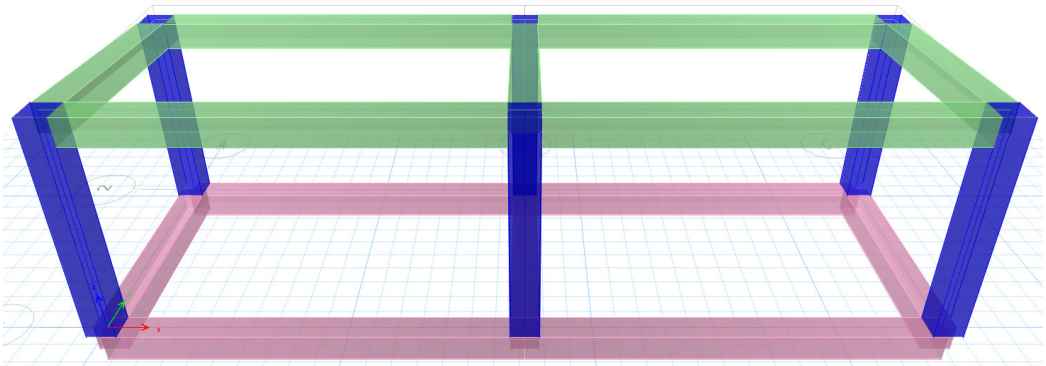
ADECUACIÓN DE INFRAESTRUCTURA FÍSICA DE LA CASA DE LA CULTURA DEL MUNICIPIO DE VITERBO, CALDAS

DISEÑOS ESTRUCTURAL
LOSA TRANSITABLE



MEMORIA ESTRUCTURAL

REALIZADO POR:

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MANIZALES, CALDAS

MARZO DEL 2025

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1. INTRODUCCIÓN

La Gobernación de Caladas a través del equipo estructurador de la secretaría de planeación, pretende apoyar al municipio de Viterbo, Caldas mediante la elaboración de los estudios y diseños correspondientes al proyecto “ADECUACIÓN DE INFRAESTRUCTURA FÍSICA DE LA CASA DE LA CULTURA DEL MUNICIPIO DE VITERBO, CALDAS”. El proyecto en general procura adecuar el terreno con la infraestructura adecuada para la óptima operabilidad de la casa de la cultura.

El alcance de este documento es realizar el diseño estructural correspondiente a una estructura para soportar una losa transitable, ubicado en el casco urbano del municipio de Viterbo, Caldas. Según el título A.2 de la NSR-10, se encuentra clasificada como zona de amenaza sísmica alta, y por tanto el diseño sísmico se realiza para una estructura con Capacidad Especial de Disipación de Energía (DES). La edificación es una estructura de un nivel más cubierta y su sistema de resistencia sísmica es una estructura de pórticos en concreto resistentes a momentos.

En este informe, se presentan todos los cálculos realizados y los parámetros de entrada utilizados para realizar el modelo matemático en el programa ETABS 21.2.0 para el diseño de la estructura propuesta por el arquitecto a cargo del proyecto y la cimentación de esta estructura junto con los elementos no estructurales. Los diseños presentados en este documento se han realizado siguiendo los lineamientos planteados por la norma sismo resistente colombiana vigente a la fecha (NSR-10). De igual manera se consultó la literatura científica disponible y aplicable de acuerdo con las características propias del país y el departamento.

2. OBJETIVOS Y ALCANCES

2.1 OBJETIVOS GENERALES Y ESPECÍFICOS

Objetivo General:
Diseñar una estructura en concreto reforzado para la óptima funcionalidad de la losa transitable del proyecto "ADECUACIÓN DE INFRAESTRUCTURA FÍSICA DE LA CASA DE LA CULTURA DEL MUNICIPIO DE VITERBO, CALDAS", de tal forma que se pueda ejecutar bajo la normatividad vigente.

Objetivos Específicos:

- Elaborar los modelos matemáticos necesarios para realizar el análisis estructural utilizando como hipótesis de diseño los parámetros recibidos por parte del estudio de suelos y los establecidos en la normatividad vigente que den como resultado deformaciones y diagramas de fuerzas internas.
- Obtener a partir de los cálculos realizados, el detalle de secciones y aceros de cada uno de los elementos estructurales, con el fin de ejecutar satisfactoriamente el proyecto en el terreno planteado para su construcción.

2.2 ALCANCE

El presente informe abarca el diseño estructural de una estructura en concreto reforzado localizada en el municipio de La Dorada, Caldas para el proyecto "ADECUACIÓN DE INFRAESTRUCTURA FÍSICA DE LA CASA DE LA CULTURA DEL MUNICIPIO DE VITERBO, CALDAS". En el cuerpo del informe, se presenta la información sobre el tipo de estructura y sistema de cimentación a utilizar, diseño y detalles de los elementos estructurales y no estructurales.

3. METODOLOGÍA DE DISEÑO

El diseño estructural fue realizado con la ayuda del programa ETABS Versión 21.2.0 el cual permite realizar un análisis estático lineal como el método de fuerza horizontal equivalente, análisis dinámico lineal como el método dinámico espectral o un análisis dinámico no lineal como el análisis cronológico a la estructura en consideración. De igual manera, presenta bastantes herramientas para el diseño estructural de diferentes elementos estructurales, como elementos tipo frame que permiten modelar vigas y columnas, elementos tipo shell que permiten modelar muros e incluso elementos tipo membrana para modelar losas. También incluye una interfaz de dibujo bastante amplia, convirtiéndolo en un programa bastante usado en la ingeniería estructural a nivel mundial. Así mismo, vale aclarar que el presente diseño cumple con los requisitos impuestos por la normatividad vigente en Colombia; NSR-10, con combinaciones de carga de diseño y factores de amplificación.

El procedimiento de diseño está compuesto por etapas, que siguen el orden que se presenta a continuación:

1. Inicialmente se realiza una evaluación de las cargas muertas, sobre impuestas, vivas, de viento y de empujes de suelo y las demás a las que estaría sometida la estructura durante su vida útil.

2. En el programa ETABS se definen inicialmente las propiedades de los materiales, las secciones iniciales de vigas, columnas, losas, apoyos de los nodos y las combinaciones de carga consideradas en el diseño.

3. Se representa el modelo tridimensional y se definen los casos de sismo que se emplearían en el cálculo, incluyendo los efectos de torsión accidental del 5.0% señalados en el código.

4. Teniendo en cuenta que la estructura es en pórticos en concreto resistentes a momentos con capacidad especial de disipación de energía (DES), se determina que la estructura tiene un coeficiente de disipación de energía básico Ro correspondiente a 7.0. De igual manera, se evalúan las posibles irregularidades presentes en la estructura y se determina que el coeficiente de disipación de energía (R) es igual 4.725 para la dirección X y de 4.725 para la dirección Y.

5. Teniendo en cuenta lo dispuesto en el apartado A.3.5.2, la estructura en cuestión aplica para ser analizado por el método de la fuerza horizontal equivalente, por lo tanto, se hace el análisis sísmico por este método teniendo en cuenta los parámetros establecidos en el estudio de suelos.
   a. El sistema estructural adoptado en este caso está constituido de pórticos en concreto, compuesto por columnas y vigas cuadradas de 30 centímetros.

6. Se verifica que las derivas resultantes en la estructura cumplan con las permitidas por el código (1.0%). Este chequeo se hace con el patrón de carga MFHE sin ser reducido por el R.
   a. En el caso del pórtico en concreto la deriva máxima en X fue de 0.14% ≤ 1.0%
   b. En el caso del pórtico en concreto la deriva máxima en Y fue de 0.16% ≤ 1.0%

7. Después de los pasos anteriormente descritos, se presenta en la memoria de cálculo y en el plano estructural las plantas, elevaciones y las secciones empleadas de la estructura con la numeración de los elementos que fueron asignados por el programa y los resultados de diseño que se obtuvieron en cuanto a secciones y acero de refuerzo de los elementos estructurales en concreto.

8. De igual manera, se presenta la numeración de nodos en la planta de cimentación, el diseño y el chequeo de la cimentación que consta de zapatas cuadradas con dimensión variable, espesores y niveles de desplante variable. Los parámetros geotécnicos para este diseño fueron determinados según las recomendaciones realizadas en el estudio de suelos.

4. NORMAS APLICABLES

El diseño se realizó tomando como referencia las siguientes normas:

- Reglamento Colombiano de Construcción Sismo Resistente (N.S.R. - 10), A.I.S.
- ACI - 318 American Concrete Institute: Building Code Requirements for Structural Concrete. Detroit: PCA, 2008.
- NTC - Normas Técnicas Colombianas. Bogotá: ICONTEC, 2004.

5. ESTUDIOS REQUERIDOS

5.1 ESTUDIO DE SUELOS

“Se recomienda que la cimentación sea llevada al menos hasta 1.0 m por debajo del nivel del terreno para el bloque donde se encuentra actualmente la construcción, separando las cimentaciones del mismo. Tomando como referencia el estudio de suelos presentado en documento diferenciado, la capacidad portante admisible del terreno para cargas de servicio a esta profundidad es de 73.15 kN/m². Las cargas estimadas por los ingenieros estructurales deberán ser chequeadas en la tabla 6. El cálculo

de la profundidad recomendada y determinar las dimensiones óptimas para soportar el peso propio de la estructura.

De acuerdo con los resultados de laboratorio obtenidos, no se identifican suelos con potencial expansivo, por lo que no se espera una susceptibilidad al hinchamiento o contracción de los materiales por condiciones climáticas especiales o periodos prolongados de verano e invierno. Igualmente, se recomienda seguir algunas de las recomendaciones de manejo preliminares del constructor y del ingeniero, por lo que es especial los respectivos sumideros y drenajes de aguas lluvias e infiltración.
Acatando las recomendaciones expuestas por el Reglamento Colombiano de Construcción Sismo resistente, NSR10. Deberán utilizarse los siguientes coeficientes:

Municipio: Caldas
- Zona de Amenaza Sísmica: Alta
- Aa = 0.25
- Av = 0.30
- Fa = 1.45
- Fv = 2.80
- ϕ_k = 0.45
- A_e = 0.25
- Perfil del suelo: Tipo F (Tabla A.2.4-1 NSR-10)
- Grupo de Uso: Grupo I (1.00)

El sistema de cimentación proyectado se debe diseñar como un conjunto, por lo tanto, debe construirse de modo que garantice su acción como tal. Cada cimentación independiente corresponderá a una edificación igualmente independiente y viceversa.

6. ANÁLISIS ESTRUCTURAL

En esta sección se especifican los parámetros que se utilizaron para el diseño sísmico del proyecto, los materiales empleados para el cálculo estructural, el análisis de cargas, el resumen de la manera en que éstas fueron ingresadas al programa de diseño y se realiza una descripción del modelo matemático utilizado con las diversas combinaciones de carga a las que se verá sometida la estructura durante su vida útil. Cabe destacar que el método de análisis empleado para el análisis y posterior diseño estructural del proyecto, teniendo en cuenta lo expuesto el numeral (d) del apartado A.3.4.2 de la NSR-10 es el método de la fuerza horizontal equivalente descrito en el capítulo A.4 de la NSR-10.

6.1 PARÁMETROS DE ANÁLISIS SÍSMICO

- Amenaza sísmica: ALTA
- Grado de disipación de energía: DES
- Coeficiente que representa la aceleración horizontal pico efectiva (Aa): 0.25

- Coeficiente de aceleración que representa la velocidad horizontal pico efectiva (Av): 0.30
- Tipo de perfil del suelo: E
- Coeficiente de amplificación que afecta la aceleración en la zona de periodos cortos (Fa): 1.45
- Coeficiente de ampliación que afecta la aceleración en la zona de periodos intermedios (Fv): 2.80
- Grupo de uso de la estructura: III
- Coeficiente de importancia: 1.25
- Coeficiente de capacidad de disipación de energía básico (Ro): 7.0
- Irregularidad en planta (Φp): 0.90
  - Irregularidad torsional: No aplica.
  - Irregularidad torsional extrema: No aplica.
  - Retrocesos excesivos en las esquinas: No aplica.
  - Discontinuidades en el diafragma: No aplica.
  - Desplazamientos del plano de acción de elementos verticales: No aplica.
  - Sistemas no paralelos: Aplica.
- Irregularidad en altura (Φa): 1.0
  - Piso flexible (Irregularidad en rigidez): No aplica.
  - Piso flexible (Irregularidad extrema en rigidez): No aplica.
  - Irregularidad en la distribución de las masas: No aplica.
  - Irregularidad geométrica: No aplica.
  - Desplazamientos dentro del plano de acción: No aplica.
  - Piso débil – Discontinuidad en la resistencia: No aplica.
  - Piso débil – Discontinuidad extrema en la resistencia: No aplica.
- Irregularidad por ausencia de redundancia en sentido X (Φrx): 0.75
- Irregularidad por ausencia de redundancia en sentido Y (Φry): 0.75
- Coeficiente de capacidad de disipación de energía para el diseño en sentido X (Rx): 4.725
- Coeficiente de capacidad de disipación de energía para el diseño en sentido Y (Rx): 4.725

6.2 MATERIALES EMPLEADOS

Las propiedades mecánicas de los materiales se resumen a continuación:

6.2.1 Concreto estructural de los elementos de cimentación

- Resistencia a la compresión: f'c = 21 MPa
- Peso unitario: γc = 2.4 ton / m^3.
- Módulo de elasticidad: Ec = 4700 * √f´c (MPa) = 21538 MPa
- Agregado grueso de origen metamórfico
- Módulo de Poisson: ɣ = 0.20

6.2.2 Concreto estructural de los elementos del pórtico

- Resistencia a la compresión: f'c = 21 MPa
- Peso unitario: γc = 2.4 ton / m^3.

- Módulo de elasticidad: Ec = 4700 * √f´c (MPa) = 21538 MPa
- Agregado grueso de origen metamórfico
- Módulo de Poisson: ɣ = 0.20

6.2.3 Acero de Refuerzo

- Esfuerzo de fluencia: fy = 420 MPa
- Módulo de elasticidad: Es = 204.000 MPa
- Densidad del acero: 7.85 ton / m³
- Recubrimiento de concreto expuesto a líquidos: 500 mm.
- Recubrimiento de concreto en el resto de los elementos estructurales: 400 mm.
- Recubrimiento de concreto vaciado contra la tierra y en permanente contacto a ella: 750 mm.

6.2.4 Concreto de limpieza

- Resistencia a la compresión f´c = 14 MPa
- Peso unitario: γc = 2.27 ton / m3.
- Módulo de elasticidad: Ec = 4700 * √f´c (MPa) = 17586 MPa

6.2.5 Acero estructural A 572 Gr 50

- Fuerza de producción: Fy = 345 MPa
- Resistencia a la tracción: Fu = 450 MPa
- Peso unitario: γc = 7.85 ton / m3.
- Módulo de elasticidad: Ec = 2 x10^6 MPa

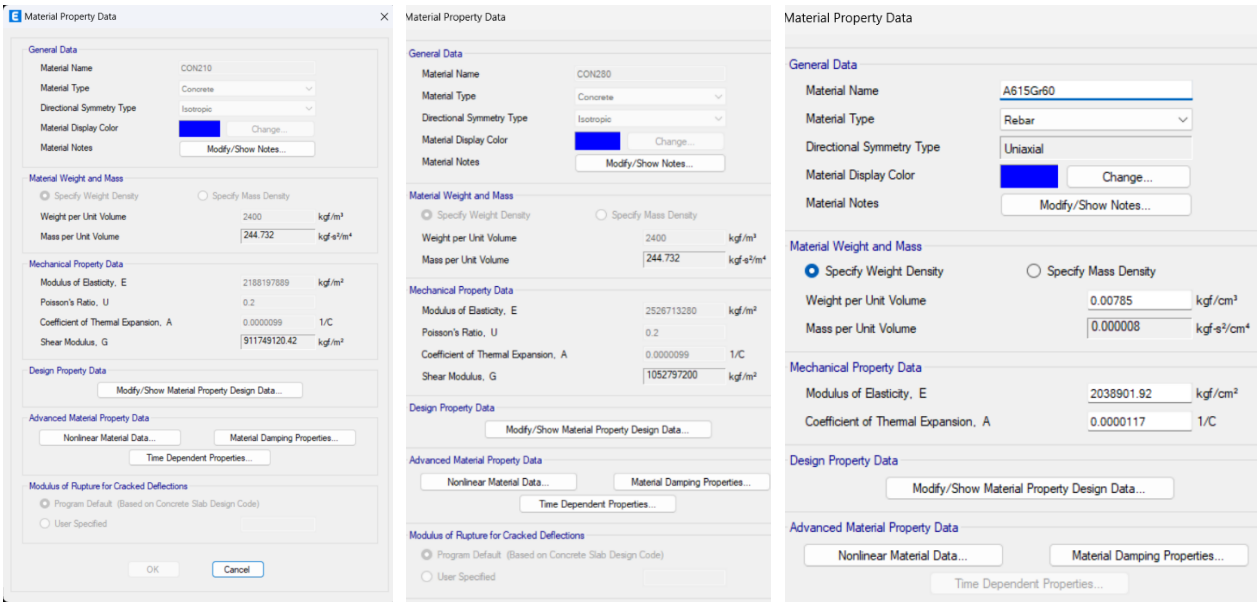


Figura 1 *Materiales utilizados en el modelo matemático*
Fuente: Programa ETABS

6.3 ANÁLISIS DE CARGAS

Las cargas que se tuvieron en cuenta para el cálculo de la estructura corresponden a la estipuladas en el título B de la NSR-10.

- Carga muerta debida al peso propio de los elementos (D)
- Carga sobre impuesta de los elementos no estructurales (SD)
- Carga viva (L)

6.3.1 Carga muerta (D)

Peso propio de los elementos estructurales que se tiene en cuenta en el modelo.

6.3.2 Carga sobre impuesta (SD)

Peso propio de los elementos no estructurales, correspondientes al cielo raso y peso de cubierta incluida las cubiertas. Cabe aclarar que la carga sombre impuesta de la zona en voladizo, únicamente se tiene en cuenta la aportada por la teja y las correas.

- Entrepiso en Metaldeck: 190.00 kgf/m^2
- Piso en baldosa: 110.00 kgf/m^2

6.3.3 Carga vivía (L)

Según la tabla B.4.2.1-1, corresponde a 500 kgf/m^2 debido a que se trata de un corredor para una institución educativa

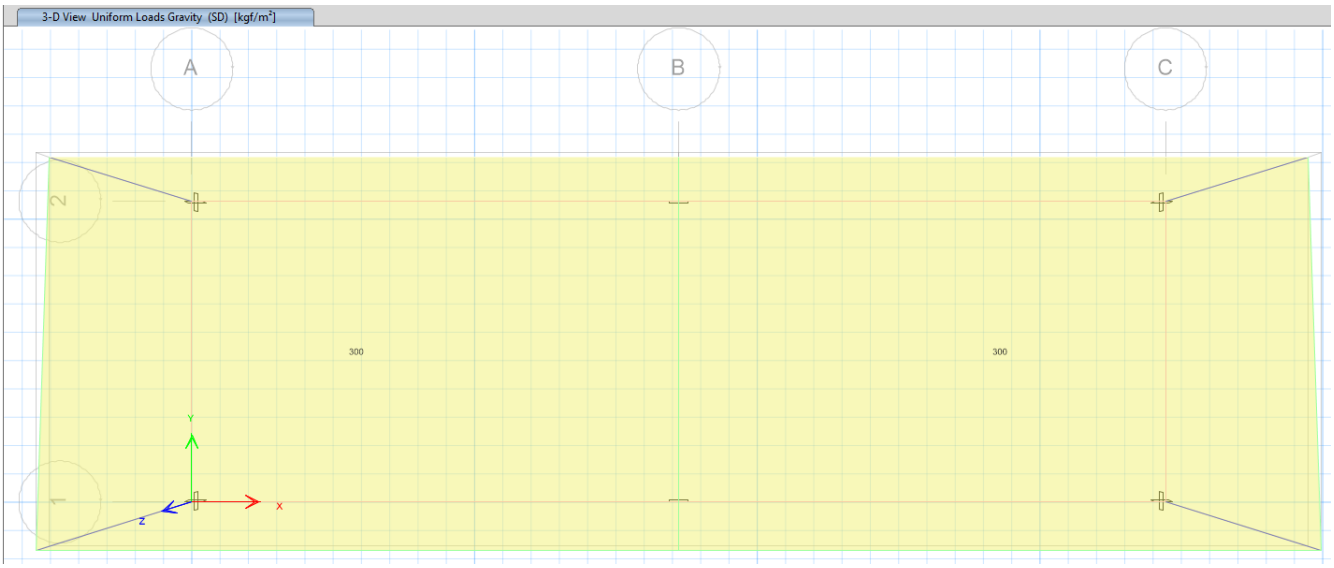


Figura 2 *Distribución de carga sobre impuesta en elementos tipo shell.*
Fuente: Programa ETABS

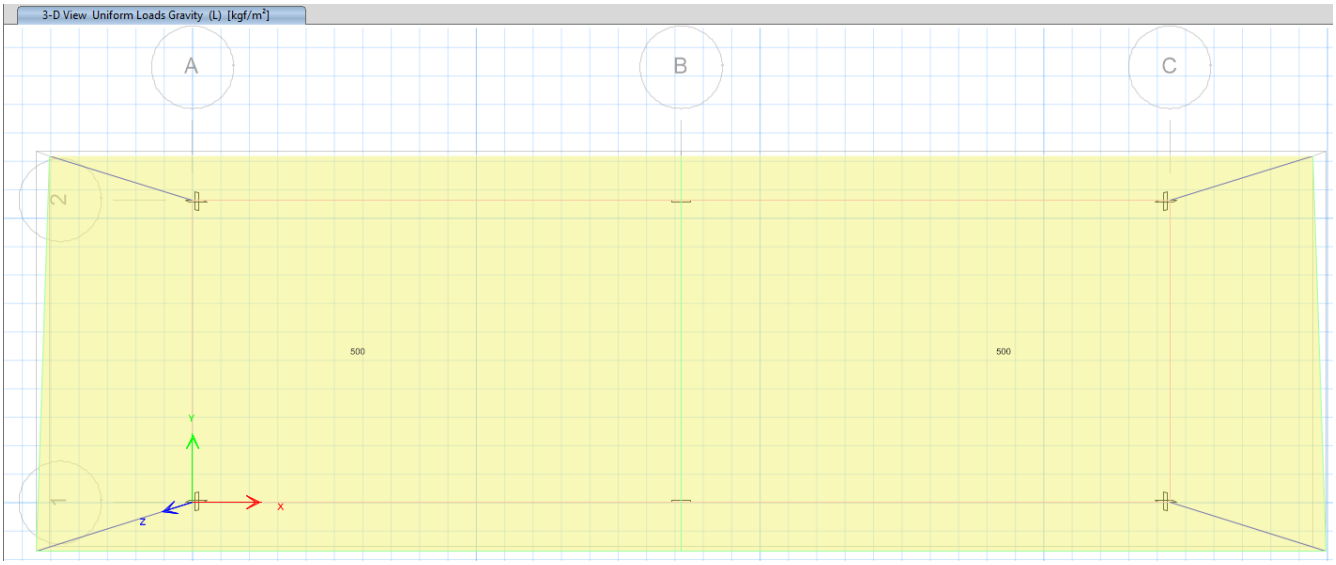


Figura 3 *Distribución de carga viva en elementos tipo shell.*
Fuente: Programa ETABS

6.4 COMBINACIONES DE CARGA

Las combinaciones de carga que se emplearon para el diseño estructural son las que figuran en el titulo B de la NSR-10. Estas son presentadas en el anexo de diseño del programa.

