-0.01284	-0.000748	-0.000906	0.000282	-0.000091	3.8E-05	0.000317	0.026	0.00	0.01	O.k	
Story2	12	DERIVA 2X	0.01411	0.004753	-0.000084	0.000213	0.001012	0.001904	0.006378	0.002161	0.026	0.25	0.08	O.k	
Story2	12	DERIVA 2X	-0.01414	-0.00566	-0.000528	-0.000388	-0.000608	-0.001907	0.006377	0.002581	0.026	0.25	0.10	O.k	
Story2	12	DERIVA 2Y	0.000523	0.01162	-0.000023	0.000708	0.000257	0.000093	0.000243	0.005236	0.026	0.01	0.20	O.k	
Story2	12	DERIVA 2Y	-0.000552	-0.01253	-0.00059	-0.000883	0.000147	-0.000095	0.000241	0.005656	0.026	0.01	0.22	O.k	
Story1	12	DERIVA 1K	0.007732	0.002592	-0.000139	0.000551	0.001761	0.001039	0.007732	0.002592	0.026	0.30	0.10	O.k	
Story1	12	DERIVA 1K	-0.007763	-0.00308	-0.000476	-0.000602	-0.001407	-0.001037	0.007763	0.003078	0.026	0.30	0.12	O.k	
Story1	12	DERIVA 1Y	0.00028	0.006384	-0.00009	0.001381	0.00028	0.000052	0.00028	0.006384	0.026				

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

Base	12	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	12	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	12	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	12	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	12	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	12	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	12	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	12	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story2	13	DERIVA 1X	0.012058	0.004436	-0.000175	0.000298	0.000987	0.001908	0.005444	0.001844	0.026	0.21	0.07 O.k
Story2	13	DERIVA 1X	-0.012151	-0.00598	-0.000679	-0.000067	-0.000442	-0.001903	0.00551	0.002899	0.026	0.21	0.11 O.k
Story2	13	DERIVA 1Y	0.000384	0.011303	-0.000324	0.000595	0.000296	0.000097	0.000161	0.004919	0.026	0.01	0.19 O.k
Story2	13	DERIVA 1Y	-0.000477	-0.01284	-0.000529	-0.000364	0.000249	-0.000091	0.000228	0.005973	0.026	0.01	0.23 O.k
Story2	13	DERIVA 2X	0.012087	0.004753	-0.000012	0.000247	0.000859	0.001904	0.005465	0.002058	0.026	0.21	0.08 O.k
Story2	13	DERIVA 2X	-0.012122	-0.00566	-0.000516	-0.000118	-0.000057	-0.001907	0.005489	0.002683	0.026	0.21	0.10 O.k
Story2	13	DERIVA 2Y	0.000413	0.01162	-0.000162	0.000545	0.000168	0.000093	0.000182	0.005134	0.026	0.01	0.20 O.k
Story2	13	DERIVA 2Y	-0.000448	-0.01253	-0.000366	-0.000415	0.000121	-0.000095	0.000206	0.005758	0.026	0.01	0.22 O.k
Story1	13	DERIVA 1X	0.006614	0.002592	-0.00009	0.000494	0.001496	0.001039	8E-06	0.000103	0.026	0.00	0.00 O.k
Story1	13	DERIVA 1X	-0.006641	-0.00308	-0.000477	-0.000297	-0.001222	-0.001037	8E-06	0.000102	0.026	0.00	0.00 O.k
Story1	13	DERIVA 1Y	0.000223	0.006384	-0.0002	0.001035	0.000202	0.000052	0.000008	0.000102	0.026	0.00	0.00 O.k
Story1	13	DERIVA 1Y	-0.000249	-0.00687	-0.000367	-0.000839	0.000072	-0.00005	7E-06	0.000102	0.026	0.00	0.00 O.k
Story1	13	DERIVA 2X	0.006622	0.002695	0.000014	0.000457	0.001447	0.001038	0.006622	0.002695	0.026	0.25	0.10 O.k
Story1	13	DERIVA 2X	-0.006633	-0.00298	-0.000373	-0.000334	-0.001271	-0.001038	0.006633	0.002976	0.026	0.26	0.11 O.k
Story1	13	DERIVA 2Y	0.000231	0.006486	-0.000096	0.000998	0.000153	0.000051	0.000231	0.006486	0.026	0.01	0.25 O.k
Story1	13	DERIVA 2Y	-0.000242	-0.00677	-0.000263	-0.000876	0.000023	-0.000051	0.000242	0.006768	0.026	0.01	0.26 O.k
Base	13	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	13	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	13	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	13	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	13	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	13	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	13	DERIVA 2Y	0	0	0	0	0	0		0.000			
Base	13	DERIVA 2Y	0	0	0	0	0	0		0.000			
Story2	14	DERIVA 1X	0.010962	0.004436	-0.000238	0.000179	0.000926	0.001908	0.004984	0.001844	0.026	0.19	0.07 O.k
Story2	14	DERIVA 1X	-0.011042	-0.00598	-0.000671	-0.00017	-0.000365	-0.001903	0.005043	0.002899	0.026	0.19	0.11 O.k
Story2	14	DERIVA 1Y	0.000356	0.011303	-0.000426	0.000453	0.000313	0.000097	0.000151	0.004919	0.026	0.01	0.19 O.k
Story2	14	DERIVA 1Y	-0.000435	-0.01284	-0.000484	-0.000444	0.000249	-0.000091	0.00021	0.005973	0.026	0.01	0.23 O.k
Story2	14	DERIVA 2X	0.010981	0.004753	-0.000068	0.000182	0.000791	0.001904	0.004999	0.002058	0.026	0.19	0.08 O.k
Story2	14	DERIVA 2X	-0.011023	-0.00566	-0.000501	-0.000167	-0.000499	-0.001907	0.005028	0.002683	0.026	0.19	0.10 O.k
Story2	14	DERIVA 2Y	0.000374	0.01162	-0.000255	0.000456	0.000178	0.000093	0.000165	0.005134	0.026	0.01	0.20 O.k
Story2	14	DERIVA 2Y	-0.000417	-0.01253	-0.000313	-0.000441	0.000114	-0.000095	0.000196	0.005758	0.026	0.01	0.22 O.k
Story1	14	DERIVA 1X	0.005978	0.002592	-0.000136	0.000454	0.001367	0.001039	0.005978	0.002592	0.026	0.23	0.10 O.k
Story1	14	DERIVA 1X	-0.005999	-0.00308	-0.000465	-0.00038	-0.001082	-0.001037	0.005999	0.003078	0.026	0.23	0.12 O.k
Story1	14	DERIVA 1Y	0.000205	0.006384	-0.000274	0.001027	0.000184	0.000052	0.000205	0.006384	0.026	0.01	0.25 O.k
Story1	14	DERIVA 1Y	-0.000225	-0.00687	-0.000327	-0.000953	0.000101	-0.00005	0.000225	0.00687	0.026	0.01	0.26 O.k
Story1	14	DERIVA 2X	0.005982	0.002695	-0.000027	0.000436	0.001314	0.001038	0.005982	0.002695	0.026	0.23	0.10 O.k
Story1	14	DERIVA 2X	-0.005995	-0.00298	-0.000356	-0.000398	-0.001135	-0.001038	0.005995	0.002976	0.026	0.23	0.11 O.k
Story1	14	DERIVA 2Y	0.000209	0.006486	-0.000165	0.001008	0.000131	0.000051	0.000209	0.006486	0.026	0.01	0.25 O.k
Story1	14	DERIVA 2Y	-0.000221	-0.00677	-0.000218	-0.000971	0.000048	-0.000051	0.000221	0.006768	0.026	0.01	0.26 O.k
Base	14	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	14	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0		0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0		0.000			
Story2	15	DERIVA 1X	0.011734	0.004436	-0.000213	0.000259	0.000966	0.001908	0.005368	0.001844	0.026	0.21	0.07 O.k
Story2	15	DERIVA 1X	-0.011802	-0.00598	-0.000668	-0.000126	-0.000395	-0.001903	0.005421	0.002899	0.026	0.21	0.11 O.k
Story2	15	DERIVA 1Y	0.000442	0.011303	-0.000397	0.000556	0.00031	0.000097	0.000192	0.004919	0.026	0.01	0.19 O.k
Story2	15	DERIVA 1Y	-0.00051	-0.01284	-0.000485	-0.000423	0.000261	-0.000091	0.000245	0.005973	0.026	0.01	0.23 O.k
Story2	15	DERIVA 2X	0.011743	0.004753	-0.000045	0.00022	0.000822	0.001904	0.005376	0.002058	0.026	0.21	0.08 O.k
Story2	15	DERIVA 2X	-0.011792	-0.00566	-0.0005	-0.000165	-0.000538	-0.001907	0.005412	0.002683	0.026	0.21	0.10 O.k
Story2	15	DERIVA 2Y	0.000451	0.01162	-0.000228	0.000517	0.000166	0.000093	0.0002	0.005134	0.026	0.01	0.20 O.k
Story2	15	DERIVA 2Y	-0.0005	-0.01253	-0.000316	-0.000462	0.000118	-0.000095	0.000236	0.005758	0.026	0.01	0.22 O.k
Story1	15	DERIVA 1X	0.006366	0.002592	-0.000121	0.000508	0.001429	0.001039	0.006366	0.002592	0.026	0.24	0.10 O.k
Story1	15	DERIVA 1X	-0.006381	-0.00308	-0.000467	-0.000344	-0.001137	-0.001037	0.006381	0.003078	0.026	0.25	0.12 O.k
Story1	15	DERIVA 1Y	0.00025	0.006384	-0.000258	0.00108	0.000196	0.000052	0.00025	0.006384	0.026	0.01	0.25 O.k
Story1	15	DERIVA 1Y	-0.000265	-0.00687	-0.000329	-0.000916	0.000096	-0.00005	0.000265	0.00687	0.026	0.01	0.26 O.k
Story1	15	DERIVA 2X	0.006367	0.002695	-0.000014	0.00048	0.001375	0.001038	0.006367	0.002695	0.026	0.24	0.10 O.k
Story1	15	DERIVA 2X	-0.00638	-0.00298	-0.00036	-0.000372	-0.001191	-0.001038	0.00638	0.002976	0.026	0.25	0.11 O.k
Story1	15	DERIVA 2Y	0.000251	0.006486	-0.000151	0.001052	0.000142	0.000051	0.000251	0.006486	0.026	0.01	0.25 O.k
Story1	15	DERIVA 2Y	-0.000264	-0.00677	-0.000222	-0.000944	0.000042	-0.000051	0.000264	0.006768	0.026	0.01	0.26 O.k
Base	15	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	15	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	15	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	15	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	15	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	15	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	15	DERIVA 2Y	0	0	0	0	0	0		0.000			
Base	15	DERIVA 2Y	0	0	0	0	0	0		0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story2	16	DERIVA 1X	0.015224	0.004436	-0.000593	0.001518	0.001361	0.001908	0.006988	0.001844	0.026	0.27	0.07	O.k
Story2	16	DERIVA 1X	-0.015274	-0.00598	-0.001047	0.000815	-0.000705	-0.001903	0.00703	0.002899	0.026	0.27	0.11	O.k
Story2	16	DERIVA 1Y	0.00068	0.011303	-0.000676	0.002019	0.000392	0.000097	0.000302	0.004919	0.026	0.01	0.19	O.k
Story2	16	DERIVA 1Y	-0.00073	-0.01284	-0.000964	0.000314	0.000264	-0.000091	0.000345	0.005973	0.026	0.01	0.23	O.k
Story2	16	DERIVA 2X	0.01522	0.004753	-0.000264	0.001065	0.00122	0.001904	0.006987	0.002058	0.026	0.27	0.08	O.k
Story2	16	DERIVA 2X	-0.015278	-0.00566	-0.000717	0.000362	-0.000847	-0.001907	0.00703	0.002683	0.026	0.27	0.10	O.k
Story2	16	DERIVA 2Y	0.000676	0.01162	-0.000347	0.001566	0.000251	0.000093	0.000302	0.005134	0.026	0.01	0.20	O.k
Story2	16	DERIVA 2Y	-0.000735	-0.01253	-0.000634	-0.000139	0.000122	-0.000095	0.000346	0.005758	0.026	0.01	0.22	O.k
Story1	16	DERIVA 1X	0.008236	0.002592	-0.000372	0.001556	0.002134	0.001039	0.008236	0.002592	0.026	0.32	0.10	O.k
Story1	16	DERIVA 1X	-0.008244	-0.00308	-0.000716	0.000111	-0.001813	-0.001037	0.008244	0.003078	0.026	0.32	0.12	O.k
Story1	16	DERIVA 1Y	0.000378	0.006384	-0.000436	0.002547	0.000269	0.000052	0.000378	0.006384	0.026	0.01	0.25	O.k
Story1	16	DERIVA 1Y	-0.000385	-0.00687	-0.000652	-0.00088	0.000052	-0.00005	0.000385	0.00687	0.026	0.01	0.26	O.k
Story1	16	DERIVA 2X	0.008233	0.002695	-0.000157	0.001203	0.002077	0.001038	0.008233	0.002695	0.026	0.32	0.10	O.k
Story1	16	DERIVA 2X	-0.008248	-0.00298	-0.0005	-0.000242	-0.00187	-0.001038	0.008248	0.002976	0.026	0.32	0.11	O.k
Story1	16	DERIVA 2Y	0.000374	0.006486	-0.00022	0.002194	0.000212	0.000051	0.000374	0.006486	0.026	0.01	0.25	O.k
Story1	16	DERIVA 2Y	-0.000389	-0.00677	-0.000436	-0.001232	-0.000005	-0.000051	0.000389	0.006768	0.026	0.01	0.26	O.k
Base	16	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	16	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	16	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	16	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	16	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	16	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	16	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	16	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	17	DERIVA 1X	0.015192	-0.00034	-0.001291	-0.000526	0.000191	0.001908	0.006845	0.000333	0.026	0.26	0.01	O.k
Story2	17	DERIVA 1X	-0.0153	-0.00118	-0.001383	-0.000565	-0.00002	-0.001903	0.006919	0.000713	0.026	0.27	0.03	O.k
Story2	17	DERIVA 1Y	0.000544	0.011266	-0.000513	-0.000019	0.000092	0.000097	0.000232	0.004902	0.026	0.01	0.19	O.k
Story2	17	DERIVA 1Y	-0.000653	-0.01279	-0.002161	-0.001072	0.000079	-0.000091	0.000308	0.005949	0.026	0.01	0.23	O.k
Story2	17	DERIVA 2X	0.015233	-3.6E-05	-0.000823	-0.000353	0.000156	0.001904	0.006874	0.000053	0.026	0.26	0.00	O.k
Story2	17	DERIVA 2X	-0.01526	-0.00088	-0.000915	-0.000392	-0.000055	-0.001907	0.006891	0.000506	0.026	0.27	0.02	O.k
Story2	17	DERIVA 2Y	0.000585	0.011573	-0.000045	0.000154	0.000058	0.000093	0.000261	0.00511	0.026	0.01	0.20	O.k
Story2	17	DERIVA 2Y	-0.000612	-0.01249	-0.001693	-0.000899	0.000044	-0.000095	0.000279	0.00574	0.026	0.01	0.22	O.k
Story1	17	DERIVA 1X	0.008347	-9E-06	-0.00087	-0.000402	0.000311	0.001039	0.006845	0.004884	0.026	0.26	0.19	O.k
Story1	17	DERIVA 1X	-0.008381	-0.00047	-0.00097	-0.000465	-0.000184	-0.001037	0.006919	0.005932	0.026	0.27	0.23	O.k
Story1	17	DERIVA 1Y	0.000312	0.006364	0.000133	0.000383	0.000077	0.000052	0.000232	0.004868	0.026	0.01	0.19	O.k
Story1	17	DERIVA 1Y	-0.000345	-0.00684	-0.001973	-0.001251	0.000049	-0.00005	0.000308	0.005898	0.026	0.01	0.23	O.k
Story1	17	DERIVA 2X	0.008359	0.000089	-0.000578	-0.00029	0.00029	0.001038	0.006874	0.005098	0.026	0.26	0.20	O.k
Story1	17	DERIVA 2X	-0.008369	-0.00037	-0.000679	-0.000353	-0.000205	-0.001038	0.006891	0.005737	0.026	0.27	0.22	O.k
Story1	17	DERIVA 2Y	0.000324	0.006463	0.000424	0.000496	0.000056	0.000051	0.000261	0.005063	0.026	0.01	0.19	O.k
Story1	17	DERIVA 2Y	-0.000333	-0.00675	-0.001682	-0.001139	0.000028	-0.000051	0.000279	0.005702	0.026	0.01	0.22	O.k
Story2	18	DERIVA 1X	0.015192	0.004893	-0.000559	-0.000181	-0.000368	0.001908	0.006845	0.002052	0.026	0.26	0.08	O.k
Story2	18	DERIVA 1X	-0.0153	-0.0064	-0.001091	-0.000677	-0.000683	-0.001903	0.006919	0.003089	0.026	0.27	0.12	O.k
Story2	18	DERIVA 1Y	0.000544	0.011232	0.000042	0.000191	-0.000467	0.000097	0.000232	0.004886	0.026	0.01	0.19	O.k
Story2	18	DERIVA 1Y	-0.000653	-0.01274	-0.001692	-0.001049	-0.000584	-0.000091	0.000308	0.005923	0.026	0.01	0.23	O.k
Story2	18	DERIVA 2X	0.015233	0.005187	-0.000287	-0.000047	-0.000162	0.001904	0.006874	0.002251	0.026	0.26	0.09	O.k
Story2	18	DERIVA 2X	-0.01526	-0.00611	-0.000819	-0.000543	-0.000477	-0.001907	0.006891	0.00289	0.026	0.27	0.11	O.k
Story2	18	DERIVA 2Y	0.000585	0.011526	0.000314	0.000325	-0.000261	0.000093	0.000261	0.005086	0.026	0.01	0.20	O.k
Story2	18	DERIVA 2Y	-0.000612	-0.01245	-0.00142	-0.000915	-0.000378	-0.000095	0.000279	0.005724	0.026	0.01	0.22	O.k
Story1	18	DERIVA 1X	0.008347	0.002841	-0.000111	0.000152	-0.000138	0.001039	0.003711	0.002499	0.026	0.14	0.10	O.k
Story1	18	DERIVA 1X	-0.008381	-0.00331	-0.001008	-0.000793	-0.000657	-0.001037	0.00377	0.00213	0.026	0.15	0.08	O.k
Story1	18	DERIVA 1Y	0.000312	0.006346	0.000649	0.000704	-0.000248	0.000052	0.000072	0.00492	0.026	0.00	0.19	O.k
Story1	18	DERIVA 1Y	-0.000345	-0.00682	-0.001768	-0.001344	-0.000547	-0.00005	0.000132	0.005974	0.026	0.01	0.23	O.k
Story1	18	DERIVA 2X	0.008359	0.002936	0.000055	0.000233	-0.000008	0.001038	0.003728	0.0029	0.026	0.14	0.11	O.k
Story1	18	DERIVA 2X	-0.008369	-0.00322	-0.000843	-0.000713	-0.000528	-0.001038	0.003753	0.002341	0.026	0.14	0.09	O.k
Story1	18	DERIVA 2Y	0.000324	0.00644	0.000815	0.000784	-0.000119	0.000051	0.000089	0.005133	0.026	0.00	0.20	O.k
Story1	18	DERIVA 2Y	-0.000333	-0.00672	-0.001602	-0.001264	-0.000417	-0.000051	0.000115	0.005762	0.026	0.00	0.22	O.k
Story2	2	DERIVA 1X	0.012058	-0.00034	-0.000764	0.000113	0.000429	0.001908	0.005444	0.000333	0.026	0.21	0.01	O.k
Story2	2	DERIVA 1X	-0.012151	-0.00118	-0.000819	0.000083	-0.000327	-0.001903	0.00551	0.000713	0.026	0.21	0.03	O.k
Story2	2	DERIVA 1Y	0.000384	0.011266	-0.000692	0.000484	0.000064	0.000097	0.000161	0.004902	0.026	0.01	0.19	O.k
Story2	2	DERIVA 1Y	-0.000477	-0.01279	-0.000891	-0.000289	0.000038	-0.000091	0.000228	0.005949	0.026	0.01	0.23	O.k
Story2	2	DERIVA 2X	0.012087	-3.6E-05	-0.000434	0.00006	0.000405	0.001904	0.005465	0.000053	0.026	0.21	0.00	O.k
Story2	2	DERIVA 2X	-0.012122	-0.00088	-0.000489	0.00003	-0.000351	-0.001907	0.005489	0.000506	0.026	0.21	0.02	O.k
Story2	2	DERIVA 2Y	0.000413	0.011573	-0.000362	0.000432	0.00004	0.000093	0.000182	0.00511	0.026	0.01	0.20	O.k
Story2	2	DERIVA 2Y	-0.000448	-0.01249	-0.000561	-0.000341	0.000014	-0.000095	0.000206	0.00574	0.026	0.01	0.22	O.k
Story1	2	DERIVA 1X	0.006614	-9E-06	-0.000491	0.000111	0.000745	0.001039	0.006614	0.000009	0.026	0.25	0.00	O.k
Story1	2	DERIVA 1X	-0.006641	-0.00047	-0.000535	0.000059	-0.000692	-0.001037	0.006641	0.000471	0.026	0.26	0.02	O.k
Story1	2	DERIVA 1Y	0.000223	0.006364	-0.000425	0.000806	0.000052	0.000052	0.000223	0.006364	0.026	0.01	0.24	O.k
Story1	2	DERIVA 1Y	-0.000249	-0.00684	-0.000601	-0.000636	0.000002	-0.00005	0.000249	0.006844	0.026	0.01	0.26	O.k
Story1	2	DERIVA 2X	0.006622	0.000089	-0.000288	0.000076	0.000736	0.001038	0.006622	0.000089	0.026	0.25	0.00	O.k
Story1	2	DERIVA 2X	-0.006633	-0.00037	-0.000332	0.000025	-0.000701	-0.001038	0.006633	0.000372	0.026	0.26	0.01	O.k
Story1	2	DERIVA 2Y	0.000231	0.006463	-0.000222	0.000772	0.000043	0.000051	0.000231	0.006463	0.026	0.01	0.25	O.k
Story1	2	DERIVA 2Y	-0.000242	-0.00675	-0.000398	-0.000671	-0.000007	-0.000051	0.000242	0.006746	0.026	0.01	0.26	O.k
Base	2	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0			0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story2	20	DERIVA 1X	0.01823	0.004436	-0.010265	0.006225	0.001283	0.001908	0.008366	0.001844	0.026	0.32	0.07	O.k
Story2	20	DERIVA 1X	-0.018269	-0.00598	-0.011219	0.005842	0.000925	-0.001903	0.008402	0.002899	0.026	0.32	0.11	O.k
Story2	20	DERIVA 1Y	0.000857	0.011303	-0.008906	0.006809	0.001198	0.000097	0.000384	0.004919	0.026	0.01	0.19	O.k
Story2	20	DERIVA 1Y	-0.000896	-0.01284	-0.012578	0.005258	0.00101	-0.000091	0.00042	0.005973	0.026	0.02	0.23	O.k
Story2	20	DERIVA 2X	0.018217	0.004753	-0.006106	0.003941	0.000969	0.001904	0.008359	0.002058	0.026	0.32	0.08	O.k
Story2	20	DERIVA 2X	-0.018282	-0.00566	-0.007059	0.003558	0.000611	-0.001907	0.008408	0.002683	0.026	0.32	0.10	O.k
Story2	20	DERIVA 2Y	0.000844	0.01162	-0.004746	0.004525	0.000884	0.000093	0.000378	0.005134	0.026	0.01	0.20	O.k
Story2	20	DERIVA 2Y	-0.000909	-0.01253	-0.008418	0.002974	0.000696	-0.000095	0.000427	0.005758	0.026	0.02	0.22	O.k
Story1	20	DERIVA 1X	0.009864	0.002592	-0.008776	0.006116	0.001372	0.001039	0.008366	0.00225	0.026	0.32	0.09	O.k
Story1	20	DERIVA 1X	-0.009867	-0.00308	-0.010803	0.005328	0.000762	-0.001037	0.008402	0.001894	0.026	0.32	0.07	O.k
Story1	20	DERIVA 1Y	0.000473	0.006384	-0.006294	0.00727	0.001285	0.000052	0.000384	0.004882	0.026	0.01	0.19	O.k
Story1	20	DERIVA 1Y	-0.000476	-0.00687	-0.013285	0.004174	0.000849	-0.00005	0.00042	0.005923	0.026	0.02	0.23	O.k
Story1	20	DERIVA 2X	0.009858	0.002695	-0.004923	0.003917	0.001066	0.001038	0.008359	0.002659	0.026	0.32	0.10	O.k
Story1	20	DERIVA 2X	-0.009874	-0.00298	-0.00695	0.003128	0.000457	-0.001038	0.008408	0.002098	0.026	0.32	0.08	O.k
Story1	20	DERIVA 2Y	0.000466	0.006486	-0.002441	0.005071	0.000979	0.000051	0.000378	0.005087	0.026	0.01	0.20	O.k
Story1	20	DERIVA 2Y	-0.000482	-0.00677	-0.009432	0.001974	0.000544	-0.000051	0.000427	0.005718	0.026	0.02	0.22	O.k
Story2	21	DERIVA 1X	0.01823	-0.00034	-0.011988	0.006293	-0.000202	0.001908	0.008366	0.000333	0.026	0.32	0.01	O.k
Story2	21	DERIVA 1X	-0.018269	-0.00118	-0.01212	0.006229	-0.000054	-0.001903	0.008402	0.000713	0.026	0.32	0.03	O.k
Story2	21	DERIVA 1Y	0.000857	0.011266	-0.010493	0.006899	-0.000282	0.000097	0.000384	0.004902	0.026	0.01	0.19	O.k
Story2	21	DERIVA 1Y	-0.000896	-0.01279	-0.013615	0.005622	-0.00046	-0.000091	0.00042	0.005949	0.026	0.02	0.23	O.k
Story2	21	DERIVA 2X	0.018217	-3.6E-05	-0.007561	0.00409	0.000037	0.001904	0.008359	0.000053	0.026	0.32	0.00	O.k
Story2	21	DERIVA 2X	-0.018282	-0.00088	-0.007693	0.004026	-0.000301	-0.001907	0.008408	0.000056	0.026	0.32	0.02	O.k
Story2	21	DERIVA 2Y	0.000844	0.011573	-0.006066	0.004696	-0.000043	0.000093	0.000378	0.00511	0.026	0.01	0.20	O.k
Story2	21	DERIVA 2Y	-0.000909	-0.01249	-0.009188	0.003419	-0.000221	-0.000095	0.000427	0.00574	0.026	0.02	0.22	O.k
Story1	21	DERIVA 1X	0.009864	-9E-06	-0.010954	0.00609	0.00002	0.001039	0.008387	0.004894	0.026	0.32	0.19	O.k
Story1	21	DERIVA 1X	-0.009867	-0.00047	-0.011197	0.005972	-0.000726	-0.001037	0.008423	0.005943	0.026	0.32	0.23	O.k
Story1	21	DERIVA 1Y	0.000473	0.006364	-0.008197	0.007308	-0.000163	0.000052	0.000385	0.004892	0.026	0.01	0.19	O.k
Story1	21	DERIVA 1Y	-0.000476	-0.00684	-0.013954	0.004754	-0.000544	-0.00005	0.000421	0.005923	0.026	0.02	0.23	O.k
Story1	21	DERIVA 2X	0.009858	0.000089	-0.006819	0.003928	0.000242	0.001038	0.008381	0.005108	0.026	0.32	0.20	O.k
Story1	21	DERIVA 2X	-0.009874	-0.00037	-0.007062	0.003811	-0.000503	-0.001038	0.008429	0.005747	0.026	0.32	0.22	O.k
Story1	21	DERIVA 2Y	0.000466	0.006463	-0.004062	0.005147	0.00006	0.000051	0.000379	0.005088	0.026	0.01	0.20	O.k
Story1	21	DERIVA 2Y	-0.000482	-0.00675	-0.009819	0.002592	-0.000321	-0.000051	0.000428	0.005727	0.026	0.02	0.22	O.k
Story2	22	DERIVA 1X	0.018251	0.004903	-0.007719	0.004788	-0.001683	0.001919	0.008375	0.002056	0.026	0.32	0.08	O.k
Story2	22	DERIVA 1X	-0.01829	-0.00641	-0.008708	0.0044	-0.002037	-0.001914	0.008411	0.003094	0.026	0.32	0.12	O.k
Story2	22	DERIVA 1Y	0.000858	0.011256	-0.006611	0.005227	-0.001758	0.000096	0.000384	0.004896	0.026	0.01	0.19	O.k
Story2	22	DERIVA 1Y	-0.000897	-0.01277	-0.009816	0.003961	-0.001962	-0.000091	0.000421	0.005934	0.026	0.02	0.23	O.k
Story2	22	DERIVA 2X	0.018239	0.005197	-0.005172	0.003347	-0.000851	0.001915	0.00837	0.002256	0.026	0.32	0.09	O.k
Story2	22	DERIVA 2X	-0.018303	-0.00612	-0.006161	0.00296	-0.001206	-0.001918	0.008418	0.002894	0.026	0.32	0.11	O.k
Story2	22	DERIVA 2Y	0.000845	0.011551	-0.004064	0.003786	-0.000927	0.000092	0.000378	0.005097	0.026	0.01	0.20	O.k
Story2	22	DERIVA 2Y	-0.00091	-0.01247	-0.007269	0.00252	-0.00113	-0.000095	0.000427	0.005735	0.026	0.02	0.22	O.k
Story1	22	DERIVA 1X	0.009876	0.002847	-0.006356	0.004772	-0.001419	0.001045	0.008354	0.000811	0.026	0.32	0.03	O.k
Story1	22	DERIVA 1X	-0.009879	-0.00332	-0.008509	0.003964	-0.002075	-0.001043	0.00839	0.000235	0.026	0.32	0.01	O.k
Story1	22	DERIVA 1Y	0.000474	0.00636	-0.004441	0.00562	-0.001518	0.000052	0.000383	0.004888	0.026	0.01	0.19	O.k
Story1	22	DERIVA 1Y	-0.000476	-0.00683	-0.010425	0.003116	-0.001976	-0.00005	0.00042	0.005934	0.026	0.02	0.23	O.k
Story1	22	DERIVA 2X	0.009869	0.002941	-0.003977	0.003361	-0.000654	0.001044	0.008348	0.000604	0.026	0.32	0.02	O.k
Story1	22	DERIVA 2X	-0.009885	-0.00323	-0.006131	0.002552	-0.00131	-0.001044	0.008397	2.9E-05	0.026	0.32	0.00	O.k
Story1	22	DERIVA 2Y	0.000467	0.006454	-0.002062	0.004208	-0.000753	0.000051	0.000377	0.005095	0.026	0.01	0.20	O.k
Story1	22	DERIVA 2Y	-0.000483	-0.00674	-0.008046	0.001705	-0.001211	-0.000051	0.000426	0.005729	0.026	0.02	0.22	O.k
Story2	23	DERIVA 1X	0.01823	0.002036	-0.01054	0.005171	-0.001115	0.001908	0.008366	0.000751	0.026	0.32	0.03	O.k
Story2	23	DERIVA 1X	-0.018269	-0.00356	-0.011038	0.004961	-0.001489	-0.001903	0.008402	0.001793	0.026	0.32	0.07	O.k
Story2	23	DERIVA 1Y	0.000857	0.011248	-0.009312	0.005766	-0.001284	0.000097	0.000384	0.004894	0.026	0.01	0.19	O.k
Story2	23	DERIVA 1Y	-0.000896	-0.01277	-0.012267	0.004365	-0.00132	-0.000091	0.00042	0.005936	0.026	0.02	0.23	O.k
Story2	23	DERIVA 2X	0.018217	0.002337	-0.006802	0.003482	-0.000473	0.001904	0.008359	0.000955	0.026	0.32	0.04	O.k
Story2	23	DERIVA 2X	-0.018282	-0.00325	-0.0073	0.003271	-0.000847	-0.001907	0.008408	0.001589	0.026	0.32	0.06	O.k
Story2	23	DERIVA 2Y	0.000844	0.011549	-0.005573	0.004077	-0.000642	0.000093	0.000378	0.005098	0.026	0.01	0.20	O.k
Story2	23	DERIVA 2Y	-0.000909	-0.01247	-0.008528	0.002676	-0.000678	-0.000095	0.000427	0.005733	0.026	0.02	0.22	O.k
Story1	23	DERIVA 1X	0.009864	0.001285	-0.009303	0.005091	-0.000829	0.001039	0.00536	0.000751	0.026	0.21	0.03	O.k
Story1	23	DERIVA 1X	-0.009867	-0.00176	-0.010448	0.004649	-0.001645	-0.001037	0.005407	0.001793	0.026	0.21	0.07	O.k
Story1	23	DERIVA 1Y	0.000473	0.006354	-0.007167	0.006271	-0.00119	0.000052	0.000207	0.004894	0.026	0.01	0.19	O.k
Story1	23	DERIVA 1Y	-0.000476	-0.00683	-0.012584	0.003469	-0.001284	-0.00005	0.000254	0.005936	0.026	0.01	0.23	O.k
Story1	23	DERIVA 2X	0.009858	0.001382	-0.005815	0.003412	-0.000228	0.001038	0.005362	0.000955	0.026	0.21	0.04	O.k
Story1	23	DERIVA 2X	-0.009874	-0.00167	-0.00696	0.002969	-0.001043	-0.001038	0.005404	0.001589	0.026	0.21	0.06	O.k
Story1	23	DERIVA 2Y	0.000466	0.006451	-0.003679	0.004591	-0.000588	0.000051	0.00021	0.005098	0.026	0.01	0.20	O.k
Story1	23	DERIVA 2Y	-0.000482	-0.00673	-0.009096	0.001789	-0.000683	-0.000051	0.000253	0.005733	0.026	0.01	0.22	O.k
Story2	24	DERIVA 1X	0.015224	0.002036	-0.002024	0.001877	0.000025	0.001908	0.006988	0.000751	0.026	0.27	0.03	O.k
Story2	24	DERIVA 1X	-0.015274	-0.00356	-0.00212	0.001712	-0.000411	-0.001903	0.00703	0.001793	0.026	0.27	0.07	O.k
Story2	24	DERIVA 1Y	0.00068	0.011248	-0.001863	0.002149	-0.000175	0.000097	0.000302	0.004894	0.026	0.01	0.19	O.k
Story2	24	DERIVA 1Y	-0.00073	-0.01277	-0.002281	0.00144	-0.000211	-0.000091	0.000345	0.005936	0.026	0.01	0.23	O.k
Story2	24	DERIVA 2X	0.01522	0.002337	-0.001212	0.00129	0.000125	0.001904	0.006987	0.000955	0.026	0.27	0.04	O.k
Story2	24	DERIVA 2X	-0.015278	-0.00325	-0.001307	0.001125	-0.000311	-0.001907	0.00703	0.001589	0.026	0.27	0.06	O.k
Story2	24	DERIVA 2Y	0.000676	0.011549	-0.001051	0.001562	-0.000075	0.000093	0.000302	0.005098	0.026	0.01	0.20	O.k
Story2	24	DERIVA 2Y	-0.000735	-0.01247	-0.001468	0.000853	-0.000111	-0.000095	0.000346	0.005733	0.026	0.01	0.22	O.k
Story1	24	DERIVA 1X	0.008236	0.001285	-0.001318	0.001825	0.000365	0.001039	0.002783	0.000938	0.026	0.11	0.04	O.k
Story1	24	DERIVA 1X	-0.008244	-0.00176	-0.001723	0.001487	-0.000654	-0.001037	0.00285					

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story2	3	DERIVA 1X	0.010962	-0.00034	-0.000802	2.58E-07	0.000389	0.001908	0.004984	0.000333	0.026	0.19	0.01	O.k
Story2	3	DERIVA 1X	-0.011042	-0.00118	-0.000851	-0.000026	-0.000288	-0.001903	0.005043	0.000713	0.026	0.19	0.03	O.k
Story2	3	DERIVA 1Y	0.000356	0.011266	-0.000823	0.000315	0.000064	0.000097	0.000151	0.004902	0.026	0.01	0.19	O.k
Story2	3	DERIVA 1Y	-0.000435	-0.01279	-0.000083	-0.00034	0.000037	-0.000091	0.000021	0.005949	0.026	0.01	0.23	O.k
Story2	3	DERIVA 2X	0.010981	-3.6E-05	-0.000456	0.000013	0.000364	0.001904	0.004999	0.000053	0.026	0.19	0.00	O.k
Story2	3	DERIVA 2X	-0.011023	-0.00088	-0.000505	-0.000013	-0.000313	-0.001907	0.005028	0.000506	0.026	0.19	0.02	O.k
Story2	3	DERIVA 2Y	0.000374	0.011573	-0.000477	0.000327	0.000039	0.000093	0.000165	0.00511	0.026	0.01	0.20	O.k
Story2	3	DERIVA 2Y	-0.000417	-0.01249	-0.000484	-0.000328	0.000012	-0.000095	0.000196	0.00574	0.026	0.01	0.22	O.k
Story1	3	DERIVA 1X	0.005978	-9E-06	-0.000516	0.000047	0.000666	0.001039	0.005978	0.000009	0.026	0.23	0.00	O.k
Story1	3	DERIVA 1X	-0.005999	-0.00047	-0.000555	-0.000008	-0.000612	-0.001037	0.005999	0.000471	0.026	0.23	0.02	O.k
Story1	3	DERIVA 1Y	0.000205	0.006364	-0.000526	0.000767	0.000052	0.000052	0.000205	0.006364	0.026	0.01	0.24	O.k
Story1	3	DERIVA 1Y	-0.000225	-0.00684	-0.000545	-0.000728	0.000002	-0.00005	0.000225	0.006844	0.026	0.01	0.26	O.k
Story1	3	DERIVA 2X	0.005982	0.000089	-0.000302	0.000036	0.000656	0.001038	0.005982	0.000089	0.026	0.23	0.00	O.k
Story1	3	DERIVA 2X	-0.005995	-0.00037	-0.000342	-0.000018	-0.000622	-0.001038	0.005995	0.000372	0.026	0.23	0.01	O.k
Story1	3	DERIVA 2Y	0.000209	0.006463	-0.000313	0.000756	0.000042	0.000051	0.000209	0.006463	0.026	0.01	0.25	O.k
Story1	3	DERIVA 2Y	-0.000221	-0.00675	-0.000332	-0.000739	-0.000008	-0.000051	0.000221	0.006746	0.026	0.01	0.26	O.k
Base	3	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	3	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	31	DERIVA 1X	0.007732	0.002618	-0.000098	0.000551	0.001761	0.001039	0.004002	0.002276	0.026	0.15	0.09	O.k
Story1	31	DERIVA 1X	-0.007763	-0.0031	-0.000509	-0.000602	-0.001407	-0.001037	0.004039	0.00192	0.026	0.16	0.07	O.k
Story1	31	DERIVA 1Y	0.00028	0.006384	-0.000088	0.001381	0.000028	0.000052	0.000162	0.004882	0.026	0.01	0.19	O.k
Story1	31	DERIVA 1Y	-0.000311	-0.00687	-0.000519	-0.001432	0.000074	-0.00005	0.000199	0.005922	0.026	0.01	0.23	O.k
Story1	31	DERIVA 2X	0.007742	0.002721	0.000002	0.000543	0.001706	0.001038	0.004001	0.002685	0.026	0.15	0.10	O.k
Story1	31	DERIVA 2X	-0.007753	-0.003	-0.000409	-0.00061	-0.001463	-0.001038	0.004039	0.002124	0.026	0.16	0.08	O.k
Story1	31	DERIVA 2Y	0.00029	0.006487	0.000012	0.001373	0.000224	0.000051	0.000161	0.005086	0.026	0.01	0.20	O.k
Story1	31	DERIVA 2Y	-0.0003	-0.00677	-0.000419	-0.001439	0.000019	-0.000051	0.0002	0.005718	0.026	0.01	0.22	O.k
Story2	4	DERIVA 1X	0.011734	-0.00034	-0.000795	0.000101	0.000404	0.001908	0.005368	0.000333	0.026	0.21	0.01	O.k
Story2	4	DERIVA 1X	-0.011802	-0.00118	-0.000847	0.000073	-0.000306	-0.001903	0.005421	0.000713	0.026	0.21	0.03	O.k
Story2	4	DERIVA 1Y	0.000442	0.011266	-0.000788	0.000459	0.000062	0.000097	0.000192	0.004902	0.026	0.01	0.19	O.k
Story2	4	DERIVA 1Y	-0.00051	-0.01279	-0.000854	-0.000285	0.000036	-0.000091	0.000245	0.005949	0.026	0.01	0.23	O.k
Story2	4	DERIVA 2X	0.011743	-3.6E-05	-0.000439	0.000045	0.000377	0.001904	0.005376	0.000053	0.026	0.21	0.00	O.k
Story2	4	DERIVA 2X	-0.011792	-0.00088	-0.000491	0.000016	-0.000333	-0.001907	0.005412	0.000506	0.026	0.21	0.02	O.k
Story2	4	DERIVA 2Y	0.000451	0.011573	-0.000432	0.000402	0.000035	0.000093	0.0002	0.00511	0.026	0.01	0.20	O.k
Story2	4	DERIVA 2Y	-0.0005	-0.01249	-0.000498	-0.000342	0.000009	-0.000095	0.000236	0.00574	0.026	0.01	0.22	O.k
Story1	4	DERIVA 1X	0.006366	-9E-06	-0.00051	0.000097	0.000069	0.001039	0.006366	0.000009	0.026	0.24	0.00	O.k
Story1	4	DERIVA 1X	-0.006381	-0.00047	-0.000551	0.000042	-0.000645	-0.001037	0.006381	0.000471	0.026	0.25	0.02	O.k
Story1	4	DERIVA 1Y	0.00025	0.006364	-0.000504	0.000824	0.000048	0.000052	0.00025	0.006364	0.026	0.01	0.24	O.k
Story1	4	DERIVA 1Y	-0.000265	-0.00684	-0.000557	-0.000685	-0.000003	-0.00005	0.000265	0.006844	0.026	0.01	0.26	O.k
Story1	4	DERIVA 2X	0.006367	0.000089	-0.000294	0.000072	0.000681	0.001038	0.006367	0.000089	0.026	0.24	0.00	O.k
Story1	4	DERIVA 2X	-0.00638	-0.00037	-0.000335	0.000017	-0.000654	-0.001038	0.00638	0.000372	0.026	0.25	0.01	O.k
Story1	4	DERIVA 2Y	0.000251	0.006463	-0.000288	0.000799	0.000038	0.000051	0.000251	0.006463	0.026	0.01	0.25	O.k
Story1	4	DERIVA 2Y	-0.000264	-0.00675	-0.000341	-0.00071	-0.000012	-0.000051	0.000264	0.006746	0.026	0.01	0.26	O.k
Base	4	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	5	DERIVA 1X	0.015224	-0.00034	-0.001401	0.001133	0.000086	0.001908	0.006988	0.000333	0.026	0.27	0.01	O.k
Story2	5	DERIVA 1X	-0.015274	-0.00118	-0.001471	0.001081	-0.000298	-0.001903	0.00703	0.000713	0.026	0.27	0.03	O.k
Story2	5	DERIVA 1Y	0.00068	0.011266	-0.001237	0.001819	0.000316	0.000097	0.000302	0.004902	0.026	0.01	0.19	O.k
Story2	5	DERIVA 1Y	-0.00073	-0.01279	-0.001634	0.000395	0.000245	-0.000091	0.000345	0.005949	0.026	0.01	0.23	O.k
Story2	5	DERIVA 2X	0.01522	-3.6E-05	-0.000816	0.000746	0.000756	0.001904	0.006987	0.000053	0.026	0.27	0.00	O.k
Story2	5	DERIVA 2X	-0.015278	-0.00088	-0.000886	0.000694	-0.000402	-0.001907	0.00703	0.000506	0.026	0.27	0.02	O.k
Story2	5	DERIVA 2Y	0.000676	0.011573	-0.000653	0.001432	0.000212	0.000093	0.000302	0.00511	0.026	0.01	0.20	O.k
Story2	5	DERIVA 2Y	-0.000735	-0.01249	-0.00105	0.000008	0.000141	-0.000095	0.000346	0.00574	0.026	0.01	0.22	O.k
Story1	5	DERIVA 1X	0.008236	-9E-06	-0.000917	0.000916	0.001336	0.001039	0.008236	0.000009	0.026	0.32	0.00	O.k
Story1	5	DERIVA 1X	-0.008244	-0.00047	-0.000972	0.000816	-0.000951	-0.001037	0.008244	0.000471	0.026	0.32	0.02	O.k
Story1	5	DERIVA 1Y	0.000378	0.006364	-0.000793	0.00229	0.000261	0.000052	0.000378	0.006364	0.026	0.01	0.24	O.k
Story1	5	DERIVA 1Y	-0.000385	-0.00684	-0.001096	-0.000558	0.000125	-0.00005	0.000385	0.006844	0.026	0.01	0.26	O.k
Story1	5	DERIVA 2X	0.008233	0.000089	-0.00054	0.000567	0.001267	0.001038	0.008233	0.000089	0.026	0.32	0.00	O.k
Story1	5	DERIVA 2X	-0.008248	-0.00037	-0.000595	0.000467	-0.001019	-0.001038	0.008248	0.000372	0.026	0.32	0.01	O.k
Story1	5	DERIVA 2Y	0.000374	0.006463	-0.000416	0.001941	0.000192	0.000051	0.000374	0.006463	0.026	0.01	0.25	O.k
Story1	5	DERIVA 2Y	-0.000389	-0.00675	-0.000719	-0.000907	0.000056	-0.000051	0.000389	0.006746	0.026	0.01	0.26	O.k
Base	5	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	6	DERIVA 1X	0.015192	0.004436	-0.000509	-0.000168	0.000617	0.001908	0.006845	0.001844	0.026	0.26	0.07	O.k
Story2	6	DERIVA 1X	-0.0153	-0.00598	-0.001001	-0.000618	0.000261	-0.001903	0.006919	0.002899	0.026	0.27	0.11	O.k
Story2	6	DERIVA 1Y	0.000544	0.011303	0.000126	0.000237	0.000501	0.000097	0.000232	0.004919	0.026	0.01	0.19	O.k
Story2	6	DERIVA 1Y	-0.000653	-0.01284	-0.001635	-0.001023	0.000377	-0.000091	0.000308	0.005973	0.026	0.01	0.23	O.k
Story2	6	DERIVA 2X	0.015233	0.004753	-0.000265	-0.000048	0.000448	0.00						