6.5 OBTENCIÓN DE LA FUERZA SÍSMICA DE DISEÑO

A partir de los parámetros de la localización de la estructura, el tipo de suelo, los parámetros de efectos locales del suelo, los parámetros dinámicos y el coeficiente de importancia, se obtienen las fuerzas sísmicas de diseño (Fs) de la siguiente manera.

Se obtiene el valor del periodo fundamental e la estructura (Ta) a partir del A.4.2.2 de la NSR-10. Ta=Ct·hα. Donde Ct y α son valores que dependen del sistema estructural de resistencia sísmica empleado y h es la altura total de la estructura.

Localización estructura		
Ciudad		VITERBO
Actividad sísmica		ALTA
Aceleración horizontal	Aa	0.25
Velocidad horizontal	Av	0.30

Tipo de suelo		
Clasificación		E
Coeficiente de amplificación	Fa	1.45
Coeficiente de amplificación	Fv	2.80

Parámetros dinámicos	
Sistema estructural	Pórticos Resistente a momento CR
Ct	0.047
α	0.9

Coeficiente de importancia		
Grupo de uso		3
Coeficiente de importancia	I	1.25

Periodo de la estructura		
Altura entrepiso	[m]	2.50
Altura piso atico	[m]	
Número de pisos		1.00
Altura edificio	[m]	2.50

Espectro de diseño (Sa)	
Ta	0.107
Tc	1.112
To	0.232
TL	6.720
Sa (Ta)	1.1328
K	1.000

Luego, se obtiene el valor del espectro de aceleraciones de diseño para el periodo fundamental según las fórmulas descritas en la figura A.2.6-1 de la NSR-10

Se calcula el valor 'k' que representa el exponte relacionado con el periodo fundamental según A.4.3.2 de la NSR-10.
Para Ta menor o igual a 0.5 segundos,
k = 1.0.
Para Ta entre 0.5 y 2.5 segundos,
k = 0.75+0.5·Ta
Para Ta mayor que 2.5 segundos, k = 2.0

Los anteriores pasos, se realizan en una hoja de Excel personalizada, donde se describen cada una de las fórmulas y se obtiene el espectro de diseño de la imagen 6.

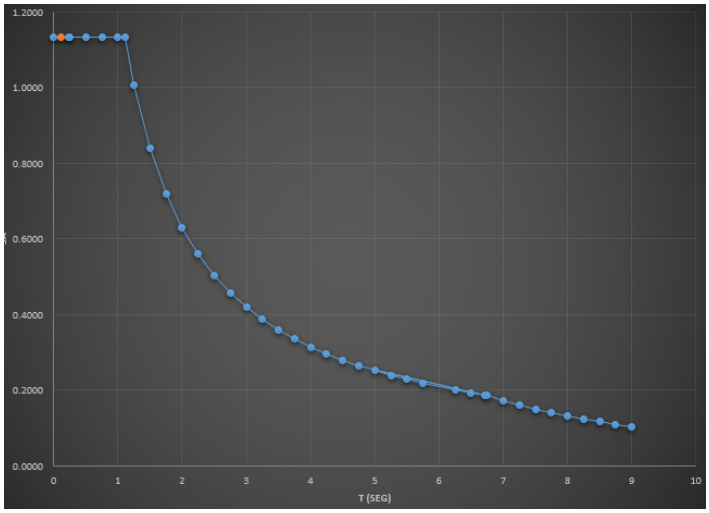


Figura 4 Espectro elástico de aceleraciones
Fuente: Elaboración Propia

De esta manera, y con los resultados obtenidos de los pasos 2 y 3, configuramos la fuerza horizontal en el programa de cálculo teniendo en cuenta que el espectro está definido para un coeficiente de amortiguamiento crítico del 5%.

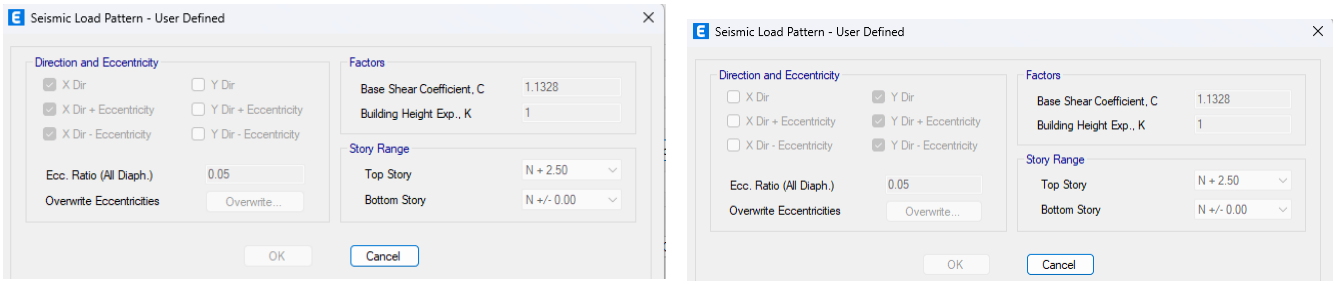


Figura 5 *Parámetros del sismo según la FHE en dirección X & Y respectivamente*
Fuente: Programa ETABS

6.6 DESCRIPCIÓN DEL MODELO MATEMÁTICO

6.6.1 Modelo del sistema de resistencia sísmica

La estructura fue modelada en el software ETABS utilizando elementos tipo frame, los cuales poseen rigidez y geometría constante a lo largo del elemento, acorde con las secciones transversales definidas previamente. El modelado consistió en pórticos de concreto reforzado

con capacidad moderada de disipación de energía (DMO), sobre los cuales se asignaron las cargas verticales y laterales según lo establecido anteriormente e indicado en la norma NSR-10. A partir de este modelo, se realizó un análisis para determinar los esfuerzos internos (momentos flectores y fuerzas cortantes) en cada elemento estructural.

Con base en los resultados del análisis, se procedió al diseño y dimensionamiento de los diferentes elementos que conforman el sistema de resistencia sísmica (vigas, columnas y nudos) siguiendo los lineamientos de la NSR-10 para estructuras de concreto reforzado. Las uniones también fueron verificadas para garantizar un comportamiento monolítico y una correcta transmisión de esfuerzos. En la base de los elementos verticales se restringieron los grados de libertad traslacionales y rotacionales para representar el empotramiento con la cimentación. Además, se incluyeron vigas de amarre para modelar adecuadamente la interacción suelo-estructura y obtener reacciones más realistas para el diseño de la cimentación.

Se realizó un chequeo de deflexiones máximas permitidas según lo dispuesto en la tabla CR9.5.2.1 de la NSR-10. De esta manera, se comprobó que todas las deflexiones cumplen bajo lo dispuesto en la norma.

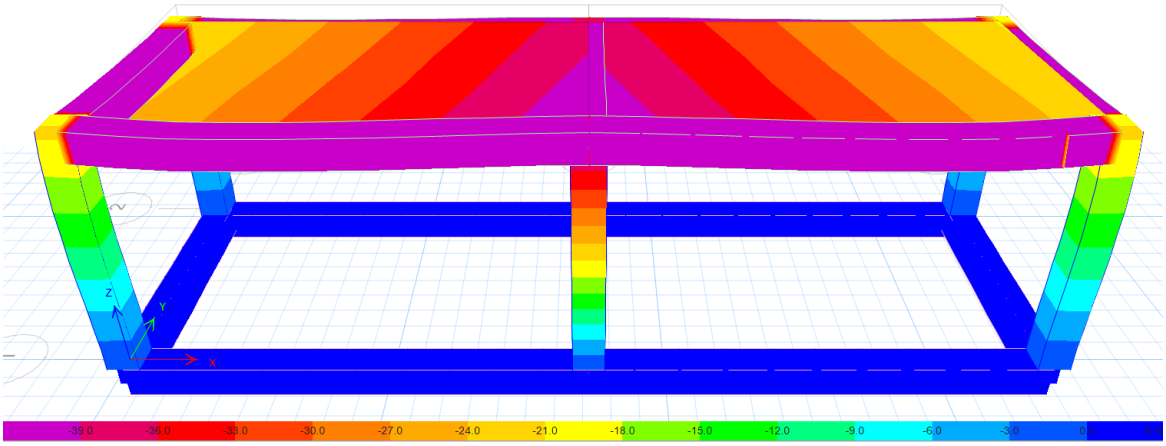


Figura 6 *Deflexiones de la estructura por combinación de carga mas desfavorable*
Fuente: Programa ETABS

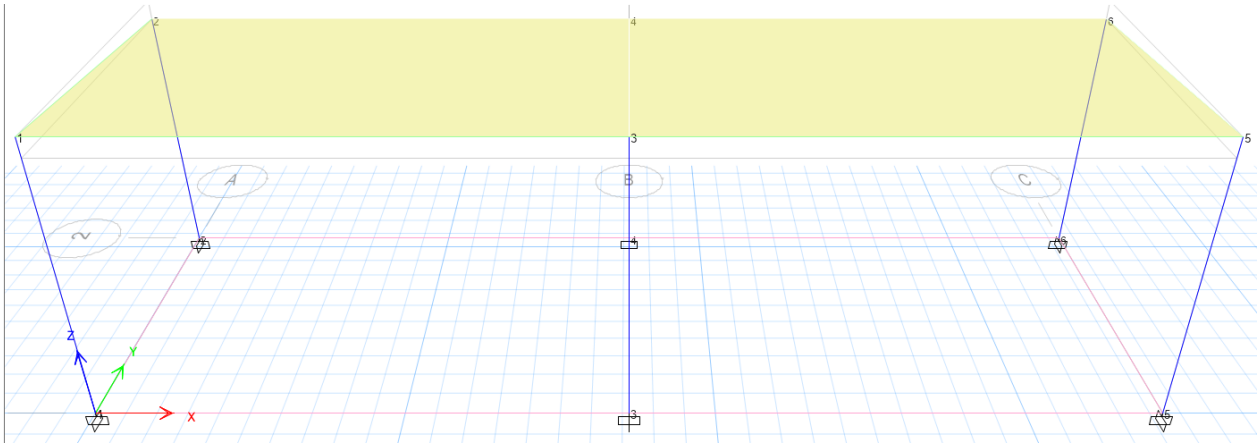


Figura 7 *Asignación de nodos*
Fuente: Programa ETABS

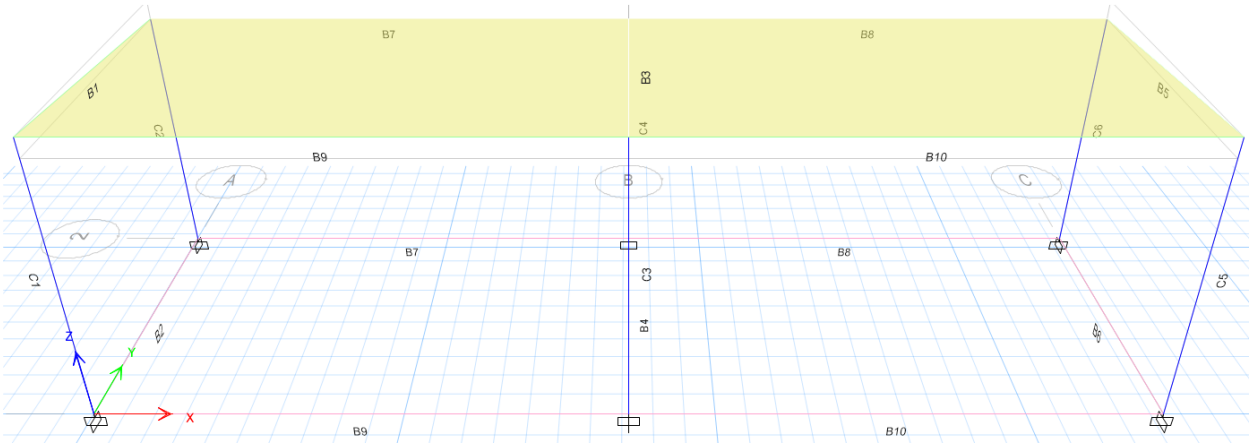


Figura 8 *Asignación de elementos tipo 'frame'*
Fuente: Programa ETABS

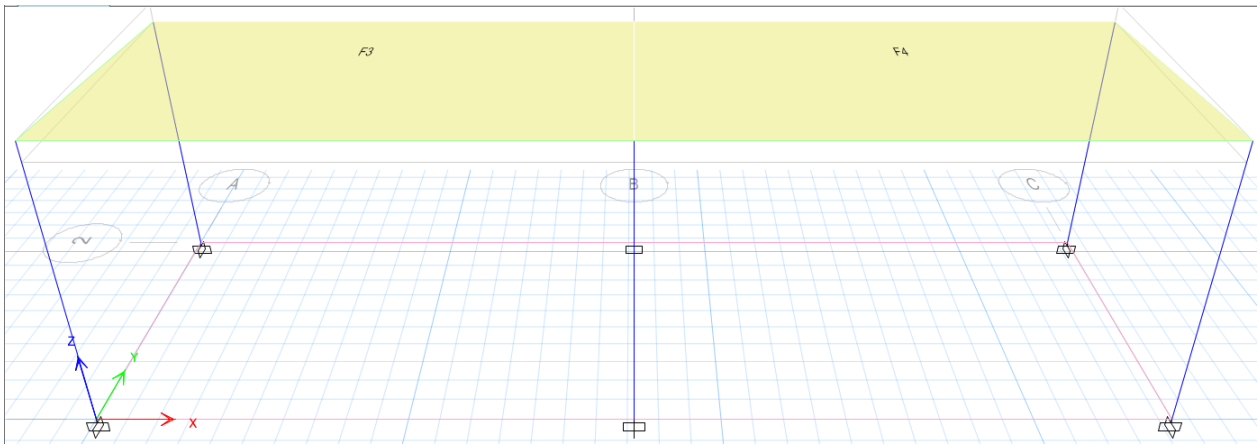


Figura 9 *Asignación de elementos tipo 'shell' en losas*
Fuente: Programa ETABS

7. DISEÑO ESTRUCTURAL

7.1 SISTEMA APORTICADO EN CONCRETO

Teniendo en cuenta las asignaciones de los elementos tipo 'frame' de la figura 8, se puede observar en los anexos generados por el programa todos los esfuerzos obtenidos para cada uno de los elementos, de los cuales se realizó el diseño para obtener el refuerzo longitudinal y transversal necesario. A continuación, se presenta el chequeo por parte del programa en donde queda constatado que todas las vigas, columnas y nudos que pertenecen al sistema de resistencia sísmica cumplen bajo lo estipulado en la norma NSR-10. De la misma manera, se realiza el chequeo para las vigas metálicas correspondientes a la pérgola.

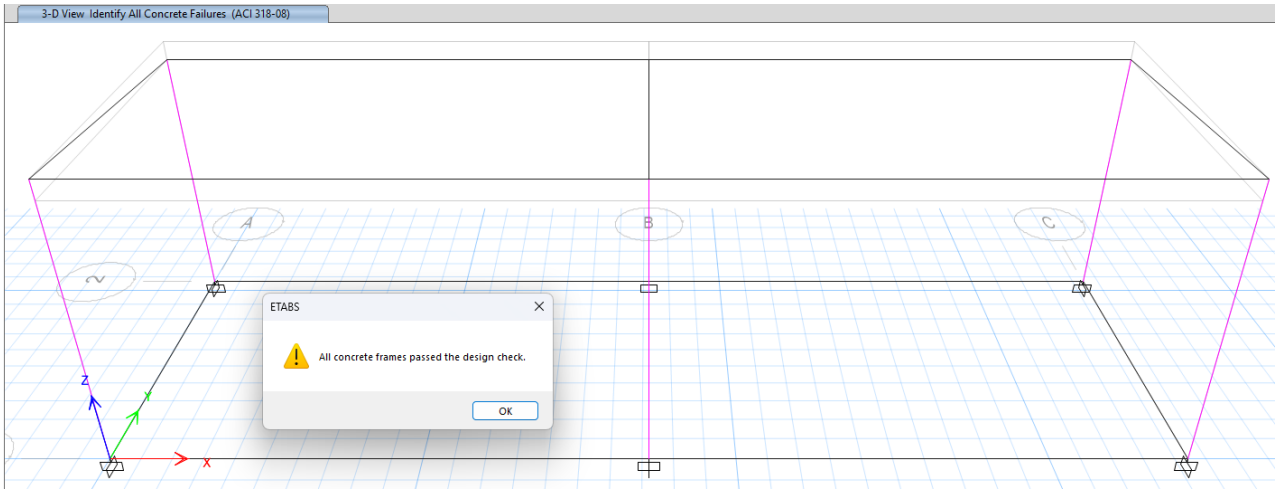


Figura 10 *Chequeo de capacidad/demanda de los elementos de concreto*
Fuente: Programa ETABS

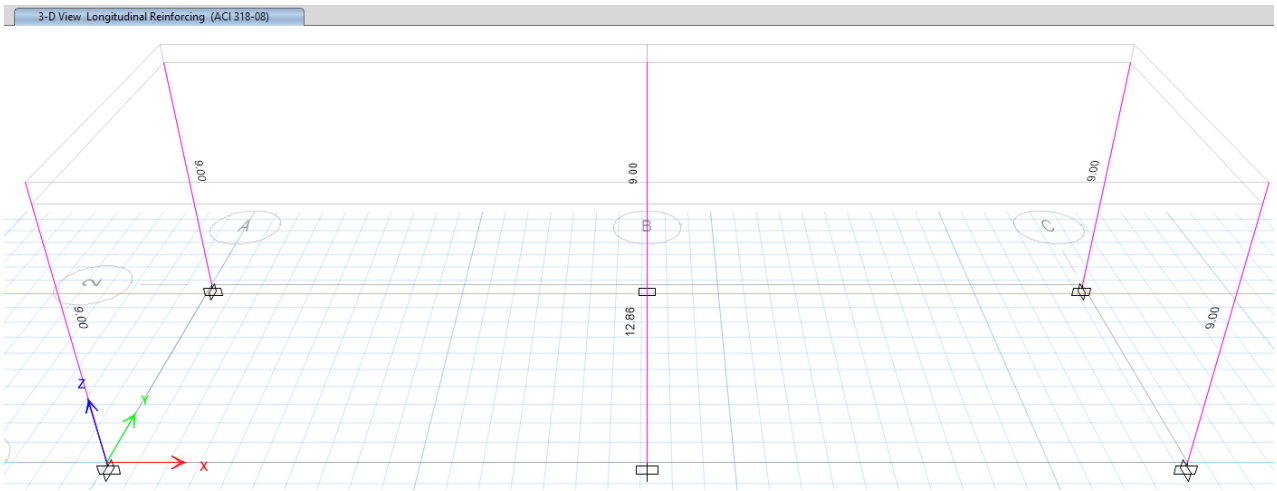


Figura 11 *Requerimiento de cuantía de columnas (cm)*
Fuente: Programa ETABS

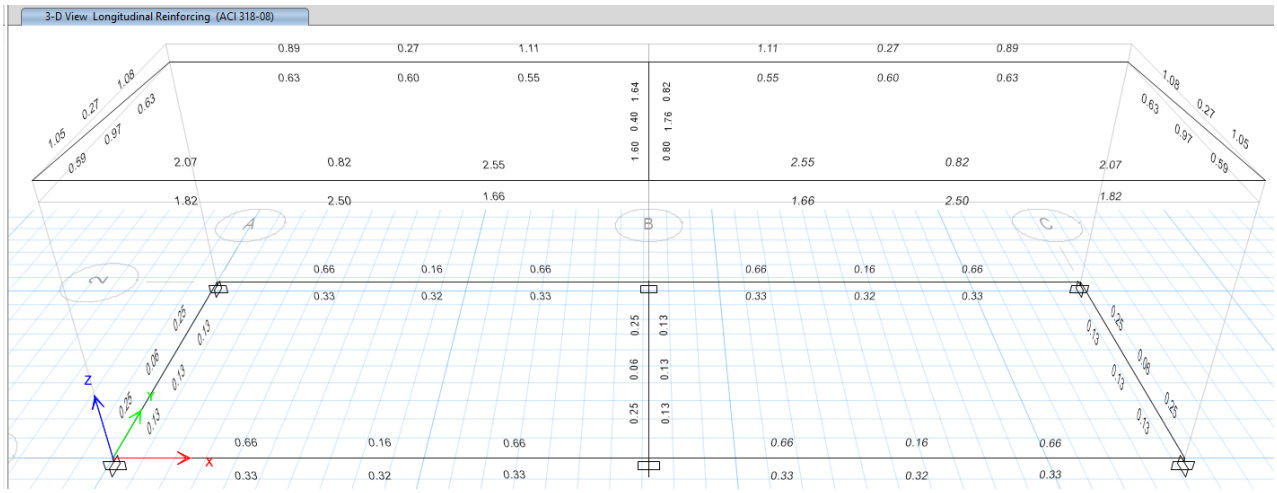


Figura 12 *Requerimiento de cuantía de vigas (cm)*
Fuente: Programa ETABS

7.1.1 CHEQUEO DE DEFLEXIONES

A partir de las deflexiones obtenidas por el programa de la combinación de carga muerta mas viva sin mayorar, se compara con la máxima deflexión admitida en la tabla C.9.5(b) de la NSR-10. De manera práctica, se evalúan las luces más desfavorables en cuanto a longitud y aplicación de carga en cada una de las direcciones del proyecto, de la misma manera, se evalúa la viga en voladizo más desfavorable.

ELEMENTO	DIRECCIÓN	LONGITUD (mm)	DEFLEXIÓN (mm) PROGRAMA (Lr+D+SD)	DEFLEXIÓN ADMITIDA (mm)	ESTADO
B3	Y	2665.4	0.218	5.55	CUMPLE
B7	X	4305	0.121	8.97	CUMPLE

7.1.2 SEPARACIÓN SÍSMICA EDIFICACIONES COLINDANTES

Teniendo en cuenta que la estructura es de un único piso, no requiere separación sísmica según lo establecido en la tabla A.6.5-2 de la NSR-10.

7.2 CIMENTACIÓN

El diseño de las zapatas aisladas se realizó únicamente en hojas de cálculo de Excel. Se diseñaron zapatas excéntricas teniendo en las limitaciones del predio. El diseño se realizó utilizando las reacciones obtenidas del modelo matemático de la superestructura para la combinación de carga de servicio más desfavorable en la base de las columnas.

Las zapatas concéntricas se diseñaron de manera que se representa una condición ideal donde la resultante de las cargas actúa en el centro geométrico de la zapata. De esta manera, los cálculos y resultados se encuentran en los anexos a este informe.