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story1	6	DERIVA 1X	0.008347	0.002592	-0.000121	0.000133	0.000567	0.001039	0.005726	0.002301	0.026	0.22	0.09	O.k
Story1	6	DERIVA 1Y	-0.008381	-0.00308	-0.000902	-0.000717	0.000091	-0.001037	0.005796	0.003325	0.026	0.22	0.13	O.k
Story1	6	DERIVA 1Y	0.000312	0.006384	0.000714	0.000748	0.000486	0.000052	0.000174	0.004848	0.026	0.01	0.19	O.k
Story1	6	DERIVA 1Y	-0.000345	-0.00687	-0.001737	-0.001333	0.000172	-0.00005	0.000245	0.005872	0.026	0.01	0.23	O.k
Story1	6	DERIVA 2X	0.008359	0.002695	0.000026	0.000204	0.000458	0.001038	0.005751	0.002492	0.026	0.22	0.10	O.k
Story1	6	DERIVA 2X	-0.006369	-0.00298	-0.000754	-0.000646	-0.000019	-0.001038	0.005771	0.003133	0.026	0.22	0.12	O.k
Story1	6	DERIVA 2Y	0.000324	0.006486	0.000861	0.000819	0.000377	0.000051	0.000199	0.00504	0.026	0.01	0.19	O.k
Story1	6	DERIVA 2Y	-0.000333	-0.00677	-0.001589	-0.001262	0.000063	-0.000051	0.000219	0.00568	0.026	0.01	0.22	O.k
Story2	7	DERIVA 1X	0.014073	0.004893	-0.000317	0.0002	0.000394	0.001908	0.006341	0.002052	0.026	0.24	0.08	O.k
Story2	7	DERIVA 1X	-0.014177	-0.0064	-0.0007	-0.000453	-0.001221	-0.001903	0.006414	0.003089	0.026	0.25	0.12	O.k
Story2	7	DERIVA 1Y	0.000486	0.011232	-0.00023	0.000654	-0.000345	0.000097	0.000206	0.004886	0.026	0.01	0.19	O.k
Story2	7	DERIVA 1Y	-0.00059	-0.01274	-0.000787	-0.000907	-0.000483	-0.000091	0.000279	0.005923	0.026	0.01	0.23	O.k
Story2	7	DERIVA 2X	0.01411	0.005187	-0.000142	0.00023	0.000566	0.001904	0.006368	0.002251	0.026	0.24	0.09	O.k
Story2	7	DERIVA 2X	-0.01414	-0.00611	-0.000524	-0.000423	-0.001048	-0.001907	0.006388	0.00289	0.026	0.25	0.11	O.k
Story2	7	DERIVA 2Y	0.000523	0.011526	-0.000055	0.000684	-0.000172	0.000093	0.000233	0.005086	0.026	0.01	0.20	O.k
Story2	7	DERIVA 2Y	-0.000552	-0.01245	-0.000611	-0.000877	-0.00031	-0.000095	0.000252	0.005724	0.026	0.01	0.22	O.k
Story1	7	DERIVA 1X	0.007732	0.002841	-0.000191	0.000587	0.000418	0.001039	0.007732	0.002841	0.026	0.30	0.11	O.k
Story1	7	DERIVA 1X	-0.007763	-0.00331	-0.000479	-0.000662	-0.001866	-0.001037	0.007763	0.003314	0.026	0.30	0.13	O.k
Story1	7	DERIVA 1Y	0.00028	0.006346	-0.000121	0.001341	-0.00009	0.000052	0.00028	0.006346	0.026	0.30	0.11	O.k
Story1	7	DERIVA 1Y	-0.000311	-0.00682	-0.00055	-0.001416	-0.000358	-0.00005	0.000311	0.006819	0.026	0.01	0.26	O.k
Story1	7	DERIVA 2X	0.007742	0.002936	-0.00008	0.000585	0.001491	0.001038	0.007742	0.002936	0.026	0.30	0.11	O.k
Story1	7	DERIVA 2X	-0.007752	-0.00322	-0.000368	-0.000664	-0.001792	-0.001038	0.007752	0.003219	0.026	0.30	0.12	O.k
Story1	7	DERIVA 2Y	0.00029	0.00644	-0.000009	0.001339	-0.000017	0.000051	0.00029	0.00644	0.026	0.01	0.25	O.k
Story1	7	DERIVA 2Y	-0.0003	-0.00672	-0.000438	-0.001418	-0.000285	-0.000051	0.0003	0.006724	0.026	0.01	0.26	O.k
Base	7	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	7	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	7	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	7	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	7	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	7	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	7	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	7	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	8	DERIVA 1X	0.012058	0.004893	-0.000235	0.000316	0.00037	0.001908	0.005444	0.002052	0.026	0.21	0.08	O.k
Story2	8	DERIVA 1X	-0.012151	-0.0064	-0.000688	-0.000084	-0.001053	-0.001903	0.00551	0.003089	0.026	0.21	0.12	O.k
Story2	8	DERIVA 1Y	0.000384	0.011232	-0.000355	0.000586	-0.000311	0.000097	0.000161	0.004886	0.026	0.01	0.19	O.k
Story2	8	DERIVA 1Y	-0.000477	-0.01274	-0.000568	-0.000354	-0.000372	-0.000091	0.000228	0.005923	0.026	0.01	0.23	O.k
Story2	8	DERIVA 2X	0.012087	0.005187	-0.000057	0.000265	0.000534	0.001904	0.005465	0.002251	0.026	0.21	0.09	O.k
Story2	8	DERIVA 2X	-0.012122	-0.00611	-0.00051	-0.000135	-0.000889	-0.001907	0.005489	0.00289	0.026	0.21	0.11	O.k
Story2	8	DERIVA 2Y	0.000413	0.011526	-0.000177	0.000535	-0.000147	0.000093	0.000182	0.005086	0.026	0.01	0.20	O.k
Story2	8	DERIVA 2Y	-0.000448	-0.01245	-0.00039	-0.000405	-0.000208	-0.000095	0.000206	0.005724	0.026	0.01	0.22	O.k
Story1	8	DERIVA 1X	0.006614	0.002841	-0.000132	0.000522	0.001232	0.001039	0.006614	0.002841	0.026	0.25	0.11	O.k
Story1	8	DERIVA 1X	-0.006641	-0.00331	-0.000479	-0.000327	-0.001583	-0.001037	0.006641	0.003314	0.026	0.26	0.13	O.k
Story1	8	DERIVA 1Y	0.000223	0.006346	-0.000218	0.001013	-0.000129	0.000052	0.000223	0.006346	0.026	0.01	0.24	O.k
Story1	8	DERIVA 1Y	-0.000249	-0.00682	-0.000393	-0.000818	-0.000221	-0.00005	0.000249	0.006819	0.026	0.01	0.26	O.k
Story1	8	DERIVA 2X	0.006622	0.002936	-0.000019	0.000486	0.001296	0.001038	0.006622	0.002936	0.026	0.25	0.11	O.k
Story1	8	DERIVA 2X	-0.006633	-0.00322	-0.000366	-0.000363	-0.001152	-0.001038	0.006633	0.003219	0.026	0.26	0.12	O.k
Story1	8	DERIVA 2Y	0.000231	0.00644	-0.000105	0.000977	-0.000066	0.000051	0.000231	0.00644	0.026	0.01	0.25	O.k
Story1	8	DERIVA 2Y	-0.000242	-0.00672	-0.00028	-0.000854	-0.000158	-0.000051	0.000242	0.006724	0.026	0.01	0.26	O.k
Base	8	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	9	DERIVA 1X	0.010962	0.004893	-0.000298	0.000189	0.000297	0.001908	0.004984	0.002052	0.026	0.19	0.08	O.k
Story2	9	DERIVA 1X	-0.011042	-0.0064	-0.000682	-0.000191	-0.000989	-0.001903	0.005043	0.003089	0.026	0.19	0.12	O.k
Story2	9	DERIVA 1Y	0.000356	0.011232	-0.000471	0.000435	-0.000326	0.000097	0.000151	0.004886	0.026	0.01	0.19	O.k
Story2	9	DERIVA 1Y	-0.000435	-0.01274	-0.00051	-0.000437	-0.000366	-0.000091	0.00021	0.005923	0.026	0.01	0.23	O.k
Story2	9	DERIVA 2X	0.010981	0.005187	-0.000111	0.000195	0.000466	0.001904	0.004999	0.002251	0.026	0.19	0.09	O.k
Story2	9	DERIVA 2X	-0.011023	-0.00611	-0.000495	-0.000185	-0.00082	-0.001907	0.005028	0.00289	0.026	0.19	0.11	O.k
Story2	9	DERIVA 2Y	0.000374	0.011526	-0.000284	0.000441	-0.000157	0.000093	0.000165	0.005086	0.026	0.01	0.20	O.k
Story2	9	DERIVA 2Y	-0.000417	-0.01245	-0.000322	-0.000431	-0.000197	-0.000095	0.000196	0.005724	0.026	0.01	0.22	O.k
Story1	9	DERIVA 1X	0.005978	0.002841	-0.000178	0.000482	0.00109	0.001039	0.005978	0.002841	0.026	0.23	0.11	O.k
Story1	9	DERIVA 1X	-0.005999	-0.00331	-0.000468	-0.000414	-0.001447	-0.001037	0.005999	0.003314	0.026	0.23	0.13	O.k
Story1	9	DERIVA 1Y	0.000205	0.006346	-0.000304	0.000998	-0.000131	0.000052	0.000205	0.006346	0.026	0.01	0.24	O.k
Story1	9	DERIVA 1Y	-0.000225	-0.00682	-0.000342	-0.000931	-0.000225	-0.00005	0.000225	0.006819	0.026	0.01	0.26	O.k
Story1	9	DERIVA 2X	0.005982	0.002936	-0.000059	0.000466	0.001155	0.001038	0.005982	0.002936	0.026	0.23	0.11	O.k
Story1	9	DERIVA 2X	-0.005995	-0.00322	-0.000349	-0.00043	-0.001382	-0.001038	0.005995	0.003219	0.026	0.23	0.12	O.k
Story1	9	DERIVA 2Y	0.000209	0.00644	-0.000185	0.000982	-0.000067	0.000051	0.000209	0.00644	0.026	0.01	0.25	O.k
Story1	9	DERIVA 2Y	-0.000221	-0.00672	-0.000223	-0.000946	-0.00016	-0.000051	0.000221	0.006724	0.026	0.01	0.26	O.k
Base	9	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	9	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	9	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	9	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	9	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	9	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	9	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	9	DERIVA 2Y	0	0	0	0	0	0			0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

PROYECTO: MODULO 2
CÁLCULO DE DERIVAS (ESPECTRO NORMAL NSR-10)

STORY DATA			
Name	Height	Elevation	Master Story
Story2	3.35	7.00	
Story1	3.65	3.65	Yes
Base	0.00	0.00	No

$$\Delta_{\max}^i = \sqrt{\sum_{j=1}^2 (\partial_{tot,j}^i - \partial_{tot,j}^{i-1})^2}$$

A.6.3-1 NSR-10

Estructuras de	Deriva Maxima	Usada
Concreto reforzado, metalicas y de madera	1.0 % (0.010 hpi)	Si
mamposteria	0.5 % (0.005 hpi)	

POINT DISPLACEMENTS									$\Delta_{\max}^i$ (X)	$\Delta_{\max}^i$ (Y)	1.0 % hpi (m)	% hpi (X)	% hpi (Y)	Obs
Story	Label	ad Case/Com	UX	UY	UZ	RX	RY	RZ						
Story2	1	DERIVA 1X	0.047499	0.000408	-0.000618	0.000737	0.001608	0.000474	0.011919	0.000064	0.034	0.355791	0.0019	O.k
Story2	1	DERIVA 1Y	-0.00641	-0.000811	-0.000238	-0.00217	-0.000445	0.011712	0.003488	0.034	0.349612	0.1041	O.k	
Story2	1	DERIVA 1Y	0.002197	-0.041648	-0.000568	0.008058	-0.000143	0.001127	0.000847	0.026642	0.034	0.025284	0.7953	O.k
Story2	1	DERIVA 1Y	-0.001914	-0.04765	-0.000862	-0.00756	-0.000419	-0.001098	0.000639	0.030067	0.034	0.019075	0.8975	O.k
Story2	1	DERIVA 2X	0.047439	0.002328	-0.000262	0.000468	0.00174	0.000473	0.01187	0.001165	0.034	0.354328	0.0348	O.k
Story2	1	DERIVA 2X	-0.047276	-0.00449	-0.000455	-0.000507	-0.002039	-0.000447	0.01176	0.002387	0.034	0.351045	0.0713	O.k
Story2	1	DERIVA 2Y	0.002137	0.043568	-0.000211	0.00779	-0.000012	0.001126	0.000798	0.027744	0.034	0.023821	0.8282	O.k
Story2	1	DERIVA 2Y	-0.001974	-0.04573	-0.000506	-0.007828	-0.000287	-0.001099	0.000688	0.028965	0.034	0.020537	0.8646	O.k
Story1	1	DERIVA 1X	0.03558	0.000344	-0.000438	-0.000107	0.005037	0.000101	0.03558	0.000344	0.037	0.974795	0.0094	O.k
Story1	1	DERIVA 1X	-0.035505	-0.00292	-0.00061	-0.000971	-0.00198	-9.50E-05	0.035505	0.00292	0.037	0.972740	0.0800	O.k
Story1	1	DERIVA 1Y	0.00135	0.015006	-0.000411	0.004908	0.001747	0.000365	0.00135	0.015006	0.037	0.036986	0.4111	O.k
Story1	1	DERIVA 1Y	-0.001275	-0.01758	-0.000636	-0.005986	0.00131	-0.000359	0.001275	0.017581	0.037	0.034932	0.4817	O.k
Story1	1	DERIVA 2X	0.035569	0.001163	-0.000184	-0.000064	0.004313	0.000101	0.035569	0.001163	0.037	0.974493	0.0319	O.k
Story1	1	DERIVA 2X	-0.035516	-0.0021	-0.000356	-0.000927	-0.002705	-0.000096	0.035516	0.002101	0.037	0.973041	0.0576	O.k
Story1	1	DERIVA 2Y	0.001339	0.015824	-0.000157	0.004951	0.001022	0.000365	0.001339	0.015824	0.037	0.036685	0.4335	O.k
Story1	1	DERIVA 2Y	-0.001286	-0.01676	-0.000383	-0.005943	0.000586	-0.00036	0.001286	0.016763	0.037	0.035233	0.4593	O.k
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0.00E+00	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	10	DERIVA 1X	0.045076	-0.00221	-0.000722	-0.000318	0.001262	0.0001	0.010266	0.001641	0.034	0.306448	0.0490	O.k
Story2	10	DERIVA 1X	-0.046826	-0.00433	-0.000741	-0.000504	-0.001103	-0.000164	0.01204	0.002452	0.034	0.359403	0.0732	O.k
Story2	10	DERIVA 1Y	0.002033	0.021499	-0.000661	0.00206	0.000203	0.000679	0.000103	0.008479	0.034	0.003075	0.2531	O.k
Story2	10	DERIVA 1Y	-0.003783	-0.02803	-0.000802	-0.002881	-0.000043	-0.000744	0.001876	0.012572	0.034	0.056000	0.3753	O.k
Story2	10	DERIVA 2X	0.045376	-5.7E-05	-0.000462	-0.00017	0.00123	0.000113	0.010574	0.000185	0.034	0.315642	0.0055	O.k
Story2	10	DERIVA 2X	-0.046526	-0.00217	-0.00048	-0.000357	-0.001135	-0.000151	0.011732	0.00111	0.034	0.350209	0.0331	O.k
Story2	10	DERIVA 2Y	0.002333	0.023652	-0.0004	0.002207	0.000171	0.000693	0.000411	0.009822	0.034	0.012269	0.2932	O.k
Story2	10	DERIVA 2Y	-0.003483	-0.02588	-0.000542	-0.002734	-0.000076	-0.000731	0.001568	0.01123	0.034	0.046806	0.3352	O.k
Story1	10	DERIVA 1X	0.03481	-0.00057	-6.38E-04	0.004009	0.002946	0.000101	0.03481	0.000568	0.037	0.953699	0.0156	O.k
Story1	10	DERIVA 1X	-0.034786	-0.00187	-0.000662	0.003741	-0.000089	-0.000095	0.034786	0.001873	0.037	0.953041	0.0513	O.k
Story1	10	DERIVA 1Y	0.00193	0.01302	-0.000591	0.007046	0.001144	0.000365	0.00193	0.01302	0.037	0.052877	0.3567	O.k
Story1	10	DERIVA 1Y	-0.001907	-0.01546	-0.00071	0.000704	0.000913	-0.000359	0.001907	0.015461	0.037	0.052247	0.4236	O.k
Story1	10	DERIVA 2X	0.034802	0.000242	-0.000405	0.002382	0.002602	0.000101	0.034802	0.000242	0.037	0.953479	0.0065	O.k
Story1	10	DERIVA 2X	-0.034794	-0.00106	-0.000429	0.002115	-0.001234	-0.000096	0.034794	0.001063	0.037	0.953260	0.0291	O.k
Story1	10	DERIVA 2Y	0.001922	0.01383	-0.000358	0.00542	0.000799	0.000365	0.001922	0.01383	0.037	0.052658	0.3789	O.k
Story1	10	DERIVA 2Y	-0.001915	-0.01465	-0.000476	-0.000922	0.000568	-0.00036	0.001915	0.014651	0.037	0.052466	0.4014	O.k
Base	10	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	11	DERIVA 1X	0.047273	-0.00046	-0.001021	0.001521	0.002003	0.000431	0.011693	0.000225	0.034	0.349045	0.0067	O.k
Story2	11	DERIVA 1X	-0.04738	-0.00535	-0.001143	0.001037	-0.001259	-0.00023	0.011875	0.00272	0.034	0.354478	0.0812	O.k
Story2	11	DERIVA 1Y	0.00199	0.022862	-0.001006	0.003941	0.000486	0.00108	0.00064	0.009444	0.034	0.019104	0.2819	O.k
Story2	11	DERIVA 1Y	-0.002097	-0.02867	-0.001158	-0.001383	0.000258	-0.000878	0.000822	0.012857	0.034	0.024537	0.3838	O.k
Story2	11	DERIVA 2X	0.047302	0.001602	-0.000549	0.000797	0.001866	0.000391	0.011733	0.00056	0.034	0.350239	0.0167	O.k
Story2	11	DERIVA 2X	-0.047351	-0.00329	-0.000671	0.000314	-0.001396	-0.00027	0.011835	0.001467	0.034	0.353284	0.0438	O.k
Story2	11	DERIVA 2Y	0.002019	0.024923	-0.000534	0.003217	0.000349	0.001039	0.00068	0.010897	0.034	0.020299	0.3193	O.k
Story2	11	DERIVA 2Y	-0.002068	-0.02661	-0.000686	-0.002106	0.000121	-0.000918	0.000782	0.011804	0.034	0.023343	0.3464	O.k
Story1	11	DERIVA 1X	0.03558	0.000234	-0.000946	-0.002278	-0.000184	0.000101	0.03558	0.000234	0.037	0.974795	0.0064	O.k
Story1	11	DERIVA 1X	-0.035505	-0.00263	-0.001055	-0.002903	-0.003937	-0.000095	0.035505	0.002629	0.037	0.972740	0.0720	O.k
Story1	11	DERIVA 1Y	0.00135	0.013418	-0.000937	0.000641	-0.001989	0.000365	0.00135	0.013418	0.037	0.036986	0.3676	O.k
Story1	11	DERIVA 1Y	-0.001275	-0.01581	-0.001064	-0.005822	-0.002132	-0.000359	0.001275	0.015813	0.037	0.034932	0.4332	O.k
Story1	11	DERIVA 2X	0.035569	0.001042	-0.000504	-0.001594	0.000646	0.000101	0.035569	0.001042	0.037	0.974493	0.0285	O.k
Story1	11	DERIVA 2X	-0.035516	-0.00182	-0.000613	-0.002219	-0.003106	-0.000096	0.035516	0.001821	0.037	0.973041	0.0499	O.k
Story1	11	DERIVA 2Y	0.001339	0.014226	-0.000495	0.001325	-0.001158	0.000365	0.001339	0.014226	0.037	0.036685	0.3898	O.k
Story1	11	DERIVA 2Y	-0.001286	-0.01501	-0.000621	-0.005138	-0.001302	-0.00036	0.001286	0.015005	0.037	0.035233	0.4111	O.k
Base	11	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	11	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	11	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	11	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	11	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	11	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	11	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	11	DERIVA 2Y	0	0	0	0	0	0			0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story2	12	DERIVA 1X	0.044916	-0.00087	-0.000775	-0.000245	0.000075	0.000575	0.010106	0.000631	0.034	0.301672	0.0188	O.k
Story2	12	DERIVA 1X	-0.04686	-0.00576	-0.000925	-0.000719	-0.001912	0.000105	0.012074	0.00313	0.034	0.360418	0.0934	O.k
Story2	12	DERIVA 1Y	0.001929	0.022465	-0.000773	0.002163	-0.000814	0.001553	1E-06	0.009047	0.034	0.000030	0.2701	O.k
Story2	12	DERIVA 1Y	-0.003873	-0.02909	-0.000927	-0.003127	-0.001023	-0.000873	0.001966	0.013276	0.034	0.058687	0.3963	O.k
Story2	12	DERIVA 2X	0.04525	0.001333	-0.000471	-0.000067	0.000038	0.00044	0.010448	0.000291	0.034	0.311881	0.0087	O.k
Story2	12	DERIVA 2X	-0.046526	-0.00356	-0.000622	-0.000542	-0.001606	-0.00003	0.011732	0.00174	0.034	0.350209	0.0519	O.k
Story2	12	DERIVA 2Y	0.002263	0.024663	-0.00047	0.00234	-0.000508	0.001418	0.000341	0.010437	0.034	0.010179	0.3116	O.k
Story2	12	DERIVA 2Y	-0.003539	-0.02689	-0.000623	-0.00295	-0.000717	-0.001008	0.001624	0.011886	0.034	0.048478	0.3548	O.k
Story1	12	DERIVA 1X	0.03481	0.000234	-0.000654	0.004383	0.001071	0.000101	0.03481	0.000234	0.037	0.953699	0.0064	O.k
Story1	12	DERIVA 1X	-0.034786	-0.00263	-0.000786	0.003723	-0.002661	-0.000095	0.034786	0.002629	0.037	0.953041	0.0720	O.k
Story1	12	DERIVA 1Y	0.00193	0.013418	-0.000655	0.007339	-0.000676	0.000365	0.00193	0.013418	0.037	0.052877	0.3676	O.k
Story1	12	DERIVA 1Y	-0.001907	-0.01581	-0.000784	0.000767	-0.000913	-0.000359	0.001907	0.015813	0.037	0.052247	0.4332	O.k
Story1	12	DERIVA 2X	0.034802	0.001042	-0.000394	0.002673	0.001334	0.000101	0.034802	0.001042	0.037	0.953479	0.0285	O.k
Story1	12	DERIVA 2X	-0.034794	-0.00182	-0.000526	0.002012	-0.002398	-0.000096	0.034794	0.001821	0.037	0.953260	0.0499	O.k
Story1	12	DERIVA 2Y	0.001922	0.014226	-0.000396	0.005629	-0.000413	0.000365	0.001922	0.014226	0.037	0.052658	0.3898	O.k
Story1	12	DERIVA 2Y	-0.001915	-0.01501	-0.000525	-0.000943	-0.000651	-0.00036	0.001915	0.015005	0.037	0.052466	0.4111	O.k
Base	12	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	12	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	12	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	12	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	12	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	12	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	12	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	12	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	13	DERIVA 1X	0.047344	0.001519	-0.000595	0.000768	0.001895	0.000473	0.011764	0.000679	0.034	0.351164	0.0203	O.k
Story2	13	DERIVA 1X	-0.047492	-0.00707	-0.000783	-0.00044	-0.001913	-0.000504	0.011987	0.003869	0.034	0.357821	0.1155	O.k
Story2	13	DERIVA 1Y	0.001975	0.035887	-0.000562	0.006651	0.000136	0.000929	0.000625	0.021811	0.034	0.018657	0.6511	O.k
Story2	13	DERIVA 1Y	-0.002123	-0.04144	-0.000816	-0.006322	-0.000154	-0.000961	0.000848	0.025	0.034	0.025313	0.7463	O.k
Story2	13	DERIVA 2X	0.047383	0.003375	-0.00025	0.000538	0.001879	0.000477	0.011814	0.00173	0.034	0.352657	0.0516	O.k
Story2	13	DERIVA 2X	-0.047453	-0.00521	-0.000437	-0.00067	-0.001928	-0.0005	0.011937	0.002819	0.034	0.356328	0.0841	O.k
Story2	13	DERIVA 2Y	0.002014	0.037743	-0.000216	0.006421	0.00012	0.000933	0.000675	0.022861	0.034	0.020149	0.6824	O.k
Story2	13	DERIVA 2Y	-0.002084	-0.03958	-0.000471	-0.006552	-0.000169	-0.000956	0.000798	0.02395	0.034	0.023821	0.7149	O.k
Story1	13	DERIVA 1X	0.03558	0.00084	-0.000415	0.000069	0.002508	0.000101	0.03558	0.00084	0.037	0.974795	0.0230	O.k
Story1	13	DERIVA 1X	-0.035505	-0.0032	-0.000582	-0.001017	-0.004553	-0.000095	0.035505	0.0032	0.037	0.972740	0.0877	O.k
Story1	13	DERIVA 1Y	0.00135	0.014076	-0.0004	0.00428	-0.000838	0.000365	0.00135	0.014076	0.037	0.036986	0.3856	O.k
Story1	13	DERIVA 1Y	-0.001275	-0.01644	-0.000597	-0.005228	-0.001208	-0.000359	0.001275	0.016436	0.037	0.034932	0.4503	O.k
Story1	13	DERIVA 2X	0.035569	0.001645	-0.000172	0.000092	0.003026	0.000101	0.035569	0.001645	0.037	0.974493	0.0451	O.k
Story1	13	DERIVA 2X	-0.035516	-0.00239	-0.000339	-0.000995	-0.004035	-0.000096	0.035516	0.002394	0.037	0.973041	0.0656	O.k
Story1	13	DERIVA 2Y	0.001339	0.014882	-0.000157	0.004302	-0.000319	0.000365	0.001339	0.014882	0.037	0.036685	0.4077	O.k
Story1	13	DERIVA 2Y	-0.001286	-0.01563	-0.000354	-0.005205	-0.00069	-0.00036	0.001286	0.01563	0.037	0.035233	0.4282	O.k
Base	13	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	14	DERIVA 1X	0.045071	0.00229	-0.000419	0.000921	0.001308	0.000375	0.010261	0.00145	0.034	0.306299	0.0433	O.k
Story2	14	DERIVA 1X	-0.047017	-0.00633	-0.000752	-0.000292	-0.002191	0.000138	0.012231	0.003132	0.034	0.365104	0.0935	O.k
Story2	14	DERIVA 1Y	0.001941	0.036855	-0.000461	0.006841	-0.000272	0.00105	1.1E-05	0.022779	0.034	0.000328	0.6800	O.k
Story2	14	DERIVA 1Y	-0.003888	-0.0409	-0.000711	-0.006212	-0.000611	-0.000537	0.001981	0.024461	0.034	0.059134	0.7302	O.k
Story2	14	DERIVA 2X	0.045405	0.003618	-0.000139	0.000841	0.001465	0.000263	0.010603	0.001973	0.034	0.316507	0.0589	O.k
Story2	14	DERIVA 2X	-0.046682	-0.005	-0.000473	-0.000372	-0.002033	0.000027	0.011888	0.00261	0.034	0.354866	0.0779	O.k
Story2	14	DERIVA 2Y	0.002276	0.038183	-0.000181	0.000676	-0.000114	0.000938	0.000354	0.023301	0.034	0.010567	0.6956	O.k
Story2	14	DERIVA 2Y	-0.003553	-0.03957	-0.000431	-0.006292	-0.000454	-0.000648	0.001638	0.023939	0.034	0.048896	0.7146	O.k
Story1	14	DERIVA 1X	0.03481	0.00084	-0.000256	0.001993	0.002749	0.000101	0.03481	0.00084	0.037	0.953699	0.0230	O.k
Story1	14	DERIVA 1X	-0.034786	-0.0032	-0.000533	0.000894	-0.003903	-0.000095	0.034786	0.0032	0.037	0.953041	0.0877	O.k
Story1	14	DERIVA 1Y	0.00193	0.014076	-0.000298	0.006248	-0.00037	0.000365	0.00193	0.014076	0.037	0.052877	0.3856	O.k
Story1	14	DERIVA 1Y	-0.001907	-0.01644	-0.000491	-0.003361	-0.000785	-0.000359	0.001907	0.016436	0.037	0.052247	0.4503	O.k
Story1	14	DERIVA 2X	0.034802	0.001645	-0.000078	0.001348	0.00296	0.000101	0.034802	0.001645	0.037	0.953479	0.0451	O.k
Story1	14	DERIVA 2X	-0.034794	-0.00239	-0.000355	0.000248	-0.003692	-0.000096	0.034794	0.002394	0.037	0.953260	0.0656	O.k
Story1	14	DERIVA 2Y	0.001922	0.014882	-0.00012	0.005602	-0.000158	0.000365	0.001922	0.014882	0.037	0.052658	0.4077	O.k
Story1	14	DERIVA 2Y	-0.001915	-0.01563	-0.000313	-0.004006	-0.000574	-0.00036	0.001915	0.01563	0.037	0.052466	0.4282	O.k
Base	14	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	2	DERIVA 1X	0.045852	0.001166	-0.000487	0.000818	0.001599	0.000301	0.011042	0.000822	0.034	0.329612	0.0245	O.k
Story2	2	DERIVA 1X	-0.047338	-0.00568	-0.00071	-0.000159	-0.002091	-0.00031	0.012552	0.002758	0.034	0.374687	0.0823	O.k
Story2	2	DERIVA 1Y	0.002231	0.042667	-0.000452	0.008188	-0.000025	0.000195	0.000301	0.027661	0.034	0.008985	0.8257	O.k
Story2	2	DERIVA 1Y	-0.003717	-0.04718	-0.000744	-0.007529	-0.000467	-0.001203	0.00181	0.029598	0.034	0.054030	0.8835	O.k
Story2	2	DERIVA 2X	0.046104	0.002561	-0.000203	0.000725	0.001665	0.000322	0.011302	0.001398	0.034	0.337373	0.0417	O.k
Story2	2	DERIVA 2X	-0.047086	-0.00428	-0.000426	-0.000253	-0.002025	-0.000289	0.012292	0.002182	0.034	0.366925	0.0651	O.k
Story2	2	DERIVA 2Y	0.002483	0.044061	-0.000169	0.008094	0.000041	0.001216	0.000561	0.028237	0.034	0.016746	0.8429	O.k
Story2	2	DERIVA 2Y	-0.003465	-0.04578	-0.000461	-0.007622	-0.000401	-0.001182	0.00155	0.029021	0.034	0.046269	0.8663	O.k
Story1	2	DERIVA 1X	0.03481	0.000344	-0.000313	0.001987	0.004211	0.000101	0.03481	0.000344	0.037	0.953699	0.0094	O.k
Story1	2	DERIVA 1X	-0.034786	-0.00292	-0.000508	0.00111	-0.002779	-0.000095	0.034786	0.00292	0.037	0.953041	0.0800	O.k
Story1	2	DERIVA 1Y	0.00											

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

Base	2	DERIVA 1x	0	0	0	0	0	0	0.000					
Base	2	DERIVA 1x	0	0	0	0	0	0	0.000					
Base	2	DERIVA 1y	0	0	0	0	0	0	0.000					
Base	2	DERIVA 1y	0	0	0	0	0	0	0.000					
Base	2	DERIVA 2x	0	0	0	0	0	0	0.000					
Base	2	DERIVA 2x	0	0	0	0	0	0	0.000					
Base	2	DERIVA 2y	0	0	0	0	0	0	0.000					
Base	2	DERIVA 2y	0	0	0	0	0	0	0.000					
Story2	3	DERIVA 1x	0.047378	-0.00132	-0.000726	0.000875	0.001611	0.00036	0.011798	0.001117	0.034	0.352179	0.0333	O.k
Story2	3	DERIVA 1x	-0.047162	-0.00499	-0.000787	0.000506	-0.001359	-0.000228	0.011657	0.002649	0.034	0.347970	0.0791	O.k
Story2	3	DERIVA 1y	0.002154	0.024146	-0.000674	0.003541	0.000235	0.001236	0.000804	0.010036	0.034	0.024000	0.2996	O.k
Story2	3	DERIVA 1y	-0.001938	-0.03045	-0.000839	-0.002161	0.000017	-0.001104	0.000663	0.013801	0.034	0.019791	0.4120	O.k
Story2	3	DERIVA 2x	0.047334	0.000733	-0.000374	0.000349	0.001554	0.000336	0.011765	0.000122	0.034	0.351194	0.0036	O.k
Story2	3	DERIVA 2x	-0.047206	-0.00293	-0.000435	-0.000002	-0.001416	-0.000252	0.01169	0.00141	0.034	0.348955	0.0421	O.k
Story2	3	DERIVA 2y	0.00211	0.026201	-0.000322	0.003015	0.000178	0.001212	0.000771	0.011274	0.034	0.023015	0.3365	O.k
Story2	3	DERIVA 2y	-0.001982	-0.0284	-0.000486	-0.002687	-0.000004	-0.001128	0.000696	0.012562	0.034	0.020776	0.3750	O.k
Story1	3	DERIVA 1x	0.03558	-0.00021	-0.000652	-0.000741	0.001345	0.001101	0.03558	0.000206	0.037	0.974795	0.0056	O.k
Story1	3	DERIVA 1x	-0.035505	-0.00234	-0.00071	-0.001214	-0.001933	-0.000095	0.035505	0.002336	0.037	0.972740	0.0640	O.k
Story1	3	DERIVA 1y	0.00135	0.01411	-0.000613	0.00247	-0.000239	0.000365	0.00135	0.01411	0.037	0.036986	0.3866	O.k
Story1	3	DERIVA 1y	-0.001275	-0.01665	-0.000749	-0.004425	-0.000349	-0.000359	0.001275	0.016652	0.037	0.034932	0.4562	O.k
Story1	3	DERIVA 2x	0.035569	0.000611	-0.000326	-0.000488	0.001487	0.000101	0.035569	0.000611	0.037	0.974493	0.0167	O.k
Story1	3	DERIVA 2x	-0.035516	-0.00152	-0.000384	-0.000962	-0.001791	-0.000096	0.035516	0.001519	0.037	0.973041	0.0416	O.k
Story1	3	DERIVA 2y	0.001339	0.014927	-0.000287	0.002722	-0.000097	0.000365	0.001339	0.014927	0.037	0.036685	0.4090	O.k
Story1	3	DERIVA 2y	-0.001286	-0.01584	-0.000423	-0.004172	-0.000207	-0.00036	0.001286	0.015835	0.037	0.035233	0.4338	O.k
Base	3	DERIVA 1x	0	0	0	0	0	0	0.000					
Base	3	DERIVA 1x	0	0	0	0	0	0	0.000					
Base	3	DERIVA 1y	0	0	0	0	0	0	0.000					
Base	3	DERIVA 1y	0	0	0	0	0	0	0.000					
Base	3	DERIVA 2x	0	0	0	0	0	0	0.000					
Base	3	DERIVA 2x	0	0	0	0	0	0	0.000					
Base	3	DERIVA 2y	0	0	0	0	0	0	0.000					
Base	3	DERIVA 2y	0	0	0	0	0	0	0.000					
Story2	4	DERIVA 1x	0.045606	-0.00153	-0.000489	0.000306	0.001404	0.00011	0.010796	0.001321	0.034	0.322269	0.0394	O.k
Story2	4	DERIVA 1x	-0.04714	-0.00519	-0.000534	-0.00006	-0.001532	-0.000146	0.012354	0.002855	0.034	0.368776	0.0852	O.k
Story2	4	DERIVA 1y	0.002184	0.023943	-0.000429	0.002964	0.000075	0.001186	0.000254	0.009833	0.034	0.007582	0.2935	O.k
Story2	4	DERIVA 1y	-0.003719	-0.03066	-0.000594	-0.002718	-0.000203	-0.001222	0.001812	0.014009	0.034	0.054090	0.4182	O.k
Story2	4	DERIVA 2x	0.045867	0.000609	-0.000292	0.000309	0.001432	0.000129	0.011065	2E-06	0.034	0.330299	0.0001	O.k
Story2	4	DERIVA 2x	-0.046879	-0.00306	-0.000336	-0.000057	-0.001504	-0.000127	0.012085	0.001536	0.034	0.360746	0.0459	O.k
Story2	4	DERIVA 2y	0.002446	0.026079	-0.000231	0.002967	0.000103	0.001205	0.000524	0.011152	0.034	0.015642	0.3329	O.k
Story2	4	DERIVA 2y	-0.003457	-0.02853	-0.000396	-0.002715	-0.000175	-0.001202	0.001542	0.01269	0.034	0.046030	0.3788	O.k
Story1	4	DERIVA 1x	0.03481	-0.00021	-0.000417	0.002786	0.001396	0.000101	0.03481	0.000206	0.037	0.953699	0.0056	O.k
Story1	4	DERIVA 1x	-0.034786	-0.00234	-0.00046	0.0023	-0.00176	-0.000095	0.034786	0.002336	0.037	0.953041	0.0640	O.k
Story1	4	DERIVA 1y	0.00193	0.01411	-0.00037	0.006018	-0.00008	0.000365	0.00193	0.01411	0.037	0.052877	0.3866	O.k
Story1	4	DERIVA 1y	-0.001907	-0.01665	-0.000507	-0.000933	-0.000284	-0.000359	0.001907	0.016652	0.037	0.052247	0.4562	O.k
Story1	4	DERIVA 2x	0.034802	0.000611	-0.000244	0.001524	0.001464	0.000101	0.034802	0.000611	0.037	0.953479	0.0167	O.k
Story1	4	DERIVA 2x	-0.034794	-0.00152	-0.000287	0.001038	-0.001692	-0.000096	0.034794	0.001519	0.037	0.953260	0.0416	O.k
Story1	4	DERIVA 2y	0.001922	0.014927	-0.000197	0.004756	-0.000012	0.000365	0.001922	0.014927	0.037	0.052658	0.4090	O.k
Story1	4	DERIVA 2y	-0.001915	-0.01584	-0.000334	-0.002195	-0.000216	-0.00036	0.001915	0.015835	0.037	0.052466	0.4338	O.k
Base	4	DERIVA 1x	0	0	0	0	0	0	0.000					
Base	4	DERIVA 1x	0	0	0	0	0	0	0.000					
Base	4	DERIVA 1y	0	0	0	0	0	0	0.000					
Base	4	DERIVA 1y	0	0	0	0	0	0	0.000					
Base	4	DERIVA 2x	0	0	0	0	0	0	0.000					
Base	4	DERIVA 2x	0	0	0	0	0	0	0.000					
Base	4	DERIVA 2y	0	0	0	0	0	0	0.000					
Base	4	DERIVA 2y	0	0	0	0	0	0	0.000					
Story2	5	DERIVA 1x	0.047312	-0.00223	-0.000763	0.0000858	0.001386	0.000285	0.011732	0.001479	0.034	0.350209	0.0441	O.k
Story2	5	DERIVA 1x	-0.047141	-0.00397	-0.000767	0.0000662	-0.001526	-0.000239	0.011636	0.002211	0.034	0.347343	0.0660	O.k
Story2	5	DERIVA 1y	0.002127	0.022368	-0.000693	0.003273	0.000029	0.000748	0.000777	0.008905	0.034	0.023194	0.2658	O.k
Story2	5	DERIVA 1y	-0.001956	-0.02857	-0.000836	-0.001752	-0.000169	-0.000703	0.000681	0.012595	0.034	0.020328	0.3760	O.k
Story2	5	DERIVA 2x	0.047279	-0.0002	-0.000418	0.000033	0.001416	0.000278	0.01171	0.000132	0.034	0.349552	0.0039	O.k
Story2	5	DERIVA 2x	-0.047175	-0.00195	-0.000422	0.000134	-0.001496	-0.000224	0.011659	0.000999	0.034	0.348030	0.0298	O.k
Story2	5	DERIVA 2y	0.002093	0.024395	-0.000349	0.002745	0.000059	0.000742	0.000754	0.010118	0.034	0.022507	0.3020	O.k
Story2	5	DERIVA 2y	-0.001989	-0.02654	-0.000492	-0.002281	-0.000139	-0.000709	0.000703	0.011383	0.034	0.020985	0.3398	O.k
Story1	5	DERIVA 1x	0.03558	-0.00075	-0.00069	-0.001153	0.002068	0.000101	0.03558	0.000747	0.037	0.974795	0.0205	O.k
Story1	5	DERIVA 1x	-0.035505	-0.00176	-0.000694	-0.001373	-0.001799	-0.000095	0.035505	0.001761	0.037	0.972740	0.0482	O.k
Story1	5	DERIVA 1y	0.00135	0.013463	-0.000632	0.00197	0.000216	0.000365	0.00135	0.013463	0.037	0.036986	0.3868	O.k
Story1	5	DERIVA 1y	-0.001275	-0.01597	-0.000752	-0.004496	0.000053	-0.000359	0.001275	0.015971	0.037	0.034932	0.4376	O.k
Story1	5	DERIVA 2x	0.035569	0.000067	-0.000371	-0.00084	0.002008	0.000101	0.035569	0.000067	0.037	0.974493	0.0018	O.k
Story1	5	DERIVA 2x	-0.035516	-0.00095	-0.000375	-0.00106	-0.001859	-0.000096	0.035516	0.000946	0.037	0.973041	0.0259	O.k
Story1	5	DERIVA 2y	0.001339	0.014277	-0.000313	0.002283	0.000156	0.000365	0.001339	0.014277	0.037	0.036685	0.3912	O.k
Story1	5	DERIVA 2y	-0.001286	-0.01516	-0.000433	-0.004183	-0.000007	-0.00036	0.001286	0.015156	0.037	0.035233	0.4152	O.k
Base	5	DERIVA 1x	0	0	0	0	0	0	0.000					
Base	5	DERIVA 1x	0	0	0	0	0	0	0.000					
Base	5	DERIVA 1y	0	0	0	0	0	0	0.000					
Base	5	DERIVA 1y	0	0	0	0	0	0	0.000					
Base	5	DERIVA 2x	0	0	0	0	0	0	0.000					
Base	5	DERIVA 2x	0	0	0	0	0	0	0.000					
Base	5	DERIVA 2y	0	0	0	0	0	0	0.000					
Base	5	DERIVA 2y	0	0	0	0	0	0	0.000					
Story2	6	DERIVA 1x	0.045403	-0.00249	-0.000524	0.000153	0.001258	0.000154	0.010593	0.001745	0.034	0.316209	0.0521	O.k
Story2	6	DERIVA 1x	-0.046992	-0.00424	-0.000534	-0.000043	-0.001549	-0.000058	0.012206	0.002477	0.034	0.364358	0.0739	O.k
Story2	6	DERIVA 1y	0.002138	0.022104	-0.000457	0.002555	-0.000007	0.000781	0.000208	0.008641	0.034	0.006209	0.2579	O.k
Story2	6	DERIVA 1y	-0.003728	-0.02883	-0.0006	-0.002445	-0.000283	-0.000685	0.001821	0.012863	0.034	0.054358	0.3840	O.k
Story2	6	DERIVA 2x	0.045674	-0.00037	-0.000327	0.000161	0.001308	0.000139	0.010872	0.000298	0.034	0.324537	0.0089	O.k
Story2	6	DERIVA 2x	-0.046721	-0.00211	-0.000338	-0.000035	-0.001499	-0.000073	0.011927	0.001165	0.034	0.356030	0.0348	O.k
Story2	6	DERIVA 2y	0.00241	0.024231	-0.000261	0.002563	0.000042	0.						