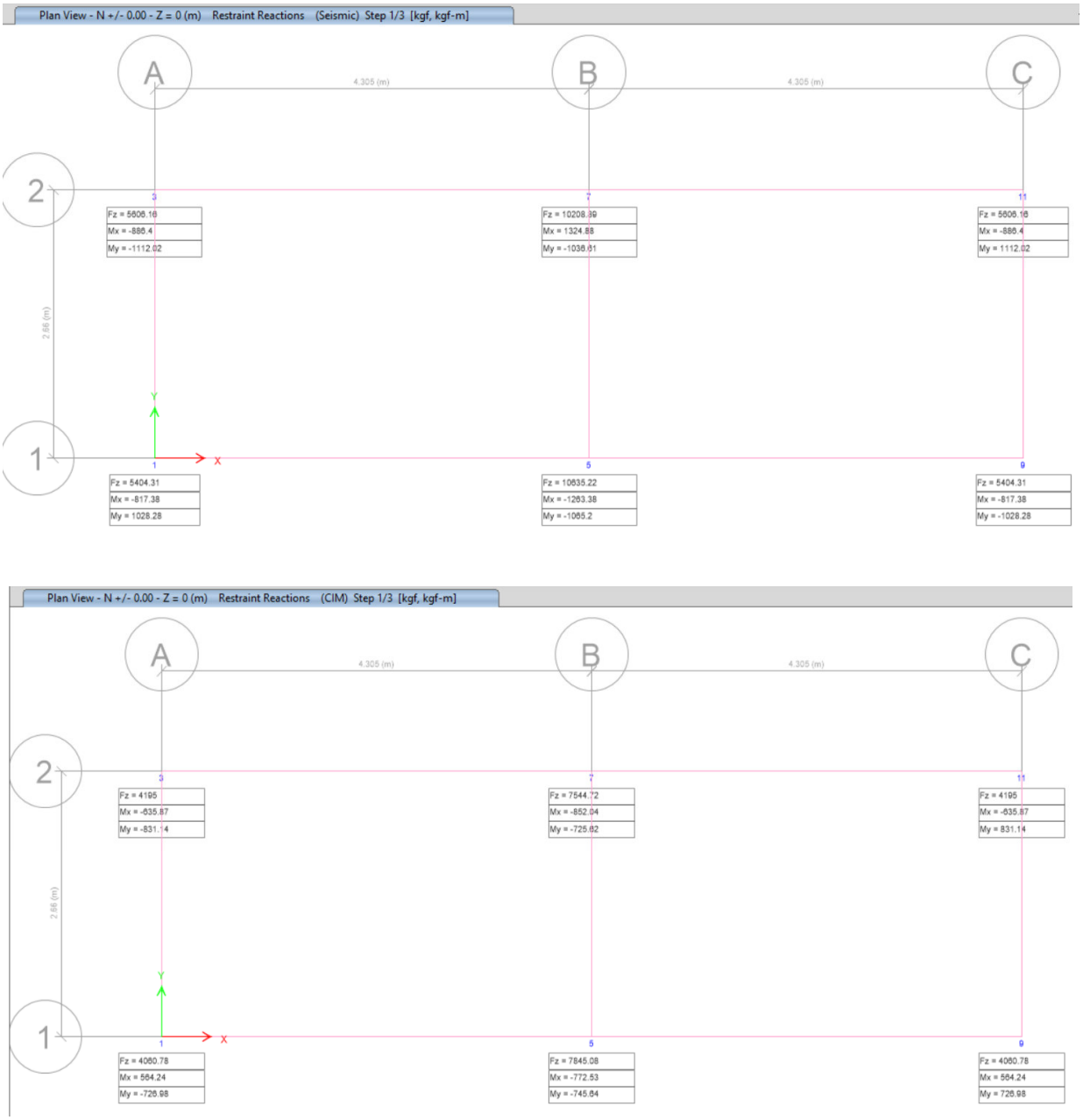


Figura 13 *Reacciones en la base*
Fuente: Programa ETABS

8. DISEÑO DE ELEMENTOS NO ESTRUCTURALES

De acuerdo con la tabla A.9.5-1 de la NSR-10, no hay presencia de elementos no estructurales en esta estructura que requieran un diseño. En caso de haberlos y considerando que la estructura pertenece al Grupo de Uso III, lo cual determina un grado de desempeño 'SUPERIOR' según la tabla A.9.2.1 de la NSR-10.

9. CONCLUSIONES Y RECOMENDACIONES

- Los estudios y diseños relacionados en este documento se proponen con el fin de permitir un óptimo comportamiento a la estructura para la losa transitable de un nivel ubicada en el casco urbano del municipio de Viterbo, Caldas.

- En el presente informe se describe la metodología aplicada y el proceso de análisis y diseño estructural con base en la información geotécnica y arquitectónica suministrada.

- El análisis estructural ejecutado cumple los diferentes requerimientos de las normas aplicables a la estructura mencionadas en el punto 4 del presente informe.

- Los elementos estructurales propuestos, se encuentran detallados en los planos anexos a este documento y su diseño contiene los requisitos mínimos para su construcción basados en la información suministrada, deberán ser ajustadas y replanteadas de acuerdo con las condiciones encontradas en el momento de construcción con confirmación previa del ingeniero diseñador.

- El modelo matemático empleado para el diseño de la estructura fue elaborado en un software que permite análisis estructural por elementos finitos, definiendo las propiedades de resistencia de materiales, secciones y longitudes similares a las que tendrá la estructura ejecutada.

- Se verifica que los esfuerzos en el modelo no superen los máximos permisibles recomendados en el estudio de suelos.

- Como resultado de los procesos descritos se han elaborado planos con los detalles de cada uno de los elementos estructurales y no estructurales donde se definen los despieces, dimensiones de elementos, detalles de construcción y especificaciones.

- Cualquier cambio correspondiente al diseño de la estructura deberá ser comunicado a la interventoría y deberá quedar consignado en los planos como aprobado por el ingeniero calculista, de lo contrario, el ingeniero calculista no se hace responsable de la ejecución de la obra.

10. ANEXOS DE DISEÑO

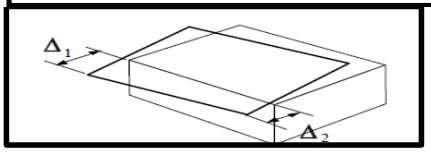
IRREGULARIDAD EN PLANTA

Tipo 1aP- Irregularidad torsional

Tipo 1aP — Irregularidad torsional

$$\phi_p = 0.9$$

$$1.4\left(\frac{\Delta_1 + \Delta_2}{2}\right) \geq \Delta_1 > 1.2\left(\frac{\Delta_1 + \Delta_2}{2}\right)$$



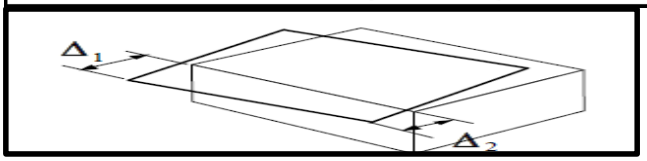
ϕp	1

Tipo 1bP- Irregularidad torsional extrema

Tipo 1bP — Irregularidad torsional extrema

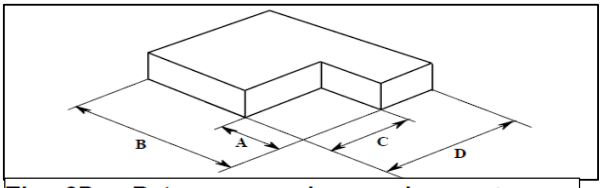
$$\phi_p = 0.8$$

$$\Delta_1 > 1.4\left(\frac{\Delta_1 + \Delta_2}{2}\right)$$



ϕp	1

Tipo 2P-Retrocesos excesivos en las esquinas

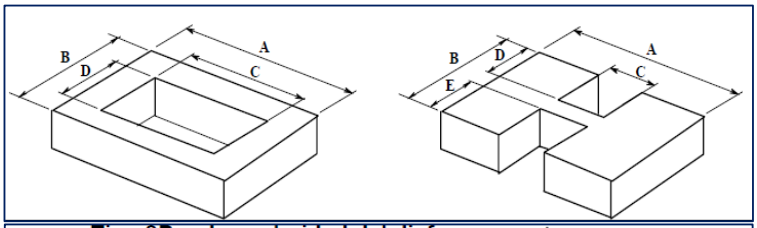


Tipo 2P — Retrocesos en las esquinas — $\phi_p = 0.9$

$A > 0.15B$ y $C > 0.15D$

A	0	m
B	8.61	m
C	0	m
D	2.66	m
$A > 0.15B$	$C > 0.15D$	NO
ϕp		1

Tipo 3P-Irregularidad del diafragma

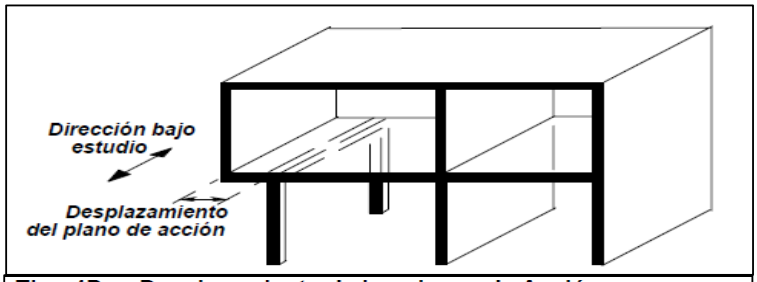


Tipo 3P — Irregularidad del diafragma — $\phi_p = 0.9$

1) $C \times D > 0.5A \times B$ 2) $(C \times D + C \times E) > 0.5A \times B$

AREA VACIOS	0.00	m^2
AREA PLANTA	22.90	m^2
1) $C \times D > 0.5A \times B$ 2) $(C \times D + C \times E) > 0.5A \times B$		NO
ϕp		1

Tipo 4P-Desplazamientos de los planos de accion

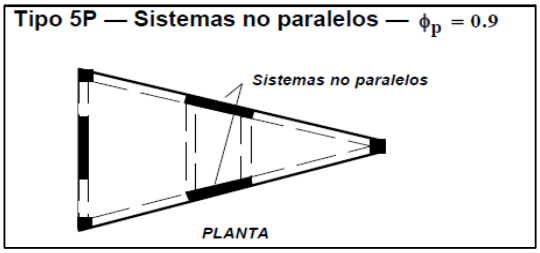


Tipo 4P — Desplazamiento de los planos de Acción — $\phi_p = 0.8$

¿Presenta esta irregularidad?	NO
ϕp	1

Tipo 5P-Sistemas no paralelos

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



¿Presenta esta irregularidad?	SI
ϕp	0.9

IRREGULARIDAD EN PLANTA	
Tipo de irregularidad en planta	**ϕ_p**
1aP - Irregularidad torsional	**1**
1bP - Irregularidad torsional extrema	**1**
2P - Retr. excesivos en las esquinas	**1**
3P - Irregularidad del diafragma	**1**
4P - Despl. de los planos de accion	**1**
5P - Sistemas no paralelos	**0.9**

ϕ_p Elegido	**0.9**

IRREGULARIDADES EN ALTURA

Tipo 1aA-Piso flexible

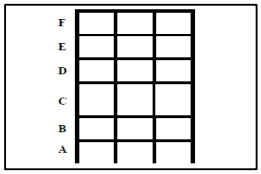
Tipo 1aA — Piso flexible

$\phi_a = 0.9$

$0.60\ \text{Rigidez}\ K_D \leq \text{Rigidez}\ K_C < 0.70\ \text{Rigidez}\ K_D$

o

$0.70\ (K_D+K_E+K_F)\ /3 \leq \text{Rigidez}\ K_C < 0.80\ (K_D+K_E+K_F)\ /3$



Rigidez dirección X	
KB (Ton/m)	NA
KC (Ton/m)	NA
KD (Ton/m)	NA
Chequeo	NA
ϕa	1

Rigidez dirección Y	
KB (Ton/m)	NA
KC (Ton/m)	NA
KD (Ton/m)	NA
Chequeo	NA
ϕa	1

Tipo 1bA-Piso flexible extremo

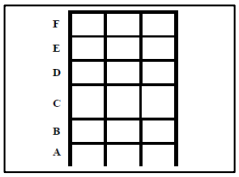
Tipo 1bA — Piso flexible extremo

$\phi_a = 0.8$

$\text{Rigidez}\ K_C < 0.60\ \text{Rigidez}\ K_D$

o

$\text{Rigidez}\ K_C < 0.70\ (K_D+K_E+K_F)\ /3$



Rigidez dirección X	
KB (Ton/m)	NA
KC (Ton/m)	NA
KD (Ton/m)	NA
Chequeo	#¡VALOR!
ϕa	1

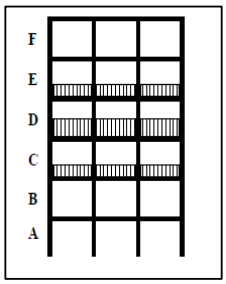
Rigidez dirección Y	
KB (Ton/m)	NA
KC (Ton/m)	NA
KD (Ton/m)	NA
Chequeo	#¡VALOR!
ϕa	1

Tipo 2A-Irregularidades en la distribución de las masas

Tipo 2A — Distribución masa — $\phi_a = 0.9$

$$m_D > 1.50\ m_E$$
o
$$m_D > 1.50\ m_C$$

MB (ton)	NA
MC (ton)	NA
MD (ton)	NA
Chequeo	NA
ϕa	1



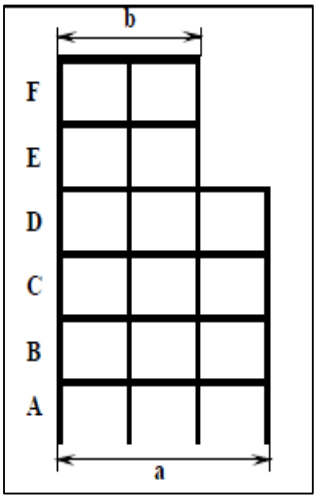
Tipo 3A-Irregularidad geometrica

Tipo 3A — Geométrica — $\phi_a = 0.9$

$$a > 1.30\ b$$

DIRECCION X	
a (m)	8.61
b (m)	8.61
Chequeo	NO
ϕa	1

DIRECCION Y	
a (m)	2.66
b (m)	2.66
Chequeo	NO
ϕa	1



NOTA: En el análisis de irregularidades en planta de una estructura, la determinación de la resistencia de cada piso se basa en la suma de la resistencia a cortante (aportada por el concreto y el acero) de todos los elementos verticales que resisten las fuerzas sísmicas. Sin embargo, como una simplificación práctica, la identificación de las irregularidades de piso débil (5aA) y piso débil extremo (5bA) se realiza a partir de los valores de rigidez lateral de cada piso. Esta rigidez lateral es un indicador del comportamiento sísmico de cada nivel, ya que si se representa de manera triangular, revela que el piso más resistente suele ser el primero. Cuanto mayor sea la rigidez lateral de un piso en relación con los demás, mayor será su capacidad para resistir las fuerzas sísmicas laterales. Por lo tanto, el cálculo de la rigidez lateral simplifica la evaluación de estas irregularidades, brindando una aproximación confiable del desempeño estructural ante cargas sísmicas.

Tipo 5aA-Piso debil-Discontinuidad en la resistencia

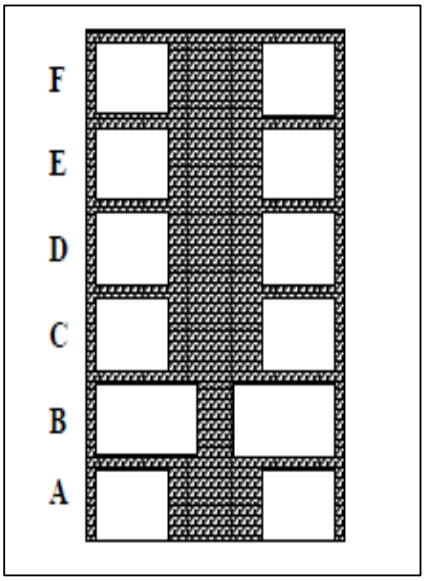
Tipo 5aA — Piso débil

$\phi_a = 0.9$

0.65 Resist. Piso C ≤ Resist. Piso B < 0.80 Resist. Piso C

DIRECCION X	
Rigidez Piso B	NA
Rigidez Piso C	NA
Rigidez Piso D	NA
Chequeo	NA
ϕa	1

DIRECCION Y	
Rigidez Piso B	NA
Rigidez Piso C	NA
Rigidez Piso D	NA
Chequeo	NA
ϕa	1



Tipo 5bA-Piso debil extremo-Discontinuidad extrema en la resistencia

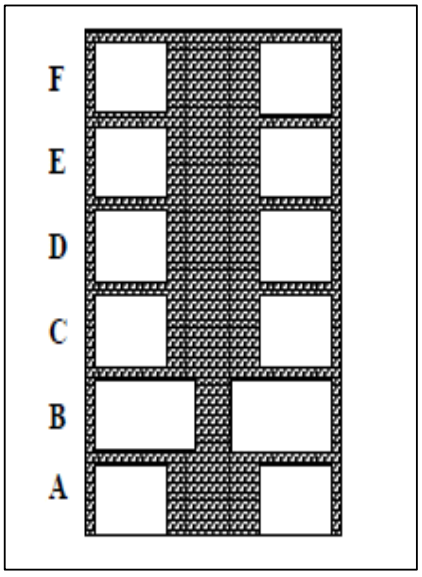
Tipo 5bA — Piso débil extremo

$\phi_a = 0.8$

Resistencia Piso B < 0.65 Resistencia Piso C

DIRECCION Y	
Rigidez Piso B	NA
Rigidez Piso C	NA
Rigidez Piso D	NA
Chequeo	NA
ϕa	1

DIRECCION Y	
Rigidez Piso B	NA
Rigidez Piso C	NA
Rigidez Piso D	NA
Chequeo	NA
ϕa	1



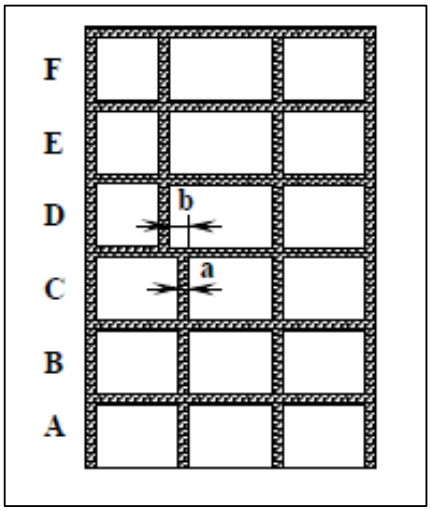
Tipo 4A-Desplazamientos dentro del plano de acción

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

b > a

DIRECCION X	
a	0
b	0
Chequeo	NO
ϕa	1

DIRECCION Y	
a	0
b	0
Chequeo	NO
ϕa	1



IRREGULARIDADES EN ALTURA		
Tipo de irregularidad en altura		**ϕa**
1aA	Piso flexible	**1**
1bA	Piso flexible extremo	**1**
2A	Distribución de las masas	**1**
3A	Geometrica	**1**
4A	Despl. dentro del plano de acción	**1**
5aA	Piso debil	**1**
5bA	Piso debil extremo	**1**

ϕa Elegido	**1**

CHEQUEO IRREGULARIDAD TORSIONAL Y TORSIONAL EXTREMA

SENTIDO EN Y SISMO EN X

Story	Label	Unique Name	Output Case	Ux mm	Uy mm	Δi	Δ1	Δ2	$1.4\left(\frac{\Delta_1+\Delta_2}{2}\right)$	$1.2\left(\frac{\Delta_1+\Delta_2}{2}\right)$	CHEQUEO 1aP	ϕ_p	CHEQUEO 1bP	ϕ_p
N + 4,65	1	2	DERIVAS X	3.477	0.726	3.5520	3.5660	3.5520	4.9826	4.2708	NO	1	NO	1
N + 4,65	5	10	DERIVAS X	3.464	0.847	3.5660								

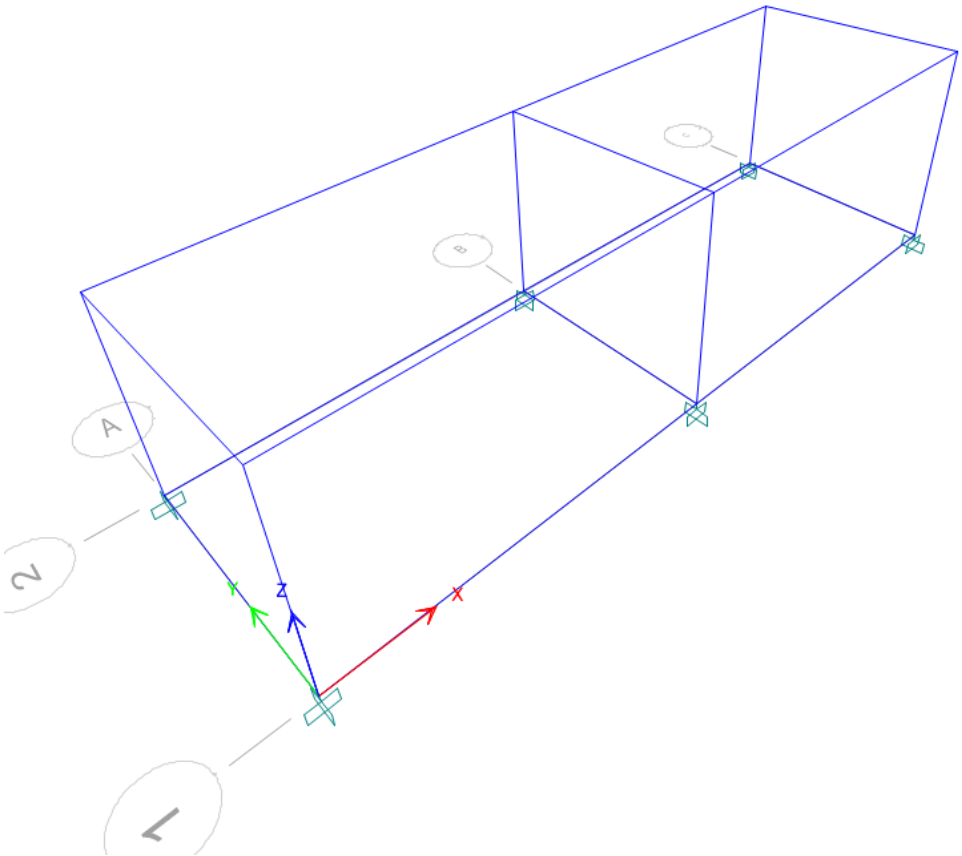
SENTIDO EN X SISMO EN Y

Story	Label	Unique Name	Output Case	Ux mm	Uy mm	Δi	Δ1	Δ2	$1.4\left(\frac{\Delta_1+\Delta_2}{2}\right)$	$1.2\left(\frac{\Delta_1+\Delta_2}{2}\right)$	CHEQUEO 1aP	ϕ_p	CHEQUEO 1bP	ϕ_p
N + 4,65	1	2	DERIVAS Y	1.052	2.612	2.8159	2.8159	2.7513	3.8970	3.3403	NO	1	NO	1
N + 4,65	2	4	DERIVAS Y	0.891	2.603	2.7513								