PROYECTO ESTRUCTURALES

CALCULO Y DISEÑO

ESTRUCTURAL

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CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

PROYECTO: MODULO 3
CÁLCULO DE DERIVAS (ESPECTRO NORMAL NSR-10)

STORY DATA			
Name	Height	Elevation	Master Story
Story2	3.35	7.00	
Story1	3.65	3.65	Yes
Base	0.00	0.00	No

$$\Delta_{\max}^i = \sqrt{\sum_{j=1}^2 (\partial_{tot,j}^i - \partial_{tot,j}^{i-1})^2}$$

A.6.3-1 NSR-10

Estructuras de	Deriva Maxima	Usada
Concreto reforzado, metalicas y de madera	1.0 % (0.010 hpi)	Si
mamposteria	0.5 % (0.005 hpi)	

POINT DISPLACEMENTS									$\Delta_{\max}^i$ (X)	$\Delta_{\max}^i$ (Y)	1.0 % hpi (m)	% hpi (X)	% hpi (Y)	Obs
Story	Label	ad Case/Com	UX	UY	UZ	RX	RY	RZ						
Story2	1	DERIVA 1X	0.044095	-0.00053	-0.000503	0.001139	0.00082	0.000037	0.009913	0.000479	0.034	0.295910	0.0143	O.k
Story2	1	DERIVA 1X	-0.045193	-0.00495	-0.000665	0.000571	-0.001838	-0.000228	0.010385	0.002589	0.034	0.31	0.08	O.k
Story2	1	DERIVA 1Y	0.002768	0.031682	-0.000482	0.00622	-0.000342	0.001188	0.000834	0.018129	0.034	0.024896	0.54	O.k
Story2	1	DERIVA 1Y	-0.003866	-0.03716	-0.000687	-0.00451	-0.000676	-0.00138	0.001306	0.0213	0.034	0.04	0.64	O.k
Story2	1	DERIVA 2X	0.044377	0.001149	-0.000203	0.000697	0.00107	0.000086	0.010038	0.000388	0.034	0.30	0.01	O.k
Story2	1	DERIVA 2X	-0.044911	-0.00327	-0.000365	0.00013	-0.001588	-0.000179	0.01026	0.001618	0.034	0.31	0.05	O.k
Story2	1	DERIVA 2Y	0.00305	0.033363	-0.000182	0.005778	-0.000092	0.001238	0.000959	0.0191	0.034	0.03	0.57	O.k
Story2	1	DERIVA 2Y	-0.003584	-0.03548	-0.000386	-0.004952	-0.000426	-0.001331	0.001181	0.02033	0.034	0.04	0.61	O.k
Story1	1	DERIVA 1X	0.034182	0.000052	-0.000394	-0.000475	0.005934	0.00011	0.000157	0.000709	0.037	0.00	0.02	O.k
Story1	1	DERIVA 1X	-0.034808	-0.00236	-0.000539	-0.001048	-0.002171	-1.11E-04	0.000157	0.00071	0.037	0.00	0.02	O.k
Story1	1	DERIVA 1Y	0.001934	0.013553	-0.000385	0.003495	0.002233	0.000553	0.000157	0.00071	0.037	0.00	0.02	O.k
Story1	1	DERIVA 1Y	-0.00256	-0.01586	-0.000547	-0.005018	0.001529	-0.000554	0.000157	0.00071	0.037	0.00	0.02	O.k
Story1	1	DERIVA 2X	0.034339	0.000761	-0.000162	-0.000275	0.005007	0.000111	0.034339	0.000761	0.037	0.94	0.02	O.k
Story1	1	DERIVA 2X	-0.034651	-0.00165	-0.000307	-0.000848	-0.003099	-0.00011	0.034651	0.00165	0.037	0.95	0.05	O.k
Story1	1	DERIVA 2Y	0.002091	0.014263	-0.000153	0.003695	0.001306	0.000554	0.002091	0.014263	0.037	0.06	0.39	O.k
Story1	1	DERIVA 2Y	-0.002403	-0.01515	-0.000315	-0.004818	0.000602	-0.000553	0.002403	0.015152	0.037	0.07	0.42	O.k
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0.00E+00	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	10	DERIVA 1X	0.047703	0.00085	-0.000416	-4.03E-07	0.002663	0.000403	0.000287	0.00127	0.034	0.01	0.04	O.k
Story2	10	DERIVA 1X	-0.04894	-0.00505	-0.000578	-0.000742	-0.002239	-0.000426	0.000288	0.00127	0.034	0.01	0.04	O.k
Story2	10	DERIVA 1Y	0.00429	0.029748	-0.000404	0.004352	0.000674	0.001193	0.000288	0.001271	0.034	0.01	0.04	O.k
Story2	10	DERIVA 1Y	-0.005527	-0.03395	-0.000591	-0.005095	-0.00025	-0.001216	0.000287	0.001271	0.034	0.01	0.04	O.k
Story2	10	DERIVA 2X	0.04799	0.00212	-0.000172	0.000152	0.002588	0.000401	0.014758	0.001713	0.034	0.44	0.05	O.k
Story2	10	DERIVA 2X	-0.048652	-0.00378	-0.000334	-0.000589	-0.002314	-0.000429	0.014796	0.001062	0.034	0.44	0.03	O.k
Story2	10	DERIVA 2Y	0.004578	0.031019	-0.000159	0.004505	0.000599	0.001191	0.002247	0.017779	0.034	0.07	0.53	O.k
Story2	10	DERIVA 2Y	-0.00524	-0.03268	-0.000346	-0.004942	-0.000325	-0.001219	0.002284	0.017127	0.034	0.07	0.51	O.k
Story1	10	DERIVA 1X	0.033232	0.000407	-3.08E-04	0.002175	0.002896	0.00011	0.033232	0.000407	0.037	0.91	0.01	O.k
Story1	10	DERIVA 1X	-0.033856	-0.00272	-0.000447	0.001382	-0.006731	-0.000111	0.033856	0.002719	0.037	0.93	0.07	O.k
Story1	10	DERIVA 1Y	0.002331	0.01324	-0.000303	0.005763	-0.001452	0.000553	0.002331	0.01324	0.037	0.06	0.36	O.k
Story1	10	DERIVA 1Y	-0.002956	-0.01555	-0.000452	-0.002206	-0.002383	-0.000554	0.002956	0.015552	0.037	0.08	0.43	O.k
Story1	10	DERIVA 2X	0.033383	0.001132	-0.000133	0.001363	0.003719	0.000111	0.033383	0.001132	0.037	0.91	0.03	O.k
Story1	10	DERIVA 2X	-0.033705	-0.00199	-0.000272	0.000571	-0.005908	-0.00011	0.033705	0.001994	0.037	0.92	0.05	O.k
Story1	10	DERIVA 2Y	0.002483	0.013965	-0.000128	0.004952	-0.000629	0.000554	0.002483	0.013965	0.037	0.07	0.38	O.k
Story1	10	DERIVA 2Y	-0.002804	-0.01483	-0.000277	-0.003017	-0.00156	-0.000553	0.002804	0.014827	0.037	0.08	0.41	O.k
Base	10	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	2	DERIVA 1X	0.047738	0.000011	-0.000351	-0.000001	0.002144	0.000303	0.014506	0.000041	0.034	0.43	0.00	O.k
Story2	2	DERIVA 1X	-0.048681	-0.00442	-0.000568	-0.000057	-0.002526	-0.00034	0.014825	0.002063	0.034	0.44	0.06	O.k
Story2	2	DERIVA 1Y	0.004423	0.032401	-0.00036	0.005114	0.000253	0.001313	0.002092	0.018848	0.034	0.06	0.56	O.k
Story2	2	DERIVA 1Y	-0.005366	-0.03681	-0.000558	-0.005684	-0.000635	-0.00135	0.00241	0.020951	0.034	0.07	0.63	O.k
Story2	2	DERIVA 2X	0.047965	0.001327	-0.000126	0.000098	0.002202	0.000328	0.014582	0.000566	0.034	0.44	0.02	O.k
Story2	2	DERIVA 2X	-0.048454	-0.00311	-0.000342	-0.00047	-0.002468	-0.000315	0.014749	0.001456	0.034	0.44	0.04	O.k
Story2	2	DERIVA 2Y	0.004651	0.033718	-0.000135	0.005213	0.000311	0.001338	0.002168	0.019455	0.034	0.06	0.58	O.k
Story2	2	DERIVA 2Y	-0.005139	-0.0355	-0.000333	-0.005585	-0.000577	-0.001325	0.002335	0.020344	0.034	0.07	0.61	O.k
Story1	2	DERIVA 1X	0.033232	0.000052	-0.000253	0.002053	0.005346	0.00011	0.000151	0.000709	0.037	0.00	0.02	O.k
Story1	2	DERIVA 1X	-0.033856	-0.00236	-0.000437	0.001469	-0.003421	-0.000111	0.000151	0.00071	0.037	0.00	0.02	O.k
Story1	2	DERIVA 1Y	0.002331	0.013553	-0.000266	0.006064	0.001381	0.000553	0.000152	0.00071	0.037	0.00	0.02	O.k
Story1	2	DERIVA 1Y	-0.002956	-0.01586	-0.000424	-0.002542	0.000544	-0.000554	0.000152	0.00071	0.037	0.00	0.02	O.k
Story1	2	DERIVA 2X	0.033383	0.000761	-0.000094	0.001257	0.004975	0.000111	0.033383	0.000761	0.037	0.91	0.02	O.k
Story1	2	DERIVA 2X	-0.033705	-0.00165	-0.000278	0.000673	-0.003792	-0.00011	0.033705	0.00165	0.037	0.92	0.05	O.k
Story1	2	DERIVA 2Y	0.002483	0.014263	-0.000107	0.005268	0.001011	0.000554	0.002483	0.014263	0.037	0.07	0.39	O.k
Story1	2	DERIVA 2Y	-0.002804	-0.01515	-0.000265	-0.003338	0.000173	-0.000553	0.002804	0.015152	0.037	0.08	0.42	O.k
Base	2	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0			0.000			

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Story2	3	DERIVA 1X	0.043992	-0.002	-0.000611	0.001252	0.001394	0.000163	0.000304	0.001811	0.034	0.01	0.05	O.k
Story2	3	DERIVA 1X	-0.04518	-0.00387	-0.000622	0.001094	-0.000849	-0.000046	0.000304	0.00181	0.034	0.01	0.05	O.k
Story2	3	DERIVA 1Y	0.002714	0.019292	-0.000555	0.003223	0.000403	0.001324	0.000304	0.001811	0.034	0.01	0.05	O.k
Story2	3	DERIVA 1Y	-0.003902	-0.02516	-0.000678	-0.000878	0.000142	-0.001207	0.000304	0.00181	0.034	0.01	0.05	O.k
Story2	3	DERIVA 2X	0.044296	-0.00019	-0.000299	0.000591	0.001274	0.000142	0.010114	0.000385	0.034	0.30	0.01	O.k
Story2	3	DERIVA 2X	-0.044876	-0.00206	-0.00031	0.000433	-0.000968	-0.000067	0.010068	0.000323	0.034	0.30	0.01	O.k
Story2	3	DERIVA 2Y	0.003018	0.021103	-0.000243	0.002562	0.000284	0.001303	0.001084	0.008821	0.034	0.03	0.26	O.k
Story2	3	DERIVA 2Y	-0.003598	-0.02335	-0.000366	-0.001539	0.000022	-0.001228	0.001038	0.008759	0.034	0.03	0.26	O.k
Story1	3	DERIVA 1X	0.034182	-0.00058	-0.000572	-0.000889	0.000924	0.00011	0.034182	0.000576	0.037	0.94	0.02	O.k
Story1	3	DERIVA 1X	-0.034808	-0.00173	-0.000578	-0.001138	-0.002942	-0.000111	0.034808	0.001733	0.037	0.95	0.05	O.k
Story1	3	DERIVA 1Y	0.001934	0.012282	-0.000523	0.001819	-0.000886	0.000553	0.001934	0.012282	0.037	0.05	0.34	O.k
Story1	3	DERIVA 1Y	-0.00256	-0.01459	-0.000628	-0.003846	-0.001132	-0.000554	0.00256	0.014591	0.037	0.07	0.40	O.k
Story1	3	DERIVA 2X	0.034339	0.000137	-0.000277	-0.000469	0.001406	0.000111	0.034339	0.000137	0.037	0.94	0.00	O.k
Story1	3	DERIVA 2X	-0.034651	-0.00102	-0.000283	-0.000719	-0.00246	-0.00011	0.034651	0.00102	0.037	0.95	0.03	O.k
Story1	3	DERIVA 2Y	0.002091	0.012995	-0.000228	0.002238	-0.000403	0.000554	0.002091	0.012995	0.037	0.06	0.36	O.k
Story1	3	DERIVA 2Y	-0.002403	-0.01388	-0.000333	-0.003426	-0.00065	-0.000553	0.002403	0.013877	0.037	0.07	0.38	O.k
Base	3	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	3	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	4	DERIVA 1X	0.047582	-0.00214	-0.000391	-0.000348	0.0018	0.00004	0.01435	0.001563	0.034	0.43	0.05	O.k
Story2	4	DERIVA 1X	-0.048575	-0.004	-0.000416	-0.000501	-0.001568	-0.000177	0.014719	0.002271	0.034	0.44	0.07	O.k
Story2	4	DERIVA 1Y	0.004375	0.019156	-0.000341	0.001618	0.000382	0.001209	0.002044	0.006874	0.034	0.06	0.21	O.k
Story2	4	DERIVA 1Y	-0.005368	-0.0253	-0.000465	-0.002467	-0.000149	-0.001345	0.002412	0.010709	0.034	0.07	0.32	O.k
Story2	4	DERIVA 2X	0.04782	-0.00025	-0.000211	-0.000148	0.001772	0.000078	0.014437	0.000117	0.034	0.43	0.00	O.k
Story2	4	DERIVA 2X	-0.048338	-0.00212	-0.000236	-0.000301	-0.001596	-0.000141	0.014633	0.001098	0.034	0.44	0.03	O.k
Story2	4	DERIVA 2Y	0.004613	0.021042	-0.000162	0.001818	0.000353	0.001245	0.00213	0.008047	0.034	0.06	0.24	O.k
Story2	4	DERIVA 2Y	-0.00513	-0.02341	-0.000286	-0.002267	-0.000178	-0.001309	0.002326	0.009537	0.034	0.07	0.28	O.k
Story1	4	DERIVA 1X	0.033232	-0.00058	-0.000356	0.002613	0.001479	0.00011	0.000151	0.000439	0.037	0.00	0.01	O.k
Story1	4	DERIVA 1X	-0.033856	-0.00173	-0.000373	0.00235	-0.002622	-0.000111	0.000151	0.000713	0.037	0.00	0.02	O.k
Story1	4	DERIVA 1Y	0.002331	0.012282	-0.000311	0.005333	-0.000359	0.000553	0.000152	0.000713	0.037	0.00	0.02	O.k
Story1	4	DERIVA 1Y	-0.002956	-0.01459	-0.000417	-0.000371	-0.000783	-0.000554	0.000152	0.000714	0.037	0.00	0.02	O.k
Story1	4	DERIVA 2X	0.033383	0.000137	-0.000192	0.001294	0.001701	0.000111	0.033383	0.000137	0.037	0.91	0.00	O.k
Story1	4	DERIVA 2X	-0.033705	-0.00102	-0.000209	0.001031	-0.002401	-0.00011	0.033705	0.00102	0.037	0.92	0.03	O.k
Story1	4	DERIVA 2Y	0.002483	0.012995	-0.000148	0.004015	-0.000138	0.000554	0.002483	0.012995	0.037	0.07	0.36	O.k
Story1	4	DERIVA 2Y	-0.002804	-0.01388	-0.000253	-0.001689	-0.000562	-0.000553	0.002804	0.013877	0.037	0.08	0.38	O.k
Base	4	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	5	DERIVA 1X	0.043977	-0.00255	-0.000815	0.001686	0.00071	0.000046	0.009795	0.001485	0.034	0.29	0.04	O.k
Story2	5	DERIVA 1X	-0.045192	-0.00293	-0.000891	0.001637	-0.001536	-0.000178	0.010384	0.001675	0.034	0.31	0.05	O.k
Story2	5	DERIVA 1Y	0.002699	0.018153	-0.000806	0.003491	-0.000287	0.000965	0.000765	0.006424	0.034	0.02	0.19	O.k
Story2	5	DERIVA 1Y	-0.003915	-0.02362	-0.00092	-0.000168	-0.00054	-0.001096	0.001355	0.009584	0.034	0.04	0.29	O.k
Story2	5	DERIVA 2X	0.044288	-0.00078	-0.000422	0.000884	0.000879	0.000077	0.009949	0.000435	0.034	0.30	0.01	O.k
Story2	5	DERIVA 2X	-0.044881	-0.00116	-0.000518	0.000835	-0.001367	-0.000148	0.01023	0.000625	0.034	0.31	0.02	O.k
Story2	5	DERIVA 2Y	0.003011	0.019919	-0.000413	0.002689	-0.000118	0.000995	0.00092	0.007473	0.034	0.03	0.22	O.k
Story2	5	DERIVA 2Y	-0.003603	-0.02186	-0.000527	-0.000971	-0.000106	0.0012	0.008534	0.0034	0.04	0.04	0.25	O.k
Story1	5	DERIVA 1X	0.034182	-0.00106	-0.00078	-0.00242	0.004577	0.00011	0.034182	0.00106	0.037	0.94	0.03	O.k
Story1	5	DERIVA 1X	-0.034808	-0.00125	-0.000863	-0.002469	-0.0002	-0.000111	0.034808	0.00125	0.037	0.95	0.03	O.k
Story1	5	DERIVA 1Y	0.001934	0.011729	-0.000772	0.000206	0.002372	0.000553	0.001934	0.011729	0.037	0.05	0.32	O.k
Story1	5	DERIVA 1Y	-0.00256	-0.01404	-0.000871	-0.005095	0.002005	-0.000554	0.00256	0.014039	0.037	0.07	0.38	O.k
Story1	5	DERIVA 2X	0.034339	-0.00034	-0.000405	-0.001619	0.00364	0.000111	0.034339	0.000344	0.037	0.94	0.01	O.k
Story1	5	DERIVA 2X	-0.034651	-0.00053	-0.000487	-0.001668	-0.001137	-0.00011	0.034651	0.000534	0.037	0.95	0.01	O.k
Story1	5	DERIVA 2Y	0.002091	0.012446	-0.000397	0.001007	0.001435	0.000554	0.002091	0.012446	0.037	0.06	0.34	O.k
Story1	5	DERIVA 2Y	-0.002403	-0.01332	-0.000495	-0.004294	0.001068	-0.000553	0.002403	0.013323	0.037	0.07	0.37	O.k
Base	5	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	6	DERIVA 1X	0.047556	-0.00287	-0.000557	-0.00092	0.001577	0.000169	0.014324	0.001814	0.034	0.43	0.05	O.k
Story2	6	DERIVA 1X	-0.048564	-0.00326	-0.000671	-0.000968	-0.001961	-0.000123	0.014708	0.002005	0.034	0.44	0.06	O.k
Story2	6	DERIVA 1Y	0.004363	0.017825	-0.000556	0.000868	0.000104	0.001068	0.002032	0.006096	0.034	0.06	0.18	O.k
Story2	6	DERIVA 1Y	-0.005371	-0.02395	-0.000671	-0.002757	-0.000488	-0.001022	0.002415	0.009915	0.034	0.07	0.30	O.k
Story2	6	DERIVA 2X	0.047797	-0.00098	-0.000317	-0.000576	0.001626	0.00017	0.014414	0.000633	0.034	0.43	0.02	O.k
Story2	6	DERIVA 2X	-0.048323	-0.00136	-0.00043	-0.000625	-0.001912	-0.000123	0.014618	0.000824	0.034	0.44	0.02	O.k
Story2	6	DERIVA 2Y	0.004604	0.019722	-0.000316	0.001212	0.000153	0.001068	0.002121	0.007276	0.034	0.06	0.22	O.k
Story2	6	DERIVA 2Y	-0.00513	-0.02206	-0.000431	-0.002413	-0.000439	-0.001021	0.002326	0.008734	0.034	0.07	0.26	O.k
Story1	6	DERIVA 1X	0.033232	-0.00106	-0.000527	0.003833	0.003907	0.00011	0.033232	0.00106	0.037	0.91	0.03	O.k
Story1	6	DERIVA 1X	-0.033856	-0.00125	-0.000622	0.00378	-0.001304	-0.000111	0.033856	0.00125	0.037	0.93	0.03	O.k
Story1	6	DERIVA 1Y	0.002331	0.011729	-0.000525	0.006501	0.001567	0.000553	0.002331	0.011729	0.037	0.06	0.32	O.k
Story1	6	DERIVA 1Y	-0.002956	-0.01404	-0.000624	0.001112	0.001037	-0.000554	0.002956	0.014039	0.037	0.08	0.38	O.k
Story1	6	DERIVA 2X	0.033383	-0.00034	-0.000303	0.002161	0.003451	0.000111	0.033383	0.				

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Base	6	DERIVA 1X	0	0	0	0	0	0		0.000				
Base	6	DERIVA 1X	0	0	0	0	0	0		0.000				
Base	6	DERIVA 1Y	0	0	0	0	0	0		0.000				
Base	6	DERIVA 1Y	0	0	0	0	0	0		0.000				
Base	6	DERIVA 2X	0	0	0	0	0	0		0.000				
Base	6	DERIVA 2X	0	0	0	0	0	0		0.000				
Base	6	DERIVA 2Y	0	0	0	0	0	0		0.000				
Base	6	DERIVA 2Y	0	0	0	0	0	0		0.000				
Story2	7	DERIVA 1X	0.043921	-0.0017	-0.001002	0.001927	0.001269	0.00012	0.009739	0.001301	0.034	0.29	0.04	O.k
Story2	7	DERIVA 1X	-0.045343	-0.00419	-0.00104	0.001707	-0.001358	-0.000138	0.010535	0.002274	0.034	0.31	0.07	O.k
Story2	7	DERIVA 1Y	0.0026	0.018516	-0.000962	0.003787	0.000114	0.000107	0.000666	0.006622	0.034	0.02	0.20	O.k
Story2	7	DERIVA 1Y	-0.004022	-0.0244	-0.001079	-0.000153	-0.000202	-0.001124	0.001462	0.010197	0.034	0.04	0.30	O.k
Story2	7	DERIVA 2X	0.044279	0.000198	-0.00051	0.000989	0.00135	0.000135	0.00994	0.000125	0.034	0.30	0.00	O.k
Story2	7	DERIVA 2X	-0.044985	-0.00229	-0.000548	0.000769	-0.001277	-0.000123	0.010334	0.001097	0.034	0.31	0.03	O.k
Story2	7	DERIVA 2Y	0.002958	0.020413	-0.000471	0.002849	0.000195	0.001121	0.000867	0.007798	0.034	0.03	0.23	O.k
Story2	7	DERIVA 2Y	-0.003664	-0.02251	-0.000587	-0.001091	-0.000122	-0.00111	0.001261	0.00902	0.034	0.04	0.27	O.k
Story1	7	DERIVA 1X	0.034182	-0.0004	-0.000952	-0.002251	0.0021	0.00011	0.034182	0.000398	0.037	0.94	0.01	O.k
Story1	7	DERIVA 1X	-0.034808	-0.00191	-0.000989	-0.002578	-0.0029	-0.000111	0.034808	0.001913	0.037	0.95	0.05	O.k
Story1	7	DERIVA 1Y	0.001934	0.011894	-0.00092	0.000271	-0.000245	0.000553	0.001934	0.011894	0.037	0.05	0.33	O.k
Story1	7	DERIVA 1Y	-0.00256	-0.01421	-0.00102	-0.0051	-0.000555	-0.000554	0.00256	0.014205	0.037	0.07	0.39	O.k
Story1	7	DERIVA 2X	0.034339	0.000323	-0.000482	-0.001352	0.002088	0.000111	0.034339	0.000323	0.037	0.94	0.01	O.k
Story1	7	DERIVA 2X	-0.034651	-0.00119	-0.000518	-0.001679	-0.002912	-0.00011	0.034651	0.001193	0.037	0.95	0.03	O.k
Story1	7	DERIVA 2Y	0.002091	0.012615	-0.00045	0.001169	-0.000256	0.000554	0.002091	0.012615	0.037	0.06	0.35	O.k
Story1	7	DERIVA 2Y	-0.002403	-0.01349	-0.00055	-0.004201	-0.000567	-0.000553	0.002403	0.013485	0.037	0.07	0.37	O.k
Base	7	DERIVA 1X	0	0	0	0	0	0		0.000				
Base	7	DERIVA 1X	0	0	0	0	0	0		0.000				
Base	7	DERIVA 1Y	0	0	0	0	0	0		0.000				
Base	7	DERIVA 1Y	0	0	0	0	0	0		0.000				
Base	7	DERIVA 2X	0	0	0	0	0	0		0.000				
Base	7	DERIVA 2X	0	0	0	0	0	0		0.000				
Base	7	DERIVA 2Y	0	0	0	0	0	0		0.000				
Base	7	DERIVA 2Y	0	0	0	0	0	0		0.000				
Story2	8	DERIVA 1X	0.047576	-0.00199	-0.000683	-0.000929	0.00206	0.000201	0.014344	0.001591	0.034	0.43	0.05	O.k
Story2	8	DERIVA 1X	-0.048708	-0.00448	-0.000714	-0.00114	-0.001993	-0.000175	0.014852	0.002567	0.034	0.44	0.08	O.k
Story2	8	DERIVA 1Y	0.004314	0.018229	-0.000638	0.000911	0.000366	0.001143	0.001983	0.006335	0.034	0.06	0.19	O.k
Story2	8	DERIVA 1Y	-0.005445	-0.0247	-0.000758	-0.002981	-0.000299	-0.001117	0.002489	0.010492	0.034	0.07	0.31	O.k
Story2	8	DERIVA 2X	0.047841	0.000039	-0.00039	-0.000495	0.002073	0.000186	0.014458	0.000284	0.034	0.43	0.01	O.k
Story2	8	DERIVA 2X	-0.048443	-0.00245	-0.000421	-0.000706	-0.001981	-0.000189	0.014738	0.001259	0.034	0.44	0.04	O.k
Story2	8	DERIVA 2Y	0.004578	0.020256	-0.000345	0.001345	0.000379	0.001128	0.002095	0.007641	0.034	0.06	0.23	O.k
Story2	8	DERIVA 2Y	-0.005181	-0.02267	-0.000466	-0.002547	-0.000287	-0.000131	0.002377	0.009184	0.034	0.07	0.27	O.k
Story1	8	DERIVA 1X	0.033232	-0.0004	-0.000633	0.004123	0.002327	0.00011	0.033232	0.000398	0.037	0.91	0.01	O.k
Story1	8	DERIVA 1X	-0.033856	-0.00191	-0.000662	0.003769	-0.003135	-0.000111	0.033856	0.001913	0.037	0.93	0.05	O.k
Story1	8	DERIVA 1Y	0.002331	0.011894	-0.000596	0.006996	-0.000127	0.000553	0.002331	0.011894	0.037	0.06	0.33	O.k
Story1	8	DERIVA 1Y	-0.002956	-0.01421	-0.0007	0.001196	-0.000681	-0.000554	0.002956	0.014205	0.037	0.08	0.39	O.k
Story1	8	DERIVA 2X	0.033383	0.000323	-0.000362	0.002242	0.00239	0.000111	0.033383	0.000323	0.037	0.91	0.01	O.k
Story1	8	DERIVA 2X	-0.033705	-0.00119	-0.000391	0.001888	-0.003071	-0.00011	0.033705	0.001193	0.037	0.92	0.03	O.k
Story1	8	DERIVA 2Y	0.002483	0.012615	-0.000325	0.004815	-0.000063	0.000554	0.002483	0.012615	0.037	0.07	0.35	O.k
Story1	8	DERIVA 2Y	-0.002804	-0.01349	-0.000428	-0.000685	-0.000618	-0.000553	0.002804	0.013485	0.037	0.08	0.37	O.k
Base	8	DERIVA 1X	0	0	0	0	0	0		0.000				
Base	8	DERIVA 1X	0	0	0	0	0	0		0.000				
Base	8	DERIVA 1Y	0	0	0	0	0	0		0.000				
Base	8	DERIVA 1Y	0	0	0	0	0	0		0.000				
Base	8	DERIVA 2X	0	0	0	0	0	0		0.000				
Base	8	DERIVA 2X	0	0	0	0	0	0		0.000				
Base	8	DERIVA 2Y	0	0	0	0	0	0		0.000				
Base	8	DERIVA 2Y	0	0	0	0	0	0		0.000				
Story2	9	DERIVA 1X	0.04391	0.000303	-0.000585	0.001219	0.002128	0.000305	0.009728	0.000104	0.034	0.29	0.00	O.k
Story2	9	DERIVA 1X	-0.045528	-0.00558	-0.000697	0.000475	-0.000616	-0.000035	0.01072	0.00286	0.034	0.32	0.09	O.k
Story2	9	DERIVA 1Y	0.002512	0.029065	-0.000545	0.005543	0.00094	0.001289	0.000578	0.015825	0.034	0.02	0.47	O.k
Story2	9	DERIVA 1Y	-0.00413	-0.03434	-0.000737	-0.00385	0.000572	-0.001018	0.00157	0.018789	0.034	0.05	0.56	O.k
Story2	9	DERIVA 2X	0.04432	0.001941	-0.000254	0.00078	0.001712	0.000229	0.009981	0.000809	0.034	0.30	0.02	O.k
Story2	9	DERIVA 2X	-0.045118	-0.00394	-0.000366	0.000036	-0.01032	-0.000111	0.010467	0.001947	0.034	0.31	0.06	O.k
Story2	9	DERIVA 2Y	0.002922	0.030703	-0.000214	0.005105	0.000524	0.001212	0.000831	0.016738	0.034	0.02	0.50	O.k
Story2	9	DERIVA 2Y	-0.00372	-0.0327	-0.000406	-0.004289	0.000156	-0.001095	0.001317	0.017876	0.034	0.04	0.53	O.k
Story1	9	DERIVA 1X	0.034182	0.000407	-0.000469	-0.000427	0.00065	0.00011	0.034182	0.000407	0.037	0.94	0.01	O.k
Story1	9	DERIVA 1X	-0.034808	-0.00272	-0.000571	-0.001193	-0.008139	-0.000111	0.034808	0.002719	0.037	0.95	0.07	O.k
Story1	9	DERIVA 1Y	0.001934	0.01324	-0.000443	0.003127	-0.003345	0.000553	0.001934	0.01324	0.037	0.05	0.36	O.k
Story1	9	DERIVA 1Y	-0.00256	-0.01555	-0.000597	-0.004747	-0.004144	-0.000554	0.00256	0.015552	0.037	0.07	0.43	O.k
Story1	9	DERIVA 2X	0.034339	0.001132	-0.000208	-0.000197	0.002607	0.000111	0.034339	0.001132	0.037	0.94	0.03	O.k
Story1	9	DERIVA 2X	-0.034651	-0.00199	-0.00031	-0.000963	-0.006182	-0.00011	0.034651	0.001994	0.037	0.95	0.05	O.k
Story1	9	DERIVA 2Y	0.002091	0.013965	-0.000182	0.003357	-0.001388	0.000554	0.002091	0.013965	0.037	0.06	0.38	O.k
Story1	9	DERIVA 2Y	-0.002403	-0.01483	-0.000335	-0.004517	-0.002187	-0.000553	0.002403	0.014827	0.037	0.07	0.41	O.k
Base	9	DERIVA 1X	0	0	0	0	0	0		0.000				
Base	9	DERIVA 1X	0	0	0	0	0	0		0.000				
Base	9	DERIVA 1Y	0	0	0	0	0	0		0.000				
Base	9	DERIVA 1Y	0	0	0	0	0	0		0.000				
Base	9	DERIVA 2X	0	0	0	0	0	0		0.000				
Base	9	DERIVA 2X	0	0	0	0	0	0		0.000				
Base	9	DERIVA 2Y	0	0	0	0	0	0		0.000				
Base	9	DERIVA 2Y	0	0	0	0	0	0		0.000				

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

PROYECTO: MODULO 4 y 5
CÁLCULO DE DERIVAS (ESPECTRO NORMAL NSR-10)

STORY DATA			
Name	Height	Elevation	Master Story
Story2	3.35	7.00	
Story1	3.65	3.65	Yes
Base	0.00	0.00	No

$$\Delta_{\max}^i = \sqrt{\sum_{j=1}^2 (\partial_{tot,j}^i - \partial_{tot,j}^{i-1})^2}$$

A.6.3-1 NSR-10

Estructuras de	Deriva Maxima	Usada
Concreto reforzado, metalicas y de madera	1.0 % (0.010 hpi)	Si
mamposteria	0.5 % (0.005 hpi)	

POINT DISPLACEMENTS									$\Delta_{\max}^i$ (X)	$\Delta_{\max}^i$ (Y)	1.0 % hpi (m)	% hpi (X)	% hpi (Y)	Obs
Story2	1	DERIVA 1X	0.044149	-0.00157	-0.001346	-0.000048	0.001463	0.000043	0.01039	0.001028	0.034	0.310149	0.0307	O.k
Story2	1	DERIVA 1Y	-0.044173	-0.00752	-0.001363	-0.000683	-0.001548	-0.000141	0.010322	0.003691	0.034	0.31	0.11	O.k
Story2	1	DERIVA 1Y	0.000866	0.025113	-0.001262	0.003633	0.000007	0.000198	0.000355	0.013093	0.034	0.010597	0.39	O.k
Story2	1	DERIVA 1Y	-0.000889	-0.03421	-0.001448	-0.004365	-0.000092	-0.000296	0.000286	0.017812	0.034	0.01	0.53	O.k
Story2	1	DERIVA 2X	0.044168	0.00165	-0.000734	-0.000004	0.001509	0.000073	0.010382	0.000671	0.034	0.31	0.02	O.k
Story2	1	DERIVA 2X	-0.044154	-0.0043	-0.000751	-0.000639	-0.001502	-0.000112	0.010329	0.001991	0.034	0.31	0.06	O.k
Story2	1	DERIVA 2Y	0.000884	0.028333	-0.00065	0.003678	0.000053	0.000228	0.000347	0.014793	0.034	0.01	0.44	O.k
Story2	1	DERIVA 2Y	-0.00087	-0.03099	-0.000835	-0.00432	-0.000046	-0.000267	0.000294	0.016112	0.034	0.01	0.48	O.k
Story1	1	DERIVA 1X	0.033759	-0.00054	-0.001042	0.005221	0.002363	0.000089	2.7E-05	0.000437	0.037	0.00	0.01	O.k
Story1	1	DERIVA 1X	-0.033851	-0.00383	-0.00106	0.00444	-0.001462	-8.90E-05	2.6E-05	0.001521	0.037	0.00	0.04	O.k
Story1	1	DERIVA 1Y	0.000511	0.01202	-0.000975	0.008526	0.000489	0.000089	2.6E-05	0.00152	0.037	0.00	0.04	O.k
Story1	1	DERIVA 1Y	-0.000603	-0.01639	-0.001126	0.001135	0.000411	-0.000089	0.000027	0.00152	0.037	0.00	0.04	O.k
Story1	1	DERIVA 2X	0.033786	0.000979	-0.000582	0.002962	0.0021	0.000088	0.033786	0.000979	0.037	0.93	0.03	O.k
Story1	1	DERIVA 2X	-0.033825	-0.00231	-0.0006	0.00218	-0.001725	-0.00009	0.033825	0.002312	0.037	0.93	0.06	O.k
Story1	1	DERIVA 2Y	0.000537	0.01354	-0.000516	0.006266	0.000226	0.000088	0.000537	0.01354	0.037	0.01	0.37	O.k
Story1	1	DERIVA 2Y	-0.000576	-0.01487	-0.000666	-0.001124	0.000148	-0.000089	0.000576	0.014874	0.037	0.02	0.41	O.k
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0.00E+00	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	10	DERIVA 1X	0.044798	-0.00266	-0.001808	0.001959	0.001606	0.000337	0.000106	0.00136	0.034	0.00	0.04	O.k
Story2	10	DERIVA 1X	-0.045237	-0.00889	-0.001854	0.00126	-0.001411	-0.000251	0.000106	0.003958	0.034	0.00	0.12	O.k
Story2	10	DERIVA 1Y	0.000169	0.025152	-0.00174	0.005889	0.000126	0.000331	0.000106	0.003958	0.034	0.00	0.12	O.k
Story2	10	DERIVA 1Y	-0.000608	-0.0367	-0.001923	-0.002671	0.000069	-0.000245	0.000106	0.003958	0.034	0.00	0.12	O.k
Story2	10	DERIVA 2X	0.044904	0.001299	-0.000892	0.001043	0.001527	0.000302	0.010431	0.000812	0.034	0.31	0.02	O.k
Story2	10	DERIVA 2X	-0.045131	-0.00493	-0.000938	0.000345	-0.00149	-0.000286	0.010563	0.001029	0.034	0.32	0.03	O.k
Story2	10	DERIVA 2Y	0.000275	0.02911	-0.000824	0.004974	0.000046	0.000296	0.000086	0.01649	0.034	0.00	0.49	O.k
Story2	10	DERIVA 2Y	-0.000502	-0.03274	-0.001007	-0.003596	-0.00001	-0.000281	0.000219	0.015734	0.034	0.01	0.47	O.k
Story1	10	DERIVA 1X	0.034473	-0.00049	-1.50E-03	-0.001998	0.000752	0.000089	0.034473	0.000487	0.037	0.94	0.01	O.k
Story1	10	DERIVA 1X	-0.034568	-0.0039	-0.001547	-0.00278	-0.003142	-0.000089	0.034568	0.003899	0.037	0.95	0.11	O.k
Story1	10	DERIVA 1Y	0.000189	0.01262	-0.001451	0.001361	-0.001176	0.000089	0.000189	0.01262	0.037	0.01	0.35	O.k
Story1	10	DERIVA 1Y	-0.000283	-0.01701	-0.0016	-0.006139	-0.001215	-0.000089	0.000283	0.017005	0.037	0.01	0.47	O.k
Story1	10	DERIVA 2X	0.034496	0.001018	-0.000742	-0.001422	0.001462	0.000088	0.034496	0.001018	0.037	0.95	0.03	O.k
Story1	10	DERIVA 2X	-0.034545	-0.0024	-0.000785	-0.002204	-0.002432	-0.00009	0.034545	0.002395	0.037	0.95	0.07	O.k
Story1	10	DERIVA 2Y	0.000212	0.014124	-0.000689	0.001937	-0.000466	0.000088	0.000212	0.014124	0.037	0.01	0.39	O.k
Story1	10	DERIVA 2Y	-0.000261	-0.0155	-0.000838	-0.005563	-0.000505	-0.000089	0.000261	0.015501	0.037	0.01	0.42	O.k
Base	10	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	10	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	11	DERIVA 1X	0.04401	-0.00154	-0.001338	-0.000067	0.001494	0.000136	0.010251	0.00105	0.034	0.31	0.03	O.k
Story2	11	DERIVA 1X	-0.044316	-0.00777	-0.001355	-0.000756	-0.001526	-0.000027	0.010465	0.003867	0.034	0.31	0.12	O.k
Story2	11	DERIVA 1Y	0.000724	0.026273	-0.001252	0.003835	0.000034	0.000343	0.000213	0.013653	0.034	0.01	0.41	O.k
Story2	11	DERIVA 1Y	-0.00103	-0.03558	-0.00144	-0.004658	-0.000066	-0.000234	0.000427	0.018571	0.034	0.01	0.55	O.k
Story2	11	DERIVA 2X	0.044083	0.001699	-0.00073	0.000007	0.001484	0.000099	0.010297	0.000681	0.034	0.31	0.02	O.k
Story2	11	DERIVA 2X	-0.044243	-0.00453	-0.000747	-0.000681	-0.001536	-0.000064	0.010418	0.002135	0.034	0.31	0.06	O.k
Story2	11	DERIVA 2Y	0.000797	0.029509	-0.000644	0.003909	0.000024	0.000306	0.00026	0.015385	0.034	0.01	0.46	O.k
Story2	11	DERIVA 2Y	-0.000956	-0.03234	-0.000832	-0.004583	-0.000076	-0.000271	0.000038	0.016839	0.034	0.01	0.50	O.k
Story1	11	DERIVA 1X	0.033759	-0.00049	-0.001033	0.005207	0.001556	0.000089	2.7E-05	0.000531	0.037	0.00	0.01	O.k
Story1	11	DERIVA 1X	-0.033851	-0.0039	-0.00105	0.004394	-0.002268	-0.000089	2.6E-05	0.001504	0.037	0.00	0.04	O.k
Story1	11	DERIVA 1Y	0.000511	0.01262	-0.000965	0.008641	-0.000319	0.000089	2.6E-05	0.001504	0.037	0.00	0.04	O.k
Story1	11	DERIVA 1Y	-0.000603	-0.01701	-0.001118	0.00096	-0.000393	-0.000089	0.000027	0.001504	0.037	0.00	0.04	O.k
Story1	11	DERIVA 2X	0.033786	0.001018	-0.000578	0.00297	0.001758	0.000088	0.033786	0.001018	0.037	0.93	0.03	O.k
Story1	11	DERIVA 2X	-0.033825	-0.0024	-0.000595	0.002157	-0.002066	-0.00009	0.033825	0.002395	0.037	0.93	0.07	O.k
Story1	11	DERIVA 2Y	0.000537	0.014124	-0.00051	0.006404	-0.000117	0.000088	0.000537	0.014124	0.037	0.01	0.39	O.k
Story1	11	DERIVA 2Y	-0.000576	-0.0155	-0.000664	-0.001277	-0.000191	-0.000089	0.000576	0.015501	0.037	0.02	0.42	O.k
Base	11	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	11	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	11	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	11	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	11	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	11	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	11	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	11	DERIVA 2Y	0	0	0	0	0	0			0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story2	12	DERIVA 1X	0.044805	-0.00015	-0.000861	0.000321	0.002604	0.000565	0.000144	0.002741	0.034	0.00	0.08	O.k
Story2	12	DERIVA 1X	-0.045408	-0.00897	-0.000969	-0.000642	-0.000742	-0.000142	0.000144	0.003049	0.034	0.00	0.09	O.k
Story2	12	DERIVA 1Y	0.000089	0.026946	-0.000816	0.004115	0.000997	0.000389	0.000143	0.003049	0.034	0.00	0.09	O.k
Story2	12	DERIVA 1Y	-0.000692	-0.03606	-0.001014	-0.004436	0.000865	0.000034	0.000144	0.003049	0.034	0.00	0.09	O.k
Story2	12	DERIVA 2X	0.044949	0.002895	-0.000408	0.000304	0.002145	0.000451	0.010476	0.00268	0.034	0.31	0.08	O.k
Story2	12	DERIVA 2X	-0.045264	-0.00592	-0.000517	-0.000659	-0.001201	-0.000256	0.010696	0.001313	0.034	0.32	0.04	O.k
Story2	12	DERIVA 2Y	0.000232	0.029995	-0.000364	0.004098	0.000538	0.000276	0.000043	0.017157	0.034	0.00	0.51	O.k
Story2	12	DERIVA 2Y	-0.000548	-0.03302	-0.000561	-0.004453	0.000406	-0.00008	0.000265	0.01579	0.034	0.01	0.47	O.k
Story1	12	DERIVA 1X	0.034473	0.000215	-0.000616	0.000272	0.000161	0.000089	0.034473	0.000215	0.037	0.94	0.01	O.k
Story1	12	DERIVA 1X	-0.034568	-0.0046	-0.000716	-0.000874	-0.007515	-0.000089	0.034568	0.004603	0.037	0.95	0.13	O.k
Story1	12	DERIVA 1Y	0.000189	0.012838	-0.000587	0.003654	-0.00349	0.000089	0.000189	0.012838	0.037	0.01	0.35	O.k
Story1	12	DERIVA 1Y	-0.000283	-0.01723	-0.000745	-0.004256	-0.003864	-0.000089	0.000283	0.017225	0.037	0.01	0.47	O.k
Story1	12	DERIVA 2X	0.034496	0.001716	-0.000295	0.000125	0.001902	0.000088	0.034496	0.001716	0.037	0.95	0.05	O.k
Story1	12	DERIVA 2X	-0.034545	-0.0031	-0.000394	-0.001021	-0.005774	-0.00009	0.034545	0.003102	0.037	0.95	0.08	O.k
Story1	12	DERIVA 2Y	0.000212	0.014338	-0.000266	0.003507	-0.001749	0.000088	0.000212	0.014338	0.037	0.01	0.39	O.k
Story1	12	DERIVA 2Y	-0.000261	-0.01573	-0.000424	-0.004403	-0.002123	-0.000089	0.000261	0.015725	0.037	0.01	0.43	O.k
Base	12	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	12	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	12	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	12	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	12	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	12	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	12	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	12	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	13	DERIVA 1X	0.044049	0.001101	-0.000686	0.00134	0.002044	0.000069	0.01029	0.000886	0.034	0.31	0.03	O.k
Story2	13	DERIVA 1X	-0.044446	-0.00771	-0.000832	0.000385	-0.001206	-0.00018	0.010595	0.003107	0.034	0.32	0.09	O.k
Story2	13	DERIVA 1Y	0.000681	0.028195	-0.000662	0.005128	0.000486	0.000134	0.00017	0.015357	0.034	0.01	0.46	O.k
Story2	13	DERIVA 1Y	-0.001077	-0.0348	-0.000856	-0.003403	0.000353	-0.000246	0.000474	0.017579	0.034	0.01	0.52	O.k
Story2	13	DERIVA 2X	0.044139	0.003354	-0.000329	0.000089	0.001885	0.000077	0.010353	0.001638	0.034	0.31	0.05	O.k
Story2	13	DERIVA 2X	-0.044357	-0.00546	-0.000475	-0.000085	-0.001365	-0.000172	0.010532	0.002355	0.034	0.31	0.07	O.k
Story2	13	DERIVA 2Y	0.00077	0.030448	-0.000306	0.004678	0.000327	0.000142	0.000233	0.01611	0.034	0.01	0.48	O.k
Story2	13	DERIVA 2Y	-0.000988	-0.03255	-0.000499	-0.003853	0.000194	-0.000237	0.000412	0.016827	0.034	0.01	0.50	O.k
Story1	13	DERIVA 1X	0.033759	0.000215	-0.000449	0.002249	0.001922	0.000089	2.7E-05	0.001501	0.037	0.00	0.04	O.k
Story1	13	DERIVA 1X	-0.033851	-0.0046	-0.000579	0.001081	-0.005804	-0.000089	2.6E-05	0.001501	0.037	0.00	0.04	O.k
Story1	13	DERIVA 1Y	0.000511	0.012838	-0.000437	0.005646	-0.00187	0.000089	2.6E-05	0.0015	0.037	0.00	0.04	O.k
Story1	13	DERIVA 1Y	-0.000603	-0.01723	-0.000591	-0.002316	-0.002012	-0.000089	0.000027	0.0015	0.037	0.00	0.04	O.k
Story1	13	DERIVA 2X	0.033786	0.001716	-0.00022	0.001496	0.002643	0.000088	0.033786	0.001716	0.037	0.93	0.05	O.k
Story1	13	DERIVA 2X	-0.033825	-0.0031	-0.000351	0.000328	-0.005804	-0.00009	0.033825	0.003102	0.037	0.93	0.08	O.k
Story1	13	DERIVA 2Y	0.000537	0.014338	-0.000208	0.004893	-0.001149	0.000088	0.000537	0.014338	0.037	0.01	0.39	O.k
Story1	13	DERIVA 2Y	-0.000576	-0.01573	-0.000362	-0.003069	-0.001292	-0.000089	0.000576	0.015725	0.037	0.02	0.43	O.k
Base	13	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	14	DERIVA 1X	0.045094	-0.00263	-0.001812	0.001811	0.001316	0.000261	0.010621	0.002087	0.034	0.32	0.06	O.k
Story2	14	DERIVA 1X	-0.04494	-0.00858	-0.001857	0.001166	-0.001695	-0.000373	0.010372	0.004747	0.034	0.31	0.14	O.k
Story2	14	DERIVA 1Y	0.000465	0.024056	-0.001744	0.005519	-0.000161	0.000191	0.000278	0.012036	0.034	0.01	0.36	O.k
Story2	14	DERIVA 1Y	-0.000311	-0.03527	-0.001925	-0.002542	-0.000218	-0.000303	0.000028	0.018871	0.034	0.00	0.56	O.k
Story2	14	DERIVA 2X	0.045052	0.001278	-0.000892	0.000962	0.001445	0.000301	0.010556	0.000299	0.034	0.32	0.01	O.k
Story2	14	DERIVA 2X	-0.044982	-0.00467	-0.000938	0.000317	-0.001565	-0.000332	0.010437	0.002361	0.034	0.31	0.07	O.k
Story2	14	DERIVA 2Y	0.000423	0.027963	-0.000824	0.00467	-0.000031	0.000232	0.000211	0.014423	0.034	0.01	0.43	O.k
Story2	14	DERIVA 2Y	-0.000353	-0.03136	-0.001006	-0.00339	-0.000089	-0.000263	0.000092	0.016484	0.034	0.00	0.49	O.k
Story1	14	DERIVA 1X	0.034473	-0.00054	-0.001508	-0.00213	0.003336	0.000089	0.034473	0.000542	0.037	0.94	0.01	O.k
Story1	14	DERIVA 1X	-0.034568	-0.00383	-0.00155	-0.00288	-0.000558	-0.000089	0.034568	0.003833	0.037	0.95	0.11	O.k
Story1	14	DERIVA 1Y	0.000189	0.01202	-0.001456	0.001104	0.001408	0.000089	0.000189	0.01202	0.037	0.01	0.33	O.k
Story1	14	DERIVA 1Y	-0.000283	-0.01639	-0.001602	-0.006114	0.00137	-0.000089	0.000283	0.016394	0.037	0.01	0.45	O.k
Story1	14	DERIVA 2X	0.034496	0.000979	-0.000742	-0.001506	0.002522	0.000088	0.034496	0.000979	0.037	0.95	0.03	O.k
Story1	14	DERIVA 2X	-0.034545	-0.00231	-0.000785	-0.002256	-0.001372	-0.00009	0.034545	0.002312	0.037	0.95	0.06	O.k
Story1	14	DERIVA 2Y	0.000212	0.01354	-0.00069	0.001728	0.000594	0.000088	0.000212	0.01354	0.037	0.01	0.37	O.k
Story1	14	DERIVA 2Y	-0.000261	-0.01487	-0.000836	-0.00549	-0.000556	-0.000089	0.000261	0.014874	0.037	0.01	0.41	O.k
Base	14	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	2	DERIVA 1X	0.044919	-0.00436	-0.001727	0.002596	0.001648	0.00033	0.010446	0.003111	0.034	0.31	0.09	O.k
Story2	2	DERIVA 1X	-0.044922	-0.00729	-0.00174	0.002364	-0.001488	-0.000325	0.010354	0.004161	0.034	0.31	0.12	O.k
Story2	2	DERIVA 1Y	0.000385	0.017045	-0.00167	0.004443	0.000107	0.000237	0.000196	0.004962	0.034	0.01	0.15	O.k
Story2	2	DERIVA 1Y	-0.000388	-0.02869	-0.001797	0.000517	0.000053	-0.000232	0.000105	0.012233	0.034	0.00	0.37	O.k
Story2	2	DERIVA 2X	0.044917	-0.00024	-0.000895	0.001228	0.001582	0.000324	0.010421	0.000032	0.034	0.31	0.00	O.k
Story2	2	DERIVA 2X	-0.044923	-0.00318	-0.000908	0.000996	-0.001555	-0.00033	0.010378	0.001563	0.034	0.31	0.05	O.k
Story2	2	DERIVA 2Y	0.000383	0.021161	-0.000837	0.003075	0.00004	0.000231	0.000171	0.007561	0.034	0.01	0.23	O.k
Story2	2	DERIVA 2Y	-0.000389	-0.02458	-0.000965	-0.000851	-0.000014	-0.000237	0.000128	0.009635	0.034	0.00	0.29	O.k
Story1	2	DERIVA 1X	0.034473	-0.00125	-0.001571	-0.002399	0.001776	0.000089	0.034473	0.001245	0.037	0.94	0.03	O.k
Story1	2	DERIVA 1X	-0.034568	-0.00313	-0.001579	-0.002771	-0.002674	-0.000089	0.034568	0.003131	0.037	0.95	0.09	O.k
Story1	2	DERIVA 1Y	0.000189	0.012083	-0.00152	0.000306	-0.000429	0.000089	0.000189	0.012083	0.037	0.01	0.33	O.k
Story1	2	DERIVA 1Y	-0.000283	-0.01646	-0.00163	-0.005476	-0.000469	-0.000089	0.000283	0.01646	0.037	0.01	0.45	O.k
Story1	2	DERIVA 2X	0											

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Base	2	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story2	28	DERIVA 1X	0.044279	0.001103	-0.000686	0.001305	0.001221	0.000181	0.010561	0.000888	0.034	0.32	0.03 O.k
Story2	28	DERIVA 1X	-0.044212	-0.00748	-0.000832	0.000381	-0.002065	-0.000072	0.010437	0.002983	0.034	0.31	0.09 O.k
Story2	28	DERIVA 1Y	0.000913	0.026959	-0.000665	0.005002	-0.000353	0.000234	0.000384	0.014969	0.034	0.01	0.45 O.k
Story2	28	DERIVA 1Y	-0.000846	-0.03334	-0.000852	-0.003316	-0.000491	-0.000125	0.000026	0.017065	0.034	0.01	0.51 O.k
Story2	28	DERIVA 2X	0.044282	0.003349	-0.000329	0.000857	0.00138	0.000172	0.010548	0.001636	0.034	0.31	0.05 O.k
Story2	28	DERIVA 2X	-0.04421	-0.00524	-0.000475	-0.000068	-0.001906	-0.000081	0.010451	0.002234	0.034	0.31	0.07 O.k
Story2	28	DERIVA 2Y	0.000916	0.029206	-0.000309	0.004553	-0.000195	0.000225	0.000371	0.015718	0.034	0.01	0.47 O.k
Story2	28	DERIVA 2Y	-0.000844	-0.03109	-0.000496	-0.003764	-0.000332	-0.000134	0.000274	0.016316	0.034	0.01	0.49 O.k
Story1	28	DERIVA 1X	0.033718	0.000215	-0.000449	0.002226	0.005759	0.000091	0.033718	0.000215	0.037	0.92	0.01 O.k
Story1	28	DERIVA 1X	-0.033775	-0.0045	-0.000578	0.001085	-0.001964	-0.000116	0.033775	0.004501	0.037	0.93	0.12 O.k
Story1	28	DERIVA 1Y	0.000529	0.01199	-0.000439	0.005458	0.001978	0.000078	0.000529	0.01199	0.037	0.01	0.33 O.k
Story1	28	DERIVA 1Y	-0.000586	-0.01628	-0.000588	-0.002147	0.001817	-0.000103	0.000586	0.016276	0.037	0.02	0.45 O.k
Story1	28	DERIVA 2X	0.033734	0.001713	-0.000221	0.001474	0.005066	0.000097	0.033734	0.001713	0.037	0.92	0.05 O.k
Story1	28	DERIVA 2X	-0.033759	-0.003	-0.000351	0.000333	-0.002658	-0.000109	0.033759	0.003003	0.037	0.92	0.08 O.k
Story1	28	DERIVA 2Y	0.000545	0.013488	-0.000211	0.004705	0.001284	0.000084	0.000545	0.013488	0.037	0.01	0.37 O.k
Story1	28	DERIVA 2Y	-0.00057	-0.01478	-0.00036	-0.002899	0.001124	-0.000096	0.00057	0.014778	0.037	0.02	0.40 O.k
Base	28	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	28	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	28	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	28	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	28	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	28	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	28	DERIVA 2Y	0	0	0	0	0	0		0.000			
Base	28	DERIVA 2Y	0	0	0	0	0	0		0.000			
Story2	3	DERIVA 1X	0.044022	-0.00454	-0.001099	-0.000897	0.001458	0.000042	0.010263	0.003293	0.034	0.31	0.10 O.k
Story2	3	DERIVA 1X	-0.044121	-0.00748	-0.001107	-0.001129	-0.001401	-0.000122	0.01027	0.004345	0.034	0.31	0.13 O.k
Story2	3	DERIVA 1Y	0.000824	0.016862	-0.00104	0.00093	0.000078	0.000196	0.000313	0.004779	0.034	0.01	0.14 O.k
Story2	3	DERIVA 1Y	-0.000924	-0.02888	-0.001166	-0.002956	-0.000021	-0.000275	0.000321	0.012415	0.034	0.01	0.37 O.k
Story2	3	DERIVA 2X	0.044057	-0.00036	-0.000671	-0.000576	0.001421	0.000072	0.010271	0.000092	0.034	0.31	0.00 O.k
Story2	3	DERIVA 2X	-0.044087	-0.0033	-0.000679	-0.000808	-0.001438	-0.000093	0.010262	0.001688	0.034	0.31	0.05 O.k
Story2	3	DERIVA 2Y	0.000859	0.021035	-0.000612	0.001251	0.000041	0.000225	0.000322	0.007435	0.034	0.01	0.22 O.k
Story2	3	DERIVA 2Y	-0.000889	-0.0247	-0.000738	-0.002635	-0.000058	-0.000246	0.000313	0.009759	0.034	0.01	0.29 O.k
Story1	3	DERIVA 1X	0.033759	-0.00125	-0.000943	0.005767	0.001966	0.000089	0.033759	0.001245	0.037	0.92	0.03 O.k
Story1	3	DERIVA 1X	-0.033851	-0.00313	-0.00095	0.005389	-0.002558	-0.000089	0.033851	0.003131	0.037	0.93	0.09 O.k
Story1	3	DERIVA 1Y	0.000511	0.012083	-0.000892	0.008524	-0.000252	0.000089	0.000511	0.012083	0.037	0.01	0.33 O.k
Story1	3	DERIVA 1Y	-0.000603	-0.01646	-0.001001	0.002632	-0.000341	-0.000089	0.000603	0.01646	0.037	0.02	0.45 O.k
Story1	3	DERIVA 2X	0.033786	0.000272	-0.000574	0.00324	0.002199	0.000088	0.033786	0.000272	0.037	0.93	0.01 O.k
Story1	3	DERIVA 2X	-0.033825	-0.00161	-0.000582	0.002862	-0.002325	-0.00009	0.033825	0.001614	0.037	0.93	0.04 O.k
Story1	3	DERIVA 2Y	0.000537	0.0136	-0.000524	0.005997	-0.000019	0.000088	0.000537	0.0136	0.037	0.01	0.37 O.k
Story1	3	DERIVA 2Y	-0.000576	-0.01494	-0.000632	0.000105	-0.000108	-0.000089	0.000576	0.014943	0.037	0.02	0.41 O.k
Base	3	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	3	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0		0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0		0.000			
Story2	31	DERIVA 1X	0.045263	-0.00015	-0.000853	0.000297	0.000794	0.000154	0.010823	0.000012	0.034	0.32	0.00 O.k
Story2	31	DERIVA 1X	-0.04495	-0.00873	-0.000962	-0.000648	-0.002573	-0.000556	0.010413	0.004218	0.034	0.31	0.13 O.k
Story2	31	DERIVA 1Y	0.000546	0.025715	-0.000812	0.003989	-0.000831	-0.000031	0.000359	0.013748	0.034	0.01	0.41 O.k
Story2	31	DERIVA 1Y	-0.000233	-0.0346	-0.001002	-0.00434	-0.000949	-0.000372	0.000051	0.018274	0.034	0.00	0.55 O.k
Story2	31	DERIVA 2X	0.045184	0.002893	-0.000403	0.000284	0.001233	0.000026	0.01072	0.001218	0.034	0.32	0.04 O.k
Story2	31	DERIVA 2X	-0.045028	-0.00569	-0.000512	-0.00066	-0.002133	-0.00045	0.010515	0.002692	0.034	0.31	0.08 O.k
Story2	31	DERIVA 2Y	0.000468	0.028756	-0.000362	0.003977	-0.000391	0.000076	0.000257	0.015273	0.034	0.01	0.46 O.k
Story2	31	DERIVA 2Y	-0.000312	-0.03156	-0.000552	-0.004352	-0.000509	-0.000266	0.000052	0.016748	0.034	0.00	0.50 O.k
Story1	31	DERIVA 1X	0.03444	0.00016	-0.000608	0.000202	0.007392	0.000087	0.03444	0.00016	0.037	0.94	0.00 O.k
Story1	31	DERIVA 1X	-0.034537	-0.00452	-0.000708	-0.000914	-0.000281	-0.000085	0.034537	0.004516	0.037	0.95	0.12 O.k
Story1	31	DERIVA 1Y	0.000187	0.011967	-0.000582	0.003422	0.003732	0.000091	0.000187	0.011967	0.037	0.01	0.33 O.k
Story1	31	DERIVA 1Y	-0.000284	-0.01632	-0.000734	-0.004134	0.003378	-0.000088	0.000284	0.016323	0.037	0.01	0.45 O.k
Story1	31	DERIVA 2X	0.034464	0.001675	-0.000289	0.000064	0.0057	0.000087	0.034464	0.001675	0.037	0.94	0.05 O.k
Story1	31	DERIVA 2X	-0.034513	-0.003	-0.000389	-0.001052	-0.001973	-0.000085	0.034513	0.003	0.037	0.95	0.08 O.k
Story1	31	DERIVA 2Y	0.000211	0.013483	-0.000264	0.003284	0.00204	0.00009	0.000211	0.013483	0.037	0.001	0.37 O.k
Story1	31	DERIVA 2Y	-0.00026	-0.01481	-0.000415	-0.004272	0.001687	-0.000089	0.00026	0.014807	0.037	0.01	0.41 O.k
Base	31	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	31	DERIVA 1X	0	0	0	0	0	0		0.000			
Base	31	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	31	DERIVA 1Y	0	0	0	0	0	0		0.000			
Base	31	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	31	DERIVA 2X	0	0	0	0	0	0		0.000			
Base	31	DERIVA 2Y	0	0	0	0	0	0		0.000			
Base	31	DERIVA 2Y	0	0	0	0	0	0		0.000			
Story2	4	DERIVA 1X	0.044805	-0.00557	-0.001368	0.002081	0.000889	0.000233	0.010332	0.003627	0.034	0.31	0.11 O.k
Story2	4	DERIVA 1X	-0.044943	-0.0063	-0.001467	0.00203	-0.000123	-0.000071	0.010375	0.003866	0.034	0.31	0.12 O.k
Story2	4	DERIVA 1Y	0.000317	0.016764	-0.001358	0.003898	0.000393	0.000023	0.000128	0.004583	0.034	0.00	0.14 O.k
Story2	4	DERIVA 1Y	-0.000455	-0.02864	-0.001477	0.000213	0.000373	-0.000068	0.000172	0.012076	0.034	0.01	0.36 O.k
Story2	4	DERIVA 2X	0.044836	-0.00145	-0.000712	0.000949	0.000697	0.000189	0.01034	0.00102	0.034	0.31	0.03 O.k
Story2	4	DERIVA 2X	-0.044912	-0.00218	-0.00081	0.000897	-0.000315	-0.000115	0.010367	0.001259	0.034	0.31	0.04 O.k
Story2	4	DERIVA 2Y	0.000348	0.020884	-0.000701	0.002766	0.000201	0.000186	0.000136	0.007189	0.034	0.00	0.21 O.k
Story2	4	DERIVA 2Y	-0.000424	-0.02452	-0.000821	-0.00092	0.000181	-0.000112	0.000163	0.00947	0.034	0.00	0.28 O.k

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

Story1	4	DERIVA 1X	0.034473	-0.00194	-0.001241	-0.001563	-0.000395	0.000089	0.034473	0.001942	0.037	0.94	0.05	O.k
Story1	4	DERIVA 1Y	-0.034568	-0.00244	-0.001312	-0.00165	-0.004448	-0.000089	0.034568	0.002437	0.037	0.95	0.07	O.k
Story1	4	DERIVA 1Y	0.000189	0.012181	-0.001224	0.001298	-0.002377	0.000089	0.000189	0.012181	0.037	0.01	0.33	O.k
Story1	4	DERIVA 1Y	-0.000283	-0.01656	-0.001328	-0.004511	-0.002466	-0.000089	0.000283	0.01656	0.037	0.01	0.45	O.k
Story1	4	DERIVA 2X	0.034496	-0.00043	-0.000637	-0.001632	0.000829	0.000088	0.034496	0.000428	0.037	0.95	0.01	O.k
Story1	4	DERIVA 2X	-0.034545	-0.00092	-0.000708	-0.001719	-0.003224	-0.00009	0.034545	0.000924	0.037	0.95	0.03	O.k
Story1	4	DERIVA 2Y	0.000212	0.013695	-0.000621	0.001229	-0.001154	0.000088	0.000212	0.013695	0.037	0.01	0.38	O.k
Story1	4	DERIVA 2Y	-0.000261	-0.01505	-0.000725	-0.00458	-0.001242	-0.000089	0.000261	0.015046	0.037	0.01	0.41	O.k
Base	4	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	4	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	5	DERIVA 1X	0.043947	-0.00574	-0.000862	-0.000515	0.001609	0.000024	0.010188	0.003799	0.034	0.30	0.11	O.k
Story2	5	DERIVA 1X	-0.04411	-0.00647	-0.000918	-0.000564	-0.00112	-0.000121	0.010259	0.004036	0.034	0.31	0.12	O.k
Story2	5	DERIVA 1Y	0.000791	0.016589	-0.00083	0.001287	0.00029	0.00011	0.00028	0.004408	0.034	0.01	0.13	O.k
Story2	5	DERIVA 1Y	-0.000954	-0.0288	-0.00095	-0.002365	0.000199	-0.000208	0.000351	0.012242	0.034	0.01	0.37	O.k
Story2	5	DERIVA 2X	0.043992	-0.00158	-0.000542	-0.000435	0.001509	0.000042	0.010206	0.001151	0.034	0.30	0.03	O.k
Story2	5	DERIVA 2X	-0.044064	-0.00231	-0.000599	-0.000484	-0.001219	-0.000103	0.010239	0.001386	0.034	0.31	0.04	O.k
Story2	5	DERIVA 2Y	0.000837	0.020751	-0.000511	0.001366	0.000191	0.000129	0.0003	0.007056	0.034	0.01	0.21	O.k
Story2	5	DERIVA 2Y	-0.000908	-0.02464	-0.00063	-0.002286	0.000099	-0.000189	0.000332	0.009594	0.034	0.01	0.29	O.k
Story1	5	DERIVA 1X	0.033759	-0.00194	-0.000732	0.004718	0.000842	0.000089	0.033759	0.001942	0.037	0.92	0.05	O.k
Story1	5	DERIVA 1X	-0.033851	-0.00244	-0.000781	0.00463	-0.003047	-0.000089	0.033851	0.002437	0.037	0.93	0.07	O.k
Story1	5	DERIVA 1Y	0.000511	0.012181	-0.000704	0.007619	-0.001064	0.000089	0.000511	0.012181	0.037	0.01	0.33	O.k
Story1	5	DERIVA 1Y	-0.000603	-0.01656	-0.000809	0.001729	-0.001141	-0.000089	0.000603	0.01656	0.037	0.02	0.45	O.k
Story1	5	DERIVA 2X	0.033786	-0.00043	-0.000461	0.002698	0.001275	0.000088	0.033786	0.000428	0.037	0.93	0.01	O.k
Story1	5	DERIVA 2X	-0.033825	-0.00092	-0.00051	0.00261	-0.002613	-0.00009	0.033825	0.000924	0.037	0.93	0.03	O.k
Story1	5	DERIVA 2Y	0.000537	0.013695	-0.000434	0.005599	-0.000631	0.000088	0.000537	0.013695	0.037	0.01	0.38	O.k
Story1	5	DERIVA 2Y	-0.000576	-0.01505	-0.000538	-0.000291	-0.000707	-0.000089	0.000576	0.015046	0.037	0.02	0.41	O.k
Base	5	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	5	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	6	DERIVA 1X	0.044809	-0.00522	-0.001441	0.00227	0.000098	0.000103	0.010336	0.003337	0.034	0.31	0.10	O.k
Story2	6	DERIVA 1X	-0.044939	-0.00614	-0.001539	0.002205	-0.000914	-0.000201	0.010371	0.00364	0.034	0.31	0.11	O.k
Story2	6	DERIVA 1Y	0.00032	0.017164	-0.00143	0.004089	-0.000398	0.000108	0.000131	0.004887	0.034	0.00	0.15	O.k
Story2	6	DERIVA 1Y	-0.000451	-0.02852	-0.00155	0.000386	-0.000417	-0.000205	0.000168	0.011864	0.034	0.01	0.35	O.k
Story2	6	DERIVA 2X	0.044837	-0.00126	-0.000737	0.001023	0.000306	0.000126	0.010341	0.000891	0.034	0.31	0.03	O.k
Story2	6	DERIVA 2X	-0.044911	-0.00218	-0.000835	0.000958	-0.000706	-0.000179	0.010366	0.001193	0.034	0.31	0.04	O.k
Story2	6	DERIVA 2Y	0.000348	0.021122	-0.000726	0.002841	-0.000191	0.00013	0.000136	0.007334	0.034	0.00	0.22	O.k
Story2	6	DERIVA 2Y	-0.000423	-0.02457	-0.000846	-0.000861	-0.00021	-0.000183	0.000162	0.009418	0.034	0.00	0.28	O.k
Story1	6	DERIVA 1X	0.034473	-0.00188	-0.001317	-0.002284	0.004914	0.000089	0.034473	0.001884	0.037	0.94	0.05	O.k
Story1	6	DERIVA 1X	-0.034568	-0.0025	-0.001387	-0.002395	0.000862	-0.000089	0.034568	0.002497	0.037	0.95	0.07	O.k
Story1	6	DERIVA 1Y	0.000189	0.012277	-0.001299	0.000583	0.002932	0.000089	0.000189	0.012277	0.037	0.01	0.34	O.k
Story1	6	DERIVA 1Y	-0.000283	-0.01666	-0.001404	-0.005262	0.002844	-0.000089	0.000283	0.016658	0.037	0.01	0.46	O.k
Story1	6	DERIVA 2X	0.034496	-0.00037	-0.000664	-0.001893	0.003384	0.000088	0.034496	0.000373	0.037	0.95	0.01	O.k
Story1	6	DERIVA 2X	-0.034545	-0.00099	-0.000734	-0.002004	-0.000668	-0.00009	0.034545	0.000986	0.037	0.95	0.03	O.k
Story1	6	DERIVA 2Y	0.000212	0.013788	-0.000647	0.000974	0.001402	0.000088	0.000212	0.013788	0.037	0.01	0.38	O.k
Story1	6	DERIVA 2Y	-0.000261	-0.01515	-0.000752	-0.004871	0.001314	-0.000089	0.000261	0.015147	0.037	0.01	0.41	O.k
Base	6	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	6	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	6	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	6	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	6	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	6	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	6	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	6	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	7	DERIVA 1X	0.043949	-0.00548	-0.000935	-0.000766	0.001052	0.000143	0.01019	0.003598	0.034	0.30	0.11	O.k
Story2	7	DERIVA 1X	-0.044108	-0.0064	-0.000991	-0.000828	-0.001676	-0.000002	0.010257	0.003898	0.034	0.31	0.12	O.k
Story2	7	DERIVA 1Y	0.000793	0.0169	-0.000903	0.001037	-0.000266	0.000238	0.000282	0.004623	0.034	0.01	0.14	O.k
Story2	7	DERIVA 1Y	-0.000952	-0.02878	-0.001023	-0.002632	-0.000358	-0.000096	0.000349	0.012119	0.034	0.01	0.36	O.k
Story2	7	DERIVA 2X	0.043992	-0.00143	-0.000567	-0.000525	0.001196	0.000109	0.010206	0.001054	0.034	0.30	0.03	O.k
Story2	7	DERIVA 2X	-0.044064	-0.00234	-0.000624	-0.000587	-0.001532	-0.000036	0.010239	0.001354	0.034	0.31	0.04	O.k
Story2	7	DERIVA 2Y	0.000836	0.020955	-0.000536	0.001279	-0.000122	0.000203	0.000299	0.007167	0.034	0.01	0.21	O.k
Story2	7	DERIVA 2Y	-0.000908	-0.02472	-0.000656	-0.00239	-0.000214	-0.000131	0.000332	0.009575	0.034	0.01	0.29	O.k
Story1	7	DERIVA 1X	0.033759	-0.00188	-0.000806	0.005268	0.003311	0.000089	0.033759	0.001884	0.037	0.92	0.05	O.k
Story1	7	DERIVA 1X	-0.033851	-0.0025	-0.000855	0.005156	-0.000578	-0.000089	0.033851	0.002497	0.037	0.93	0.07	O.k
Story1	7	DERIVA 1Y	0.000511	0.012277	-0.000778	0.008176	0.001406	0.000089	0.000511	0.012277	0.037	0.01	0.34	O.k
Story1	7	DERIVA 1Y	-0.000603	-0.01666	-0.000883	0.002248	0.001327	-0.000089	0.000603	0.016658	0.037	0.02	0.46	O.k
Story1	7	DERIVA 2X	0.033786	-0.00037	-0.000487	0.002909	0.002695	0.000088	0.033786	0.000373	0.037	0.93	0.01	O.k
Story1	7	DERIVA 2X	-0.033825	-0.00099	-0.000536	0.002797	-0.001194	-0.00009	0.033825	0.000986	0.037	0.93	0.03	O.k
Story1	7	DERIVA 2Y	0.000537	0.013788	-0.000459	0.005817	0.00079	0.000088	0.000537	0.013788	0.037	0.01	0.38	O.k
Story1	7	DERIVA 2Y	-0.000576	-0.01515	-0.000564	-0.000111	0.000711	-0.000089	0.000576	0.015147	0.037	0.02	0.41	O.k
Base	7	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	7	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	7	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	7	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	7	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	7	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	7	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	7	DERIVA 2Y	0	0	0	0	0	0			0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story2	8	DERIVA 1X	0.044774	-0.00402	-0.001835	0.002869	0.001678	0.000358	0.010301	0.002834	0.034	0.31	0.08	O.k
Story2	8	DERIVA 1Y	-0.045067	-0.00715	-0.001848	0.00262	-0.001458	-0.000298	0.010499	0.003956	0.034	0.31	0.12	O.k
Story2	8	DERIVA 1Y	0.00024	0.017838	-0.001776	0.004754	0.000137	0.000301	0.000051	0.005405	0.034	0.00	0.16	O.k
Story2	8	DERIVA 1Y	-0.000533	-0.02901	-0.001907	0.000734	0.000083	-0.000241	0.000025	0.012195	0.034	0.01	0.36	O.k
Story2	8	DERIVA 2X	0.044843	-6.9E-05	-0.000934	0.001336	0.001625	0.000341	0.010347	0.000251	0.034	0.31	0.01	O.k
Story2	8	DERIVA 2X	-0.044998	-0.0032	-0.000947	0.001087	-0.001511	-0.000315	0.010453	0.00151	0.034	0.31	0.05	O.k
Story2	8	DERIVA 2Y	0.000309	0.021791	-0.000875	0.003221	0.000084	0.000284	0.000097	0.007851	0.034	0.00	0.23	O.k
Story2	8	DERIVA 2Y	-0.000464	-0.02506	-0.001006	-0.000799	0.00003	-0.000258	0.000203	0.00975	0.034	0.01	0.29	O.k
Story1	8	DERIVA 1X	0.034473	-0.00119	-0.001678	-3.32E-03	0.00191	0.000089	0.034473	0.001188	0.037	0.94	0.03	O.k
Story1	8	DERIVA 1X	-0.034568	-0.0032	-0.001686	-0.003711	-0.00254	-0.000089	0.034568	0.003195	0.037	0.95	0.09	O.k
Story1	8	DERIVA 1Y	0.000189	0.012433	-0.001626	-0.000552	-0.000295	0.000089	0.000189	0.012433	0.037	0.01	0.34	O.k
Story1	8	DERIVA 1Y	-0.000283	-0.01682	-0.001738	-0.006474	-0.000335	-0.000089	0.000283	0.016816	0.037	0.01	0.46	O.k
Story1	8	DERIVA 2X	0.034496	0.00032	-0.000839	-0.002304	0.002063	0.000088	0.034496	0.00032	0.037	0.95	0.01	O.k
Story1	8	DERIVA 2X	-0.034545	-0.00169	-0.000847	-0.0027	-0.002388	-0.00009	0.034545	0.001688	0.037	0.95	0.05	O.k
Story1	8	DERIVA 2Y	0.000212	0.01394	-0.000787	0.000459	-0.000142	0.000088	0.000212	0.01394	0.037	0.01	0.38	O.k
Story1	8	DERIVA 2Y	-0.000261	-0.01531	-0.000899	-0.005463	-0.000183	-0.000089	0.000261	0.015308	0.037	0.01	0.42	O.k
Base	8	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	9	DERIVA 1X	0.043953	-0.00431	-0.001205	-0.001228	0.001517	0.000096	0.010194	0.003123	0.034	0.30	0.09	O.k
Story2	9	DERIVA 1X	-0.044192	-0.00744	-0.001214	-0.001475	-0.00134	-0.000069	0.010341	0.004246	0.034	0.31	0.13	O.k
Story2	9	DERIVA 1Y	0.000754	0.017548	-0.001145	0.000639	0.000138	0.000287	0.000243	0.005115	0.034	0.01	0.15	O.k
Story2	9	DERIVA 1Y	-0.000993	-0.0293	-0.001274	-0.003341	0.000039	-0.00026	0.00039	0.012484	0.034	0.01	0.37	O.k
Story2	9	DERIVA 2X	0.044013	-0.00023	-0.00071	-0.000694	0.001478	0.000082	0.010227	0.000087	0.034	0.31	0.00	O.k
Story2	9	DERIVA 2X	-0.044132	-0.00336	-0.000719	-0.000941	-0.00138	-0.000083	0.010307	0.001675	0.034	0.31	0.05	O.k
Story2	9	DERIVA 2Y	0.000814	0.021626	-0.00065	0.001172	0.000099	0.000272	0.000277	0.007686	0.034	0.01	0.23	O.k
Story2	9	DERIVA 2Y	-0.000933	-0.02522	-0.00078	-0.002808	-3.89E-07	-0.000274	0.000357	0.009914	0.034	0.01	0.30	O.k
Story1	9	DERIVA 1X	0.033759	-0.00119	-0.001048	0.006554	0.002069	0.000089	0.033759	0.001188	0.037	0.92	0.03	O.k
Story1	9	DERIVA 1X	-0.033851	-0.0032	-0.001056	0.006151	-0.002455	-0.000089	0.033851	0.003195	0.037	0.93	0.09	O.k
Story1	9	DERIVA 1Y	0.000511	0.012433	-0.000996	0.00937	-0.000147	0.000089	0.000511	0.012433	0.037	0.01	0.34	O.k
Story1	9	DERIVA 1Y	-0.000603	-0.01682	-0.001108	0.003335	-0.000239	-0.000089	0.000603	0.016816	0.037	0.02	0.46	O.k
Story1	9	DERIVA 2X	0.033786	0.00032	-0.000613	0.003542	0.002148	0.000088	0.033786	0.00032	0.037	0.93	0.01	O.k
Story1	9	DERIVA 2X	-0.033825	-0.00169	-0.000621	0.00314	-0.002376	-0.00009	0.033825	0.001688	0.037	0.93	0.05	O.k
Story1	9	DERIVA 2Y	0.000537	0.01394	-0.000561	0.006358	-0.000068	0.000088	0.000537	0.01394	0.037	0.01	0.38	O.k
Story1	9	DERIVA 2Y	-0.000576	-0.01531	-0.000673	0.000323	-0.00016	-0.000089	0.000576	0.015308	0.037	0.02	0.42	O.k
Base	9	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	9	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	9	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	9	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	9	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	9	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	9	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	9	DERIVA 2Y	0	0	0	0	0	0			0.000			

PROYECTO: MODULO 6 CÁLCULO DE DERIVAS (ESPECTRO NORMAL NSR-10)

STORY DATA			
Name	Height	Elevation	Master Story
Story1	3.65	3.65	Yes
Base	0.00	0.00	No

$$\Delta_{\max}^i = \sqrt{\sum_{j=1}^2 (\partial_{tot,j}^i - \partial_{tot,j}^{i-1})^2}$$

A.6.3-1 NSR-10

Estructuras de	Deriva Maxima	Usada
Concreto reforzado, metalicas y de madera	1.0 % (0.010 hpi)	Si
mamposteria	0.5 % (0.005 hpi)	