DERIVAS MAXIMAS POR PISO

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m	Deriva	Observación
N + 2.33	DERIVAS Y	Combination	Max	Y	0.001584	4	430.5	266	233	0.16%	Cumple
N + 2.50	DERIVAS Y	Combination	Max	Y	0.001481	3	430.5	0	250	0.15%	Cumple
N + 2.50	DERIVAS X	Combination	Max	X	0.001391	1	0	0	250	0.14%	Cumple
N + 2.33	DERIVAS X	Combination	Max	X	0.00128	4	430.5	266	233	0.13%	Cumple
N + 2.33	DERIVAS Y	Combination	Min	Y	0.001179	4	430.5	266	233	0.12%	Cumple
N + 2.50	DERIVAS Y	Combination	Min	Y	0.001104	3	430.5	0	250	0.11%	Cumple
N + 2.50	DERIVAS X	Combination	Min	X	0.001046	1	0	0	250	0.10%	Cumple
N + 2.33	DERIVAS X	Combination	Min	X	0.00096	4	430.5	266	233	0.10%	Cumple
N + 2.33	DERIVAS X	Combination	Max	Y	0.000472	4	430.5	266	233	0.05%	Cumple
N + 2.50	DERIVAS X	Combination	Max	Y	0.000442	3	430.5	0	250	0.04%	Cumple
N + 2.50	DERIVAS Y	Combination	Max	X	0.000421	1	0	0	250	0.04%	Cumple
N + 2.33	DERIVAS Y	Combination	Max	X	0.000385	6	861	266	233	0.04%	Cumple
N + 2.33	DERIVAS X	Combination	Min	Y	0.000345	4	430.5	266	233	0.03%	Cumple
N + 2.50	DERIVAS X	Combination	Min	Y	0.000324	3	430.5	0	250	0.03%	Cumple
N + 2.50	DERIVAS Y	Combination	Min	X	0.000318	1	0	0	250	0.03%	Cumple
N + 2.33	DERIVAS Y	Combination	Min	X	0.000288	4	430.5	266	233	0.03%	Cumple

ETABS®



DISEÑO LOSA VITERBO

Model File: CASA DE LA CULTURA, Revision
26/03/2025

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1 Structure Data

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

1.1 Story Data

Table 1.1 - Story Definitions

Tower	Name	Height cm	Master Story	Similar To	Splice Story	Splice Height cm	Color
T1	N + 2.50	17	No	None	No		Cyan
T1	N + 2.33	233	No	None	No		Cyan

1.2 Grid Data

Table 1.2 - Grid Definitions - General

Tower	Name	Type	Ux cm	Uy cm	Rz deg	Story Range	User Top Story	User Bottom Story	Bubble Size cm	Color
T1	G1	Cartesian	0	0	0	Default			70	Gray6

Table 1.3 - Grid Definitions - Grid Lines

Name	Grid Line Type	ID	Ordinate cm	Angle deg	X1 cm	Y1 cm	X2 cm	Y2 cm	Bubble Location	Visible
G1	X (Cartesian)	A	0						End	Yes
G1	X (Cartesian)	B	430.5						End	Yes
G1	X (Cartesian)	C	861						End	Yes
G1	Y (Cartesian)	1	0						Start	Yes
G1	Y (Cartesian)	2	266						Start	Yes

1.3 Point Coordinates

Table 1.4 - Point Bays

Label	Is Auto Point	X cm	Y cm	DZBelow cm
1	No	0	0	0
2	No	0	266	0
3	No	430.5	0	0
4	No	430.5	266	0
5	No	861	0	0
6	No	861	266	0

Table 1.5 - Point Object Connectivity

UniqueName	Is Auto Point	Story	PointBay	IsSpecial	X cm	Y cm	Z cm
2	No	N + 2.50	1	No	0	0	250
6	No	N + 2.50	3	Yes	430.5	0	250
10	No	N + 2.50	5	Yes	861	0	250
4	No	N + 2.33	2	No	0	266	233
8	No	N + 2.33	4	Yes	430.5	266	233

Table 1.5 - Point Object Connectivity (continued)

UniqueName	Is Auto Point	Story	PointBay	IsSpecial	X cm	Y cm	Z cm
12	No	N + 2.33	6	Yes	861	266	233
1	No	N +/- 0.00	1	No	0	0	0
3	No	N +/- 0.00	2	No	0	266	0
5	No	N +/- 0.00	3	Yes	430.5	0	0
7	No	N +/- 0.00	4	Yes	430.5	266	0
9	No	N +/- 0.00	5	Yes	861	0	0
11	No	N +/- 0.00	6	Yes	861	266	0

1.4 Line Connectivity

Table 1.6 - Column Bays

Label	PointBayI	PointBayJ	IEndStory
C1	1	1	Same
C2	2	2	Below
C3	3	3	Same
C4	4	4	Below
C5	5	5	Same
C6	6	6	Below

Table 1.7 - Beam Bays

Label	PointBayI	PointBayJ
B1	2	1
B2	1	2
B3	4	3
B4	3	4
B5	6	5
B6	5	6
B7	2	4
B8	4	6
B9	1	3
B10	3	5

1.5 Area Connectivity

Table 1.8 - Floor Bays

Label	NumPoints	PointNumber	PointBay
F3	4	1	1
F3		2	3
F3		3	4
F3		4	2
F4	4	1	3
F4		2	5
F4		3	6
F4		4	4

1.6 Mass

Table 1.9 - Mass Source Definition

Name	Is Default	Include Lateral Mass?	Include Vertical Mass?	Lump Mass?	Source Self Mass?	Source Added Mass?	Source Load Patterns?	Move Mass Centroid?	Move Ratio X	Move Ratio Y	Load Pattern	Multiplier
Masa	Yes	Yes	No	Yes	No	No	Yes	No			D	1
Masa											SD	1
Masa											L	0.25
MsSrc1	No	Yes	No	Yes	Yes	Yes	No	No				

Table 1.10 - Mass Summary by Story

Story	UX kgf-s2/cm	UY kgf-s2/cm	UZ kgf-s2/cm
N + 2.50	8.3454	8.3454	0
N + 2.33	8.2893	8.2893	0
N +/- 0.00	7.1463	7.1463	0

Table 1.11 - Mass Summary by Group

Group	Self Mass kgf-s2/cm	Self Weight kgf	Mass X kgf-s2/cm	Mass Y kgf-s2/cm	Mass Z kgf-s2/cm
All	0	13567.73	23.781	23.781	0

2 Properties

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

2.1 Materials

Table 2.1 - Material Properties - General

Material	Type	SymType	Grade	Color	Notes
A416Gr270	Tendon	Uniaxial	Unknown	Gray8Dark	
A615Gr60	Rebar	Uniaxial	Unknown	Magenta	
CON210	Concrete	Isotropic	Unknown	Red	

2.2 Frame Sections

Table 2.2 - Frame Section Property Definitions - Summary (Part 1 of 4)

Name	Material	Shape	Color	Area cm2	J cm4	I33 cm4	I22 cm4	I23 cm4	IMajor cm4	IMinor cm4
C 30x30	CON210	Concrete Rectangular	Blue	900	114117.2	67500	67500	0		
V 30x30	CON210	Concrete Rectangular	10354589	900	114117.2	67500	67500	0		
VF 30x30	CON210	Concrete Rectangular	13739263	900	114117.2	67500	67500	0		

Table 2.2 - Frame Section Property Definitions - Summary (Part 2 of 4)

Name	MajorAngle deg	As2 cm2	As3 cm2	S33Pos cm3	S33Neg cm3	S22Pos cm3	S22Neg cm3	Z33 cm3	Z22 cm3	R33 cm	R22 cm
C 30x30		750	750	4500	4500	4500	4500	6750	6750	8.66	8.66
V 30x30		750	750	4500	4500	4500	4500	6750	6750	8.66	8.66
VF 30x30		750	750	4500	4500	4500	4500	6750	6750	8.66	8.66

Table 2.2 - Frame Section Property Definitions - Summary (Part 3 of 4)

Name	Fillet Radius cm	CG Offset 3 cm	CG Offset 2 cm	PNA Offset 3 cm	PNA Offset 2 cm	SC Offset 3 cm	SC Offset 2 cm	Area Modifier	As2 Modifier	As3 Modifier	J Modifier
C 30x30		0	0	0	0			1	1	1	1
V 30x30		0	0	0	0			1	1	1	1
VF 30x30		0	0	0	0			1	1	1	1

Table 2.2 - Frame Section Property Definitions - Summary (Part 4 of 4)

Name	I22 Modifier	Mass Modifier	Weight Modifier
C 30x30	1	1	1
V 30x30	1	1	1
VF 30x30	1	1	1

2.3 Shell Sections

Table 2.3 - Area Section Property Definitions - Summary

Name	Type	Element Type	Material	Total Thickness cm	Deck Material	Deck Depth cm
Losa Aerea	Slab	Membrane	CON210	1E-05		

2.4 Reinforcement Sizes

Table 2.4 - Reinforcing Bar Sizes

Name	Diameter cm	Area cm2
#4	1.27	1.3

3 Assignments

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

3.1 Joint Assignments

Table 3.1 - Joint Assignments - Summary

Story	Label	UniqueName	Diaphragm	Restraints	Spring	Added Mass	Panel Zone	Include in Mesh
N + 2.50	1	2	From Area					
N + 2.50	3	6	From Area					
N + 2.50	5	10	From Area					
N + 2.33	2	4	From Area					
N + 2.33	4	8	From Area					
N + 2.33	6	12	From Area					
N +/- 0.00	1	1	From Area	UX; UY; UZ; RX; RY; RZ				
N +/- 0.00	2	3	From Area	UX; UY; UZ; RX; RY; RZ				
N +/- 0.00	3	5	From Area	UX; UY; UZ; RX; RY; RZ				
N +/- 0.00	4	7	From Area	UX; UY; UZ; RX; RY; RZ				
N +/- 0.00	5	9	From Area	UX; UY; UZ; RX; RY; RZ				
N +/- 0.00	6	11	From Area	UX; UY; UZ; RX; RY; RZ				

3.2 Frame Assignments

Table 3.2 - Frame Assignments - Summary (Part 1 of 2)

UniqueName	Story	Label	Design Type	Length cm	Auto Select	Analysis Section	Design Section	Axis Angle deg	Max Station Spacing cm	Min Number Stations
3	N + 2.50	B1	Beam	266.543		V 30x30	V 30x30			3
7	N + 2.50	B3	Beam	266.543		V 30x30	V 30x30			3
11	N + 2.50	B5	Beam	266.543		V 30x30	V 30x30			3
20	N + 2.50	B9	Beam	430.5		V 30x30	V 30x30		50	
21	N + 2.50	B10	Beam	430.5		V 30x30	V 30x30		50	
1	N + 2.50	C1	Column	250		C 30x30	C 30x30			3
5	N + 2.50	C3	Column	250		C 30x30	C 30x30			3
9	N + 2.50	C5	Column	250		C 30x30	C 30x30			3
18	N + 2.33	B7	Beam	430.5		V 30x30	V 30x30		50	
19	N + 2.33	B8	Beam	430.5		V 30x30	V 30x30		50	
2	N + 2.33	C2	Column	233		C 30x30	C 30x30			3
6	N + 2.33	C4	Column	233		C 30x30	C 30x30			3
10	N + 2.33	C6	Column	233		C 30x30	C 30x30			3
4	N +/- 0.00	B2	Beam	266		VF 30x30	VF 30x30		50	
8	N +/- 0.00	B4	Beam	266		VF 30x30	VF 30x30		50	
12	N +/- 0.00	B6	Beam	266		VF 30x30	VF 30x30		50	
13	N +/- 0.00	B7	Beam	430.5		VF 30x30	VF 30x30		50	
14	N +/- 0.00	B8	Beam	430.5		VF 30x30	VF 30x30		50	
15	N +/- 0.00	B9	Beam	430.5		VF 30x30	VF 30x30		50	
16	N +/- 0.00	B10	Beam	430.5		VF 30x30	VF 30x30		50	

Table 3.2 - Frame Assignments - Summary (Part 2 of 2)

UniqueName	Releases	User Offsets	Added Mass kgf-s2/cm2	Pier	Spandrel	Spring	Modifiers	T/C Limits	Moment Beam Type
3									
7									
11									
20									
21									
1									
5									
9									
18									
19									
2									
6									
10									
4									
8									
12									
13									
14									
15									
16									

3.3 Shell Assignments

Table 3.3 - Area Assignments - Summary (Part 1 of 2)

UniqueName	Story	Label	Section Property	Property Type	Diaphragm	Axis Angle deg	Added Mass kgf-s2/cm3	Pier	Spandrel
1	N + 2.50	F3	Losa Aerea	Slab					
2	N + 2.50	F4	Losa Aerea	Slab					

Table 3.3 - Area Assignments - Summary (Part 2 of 2)

UniqueName	Spandrel Story	Spring	Modifiers
1			
2			

4 Loads

This chapter provides loading information as applied to the model.

4.1 Load Patterns

Table 4.1 - Load Pattern Definitions

Name	Is Auto Load	Type	Self Weight Multiplier	Auto Load
~LLRF	Yes	Other	0	
D	No	Dead	1	
FHE-X	No	Seismic	0	User Coefficient
FHE-X(1/3)	Yes	Seismic	0	User Coefficient
FHE-X(2/3)	Yes	Seismic	0	User Coefficient
FHE-X(3/3)	Yes	Seismic	0	User Coefficient
$FHE\text{-}X_{der}$	No	Seismic	0	User Coefficient
FHE-Y	No	Seismic	0	User Coefficient
FHE-Y(1/3)	Yes	Seismic	0	User Coefficient
FHE-Y(2/3)	Yes	Seismic	0	User Coefficient
FHE-Y(3/3)	Yes	Seismic	0	User Coefficient
$FHE\text{-}Y_{der}$	No	Seismic	0	User Coefficient
G	No	Snow	0	
H	No	Other	0	
L	No	Live	0	
Lr	No	Roof Live	0	
SD	No	Super Dead	0	
W	No	Wind	0	None

4.2 Load Sets

Table 4.2 - Shell Uniform Load Sets

Name	Load Pattern	Load Value kgf/cm2
LOSA	SD	0.03
LOSA	L	0.05

4.3 Auto Seismic Loading

User Coefficient Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern FHE-X using the user input coefficients, as calculated by ETABS.

Direction and Eccentricity

Direction = Multiple

Eccentricity Ratio = 5% for all diaphragms

Factors and Coefficients

Equivalent Lateral Forces

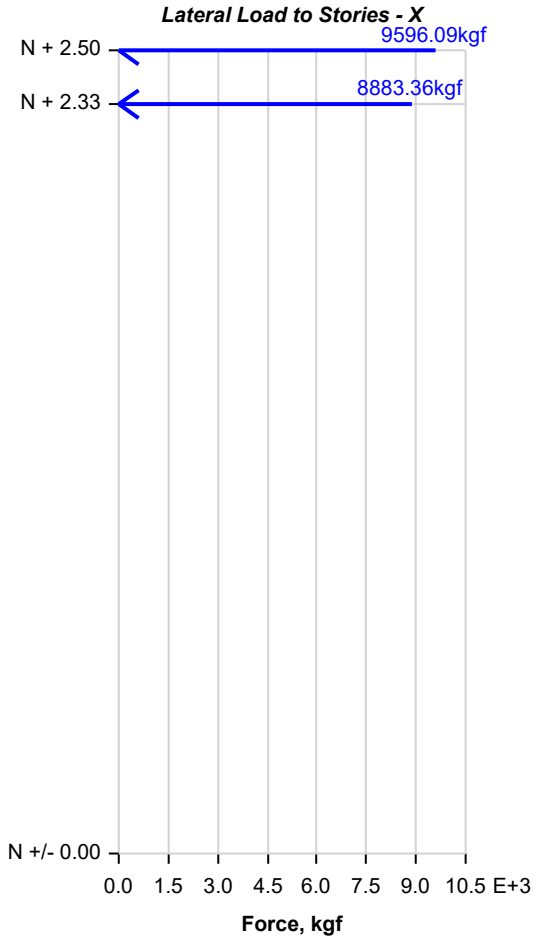
Base Shear Coefficient, C $C = 1.1328$

Base Shear, V $V = CW$

Calculated Base Shear

Direction	Period Used (sec)	C	W (kgf)	V (kgf)
X	0	0	16313.08	18479.45
X + Ecc. Y	0	0	16313.08	18479.45
X - Ecc. Y	0	0	16313.08	18479.45

Applied Story Forces



Story	Elevation	X-Dir	Y-Dir
	cm	kgf	kgf
N + 2.50	250	9596.09	0
N + 2.33	233	8883.36	0
N +/- 0.00	0	0	0

User Coefficient Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern FHE-Y using the user input coefficients, as calculated by ETABS.

Direction and Eccentricity

Direction = Multiple

Eccentricity Ratio = 5% for all diaphragms

Factors and Coefficients

Equivalent Lateral Forces

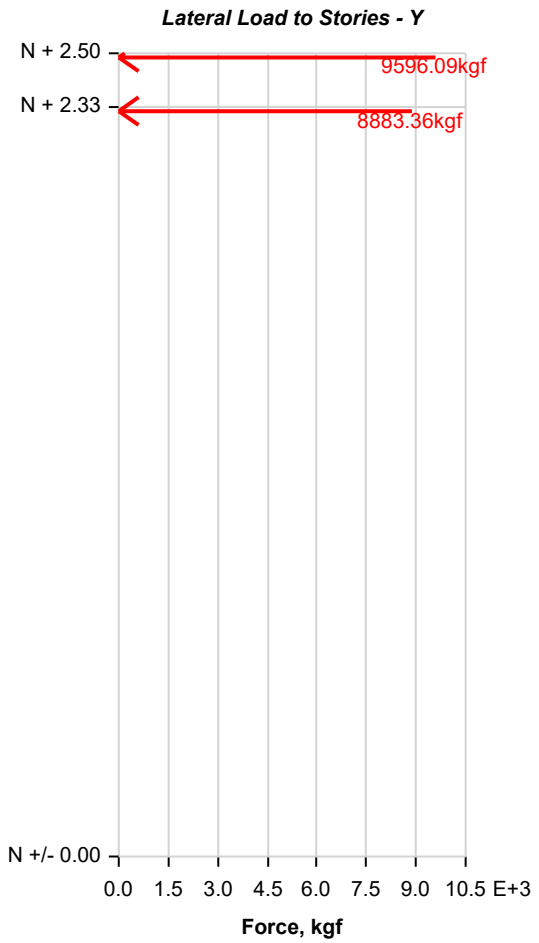
Base Shear Coefficient, C $C = 1.1328$

Base Shear, V $V = CW$

Calculated Base Shear

Direction	Period Used (sec)	C	W (kgf)	V (kgf)
Y	0	0	16313.08	18479.45
Y + Ecc. X	0	0	16313.08	18479.45
Y - Ecc. X	0	0	16313.08	18479.45

Applied Story Forces



Story	Elevation	X-Dir	Y-Dir
	cm	kgf	kgf
N + 2.50	250	0	9596.09
N + 2.33	233	0	8883.36
N +/- 0.00	0	0	0

User Coefficient Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern FHE-Y_{der} using the user input coefficients, as calculated by ETABS.

Direction and Eccentricity

Direction = Y

Factors and Coefficients

Equivalent Lateral Forces

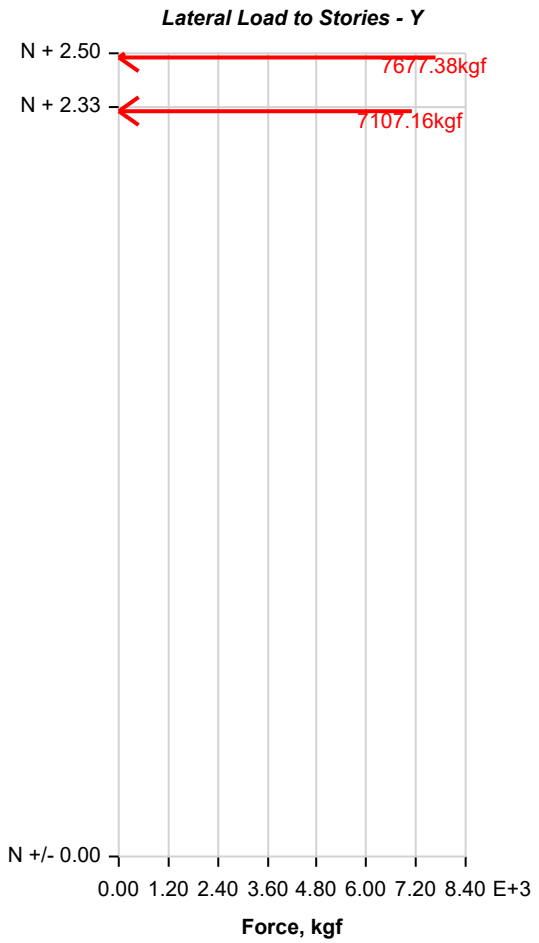
Base Shear Coefficient, C $C = 0.9063$

Base Shear, V $V = CW$

Calculated Base Shear

Direction	Period Used (sec)	C	W (kgf)	V (kgf)
Y	0	0	16313.08	14784.54

Applied Story Forces



Story	Elevation	X-Dir	Y-Dir
	cm	kgf	kgf
N + 2.50	250	0	7677.38
N + 2.33	233	0	7107.16
N +/- 0.00	0	0	0

User Coefficient Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern FHE-X_{der} using the user input coefficients, as calculated by ETABS.

Direction and Eccentricity

Direction = X

Factors and Coefficients

Equivalent Lateral Forces

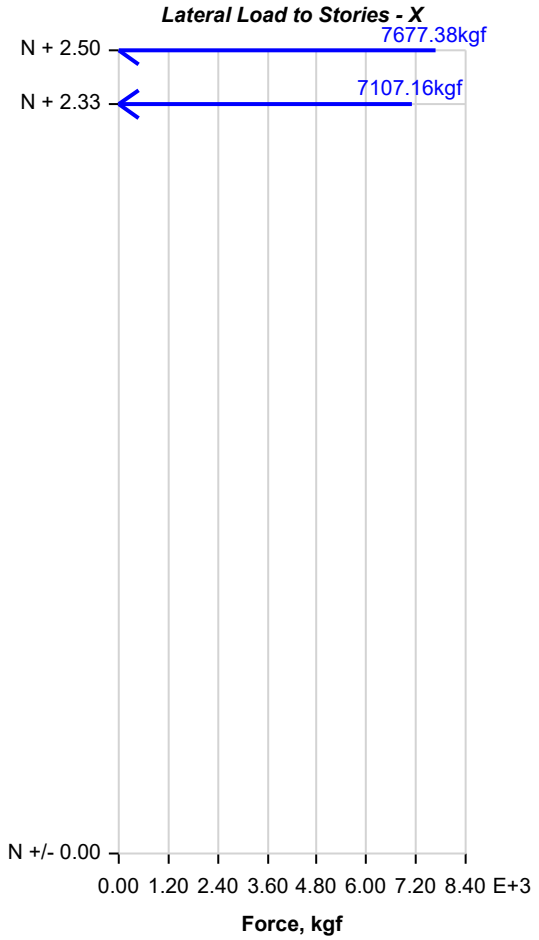
Base Shear Coefficient, C $C = 0.9063$

Base Shear, V $V = CW$

Calculated Base Shear

Direction	Period Used (sec)	C	W (kgf)	V (kgf)
X	0	0	16313.08	14784.54

Applied Story Forces



Story	Elevation	X-Dir	Y-Dir
	cm	kgf	kgf
N + 2.50	250	7677.38	0
N + 2.33	233	7107.16	0
N +/- 0.00	0	0	0

4.4 Applied Loads

4.4.1 Area Loads

Table 4.7 - Area Load Assignments - Uniform Load Sets

Story	Label	UniqueName	Load Set
N + 2.50	F3	1	LOSA
N + 2.50	F4	2	LOSA

4.5 Functions

4.5.1 Response Spectrum Functions

Table 4.8 - Functions - Response Spectrum - User Defined

Name	Period sec	Value	Damping Ratio
NSR-10	0	0.8125	0.05
NSR-10	0.1	0.8125	
NSR-10	0.2	0.8125	
NSR-10	0.3	0.8125	
NSR-10	0.4	0.8125	
NSR-10	0.5	0.8125	
NSR-10	0.6	0.8125	
NSR-10	0.7	0.8125	
NSR-10	0.8	0.7125	
NSR-10	0.9	0.6333	
NSR-10	1	0.57	
NSR-10	1.2	0.475	
NSR-10	1.5	0.38	
NSR-10	1.7	0.3353	
NSR-10	2	0.285	
NSR-10	2.5	0.228	
NSR-10	3	0.19	
NSR-10	3.5	0.1629	
NSR-10	4	0.1425	
NSR-10	5	0.104	
NSR-10	8	0.0406	
NSR-10	11	0.0215	
NSR-10	15	0.0116	

4.6 Load Cases

Table 4.9 - Load Case Definitions - Summary

Name	Type	Notes
Modal	Modal - Eigen	
D	Linear Static	
L	Linear Static	
SD	Linear Static	
ADEEx	Response Spectrum	
ADEEy	Response Spectrum	

Table 4.9 - Load Case Definitions - Summary (continued)

Name	Type	Notes
Lr	Linear Static	
W	Linear Static	
FHE-X	Linear Static	
FHE-Y	Linear Static	
FHE-Y_{der}	Linear Static	
FHE-X_{der}	Linear Static	
H	Linear Static	
G	Linear Static	

4.7 Load Combinations

Table 4.10 - Load Combination Definitions (Part 1 of 2)

Name	Type	Is Auto	Load Name	Mode	SF
(B.2.4-1)	Linear Add	No	D		1.4
(B.2.4-1)			SD		1.4
(B.2.4-2A)	Linear Add	No	D		1.2
(B.2.4-2A)			SD		1.2
(B.2.4-2A)			H		1.6
(B.2.4-2A)			L		1.6
(B.2.4-2A)			Lr		0.5
(B.2.4-2B)	Linear Add	No	D		1.2
(B.2.4-2B)			SD		1.2
(B.2.4-2B)			H		1.6
(B.2.4-2B)			L		1.6
(B.2.4-2B)			G		0.5
(B.2.4-3A)	Linear Add	No	D		1.2
(B.2.4-3A)			SD		1.2
(B.2.4-3A)			L		1
(B.2.4-3A)			Lr		1.6
(B.2.4-3B)	Linear Add	No	D		1.2
(B.2.4-3B)			SD		1.2
(B.2.4-3B)			W		0.5
(B.2.4-3B)			Lr		1.6
(B.2.4-3C)	Linear Add	No	D		1.2
(B.2.4-3C)			SD		1.2
(B.2.4-3C)			W		-0.5
(B.2.4-3C)			Lr		1.6
(B.2.4-3D)	Linear Add	No	D		1.2
(B.2.4-3D)			SD		1.2
(B.2.4-3D)			L		1
(B.2.4-3D)			G		1.6
(B.2.4-3E)	Linear Add	No	D		1.2
(B.2.4-3E)			SD		1.2
(B.2.4-3E)			G		1.6
(B.2.4-3E)			W		0.5
(B.2.4-3F)	Linear Add	No	D		1.2

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
(B.2.4-3F)			SD		1.2
(B.2.4-3F)			G		1.6
(B.2.4-3F)			W		-0.5
(B.2.4-4A)	Linear Add	No	D		1.2
(B.2.4-4A)			SD		1.2
(B.2.4-4A)			L		1
(B.2.4-4A)			W		1
(B.2.4-4A)			Lr		0.5
(B.2.4-4B)	Linear Add	No	D		1.2
(B.2.4-4B)			SD		1.2
(B.2.4-4B)			L		1
(B.2.4-4B)			W		-1
(B.2.4-4B)			Lr		0.5
(B.2.4-4C)	Linear Add	No	D		1.2
(B.2.4-4C)			SD		1.2
(B.2.4-4C)			L		1
(B.2.4-4C)			W		1
(B.2.4-4C)			G		0.5
(B.2.4-4D)	Linear Add	No	D		1.2
(B.2.4-4D)			SD		1.2
(B.2.4-4D)			L		1
(B.2.4-4D)			W		-1
(B.2.4-4D)			G		0.5
(B.2.4-5A1)	Linear Add	No	D		1.2
(B.2.4-5A1)			SD		1.2
(B.2.4-5A1)			L		1
(B.2.4-5A1)			FHE_X / R		1
(B.2.4-5A1)			FHE_Y / R		0.3
(B.2.4-5A2)	Linear Add	No	D		1.2
(B.2.4-5A2)			SD		1.2
(B.2.4-5A2)			L		1
(B.2.4-5A2)			FHE_X / R		-1
(B.2.4-5A2)			FHE_Y / R		-0.3
(B.2.4-5A3)	Linear Add	No	D		1.2
(B.2.4-5A3)			SD		1.2
(B.2.4-5A3)			L		1
(B.2.4-5A3)			FHE_X / R		-1
(B.2.4-5A3)			FHE_Y / R		0.3
(B.2.4-5A4)	Linear Add	No	D		1.2
(B.2.4-5A4)			SD		1.2
(B.2.4-5A4)			L		1
(B.2.4-5A4)			FHE_X / R		1
(B.2.4-5A4)			FHE_Y / R		-0.3
(B.2.4-5B1)	Linear Add	No	D		1.2
(B.2.4-5B1)			SD		1.2
(B.2.4-5B1)			L		1

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
(B.2.4-5B1)			FHE_X / R		0.3
(B.2.4-5B1)			FHE_Y / R		1
(B.2.4-5B2)	Linear Add	No	D		1.2
(B.2.4-5B2)			SD		1.2
(B.2.4-5B2)			L		1
(B.2.4-5B2)			FHE_X / R		-0.3
(B.2.4-5B2)			FHE_Y / R		-1
(B.2.4-5B3)	Linear Add	No	D		1.2
(B.2.4-5B3)			SD		1.2
(B.2.4-5B3)			L		1
(B.2.4-5B3)			FHE_X / R		0.3
(B.2.4-5B3)			FHE_Y / R		-1
(B.2.4-5B4)	Linear Add	No	D		1.2
(B.2.4-5B4)			SD		1.2
(B.2.4-5B4)			L		1
(B.2.4-5B4)			FHE_X / R		-0.3
(B.2.4-5B4)			FHE_Y / R		1
(B.2.4-6A)	Linear Add	No	D		0.9
(B.2.4-6A)			SD		0.9
(B.2.4-6A)			W		1
(B.2.4-6A)			H		1.6
(B.2.4-6B)	Linear Add	No	D		0.9
(B.2.4-6B)			SD		0.9
(B.2.4-6B)			W		-1
(B.2.4-6B)			H		1.6
(B.2.4-7A1)	Linear Add	No	D		0.9
(B.2.4-7A1)			SD		0.9
(B.2.4-7A1)			H		1.6
(B.2.4-7A1)			FHE_X / R		1
(B.2.4-7A1)			FHE_Y / R		0.3
(B.2.4-7A2)	Linear Add	No	D		0.9
(B.2.4-7A2)			SD		0.9
(B.2.4-7A2)			H		1.6
(B.2.4-7A2)			FHE_X / R		-1
(B.2.4-7A2)			FHE_Y / R		-0.3
(B.2.4-7A3)	Linear Add	No	D		0.9
(B.2.4-7A3)			SD		0.9
(B.2.4-7A3)			H		1.6
(B.2.4-7A3)			FHE_X / R		-1
(B.2.4-7A3)			FHE_Y / R		0.3
(B.2.4-7A4)	Linear Add	No	D		0.9
(B.2.4-7A4)			SD		0.9
(B.2.4-7A4)			H		1.6
(B.2.4-7A4)			FHE_X / R		1
(B.2.4-7A4)			FHE_Y / R		-0.3
(B.2.4-7B1)	Linear Add	No	D		0.9

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
(B.2.4-7B1)			SD		0.9
(B.2.4-7B1)			H		1.6
(B.2.4-7B1)			FHE_X / R		0.3
(B.2.4-7B1)			FHE_Y / R		1
(B.2.4-7B2)	Linear Add	No	D		0.9
(B.2.4-7B2)			SD		0.9
(B.2.4-7B2)			H		1.6
(B.2.4-7B2)			FHE_X / R		-0.3
(B.2.4-7B2)			FHE_Y / R		-1
(B.2.4-7B3)	Linear Add	No	D		0.9
(B.2.4-7B3)			SD		0.9
(B.2.4-7B3)			H		1.6
(B.2.4-7B3)			FHE_X / R		0.3
(B.2.4-7B3)			FHE_Y / R		-1
(B.2.4-7B4)	Linear Add	No	D		0.9
(B.2.4-7B4)			SD		0.9
(B.2.4-7B4)			H		1.6
(B.2.4-7B4)			FHE_X / R		-0.3
(B.2.4-7B4)			FHE_Y / R		1
(C5)	Linear Add	No	D		1
(C5)			SD		1
(C6)	Linear Add	No	D		1
(C6)			SD		1
(C6)			L		1
(C7.1)	Linear Add	No	D		1
(C7.1)			SD		1
(C7.1)			Lr		1
(C7.2)	Linear Add	No	D		1
(C7.2)			SD		1
(C7.2)			G		1
(C8.1)	Linear Add	No	D		1
(C8.1)			SD		1
(C8.1)			L		0.75
(C8.1)			Lr		0.75
(C8.2)	Linear Add	No	D		1
(C8.2)			SD		1
(C8.2)			L		0.75
(C8.2)			G		0.75
(C9.1)	Linear Add	No	D		1
(C9.1)			SD		1
(C9.1)			W		1
(C9.2)	Linear Add	No	D		1
(C9.2)			SD		1
(C9.2)			W		-1
(C10.A1)	Linear Add	No	D		1
(C10.A1)			SD		1

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
(C10.A1)			FHE_X / R		0.7
(C10.A1)			FHE_Y / R		0.21
(C10.A2)	Linear Add	No	D		1
(C10.A2)			SD		1
(C10.A2)			FHE_X / R		-0.7
(C10.A2)			FHE_Y / R		-0.21
(C10.A3)	Linear Add	No	D		1
(C10.A3)			SD		1
(C10.A3)			FHE_X / R		0.7
(C10.A3)			FHE_Y / R		-0.21
(C10.A4)	Linear Add	No	D		1
(C10.A4)			SD		1
(C10.A4)			FHE_X / R		-0.7
(C10.A4)			FHE_Y / R		0.21
(C10.B1)	Linear Add	No	D		1
(C10.B1)			SD		1
(C10.B1)			FHE_X / R		0.21
(C10.B1)			FHE_Y / R		0.7
(C10.B2)	Linear Add	No	D		1
(C10.B2)			SD		1
(C10.B2)			FHE_X / R		-0.21
(C10.B2)			FHE_Y / R		-0.7
(C10.B3)	Linear Add	No	D		1
(C10.B3)			SD		1
(C10.B3)			FHE_X / R		0.21
(C10.B3)			FHE_Y / R		-0.7
(C10.B4)	Linear Add	No	D		1
(C10.B4)			SD		1
(C10.B4)			FHE_X / R		-0.21
(C10.B4)			FHE_Y / R		0.7
(C11.1)	Linear Add	No	D		1
(C11.1)			SD		1
(C11.1)			W		0.75
(C11.1)			L		0.75
(C11.1)			Lr		0.75
(C11.2)	Linear Add	No	D		1
(C11.2)			SD		1
(C11.2)			W		-0.75
(C11.2)			L		0.75
(C11.2)			Lr		0.75
(C11.3)	Linear Add	No	D		1
(C11.3)			SD		1
(C11.3)			W		0.75
(C11.3)			L		0.75
(C11.3)			G		0.75
(C11.4)	Linear Add	No	D		1

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
(C11.4)			SD		1
(C11.4)			W		-0.75
(C11.4)			L		0.75
(C11.4)			G		0.75
(C12.A1)	Linear Add	No	D		1
(C12.A1)			SD		1
(C12.A1)			L		0.75
(C12.A1)			Lr		0.75
(C12.A1)			FHE_X / R		0.525
(C12.A1)			FHE_Y / R		0.1575
(C12.A2)	Linear Add	No	D		1
(C12.A2)			SD		1
(C12.A2)			L		0.75
(C12.A2)			Lr		0.75
(C12.A2)			FHE_X / R		-0.525
(C12.A2)			FHE_Y / R		-0.1575
(C12.A3)	Linear Add	No	D		1
(C12.A3)			SD		1
(C12.A3)			L		0.75
(C12.A3)			Lr		0.75
(C12.A3)			FHE_X / R		0.525
(C12.A3)			FHE_Y / R		-0.1575
(C12.A4)	Linear Add	No	D		1
(C12.A4)			SD		1
(C12.A4)			L		0.75
(C12.A4)			Lr		0.75
(C12.A4)			FHE_X / R		-0.525
(C12.A4)			FHE_Y / R		0.1575
(C12.B1)	Linear Add	No	D		1
(C12.B1)			SD		1
(C12.B1)			L		0.75
(C12.B1)			Lr		0.75
(C12.B1)			FHE_X / R		0.1575
(C12.B1)			FHE_Y / R		0.525
(C12.B2)	Linear Add	No	D		1
(C12.B2)			SD		1
(C12.B2)			L		0.75
(C12.B2)			Lr		0.75
(C12.B2)			FHE_X / R		-0.1575
(C12.B2)			FHE_Y / R		-0.525
(C12.B3)	Linear Add	No	D		1
(C12.B3)			SD		1
(C12.B3)			L		0.75
(C12.B3)			Lr		0.75
(C12.B3)			FHE_X / R		0.1575
(C12.B3)			FHE_Y / R		-0.525

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
(C12.B4)	Linear Add	No	D		1
(C12.B4)			SD		1
(C12.B4)			L		0.75
(C12.B4)			Lr		0.75
(C12.B4)			FHE_X / R		-0.1575
(C12.B4)			FHE_Y / R		0.525
(C12.C1)	Linear Add	No	D		1
(C12.C1)			SD		1
(C12.C1)			L		0.75
(C12.C1)			G		0.75
(C12.C1)			FHE_X / R		0.525
(C12.C1)			FHE_Y / R		0.1575
(C12.C2)	Linear Add	No	D		1
(C12.C2)			SD		1
(C12.C2)			L		0.75
(C12.C2)			G		0.75
(C12.C2)			FHE_X / R		-0.525
(C12.C2)			FHE_Y / R		-0.1575
(C12.C3)	Linear Add	No	D		1
(C12.C3)			SD		1
(C12.C3)			L		0.75
(C12.C3)			G		0.75
(C12.C3)			FHE_X / R		0.525
(C12.C3)			FHE_Y / R		-0.1575
(C12.C4)	Linear Add	No	D		1
(C12.C4)			SD		1
(C12.C4)			L		0.75
(C12.C4)			G		0.75
(C12.C4)			FHE_X / R		-0.525
(C12.C4)			FHE_Y / R		0.1575
(C12.D1)	Linear Add	No	D		1
(C12.D1)			SD		1
(C12.D1)			L		0.75
(C12.D1)			G		0.75
(C12.D1)			FHE_X / R		0.1575
(C12.D1)			FHE_Y / R		0.525
(C12.D2)	Linear Add	No	D		1
(C12.D2)			SD		1
(C12.D2)			L		0.75
(C12.D2)			G		0.75
(C12.D2)			FHE_X / R		-0.1575
(C12.D2)			FHE_Y / R		-0.525
(C12.D3)	Linear Add	No	D		1
(C12.D3)			SD		1
(C12.D3)			L		0.75
(C12.D3)			G		0.75

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
(C12.D3)			FHE_X / R		0.1575
(C12.D3)			FHE_Y / R		-0.525
(C12.D4)	Linear Add	No	D		1
(C12.D4)			SD		1
(C12.D4)			L		0.75
(C12.D4)			G		0.75
(C12.D4)			FHE_X / R		-0.1575
(C12.D4)			FHE_Y / R		0.525
CIM	Envelope	No	(C5)		1
CIM			(C6)		1
CIM			(C7.1)		1
CIM			(C7.2)		1
CIM			(C8.1)		1
CIM			(C8.2)		1
CIM			(C9.1)		1
CIM			(C9.2)		1
CIM			(C10.A1)		1
CIM			(C10.A2)		1
CIM			(C10.A3)		1
CIM			(C10.A4)		1
CIM			(C10.B1)		1
CIM			(C10.B2)		1
CIM			(C10.B3)		1
CIM			(C10.B4)		1
CIM			(C11.1)		1
CIM			(C11.2)		1
CIM			(C11.3)		1
CIM			(C11.4)		1
CIM			(C12.A1)		1
CIM			(C12.A2)		1
CIM			(C12.A3)		1
CIM			(C12.A4)		1
CIM			(C12.B1)		1
CIM			(C12.B2)		1
CIM			(C12.B3)		1
CIM			(C12.B4)		1
CIM			(C12.C1)		1
CIM			(C12.C2)		1
CIM			(C12.C3)		1
CIM			(C12.C4)		1
CIM			(C12.D1)		1
CIM			(C12.D2)		1
CIM			(C12.D3)		1
CIM			(C12.D4)		1
DER1: D+0.3FsX+FsY	Linear Add	No	SD		1
DER1: D+0.3FsX+FsY			D		1

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
DER1: D+0.3FsX+FsY			FHE-Y_{der}		1
DER1: D+0.3FsX+FsY			FHE-X_{der}		0.3
DER2: D+FsX+0.3FsY	Linear Add	No	SD		1
DER2: D+FsX+0.3FsY			D		1
DER2: D+FsX+0.3FsY			FHE-Y_{der}		0.3
DER2: D+FsX+0.3FsY			FHE-X_{der}		1
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Linear Add	No	SD		1
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY			D		1
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY			L		0.75
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY			FHE-Y_{der}		0.75
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY			FHE-X_{der}		0.225
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY			Lr		0.75
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Linear Add	No	SD		1
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY			D		1
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY			L		0.75
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY			FHE-Y_{der}		0.225
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY			FHE-X_{der}		0.75
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY			Lr		0.75
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Linear Add	No	SD		1
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY			D		1
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY			L		0.75
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY			FHE-Y_{der}		0.75
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY			FHE-X_{der}		0.225
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY			G		0.75
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Linear Add	No	SD		1
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY			D		1
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY			L		0.75
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY			FHE-Y_{der}		0.225
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY			FHE-X_{der}		0.75
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY			G		0.75
DER7: 0.6D+0.3FsX+Fsy	Linear Add	No	SD		0.6
DER7: 0.6D+0.3FsX+Fsy			D		0.6
DER7: 0.6D+0.3FsX+Fsy			FHE-Y_{der}		1
DER7: 0.6D+0.3FsX+Fsy			FHE-X_{der}		0.3
DER8: 0.6D+FsX+0.3Fsy	Linear Add	No	SD		0.6
DER8: 0.6D+FsX+0.3Fsy			D		0.6
DER8: 0.6D+FsX+0.3Fsy			FHE-Y_{der}		0.3
DER8: 0.6D+FsX+0.3Fsy			FHE-X_{der}		1
DERIVAS X	Envelope	No	DER8: 0.6D+FsX+0.3Fsy		1
DERIVAS X			DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY		1
DERIVAS X			DER2: D+FsX+0.3FsY		1
DERIVAS X			DER6: D+0.75L+0.75G+0.75FsX+0.225FsY		1
DERIVAS Y	Envelope	No	DER7: 0.6D+0.3FsX+Fsy		1
DERIVAS Y			DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY		1
DERIVAS Y			DER1: D+0.3FsX+FsY		1
DERIVAS Y			DER5: D+0.75L+0.75G+0.225FsX+0.75FsY		1

Table 4.10 - Load Combination Definitions (Part 1 of 2, continued)

Name	Type	Is Auto	Load Name	Mode	SF
DStlD1	Linear Add	Yes	D		1
DStlD1			SD		1
DStlD2	Linear Add	Yes	D		1
DStlD2			L		1
DStlD2			SD		1
FHE_X / R	Linear Add	No	FHE-X		0.2116
FHE_Y / R	Linear Add	No	FHE-Y		0.21164
L+D	Linear Add	No	D		1
L+D			SD		1
L+D			Lr		1
Seismic	Envelope	No	(B.2.4-1)		1
Seismic			(B.2.4-2A)		1
Seismic			(B.2.4-2B)		1
Seismic			(B.2.4-3A)		1
Seismic			(B.2.4-3B)		1
Seismic			(B.2.4-3C)		1
Seismic			(B.2.4-3D)		1
Seismic			(B.2.4-3E)		1
Seismic			(B.2.4-3F)		1
Seismic			(B.2.4-4A)		1
Seismic			(B.2.4-4B)		1
Seismic			(B.2.4-4C)		1
Seismic			(B.2.4-4D)		1
Seismic			(B.2.4-5A1)		1
Seismic			(B.2.4-5A2)		1
Seismic			(B.2.4-5A3)		1
Seismic			(B.2.4-5A4)		1
Seismic			(B.2.4-5B1)		1
Seismic			(B.2.4-5B2)		1
Seismic			(B.2.4-5B3)		1
Seismic			(B.2.4-5B4)		1
Seismic			(B.2.4-6A)		1
Seismic			(B.2.4-6B)		1
Seismic			(B.2.4-7A1)		1
Seismic			(B.2.4-7A2)		1
Seismic			(B.2.4-7A3)		1
Seismic			(B.2.4-7A4)		1
Seismic			(B.2.4-7B1)		1
Seismic			(B.2.4-7B2)		1
Seismic			(B.2.4-7B3)		1
Seismic			(B.2.4-7B4)		1

Table 4.10 - Load Combination Definitions (Part 2 of 2)