POINT DISPLACEMENTS									$\Delta^i_{\max}$ (X)	$\Delta^i_{\max}$ (Y)	1.0 % hpi (m)	% hpi (X)	% hpi (Y)	Obs
Story	Label	ad Case/Com	UX	UY	UZ	RX	RY	RZ						
Story1	1	DERIVA 1X	0.006904	0.000106	-0.000076	0.000287	0.002144	0.001281	0.006904	0.000106	0.037	0.189151	0.0029	O.k
Story1	1	DERIVA 1X	-0.006879	-0.00028	-0.000086	0.000195	-0.00077	-0.000941	0.006879	0.000278	0.037	0.19	0.01	O.k
Story1	1	DERIVA 1Y	0.000014	0.00348	-0.000073	0.001111	0.000692	0.000333	0.000014	0.00348	0.037	0.000384	0.10	O.k
Story1	1	DERIVA 1Y	0.000011	-0.00365	-0.00009	-0.000629	0.000683	0.000007	0.000011	0.003651	0.037	0.00	0.10	O.k
Story1	1	DERIVA 2X	0.006898	0.000157	-0.000034	0.00013	0.001803	0.001195	0.006898	0.000157	0.037	0.19	0.00	O.k
Story1	1	DERIVA 2X	-0.006885	-0.00023	-0.000044	0.000038	-0.001111	-0.001028	0.006885	0.000227	0.037	0.19	0.01	O.k
Story1	1	DERIVA 2Y	0.000008	0.003531	-0.00003	0.000954	0.00035	0.000247	0.000008	0.003531	0.037	0.00	0.10	O.k
Story1	1	DERIVA 2Y	0.000005	-0.0036	-0.000047	-0.000786	0.000341	-0.000079	0.000005	0.0036	0.037	0.00	0.10	O.k
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1X	0	0	0	0	0	0.00E+00			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	2	DERIVA 1X	0.013681	0.000251	-0.00007	-0.00018	0.003587	0.001214	0.013681	0.00003	0.037	0.37	0.00	O.k
Story1	2	DERIVA 1X	-0.01366	-0.00013	-0.00009	-0.000272	-0.002186	-0.001535	0.01366	0.00003	0.037	0.37	0.00	O.k
Story1	2	DERIVA 1Y	0.000012	0.003645	-0.000071	0.000646	0.000704	0.000004	0.000012	3E-05	0.037	0.00	0.00	O.k
Story1	2	DERIVA 1Y	0.000009	-0.00353	-0.000088	-0.001097	0.000696	-0.000325	0.000009	3E-05	0.037	0.00	0.00	O.k
Story1	2	DERIVA 2X	0.013676	0.000221	-0.000028	-3.50E-05	0.003236	0.001294	0.013676	0.000221	0.037	0.37	0.01	O.k
Story1	2	DERIVA 2X	-0.013665	-0.00016	-0.000048	-0.000127	-0.002536	-0.001454	0.013665	0.000163	0.037	0.37	0.00	O.k
Story1	2	DERIVA 2Y	0.000007	0.003615	-0.00003	0.000791	0.000354	0.000085	0.000007	0.003615	0.037	0.00	0.10	O.k
Story1	2	DERIVA 2Y	0.000004	-0.00356	-0.000047	-0.000952	0.000346	-0.000245	0.000004	0.003557	0.037	0.00	0.10	O.k

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

Base	2	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	3	DERIVA 1X	0.006917	-6.6E-05	-1.61E-04	0.000669	0.000712	0.000904	0.006917	0.000066	0.037	0.19	0.00 O.k
Story1	3	DERIVA 1X	-0.006903	-0.00009	-0.000164	0.000663	-0.00093	-0.00099	0.006903	0.00009	0.037	0.19	0.00 O.k
Story1	3	DERIVA 1Y	0.000008	0.006648	-0.000147	0.002307	-0.000104	0.000062	0.000008	0.006648	0.037	0.00	0.18 O.k
Story1	3	DERIVA 1Y	0.000006	-0.0068	-0.000179	-0.000975	-0.000114	-0.000148	0.000006	0.006804	0.037	0.00	0.19 O.k
Story1	3	DERIVA 2X	0.006913	-2.3E-05	-0.000075	0.000269	0.000766	0.000925	0.006913	0.000023	0.037	0.19	0.00 O.k
Story1	3	DERIVA 2X	-0.006906	-4.7E-05	-0.000078	0.000263	-0.000877	-0.000969	0.006906	0.000047	0.037	0.19	0.00 O.k
Story1	3	DERIVA 2Y	0.000004	0.006691	-0.00006	0.001907	-0.00005	0.000083	0.000004	0.006691	0.037	0.00	0.18 O.k
Story1	3	DERIVA 2Y	0.000003	-0.00676	-0.000092	-0.001375	-0.00006	-0.000127	0.000003	0.006761	0.037	0.00	0.19 O.k
Base	3	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	4	DERIVA 1X	0.013715	0.000229	-0.000163	-0.00074	0.001515	0.001015	0.013715	0.000229	0.037	0.38	0.01 O.k
Story1	4	DERIVA 1X	-0.013703	0.000205	-0.000168	-0.000745	-0.001737	-0.000923	0.013703	0.000205	0.037	0.38	0.01 O.k
Story1	4	DERIVA 1Y	0.000007	0.006982	-0.000149	0.000901	-0.000106	0.000152	0.000007	0.006982	0.037	0.00	0.19 O.k
Story1	4	DERIVA 1Y	0.000005	-0.00655	-0.000182	-0.002387	-0.000116	-0.00006	0.000005	0.006548	0.037	0.00	0.18 O.k
Story1	4	DERIVA 2X	0.013712	0.000106	-0.000074	-0.000296	0.00157	0.000992	0.013712	0.000106	0.037	0.38	0.00 O.k
Story1	4	DERIVA 2X	-0.013706	0.000082	-0.00008	-0.000301	-0.001682	-0.000947	0.013706	0.000082	0.037	0.38	0.00 O.k
Story1	4	DERIVA 2Y	0.000004	0.006859	-0.000061	0.001346	-0.000051	0.000129	0.000004	0.006859	0.037	0.00	0.19 O.k
Story1	4	DERIVA 2Y	0.000002	-0.00667	-0.000093	-0.001942	-0.000061	-0.000083	0.000002	0.006671	0.037	0.00	0.18 O.k
Base	4	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	4	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	4	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	4	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	4	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	4	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	4	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	4	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	5	DERIVA 1X	0.006905	-6.2E-05	-0.000161	0.000667	0.000931	0.000993	0.006905	0.000062	0.037	0.19	0.00 O.k
Story1	5	DERIVA 1X	-0.006916	-8.7E-05	-0.000164	0.000662	-0.000712	-0.000901	0.006916	0.000087	0.037	0.19	0.00 O.k
Story1	5	DERIVA 1Y	-0.000005	0.006651	-0.000147	0.002305	0.000114	0.000151	0.000005	0.006651	0.037	0.00	0.18 O.k
Story1	5	DERIVA 1Y	-0.000007	-0.0068	-0.000179	-0.000976	0.000104	-0.000059	0.000007	0.0068	0.037	0.00	0.19 O.k
Story1	5	DERIVA 2X	0.006908	-2.2E-05	-0.000075	0.000268	0.000877	0.00097	0.006908	0.000022	0.037	0.19	0.00 O.k
Story1	5	DERIVA 2X	-0.006914	-4.6E-05	-0.000078	0.000263	-0.000766	-0.000924	0.006914	0.000046	0.037	0.19	0.00 O.k
Story1	5	DERIVA 2Y	-0.000002	0.006692	-0.00006	0.001906	0.00006	0.000128	0.000002	0.006692	0.037	0.00	0.18 O.k
Story1	5	DERIVA 2Y	-0.000004	-0.00676	-0.000092	-0.001376	0.00005	-0.000082	0.000004	0.00676	0.037	0.00	0.19 O.k
Base	5	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	5	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	5	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	5	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	5	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	5	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	5	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	5	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	6	DERIVA 1X	0.013701	0.000233	-0.000163	-0.000742	0.001737	0.000927	0.013701	0.000233	0.037	0.38	0.01 O.k
Story1	6	DERIVA 1X	-0.013715	0.000208	-0.000168	-0.000747	-0.001515	-0.001012	0.013715	0.000208	0.037	0.38	0.01 O.k
Story1	6	DERIVA 1Y	-0.000006	0.006985	-0.000149	0.0009	0.000116	0.000063	0.000006	0.006985	0.037	0.00	0.19 O.k
Story1	6	DERIVA 1Y	-0.000008	-0.00654	-0.000182	-0.002388	0.000106	-0.000149	0.000008	0.006544	0.037	0.00	0.18 O.k
Story1	6	DERIVA 2X	0.013705	0.000108	-0.000074	-0.000296	0.001682	0.000948	0.013705	0.000108	0.037	0.38	0.00 O.k
Story1	6	DERIVA 2X	-0.013712	0.000083	-0.00008	-0.000302	-0.00157	-0.000991	0.013712	0.000083	0.037	0.38	0.00 O.k
Story1	6	DERIVA 2Y	-0.000003	0.00686	-0.000061	0.001345	0.000061	0.000085	0.000003	0.00686	0.037	0.00	0.19 O.k
Story1	6	DERIVA 2Y	-0.000004	-0.00667	-0.000093	-0.001943	0.000051	-0.000128	0.000004	0.006669	0.037	0.00	0.18 O.k
Base	6	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	6	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	6	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	6	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	6	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	6	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	6	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	6	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	7	DERIVA 1X	0.006882	0.000192	-0.000073	0.000242	0.00077	0.000944	0.006882	0.000192	0.037	0.19	0.01 O.k
Story1	7	DERIVA 1X	-0.006905	-0.00019	-0.000084	0.000149	-0.002145	-0.001277	0.006905	0.000192	0.037	0.19	0.01 O.k
Story1	7	DERIVA 1Y	-0.00001	0.003566	-0.00007	0.001065	-0.000683	-0.000004	0.00001	0.003566	0.037	0.00	0.10 O.k
Story1	7	DERIVA 1Y	-0.000013	-0.00357	-0.000087	-0.000675	-0.000692	-0.000329	0.000013	0.003567	0.037	0.00	0.10 O.k
Story1	7	DERIVA 2X	0.006888	0.000189	-0.000033	0.000113	0.001112	0.001028	0.006888	0.000189	0.037	0.19	0.01 O.k
Story1	7	DERIVA 2X	-0.006899	-0.0002	-0.000043	0.000021	-0.001803	-0.001194	0.006899	0.000195	0.037	0.19	0.01 O.k
Story1	7	DERIVA 2Y	-0.000004	0.003563	-0.000029	0.000937	-0.000341	0.000008	0.000004	0.003563	0.037	0.00	0.10 O.k
Story1	7	DERIVA 2Y	-0.000007	-0.00357	-0.000047	-0.000803	-0.00035	-0.000246	0.000007	0.003569	0.037	0.00	0.10 O.k
Base	7	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	7	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	7	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	7	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	7	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	7	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	7	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	7	DERIVA 2Y	0	0	0	0	0	0	0	0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story1	8	DERIVA 1X	0.013657	0.000337	-0.000072	-0.000228	0.002186	0.001538	0.013657	0.000337	0.037	0.37	0.01	O.k
Story1	8	DERIVA 1X	-0.01368	-4.8E-05	-0.000092	-0.000321	-0.003586	-0.00121	0.01368	0.000048	0.037	0.37	0.00	O.k
Story1	8	DERIVA 1Y	-0.00001	0.00373	-0.000074	0.000597	-0.000696	0.000329	0.00001	0.00373	0.037	0.00	0.10	O.k
Story1	8	DERIVA 1Y	-0.000013	-0.00344	-0.000091	-0.001146	-0.000705	-0.000001	0.000013	0.00344	0.037	0.00	0.09	O.k
Story1	8	DERIVA 2X	0.013663	0.000253	-0.000029	-0.000053	0.002536	-0.001455	0.013663	0.000253	0.037	0.37	0.01	O.k
Story1	8	DERIVA 2X	-0.013674	-0.00013	-0.000049	-0.000145	-0.003236	-0.001293	0.013674	0.000132	0.037	0.37	0.00	O.k
Story1	8	DERIVA 2Y	-0.000004	0.003645	-0.000031	0.000773	-0.000346	0.000246	0.000004	0.003645	0.037	0.00	0.10	O.k
Story1	8	DERIVA 2Y	-0.000007	-0.00353	-0.000048	-0.00097	-0.000354	-0.000084	0.000007	0.003525	0.037	0.00	0.10	O.k
Base	8	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	8	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	14	DERIVA 1X	0.005978	0.002592	-0.000136	0.000454	0.001367	0.001039	0.005978	0.002592	0.037	0.16	0.07	O.k
Story1	14	DERIVA 1X	-0.005999	-0.00308	-0.000465	-0.00038	-0.001082	-0.001037	0.005999	0.003078	0.037	0.16	0.08	O.k
Story1	14	DERIVA 1Y	0.000205	0.006384	-0.000274	0.001027	0.000184	0.000052	0.000205	0.006384	0.037	0.01	0.17	O.k
Story1	14	DERIVA 1Y	-0.000225	-0.00687	-0.000327	-0.000953	0.000101	-0.00005	0.000225	0.00687	0.037	0.01	0.19	O.k
Story1	14	DERIVA 2X	0.005982	0.002695	-0.000027	0.000436	0.001314	0.001038	0.005982	0.002695	0.037	0.16	0.07	O.k
Story1	14	DERIVA 2X	-0.005995	-0.00298	-0.000356	-0.000398	-0.001135	-0.001038	0.005995	0.002976	0.037	0.16	0.08	O.k
Story1	14	DERIVA 2Y	0.000209	0.006486	-0.000165	0.001008	0.000131	0.000051	0.000209	0.006486	0.037	0.01	0.18	O.k
Story1	14	DERIVA 2Y	-0.000221	-0.00677	-0.000218	-0.000971	0.000048	-0.000051	0.000221	0.006768	0.037	0.01	0.19	O.k
Base	14	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0			0.000			

PROYECTO: MODULO 7 CÁLCULO DE DERIVAS (ESPECTRO NORMAL NSR-10)

STORY DATA			
Name	Height	Elevation	Master Story
Story2	1.70	5.10	
Story1	3.40	3.40	Yes
Base	0.00	0.00	No

$$\Delta_{\max}^i = \sqrt{\sum_{j=1}^2 \left(\partial_{\text{tot},j}^i - \partial_{\text{tot},j}^{i-1} \right)^2}$$

A.6.3-1 NSR-10

Estructuras de	Deriva Maxima	Usada
Concreto reforzado, metalicas y de madera	1.0 % (0.010 hpi)	Si
mamposteria	0.5 % (0.005 hpi)	

POINT DISPLACEMENTS									D ⁱ _{max} (X)	D ⁱ _{max} (Y)	1.0 % hpi (m)	% hpi (X)	% hpi (Y)	obs
Story	Label	ad Case/Com	UX	UY	UZ	RX	RY	RZ						
Story2	1	DERIVA 1X	0.015786	0.000038	-0.00003	-0.000186	0.002663	0.011238	0.005453	0.000013	0.017	0.320765	0.0008	O.k
Story2	1	DERIVA 1X	-0.015839	-0.00015	-0.000071	-0.000233	-0.002586	-0.011641	0.005456	0.00002	0.017	0.320941	0.0012	O.k
Story2	1	DERIVA 1Y	0.00015	0.018361	0.000021	0.002356	0.000082	0.000156	0.000069	0.006418	0.017	0.004059	0.3775	O.k
Story2	1	DERIVA 1Y	-0.000202	-0.01847	-0.000122	-0.002775	-0.000006	-0.00056	0.000071	0.006376	0.017	0.004176	0.3751	O.k
Story2	1	DERIVA 2X	0.015803	0.000067	-0.000009	-0.000085	0.002655	0.01135	0.005461	0.000055	0.017	0.321235	0.0032	O.k
Story2	1	DERIVA 2X	-0.015822	-0.00012	-0.000049	-0.000132	-0.002594	-0.011529	0.005448	0.000028	0.017	0.320471	0.0016	O.k
Story2	1	DERIVA 2Y	0.000167	0.018391	0.000043	0.002457	0.000075	0.000268	0.000077	0.006411	0.017	0.004529	0.3771	O.k
Story2	1	DERIVA 2Y	-0.000185	-0.01844	-0.000101	-0.002674	-0.000013	-0.000448	0.000064	0.006383	0.017	0.003765	0.3755	O.k
Story1	1	DERIVA 1X	0.010333	-2.5E-05	-0.00002	0.000053	0.003442	0.003746	0.010333	0.000025	0.034	0.303912	0.0007	O.k
Story1	1	DERIVA 1X	-0.010383	-0.00013	-0.000053	0.000004	-0.003417	-5.31E-03	0.010383	0.000127	0.034	0.305382	0.0037	O.k
Story1	1	DERIVA 1Y	0.000081	0.011943	0.000016	0.004255	0.000052	0.000108	0.000081	0.011943	0.034	0.002382	0.3513	O.k
Story1	1	DERIVA 1Y	-0.000131	-0.0121	-0.000089	-0.004198	-0.000027	-0.001668	0.000131	0.012095	0.034	0.003853	0.3557	O.k
Story1	1	DERIVA 2X	0.010342	0.000012	-0.000005	0.000035	0.003442	0.004156	0.010342	0.000012	0.034	0.304176	0.0004	O.k
Story1	1	DERIVA 2X	-0.010374	-0.00009	-0.000038	-0.000013	-0.003417	-0.004896	0.010374	0.00009	0.034	0.305118	0.0026	O.k
Story1	1	DERIVA 2Y	0.00009	0.01198	0.000031	0.004237	0.000052	0.000518	0.00009	0.01198	0.034	0.002647	0.3524	O.k
Story1	1	DERIVA 2Y	-0.000121	-0.01206	-0.000074	-0.004216	-0.000027	-0.001258	0.000121	0.012058	0.034	0.003559	0.3546	O.k
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2X	0	0	0	0	0.00E+00	0			0.000			
Base	1	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	1	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	13	DERIVA 1X	0.014398	0.000147	-0.000032	0.000232	0.002462	0.010626	0.005019	0.00002	0.017	0.295235	0.0012	O.k
Story2	13	DERIVA 1X	-0.014452	-3.9E-05	-0.000069	0.000186	-0.002385	-0.010221	0.005021	0.000014	0.017	0.295353	0.0008	O.k
Story2	13	DERIVA 1Y	0.000137	0.018447	0.000022	0.002765	0.000081	0.000559	0.000066	0.00636	0.017	0.003882	0.3741	O.k
Story2	13	DERIVA 1Y	-0.000192	-0.01834	-0.000123	-0.002346	-0.000003	-0.000154	0.000068	0.006403	0.017	0.004000	0.3766	O.k
Story2	13	DERIVA 2X	0.014415	0.000118	-0.000011	0.000132	0.002454	0.010513	0.005026	0.000028	0.017	0.295647	0.0016	O.k
Story2	13	DERIVA 2X	-0.014435	-6.8E-05	-0.000048	0.000085	-0.002392	-0.010333	0.005014	0.000056	0.017	0.294941	0.0033	O.k
Story2	13	DERIVA 2Y	0.000155	0.018418	0.000043	0.002864	0.000073	0.000446	0.000074	0.006368	0.017	0.004353	0.3746	O.k
Story2	13	DERIVA 2Y	-0.000174	-0.01837	-0.000102	-0.002447	-0.000011	-0.000266	0.00006	0.006395	0.017	0.003529	0.3762	O.k

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story1	13	DERIVA 1X	0.009379	0.000127	-0.000021	-0.000004	0.00315	0.004599	0.009379	0.000127	0.034	0.275853	0.0037	O.k
Story1	13	DERIVA 1X	-0.009431	0.000025	-0.000051	-0.000053	-0.003125	-0.00304	0.009431	0.000025	0.034	0.277382	0.0007	O.k
Story1	13	DERIVA 1Y	0.000071	0.012087	0.000017	0.004192	0.00005	0.001664	0.000071	0.012087	0.034	0.002088	0.3555	O.k
Story1	13	DERIVA 1Y	-0.000124	-0.01194	-0.000089	-0.004249	-0.000025	-0.000105	0.000124	0.011935	0.034	0.003647	0.3510	O.k
Story1	13	DERIVA 2X	0.009389	0.00009	-0.000006	0.000014	0.00315	0.004189	0.009389	0.00009	0.034	0.276147	0.0026	O.k
Story1	13	DERIVA 2X	-0.009421	-1.2E-05	-0.000037	-0.000035	-0.003125	-0.00345	0.009421	0.000012	0.034	0.277088	0.0004	O.k
Story1	13	DERIVA 2Y	0.000081	0.01205	0.000032	0.00421	0.00005	0.001254	0.000081	0.01205	0.034	0.002382	0.3544	O.k
Story1	13	DERIVA 2Y	-0.000114	-0.01197	-0.000075	-0.004231	-0.000025	-0.000515	0.000114	0.011972	0.034	0.003353	0.3521	O.k
Base	13	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	13	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	14	DERIVA 1X	0.014376	0.009677	-0.000204	0.003368	0.002117	0.009823	0.004926	4.9E-05	0.017	0.289765	0.0029	O.k
Story2	14	DERIVA 1X	-0.01443	0.009587	-0.000206	0.003329	-0.002134	-0.009369	0.004948	5.6E-05	0.017	0.291059	0.0033	O.k
Story2	14	DERIVA 1Y	0.000131	0.012622	-0.000203	0.003978	0.000025	0.000567	0.00005	0.001301	0.017	0.002941	0.0765	O.k
Story2	14	DERIVA 1Y	-0.000185	0.006643	-0.000208	0.00272	-0.000042	-0.000113	0.000071	0.001195	0.017	0.004176	0.0703	O.k
Story2	14	DERIVA 2X	0.014392	0.004633	-0.000101	0.001602	0.002123	0.009703	0.004935	3.1E-05	0.017	0.290294	0.0018	O.k
Story2	14	DERIVA 2X	-0.014415	0.004543	-0.000103	0.001563	-0.002129	-0.009489	0.004939	3.8E-05	0.017	0.290529	0.0022	O.k
Story2	14	DERIVA 2Y	0.000147	0.007578	-0.000099	0.002211	0.00003	0.000447	0.000059	0.001283	0.017	0.003471	0.0755	O.k
Story2	14	DERIVA 2Y	-0.00017	0.001599	-0.000105	0.000953	-0.000036	-0.000233	0.000063	0.001213	0.017	0.003706	0.0714	O.k
Story1	14	DERIVA 1X	0.00945	0.009628	-0.000139	-0.002213	0.002837	0.001618	0.00945	0.009628	0.034	0.277941	0.2832	O.k
Story1	14	DERIVA 1X	-0.009482	0.009531	-0.00014	-0.002232	-0.002845	0.000757	0.009482	0.009531	0.034	0.278882	0.2803	O.k
Story1	14	DERIVA 1Y	0.000081	0.011321	-0.000138	-0.001466	0.000028	0.002384	0.000081	0.011321	0.034	0.002382	0.3330	O.k
Story1	14	DERIVA 1Y	-0.000114	0.007838	-0.000141	-0.002979	-0.000036	-0.000009	0.000114	0.007838	0.034	0.003353	0.2305	O.k
Story1	14	DERIVA 2X	0.009457	0.004602	-0.000069	-0.00105	0.00284	0.000997	0.009457	0.004602	0.034	0.278147	0.1354	O.k
Story1	14	DERIVA 2X	-0.009476	0.004505	-0.000071	-0.001069	-0.002843	0.000136	0.009476	0.004505	0.034	0.278706	0.1325	O.k
Story1	14	DERIVA 2Y	0.000088	0.006295	-0.000068	-0.000302	0.000031	0.001763	0.000088	0.006295	0.034	0.002588	0.1851	O.k
Story1	14	DERIVA 2Y	-0.000107	0.002812	-0.000072	-0.001816	-0.000033	-0.000063	0.000107	0.002812	0.034	0.003147	0.0827	O.k
Base	14	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	14	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	15	DERIVA 1X	0.014373	0.012425	-0.000233	0.004051	0.002098	0.009584	0.004886	0.000267	0.017	0.287412	0.0157	O.k
Story2	15	DERIVA 1X	-0.014394	0.012398	-0.000235	0.004045	-0.002104	-0.009456	0.004894	0.000261	0.017	0.287882	0.0154	O.k
Story2	15	DERIVA 1Y	0.000135	0.017147	-0.000231	0.005044	0.000018	0.000163	0.000044	0.002235	0.017	0.002588	0.1315	O.k
Story2	15	DERIVA 1Y	-0.000156	0.007677	-0.000237	0.003052	-0.000024	-0.000035	0.000053	0.001706	0.017	0.003118	0.1004	O.k
Story2	15	DERIVA 2X	0.014379	0.005946	-0.000115	0.001927	0.0021	0.00955	0.004889	0.000137	0.017	0.287588	0.0081	O.k
Story2	15	DERIVA 2X	-0.014388	0.005919	-0.000117	0.001921	-0.002102	-0.009489	0.004891	0.000131	0.017	0.287706	0.0077	O.k
Story2	15	DERIVA 2Y	0.000141	0.010667	-0.000113	0.00292	0.00002	0.00013	0.000048	0.002104	0.017	0.002824	0.1238	O.k
Story2	15	DERIVA 2Y	-0.00015	0.001198	-0.000119	0.000928	-0.000022	-0.000068	0.00005	0.001836	0.017	0.002941	0.1080	O.k
Story1	15	DERIVA 1X	0.009487	0.012158	-0.000158	-0.00287	0.002824	0.000549	0.009487	0.012158	0.034	0.279029	0.3576	O.k
Story1	15	DERIVA 1X	-0.0095	0.012137	-0.000159	-0.002877	-0.002829	-0.00048	0.0095	0.012137	0.034	0.279412	0.3570	O.k
Story1	15	DERIVA 1Y	0.000091	0.014912	-0.000157	-0.001678	0.000026	0.000301	0.000091	0.014912	0.034	0.002676	0.4386	O.k
Story1	15	DERIVA 1Y	-0.000103	0.009383	-0.000161	-0.00407	-0.000031	-0.000233	0.000103	0.009383	0.034	0.003029	0.2760	O.k
Story1	15	DERIVA 2X	0.00949	0.005809	-0.000079	-0.001371	0.002825	0.000534	0.00949	0.005809	0.034	0.279118	0.1709	O.k
Story1	15	DERIVA 2X	-0.009497	0.005788	-0.00008	-0.001378	-0.002828	-0.000495	0.009497	0.005788	0.034	0.279324	0.1702	O.k
Story1	15	DERIVA 2Y	0.000093	0.008563	-0.000077	-0.000178	0.000027	0.000286	0.000093	0.008563	0.034	0.002735	0.2519	O.k
Story1	15	DERIVA 2Y	-0.0001	0.003034	-0.000081	-0.00257	-0.00003	-0.000248	0.0001	0.003034	0.034	0.002941	0.0892	O.k
Base	15	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	15	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	15	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	15	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	15	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	15	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	15	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	15	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	16	DERIVA 1X	0.01439	0.012435	-0.000233	0.004051	0.002103	0.009467	0.004894	0.00027	0.017	0.287882	0.0159	O.k
Story2	16	DERIVA 1X	-0.014378	0.012414	-0.000235	0.004047	-0.002099	-0.009571	0.004888	0.000264	0.017	0.287529	0.0155	O.k
Story2	16	DERIVA 1Y	0.000149	0.017218	-0.000231	0.005056	0.000022	0.000049	0.00005	0.00226	0.017	0.002941	0.1329	O.k
Story2	16	DERIVA 1Y	-0.000136	0.00763	-0.000237	0.003041	-0.000018	-0.000153	0.000043	0.001727	0.017	0.002529	0.1016	O.k
Story2	16	DERIVA 2X	0.014386	0.005949	-0.000115	0.001926	0.002102	0.009494	0.004891	0.000139	0.017	0.287706	0.0082	O.k
Story2	16	DERIVA 2X	-0.014381	0.005928	-0.000117	0.001922	-0.0021	-0.009544	0.00489	0.000133	0.017	0.287647	0.0078	O.k
Story2	16	DERIVA 2Y	0.000145	0.010732	-0.000113	0.002932	0.000021	0.000076	0.000047	0.002129	0.017	0.002765	0.1252	O.k
Story2	16	DERIVA 2Y	-0.00014	0.001144	-0.000119	0.000917	-0.000019	-0.000126	0.000046	0.001859	0.017	0.002706	0.1094	O.k
Story1	16	DERIVA 1X	0.009496	0.012165	-0.000158	-0.002874	0.002828	0.00046	0.009496	0.012165	0.034	0.279294	0.3578	O.k
Story1	16	DERIVA 1X	-0.00949	0.01215	-0.000159	-0.00288	-0.002824	-0.000523	0.00949	0.01215	0.034	0.279118	0.3574	O.k
Story1	16	DERIVA 1Y	0.000099	0.014958	-0.000157	-0.001666	0.00003	0.00023	0.000099	0.014958	0.034	0.002912	0.4399	O.k
Story1	16	DERIVA 1Y	-0.000093	0.009357	-0.000161	-0.004088	-0.000026	-0.000293	0.000093	0.009357	0.034	0.002735	0.2752	O.k
Story1	16	DERIVA 2X	0.009495	0.00581	-0.000079	-0.001373	0.002827	0.000473	0.009495	0.00581	0.034	0.279265	0.1709	O.k
Story1	16	DERIVA 2X	-0.009491	0.005795	-0.00008	-0.001378	-0.002825	-0.000509	0.009491	0.005795	0.034	0.279147	0.1704	O.k
Story1	16	DERIVA 2Y	0.000098	0.008603	-0.000077	-0.000165	0.000029	0.000243	0.000098	0.008603	0.034	0.002882	0.2530	O.k
Story1	16	DERIVA 2Y	-0.000094	0.003003	-0.000082	-0.002586	-0.000027	-0.000028	0.000094	0.003003	0.034	0.002765	0.0883	O.k
Base	16	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	16	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	16	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	16	DERIVA 1Y	0	0	0	0	0							

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story1	17	DERIVA 1X	0.01951	0.003051	-0.000041	0.000138	0.004643	0.000186	0.01951	0.003051	0.034	0.573824	0.0897	O.k
Story1	17	DERIVA 1X	-0.020557	-0.00334	-0.000122	-0.00099	-0.001202	-0.000218	0.020557	0.003344	0.034	0.604618	0.0984	O.k
Story1	17	DERIVA 1Y	0.005197	0.009921	-0.000034	0.001351	0.002553	0.000662	0.005197	0.009921	0.034	0.152853	0.2918	O.k
Story1	17	DERIVA 1Y	-0.006244	-0.01021	-0.000129	-0.002203	0.000888	-0.000695	0.006244	0.010213	0.034	0.183647	0.3004	O.k
Story1	17	DERIVA 2X	0.019712	0.003107	-0.000011	0.000304	0.003983	0.000192	0.019712	0.003107	0.034	0.579765	0.0914	O.k
Story1	17	DERIVA 2X	-0.020355	-0.00329	-0.000091	-0.000825	-0.001861	-0.000212	0.020355	0.003289	0.034	0.598676	0.0967	O.k
Story1	17	DERIVA 2Y	0.005399	0.009976	-0.000003	0.001516	0.001893	0.000669	0.005399	0.009976	0.034	0.158794	0.2934	O.k
Story1	17	DERIVA 2Y	-0.006042	-0.01016	-0.000098	-0.002037	0.000229	-0.000689	0.006042	0.010158	0.034	0.177706	0.2988	O.k
Base	17	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	17	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	17	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	17	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	17	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	17	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	17	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	17	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	18	DERIVA 1X	0.020278	0.003051	-0.000069	0.001042	0.004756	0.000186	0.020278	0.003051	0.034	0.596412	0.0897	O.k
Story1	18	DERIVA 1X	-0.021202	-0.00334	-0.000091	-0.000087	-0.001292	-0.000218	0.021202	0.003344	0.034	0.623588	0.0984	O.k
Story1	18	DERIVA 1Y	0.002774	0.009921	-0.000025	0.002254	0.002206	0.000662	0.002774	0.009921	0.034	0.081588	0.2918	O.k
Story1	18	DERIVA 1Y	-0.003698	-0.01021	-0.000135	-0.001299	0.001258	-0.000695	0.003698	0.010213	0.034	0.108765	0.3004	O.k
Story1	18	DERIVA 2X	0.020456	0.003107	-0.000039	0.000857	0.004092	0.000192	0.020456	0.003107	0.034	0.601647	0.0914	O.k
Story1	18	DERIVA 2X	-0.021024	-0.00329	-0.00006	-0.000272	-0.001956	-0.000212	0.021024	0.003289	0.034	0.618353	0.0967	O.k
Story1	18	DERIVA 2Y	0.002952	0.009976	0.000005	0.002069	0.001542	0.000669	0.002952	0.009976	0.034	0.086824	0.2934	O.k
Story1	18	DERIVA 2Y	-0.00352	-0.01016	-0.000104	-0.001484	0.000594	-0.000689	0.00352	0.010158	0.034	0.103529	0.2988	O.k
Base	18	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	18	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	18	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	18	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	18	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	18	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	18	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	18	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	19	DERIVA 1X	0.01951	0.001758	-0.000184	-0.000472	0.000979	0.000186	0.01951	0.001758	0.034	0.573824	0.0517	O.k
Story1	19	DERIVA 1X	-0.020557	-0.00225	-0.000191	-0.00118	-0.001457	-0.000218	0.020557	0.002251	0.034	0.604618	0.0662	O.k
Story1	19	DERIVA 1Y	0.005197	0.007363	-0.000147	0.000517	0.000106	0.000662	0.005197	0.007363	0.034	0.152853	0.2166	O.k
Story1	19	DERIVA 1Y	-0.006244	-0.00786	-0.000228	-0.002169	-0.000583	-0.000695	0.006244	0.007855	0.034	0.183647	0.2310	O.k
Story1	19	DERIVA 2X	0.019712	0.001852	-0.000112	-0.000148	0.00107	0.000192	0.019712	0.001852	0.034	0.579765	0.0545	O.k
Story1	19	DERIVA 2X	-0.020355	-0.00216	-0.000119	-0.000856	-0.001366	-0.000212	0.020355	0.002156	0.034	0.598676	0.0634	O.k
Story1	19	DERIVA 2Y	0.005399	0.007457	-0.000075	0.000841	0.000197	0.000669	0.005399	0.007457	0.034	0.158794	0.2193	O.k
Story1	19	DERIVA 2Y	-0.006042	-0.00776	-0.000156	-0.001845	-0.000492	-0.000689	0.006042	0.007761	0.034	0.177706	0.2283	O.k
Base	19	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	19	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	19	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	19	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	19	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	19	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	19	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	19	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story2	2	DERIVA 1X	0.015761	-0.00959	-0.000204	-0.003325	0.00228	0.010275	0.005345	6.1E-05	0.017	0.314412	0.0036	O.k
Story2	2	DERIVA 1X	-0.015813	-0.00972	-0.000207	-0.003355	-0.002295	-0.010727	0.005368	6.8E-05	0.017	0.315765	0.0040	O.k
Story2	2	DERIVA 1Y	0.000144	-0.00683	-0.000203	-0.002721	0.000027	0.000116	0.000053	0.001186	0.017	0.003118	0.0698	O.k
Story2	2	DERIVA 1Y	-0.000196	-0.01268	-0.000208	-0.00396	-0.000043	-0.000568	0.000076	0.001315	0.017	0.004471	0.0774	O.k
Story2	2	DERIVA 2X	0.015777	-0.00453	-0.000101	-0.001564	0.002285	0.010395	0.005355	3.6E-05	0.017	0.315000	0.0021	O.k
Story2	2	DERIVA 2X	-0.015798	-0.00466	-0.000103	-0.001594	-0.00229	-0.010608	0.005359	4.2E-05	0.017	0.315235	0.0025	O.k
Story2	2	DERIVA 2Y	0.000159	-0.00157	-0.000099	-0.00096	0.000033	0.000235	0.000062	0.001211	0.017	0.003647	0.0712	O.k
Story2	2	DERIVA 2Y	-0.000181	-0.00762	-0.000105	-0.002199	-0.000037	-0.000448	0.000067	0.001289	0.017	0.003941	0.0758	O.k
Story1	2	DERIVA 1X	0.010416	-0.00953	-0.000138	0.002242	0.003114	-0.000685	0.010416	0.009526	0.034	0.306353	0.2802	O.k
Story1	2	DERIVA 1X	-0.010445	-0.00965	-0.000141	0.002214	-0.003124	-0.001696	0.010445	0.009651	0.034	0.307206	0.2839	O.k
Story1	2	DERIVA 1Y	0.000091	-0.00782	-0.000138	0.002992	0.00003	-0.000012	0.000091	0.007817	0.034	0.002676	0.2299	O.k
Story1	2	DERIVA 1Y	-0.00012	-0.01136	-0.000142	0.001464	-0.00004	-0.002369	0.00012	0.01136	0.034	0.003529	0.3341	O.k
Story1	2	DERIVA 2X	0.010422	-0.00449	-0.000069	0.001075	0.003117	-0.000062	0.010422	0.004494	0.034	0.306529	0.1322	O.k
Story1	2	DERIVA 2X	-0.010439	-0.00462	-0.000071	0.001047	-0.003121	-0.001073	0.010439	0.004619	0.034	0.307029	0.1359	O.k
Story1	2	DERIVA 2Y	0.000097	-0.00279	-0.000068	0.001825	0.000033	0.000611	0.000097	0.002785	0.034	0.002853	0.0819	O.k
Story1	2	DERIVA 2Y	-0.000114	-0.00633	-0.000072	0.000297	-0.000037	-0.001746	0.000114	0.006328	0.034	0.003353	0.1861	O.k
Base	2	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	2	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	20	DERIVA 1X	0.020278	0.001758	-0.000166	0.001267	0.001015	0.000186	0.020278	0.001758	0.034	0.596412	0.0517	O.k
Story1	20	DERIVA 1X	-0.021202	-0.00225	-0.000204	0.000559	-0.001503	-0.000218	0.021202	0.002251	0.034	0.623588	0.0662	O.k
Story1	20	DERIVA 1Y	0.002774	0.007363	-0.000146	0.002256	-0.000044	0.000662	0.002774	0.007363	0.034	0.081588	0.2166	O.k
Story1	20	DERIVA 1Y	-0.003698	-0.00786	-0.000224	-0.00043	-0.000444	-0.000695	0.003698	0.007855	0.034	0.108765	0.2310	O.k
Story1	20	DERIVA 2X	0.020456	0.001852	-0.000095	0.000909	0.001108	0.000192	0.020456	0.001852	0.034	0.601647	0.0545	O.k
Story1	20	DERIVA 2X	-0.021024	-0.00216	-0.000133	0.000202	-0.00141	-0.000212	0.021024	0.002156	0.034	0.618353	0.0634	O.k
Story1	20	DERIVA 2Y	0.002952	0.007457	-0.000075	0.001898	0.000049	0.000669	0.002952	0.007457	0.034	0.086824	0.2193	O.k
Story1	20	DERIVA 2Y	-0.00352	-0.00776	-0.000153	-0.000788	-0.000351	-0.000689	0.00352	0.007761	0.034	0.103529	0.2283	O.k
Base	20	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	20	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	20	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	20	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	20	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	20	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	20	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	20	DERIVA 2Y	0	0	0	0	0	0			0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story1	21	DERIVA 1X	0.01951	0.000577	-0.000129	-0.000755	0.000451	0.000186	0.01951	0.000577	0.034	0.573824	0.0170	O.k
Story1	21	DERIVA 1Y	-0.020557	-0.00127	-0.000164	-0.00108	-0.002146	-0.000218	0.020557	0.001267	0.034	0.604618	0.0373	O.k
Story1	21	DERIVA 1Y	0.005197	0.006613	-0.00011	0.000311	-0.00048	0.000662	0.005197	0.006613	0.034	0.152853	0.1945	O.k
Story1	21	DERIVA 1Y	-0.006244	-0.0073	-0.000183	-0.002145	-0.001216	-0.000695	0.006244	0.007303	0.034	0.183647	0.2148	O.k
Story1	21	DERIVA 2X	0.019712	0.00071	-0.000072	-0.000394	0.00078	0.000192	0.019712	0.00071	0.034	0.579765	0.0209	O.k
Story1	21	DERIVA 2X	-0.020355	-0.00113	-0.000108	-0.000719	-0.001817	-0.000212	0.020355	0.001134	0.034	0.598676	0.0334	O.k
Story1	21	DERIVA 2Y	0.005399	0.006746	-0.000054	0.000672	-0.000151	0.000669	0.005399	0.006746	0.034	0.158794	0.1984	O.k
Story1	21	DERIVA 2Y	-0.006042	-0.00717	-0.000127	-0.001785	-0.000887	-0.000689	0.006042	0.007171	0.034	0.177706	0.2109	O.k
Base	21	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	21	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	21	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	21	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	21	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	21	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	21	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	21	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	22	DERIVA 1X	0.020278	0.000577	-0.000134	0.001201	0.000544	0.000186	0.020278	0.000577	0.034	0.596412	0.0170	O.k
Story1	22	DERIVA 1X	-0.021202	-0.00127	-0.000156	0.000876	-0.002142	-0.000218	0.021202	0.001267	0.034	0.623588	0.0373	O.k
Story1	22	DERIVA 1Y	0.002774	0.006613	-0.000109	0.002266	-0.000587	0.000662	0.002774	0.006613	0.034	0.081588	0.1945	O.k
Story1	22	DERIVA 1Y	-0.003698	-0.0073	-0.00018	-0.00019	-0.001011	-0.000695	0.003698	0.007303	0.034	0.108765	0.2148	O.k
Story1	22	DERIVA 2X	0.020456	0.00071	-0.000079	0.000794	0.000854	0.000192	0.020456	0.00071	0.034	0.601647	0.0209	O.k
Story1	22	DERIVA 2X	-0.021024	-0.00113	-0.0001	0.000468	-0.001832	-0.000212	0.021024	0.001134	0.034	0.618353	0.0334	O.k
Story1	22	DERIVA 2Y	0.002952	0.006746	-0.000054	0.001859	-0.000277	0.000669	0.002952	0.006746	0.034	0.086824	0.1984	O.k
Story1	22	DERIVA 2Y	-0.00352	-0.00717	-0.000125	-0.000597	-0.000701	-0.000689	0.00352	0.007171	0.034	0.103529	0.2109	O.k
Base	22	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	22	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	22	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	22	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	22	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	22	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	22	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	22	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	23	DERIVA 1X	0.01951	0.000191	-0.000008	-0.000465	0.000718	0.000186	0.01951	0.000191	0.034	0.573824	0.0056	O.k
Story1	23	DERIVA 1X	-0.020557	-0.00101	-0.000089	-0.000692	-0.000726	-0.000218	0.020557	0.001007	0.034	0.604618	0.0296	O.k
Story1	23	DERIVA 1Y	0.005197	0.007315	-0.000007	0.000888	0.0002	0.000662	0.005197	0.007315	0.034	0.152853	0.2151	O.k
Story1	23	DERIVA 1Y	-0.006244	-0.00813	-0.00009	-0.002045	-0.000207	-0.000695	0.006244	0.008131	0.034	0.183647	0.2391	O.k
Story1	23	DERIVA 2X	0.019712	0.000348	0.00001	-0.000236	0.000718	0.000192	0.019712	0.000348	0.034	0.579765	0.0102	O.k
Story1	23	DERIVA 2X	-0.020355	-0.00085	-0.000071	-0.000463	-0.000726	-0.000212	0.020355	0.00085	0.034	0.598676	0.0250	O.k
Story1	23	DERIVA 2Y	0.005399	0.007472	0.000011	0.001117	0.000199	0.000669	0.005399	0.007472	0.034	0.158794	0.2198	O.k
Story1	23	DERIVA 2Y	-0.006042	-0.00797	-0.000072	-0.001816	-0.000208	-0.000689	0.006042	0.007974	0.034	0.177706	0.2345	O.k
Base	23	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	23	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	23	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	23	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	23	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	23	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	23	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	23	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	24	DERIVA 1X	0.020278	0.000191	-0.000041	0.000148	0.000587	0.000186	0.020278	0.000191	0.034	0.596412	0.0056	O.k
Story1	24	DERIVA 1X	-0.021202	-0.00101	-0.000124	0.000006	-0.000902	-0.000218	0.021202	0.001007	0.034	0.623588	0.0296	O.k
Story1	24	DERIVA 1Y	0.002774	0.007315	-0.00006	0.000989	-0.000042	0.000662	0.002774	0.007315	0.034	0.081588	0.2151	O.k
Story1	24	DERIVA 1Y	-0.003698	-0.00813	-0.000105	-0.000834	-0.000273	-0.000695	0.003698	0.008131	0.034	0.108765	0.2391	O.k
Story1	24	DERIVA 2X	0.020456	0.000348	-0.00001	0.000111	0.000646	0.000192	0.020456	0.000348	0.034	0.601647	0.0102	O.k
Story1	24	DERIVA 2X	-0.021024	-0.00085	-0.000093	-0.000031	-0.000842	-0.000212	0.021024	0.00085	0.034	0.618353	0.0250	O.k
Story1	24	DERIVA 2Y	0.002952	0.007472	-0.000029	0.000952	0.000018	0.000669	0.002952	0.007472	0.034	0.086824	0.2198	O.k
Story1	24	DERIVA 2Y	-0.00352	-0.00797	-0.000074	-0.000871	-0.000214	-0.000689	0.00352	0.007974	0.034	0.103529	0.2345	O.k
Base	24	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	24	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	24	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	24	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	24	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	24	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	24	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	24	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	25	DERIVA 1X	0.01951	0.00032	-0.000043	-8.40E-05	0.00139	0.000186	0.01951	0.00032	0.034	0.573824	0.0094	O.k
Story1	25	DERIVA 1X	-0.020557	-0.0012	-0.000157	-0.000371	-0.000489	-0.000218	0.020557	0.001201	0.034	0.604618	0.0353	O.k
Story1	25	DERIVA 1Y	0.005197	0.007983	-0.000069	0.001374	0.000716	0.000662	0.005197	0.007983	0.034	0.152853	0.2348	O.k
Story1	25	DERIVA 1Y	-0.006244	-0.00886	-0.000131	-0.001829	0.000186	-0.000695	0.006244	0.008864	0.034	0.183647	0.2607	O.k
Story1	25	DERIVA 2X	0.019712	0.00049	-0.000005	0.000007	0.001218	0.000192	0.019712	0.00049	0.034	0.579765	0.0144	O.k
Story1	25	DERIVA 2X	-0.020355	-0.00103	-0.000119	-0.000279	-0.000681	-0.000212	0.020355	0.001032	0.034	0.598676	0.0304	O.k
Story1	25	DERIVA 2Y	0.005399	0.008152	-0.000031	0.001466	0.000544	0.000669	0.005399	0.008152	0.034	0.158794	0.2398	O.k
Story1	25	DERIVA 2Y	-0.006042	-0.0087	-0.000093	-0.001738	0.000014	-0.000689	0.006042	0.008695	0.034	0.177706	0.2557	O.k
Base	25	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	25	DERIVA 1X	0	0	0	0	0	0			0.000			
Base	25	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	25	DERIVA 1Y	0	0	0	0	0	0			0.000			
Base	25	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	25	DERIVA 2X	0	0	0	0	0	0			0.000			
Base	25	DERIVA 2Y	0	0	0	0	0	0			0.000			
Base	25	DERIVA 2Y	0	0	0	0	0	0			0.000			
Story1	26	DERIVA 1X	0.020278	0.00032	-0.000303	-0.001098	0.002488	0.000186	0.020278	0.00032	0.034	0.596412	0.0094	O.k
Story1	26	DERIVA 1X	-0.021202	-0.0012	-0.000415	-0.001288	0.000534	-0.000218	0.021202	0.001201	0.034	0.623588	0.0353	O.k
Story1	26	DERIVA 1Y	0.002774	0.007983	-0.000326	-0.000214	0.001674	0.000662	0.002774	0.007983	0.034	0.081588	0.2348	O.k
Story1	26	DERIVA 1Y	-0.003698	-0.00886	-0.000392	-0.002172	0.001347	-0.000695	0.003698	0.008864	0.034	0.108765	0.2607	O.k
Story1	26	DERIVA 2X	0.020456	0.00049	-0.000164	-0.000639	0.001902	0.000192	0.020456	0.00049	0.034	0.601647	0.0144	O.k
Story1	26	DERIVA 2X	-0.021024	-0.00103	-0.000276	-0.000829	-0.000052	-0.000212	0.021024	0.001032	0.034	0.618353	0.0304	O.k
Story1	26	DERIVA 2Y	0.002952	0.008152	-0.000187	0.000245	0.001088	0.000669	0.002952	0.008152	0.034	0.086824	0.2398	O.k
Story1	26	DERIVA 2Y	-0.00352	-0.0087	-0.000253	-0.001713	0.000762	-0.000689	0.00352	0.008695	0.034	0.103529	0.2557	O.k