Name	Notes
(B.2.4-1)	
(B.2.4-1)	
(B.2.4-2A)	
(B.2.4-2A)	
(B.2.4-2A)	
(B.2.4-2A)	
(B.2.4-2A)	
(B.2.4-2B)	
(B.2.4-2B)	
(B.2.4-2B)	
(B.2.4-2B)	
(B.2.4-2B)	
(B.2.4-3A)	
(B.2.4-3A)	
(B.2.4-3A)	
(B.2.4-3A)	
(B.2.4-3B)	
(B.2.4-3B)	
(B.2.4-3B)	
(B.2.4-3B)	
(B.2.4-3C)	
(B.2.4-3C)	
(B.2.4-3C)	
(B.2.4-3C)	
(B.2.4-3D)	
(B.2.4-3D)	
(B.2.4-3D)	
(B.2.4-3D)	
(B.2.4-3E)	
(B.2.4-3E)	
(B.2.4-3E)	
(B.2.4-3E)	
(B.2.4-3F)	
(B.2.4-3F)	
(B.2.4-3F)	
(B.2.4-3F)	
(B.2.4-4A)	
(B.2.4-4A)	
(B.2.4-4A)	
(B.2.4-4A)	
(B.2.4-4A)	
(B.2.4-4B)	
(B.2.4-4B)	
(B.2.4-4B)	
(B.2.4-4B)	
(B.2.4-4B)	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
(B.2.4-4C)	
(B.2.4-4C)	
(B.2.4-4C)	
(B.2.4-4C)	
(B.2.4-4C)	
(B.2.4-4D)	
(B.2.4-4D)	
(B.2.4-4D)	
(B.2.4-4D)	
(B.2.4-4D)	
(B.2.4-5A1)	
(B.2.4-5A1)	
(B.2.4-5A1)	
(B.2.4-5A1)	
(B.2.4-5A1)	
(B.2.4-5A2)	
(B.2.4-5A2)	
(B.2.4-5A2)	
(B.2.4-5A2)	
(B.2.4-5A2)	
(B.2.4-5A3)	
(B.2.4-5A3)	
(B.2.4-5A3)	
(B.2.4-5A3)	
(B.2.4-5A3)	
(B.2.4-5A4)	
(B.2.4-5A4)	
(B.2.4-5A4)	
(B.2.4-5A4)	
(B.2.4-5A4)	
(B.2.4-5B1)	
(B.2.4-5B1)	
(B.2.4-5B1)	
(B.2.4-5B1)	
(B.2.4-5B1)	
(B.2.4-5B2)	
(B.2.4-5B2)	
(B.2.4-5B2)	
(B.2.4-5B2)	
(B.2.4-5B2)	
(B.2.4-5B3)	
(B.2.4-5B3)	
(B.2.4-5B3)	
(B.2.4-5B3)	
(B.2.4-5B3)	
(B.2.4-5B4)	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
(B.2.4-5B4)	
(B.2.4-5B4)	
(B.2.4-5B4)	
(B.2.4-5B4)	
(B.2.4-6A)	
(B.2.4-6A)	
(B.2.4-6A)	
(B.2.4-6A)	
(B.2.4-6B)	
(B.2.4-6B)	
(B.2.4-6B)	
(B.2.4-6B)	
(B.2.4-7A1)	
(B.2.4-7A1)	
(B.2.4-7A1)	
(B.2.4-7A1)	
(B.2.4-7A1)	
(B.2.4-7A2)	
(B.2.4-7A2)	
(B.2.4-7A2)	
(B.2.4-7A2)	
(B.2.4-7A2)	
(B.2.4-7A3)	
(B.2.4-7A3)	
(B.2.4-7A3)	
(B.2.4-7A3)	
(B.2.4-7A3)	
(B.2.4-7A4)	
(B.2.4-7A4)	
(B.2.4-7A4)	
(B.2.4-7A4)	
(B.2.4-7A4)	
(B.2.4-7B1)	
(B.2.4-7B1)	
(B.2.4-7B1)	
(B.2.4-7B1)	
(B.2.4-7B1)	
(B.2.4-7B2)	
(B.2.4-7B2)	
(B.2.4-7B2)	
(B.2.4-7B2)	
(B.2.4-7B2)	
(B.2.4-7B3)	
(B.2.4-7B3)	
(B.2.4-7B3)	
(B.2.4-7B3)	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
(B.2.4-7B3)	
(B.2.4-7B4)	
(B.2.4-7B4)	
(B.2.4-7B4)	
(B.2.4-7B4)	
(B.2.4-7B4)	
(C5)	
(C5)	
(C6)	
(C6)	
(C6)	
(C7.1)	
(C7.1)	
(C7.1)	
(C7.2)	
(C7.2)	
(C7.2)	
(C8.1)	
(C8.1)	
(C8.1)	
(C8.1)	
(C8.2)	
(C8.2)	
(C8.2)	
(C8.2)	
(C9.1)	
(C9.1)	
(C9.1)	
(C9.2)	
(C9.2)	
(C9.2)	
(C10.A1)	
(C10.A1)	
(C10.A1)	
(C10.A1)	
(C10.A2)	
(C10.A2)	
(C10.A2)	
(C10.A2)	
(C10.A3)	
(C10.A3)	
(C10.A3)	
(C10.A3)	
(C10.A4)	
(C10.A4)	
(C10.A4)	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
(C10.A4)	
(C10.B1)	
(C10.B1)	
(C10.B1)	
(C10.B1)	
(C10.B2)	
(C10.B2)	
(C10.B2)	
(C10.B2)	
(C10.B3)	
(C10.B3)	
(C10.B3)	
(C10.B3)	
(C10.B4)	
(C10.B4)	
(C10.B4)	
(C10.B4)	
(C11.1)	
(C11.1)	
(C11.1)	
(C11.1)	
(C11.1)	
(C11.2)	
(C11.2)	
(C11.2)	
(C11.2)	
(C11.2)	
(C11.3)	
(C11.3)	
(C11.3)	
(C11.3)	
(C11.3)	
(C11.4)	
(C11.4)	
(C11.4)	
(C11.4)	
(C11.4)	
(C12.A1)	
(C12.A1)	
(C12.A1)	
(C12.A1)	
(C12.A1)	
(C12.A1)	
(C12.A2)	
(C12.A2)	
(C12.A2)	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
(C12.A2)	
(C12.A2)	
(C12.A2)	
(C12.A3)	
(C12.A3)	
(C12.A3)	
(C12.A3)	
(C12.A3)	
(C12.A3)	
(C12.A4)	
(C12.A4)	
(C12.A4)	
(C12.A4)	
(C12.A4)	
(C12.A4)	
(C12.B1)	
(C12.B1)	
(C12.B1)	
(C12.B1)	
(C12.B1)	
(C12.B1)	
(C12.B2)	
(C12.B2)	
(C12.B2)	
(C12.B2)	
(C12.B2)	
(C12.B2)	
(C12.B3)	
(C12.B3)	
(C12.B3)	
(C12.B3)	
(C12.B3)	
(C12.B3)	
(C12.B4)	
(C12.B4)	
(C12.B4)	
(C12.B4)	
(C12.B4)	
(C12.B4)	
(C12.C1)	
(C12.C1)	
(C12.C1)	
(C12.C1)	
(C12.C1)	
(C12.C1)	
(C12.C2)	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
(C12.C2)	
(C12.C2)	
(C12.C2)	
(C12.C2)	
(C12.C2)	
(C12.C3)	
(C12.C3)	
(C12.C3)	
(C12.C3)	
(C12.C3)	
(C12.C3)	
(C12.C4)	
(C12.C4)	
(C12.C4)	
(C12.C4)	
(C12.C4)	
(C12.C4)	
(C12.D1)	
(C12.D1)	
(C12.D1)	
(C12.D1)	
(C12.D1)	
(C12.D1)	
(C12.D2)	
(C12.D2)	
(C12.D2)	
(C12.D2)	
(C12.D2)	
(C12.D2)	
(C12.D3)	
(C12.D3)	
(C12.D3)	
(C12.D3)	
(C12.D3)	
(C12.D3)	
(C12.D4)	
(C12.D4)	
(C12.D4)	
(C12.D4)	
(C12.D4)	
(C12.D4)	
CIM	
CIM	
CIM	
CIM	
CIM	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
CIM	
DER1: D+0.3FsX+FsY	
DER1: D+0.3FsX+FsY	
DER1: D+0.3FsX+FsY	
DER1: D+0.3FsX+FsY	
DER2: D+FsX+0.3FsY	
DER2: D+FsX+0.3FsY	
DER2: D+FsX+0.3FsY	
DER2: D+FsX+0.3FsY	
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	
DER7: 0.6D+0.3FsX+Fsy	
DER7: 0.6D+0.3FsX+Fsy	
DER7: 0.6D+0.3FsX+Fsy	
DER7: 0.6D+0.3FsX+Fsy	
DER8: 0.6D+FsX+0.3Fsy	
DER8: 0.6D+FsX+0.3Fsy	
DER8: 0.6D+FsX+0.3Fsy	
DER8: 0.6D+FsX+0.3Fsy	
DERIVAS X	
DERIVAS X	
DERIVAS X	
DERIVAS X	
DERIVAS Y	
DERIVAS Y	
DERIVAS Y	
DERIVAS Y	
DStlD1	Dead [Deflections]
DStlD1	
DStlD2	Dead + Live [Deflections]
DStlD2	
DStlD2	
FHE_X / R	
FHE_Y / R	
L+D	
L+D	
L+D	
Seismic	
Seismic	
Seismic	

Table 4.10 - Load Combination Definitions (Part 2 of 2, continued)

Name	Notes
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	
Seismic	

5 Analysis Results

This chapter provides analysis results.

5.1 Structure Results

Table 5.1 - Base Reactions (Part 1 of 2)

Output Case	Case Type	Step Type	Step Number	Step Label	FX kgf	FY kgf	FZ kgf
D	LinStatic				0	0	13567.73
L	LinStatic				0	0	11458.52
SD	LinStatic				0	0	6875.11
ADEEx	LinRespSpec	Max			13028.35	0	0
ADEEy	LinRespSpec	Max			0	11761.38	0
Lr	LinStatic				0	0	0
W	LinStatic				0	0	0
FHE-X	LinStatic	Max			-18479.45	0	0
FHE-X	LinStatic	Min			-18479.45	0	0
FHE-Y	LinStatic	Max			0	-18479.45	0
FHE-Y	LinStatic	Min			0	-18479.45	0
$FHE\text{-}Y_{der}$	LinStatic				0	-14784.54	0
$FHE\text{-}X_{der}$	LinStatic				-14784.54	0	0
H	LinStatic				0	0	0
G	LinStatic				0	0	0
DERIVAS X	Combination	Max			-11088.41	-3326.52	29036.73
DERIVAS X	Combination	Min			-14784.54	-4435.36	12265.71
(B.2.4-5A2)	Combination	Max			3910.25	1173.3	35989.93
(B.2.4-5A2)	Combination	Min			3910.25	1173.3	35989.93
(B.2.4-1)	Combination				0	0	28619.98
(B.2.4-2A)	Combination				0	0	42865.04
(B.2.4-2B)	Combination				0	0	42865.04
(B.2.4-3A)	Combination				0	0	35989.93
(B.2.4-3C)	Combination				0	0	24531.41
(B.2.4-3D)	Combination				0	0	35989.93
(B.2.4-3E)	Combination				0	0	24531.41
(B.2.4-3F)	Combination				0	0	24531.41
(B.2.4-4A)	Combination				0	0	35989.93
(B.2.4-4B)	Combination				0	0	35989.93
(B.2.4-4C)	Combination				0	0	35989.93
(B.2.4-4D)	Combination				0	0	35989.93
FHE_X / R	Combination	Max			-3910.25	0	0
FHE_X / R	Combination	Min			-3910.25	0	0
FHE_Y / R	Combination	Max			0	-3911	0
FHE_Y / R	Combination	Min			0	-3911	0
(B.2.4-5A1)	Combination	Max			-3910.25	-1173.3	35989.93
(B.2.4-5A1)	Combination	Min			-3910.25	-1173.3	35989.93
(B.2.4-5A3)	Combination	Max			3910.25	-1173.3	35989.93
(B.2.4-5A3)	Combination	Min			3910.25	-1173.3	35989.93
(B.2.4-5A4)	Combination	Max			-3910.25	1173.3	35989.93
(B.2.4-5A4)	Combination	Min			-3910.25	1173.3	35989.93

Table 5.1 - Base Reactions (Part 1 of 2, continued)

Output Case	Case Type	Step Type	Step Number	Step Label	FX kgf	FY kgf	FZ kgf
(B.2.4-5B1)	Combination	Max			-1173.08	-3911	35989.93
(B.2.4-5B1)	Combination	Min			-1173.08	-3911	35989.93
(B.2.4-5B2)	Combination	Max			1173.08	3911	35989.93
(B.2.4-5B2)	Combination	Min			1173.08	3911	35989.93
(B.2.4-5B3)	Combination	Max			-1173.08	3911	35989.93
(B.2.4-5B3)	Combination	Min			-1173.08	3911	35989.93
(B.2.4-5B4)	Combination	Max			1173.08	-3911	35989.93
(B.2.4-5B4)	Combination	Min			1173.08	-3911	35989.93
(B.2.4-6A)	Combination				0	0	18398.56
(B.2.4-6B)	Combination				0	0	18398.56
(B.2.4-7A1)	Combination	Max			-3910.25	-1173.3	18398.56
(B.2.4-7A1)	Combination	Min			-3910.25	-1173.3	18398.56
(B.2.4-7A2)	Combination	Max			3910.25	1173.3	18398.56
(B.2.4-7A2)	Combination	Min			3910.25	1173.3	18398.56
(B.2.4-7A3)	Combination	Max			3910.25	-1173.3	18398.56
(B.2.4-7A3)	Combination	Min			3910.25	-1173.3	18398.56
(B.2.4-7A4)	Combination	Max			-3910.25	1173.3	18398.56
(B.2.4-7A4)	Combination	Min			-3910.25	1173.3	18398.56
(B.2.4-7B1)	Combination	Max			-1173.08	-3911	18398.56
(B.2.4-7B1)	Combination	Min			-1173.08	-3911	18398.56
(B.2.4-7B2)	Combination	Max			1173.08	3911	18398.56
(B.2.4-7B2)	Combination	Min			1173.08	3911	18398.56
(B.2.4-7B3)	Combination	Max			-1173.08	3911	18398.56
(B.2.4-7B3)	Combination	Min			-1173.08	3911	18398.56
(B.2.4-7B4)	Combination	Max			1173.08	-3911	18398.56
(B.2.4-7B4)	Combination	Min			1173.08	-3911	18398.56
Seismic	Combination	Max			3910.25	3911	42865.04
Seismic	Combination	Min			-3910.25	-3911	18398.56
(B.2.4-3B)	Combination				0	0	24531.41
L+D	Combination				0	0	20442.85
CIM	Combination	Max			2737.18	2737.7	31901.36
CIM	Combination	Min			-2737.18	-2737.7	20442.85
DER7: 0.6D+0.3FsX+Fsy	Combination				-4435.36	-14784.54	12265.71
DER8: 0.6D+FsX+0.3Fsy	Combination				-14784.54	-4435.36	12265.71
DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				-3326.52	-11088.41	29036.73
DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				-11088.41	-3326.52	29036.73
DER2: D+FsX+0.3FsY	Combination				-14784.54	-4435.36	20442.85
DER1: D+0.3FsX+FsY	Combination				-4435.36	-14784.54	20442.85
DERIVAS Y	Combination	Max			-3326.52	-11088.41	29036.73
DERIVAS Y	Combination	Min			-4435.36	-14784.54	12265.71
DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				-3326.52	-11088.41	29036.73
DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				-11088.41	-3326.52	29036.73
(C5)	Combination				0	0	20442.85
(C6)	Combination				0	0	31901.36
(C7.1)	Combination				0	0	20442.85

Table 5.1 - Base Reactions (Part 1 of 2, continued)

Output Case	Case Type	Step Type	Step Number	Step Label	FX kgf	FY kgf	FZ kgf
(C7.2)	Combination				0	0	20442.85
(C8.1)	Combination				0	0	29036.73
(C8.2)	Combination				0	0	29036.73
(C9.1)	Combination				0	0	20442.85
(C9.2)	Combination				0	0	20442.85
(C10.A1)	Combination	Max			-2737.18	-821.31	20442.85
(C10.A1)	Combination	Min			-2737.18	-821.31	20442.85
(C10.A2)	Combination	Max			2737.18	821.31	20442.85
(C10.A2)	Combination	Min			2737.18	821.31	20442.85
(C10.A3)	Combination	Max			-2737.18	821.31	20442.85
(C10.A3)	Combination	Min			-2737.18	821.31	20442.85
(C10.A4)	Combination	Max			2737.18	-821.31	20442.85
(C10.A4)	Combination	Min			2737.18	-821.31	20442.85
(C10.B1)	Combination	Max			-821.15	-2737.7	20442.85
(C10.B1)	Combination	Min			-821.15	-2737.7	20442.85
(C10.B2)	Combination	Max			821.15	2737.7	20442.85
(C10.B2)	Combination	Min			821.15	2737.7	20442.85
(C10.B3)	Combination	Max			-821.15	2737.7	20442.85
(C10.B3)	Combination	Min			-821.15	2737.7	20442.85
(C10.B4)	Combination	Max			821.15	-2737.7	20442.85
(C10.B4)	Combination	Min			821.15	-2737.7	20442.85
(C11.1)	Combination				0	0	29036.73
(C11.2)	Combination				0	0	29036.73
(C11.3)	Combination				0	0	29036.73
(C11.4)	Combination				0	0	29036.73
(C12.A1)	Combination	Max			-2052.88	-615.98	29036.73
(C12.A1)	Combination	Min			-2052.88	-615.98	29036.73
(C12.A2)	Combination	Max			2052.88	615.98	29036.73
(C12.A2)	Combination	Min			2052.88	615.98	29036.73
(C12.A3)	Combination	Max			-2052.88	615.98	29036.73
(C12.A3)	Combination	Min			-2052.88	615.98	29036.73
(C12.A4)	Combination	Max			2052.88	-615.98	29036.73
(C12.A4)	Combination	Min			2052.88	-615.98	29036.73
(C12.B1)	Combination	Max			-615.86	-2053.27	29036.73
(C12.B1)	Combination	Min			-615.86	-2053.27	29036.73
(C12.B2)	Combination	Max			615.86	2053.27	29036.73
(C12.B2)	Combination	Min			615.86	2053.27	29036.73
(C12.B3)	Combination	Max			-615.86	2053.27	29036.73
(C12.B3)	Combination	Min			-615.86	2053.27	29036.73
(C12.B4)	Combination	Max			615.86	-2053.27	29036.73
(C12.B4)	Combination	Min			615.86	-2053.27	29036.73
(C12.C1)	Combination	Max			-2052.88	-615.98	29036.73
(C12.C1)	Combination	Min			-2052.88	-615.98	29036.73
(C12.C2)	Combination	Max			2052.88	615.98	29036.73
(C12.C2)	Combination	Min			2052.88	615.98	29036.73

Table 5.1 - Base Reactions (Part 1 of 2, continued)

Output Case	Case Type	Step Type	Step Number	Step Label	FX kgf	FY kgf	FZ kgf
(C12.C3)	Combination	Max			-2052.88	615.98	29036.73
(C12.C3)	Combination	Min			-2052.88	615.98	29036.73
(C12.C4)	Combination	Max			2052.88	-615.98	29036.73
(C12.C4)	Combination	Min			2052.88	-615.98	29036.73
(C12.D1)	Combination	Max			-615.86	-2053.27	29036.73
(C12.D1)	Combination	Min			-615.86	-2053.27	29036.73
(C12.D2)	Combination	Max			615.86	2053.27	29036.73
(C12.D2)	Combination	Min			615.86	2053.27	29036.73
(C12.D3)	Combination	Max			-615.86	2053.27	29036.73
(C12.D3)	Combination	Min			-615.86	2053.27	29036.73
(C12.D4)	Combination	Max			615.86	-2053.27	29036.73
(C12.D4)	Combination	Min			615.86	-2053.27	29036.73
DStlD1	Combination				0	0	20442.85
DStlD2	Combination				0	0	31901.36

Table 5.1 - Base Reactions (Part 2 of 2)

MX kgf-cm	MY kgf-cm	MZ kgf-cm	X cm	Y cm	Z cm
1789857.46	-5840909.88	0	0	0	0
1523982.85	-4932891.84	0	0	0	0
914389.71	-2959735.11	0	0	0	0
0	3158948.38	1451106.29	0	0	0
2840807.65	0	5063275.63	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	-4468846.47	2362974.98	0	0	0
0	-4468846.47	2362974.98	0	0	0
4468846.47	0	-7955405.24	0	0	0
4468846.47	0	-7955405.24	0	0	0
3575313.87	0	-6364745.56	0	0	0
0	-3575313.87	1890505.14	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
4651679.93	-8855700.87	-14188.9	0	0	0
2695142.47	-15181799.28	-18918.53	0	0	0
4485343.17	-14548057.92	5099.59	0	0	0
4485343.17	-14548057.92	5099.59	0	0	0
3785946.04	-12320902.99	0	0	0	0
5683469.16	-18453400.94	0	0	0	0
5683469.16	-18453400.94	0	0	0	0
4769079.45	-15493665.83	0	0	0	0
3245096.61	-10560773.99	0	0	0	0
4769079.45	-15493665.83	0	0	0	0
3245096.61	-10560773.99	0	0	0	0
3245096.61	-10560773.99	0	0	0	0

Table 5.1 - Base Reactions (Part 2 of 2, continued)

MX kgf-cm	MY kgf-cm	MZ kgf-cm	X cm	Y cm	Z cm
4769079.45	-15493665.83	0	0	0	0
4769079.45	-15493665.83	0	0	0	0
4769079.45	-15493665.83	0	0	0	0
4769079.45	-15493665.83	0	0	0	0
0	-945607.91	500005.51	0	0	0
0	-945607.91	500005.51	0	0	0
945787.61	0	-1683683.65	0	0	0
945787.61	0	-1683683.65	0	0	0
5052815.74	-16439273.74	-5099.59	0	0	0
5052815.74	-16439273.74	-5099.59	0	0	0
5052815.74	-14548057.92	-1005110.6	0	0	0
5052815.74	-14548057.92	-1005110.6	0	0	0
4485343.17	-16439273.74	1005110.6	0	0	0
4485343.17	-16439273.74	1005110.6	0	0	0
5714867.07	-15777348.21	-1533682	0	0	0
5714867.07	-15777348.21	-1533682	0	0	0
3823291.84	-15209983.46	1533682	0	0	0
3823291.84	-15209983.46	1533682	0	0	0
3823291.84	-15777348.21	1833685.3	0	0	0
3823291.84	-15777348.21	1833685.3	0	0	0
5714867.07	-15209983.46	-1833685.3	0	0	0
5714867.07	-15209983.46	-1833685.3	0	0	0
2433822.46	-7920580.49	0	0	0	0
2433822.46	-7920580.49	0	0	0	0
2717558.74	-8866188.4	-5099.59	0	0	0
2717558.74	-8866188.4	-5099.59	0	0	0
2150086.17	-6974972.58	5099.59	0	0	0
2150086.17	-6974972.58	5099.59	0	0	0
2717558.74	-6974972.58	-1005110.6	0	0	0
2717558.74	-6974972.58	-1005110.6	0	0	0
2150086.17	-8866188.4	1005110.6	0	0	0
2150086.17	-8866188.4	1005110.6	0	0	0
3379610.07	-8204262.87	-1533682	0	0	0
3379610.07	-8204262.87	-1533682	0	0	0
1488034.84	-7636898.12	1533682	0	0	0
1488034.84	-7636898.12	1533682	0	0	0
1488034.84	-8204262.87	1833685.3	0	0	0
1488034.84	-8204262.87	1833685.3	0	0	0
3379610.07	-7636898.12	-1833685.3	0	0	0
3379610.07	-7636898.12	-1833685.3	0	0	0
5714867.07	-6974972.58	1833685.3	0	0	0
1488034.84	-18453400.94	-1833685.3	0	0	0
3245096.61	-10560773.99	0	0	0	0
2704247.17	-8800644.99	0	0	0	0
4343772.8	-8138719.45	1283579.71	0	0	0