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

Base	26	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	26	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	26	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	26	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	26	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	26	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	26	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	26	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	27	DERIVA 1X	0.01951	0.001244	-0.000127	0.000233	0.001535	0.000186	0.01951	0.001244	0.034	0.573824	0.0366 O.k
Story1	27	DERIVA 1X	-0.020557	-0.00232	-0.000138	-0.000314	-0.001035	-0.000218	0.020557	0.002323	0.034	0.604618	0.0683 O.k
Story1	27	DERIVA 1Y	0.005197	0.010714	-0.000074	0.001741	0.000617	0.000662	0.005197	0.010714	0.034	0.152853	0.3151 O.k
Story1	27	DERIVA 1Y	-0.006244	-0.01179	-0.000191	-0.001823	-0.000118	-0.000695	0.006244	0.011792	0.034	0.183647	0.3468 O.k
Story1	27	DERIVA 2X	0.019712	0.001452	-0.000076	0.000252	0.001439	0.000192	0.019712	0.001452	0.034	0.579765	0.0427 O.k
Story1	27	DERIVA 2X	-0.020355	-0.00212	-0.000088	-0.000295	-0.001131	-0.000212	0.020355	0.002115	0.034	0.598676	0.0622 O.k
Story1	27	DERIVA 2Y	0.005399	0.010921	-0.000023	0.001761	0.000521	0.000699	0.005399	0.010921	0.034	0.158794	0.3212 O.k
Story1	27	DERIVA 2Y	-0.006042	-0.01158	-0.000141	-0.001804	-0.000213	-0.000689	0.006042	0.011584	0.034	0.177706	0.3407 O.k
Base	27	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	27	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	27	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	27	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	27	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	27	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	27	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	27	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	28	DERIVA 1X	0.020278	0.001244	-0.000539	-0.001716	0.001785	0.000186	0.020278	0.001244	0.034	0.596412	0.0366 O.k
Story1	28	DERIVA 1X	-0.021202	-0.00232	-0.000572	-0.002102	-0.000972	-0.000218	0.021202	0.002323	0.034	0.623588	0.0683 O.k
Story1	28	DERIVA 1Y	0.002774	0.010714	-0.000517	-0.000912	0.000662	0.000662	0.002774	0.010714	0.034	0.081588	0.3151 O.k
Story1	28	DERIVA 1Y	-0.003698	-0.01179	-0.000594	-0.002905	0.000193	-0.000695	0.003698	0.011792	0.034	0.108765	0.3468 O.k
Story1	28	DERIVA 2X	0.020456	0.001452	-0.000324	-0.000979	0.001628	0.000192	0.020456	0.001452	0.034	0.601647	0.0427 O.k
Story1	28	DERIVA 2X	-0.021024	-0.00212	-0.000357	-0.001365	-0.001129	-0.000212	0.021024	0.002115	0.034	0.618353	0.0622 O.k
Story1	28	DERIVA 2Y	0.002952	0.010921	-0.000302	-0.000175	0.000463	0.000669	0.002952	0.010921	0.034	0.086824	0.3212 O.k
Story1	28	DERIVA 2Y	-0.00352	-0.01158	-0.000379	-0.002168	0.000036	-0.000689	0.00352	0.011584	0.034	0.103529	0.3407 O.k
Base	28	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	28	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	28	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	28	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	28	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	28	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	28	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	28	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	29	DERIVA 1X	0.01951	0.002347	-0.000026	0.000529	0.001313	0.000186	0.01951	0.002347	0.034	0.573824	0.0690 O.k
Story1	29	DERIVA 1X	-0.020557	-0.00363	-0.000099	-0.000597	-0.004583	-0.000218	0.020557	0.003628	0.034	0.604618	0.1067 O.k
Story1	29	DERIVA 1Y	0.005197	0.014145	-0.000002	0.002775	-0.000801	0.000662	0.005197	0.014145	0.034	0.152853	0.4160 O.k
Story1	29	DERIVA 1Y	-0.006244	-0.01543	-0.000123	-0.002843	-0.00247	-0.000695	0.006244	0.015426	0.034	0.183647	0.4537 O.k
Story1	29	DERIVA 2X	0.019712	0.002594	-0.000003	0.000543	0.001938	0.000192	0.019712	0.002594	0.034	0.579765	0.0763 O.k
Story1	29	DERIVA 2X	-0.020355	-0.00338	-0.000075	-0.000583	-0.003957	-0.000212	0.020355	0.003381	0.034	0.598676	0.0994 O.k
Story1	29	DERIVA 2Y	0.005399	0.014392	0.000022	0.002789	-0.000175	0.000669	0.005399	0.014392	0.034	0.158794	0.4233 O.k
Story1	29	DERIVA 2Y	-0.006042	-0.01518	-0.000099	-0.002829	-0.001844	-0.000689	0.006042	0.015179	0.034	0.177706	0.4464 O.k
Base	29	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	29	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	29	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	29	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	29	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	29	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	29	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	29	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story2	3	DERIVA 1X	0.015751	-0.01243	-0.000227	-0.004034	0.002366	0.010366	0.005283	0.000276	0.017	0.310765	0.0162 O.k
Story2	3	DERIVA 1X	-0.015769	-0.01244	-0.000244	-0.004042	-0.002391	-0.010492	0.005292	0.000279	0.017	0.311294	0.0164 O.k
Story2	3	DERIVA 1Y	0.000148	-0.00749	-0.000233	-0.00306	0.000011	0.000038	0.000047	0.001753	0.017	0.002765	0.1031 O.k
Story2	3	DERIVA 1Y	-0.000166	-0.01738	-0.000238	-0.005017	-0.000037	-0.000165	0.000057	0.002309	0.017	0.003353	0.1358 O.k
Story2	3	DERIVA 2X	0.015756	-0.00593	-0.000109	-0.001916	0.00237	0.010399	0.005286	0.000137	0.017	0.310941	0.0081 O.k
Story2	3	DERIVA 2X	-0.015763	-0.00595	-0.000126	-0.001925	-0.002387	-0.010459	0.005288	0.000141	0.017	0.311059	0.0083 O.k
Story2	3	DERIVA 2Y	0.000154	-0.001	-0.000115	-0.000942	0.000015	0.000072	0.000052	0.001891	0.017	0.003059	0.1112 O.k
Story2	3	DERIVA 2Y	-0.000161	-0.01089	-0.00012	-0.002899	-0.000032	-0.000131	0.000054	0.00217	0.017	0.003176	0.1276 O.k
Story1	3	DERIVA 1X	0.010468	-0.01215	-0.000152	0.002882	0.002776	0.000339	0.010468	0.012153	0.034	0.307882	0.3574 O.k
Story1	3	DERIVA 1X	-0.010477	-0.01216	-0.000169	0.002878	-0.002733	-0.000392	0.010477	0.012164	0.034	0.308147	0.3578 O.k
Story1	3	DERIVA 1Y	0.000101	-0.00924	-0.000159	0.004133	0.000049	0.000551	0.000101	0.009243	0.034	0.002971	0.2719 O.k
Story1	3	DERIVA 1Y	-0.000109	-0.01507	-0.000162	0.001628	-0.000006	-0.000604	0.000109	0.015074	0.034	0.003206	0.4434 O.k
Story1	3	DERIVA 2X	0.01047	-0.0058	-0.000072	0.001378	0.002772	0.000351	0.01047	0.005797	0.034	0.307941	0.1705 O.k
Story1	3	DERIVA 2X	-0.010475	-0.00581	-0.000089	0.001375	-0.002738	-0.00038	0.010475	0.005808	0.034	0.308088	0.1708 O.k
Story1	3	DERIVA 2Y	0.000102	-0.00289	-0.000079	0.002629	0.000045	0.000562	0.000102	0.002886	0.034	0.003000	0.0849 O.k
Story1	3	DERIVA 2Y	-0.000107	-0.00872	-0.000082	0.000124	-0.000011	-0.000592	0.000107	0.008718	0.034	0.003147	0.2564 O.k
Base	3	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 1X	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 1Y	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 2X	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Base	3	DERIVA 2Y	0	0	0	0	0	0	0	0.000			
Story1	30	DERIVA 1X	0.020278	0.002347	-0.000211	-0.00052	-0.001103	0.000186	0.020278	0.002347	0.034	0.596412	0.0690 O.k
Story1	30	DERIVA 1X	-0.021202	-0.00363	-0.000245	-0.001258	-0.007002	-0.000218	0.021202	0.003628	0.034	0.623588	0.1067 O.k
Story1	30	DERIVA 1Y	0.002774	0.014145	-0.000177	0.000843	-0.003603	0.000662	0.002774	0.014145	0.034	0.081588	0.4160 O.k
Story1	30	DERIVA 1Y	-0.003698	-0.01543	-0.000279	-0.002621	-0.004502	-0.000695	0.003698	0.015426	0.034	0.108765	0.4537 O.k
Story1	30	DERIVA 2X	0.020456	0.002594	-0.000123	-0.000178	0.000466	0.000192	0.020456	0.002594	0.034	0.601647	0.0763 O.k
Story1	30	DERIVA 2X	-0.021024	-0.00338	-0.000157	-0.000916	-0.005433	-0.000212	0.021024	0.003381	0.034	0.618353	0.0994 O.k
Story1	30	DERIVA 2Y	0.002952	0.014392	-0.00009	0.001185	-0.002034	0.000669	0.002952	0.014392	0.034	0.086824	0.4233 O.k
Story1	30	DERIVA 2Y	-0.00352	-0.01518	-0.000191	-0.00228	-0.002933	-0.000689	0.00352	0.015179	0.034	0.103529	0.4464 O.k

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

Base	30	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	30	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	30	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	30	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	30	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	30	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	30	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Base	30	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Story1	31	DERIVA 1x	0.021672	0.000191	0.000033	0.000035	0.001217	0.000186	0.021672	0.000191	0.034	0.637412	0.0056 O.k
Story1	31	DERIVA 1x	-0.022374	-0.00101	-0.000167	-0.000151	-0.001982	-0.000218	0.022374	0.001007	0.034	0.658059	0.0296 O.k
Story1	31	DERIVA 1y	0.001367	0.007315	-0.000059	0.001143	-0.000026	0.000662	0.001367	0.007315	0.034	0.040206	0.2151 O.k
Story1	31	DERIVA 1y	-0.002069	-0.00813	-0.000075	-0.001258	-0.000505	-0.000695	0.002069	0.008131	0.034	0.060853	0.2391 O.k
Story1	31	DERIVA 2x	0.021807	0.000348	0.000058	0.000058	0.001366	0.000192	0.021807	0.000348	0.034	0.641382	0.0102 O.k
Story1	31	DERIVA 2x	-0.022239	-0.00085	-0.000142	-0.000128	-0.001834	-0.000212	0.022239	0.00085	0.034	0.654088	0.0250 O.k
Story1	31	DERIVA 2y	0.001502	0.007472	-0.000034	0.001165	-0.000111	0.000669	0.001502	0.007472	0.034	0.044176	0.2198 O.k
Story1	31	DERIVA 2y	-0.001934	-0.00797	-0.00005	-0.001236	-0.000357	-0.000689	0.001934	0.007974	0.034	0.056882	0.2345 O.k
Base	31	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	31	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	31	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	31	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	31	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	31	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	31	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Base	31	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Story1	32	DERIVA 1x	0.023075	0.000191	0.000071	0.00125	0.001548	0.000186	0.023075	0.000191	0.034	0.678676	0.0056 O.k
Story1	32	DERIVA 1x	-0.023556	-0.00101	-0.000141	0.000951	-0.001854	-0.000218	0.023556	0.001007	0.034	0.692824	0.0296 O.k
Story1	32	DERIVA 1y	0.005878	0.007315	0.000002	0.003031	0.000286	0.000662	0.005878	0.007315	0.034	0.172882	0.2151 O.k
Story1	32	DERIVA 1y	-0.006358	-0.00813	-0.000071	-0.00083	-0.000592	-0.000695	0.006358	0.008131	0.034	0.187000	0.2391 O.k
Story1	32	DERIVA 2x	0.023168	0.000348	0.000084	0.000831	0.001607	0.000192	0.023168	0.000348	0.034	0.681412	0.0102 O.k
Story1	32	DERIVA 2x	-0.023463	-0.00085	-0.000128	0.000531	-0.001794	-0.000212	0.023463	0.00085	0.034	0.690088	0.0250 O.k
Story1	32	DERIVA 2y	0.005971	0.007472	0.000014	0.002611	0.000345	0.000669	0.005971	0.007472	0.034	0.175618	0.2198 O.k
Story1	32	DERIVA 2y	-0.006266	-0.00797	-0.000059	-0.00125	-0.000532	-0.000689	0.006266	0.007974	0.034	0.184294	0.2345 O.k
Base	32	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	32	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	32	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	32	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	32	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	32	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	32	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Base	32	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Story1	33	DERIVA 1x	0.021672	0.00032	-0.000362	-0.000092	0.002602	0.000186	0.021672	0.00032	0.034	0.637412	0.0094 O.k
Story1	33	DERIVA 1x	-0.022374	-0.0012	-0.000535	-0.000317	0.00084	-0.000218	0.022374	0.001201	0.034	0.658059	0.0353 O.k
Story1	33	DERIVA 1y	0.001367	0.007983	-0.000438	0.001047	0.0018	0.000662	0.001367	0.007983	0.034	0.040206	0.2348 O.k
Story1	33	DERIVA 1y	-0.002069	-0.00886	-0.000459	-0.001456	0.001642	-0.000695	0.002069	0.008864	0.034	0.060853	0.2607 O.k
Story1	33	DERIVA 2x	0.021807	0.00049	-0.000189	-0.000013	0.001936	0.000192	0.021807	0.00049	0.034	0.641382	0.0144 O.k
Story1	33	DERIVA 2x	-0.022239	-0.00103	-0.000362	-0.000237	0.000174	-0.000212	0.022239	0.001032	0.034	0.654088	0.0304 O.k
Story1	33	DERIVA 2y	0.001502	0.008152	-0.000265	0.001127	0.001134	0.000669	0.001502	0.008152	0.034	0.044176	0.2398 O.k
Story1	33	DERIVA 2y	-0.001934	-0.0087	-0.000286	-0.001376	0.000976	-0.000689	0.001934	0.008695	0.034	0.056882	0.2557 O.k
Base	33	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	33	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	33	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	33	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	33	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	33	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	33	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Base	33	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Story1	34	DERIVA 1x	0.023075	0.00032	-0.000097	0.003198	0.001586	0.000186	0.023075	0.00032	0.034	0.678676	0.0094 O.k
Story1	34	DERIVA 1x	-0.023556	-0.0012	-0.000278	0.002859	-0.000237	-0.000218	0.023556	0.001201	0.034	0.692824	0.0353 O.k
Story1	34	DERIVA 1y	0.005878	0.007983	-0.000167	0.005049	0.000934	0.000662	0.005878	0.007983	0.034	0.172882	0.2348 O.k
Story1	34	DERIVA 1y	-0.006358	-0.00886	-0.000208	0.001008	0.000416	-0.000695	0.006358	0.008864	0.034	0.187000	0.2607 O.k
Story1	34	DERIVA 2x	0.023168	0.00049	-0.000025	0.002027	0.001328	0.000192	0.023168	0.00049	0.034	0.681412	0.0144 O.k
Story1	34	DERIVA 2x	-0.023463	-0.00103	-0.000206	0.001688	-0.000495	-0.000212	0.023463	0.001032	0.034	0.690088	0.0304 O.k
Story1	34	DERIVA 2y	0.005971	0.008152	-0.000095	0.003878	0.000675	0.000669	0.005971	0.008152	0.034	0.175618	0.2398 O.k
Story1	34	DERIVA 2y	-0.006266	-0.0087	-0.000136	-0.000163	0.000157	-0.000689	0.006266	0.008695	0.034	0.184294	0.2557 O.k
Base	34	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	34	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	34	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	34	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	34	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	34	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	34	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Base	34	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Story1	35	DERIVA 1x	0.021672	0.001244	-0.000734	-0.000164	0.001875	0.000186	0.021672	0.001244	0.034	0.637412	0.0366 O.k
Story1	35	DERIVA 1x	-0.022374	-0.00232	-0.000755	-0.000572	-0.001191	-0.000218	0.022374	0.002323	0.034	0.658059	0.0683 O.k
Story1	35	DERIVA 1y	0.001367	0.010714	-0.000735	0.000932	0.000475	0.000662	0.001367	0.010714	0.034	0.040206	0.3151 O.k
Story1	35	DERIVA 1y	-0.002069	-0.01179	-0.000754	-0.001668	0.000209	-0.000695	0.002069	0.011792	0.034	0.060853	0.3468 O.k
Story1	35	DERIVA 2x	0.021807	0.001452	-0.000446	-0.000021	0.001744	0.000192	0.021807	0.001452	0.034	0.641382	0.0427 O.k
Story1	35	DERIVA 2x	-0.022239	-0.00212	-0.000467	-0.000429	-0.001322	-0.000212	0.022239	0.002115	0.034	0.654088	0.0622 O.k
Story1	35	DERIVA 2y	0.001502	0.010921	-0.000448	0.001075	0.000344	0.000669	0.001502	0.010921	0.034	0.044176	0.3212 O.k
Story1	35	DERIVA 2y	-0.001934	-0.01158	-0.000466	-0.001524	0.000078	-0.000689	0.001934	0.011584	0.034	0.056882	0.3407 O.k
Base	35	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	35	DERIVA 1x	0	0	0	0	0	0	0	0.000			
Base	35	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	35	DERIVA 1y	0	0	0	0	0	0	0	0.000			
Base	35	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	35	DERIVA 2x	0	0	0	0	0	0	0	0.000			
Base	35	DERIVA 2y	0	0	0	0	0	0	0	0.000			
Base	35	DERIVA 2y	0	0	0	0	0	0	0	0.000			

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Story1	36	DERIVA 1K	0.023075	0.001244	-0.000284	0.004803	0.001744	0.000186	0.023075	0.001244	0.034	0.678676	0.0366	O.k
Story1	36	DERIVA 1K	-0.023556	-0.00232	-0.000318	0.004175	-0.001391	-0.000218	0.023556	0.002323	0.034	0.692824	0.0683	O.k
Story1	36	DERIVA 1Y	0.005878	0.010714	-0.000272	0.006773	0.0006	0.000662	0.005878	0.010714	0.034	0.172882	0.3151	O.k
Story1	36	DERIVA 1Y	-0.006358	-0.01179	-0.00033	0.002205	-0.000248	-0.000695	0.006358	0.011792	0.034	0.187000	0.3468	O.k
Story1	36	DERIVA 2X	0.023168	0.001452	-0.000169	0.003064	0.001677	0.000192	0.023168	0.001452	0.034	0.681412	0.0427	O.k
Story1	36	DERIVA 2X	-0.023463	-0.00212	-0.000203	0.002437	-0.001457	-0.000212	0.023463	0.002115	0.034	0.690088	0.0622	O.k
Story1	36	DERIVA 2Y	0.005971	0.010921	-0.000157	0.005035	0.000534	0.000669	0.005971	0.010921	0.034	0.175618	0.3212	O.k
Story1	36	DERIVA 2Y	-0.006266	-0.01158	-0.000215	0.000466	-0.000314	-0.000689	0.006266	0.011584	0.034	0.184294	0.3407	O.k
Base	36	DERIVA 1K	0	0	0	0	0	0						
Base	36	DERIVA 1K	0	0	0	0	0	0						
Base	36	DERIVA 1Y	0	0	0	0	0	0						
Base	36	DERIVA 1Y	0	0	0	0	0	0						
Base	36	DERIVA 2X	0	0	0	0	0	0						
Base	36	DERIVA 2X	0	0	0	0	0	0						
Base	36	DERIVA 2Y	0	0	0	0	0	0						
Base	36	DERIVA 2Y	0	0	0	0	0	0						
Story1	37	DERIVA 1K	0.021672	0.002347	-0.000268	0.000385	-0.001157	0.000186	0.021672	0.002347	0.034	0.637412	0.0690	O.k
Story1	37	DERIVA 1K	-0.022374	-0.00363	-0.000326	-0.000523	-0.007186	-0.000218	0.022374	0.003628	0.034	0.658059	0.1067	O.k
Story1	37	DERIVA 1Y	0.001367	0.014145	-0.000286	0.002185	-0.003971	0.000662	0.001367	0.014145	0.034	0.040206	0.4160	O.k
Story1	37	DERIVA 1Y	-0.002069	-0.01543	-0.000308	-0.002323	-0.004372	-0.000695	0.002069	0.015426	0.034	0.060853	0.4537	O.k
Story1	37	DERIVA 2X	0.021807	0.002594	-0.000154	0.000412	0.000453	0.000192	0.021807	0.002594	0.034	0.641382	0.0763	O.k
Story1	37	DERIVA 2X	-0.022239	-0.00338	-0.000212	-0.000496	-0.005576	-0.000212	0.022239	0.003381	0.034	0.654088	0.0994	O.k
Story1	37	DERIVA 2Y	0.001502	0.014392	-0.000172	0.002212	-0.002361	0.000669	0.001502	0.014392	0.034	0.044176	0.4233	O.k
Story1	37	DERIVA 2Y	-0.001934	-0.01518	-0.000194	-0.002296	-0.002762	-0.000689	0.001934	0.015179	0.034	0.056882	0.4464	O.k
Base	37	DERIVA 1K	0	0	0	0	0	0						
Base	37	DERIVA 1K	0	0	0	0	0	0						
Base	37	DERIVA 1Y	0	0	0	0	0	0						
Base	37	DERIVA 1Y	0	0	0	0	0	0						
Base	37	DERIVA 2X	0	0	0	0	0	0						
Base	37	DERIVA 2X	0	0	0	0	0	0						
Base	37	DERIVA 2Y	0	0	0	0	0	0						
Base	37	DERIVA 2Y	0	0	0	0	0	0						
Story1	38	DERIVA 1K	0.023075	0.002347	-0.000103	0.002961	0.001583	0.000186	0.023075	0.002347	0.034	0.678676	0.0690	O.k
Story1	38	DERIVA 1K	-0.023556	-0.00363	-0.000149	0.00155	-0.005083	-0.000218	0.023556	0.003628	0.034	0.692824	0.1067	O.k
Story1	38	DERIVA 1Y	0.005878	0.014145	-0.000103	0.005872	-0.000094	0.000662	0.005878	0.014145	0.034	0.172882	0.4160	O.k
Story1	38	DERIVA 1Y	-0.006358	-0.01543	-0.000148	-0.001361	-0.00256	-0.000695	0.006358	0.015426	0.034	0.187000	0.4537	O.k
Story1	38	DERIVA 2X	0.023168	0.002594	-0.000055	0.002092	0.002249	0.000192	0.023168	0.002594	0.034	0.681412	0.0763	O.k
Story1	38	DERIVA 2X	-0.023463	-0.00338	-0.000101	0.00068	-0.004416	-0.000212	0.023463	0.003381	0.034	0.690088	0.0994	O.k
Story1	38	DERIVA 2Y	0.005971	0.014392	-0.000056	0.005002	-0.000274	0.000669	0.005971	0.014392	0.034	0.175618	0.4233	O.k
Story1	38	DERIVA 2Y	-0.006266	-0.01518	-0.0001	-0.00223	-0.001893	-0.000689	0.006266	0.015179	0.034	0.184294	0.4464	O.k
Base	38	DERIVA 1K	0	0	0	0	0	0						
Base	38	DERIVA 1K	0	0	0	0	0	0						
Base	38	DERIVA 1Y	0	0	0	0	0	0						
Base	38	DERIVA 1Y	0	0	0	0	0	0						
Base	38	DERIVA 2X	0	0	0	0	0	0						
Base	38	DERIVA 2X	0	0	0	0	0	0						
Base	38	DERIVA 2Y	0	0	0	0	0	0						
Base	38	DERIVA 2Y	0	0	0	0	0	0						
Story2	4	DERIVA 1K	0.015765	-0.01244	-0.000227	-0.004036	0.00239	0.010479	0.005291	0.000278	0.017	0.311235	0.0164	O.k
Story2	4	DERIVA 1K	-0.015755	-0.01246	-0.000244	-0.004042	-0.002366	-0.010378	0.005284	0.000283	0.017	0.310824	0.0166	O.k
Story2	4	DERIVA 1Y	0.000159	-0.00744	-0.000233	-0.003052	0.000035	0.000154	0.000053	0.00177	0.017	0.003118	0.1041	O.k
Story2	4	DERIVA 1Y	-0.000149	-0.01746	-0.000238	-0.005026	-0.00001	-0.000052	0.000046	0.002332	0.017	0.002706	0.1372	O.k
Story2	4	DERIVA 2X	0.015761	-0.00594	-0.000109	-0.001918	0.002386	0.010453	0.005288	0.000138	0.017	0.311059	0.0081	O.k
Story2	4	DERIVA 2X	-0.015758	-0.00596	-0.000126	-0.001924	-0.00237	-0.010404	0.005287	0.000144	0.017	0.311000	0.0085	O.k
Story2	4	DERIVA 2Y	0.000156	-0.00094	-0.000115	-0.000933	0.00003	0.000127	0.00005	0.001911	0.017	0.002941	0.1124	O.k
Story2	4	DERIVA 2Y	-0.000152	-0.01096	-0.00012	-0.002908	-0.000014	-0.000079	0.000048	0.002192	0.017	0.002824	0.1289	O.k
Story1	4	DERIVA 1K	0.010474	-0.01216	-0.000152	0.002885	0.002732	0.000369	0.010474	0.012162	0.034	0.308059	0.3577	O.k
Story1	4	DERIVA 1K	-0.010471	-0.01217	-0.000169	0.002881	-0.002777	-0.000323	0.010471	0.012174	0.034	0.307971	0.3581	O.k
Story1	4	DERIVA 1Y	0.000106	-0.00921	-0.000159	0.004151	0.000004	0.000733	0.000106	0.00921	0.034	0.003118	0.2709	O.k
Story1	4	DERIVA 1Y	-0.000103	-0.01513	-0.000162	0.001616	-0.000049	-0.000686	0.000103	0.015126	0.034	0.003029	0.4449	O.k
Story1	4	DERIVA 2X	0.010473	-0.0058	-0.000072	0.00138	0.002737	0.000359	0.010473	0.005801	0.034	0.308029	0.1706	O.k
Story1	4	DERIVA 2X	-0.010471	-0.00581	-0.000089	0.001376	-0.002772	-0.000333	0.010471	0.005812	0.034	0.307971	0.1709	O.k
Story1	4	DERIVA 2Y	0.000106	-0.00285	-0.000079	0.002645	0.000009	0.000723	0.000106	0.002849	0.034	0.003118	0.0838	O.k
Story1	4	DERIVA 2Y	-0.000104	-0.00876	-0.000082	0.00011	-0.000044	-0.000696	0.000104	0.008764	0.034	0.003059	0.2578	O.k
Base	4	DERIVA 1K	0	0	0	0	0	0			0.000			
Base	4	DERIVA 1K	0	0	0	0	0	0						
Base	4	DERIVA 1Y	0	0	0	0	0	0						
Base	4	DERIVA 1Y	0	0	0	0	0	0						
Base	4	DERIVA 2X	0	0	0	0	0	0						
Base	4	DERIVA 2X	0	0	0	0	0	0						
Base	4	DERIVA 2Y	0	0	0	0	0	0						
Base	4	DERIVA 2Y	0	0	0	0	0	0						
Story2	5	DERIVA 1K	0.015809	-0.0097	-0.000206	-0.003361	0.0023	0.010724	0.005369	6.5E-05	0.017	0.315824	0.0038	O.k
Story2	5	DERIVA 1K	-0.015766	-0.00981	-0.000208	-0.003386	-0.002283	-0.010299	0.00535	6.7E-05	0.017	0.314706	0.0039	O.k
Story2	5	DERIVA 1Y	0.000181	-0.00673	-0.000204	-0.002752	0.00004	0.000056	0.000066	0.001188	0.017	0.003882	0.0699	O.k
Story2	5	DERIVA 1Y	-0.000138	-0.01278	-0.00021	-0.003995	-0.000023	-0.000136	0.000046	0.00132	0.017	0.002706	0.0776	O.k
Story2	5	DERIVA 2X	0.015796	-0.00459	-0.000102	-0.001581	0.002295	0.010611	0.005361	3.8E-05	0.017	0.315353	0.0022	O.k
Story2	5	DERIVA 2X	-0.015779	-0.00469	-0.000104	-0.001607	-0.002289	-0.010411	0.005358	4.1E-05	0.017	0.315176	0.0024	O.k
Story2	5	DERIVA 2Y	0.000168	-0.00161	-0.0001	-0.000973	0.000035	0.000048	0.000057	0.001214	0.017	0.003353	0.0714	O.k
Story2	5	DERIVA 2Y	-0.000151	-0.00767	-0.000106	-0.002216	-0.000029	-0.000248	0.000054	0.001294	0.017	0.003176	0.0761	O.k
Story1	5	DERIVA 1K	0.01044	-0.00964	-0.00014	0.002262	0.003128	0.001563	0.01044	0.009635	0.034	0.307059	0.2834	O.k
Story1	5	DERIVA 1K	-0.010416	-0.00974	-0.000142	0.00224	-0.003118	0.000742	0.010416	0.009738	0.034	0.306353	0.2864	O.k
Story1	5	DERIVA 1Y	0.000115	-0.00791	-0.000139	0.003016	0.000037	0.00232	0.000115	0.007913	0.034	0.003382	0.2327	O.k
Story1	5	DERIVA 1Y	-0.000092	-0.01146	-0.000143	0.001485	-0.000027	-0.000016	0.000092	0.01146	0.034	0.002706	0.3371	O.k
Story1	5	DERIVA 2X	0.010435	-0.00455	-0.00007	0.001083	0.003125	0.000096	0.010435	0.004551	0.034	0.306912	0.1339	O.k
Story1	5	DERIVA 2X	-0.010421	-0.00465	-0.000071	0.001061	-0.003121	0.000139	0.010421	0.004653	0.034	0.306500	0.1369	O.k
Story1	5	DERIVA 2Y	0.000111	-0.00283	-0.000069	0.001837	0.000034	0.001718	0.000111	0.002828	0.034	0.003265	0.0832	O.k

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN
LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL
MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES
CALCULO Y DISEÑO
ESTRUCTURAL

Base	5	DERIVA 1X	0	0	0	0	0	0							
Base	5	DERIVA 1X	0	0	0	0	0	0							
Base	5	DERIVA 1Y	0	0	0	0	0	0							
Base	5	DERIVA 1Y	0	0	0	0	0	0							
Base	5	DERIVA 2X	0	0	0	0	0	0							
Base	5	DERIVA 2X	0	0	0	0	0	0							
Base	5	DERIVA 2Y	0	0	0	0	0	0							
Base	5	DERIVA 2Y	0	0	0	0	0	0							
Story2	6	DERIVA 1X	0.015835	0.000034	-0.000031	-0.000196	0.002592	0.01164	0.005459	0.000006	0.017	0.321118	0.0004	O.k	
Story2	6	DERIVA 1X	-0.015792	-0.00015	-0.00007	-0.000239	-0.002672	-0.011265	0.005461	7E-06	0.017	0.321235	0.0004	O.k	
Story2	6	DERIVA 1Y	0.000185	0.019029	0.000021	0.002456	-3.68E-07	0.000552	0.000059	0.006715	0.017	0.003471	0.3950	O.k	
Story2	6	DERIVA 1Y	-0.000142	-0.01914	-0.000123	-0.002891	-0.00008	-0.000178	0.000061	0.00665	0.017	0.003588	0.3912	O.k	
Story2	6	DERIVA 2X	0.015821	0.000064	-0.00001	-0.000091	0.0026	0.011535	0.005453	0.000061	0.017	0.320765	0.0036	O.k	
Story2	6	DERIVA 2X	-0.015807	-0.00012	-0.000049	-0.000135	-0.002665	-0.01137	0.005468	0.000021	0.017	0.321647	0.0012	O.k	
Story2	6	DERIVA 2Y	0.000171	0.019059	0.000043	0.002561	0.000008	0.000448	0.000054	0.006702	0.017	0.003176	0.3942	O.k	
Story2	6	DERIVA 2Y	-0.000157	-0.01911	-0.000101	-0.002786	-0.000072	-0.000283	0.000068	0.006662	0.017	0.004000	0.3919	O.k	
Story1	6	DERIVA 1X	0.010376	-0.00004	-0.000021	0.000051	0.003421	0.00503	0.010376	0.00004	0.034	0.305176	0.0012	O.k	
Story1	6	DERIVA 1X	-0.010331	-0.00014	-0.000053	0.000003	-0.003449	-0.003321	0.010331	0.000139	0.034	0.303853	0.0041	O.k	
Story1	6	DERIVA 1Y	0.000126	0.012314	0.000015	0.004474	0.000022	0.001859	0.000126	0.012314	0.034	0.003706	0.3622	O.k	
Story1	6	DERIVA 1Y	-0.000081	-0.01249	-0.000089	-0.00442	-0.000051	-0.00015	0.000081	0.012492	0.034	0.002382	0.3674	O.k	
Story1	6	DERIVA 2X	0.010368	0.000003	-0.000006	0.000034	0.003422	0.00458	0.010368	0.000003	0.034	0.304941	0.0001	O.k	
Story1	6	DERIVA 2X	-0.010339	-9.5E-05	-0.000038	-0.000014	-0.003449	-0.00377	0.010339	0.000095	0.034	0.304088	0.0028	O.k	
Story1	6	DERIVA 2Y	0.000117	0.012357	0.00003	0.004457	0.000023	0.00141	0.000117	0.012357	0.034	0.003441	0.3634	O.k	
Story1	6	DERIVA 2Y	-0.000089	-0.01245	-0.000074	-0.004437	-0.00005	-0.0006	0.000089	0.012449	0.034	0.002618	0.3661	O.k	
Base	6	DERIVA 1X	0	0	0	0	0	0							
Base	6	DERIVA 1X	0	0	0	0	0	0							
Base	6	DERIVA 1Y	0	0	0	0	0	0							
Base	6	DERIVA 1Y	0	0	0	0	0	0							
Base	6	DERIVA 2X	0	0	0	0	0	0							
Base	6	DERIVA 2X	0	0	0	0	0	0							
Base	6	DERIVA 2Y	0	0	0	0	0	0							
Base	6	DERIVA 2Y	0	0	0	0	0	0							
Story2	7	DERIVA 1X	0.014426	0.009764	-0.000207	0.003399	0.002139	0.009392	0.004949	4.9E-05	0.017	0.291118	0.0029	O.k	
Story2	7	DERIVA 1X	-0.014381	0.009699	-0.000208	0.003365	-0.002121	-0.009818	0.00493	6E-05	0.017	0.290000	0.0035	O.k	
Story2	7	DERIVA 1Y	0.000171	0.012725	-0.000204	0.004013	0.00004	0.000135	0.000062	0.001305	0.017	0.003647	0.0768	O.k	
Story2	7	DERIVA 1Y	-0.000126	0.006738	-0.00021	0.002751	-0.000021	-0.000561	0.000043	0.001197	0.017	0.002529	0.0704	O.k	
Story2	7	DERIVA 2X	0.014413	0.004667	-0.000102	0.001615	0.002133	0.009504	0.004941	3E-05	0.017	0.290647	0.0018	O.k	
Story2	7	DERIVA 2X	-0.014394	0.004601	-0.000103	0.00158	-0.002126	-0.009706	0.004938	4E-05	0.017	0.290471	0.0024	O.k	
Story2	7	DERIVA 2Y	0.000158	0.007627	-0.0001	0.002229	0.000034	0.000247	0.000054	0.001286	0.017	0.003176	0.0756	O.k	
Story2	7	DERIVA 2Y	-0.000139	0.001641	-0.000105	0.000986	-0.000027	-0.000449	0.000051	0.001215	0.017	0.003000	0.0715	O.k	
Story1	7	DERIVA 1X	0.009477	0.009715	-0.000141	-0.002239	0.002849	-0.000799	0.009477	0.009715	0.034	0.278735	0.2857	O.k	
Story1	7	DERIVA 1X	-0.009451	0.009639	-0.000141	-0.002252	-0.002841	-0.0015	0.009451	0.009639	0.034	0.277971	0.2835	O.k	
Story1	7	DERIVA 1Y	0.000109	0.01142	-0.000139	-0.001488	0.000034	0.000041	0.000109	0.01142	0.034	0.003206	0.3359	O.k	
Story1	7	DERIVA 1Y	-0.000083	0.007935	-0.000143	-0.003003	-0.000026	-0.002339	0.000083	0.007935	0.034	0.002441	0.2334	O.k	
Story1	7	DERIVA 2X	0.009472	0.004637	-0.00007	-0.001063	0.002846	-0.000198	0.009472	0.004637	0.034	0.278588	0.1364	O.k	
Story1	7	DERIVA 2X	-0.009456	0.004561	-0.000071	-0.001076	-0.002844	-0.000899	0.009456	0.004561	0.034	0.278118	0.1341	O.k	
Story1	7	DERIVA 2Y	0.000104	0.006341	-0.000069	-0.000312	0.000031	0.000642	0.000104	0.006341	0.034	0.003059	0.1865	O.k	
Story1	7	DERIVA 2Y	-0.000088	0.002856	-0.000072	-0.001827	-0.000029	-0.001738	0.000088	0.002856	0.034	0.002588	0.0840	O.k	
Base	7	DERIVA 1X	0	0	0	0	0	0							
Base	7	DERIVA 1X	0	0	0	0	0	0							
Base	7	DERIVA 1Y	0	0	0	0	0	0							
Base	7	DERIVA 1Y	0	0	0	0	0	0							
Base	7	DERIVA 2X	0	0	0	0	0	0							
Base	7	DERIVA 2X	0	0	0	0	0	0							
Base	7	DERIVA 2Y	0	0	0	0	0	0							
Base	7	DERIVA 2Y	0	0	0	0	0	0							
Story2	8	DERIVA 1X	0.014449	0.000146	-0.000033	0.000239	0.00239	0.010248	0.005025	0.000008	0.017	0.295588	0.0005	O.k	
Story2	8	DERIVA 1X	-0.014404	-3.4E-05	-0.000069	0.000196	-0.002471	-0.010623	0.005027	0.000005	0.017	0.295706	0.0003	O.k	
Story2	8	DERIVA 1Y	0.000176	0.019117	0.000022	0.002881	-0.000002	0.000178	0.000057	0.006634	0.017	0.003353	0.3902	O.k	
Story2	8	DERIVA 1Y	-0.000131	-0.01901	-0.000124	-0.002446	-0.000079	-0.000554	0.00006	0.006701	0.017	0.003529	0.3942	O.k	
Story2	8	DERIVA 2X	0.014434	0.000116	-0.000011	0.000134	0.002398	0.010353	0.005018	0.000021	0.017	0.295176	0.0012	O.k	
Story2	8	DERIVA 2X	-0.014419	-6.4E-05	-0.000047	0.000091	-0.002463	-0.010519	0.005034	0.00006	0.017	0.296118	0.0035	O.k	
Story2	8	DERIVA 2Y	0.000161	0.019088	0.000044	0.002776	0.000006	0.000283	0.000051	0.006648	0.017	0.003000	0.3911	O.k	
Story2	8	DERIVA 2Y	-0.000146	-0.01904	-0.000102	-0.002551	-0.000071	-0.000449	0.000066	0.006688	0.017	0.003882	0.3934	O.k	
Story1	8	DERIVA 1X	0.009424	0.000138	-0.000022	-0.000003	0.003129	0.002677	0.009424	0.000138	0.034	0.277176	0.0041	O.k	
Story1	8	DERIVA 1X	-0.009377	0.000039	-0.000051	-0.00005	-0.003157	-0.004384	0.009377	0.000039	0.034	0.275794	0.0011	O.k	
Story1	8	DERIVA 1Y	0.000119	0.012483	0.000016	0.004414	0.000002	0.000148	0.000119	0.012483	0.034	0.003500	0.3671	O.k	
Story1	8	DERIVA 1Y	-0.000071	-0.01231	-0.000089	-0.004467	-0.000048	-0.001856	0.000071	0.012305	0.034	0.002088	0.3619	O.k	
Story1	8	DERIVA 2X	0.009416	0.000095	-0.000007	0.000014	0.00313	0.003126	0.009416	0.000095	0.034	0.276941	0.0028	O.k	
Story1	8	DERIVA 2X	-0.009385	-4E-06	-0.000036	-0.000034	-0.003156	-0.003935	0.009385	0.000004	0.034	0.276029	0.0001	O.k	
Story1	8	DERIVA 2Y	0.00011	0.01244	0.000031	0.004431	0.000021	0.000597	0.00011	0.01244	0.034	0.003235	0.3659	O.k	
Story1	8	DERIVA 2Y	-0.00008	-0.01235	-0.000074	-0.004451	-0.000048	-0.001407	0.00008	0.012348	0.034	0.002353	0.3632	O.k	
Base	8	DERIVA 1X	0	0	0	0	0	0							
Base	8	DERIVA 1X	0	0	0	0	0	0							
Base	8	DERIVA 1Y	0	0	0	0	0	0							
Base	8	DERIVA 1Y	0	0	0	0	0	0							
Base	8	DERIVA 2X	0	0	0	0	0	0							
Base	8	DERIVA 2X	0	0	0	0	0	0							
Base	8	DERIVA 2Y	0	0	0	0	0	0							
Base	8	DERIVA 2Y	0	0	0	0	0	0							

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

Chequeo de la irregularidad torsional.