Table 5.1 - Base Reactions (Part 2 of 2, continued)

MX kgf-cm	MY kgf-cm	MZ kgf-cm	X cm	Y cm	Z cm
2042195.84	-13733536.83	-1283579.71	0	0	0
5197862.18	-6352981.16	-5797594.01	0	0	0
2695142.47	-8855700.87	-18918.53	0	0	0
6528719.71	-13304759.49	-4348195.51	0	0	0
4651679.93	-15181799.28	-14188.9	0	0	0
3776841.33	-12375958.86	-18918.53	0	0	0
6279561.05	-9873239.15	-5797594.01	0	0	0
6528719.71	-6352981.16	-4348195.51	0	0	0
5197862.18	-13304759.49	-5797594.01	0	0	0
6528719.71	-13304759.49	-4348195.51	0	0	0
4651679.93	-15181799.28	-14188.9	0	0	0
2704247.17	-8800644.99	0	0	0	0
4228230.02	-13733536.83	0	0	0	0
2704247.17	-8800644.99	0	0	0	0
2704247.17	-8800644.99	0	0	0	0
3847234.31	-12500313.87	0	0	0	0
3847234.31	-12500313.87	0	0	0	0
2704247.17	-8800644.99	0	0	0	0
2704247.17	-8800644.99	0	0	0	0
2902862.57	-9462570.53	-3569.71	0	0	0
2902862.57	-9462570.53	-3569.71	0	0	0
2505631.77	-8138719.45	3569.71	0	0	0
2505631.77	-8138719.45	3569.71	0	0	0
2505631.77	-9462570.53	703577.42	0	0	0
2505631.77	-9462570.53	703577.42	0	0	0
2902862.57	-8138719.45	-703577.42	0	0	0
2902862.57	-8138719.45	-703577.42	0	0	0
3366298.5	-8999222.65	-1073577.4	0	0	0
3366298.5	-8999222.65	-1073577.4	0	0	0
2042195.84	-8602067.33	1073577.4	0	0	0
2042195.84	-8602067.33	1073577.4	0	0	0
2042195.84	-8999222.65	1283579.71	0	0	0
2042195.84	-8999222.65	1283579.71	0	0	0
3366298.5	-8602067.33	-1283579.71	0	0	0
3366298.5	-8602067.33	-1283579.71	0	0	0
3847234.31	-12500313.87	0	0	0	0
3847234.31	-12500313.87	0	0	0	0
3847234.31	-12500313.87	0	0	0	0
3847234.31	-12500313.87	0	0	0	0
3996195.86	-12996758.03	-2677.28	0	0	0
3996195.86	-12996758.03	-2677.28	0	0	0
3698272.76	-12003869.72	2677.28	0	0	0
3698272.76	-12003869.72	2677.28	0	0	0
3698272.76	-12996758.03	527683.06	0	0	0
3698272.76	-12996758.03	527683.06	0	0	0

Table 5.1 - Base Reactions (Part 2 of 2, continued)

MX kgf-cm	MY kgf-cm	MZ kgf-cm	X cm	Y cm	Z cm
3996195.86	-12003869.72	-527683.06	0	0	0
3996195.86	-12003869.72	-527683.06	0	0	0
4343772.8	-12649247.12	-805183.05	0	0	0
4343772.8	-12649247.12	-805183.05	0	0	0
3350695.81	-12351380.63	805183.05	0	0	0
3350695.81	-12351380.63	805183.05	0	0	0
3350695.81	-12649247.12	962684.78	0	0	0
3350695.81	-12649247.12	962684.78	0	0	0
4343772.8	-12351380.63	-962684.78	0	0	0
4343772.8	-12351380.63	-962684.78	0	0	0
3996195.86	-12996758.03	-2677.28	0	0	0
3996195.86	-12996758.03	-2677.28	0	0	0
3698272.76	-12003869.72	2677.28	0	0	0
3698272.76	-12003869.72	2677.28	0	0	0
3698272.76	-12996758.03	527683.06	0	0	0
3698272.76	-12996758.03	527683.06	0	0	0
3996195.86	-12003869.72	-527683.06	0	0	0
3996195.86	-12003869.72	-527683.06	0	0	0
4343772.8	-12649247.12	-805183.05	0	0	0
4343772.8	-12649247.12	-805183.05	0	0	0
3350695.81	-12351380.63	805183.05	0	0	0
3350695.81	-12351380.63	805183.05	0	0	0
3350695.81	-12649247.12	962684.78	0	0	0
3350695.81	-12649247.12	962684.78	0	0	0
4343772.8	-12351380.63	-962684.78	0	0	0
4343772.8	-12351380.63	-962684.78	0	0	0
2704247.17	-8800644.99	0	0	0	0
4228230.02	-13733536.83	0	0	0	0

5.2 Story Results

Table 5.2 - Story Drifts (Part 1 of 2)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.50	D	LinStatic				Y	2E-06	3
N + 2.50	L	LinStatic				Y	5E-06	3
N + 2.50	SD	LinStatic				Y	3E-06	3
N + 2.50	ADEEx	LinRespSpec	Max			X	0.001279	3
N + 2.50	ADEEy	LinRespSpec	Max			Y	0.001471	3
N + 2.50	FHE-X	LinStatic	Max			X	0.001737	3
N + 2.50	FHE-X	LinStatic	Min			X	0.001737	3
N + 2.50	FHE-Y	LinStatic	Max			Y	0.001856	3
N + 2.50	FHE-Y	LinStatic	Min			Y	0.001856	3
N + 2.50	$FHE\text{-}Y_{der}$	LinStatic				Y	0.001485	3
N + 2.50	$FHE\text{-}X_{der}$	LinStatic				X	0.00139	3
N + 2.50	DERIVAS X	Combination	Max			X	0.001391	1

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.50	DERIVAS X	Combination	Max			Y	0.000442	3
N + 2.50	DERIVAS X	Combination	Min			X	0.001046	1
N + 2.50	DERIVAS X	Combination	Min			Y	0.000324	3
N + 2.50	(B.2.4-5A2)	Combination	Max			X	0.000373	5
N + 2.50	(B.2.4-5A2)	Combination	Max			Y	0.00013	3
N + 2.50	(B.2.4-5A2)	Combination	Min			X	0.000373	5
N + 2.50	(B.2.4-5A2)	Combination	Min			Y	0.00013	3
N + 2.50	(B.2.4-1)	Combination				Y	8E-06	3
N + 2.50	(B.2.4-2A)	Combination				Y	1.5E-05	3
N + 2.50	(B.2.4-2B)	Combination				Y	1.5E-05	3
N + 2.50	(B.2.4-3A)	Combination				Y	1.2E-05	3
N + 2.50	(B.2.4-3C)	Combination				Y	7E-06	3
N + 2.50	(B.2.4-3D)	Combination				Y	1.2E-05	3
N + 2.50	(B.2.4-3E)	Combination				Y	7E-06	3
N + 2.50	(B.2.4-3F)	Combination				Y	7E-06	3
N + 2.50	(B.2.4-4A)	Combination				Y	1.2E-05	3
N + 2.50	(B.2.4-4B)	Combination				Y	1.2E-05	3
N + 2.50	(B.2.4-4C)	Combination				Y	1.2E-05	3
N + 2.50	(B.2.4-4D)	Combination				Y	1.2E-05	3
N + 2.50	FHE_X / R	Combination	Max			X	0.000368	3
N + 2.50	FHE_X / R	Combination	Min			X	0.000368	3
N + 2.50	FHE_Y / R	Combination	Max			Y	0.000393	3
N + 2.50	FHE_Y / R	Combination	Min			Y	0.000393	3
N + 2.50	(B.2.4-5A1)	Combination	Max			X	0.000373	1
N + 2.50	(B.2.4-5A1)	Combination	Max			Y	0.000106	3
N + 2.50	(B.2.4-5A1)	Combination	Min			X	0.000373	1
N + 2.50	(B.2.4-5A1)	Combination	Min			Y	0.000106	3
N + 2.50	(B.2.4-5A3)	Combination	Max			X	0.000373	5
N + 2.50	(B.2.4-5A3)	Combination	Max			Y	0.000106	3
N + 2.50	(B.2.4-5A3)	Combination	Min			X	0.000373	5
N + 2.50	(B.2.4-5A3)	Combination	Min			Y	0.000106	3
N + 2.50	(B.2.4-5A4)	Combination	Max			X	0.000373	1
N + 2.50	(B.2.4-5A4)	Combination	Max			Y	0.00013	3
N + 2.50	(B.2.4-5A4)	Combination	Min			X	0.000373	1
N + 2.50	(B.2.4-5A4)	Combination	Min			Y	0.00013	3
N + 2.50	(B.2.4-5B1)	Combination	Max			X	0.000116	1
N + 2.50	(B.2.4-5B1)	Combination	Max			Y	0.000381	3
N + 2.50	(B.2.4-5B1)	Combination	Min			X	0.000116	1
N + 2.50	(B.2.4-5B1)	Combination	Min			Y	0.000381	3
N + 2.50	(B.2.4-5B2)	Combination	Max			X	0.000115	5
N + 2.50	(B.2.4-5B2)	Combination	Max			Y	0.000405	3
N + 2.50	(B.2.4-5B2)	Combination	Min			X	0.000115	5
N + 2.50	(B.2.4-5B2)	Combination	Min			Y	0.000405	3
N + 2.50	(B.2.4-5B3)	Combination	Max			X	0.000115	1
N + 2.50	(B.2.4-5B3)	Combination	Max			Y	0.000405	3

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.50	(B.2.4-5B3)	Combination	Min			X	0.000115	1
N + 2.50	(B.2.4-5B3)	Combination	Min			Y	0.000405	3
N + 2.50	(B.2.4-5B4)	Combination	Max			X	0.000116	5
N + 2.50	(B.2.4-5B4)	Combination	Max			Y	0.000381	3
N + 2.50	(B.2.4-5B4)	Combination	Min			X	0.000116	5
N + 2.50	(B.2.4-5B4)	Combination	Min			Y	0.000381	3
N + 2.50	(B.2.4-6A)	Combination				Y	5E-06	3
N + 2.50	(B.2.4-6B)	Combination				Y	5E-06	3
N + 2.50	(B.2.4-7A1)	Combination	Max			X	0.00037	1
N + 2.50	(B.2.4-7A1)	Combination	Max			Y	0.000113	3
N + 2.50	(B.2.4-7A1)	Combination	Min			X	0.00037	1
N + 2.50	(B.2.4-7A1)	Combination	Min			Y	0.000113	3
N + 2.50	(B.2.4-7A2)	Combination	Max			X	0.000369	5
N + 2.50	(B.2.4-7A2)	Combination	Max			Y	0.000123	3
N + 2.50	(B.2.4-7A2)	Combination	Min			X	0.000369	5
N + 2.50	(B.2.4-7A2)	Combination	Min			Y	0.000123	3
N + 2.50	(B.2.4-7A3)	Combination	Max			X	0.00037	5
N + 2.50	(B.2.4-7A3)	Combination	Max			Y	0.000113	3
N + 2.50	(B.2.4-7A3)	Combination	Min			X	0.00037	5
N + 2.50	(B.2.4-7A3)	Combination	Min			Y	0.000113	3
N + 2.50	(B.2.4-7A4)	Combination	Max			X	0.000369	1
N + 2.50	(B.2.4-7A4)	Combination	Max			Y	0.000123	3
N + 2.50	(B.2.4-7A4)	Combination	Min			X	0.000369	1
N + 2.50	(B.2.4-7A4)	Combination	Min			Y	0.000123	3
N + 2.50	(B.2.4-7B1)	Combination	Max			X	0.000113	1
N + 2.50	(B.2.4-7B1)	Combination	Max			Y	0.000388	3
N + 2.50	(B.2.4-7B1)	Combination	Min			X	0.000113	1
N + 2.50	(B.2.4-7B1)	Combination	Min			Y	0.000388	3
N + 2.50	(B.2.4-7B2)	Combination	Max			X	0.000112	5
N + 2.50	(B.2.4-7B2)	Combination	Max			Y	0.000398	3
N + 2.50	(B.2.4-7B2)	Combination	Min			X	0.000112	5
N + 2.50	(B.2.4-7B2)	Combination	Min			Y	0.000398	3
N + 2.50	(B.2.4-7B3)	Combination	Max			X	0.000112	1
N + 2.50	(B.2.4-7B3)	Combination	Max			Y	0.000398	3
N + 2.50	(B.2.4-7B3)	Combination	Min			X	0.000112	1
N + 2.50	(B.2.4-7B3)	Combination	Min			Y	0.000398	3
N + 2.50	(B.2.4-7B4)	Combination	Max			X	0.000113	5
N + 2.50	(B.2.4-7B4)	Combination	Max			Y	0.000388	3
N + 2.50	(B.2.4-7B4)	Combination	Min			X	0.000113	5
N + 2.50	(B.2.4-7B4)	Combination	Min			Y	0.000388	3
N + 2.50	Seismic	Combination	Max			X	0.000373	1
N + 2.50	Seismic	Combination	Max			Y	0.000388	3
N + 2.50	Seismic	Combination	Min			X	0.000373	5
N + 2.50	Seismic	Combination	Min			Y	0.000405	3
N + 2.50	(B.2.4-3B)	Combination				Y	7E-06	3

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.50	L+D	Combination				Y	6E-06	3
N + 2.50	CIM	Combination	Max			X	0.00026	1
N + 2.50	CIM	Combination	Max			Y	0.000269	3
N + 2.50	CIM	Combination	Min			X	0.00026	5
N + 2.50	CIM	Combination	Min			Y	0.000281	3
N + 2.50	DER7: 0.6D+0.3FsX+Fsy	Combination				X	0.00042	1
N + 2.50	DER7: 0.6D+0.3FsX+Fsy	Combination				Y	0.001481	3
N + 2.50	DER8: 0.6D+FsX+0.3Fsy	Combination				X	0.00139	1
N + 2.50	DER8: 0.6D+FsX+0.3Fsy	Combination				Y	0.000442	3
N + 2.50	DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				X	0.000318	1
N + 2.50	DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				Y	0.001104	3
N + 2.50	DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				X	0.001046	1
N + 2.50	DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				Y	0.000324	3
N + 2.50	DER2: D+FsX+0.3FsY	Combination				X	0.001391	1
N + 2.50	DER2: D+FsX+0.3FsY	Combination				Y	0.00044	3
N + 2.50	DER1: D+0.3FsX+FsY	Combination				X	0.000421	1
N + 2.50	DER1: D+0.3FsX+FsY	Combination				Y	0.001479	3
N + 2.50	DERIVAS Y	Combination	Max			X	0.000421	1
N + 2.50	DERIVAS Y	Combination	Max			Y	0.001481	3
N + 2.50	DERIVAS Y	Combination	Min			X	0.000318	1
N + 2.50	DERIVAS Y	Combination	Min			Y	0.001104	3
N + 2.50	DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				X	0.000318	1
N + 2.50	DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				Y	0.001104	3
N + 2.50	DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				X	0.001046	1
N + 2.50	DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				Y	0.000324	3
N + 2.50	(C5)	Combination				Y	6E-06	3
N + 2.50	(C6)	Combination				Y	1.1E-05	3
N + 2.50	(C7.1)	Combination				Y	6E-06	3
N + 2.50	(C7.2)	Combination				Y	6E-06	3
N + 2.50	(C8.1)	Combination				Y	1E-05	3
N + 2.50	(C8.2)	Combination				Y	1E-05	3
N + 2.50	(C9.1)	Combination				Y	6E-06	3
N + 2.50	(C9.2)	Combination				Y	6E-06	3
N + 2.50	(C10.A1)	Combination	Max			X	0.00026	1
N + 2.50	(C10.A1)	Combination	Max			Y	7.7E-05	3
N + 2.50	(C10.A1)	Combination	Min			X	0.00026	1
N + 2.50	(C10.A1)	Combination	Min			Y	7.7E-05	3
N + 2.50	(C10.A2)	Combination	Max			X	0.000259	5
N + 2.50	(C10.A2)	Combination	Max			Y	8.8E-05	3
N + 2.50	(C10.A2)	Combination	Min			X	0.000259	5
N + 2.50	(C10.A2)	Combination	Min			Y	8.8E-05	3
N + 2.50	(C10.A3)	Combination	Max			X	0.000259	1
N + 2.50	(C10.A3)	Combination	Max			Y	8.8E-05	3
N + 2.50	(C10.A3)	Combination	Min			X	0.000259	1
N + 2.50	(C10.A3)	Combination	Min			Y	8.8E-05	3

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.50	(C10.A4)	Combination	Max			X	0.00026	5
N + 2.50	(C10.A4)	Combination	Max			Y	7.7E-05	3
N + 2.50	(C10.A4)	Combination	Min			X	0.00026	5
N + 2.50	(C10.A4)	Combination	Min			Y	7.7E-05	3
N + 2.50	(C10.B1)	Combination	Max			X	8E-05	1
N + 2.50	(C10.B1)	Combination	Max			Y	0.000269	3
N + 2.50	(C10.B1)	Combination	Min			X	8E-05	1
N + 2.50	(C10.B1)	Combination	Min			Y	0.000269	3
N + 2.50	(C10.B2)	Combination	Max			X	7.9E-05	5
N + 2.50	(C10.B2)	Combination	Max			Y	0.000281	3
N + 2.50	(C10.B2)	Combination	Min			X	7.9E-05	5
N + 2.50	(C10.B2)	Combination	Min			Y	0.000281	3
N + 2.50	(C10.B3)	Combination	Max			X	7.9E-05	1
N + 2.50	(C10.B3)	Combination	Max			Y	0.000281	3
N + 2.50	(C10.B3)	Combination	Min			X	7.9E-05	1
N + 2.50	(C10.B3)	Combination	Min			Y	0.000281	3
N + 2.50	(C10.B4)	Combination	Max			X	8E-05	5
N + 2.50	(C10.B4)	Combination	Max			Y	0.000269	3
N + 2.50	(C10.B4)	Combination	Min			X	8E-05	5
N + 2.50	(C10.B4)	Combination	Min			Y	0.000269	3
N + 2.50	(C11.1)	Combination				Y	1E-05	3
N + 2.50	(C11.2)	Combination				Y	1E-05	3
N + 2.50	(C11.3)	Combination				Y	1E-05	3
N + 2.50	(C11.4)	Combination				Y	1E-05	3
N + 2.50	(C12.A1)	Combination	Max			X	0.000197	1
N + 2.50	(C12.A1)	Combination	Max			Y	5.2E-05	3
N + 2.50	(C12.A1)	Combination	Min			X	0.000197	1
N + 2.50	(C12.A1)	Combination	Min			Y	5.2E-05	3
N + 2.50	(C12.A2)	Combination	Max			X	0.000197	5
N + 2.50	(C12.A2)	Combination	Max			Y	7.2E-05	3
N + 2.50	(C12.A2)	Combination	Min			X	0.000197	5
N + 2.50	(C12.A2)	Combination	Min			Y	7.2E-05	3
N + 2.50	(C12.A3)	Combination	Max			X	0.000197	1
N + 2.50	(C12.A3)	Combination	Max			Y	7.2E-05	3
N + 2.50	(C12.A3)	Combination	Min			X	0.000197	1
N + 2.50	(C12.A3)	Combination	Min			Y	7.2E-05	3
N + 2.50	(C12.A4)	Combination	Max			X	0.000197	5
N + 2.50	(C12.A4)	Combination	Max			Y	5.2E-05	3
N + 2.50	(C12.A4)	Combination	Min			X	0.000197	5
N + 2.50	(C12.A4)	Combination	Min			Y	5.2E-05	3
N + 2.50	(C12.B1)	Combination	Max			X	6.3E-05	1
N + 2.50	(C12.B1)	Combination	Max			Y	0.000197	3
N + 2.50	(C12.B1)	Combination	Min			X	6.3E-05	1
N + 2.50	(C12.B1)	Combination	Min			Y	0.000197	3
N + 2.50	(C12.B2)	Combination	Max			X	6.2E-05	5

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.50	(C12.B2)	Combination	Max			Y	0.000216	3
N + 2.50	(C12.B2)	Combination	Min			X	6.2E-05	5
N + 2.50	(C12.B2)	Combination	Min			Y	0.000216	3
N + 2.50	(C12.B3)	Combination	Max			X	6.2E-05	1
N + 2.50	(C12.B3)	Combination	Max			Y	0.000216	3
N + 2.50	(C12.B3)	Combination	Min			X	6.2E-05	1
N + 2.50	(C12.B3)	Combination	Min			Y	0.000216	3
N + 2.50	(C12.B4)	Combination	Max			X	6.3E-05	5
N + 2.50	(C12.B4)	Combination	Max			Y	0.000197	3
N + 2.50	(C12.B4)	Combination	Min			X	6.3E-05	5
N + 2.50	(C12.B4)	Combination	Min			Y	0.000197	3
N + 2.50	(C12.C1)	Combination	Max			X	0.000197	1
N + 2.50	(C12.C1)	Combination	Max			Y	5.2E-05	3
N + 2.50	(C12.C1)	Combination	Min			X	0.000197	1
N + 2.50	(C12.C1)	Combination	Min			Y	5.2E-05	3
N + 2.50	(C12.C2)	Combination	Max			X	0.000197	5
N + 2.50	(C12.C2)	Combination	Max			Y	7.2E-05	3
N + 2.50	(C12.C2)	Combination	Min			X	0.000197	5
N + 2.50	(C12.C2)	Combination	Min			Y	7.2E-05	3
N + 2.50	(C12.C3)	Combination	Max			X	0.000197	1
N + 2.50	(C12.C3)	Combination	Max			Y	7.2E-05	3
N + 2.50	(C12.C3)	Combination	Min			X	0.000197	1
N + 2.50	(C12.C3)	Combination	Min			Y	7.2E-05	3
N + 2.50	(C12.C4)	Combination	Max			X	0.000197	5
N + 2.50	(C12.C4)	Combination	Max			Y	5.2E-05	3
N + 2.50	(C12.C4)	Combination	Min			X	0.000197	5
N + 2.50	(C12.C4)	Combination	Min			Y	5.2E-05	3
N + 2.50	(C12.D1)	Combination	Max			X	6.3E-05	1
N + 2.50	(C12.D1)	Combination	Max			Y	0.000197	3
N + 2.50	(C12.D1)	Combination	Min			X	6.3E-05	1
N + 2.50	(C12.D1)	Combination	Min			Y	0.000197	3
N + 2.50	(C12.D2)	Combination	Max			X	6.2E-05	5
N + 2.50	(C12.D2)	Combination	Max			Y	0.000216	3
N + 2.50	(C12.D2)	Combination	Min			X	6.2E-05	5
N + 2.50	(C12.D2)	Combination	Min			Y	0.000216	3
N + 2.50	(C12.D3)	Combination	Max			X	6.2E-05	1
N + 2.50	(C12.D3)	Combination	Max			Y	0.000216	3
N + 2.50	(C12.D3)	Combination	Min			X	6.2E-05	1
N + 2.50	(C12.D3)	Combination	Min			Y	0.000216	3
N + 2.50	(C12.D4)	Combination	Max			X	6.3E-05	5
N + 2.50	(C12.D4)	Combination	Max			Y	0.000197	3
N + 2.50	(C12.D4)	Combination	Min			X	6.3E-05	5
N + 2.50	(C12.D4)	Combination	Min			Y	0.000197	3
N + 2.50	DStlD1	Combination				Y	6E-06	3
N + 2.50	DStlD2	Combination				Y	1.1E-05	3