MODULO 1 COMPROBACIÓN POR IRREGULARIDAD TORSIONAL

POINT DISPLACEMENTS										Deriva δ' tot _x	Deriva δ' tot _y	Δ' max	0.9	0.8	OBS.
Story	Label	load Case/Comb	UX	UY	UZ	RX	RY	RZ	1.2*(D _x +D _y)/2 IRREGULARIDAD				1.4*(D _x +D _y)/2 IRREGULARIDAD EXTREMA		
Story2	1	DERIVA 1X	0.030052	0.001794	-0.000719	0.001207	0.000576	0.000176	0.00005	0.00000	0.00737	0.01	0.010		O.K.
Story2	1	DERIVA 1X	-0.029854	-0.005722	-0.000822	0.000264	-0.001675	-0.000017	0.00005	0.00001	0.00749	0.01	0.011		O.K.
Story2	1	DERIVA 1Y	0.000308	0.022166	-0.000691	0.004727	-0.00053	0.000379	0.000	0.00019	0.01389	0.02	0.019		O.K.
Story2	1	DERIVA 1Y	-0.00011	-0.026094	-0.000849	-0.003255	-0.000569	-0.000221	0.00000	0.00023	0.01520	0.02	0.022		O.K.
Story2	1	DERIVA 2X	0.030017	0.003078	-0.000356	0.00084	0.000799	0.000152	0.00005	0.00000	0.00741	0.01	0.011		O.K.
Story2	1	DERIVA 2X	-0.029889	-0.004437	-0.00046	-0.000103	-0.001451	-0.000041	0.00005	0.00000	0.00740	0.01	0.011		O.K.
Story2	1	DERIVA 2Y	0.000273	0.023451	-0.000329	0.004359	-0.000307	0.000356	0.00000	0.00021	0.01432	0.02	0.020		O.K.
Story2	1	DERIVA 2Y	-0.000145	-0.024809	-0.000487	-0.003622	-0.000346	-0.000245	0.00000	0.00022	0.01478	0.02	0.021		O.K.
Story1	1	DERIVA 1X	0.022786	0.000572	-0.000479	0.002018	0.004734	0.000083	0.00052	0.00000	0.02279	0.03	0.032		O.K.
Story1	1	DERIVA 1X	-0.022804	-0.003187	-0.000571	0.00104	-0.000481	-0.000084	0.00052	0.00001	0.02303	0.03	0.033		O.K.
Story1	1	DERIVA 1Y	0.000127	0.008275	-0.000464	0.004513	0.002151	0.000021	0.00000	0.00007	0.00828	0.01	0.012		O.K.
Story1	1	DERIVA 1Y	-0.000145	-0.01089	-0.000586	-0.001455	-0.002102	-0.000022	0.00000	0.00012	0.01089	0.01	0.015		O.K.
Story1	1	DERIVA 2X	0.022791	0.001428	-0.000245	0.001375	0.003929	0.000084	0.00052	0.00000	0.02284	0.03	0.032		O.K.
Story1	1	DERIVA 2X	-0.0228	-0.002331	-0.000337	0.000397	-0.001287	-0.000084	0.00052	0.00001	0.02292	0.03	0.033		O.K.
Story1	1	DERIVA 2Y	0.000132	0.009131	-0.00023	0.003869	0.001346	0.000021	0.00000	0.00008	0.00913	0.01	0.013		O.K.
Story1	1	DERIVA 2Y	-0.000141	-0.010034	-0.000352	-0.002098	0.001297	-0.000022	0.00000	0.00010	0.01003	0.01	0.014		O.K.
Base	1	DERIVA 1X	0	0	0	0	0	0							
Base	1	DERIVA 1X	0	0	0	0	0	0							
Base	1	DERIVA 1Y	0	0	0	0	0	0							
Base	1	DERIVA 1Y	0	0	0	0	0	0							
Base	1	DERIVA 2X	0	0	0	0	0	0							
Base	1	DERIVA 2X	0	0	0	0	0	0							
Base	1	DERIVA 2Y	0	0	0	0	0	0							
Base	1	DERIVA 2Y	0	0	0	0	0	0							
Story2	14	DERIVA 1X	0.031053	0.000557	-0.00089	0.000252	-0.000031	0.000063	0.00006	0.00000	0.00762	0.01	0.010		O.K.
Story2	14	DERIVA 1X	-0.030647	-0.006959	-0.000963	-0.000697	-0.00238	-0.000519	0.00005	0.00001	0.00812	0.01	0.012		O.K.
Story2	14	DERIVA 1Y	0.000297	0.020935	-0.000847	0.003776	-0.001175	0.000062	0.00000	0.00016	0.01266	0.01	0.017		O.K.
Story2	14	DERIVA 1Y	0.000109	-0.027338	-0.001006	-0.004221	-0.001237	-0.000518	0.00000	0.00027	0.01645	0.02	0.023		O.K.
Story2	14	DERIVA 2X	0.030958	0.002627	-0.000433	0.000286	0.000578	0.000179	0.00006	0.00000	0.00762	0.01	0.011		O.K.
Story2	14	DERIVA 2X	-0.030743	-0.004889	-0.000505	-0.000663	-0.001771	-0.000402	0.00005	0.00001	0.00773	0.01	0.011		O.K.
Story2	14	DERIVA 2Y	0.000201	0.023006	-0.000389	0.003811	-0.000565	0.000178	0.00000	0.00019	0.01388	0.02	0.019		O.K.
Story2	14	DERIVA 2Y	-0.000014	-0.025267	-0.000549	-0.004187	-0.000627	-0.000401	0.00000	0.00023	0.01523	0.02	0.021		O.K.
Story1	14	DERIVA 1X	0.023431	0.000572	-0.000645	-0.000044	0.006777	0.000083	0.00055	0.00000	0.02344	0.03	0.033		O.K.
Story1	14	DERIVA 1X	-0.023453	-0.003187	-0.000712	-0.001007	0.00153	-0.000084	0.00055	0.00001	0.02367	0.03	0.033		O.K.
Story1	14	DERIVA 1Y	0.000046	0.008275	-0.000617	0.00244	0.004265	0.000021	0.00000	0.00007	0.00828	0.01	0.011		O.K.
Story1	14	DERIVA 1Y	-0.000068	-0.01089	-0.000741	-0.003491	-0.004041	-0.000022	0.00000	0.00012	0.01089	0.01	0.015		O.K.
Story1	14	DERIVA 2X	0.023436	0.001428	-0.000318	-0.000045	0.004778	0.000084	0.00055	0.00000	0.02348	0.03	0.033		O.K.
Story1	14	DERIVA 2X	-0.023447	-0.002331	-0.000385	-0.001007	-0.00047	-0.000084	0.00055	0.00001	0.02356	0.03	0.033		O.K.
Story1	14	DERIVA 2Y	0.000051	0.009131	-0.000289	0.002439	0.002266	0.000021	0.00000	0.00008	0.00913	0.01	0.013		O.K.
Story1	14	DERIVA 2Y	-0.000062	-0.010034	-0.000413	-0.003491	0.002042	-0.000022	0.00000	0.00010	0.01003	0.01	0.014		O.K.
Base	14	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	14	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	14	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	14	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	14	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	14	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	14	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	14	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Story2	12.0	DERIVA 1X	0.030654	0.000634	-0.000893	0.000267	0.002447	0.000531	0.00005	0.00000	0.00722	0.01	0.010		O.K.
Story2	12.0	DERIVA 1X	-0.031091	-0.007070	-0.000965	-0.000706	0.000060	-0.000055	0.00006	0.00001	0.00854	0.01	0.011		O.K.
Story2	12.0	DERIVA 1Y	-0.000127	0.020368	-0.000851	0.003671	0.001290	0.000510	0.00000	0.00015	0.01225	0.02	0.018		O.K.
Story2	12.0	DERIVA 1Y	-0.000309	-0.026804	-0.001007	-0.004111	0.001217	-0.000034	0.00000	0.00026	0.01605	0.02	0.022		O.K.
Story2	12.0	DERIVA 2X	0.030758	0.002713	-0.000434	0.000300	0.001811	0.000409	0.00005	0.00000	0.00743	0.01	0.010		O.K.
Story2	12.0	DERIVA 2X	-0.030987	-0.004931	-0.000506	-0.000673	-0.000575	-0.000171	0.00006	0.00001	0.00758	0.01	0.011		O.K.
Story2	12.0	DERIVA 2Y	-0.000024	0.022447	-0.000392	0.003704	0.000655	0.000388	0.00000	0.00018	0.01347	0.02	0.019		O.K.
Story2	12.0	DERIVA 2Y	-0.000206	-0.024726	-0.000548	-0.004077	0.000581	-0.000156	0.00000	0.00022	0.01483	0.02	0.020		O.K.
Story1	12.0	DERIVA 1X	0.023431	0.000608	-0.000648	-0.000032	-0.001607	0.000083	0.00055	0.00000	0.02344	0.03	0.032		O.K.
Story1	12.0	DERIVA 1X	-0.023453	-0.003243	-0.000714	-0.001018	-0.006859	-0.000084	0.00055	0.00001	0.02368	0.03	0.033		O.K.
Story1	12.0	DERIVA 1Y	0.000046	0.008118	-0.000620	0.002375	-0.004128	0.000021	0.00000	0.00007	0.00812	0.01	0.011		O.K.
Story1	12.0	DERIVA 1Y	-0.000068	-0.010753	-0.000742	-0.003424	-0.004338	-0.000022	0.00000	0.00012	0.01075	0.01	0.015		O.K.
Story1	12.0	DERIVA 2X	0.023436	0.001469	-0.000319	-0.000033	0.000437	0.000084	0.00055	0.00000	0.02348	0.03	0.032		O.K.
Story1	12.0	DERIVA 2X	-0.023447	-0.002382	-0.000385	-0.001019	-0.004815	-0.000084	0.00055	0.00001	0.02357	0.03	0.033		O.K.
Story1	12.0	DERIVA 2Y	0.000051	0.008979	-0.000292	0.002373	-0.002084	0.000021	0.00000	0.00008	0.00898	0.01	0.013		O.K.
Story1	12.0	DERIVA 2Y	-0.000062	-0.008992	-0.000413	-0.003425	-0.002295	-0.000022	0.00000	0.00010	0.00989	0.01	0.014		O.K.
Base	12.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	12.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	12.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	12.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000							
Base	12.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000</							

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

MODULO 2 COMPROBACIÓN POR IRREGULARIDAD TORSIONAL

POINT DISPLACEMENTS									0.9		0.8			
Story	Label	oad Case/Comb	UX	UY	UZ	RX	RY	RZ	Deriva δ'_{tot_x}	Deriva δ'_{tot_y}	Δ'_{max}	1.2*(D ₁ +D ₂)/2 IRREGULARIDAD	1.4*(D ₁ +D ₂)/2 IRREGULARIDAD EXTREMA	OBS.
Story2	1	DERIVA 1X	0.047499	0.000408	-0.000618	0.000737	0.001608	0.000474	0.00014	0.00000	0.01192	0.01	0.017	O.K.
Story2	1	DERIVA 1X	-0.047217	-0.006408	-0.000811	-0.000238	-0.00217	-0.000445	0.00014	0.00001	0.01222	0.01	0.017	O.K.
Story2	1	DERIVA 1Y	0.002197	0.041648	-0.000568	0.008058	-0.000143	0.001127	0.000	0.00071	0.02666	0.03	0.034	O.K.
Story2	1	DERIVA 1Y	-0.001914	-0.047648	-0.000862	-0.00756	-0.000419	-0.001098	0.00000	0.00090	0.03007	0.03	0.039	O.K.
Story2	1	DERIVA 2X	0.047439	0.002328	-0.000262	0.000468	0.00174	0.000473	0.00014	0.00000	0.01193	0.01	0.017	O.K.
Story2	1	DERIVA 2X	-0.047276	-0.004488	-0.000455	-0.000507	-0.002039	-0.000447	0.00014	0.00001	0.01200	0.01	0.017	O.K.
Story2	1	DERIVA 2Y	0.002137	0.043568	-0.000211	0.00779	-0.000012	0.001126	0.00000	0.00077	0.02776	0.03	0.035	O.K.
Story2	1	DERIVA 2Y	-0.001974	-0.045728	-0.000506	-0.007828	-0.000287	-0.001099	0.00000	0.00084	0.02897	0.03	0.037	O.K.
Story1	1	DERIVA 1X	0.03558	0.000344	-0.000438	-0.000107	0.005037	0.000101	0.00127	0.00000	0.03558	0.04	0.050	O.K.
Story1	1	DERIVA 1X	-0.035505	-0.00292	-0.00061	-0.000971	-0.00198	-0.000095	0.00126	0.00001	0.03562	0.04	0.050	O.K.
Story1	1	DERIVA 1Y	0.00135	0.015006	-0.000411	0.004908	0.001747	0.000365	0.00000	0.00023	0.01507	0.02	0.020	O.K.
Story1	1	DERIVA 1Y	-0.001275	-0.017581	-0.000636	-0.005986	0.00131	-0.000359	0.00000	0.00031	0.01763	0.02	0.024	O.K.
Story1	1	DERIVA 2X	0.035569	0.001163	-0.000184	-0.000064	0.004313	0.000101	0.00127	0.00000	0.03559	0.04	0.050	O.K.
Story1	1	DERIVA 2X	-0.035516	-0.002101	-0.000356	-0.000927	-0.002705	-0.000096	0.00126	0.00000	0.03558	0.04	0.050	O.K.
Story1	1	DERIVA 2Y	0.001339	0.015824	-0.000157	0.004951	0.001022	0.000365	0.00000	0.00025	0.01588	0.02	0.022	O.K.
Story1	1	DERIVA 2Y	-0.001286	-0.016763	-0.000383	-0.005943	0.000586	-0.00036	0.00000	0.00028	0.01681	0.02	0.023	O.K.
Base	1	DERIVA 1X	0	0	0	0	0	0						
Base	1	DERIVA 1X	0	0	0	0	0	0						
Base	1	DERIVA 1Y	0	0	0	0	0	0						
Base	1	DERIVA 1Y	0	0	0	0	0	0						
Base	1	DERIVA 2X	0	0	0	0	0	0						
Base	1	DERIVA 2X	0	0	0	0	0	0						
Base	1	DERIVA 2Y	0	0	0	0	0	0						
Base	1	DERIVA 2Y	0	0	0	0	0	0						
Story2	13	DERIVA 1X	0.047344	0.001519	-0.000595	0.000768	0.001895	0.000473	0.00014	0.00000	0.01178	0.01	0.016	O.K.
Story2	13	DERIVA 1X	-0.047492	-0.007069	-0.000783	-0.00044	-0.001913	-0.000504	0.00014	0.00001	0.01260	0.02	0.018	O.K.
Story2	13	DERIVA 1Y	0.001975	0.035887	-0.000562	0.006651	0.000136	0.000929	0.00000	0.00048	0.02182	0.03	0.031	O.K.
Story2	13	DERIVA 1Y	-0.002123	-0.041436	-0.000816	-0.006322	-0.000154	-0.000961	0.00000	0.00063	0.02501	0.03	0.035	O.K.
Story2	13	DERIVA 2X	0.047383	0.003375	-0.000225	0.000538	0.001879	0.000477	0.00014	0.00000	0.01194	0.01	0.016	O.K.
Story2	13	DERIVA 2X	-0.047453	-0.005213	-0.000437	-0.00067	-0.001928	-0.0005	0.00014	0.00001	0.01227	0.01	0.017	O.K.
Story2	13	DERIVA 2Y	0.002014	0.037743	-0.000216	0.006421	0.00012	0.000933	0.00000	0.00052	0.02287	0.03	0.032	O.K.
Story2	13	DERIVA 2Y	-0.002084	-0.03958	-0.000471	-0.006552	-0.000169	-0.000956	0.00000	0.00057	0.02396	0.03	0.034	O.K.
Story1	13	DERIVA 1X	0.03558	0.00084	-0.000415	0.000069	0.002508	0.000101	0.00127	0.00000	0.03559	0.04	0.049	O.K.
Story1	13	DERIVA 1X	-0.035505	-0.0032	-0.000582	-0.001017	-0.004553	-0.000095	0.00126	0.00001	0.03565	0.04	0.049	O.K.
Story1	13	DERIVA 1Y	0.00135	0.014076	-0.0004	0.00428	-0.000838	0.000365	0.00000	0.00020	0.01414	0.02	0.020	O.K.
Story1	13	DERIVA 1Y	-0.001275	-0.016436	-0.000597	-0.005228	-0.001208	-0.000359	0.00000	0.00027	0.01649	0.02	0.023	O.K.
Story1	13	DERIVA 2X	0.035569	0.001645	-0.000172	0.000092	0.003026	0.000101	0.00127	0.00000	0.03561	0.04	0.049	O.K.
Story1	13	DERIVA 2X	-0.035516	-0.002394	-0.000339	-0.000995	-0.004035	-0.000096	0.00126	0.00001	0.03560	0.04	0.049	O.K.
Story1	13	DERIVA 2Y	0.001339	0.014882	-0.000157	0.004302	-0.000319	0.000365	0.00000	0.00022	0.01494	0.02	0.021	O.K.
Story1	13	DERIVA 2Y	-0.001286	-0.01563	-0.000354	-0.005205	-0.00069	-0.00036	0.00000	0.00024	0.01568	0.02	0.022	O.K.
Base	13	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	13	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	13	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	13	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	13	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	13	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	13	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	13	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Story2	14.0	DERIVA 1X	0.045071	0.002290	-0.000419	0.000921	0.001308	0.000375	0.00011	0.00000	0.01036	0.01	0.015	O.K.
Story2	14.0	DERIVA 1X	-0.047017	-0.006332	-0.000752	-0.000292	-0.002191	-0.000138	0.00015	0.00001	0.01263	0.02	0.018	O.K.
Story2	14.0	DERIVA 1Y	0.001941	0.036855	-0.000461	0.006841	-0.000272	0.001050	0.00000	0.00052	0.02278	0.03	0.035	O.K.
Story2	14.0	DERIVA 1Y	-0.003888	-0.040897	-0.000711	-0.006212	-0.000611	-0.000537	0.00000	0.00060	0.02454	0.03	0.038	O.K.
Story2	14.0	DERIVA 2X	0.045405	0.003618	-0.000139	0.000841	0.001465	0.000263	0.00011	0.00000	0.01079	0.01	0.016	O.K.
Story2	14.0	DERIVA 2X	-0.046682	-0.005004	-0.000473	-0.000372	-0.002033	-0.000027	0.00014	0.00001	0.01217	0.01	0.017	O.K.
Story2	14.0	DERIVA 2Y	0.002276	0.038183	-0.000181	0.006760	-0.000114	0.000938	0.00000	0.00054	0.02330	0.03	0.036	O.K.
Story2	14.0	DERIVA 2Y	-0.003553	-0.039569	-0.000431	-0.006292	-0.000454	-0.000648	0.00000	0.00057	0.02399	0.03	0.037	O.K.
Story1	14.0	DERIVA 1X	0.034810	0.000840	-0.000256	0.001993	0.002749	0.000101	0.00121	0.00000	0.03482	0.04	0.049	O.K.
Story1	14.0	DERIVA 1X	-0.034786	-0.003200	-0.000533	0.000894	-0.003903	-0.000095	0.00121	0.00001	0.03493	0.04	0.049	O.K.
Story1	14.0	DERIVA 1Y	0.001930	0.014076	-0.000298	0.006248	-0.000370	0.000365	0.00000	0.00020	0.01421	0.02	0.021	O.K.
Story1	14.0	DERIVA 1Y	-0.001907	-0.016436	-0.000491	-0.003361	-0.000785	-0.000359	0.00000	0.00027	0.01655	0.02	0.024	O.K.
Story1	14.0	DERIVA 2X	0.034802	0.001645	-0.000078	0.001348	0.002960	0.000101	0.00121	0.00000	0.03484	0.04	0.049	O.K.
Story1	14.0	DERIVA 2X	-0.034794	-0.002394	-0.000355	0.000248	-0.0003692	-0.000096	0.00121	0.00001	0.03488	0.04	0.049	O.K.
Story1	14.0	DERIVA 2Y	0.001922	0.014882	-0.000120	0.005602	-0.000158	0.000365	0.00000	0.00022	0.01501	0.02	0.022	O.K.
Story1	14.0	DERIVA 2Y	-0.001915	-0.015630	-0.000313	-0.004006	-0.000574	-0.000360	0.00000	0.00024	0.01575	0.02	0.023	O.K.
Base	14.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	14.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	14.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	14.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	14.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	14.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000						
Base	14.0	DERIVA 2Y	0.000000	0.000000	0.0									

PROYECTO ESTRUCTURALES

CALCULO Y DISEÑO

ESTRUCTURAL

0.9 0.8

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CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

MODULO 4 y 5 COMPROBACIÓN POR IRREGULARIDAD TORSIONAL

POINT DISPLACEMENTS										Deriva δ'_{totx}	Deriva δ'_{toty}	Δ'_{max}	0.9		0.8		OBS.
Story	Label	oad Case/Comb	UX	UY	UZ	RX	RY	RZ	1.2*(D _x +D _y)/2 IRREGULARIDAD				1.4*(D _x +D _y)/2 IRREGULARIDAD EXTREMA				
Story2	12	DERIVA 1X	52.902	-0.128	-0.497	0.000375	0.002751	0.000118	158.20608	0.44756	12.59578	14.89	17.374	O.K.			
Story2	12	DERIVA 1X	-53.446	-6.795	-0.636	-0.000314	-0.001386	-0.00013	165.32816	11.97160	13.31540	15.73	18.347	O.K.			
Story2	12	DERIVA 1Y	-0.226	30.136	-0.477	0.004229	0.000743	0.000006	0.014	190.21926	13.79251	16.55	19.309	O.K.			
Story2	12	DERIVA 1Y	-0.318	-37.058	-0.656	-0.004169	0.000622	-0.000019	0.02592	321.12640	17.92072	21.50	25.089	O.K.			
Story2	12	DERIVA 2X	53.027	2.032	-0.237	0.000228	0.002454	0.000012	159.82016	0.38440	12.65719	14.96	17.452	O.K.			
Story2	12	DERIVA 2X	-53.32	-4.635	-0.377	-0.000461	-0.001683	-0.000128	163.66085	4.71758	12.97607	15.32	17.874	O.K.			
Story2	12	DERIVA 2Y	-0.1	32.295	-0.217	0.004082	0.000446	0.000009	0.00292	227.37624	15.07910	18.09	21.111	O.K.			
Story2	12	DERIVA 2Y	-0.193	-34.899	-0.397	-0.004316	0.000325	-0.000016	0.00941	276.65669	16.63328	19.96	23.287	O.K.			
Story1	12	DERIVA 1X	40.324	0.541	-0.434	-0.000171	0.000227	0.00007	1626.02498	0.29268	40.32763	48.05	56.062	O.K.			
Story1	12	DERIVA 1X	-40.588	-3.335	-0.56	-0.001046	-0.008793	-0.000075	1647.38574	11.12223	40.72478	48.50	56.588	O.K.			
Story1	12	DERIVA 1Y	-0.107	16.344	-0.421	0.003622	-0.004094	0.000004	0.01145	267.12634	16.34435	19.61	22.882	O.K.			
Story1	12	DERIVA 1Y	-0.157	-19.138	-0.573	-0.004839	-0.004472	-0.000009	0.02465	366.26304	19.13864	22.97	26.794	O.K.			
Story1	12	DERIVA 2X	40.385	1.412	-0.203	-0.000058	0.002382	0.000071	1630.94823	1.99374	40.40968	48.15	56.171	O.K.			
Story1	12	DERIVA 2X	-40.527	-2.463	-0.329	-0.000934	-0.006637	-0.000074	1642.43773	6.06637	40.60177	48.36	56.422	O.K.			
Story1	12	DERIVA 2Y	-0.046	17.216	-0.19	0.003735	-0.001939	0.000005	0.00212	296.39066	17.21606	20.66	24.102	O.K.			
Story1	12	DERIVA 2Y	-0.096	-18.266	-0.342	-0.004727	-0.002316	-0.000008	0.00922	333.64676	18.26625	21.92	25.573	O.K.			
Base	12	DERIVA 1X	0	0	0	0	0	0									
Base	12	DERIVA 1X	0	0	0	0	0	0									
Base	12	DERIVA 1Y	0	0	0	0	0	0									
Base	12	DERIVA 1Y	0	0	0	0	0	0									
Base	12	DERIVA 2X	0	0	0	0	0	0									
Base	12	DERIVA 2X	0	0	0	0	0	0									
Base	12	DERIVA 2Y	0	0	0	0	0	0									
Base	12	DERIVA 2Y	0	0	0	0	0	0									
Story2	13	DERIVA 1X	51.963	-0.128	-0.322	0.001366	0.001909	0.000118	148.98644	0.44756	12.22432	14.66	17.109	O.K.			
Story2	13	DERIVA 1X	-52.398	-6.795	-0.483	0.000686	-0.001979	-0.00013	154.28124	11.97160	12.89391	15.44	18.010	O.K.			
Story2	13	DERIVA 1Y	-0.144	30.136	-0.315	0.005213	-0.000021	0.000006	0.00624	190.21926	13.79223	16.57	19.332	O.K.			
Story2	13	DERIVA 1Y	-0.291	-37.058	-0.49	-0.003161	-0.000049	-0.000019	0.01850	321.12640	17.92052	21.29	24.838	O.K.			
Story2	13	DERIVA 2X	52.067	2.032	-0.162	0.000852	0.002047	0.00012	150.25856	0.38440	12.27367	14.73	17.186	O.K.			
Story2	13	DERIVA 2X	-52.294	-4.635	-0.324	0.000172	-0.001841	-0.000128	152.99216	4.71758	12.55825	15.05	17.564	O.K.			
Story2	13	DERIVA 2Y	-0.04	32.295	-0.155	0.004699	0.000117	0.000009	0.00073	227.37624	15.07902	18.07	21.081	O.K.			
Story2	13	DERIVA 2Y	-0.187	-34.899	-0.331	-0.003675	0.000089	-0.000016	0.00723	276.65669	16.63322	19.79	23.088	O.K.			
Story1	13	DERIVA 1X	39.757	0.541	-0.265	0.002242	0.002374	0.00007	1580.61905	0.29268	39.76068	47.71	55.666	O.K.			
Story1	13	DERIVA 1X	-39.977	-3.335	-0.41	0.001342	-0.006727	-0.000075	1598.16053	11.12223	40.11587	48.13	56.153	O.K.			
Story1	13	DERIVA 1Y	-0.065	16.344	-0.263	0.006053	-0.002149	0.000004	0.00423	267.12634	16.34413	19.58	22.847	O.K.			
Story1	13	DERIVA 1Y	-0.155	-19.138	-0.412	-0.002469	-0.002204	-0.000009	0.02403	366.26304	19.13863	22.77	26.570	O.K.			
Story1	13	DERIVA 2X	39.809	1.412	-0.131	0.001396	0.003258	0.000071	1584.75648	1.99374	39.83403	47.80	55.769	O.K.			
Story1	13	DERIVA 2X	-39.925	-2.463	-0.276	0.000496	-0.005843	-0.000074	1594.00563	6.06637	40.00090	48.00	55.997	O.K.			
Story1	13	DERIVA 2Y	-0.013	17.216	-0.129	0.005207	-0.001265	0.000005	0.00017	296.39066	17.21600	20.60	24.030	O.K.			
Story1	13	DERIVA 2Y	-0.102	-18.266	-0.278	-0.003315	-0.00132	-0.000008	0.01040	333.64676	18.26628	21.76	25.386	O.K.			
Base	13	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	13	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	13	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	13	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	13	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	13	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	13	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	13	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Story2	28.0	DERIVA 1X	51.963000	0.144000	-0.317000	0.001302	0.002152	0.000118	148.98644	0.25402	12.21640	14.88	17.363	O.K.			
Story2	28.0	DERIVA 1X	-52.398000	-6.405000	-0.489000	0.000637	-0.002041	-0.000130	154.28124	10.45229	12.83486	15.66	18.265	O.K.			
Story2	28.0	DERIVA 1Y	-0.144000	30.119000	-0.316000	0.005114	0.000065	0.000006	0.00624	191.13063	13.82523	16.59	19.356	O.K.			
Story2	28.0	DERIVA 1Y	-0.291000	-36.380000	-0.490000	-0.003175	0.000047	-0.000019	0.01850	308.42384	17.56253	21.08	24.588	O.K.			
Story2	28.0	DERIVA 2X	52.067000	2.175000	-0.158000	0.000809	0.002010	0.000120	150.25856	0.50126	12.27843	14.96	17.458	O.K.			
Story2	28.0	DERIVA 2X	-52.294000	-4.374000	-0.329000	0.000144	-0.002183	-0.000128	152.99216	4.08444	12.53302	15.29	17.839	O.K.			
Story2	28.0	DERIVA 2Y	-0.040000	32.150000	-0.156000	0.004621	-0.000078	0.000009	0.00073	226.11137	15.03702	18.04	21.052	O.K.			
Story2	28.0	DERIVA 2Y	-0.187000	-34.349000	-0.331000	-0.003668	-0.000096	-0.000016	0.00723	267.32250	16.35022	19.62	22.890	O.K.			
Story1	28.0	DERIVA 1X	39.757000	0.648000	-0.261000	0.002191	0.005985	0.000070	1580.61905	0.41990	39.76228	48.05	56.064	O.K.			
Story1	28.0	DERIVA 1X	-39.977000	-3.172000	-0.415000	0.001310	-0.002107	-0.000075	1598.16053	10.06158	40.10264	48.49	56.570	O.K.			
Story1	28.0	DERIVA 1Y	-0.065000	16.294000	-0.264000	0.005967	0.001969	0.000004	0.00423	265.49444	16.29413	19.55	22.812	O.K.			
Story1	28.0	DERIVA 1Y	-0.155000	-18.818000	-0.412000	-0.002466	-0.001909	-0.000009	0.02403	354.11712	18.81864	22.58	26.346	O.K.			
Story1	28.0	DERIVA 2X	39.809000	1.467000	-0.127000	0.001364	0.005199	0.000071	1584.75648	2.15209	39.83602	48.15	56.173	O.K.			
Story1	28.0	DERIVA 2X	-39.925000	-2.353000	-0.281000	0.000482	-0.002893	-0.000074	1594.00563	5.53661	39.99428	48.35	56.413	O.K.			
Story1	28.0	DERIVA 2Y	-0.013000	17.113000	-0.130000	0.005140	0.001183	0.000005	0.00017	292.85477	17.11300	20.54	23.958	O.K.			
Story1	28.0	DERIVA 2Y	-0.102000	-17.990000	-0.278000	-0.003294	-0.001123	-0.000008	0.01040	323.96400	17.99929	21.60	25.199	O.K.			
Base	28.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	28.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	28.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	28.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	28.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	28.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000									
Base	28																

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

MODULO 6.1 Y 6.2 COMPROBACIÓN POR IRREGULARIDAD TORSIONAL

POINT DISPLACEMENTS								Deriva δ'_{tot_x}	Deriva δ'_{tot_y}	Δ'_{max}	0.9	0.8	OBS.
Story	Label	oad Case/Comb	UX	UY	UZ	RX	RY	RZ			1.2*(D ₁ +D ₂)/2 IRREGULARIDAD	1.4*(D ₁ +D ₂)/2 IRREGULARIDAD EXTREMA	
Story1	2	DERIVA 1X	0.013681	0.000251	-0.00007	-0.00018	0.003587	0.001214	0.00019	0.000000	0.01368	0.01441	Irregular
Story1	2	DERIVA 1X	-0.01366	-0.000133	-0.00009	-0.000272	-0.002186	-0.001535	0.00019	0.000000	0.01366	0.01438	Irregular
Story1	2	DERIVA 1Y	0.000012	0.003645	-0.000071	0.000646	0.000704	0.000004	0.00000	0.000013	0.00365	0.0043	O.K.
Story1	2	DERIVA 1Y	0.000009	-0.003527	-0.000088	-0.001097	0.000696	-0.000325	0.00000	0.000012	0.00353	0.0043	O.K.
Story1	2	DERIVA 2X	0.013676	0.000221	-0.000028	-0.000035	0.003236	0.001294	0.00019	0.000000	0.01368	0.01440	Irregular
Story1	2	DERIVA 2X	-0.013665	-0.000163	-0.000048	-0.000127	-0.002536	-0.001454	0.00019	0.000000	0.01367	0.01439	Irregular
Story1	2	DERIVA 2Y	0.000007	0.003615	-0.00003	0.000791	0.000354	0.000085	0.00000	0.000013	0.00362	0.0043	O.K.
Story1	2	DERIVA 2Y	0.000004	-0.003557	-0.000047	-0.000952	0.000346	-0.000245	0.00000	0.000013	0.00356	0.0043	O.K.
Base	2	DERIVA 1X	0	0	0	0	0	0					O.K.
Base	2	DERIVA 1X	0	0	0	0	0	0					O.K.
Base	2	DERIVA 1Y	0	0	0	0	0	0					O.K.
Base	2	DERIVA 1Y	0	0	0	0	0	0					O.K.
Base	2	DERIVA 2X	0	0	0	0	0	0					O.K.
Base	2	DERIVA 2X	0	0	0	0	0	0					O.K.
Base	2	DERIVA 2Y	0	0	0	0	0	0					O.K.
Base	2	DERIVA 2Y	0	0	0	0	0	0					O.K.
Story1	1	DERIVA 1X	0.006904	0.000106	-0.000076	0.000287	0.002144	0.001281	0.00005	0.000000	0.00690	0.0083	O.K.
Story1	1	DERIVA 1X	-0.006879	-0.000278	-0.000086	0.000195	-0.00077	-0.000941	0.00005	0.000000	0.00688	0.0083	O.K.
Story1	1	DERIVA 1Y	0.000014	0.00348	-0.000073	0.001111	0.000692	0.000333	0.00000	0.000012	0.00348	0.0042	O.K.
Story1	1	DERIVA 1Y	0.000011	-0.003651	-0.00009	-0.000629	0.000683	0.000007	0.00000	0.000013	0.00365	0.0043	O.K.
Story1	1	DERIVA 2X	0.006898	0.000157	-0.000034	0.00013	0.001803	0.001195	0.00005	0.000000	0.00690	0.0083	O.K.
Story1	1	DERIVA 2X	-0.006885	-0.000227	-0.000044	0.000038	-0.001111	-0.001026	0.00005	0.000000	0.00689	0.0083	O.K.
Story1	1	DERIVA 2Y	0.000008	0.003531	-0.00003	0.000954	0.00035	0.000247	0.00000	0.000012	0.00353	0.0043	O.K.
Story1	1	DERIVA 2Y	0.000005	-0.0036	-0.000047	-0.000786	0.000341	-0.000079	0.00000	0.000013	0.00360	0.0043	O.K.
Base	1	DERIVA 1X	0	0	0	0	0	0					O.K.
Base	1	DERIVA 1X	0	0	0	0	0	0					O.K.
Base	1	DERIVA 1Y	0	0	0	0	0	0					O.K.
Base	1	DERIVA 1Y	0	0	0	0	0	0					O.K.
Base	1	DERIVA 2X	0	0	0	0	0	0					O.K.
Base	1	DERIVA 2X	0	0	0	0	0	0					O.K.
Base	1	DERIVA 2Y	0	0	0	0	0	0					O.K.
Base	1	DERIVA 2Y	0	0	0	0	0	0					O.K.
Story1	7	DERIVA 1X	0.006882	0.000192	-0.000073	0.000242	0.00077	0.000944	0.00005	0.000000	0.00688	0.0123	O.K.
Story1	7	DERIVA 1X	-0.006905	-0.000192	-0.000084	0.000149	-0.002145	-0.001277	0.00005	0.000000	0.00691	0.0124	O.K.
Story1	7	DERIVA 1Y	-0.00001	0.003566	-0.00007	0.001065	-0.000683	-0.000004	0.00000	0.000013	0.00357	0.0044	O.K.
Story1	7	DERIVA 1Y	-0.000013	-0.003567	-0.000087	-0.000675	-0.000692	-0.000329	0.00000	0.000013	0.00357	0.0042	O.K.
Story1	7	DERIVA 2X	0.006888	0.000189	-0.000033	0.000113	0.001112	0.001028	0.00005	0.000000	0.00689	0.0123	O.K.
Story1	7	DERIVA 2X	-0.006899	-0.000195	-0.000043	0.000021	-0.001803	-0.001194	0.00005	0.000000	0.00690	0.0123	O.K.
Story1	7	DERIVA 2Y	-0.000004	0.003563	-0.000029	0.000937	-0.000341	0.00008	0.00000	0.000013	0.00356	0.0043	O.K.
Story1	7	DERIVA 2Y	-0.000007	-0.003569	-0.000047	-0.000803	-0.00035	-0.000246	0.00000	0.000013	0.00357	0.0043	O.K.
Base	7	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					
Base	7	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					
Base	7	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					
Base	7	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					
Base	7	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					
Base	7	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					
Base	7	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					
Story1	8.0	DERIVA 1X	0.013657	0.000337	-0.000072	-0.000228	0.002186	0.001538	0.00019	0.000000	0.01366	0.0164	O.K.
Story1	8.0	DERIVA 1X	-0.013680	-0.000048	-0.000092	-0.000321	-0.003596	-0.001210	0.00019	0.000000	0.01368	0.0164	O.K.
Story1	8.0	DERIVA 1Y	-0.000010	0.003730	-0.000074	0.000597	-0.000696	0.000329	0.00000	0.000014	0.00373	0.0044	O.K.
Story1	8.0	DERIVA 1Y	-0.000013	-0.003441	-0.000091	-0.001146	-0.000705	-0.000001	0.00000	0.000012	0.00344	0.0042	O.K.
Story1	8.0	DERIVA 2X	0.013663	0.000253	-0.000029	-0.000053	0.002536	0.001455	0.00019	0.000000	0.01367	0.0164	O.K.
Story1	8.0	DERIVA 2X	-0.013674	-0.000132	-0.000049	-0.000145	-0.003236	-0.001293	0.00019	0.000000	0.01367	0.0164	O.K.
Story1	8.0	DERIVA 2Y	-0.000004	0.003645	-0.000031	0.000773	-0.000346	0.000246	0.00000	0.000013	0.00365	0.0044	O.K.
Story1	8.0	DERIVA 2Y	-0.000007	-0.003525	-0.000048	-0.000970	-0.000354	-0.000084	0.00000	0.000012	0.00353	0.0042	O.K.
Base	8.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					O.K.
Base	8.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					O.K.
Base	8.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					O.K.
Base	8.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					O.K.
Base	8.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					O.K.
Base	8.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					O.K.
Base	8.0	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					O.K.
Base	8.0	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					O.K.
Story1	2.0	DERIVA 1X	0.013681	0.000251	-0.000070	-0.000180	0.003587	0.001214	0.00019	0.000000	0.01368	0.0082	Irreg EXTREMA
Story1	2.0	DERIVA 1X	-0.013660	-0.000133	-0.000090	-0.000272	-0.002186	-0.001535	0.00019	0.000000	0.01366	0.0082	Irreg EXTREMA
Story1	2.0	DERIVA 1Y	0.000012	0.003645	-0.000071	0.000646	0.000704	0.000004	0.00000	0.000013	0.00365	0.0022	Irreg EXTREMA
Story1	2.0	DERIVA 1Y	0.000009	-0.003527	-0.000088	-0.001097	0.000696	-0.000325	0.00000	0.000012	0.00353	0.0021	Irreg EXTREMA
Story1	2.0	DERIVA 2X	0.013676	0.000221	-0.000028	-0.000035	0.003236	0.001294	0.00019	0.000000	0.01368	0.0082	Irreg EXTREMA
Story1	2.0	DERIVA 2X	-0.013665	-0.000163	-0.000048	-0.000127	-0.002536	-0.001454	0.00019	0.000000	0.01367	0.0082	Irreg EXTREMA
Story1	2.0	DERIVA 2Y	0.000007	0.003615	-0.000030	0.000791	0.000354	0.000085	0.00000	0.000013	0.00362	0.0022	Irreg EXTREMA
Story1	2.0	DERIVA 2Y	0.000004	-0.003557	-0.000047	-0.000952	0.000346	-0.000245	0.00000	0.000013	0.00356	0.0021	Irreg EXTREMA

CONSTRUCCIÓN DE INFRAESTRUCTURA ESCOLAR EN LA INSTITUCIÓN EDUCATIVA NORMAL SUPERIOR, EN EL MUNICIPIO DE MOMPOX - DEPARTAMENTO DE BOLÍVAR

PROYECTO ESTRUCTURALES CALCULO Y DISEÑO ESTRUCTURAL

MODULO 7 COMPROBACIÓN POR IRREGULARIDAD TORSIONAL

POINT DISPLACEMENTS														0.9		0.8		OBS.
Story	Label	oad Case/Comb	UX	UY	UZ	RX	RY	RZ	Deriva δ'_{tot}_x	Deriva δ'_{tot}_y	Δ'_{max}	1.2*(D _x +D _y)/2 IRREGULARIDAD	1.4*(D _x +D _y)/2 IRREGULARIDAD EXTREMA					
Story2	1	DERIVA 1X	0.015786	0.000038	-0.00003	-0.000186	0.002663	0.011238	0.00003	0.00000	0.00545	0.01	0.008	O.K.				
Story2	1	DERIVA 1X	-0.015839	-0.000147	-0.000071	-0.000233	-0.002586	-0.011641	0.00003	0.00000	0.00546	0.01	0.008	O.K.				
Story2	1	DERIVA 1Y	0.000015	0.018361	0.000021	0.002356	0.000082	0.000156	0.000	0.00004	0.00642	0.01	0.009	O.K.				
Story2	1	DERIVA 1Y	-0.000202	-0.018471	-0.000122	-0.002775	-0.000006	-0.00056	0.00000	0.00004	0.00638	0.01	0.009	O.K.				
Story2	1	DERIVA 2X	0.015803	0.000067	-0.000009	-0.000085	0.002655	0.01135	0.00003	0.00000	0.00546	0.01	0.008	O.K.				
Story2	1	DERIVA 2X	-0.015822	-0.000118	-0.000049	-0.000132	-0.002594	-0.011529	0.00003	0.00000	0.00545	0.01	0.008	O.K.				
Story2	1	DERIVA 2Y	0.000167	0.018391	0.000043	0.002457	0.000075	0.000268	0.00000	0.00004	0.00641	0.01	0.009	O.K.				
Story2	1	DERIVA 2Y	-0.000185	-0.018441	-0.000101	-0.002674	-0.000013	-0.000448	0.00000	0.00004	0.00638	0.01	0.009	O.K.				
Story1	1	DERIVA 1X	0.010333	-0.000025	-0.000002	0.000053	0.003442	0.003746	0.00011	0.00000	0.01033	0.01	0.014	O.K.				
Story1	1	DERIVA 1X	-0.010383	-0.000127	-0.000053	0.000004	-0.003417	-0.003506	0.00011	0.00000	0.01038	0.01	0.015	O.K.				
Story1	1	DERIVA 1Y	0.000081	0.011943	0.000016	0.004255	0.000052	0.000108	0.00000	0.00014	0.01194	0.01	0.017	O.K.				
Story1	1	DERIVA 1Y	-0.000131	-0.012095	-0.000089	-0.004198	-0.000027	-0.001668	0.00000	0.00015	0.01210	0.01	0.017	O.K.				
Story1	1	DERIVA 2X	0.010342	0.000012	-0.000005	0.000035	0.003442	0.004156	0.00011	0.00000	0.01034	0.01	0.014	O.K.				
Story1	1	DERIVA 2X	-0.010374	-0.000009	-0.000038	-0.000013	-0.003417	-0.004896	0.00011	0.00000	0.01037	0.01	0.014	O.K.				
Story1	1	DERIVA 2Y	0.00009	0.01198	0.000031	0.004237	0.000052	0.000518	0.00000	0.00014	0.01198	0.01	0.017	O.K.				
Story1	1	DERIVA 2Y	-0.000121	-0.012058	-0.000074	-0.004216	-0.000027	-0.001258	0.00000	0.00015	0.01206	0.01	0.017	O.K.				
Base	1	DERIVA 1X	0	0	0	0	0	0										
Base	1	DERIVA 1X	0	0	0	0	0	0										
Base	1	DERIVA 1Y	0	0	0	0	0	0										
Base	1	DERIVA 1Y	0	0	0	0	0	0										
Base	1	DERIVA 2X	0	0	0	0	0	0										
Base	1	DERIVA 2X	0	0	0	0	0	0										
Base	1	DERIVA 2Y	0	0	0	0	0	0										
Base	1	DERIVA 2Y	0	0	0	0	0	0										
Story2	6	DERIVA 1X	0.015835	0.000034	-0.000031	-0.000196	0.002592	0.01164	0.00003	0.00000	0.00546	0.01	0.007	O.K.				
Story2	6	DERIVA 1X	-0.015792	-0.000146	-0.000007	-0.000239	-0.002672	-0.011265	0.00003	0.00000	0.00546	0.01	0.007	O.K.				
Story2	6	DERIVA 1Y	0.000185	0.019029	0.000021	0.002456	-3.68E-07	0.000552	0.00000	0.00005	0.00672	0.01	0.009	O.K.				
Story2	6	DERIVA 1Y	-0.000142	-0.019142	-0.000123	-0.002891	-0.000008	-0.000178	0.00000	0.00004	0.00665	0.01	0.009	O.K.				
Story2	6	DERIVA 2X	0.015821	0.000064	-0.00001	-0.000091	0.0026	0.011535	0.00003	0.00000	0.00545	0.01	0.007	O.K.				
Story2	6	DERIVA 2X	-0.015807	-0.000116	-0.000049	-0.000135	-0.002665	-0.01137	0.00003	0.00000	0.00547	0.01	0.007	O.K.				
Story2	6	DERIVA 2Y	0.000171	0.019059	0.000043	0.002561	0.000008	0.000448	0.00000	0.00004	0.00670	0.01	0.009	O.K.				
Story2	6	DERIVA 2Y	-0.000157	-0.019111	-0.000101	-0.002786	-0.000072	-0.000283	0.00000	0.00004	0.00666	0.01	0.009	O.K.				
Story1	6	DERIVA 1X	0.010376	-0.00004	-0.000021	0.000051	0.003421	0.00503	0.00011	0.00000	0.01038	0.01	0.014	O.K.				
Story1	6	DERIVA 1X	-0.010331	-0.000139	-0.000053	0.000003	-0.003449	-0.003321	0.00011	0.00000	0.01033	0.01	0.014	O.K.				
Story1	6	DERIVA 1Y	0.000126	0.012314	0.000015	0.004474	0.000022	0.0001859	0.00000	0.00015	0.01231	0.01	0.017	O.K.				
Story1	6	DERIVA 1Y	-0.000081	-0.012492	-0.000089	-0.00442	-0.000051	-0.00015	0.00000	0.00016	0.01249	0.01	0.017	O.K.				
Story1	6	DERIVA 2X	0.010368	0.000003	-0.000006	0.000034	0.003422	0.00458	0.00011	0.00000	0.01037	0.01	0.014	O.K.				
Story1	6	DERIVA 2X	-0.010339	-0.000095	-0.000038	-0.000014	-0.003449	-0.00377	0.00011	0.00000	0.01034	0.01	0.014	O.K.				
Story1	6	DERIVA 2Y	0.000117	0.012357	0.00003	0.004457	0.000023	0.00141	0.00000	0.00015	0.01236	0.01	0.017	O.K.				
Story1	6	DERIVA 2Y	-0.000089	-0.012449	-0.000074	-0.004437	-0.00005	-0.0006	0.00000	0.00015	0.01245	0.01	0.017	O.K.				
Base	6	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	6	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	6	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	6	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	6	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	6	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	6	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	6	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Story2	8.0	DERIVA 1X	0.014449	0.000146	-0.000033	0.000239	0.002390	0.010248	0.00003	0.00000	0.00503	0.01	0.007	O.K.				
Story2	8.0	DERIVA 1X	-0.014404	-0.000034	-0.000069	0.000196	-0.002471	-0.010623	0.00003	0.00000	0.00503	0.01	0.007	O.K.				
Story2	8.0	DERIVA 1Y	0.000176	0.019117	0.000022	0.002881	-0.000002	0.000178	0.00000	0.00004	0.00663	0.01	0.009	O.K.				
Story2	8.0	DERIVA 1Y	-0.000131	-0.019006	-0.000124	-0.002446	-0.000079	-0.000554	0.00000	0.00004	0.00670	0.01	0.009	O.K.				
Story2	8.0	DERIVA 2X	0.014434	0.000116	-0.000011	0.000134	0.002398	0.010353	0.00003	0.00000	0.00502	0.01	0.007	O.K.				
Story2	8.0	DERIVA 2X	-0.014419	-0.000064	-0.000047	0.000091	-0.002463	-0.010519	0.00003	0.00000	0.00503	0.01	0.007	O.K.				
Story2	8.0	DERIVA 2Y	0.000161	0.019088	0.000044	0.002776	0.000006	0.000283	0.00000	0.00004	0.00665	0.01	0.009	O.K.				
Story2	8.0	DERIVA 2Y	-0.000146	-0.019036	-0.000102	-0.002551	-0.000071	-0.000449	0.00000	0.00004	0.00669	0.01	0.009	O.K.				
Story1	8.0	DERIVA 1X	0.009424	0.000138	-0.000022	-0.000003	0.003129	0.002677	0.00009	0.00000	0.00943	0.01	0.013	O.K.				
Story1	8.0	DERIVA 1X	-0.009377	0.000039	-0.000051	-0.000050	-0.003157	-0.004384	0.00009	0.00000	0.00938	0.01	0.013	O.K.				
Story1	8.0	DERIVA 1Y	0.000119	0.012483	0.000016	0.004414	0.000020	0.000148	0.00000	0.00016	0.01248	0.01	0.017	O.K.				
Story1	8.0	DERIVA 1Y	-0.000071	-0.012305	-0.000089	-0.004467	-0.000048	-0.0001856	0.00000	0.00015	0.01231	0.01	0.017	O.K.				
Story1	8.0	DERIVA 2X	0.009416	0.000095	-0.000007	0.000014	0.003130	0.003126	0.00009	0.00000	0.00942	0.01	0.013	O.K.				
Story1	8.0	DERIVA 2X	-0.009385	-0.000004	-0.000036	-0.000034	-0.003156	-0.003935	0.00009	0.00000	0.00939	0.01	0.013	O.K.				
Story1	8.0	DERIVA 2Y	0.000110	0.012440	0.000031	0.004431	0.000021	0.000597	0.00000	0.00015	0.01244	0.01	0.017	O.K.				
Story1	8.0	DERIVA 2Y	-0.000080	-0.012348	-0.000074	-0.004451	-0.000048	-0.001407	0.00000	0.00015	0.01235	0.01	0.017	O.K.				
Base	8.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	8.0	DERIVA 1X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	8.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	8.0	DERIVA 1Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	8.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	8.0	DERIVA 2X	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000										
Base	8.0	DERIVA 2Y	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000</										

Diseño de Zapata Tipo

1. Datos Generales

Dimensiones del Pedestal:

- Altura del pedestal (h_p) = 80 cm
- Lado del pedestal (b_p) = 50 cm

Propiedades del Material:

- $f'_c = 28$ MPa
- $F_y = 420$ MPa

2. Cargas Actuantes

- Carga Muerta (C.M.): 49.09 Ton
- Carga Viva (C.V.): 28.13 Ton
- Carga de Servicio (P): 77.23 Ton
- Carga Facturada (P_n) = $1.2 \cdot C.M. + 1.6 \cdot C.V. = 103.93$ Ton

3. Capacidad Portante del Suelo

- $q_{\text{admisible}} = 15$ Ton/m²
- Área de la zapata = $3 \times 3 = 9$ m²
- Presión de contacto: $q = 103.93 / 9 = 11.55$ Ton/m² → CUMPLE

4. Verificación de Punzonamiento

Altura efectiva de la zapata:

- $h = 50$ cm → $d = h - \text{recubrimiento} - \varnothing/2 = 42.5$ cm
- Perímetro crítico: $b_0 = 2(b_p + d) = 2(50 + 42.5) = 185$ cm

$$V_u = P_n - q \cdot A = 103.93 - 11.55 \cdot 9 = 0.1 \text{ Ton} \approx 0 \text{ Ton} \rightarrow \text{CUMPLE}$$

5. Revisión por Corte Unidireccional

- $V_u = q \cdot B \cdot (B/2 - b/2 - d/2)$

$$V_u = 25.98 \times 200 \times (100 - 50 - 42.5)/100 = 25.98 \times 200 \times 0.075 = 389.7 \text{ kg} = 0.39 \text{ Ton}$$

- $V_c = 0.17 \times \sqrt{f'_c} \times b \times d$

Supongamos $f'_c = 280 \text{ kg/cm}^2$ ($\approx 4000 \text{ psi}$), $b = 200 \text{ cm}$, $d = 42.5 \text{ cm}$:

$$V_c = 0.17 \times \sqrt{280} \times 200 \times 42.5 \approx 0.17 \times 16.73 \times 200 \times 42.5 = 24,148 \text{ kg} = 24.15 \text{ Ton}$$

- $\phi V_c = 0.75 \times 24.15 = 18.11 \text{ Ton}$

 **Resultado:** $V_u = 0.39 \text{ Ton} < \phi V_c = 18.11 \text{ Ton} \rightarrow \text{CUMPLE}$

6. Diseño por Flexión – Cálculo de Refuerzo

- $M_u = q \times B/2 \times (B/2 - b/2)^2$

$$M_u = 25.98 \times 1 \times (1 - 0.5)^2 = 25.98 \times 0.25 = 6.50 \text{ Ton} \cdot \text{m}$$

- $K = M_u / (b \cdot d^2) = 650000 / (200 \times 42.5^2) \approx 0.018$

- $\rho \approx 0.0028$ (de tablas ACI para $K \approx 0.018$)

- $A_s = \rho \times b \times d = 0.0028 \times 200 \times 42.5 = 23.8 \text{ cm}^2$

- $A_{s_min} = 0.0018 \times b \times d = 0.0018 \times 200 \times 42.5 = 15.3 \text{ cm}^2$

 Se requiere $A_s = 23.8 \text{ cm}^2 \rightarrow$ usar:

- $\emptyset 1/2" @ 12 \text{ cm} \rightarrow A_s = 16.70 \text{ cm}^2 \rightarrow \text{NO CUMPLE}$

- $\emptyset 5/8" @ 20 \text{ cm} \rightarrow A_s = 26.31 \text{ cm}^2 \rightarrow \text{CUMPLE}$

Separación máxima:

$$S_{max} = \min(45, 3h, 25, 1.33d_b) = \min(45, 150, 25, 1.33 \times 1.6) = 25 \text{ cm}$$

7. Longitud de Desarrollo

- $d_{sub} < b_{sub} = 1.9 \text{ cm}$ (barra 5/8")

- Supongamos $f_y = 4200 \text{ kg/cm}^2$, $\lambda = 1$, $f'_c = 280 \text{ kg/cm}^2$

$$l_d = \frac{0.24 \times 4200}{\sqrt{280}} \times 1.9 \approx \frac{1008}{16.73} \times 1.9 \approx 60.2 \times 1.9 = 114.4 \text{ cm}$$

 **Resultado:** $l_{sub} < d_{sub} \approx 114.4 \text{ cm} \rightarrow \text{OK}$

 Las barras deben prolongarse dentro de la zapata al menos 115 cm.

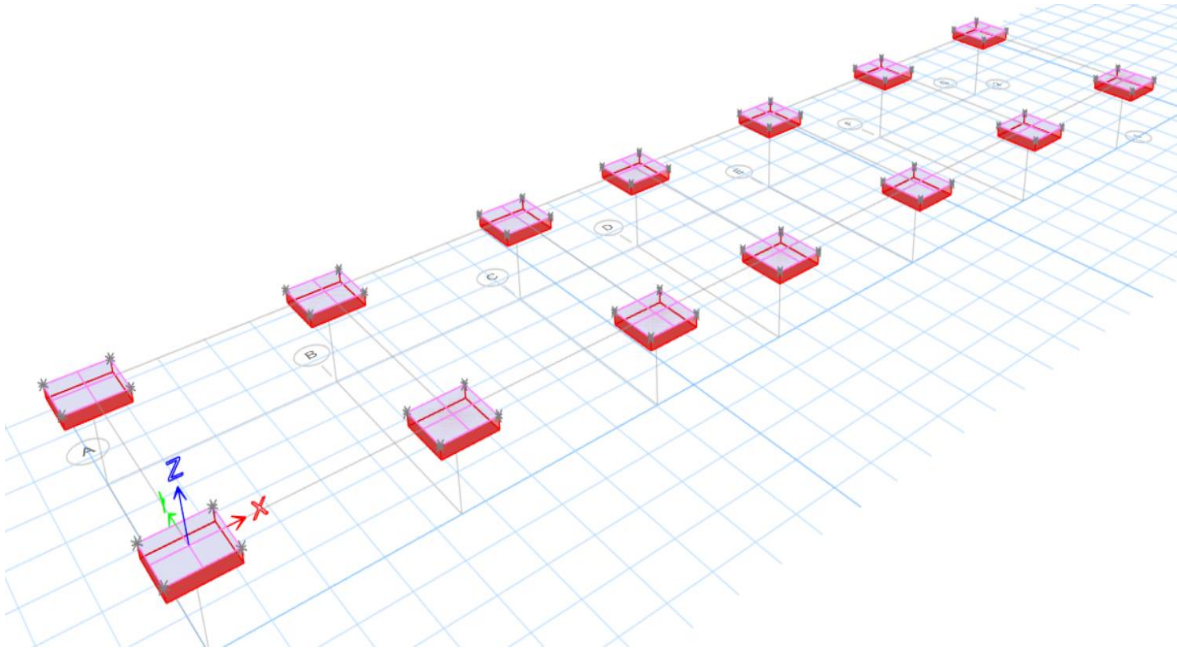


Ilustración 12. Zapatas modulo 1

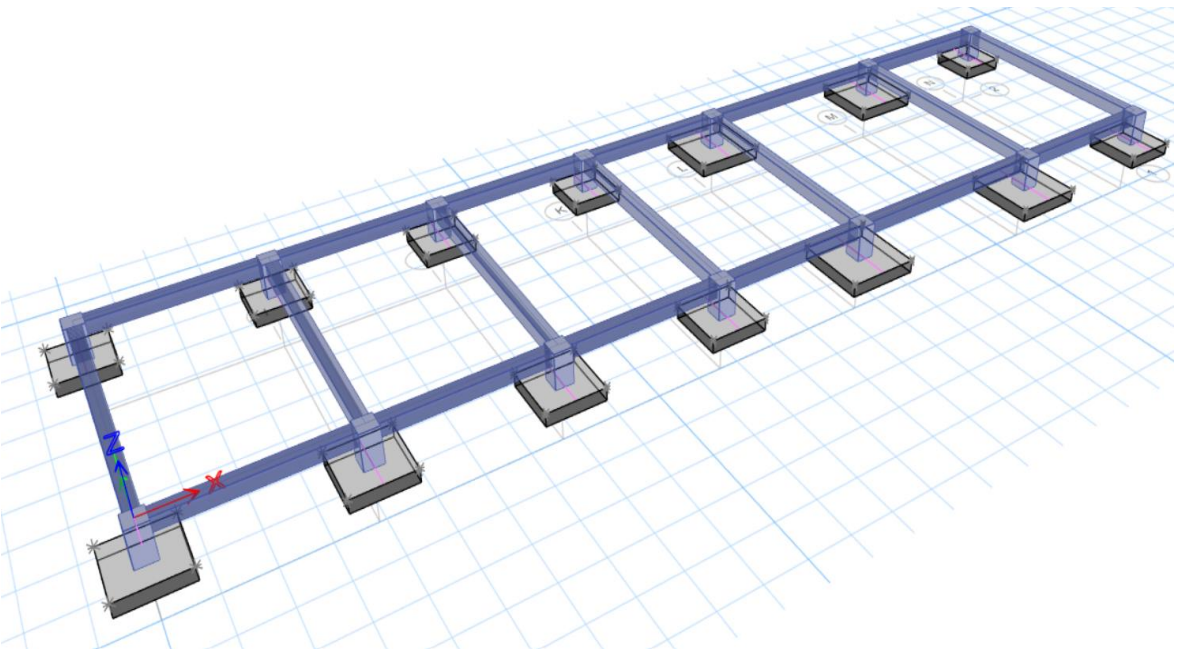


Ilustración 13. Zapatas modulo 2

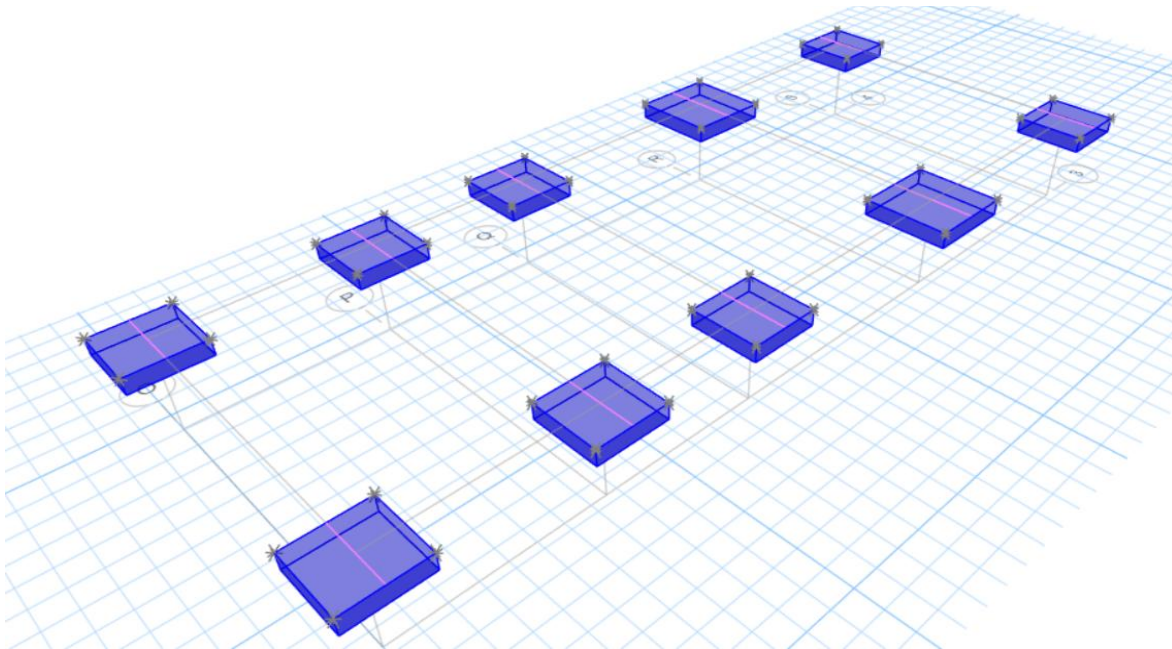


Ilustración 14. Zapatas modulo 3

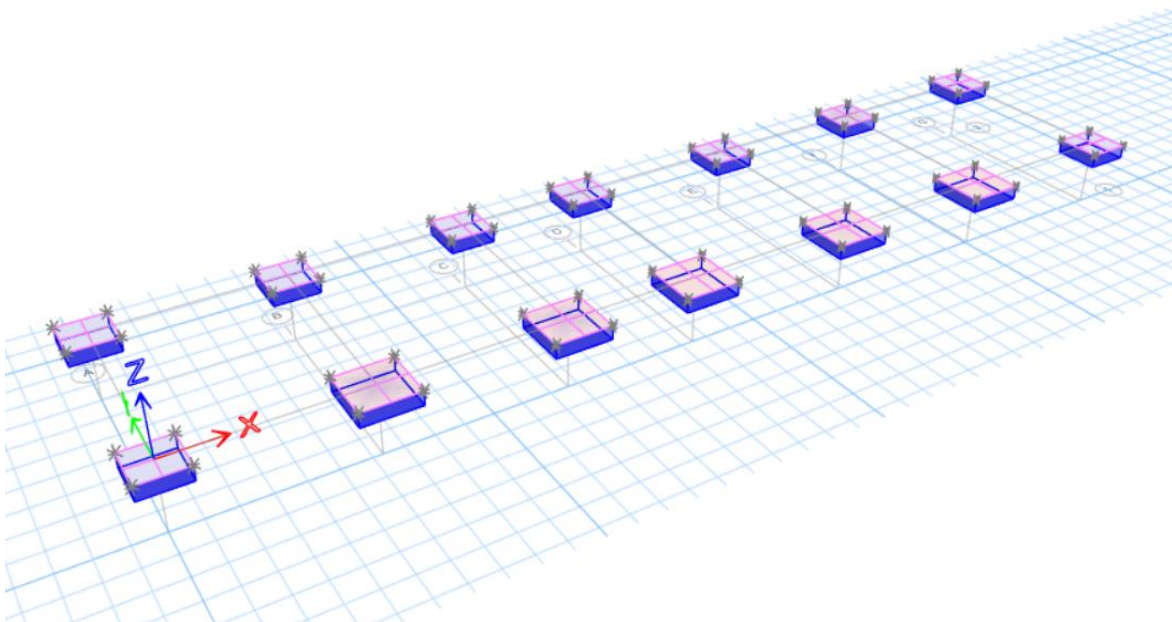


Ilustración 15. Zapatas modulo 4 y 5.

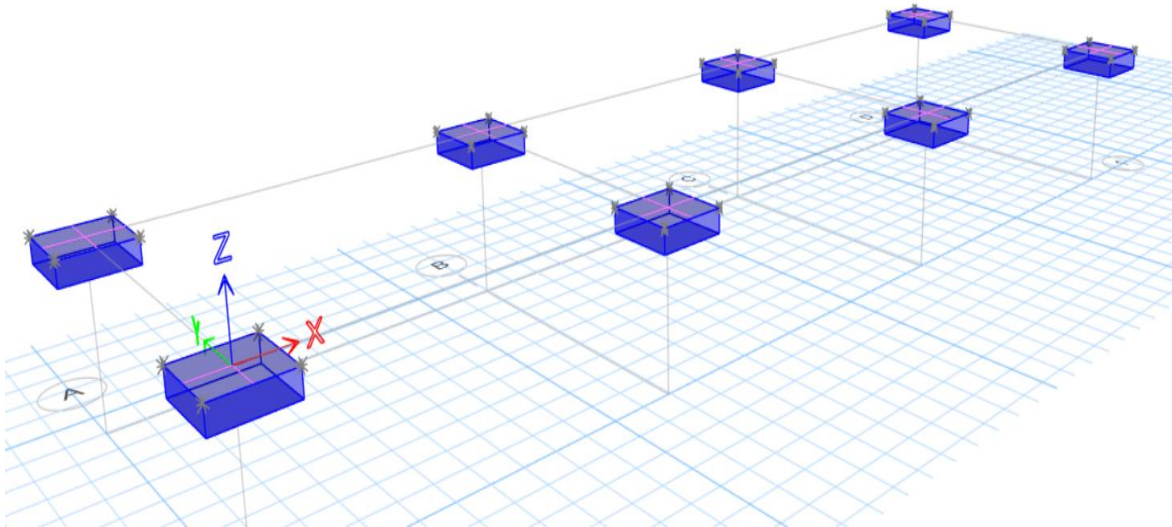


Ilustración 16. Zapatas módulos 6.1 y 6.2

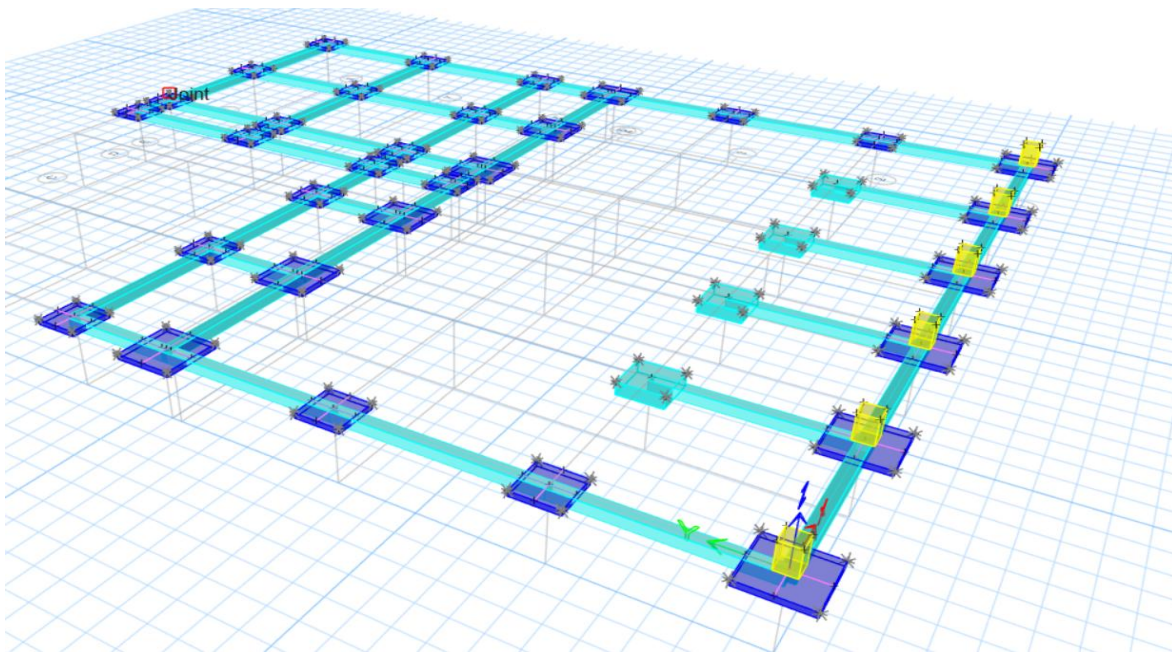


Ilustración 17. Zapatas modulo 7.

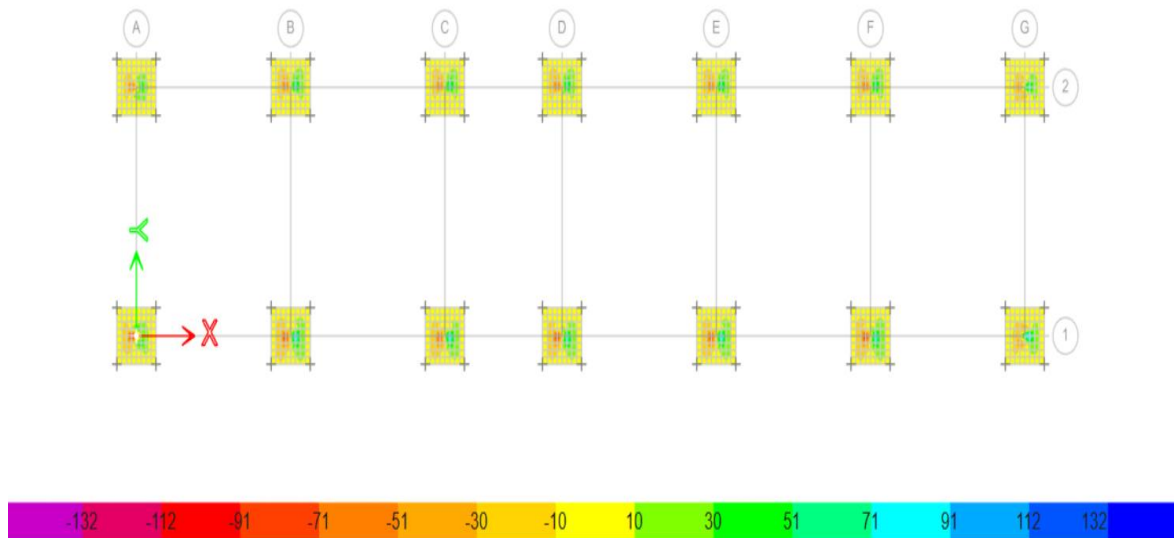


Ilustración 18. Revisión de esfuerzo cortantes en zapatas modulo 1.

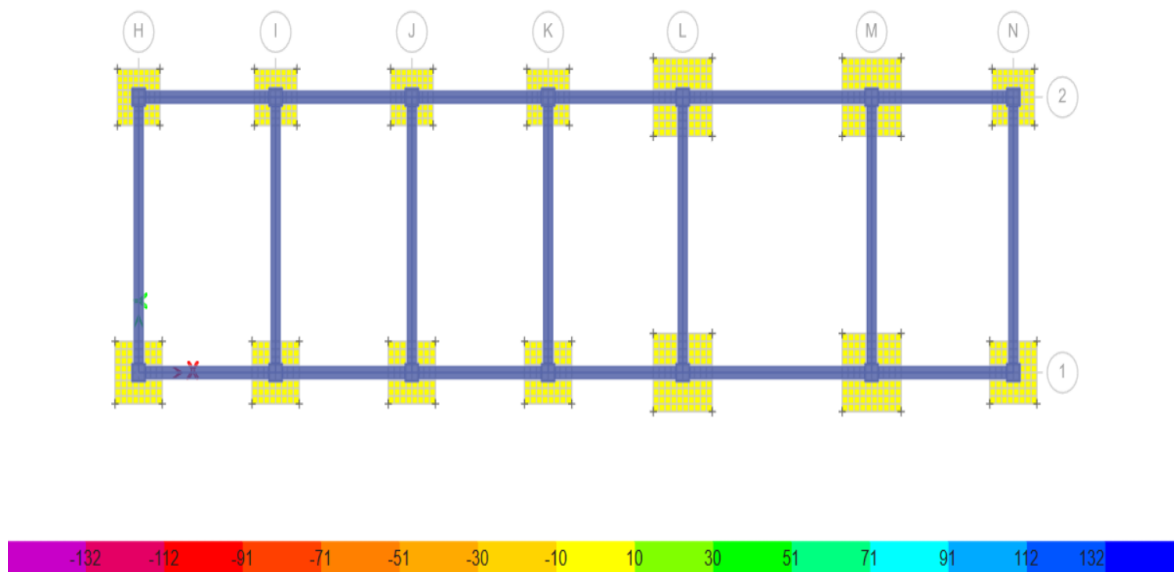


Ilustración 19. Recision de esfuerzos cortantes zapatas modulo 2.

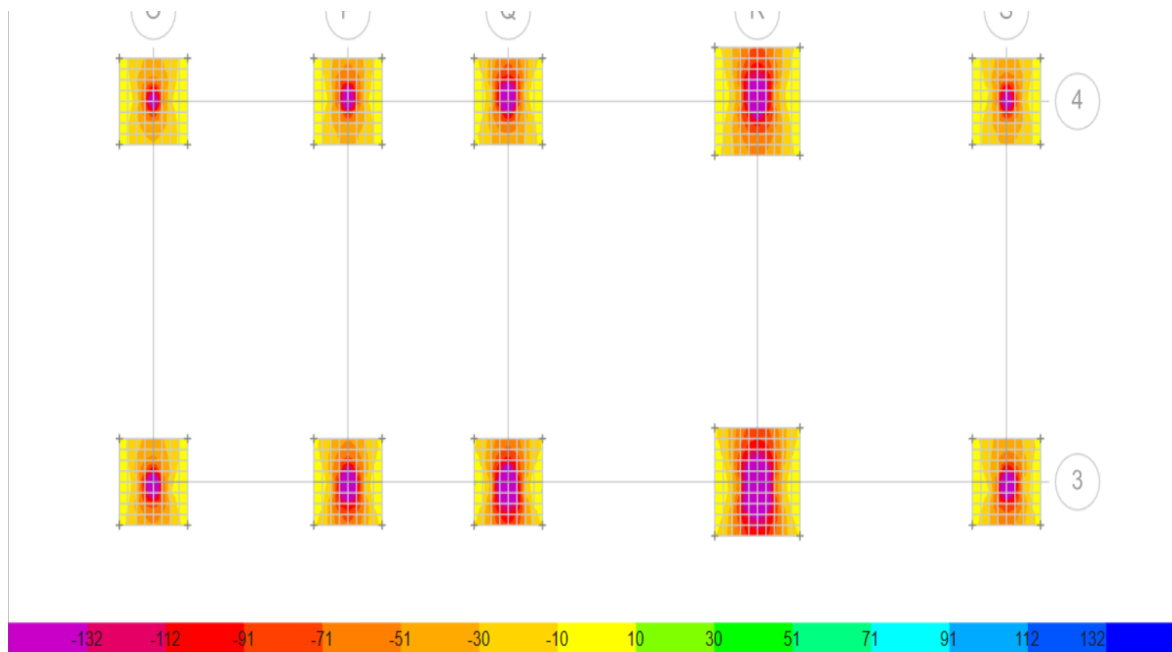


Ilustración 20. Revisión a esfuerzo cortantes en zapatas modulo 3.

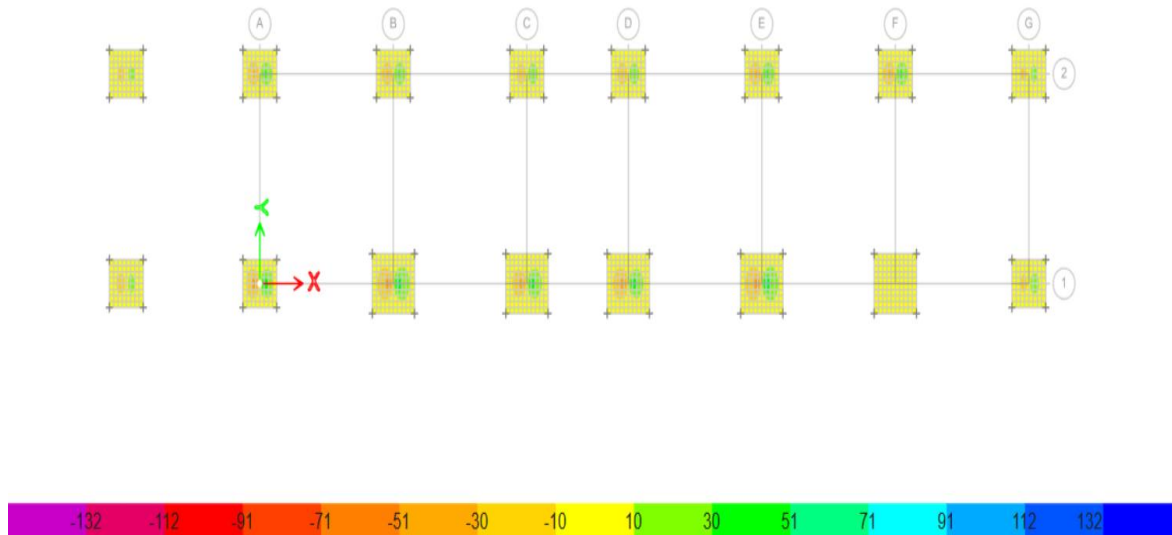


Ilustración 21. Revisión de esfuerzos cortantes en zapatas modulo 4 y 5.

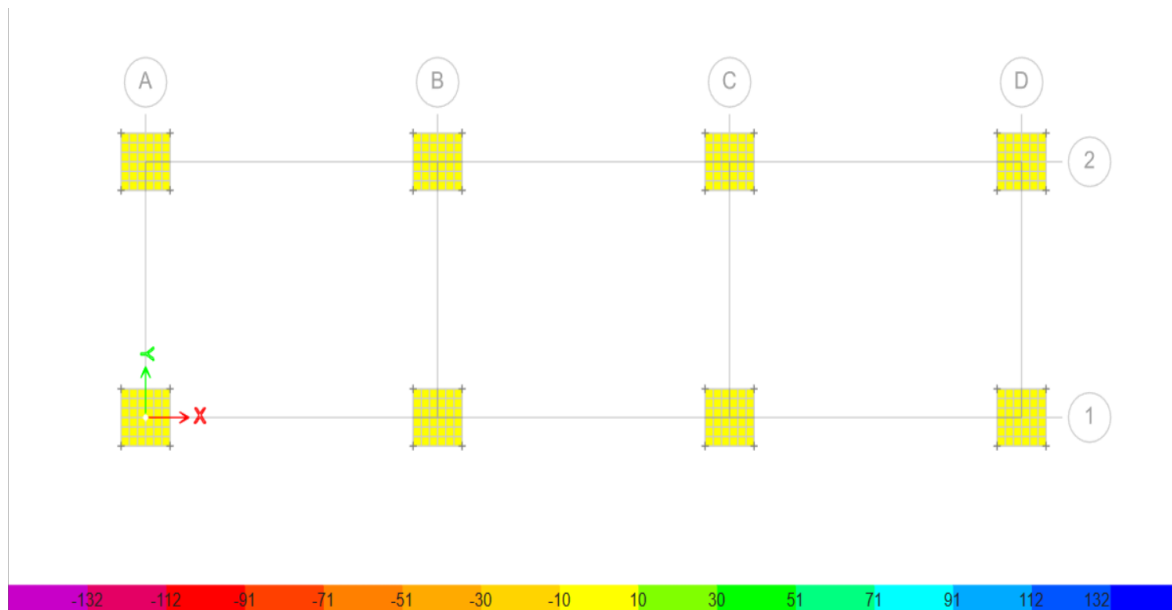


Ilustración 22. Revisión de esfuerzos cortantes en zapatas del módulo 6.

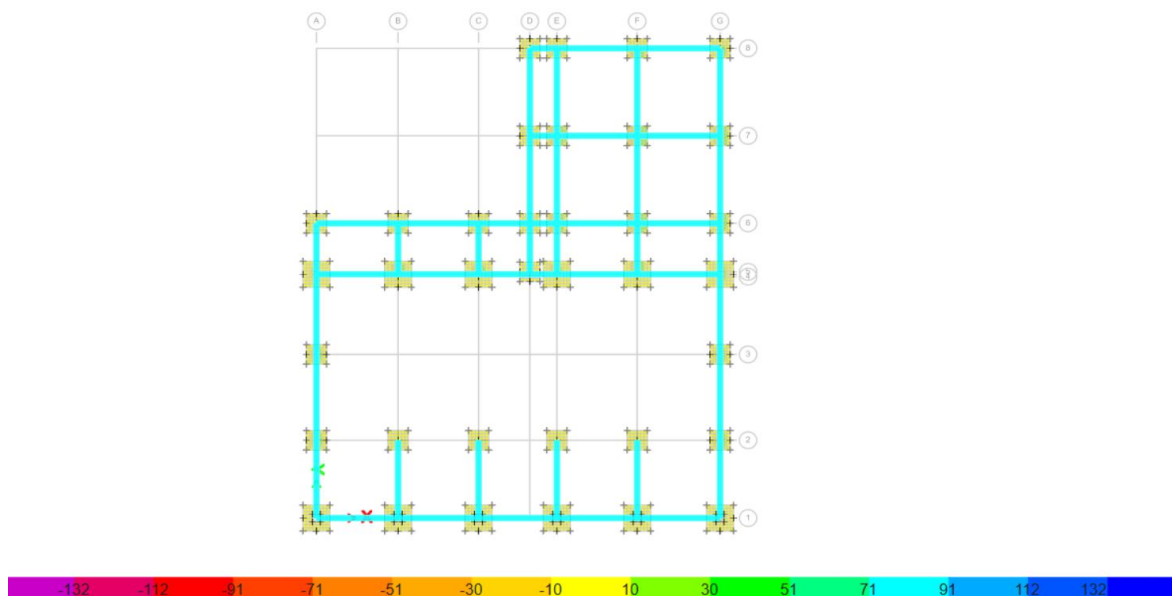


Ilustración 23. Revisión de esfuerzos cortantes de zapatas del módulo 7.

Dámaso Castillo S

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