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.33	D	LinStatic				Y	3E-06	4
N + 2.33	L	LinStatic				Y	7E-06	4
N + 2.33	SD	LinStatic				Y	4E-06	4
N + 2.33	ADEEx	LinRespSpec	Max			X	0.001085	4
N + 2.33	ADEEy	LinRespSpec	Max			Y	0.001575	4
N + 2.33	FHE-X	LinStatic	Max			X	0.001599	4
N + 2.33	FHE-X	LinStatic	Min			X	0.001599	4
N + 2.33	FHE-Y	LinStatic	Max			Y	0.001985	4
N + 2.33	FHE-Y	LinStatic	Min			Y	0.001985	4
N + 2.33	$FHE\text{-}Y_{der}$	LinStatic				Y	0.001588	4
N + 2.33	$FHE\text{-}X_{der}$	LinStatic				X	0.00128	4
N + 2.33	DERIVAS X	Combination	Max			X	0.00128	4
N + 2.33	DERIVAS X	Combination	Max			Y	0.000472	4
N + 2.33	DERIVAS X	Combination	Min			X	0.00096	4
N + 2.33	DERIVAS X	Combination	Min			Y	0.000345	4
N + 2.33	(B.2.4-5A2)	Combination	Max			X	0.00034	6
N + 2.33	(B.2.4-5A2)	Combination	Max			Y	0.000141	4
N + 2.33	(B.2.4-5A2)	Combination	Min			X	0.00034	6
N + 2.33	(B.2.4-5A2)	Combination	Min			Y	0.000141	4
N + 2.33	(B.2.4-1)	Combination				Y	1E-05	4
N + 2.33	(B.2.4-2A)	Combination				Y	1.9E-05	4
N + 2.33	(B.2.4-2B)	Combination				Y	1.9E-05	4
N + 2.33	(B.2.4-3A)	Combination				Y	1.5E-05	4
N + 2.33	(B.2.4-3C)	Combination				Y	8E-06	4
N + 2.33	(B.2.4-3D)	Combination				Y	1.5E-05	4
N + 2.33	(B.2.4-3E)	Combination				Y	8E-06	4
N + 2.33	(B.2.4-3F)	Combination				Y	8E-06	4
N + 2.33	(B.2.4-4A)	Combination				Y	1.5E-05	4
N + 2.33	(B.2.4-4B)	Combination				Y	1.5E-05	4
N + 2.33	(B.2.4-4C)	Combination				Y	1.5E-05	4
N + 2.33	(B.2.4-4D)	Combination				Y	1.5E-05	4
N + 2.33	FHE_X / R	Combination	Max			X	0.000338	4
N + 2.33	FHE_X / R	Combination	Min			X	0.000338	4
N + 2.33	FHE_Y / R	Combination	Max			Y	0.00042	4
N + 2.33	FHE_Y / R	Combination	Min			Y	0.00042	4
N + 2.33	(B.2.4-5A1)	Combination	Max			X	0.00034	2
N + 2.33	(B.2.4-5A1)	Combination	Max			Y	0.000111	4
N + 2.33	(B.2.4-5A1)	Combination	Min			X	0.00034	2
N + 2.33	(B.2.4-5A1)	Combination	Min			Y	0.000111	4
N + 2.33	(B.2.4-5A3)	Combination	Max			X	0.00034	6
N + 2.33	(B.2.4-5A3)	Combination	Max			Y	0.000111	4
N + 2.33	(B.2.4-5A3)	Combination	Min			X	0.00034	6
N + 2.33	(B.2.4-5A3)	Combination	Min			Y	0.000111	4
N + 2.33	(B.2.4-5A4)	Combination	Max			X	0.00034	2
N + 2.33	(B.2.4-5A4)	Combination	Max			Y	0.000141	4

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.33	(B.2.4-5A4)	Combination	Min			X	0.00034	2
N + 2.33	(B.2.4-5A4)	Combination	Min			Y	0.000141	4
N + 2.33	(B.2.4-5B1)	Combination	Max			X	0.000103	2
N + 2.33	(B.2.4-5B1)	Combination	Max			Y	0.000405	4
N + 2.33	(B.2.4-5B1)	Combination	Min			X	0.000103	2
N + 2.33	(B.2.4-5B1)	Combination	Min			Y	0.000405	4
N + 2.33	(B.2.4-5B2)	Combination	Max			X	0.000104	6
N + 2.33	(B.2.4-5B2)	Combination	Max			Y	0.000435	4
N + 2.33	(B.2.4-5B2)	Combination	Min			X	0.000104	6
N + 2.33	(B.2.4-5B2)	Combination	Min			Y	0.000435	4
N + 2.33	(B.2.4-5B3)	Combination	Max			X	0.000104	2
N + 2.33	(B.2.4-5B3)	Combination	Max			Y	0.000435	4
N + 2.33	(B.2.4-5B3)	Combination	Min			X	0.000104	2
N + 2.33	(B.2.4-5B3)	Combination	Min			Y	0.000435	4
N + 2.33	(B.2.4-5B4)	Combination	Max			X	0.000103	6
N + 2.33	(B.2.4-5B4)	Combination	Max			Y	0.000405	4
N + 2.33	(B.2.4-5B4)	Combination	Min			X	0.000103	6
N + 2.33	(B.2.4-5B4)	Combination	Min			Y	0.000405	4
N + 2.33	(B.2.4-6A)	Combination				Y	6E-06	4
N + 2.33	(B.2.4-6B)	Combination				Y	6E-06	4
N + 2.33	(B.2.4-7A1)	Combination	Max			X	0.000339	2
N + 2.33	(B.2.4-7A1)	Combination	Max			Y	0.00012	4
N + 2.33	(B.2.4-7A1)	Combination	Min			X	0.000339	2
N + 2.33	(B.2.4-7A1)	Combination	Min			Y	0.00012	4
N + 2.33	(B.2.4-7A2)	Combination	Max			X	0.000339	6
N + 2.33	(B.2.4-7A2)	Combination	Max			Y	0.000132	4
N + 2.33	(B.2.4-7A2)	Combination	Min			X	0.000339	6
N + 2.33	(B.2.4-7A2)	Combination	Min			Y	0.000132	4
N + 2.33	(B.2.4-7A3)	Combination	Max			X	0.000339	6
N + 2.33	(B.2.4-7A3)	Combination	Max			Y	0.00012	4
N + 2.33	(B.2.4-7A3)	Combination	Min			X	0.000339	6
N + 2.33	(B.2.4-7A3)	Combination	Min			Y	0.00012	4
N + 2.33	(B.2.4-7A4)	Combination	Max			X	0.000339	2
N + 2.33	(B.2.4-7A4)	Combination	Max			Y	0.000132	4
N + 2.33	(B.2.4-7A4)	Combination	Min			X	0.000339	2
N + 2.33	(B.2.4-7A4)	Combination	Min			Y	0.000132	4
N + 2.33	(B.2.4-7B1)	Combination	Max			X	0.000102	2
N + 2.33	(B.2.4-7B1)	Combination	Max			Y	0.000414	4
N + 2.33	(B.2.4-7B1)	Combination	Min			X	0.000102	2
N + 2.33	(B.2.4-7B1)	Combination	Min			Y	0.000414	4
N + 2.33	(B.2.4-7B2)	Combination	Max			X	0.000103	6
N + 2.33	(B.2.4-7B2)	Combination	Max			Y	0.000426	4
N + 2.33	(B.2.4-7B2)	Combination	Min			X	0.000103	6
N + 2.33	(B.2.4-7B2)	Combination	Min			Y	0.000426	4
N + 2.33	(B.2.4-7B3)	Combination	Max			X	0.000103	2

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.33	(B.2.4-7B3)	Combination	Max			Y	0.000426	4
N + 2.33	(B.2.4-7B3)	Combination	Min			X	0.000103	2
N + 2.33	(B.2.4-7B3)	Combination	Min			Y	0.000426	4
N + 2.33	(B.2.4-7B4)	Combination	Max			X	0.000102	6
N + 2.33	(B.2.4-7B4)	Combination	Max			Y	0.000414	4
N + 2.33	(B.2.4-7B4)	Combination	Min			X	0.000102	6
N + 2.33	(B.2.4-7B4)	Combination	Min			Y	0.000414	4
N + 2.33	Seismic	Combination	Max			X	0.00034	2
N + 2.33	Seismic	Combination	Max			Y	0.000414	4
N + 2.33	Seismic	Combination	Min			X	0.00034	6
N + 2.33	Seismic	Combination	Min			Y	0.000435	4
N + 2.33	(B.2.4-3B)	Combination				Y	8E-06	4
N + 2.33	L+D	Combination				Y	7E-06	4
N + 2.33	CIM	Combination	Max			X	0.000238	2
N + 2.33	CIM	Combination	Max			Y	0.000287	4
N + 2.33	CIM	Combination	Min			X	0.000238	6
N + 2.33	CIM	Combination	Min			Y	0.000301	4
N + 2.33	DER7: 0.6D+0.3FsX+Fsy	Combination				X	0.000385	6
N + 2.33	DER7: 0.6D+0.3FsX+Fsy	Combination				Y	0.001584	4
N + 2.33	DER8: 0.6D+FsX+0.3Fsy	Combination				X	0.00128	4
N + 2.33	DER8: 0.6D+FsX+0.3Fsy	Combination				Y	0.000472	4
N + 2.33	DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				X	0.000288	4
N + 2.33	DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				Y	0.001179	4
N + 2.33	DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				X	0.00096	4
N + 2.33	DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				Y	0.000345	4
N + 2.33	DER2: D+FsX+0.3FsY	Combination				X	0.00128	4
N + 2.33	DER2: D+FsX+0.3FsY	Combination				Y	0.00047	4
N + 2.33	DER1: D+0.3FsX+FsY	Combination				X	0.000384	6
N + 2.33	DER1: D+0.3FsX+FsY	Combination				Y	0.001582	4
N + 2.33	DERIVAS Y	Combination	Max			X	0.000385	6
N + 2.33	DERIVAS Y	Combination	Max			Y	0.001584	4
N + 2.33	DERIVAS Y	Combination	Min			X	0.000288	4
N + 2.33	DERIVAS Y	Combination	Min			Y	0.001179	4
N + 2.33	DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				X	0.000288	4
N + 2.33	DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				Y	0.001179	4
N + 2.33	DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				X	0.00096	4
N + 2.33	DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				Y	0.000345	4
N + 2.33	(C5)	Combination				Y	7E-06	4
N + 2.33	(C6)	Combination				Y	1.4E-05	4
N + 2.33	(C7.1)	Combination				Y	7E-06	4
N + 2.33	(C7.2)	Combination				Y	7E-06	4
N + 2.33	(C8.1)	Combination				Y	1.2E-05	4
N + 2.33	(C8.2)	Combination				Y	1.2E-05	4
N + 2.33	(C9.1)	Combination				Y	7E-06	4
N + 2.33	(C9.2)	Combination				Y	7E-06	4

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.33	(C10.A1)	Combination	Max			X	0.000238	2
N + 2.33	(C10.A1)	Combination	Max			Y	8.1E-05	4
N + 2.33	(C10.A1)	Combination	Min			X	0.000238	2
N + 2.33	(C10.A1)	Combination	Min			Y	8.1E-05	4
N + 2.33	(C10.A2)	Combination	Max			X	0.000238	6
N + 2.33	(C10.A2)	Combination	Max			Y	9.5E-05	4
N + 2.33	(C10.A2)	Combination	Min			X	0.000238	6
N + 2.33	(C10.A2)	Combination	Min			Y	9.5E-05	4
N + 2.33	(C10.A3)	Combination	Max			X	0.000238	2
N + 2.33	(C10.A3)	Combination	Max			Y	9.5E-05	4
N + 2.33	(C10.A3)	Combination	Min			X	0.000238	2
N + 2.33	(C10.A3)	Combination	Min			Y	9.5E-05	4
N + 2.33	(C10.A4)	Combination	Max			X	0.000238	6
N + 2.33	(C10.A4)	Combination	Max			Y	8.1E-05	4
N + 2.33	(C10.A4)	Combination	Min			X	0.000238	6
N + 2.33	(C10.A4)	Combination	Min			Y	8.1E-05	4
N + 2.33	(C10.B1)	Combination	Max			X	7.2E-05	2
N + 2.33	(C10.B1)	Combination	Max			Y	0.000287	4
N + 2.33	(C10.B1)	Combination	Min			X	7.2E-05	2
N + 2.33	(C10.B1)	Combination	Min			Y	0.000287	4
N + 2.33	(C10.B2)	Combination	Max			X	7.3E-05	6
N + 2.33	(C10.B2)	Combination	Max			Y	0.000301	4
N + 2.33	(C10.B2)	Combination	Min			X	7.3E-05	6
N + 2.33	(C10.B2)	Combination	Min			Y	0.000301	4
N + 2.33	(C10.B3)	Combination	Max			X	7.3E-05	2
N + 2.33	(C10.B3)	Combination	Max			Y	0.000301	4
N + 2.33	(C10.B3)	Combination	Min			X	7.3E-05	2
N + 2.33	(C10.B3)	Combination	Min			Y	0.000301	4
N + 2.33	(C10.B4)	Combination	Max			X	7.2E-05	6
N + 2.33	(C10.B4)	Combination	Max			Y	0.000287	4
N + 2.33	(C10.B4)	Combination	Min			X	7.2E-05	6
N + 2.33	(C10.B4)	Combination	Min			Y	0.000287	4
N + 2.33	(C11.1)	Combination				Y	1.2E-05	4
N + 2.33	(C11.2)	Combination				Y	1.2E-05	4
N + 2.33	(C11.3)	Combination				Y	1.2E-05	4
N + 2.33	(C11.4)	Combination				Y	1.2E-05	4
N + 2.33	(C12.A1)	Combination	Max			X	0.000179	2
N + 2.33	(C12.A1)	Combination	Max			Y	5.4E-05	4
N + 2.33	(C12.A1)	Combination	Min			X	0.000179	2
N + 2.33	(C12.A1)	Combination	Min			Y	5.4E-05	4
N + 2.33	(C12.A2)	Combination	Max			X	0.000179	6
N + 2.33	(C12.A2)	Combination	Max			Y	7.8E-05	4
N + 2.33	(C12.A2)	Combination	Min			X	0.000179	6
N + 2.33	(C12.A2)	Combination	Min			Y	7.8E-05	4
N + 2.33	(C12.A3)	Combination	Max			X	0.000179	2

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.33	(C12.A3)	Combination	Max			Y	7.8E-05	4
N + 2.33	(C12.A3)	Combination	Min			X	0.000179	2
N + 2.33	(C12.A3)	Combination	Min			Y	7.8E-05	4
N + 2.33	(C12.A4)	Combination	Max			X	0.000179	6
N + 2.33	(C12.A4)	Combination	Max			Y	5.4E-05	4
N + 2.33	(C12.A4)	Combination	Min			X	0.000179	6
N + 2.33	(C12.A4)	Combination	Min			Y	5.4E-05	4
N + 2.33	(C12.B1)	Combination	Max			X	5.5E-05	2
N + 2.33	(C12.B1)	Combination	Max			Y	0.000209	4
N + 2.33	(C12.B1)	Combination	Min			X	5.5E-05	2
N + 2.33	(C12.B1)	Combination	Min			Y	0.000209	4
N + 2.33	(C12.B2)	Combination	Max			X	5.5E-05	6
N + 2.33	(C12.B2)	Combination	Max			Y	0.000233	4
N + 2.33	(C12.B2)	Combination	Min			X	5.5E-05	6
N + 2.33	(C12.B2)	Combination	Min			Y	0.000233	4
N + 2.33	(C12.B3)	Combination	Max			X	5.5E-05	2
N + 2.33	(C12.B3)	Combination	Max			Y	0.000233	4
N + 2.33	(C12.B3)	Combination	Min			X	5.5E-05	2
N + 2.33	(C12.B3)	Combination	Min			Y	0.000233	4
N + 2.33	(C12.B4)	Combination	Max			X	5.5E-05	6
N + 2.33	(C12.B4)	Combination	Max			Y	0.000209	4
N + 2.33	(C12.B4)	Combination	Min			X	5.5E-05	6
N + 2.33	(C12.B4)	Combination	Min			Y	0.000209	4
N + 2.33	(C12.C1)	Combination	Max			X	0.000179	2
N + 2.33	(C12.C1)	Combination	Max			Y	5.4E-05	4
N + 2.33	(C12.C1)	Combination	Min			X	0.000179	2
N + 2.33	(C12.C1)	Combination	Min			Y	5.4E-05	4
N + 2.33	(C12.C2)	Combination	Max			X	0.000179	6
N + 2.33	(C12.C2)	Combination	Max			Y	7.8E-05	4
N + 2.33	(C12.C2)	Combination	Min			X	0.000179	6
N + 2.33	(C12.C2)	Combination	Min			Y	7.8E-05	4
N + 2.33	(C12.C3)	Combination	Max			X	0.000179	2
N + 2.33	(C12.C3)	Combination	Max			Y	7.8E-05	4
N + 2.33	(C12.C3)	Combination	Min			X	0.000179	2
N + 2.33	(C12.C3)	Combination	Min			Y	7.8E-05	4
N + 2.33	(C12.C4)	Combination	Max			X	0.000179	6
N + 2.33	(C12.C4)	Combination	Max			Y	5.4E-05	4
N + 2.33	(C12.C4)	Combination	Min			X	0.000179	6
N + 2.33	(C12.C4)	Combination	Min			Y	5.4E-05	4
N + 2.33	(C12.D1)	Combination	Max			X	5.5E-05	2
N + 2.33	(C12.D1)	Combination	Max			Y	0.000209	4
N + 2.33	(C12.D1)	Combination	Min			X	5.5E-05	2
N + 2.33	(C12.D1)	Combination	Min			Y	0.000209	4
N + 2.33	(C12.D2)	Combination	Max			X	5.5E-05	6
N + 2.33	(C12.D2)	Combination	Max			Y	0.000233	4

Table 5.2 - Story Drifts (Part 1 of 2, continued)

Story	Output Case	Case Type	Step Type	Step Number	Step Label	Direction	Drift	Label
N + 2.33	(C12.D2)	Combination	Min			X	5.5E-05	6
N + 2.33	(C12.D2)	Combination	Min			Y	0.000233	4
N + 2.33	(C12.D3)	Combination	Max			X	5.5E-05	2
N + 2.33	(C12.D3)	Combination	Max			Y	0.000233	4
N + 2.33	(C12.D3)	Combination	Min			X	5.5E-05	2
N + 2.33	(C12.D3)	Combination	Min			Y	0.000233	4
N + 2.33	(C12.D4)	Combination	Max			X	5.5E-05	6
N + 2.33	(C12.D4)	Combination	Max			Y	0.000209	4
N + 2.33	(C12.D4)	Combination	Min			X	5.5E-05	6
N + 2.33	(C12.D4)	Combination	Min			Y	0.000209	4
N + 2.33	DStlD1	Combination				Y	7E-06	4
N + 2.33	DStlD2	Combination				Y	1.4E-05	4

Table 5.2 - Story Drifts (Part 2 of 2)

Story	X cm	Y cm	Z cm
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	0	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	861	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.50	430.5	0	250
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233

Table 5.2 - Story Drifts (Part 2 of 2, continued)

Story	X cm	Y cm	Z cm
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	0	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	861	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233
N + 2.33	430.5	266	233

Table 5.3 - Story Forces (Part 1 of 2)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.50	Top	D	LinStatic				1730.16	0
N + 2.50	Bottom	D	LinStatic				774.93	0
N + 2.50	Top	L	LinStatic				3956.75	0
N + 2.50	Bottom	L	LinStatic				1792.12	0
N + 2.50	Top	SD	LinStatic				2374.05	0
N + 2.50	Bottom	SD	LinStatic				1075.27	0
N + 2.50	Top	ADEEx	LinRespSpec	Max			0	7282.14
N + 2.50	Bottom	ADEEx	LinRespSpec	Max			0	622.58
N + 2.50	Top	ADEEy	LinRespSpec	Max			0	0
N + 2.50	Bottom	ADEEy	LinRespSpec	Max			4483.78	0
N + 2.50	Top	Lr	LinStatic				0	0
N + 2.50	Bottom	Lr	LinStatic				0	0
N + 2.50	Top	W	LinStatic				0	0
N + 2.50	Bottom	W	LinStatic				0	0
N + 2.50	Top	FHE-X	LinStatic	Max			0	-9596.09
N + 2.50	Bottom	FHE-X	LinStatic	Max			0	-495.88
N + 2.50	Top	FHE-X	LinStatic	Min			0	-9596.09
N + 2.50	Bottom	FHE-X	LinStatic	Min			0	-495.88
N + 2.50	Top	FHE-Y	LinStatic	Max			0	0
N + 2.50	Bottom	FHE-Y	LinStatic	Max			7064.98	0
N + 2.50	Top	FHE-Y	LinStatic	Min			0	0
N + 2.50	Bottom	FHE-Y	LinStatic	Min			7064.98	0
N + 2.50	Top	$FHE\text{-}Y_{der}$	LinStatic				0	0
N + 2.50	Bottom	$FHE\text{-}Y_{der}$	LinStatic				5652.36	0
N + 2.50	Top	$FHE\text{-}X_{der}$	LinStatic				0	-7677.38
N + 2.50	Bottom	$FHE\text{-}X_{der}$	LinStatic				0	-396.73
N + 2.50	Top	H	LinStatic				0	0
N + 2.50	Bottom	H	LinStatic				0	0
N + 2.50	Top	G	LinStatic				0	0
N + 2.50	Bottom	G	LinStatic				0	0
N + 2.50	Top	DERIVAS X	Combination	Max			7071.77	-5758.04
N + 2.50	Bottom	DERIVAS X	Combination	Max			4466.07	-297.55
N + 2.50	Top	DERIVAS X	Combination	Min			2462.53	-7677.38
N + 2.50	Bottom	DERIVAS X	Combination	Min			2805.83	-396.73
N + 2.50	Top	(B.2.4-5A2)	Combination	Max			8881.8	2030.53
N + 2.50	Bottom	(B.2.4-5A2)	Combination	Max			3563.79	104.93
N + 2.50	Top	(B.2.4-5A2)	Combination	Min			8881.8	2030.53
N + 2.50	Bottom	(B.2.4-5A2)	Combination	Min			3563.79	104.93
N + 2.50	Top	(B.2.4-1)	Combination				5745.89	0
N + 2.50	Bottom	(B.2.4-1)	Combination				2590.28	0
N + 2.50	Top	(B.2.4-2A)	Combination				11255.85	0
N + 2.50	Bottom	(B.2.4-2A)	Combination				5087.63	0
N + 2.50	Top	(B.2.4-2B)	Combination				11255.85	0
N + 2.50	Bottom	(B.2.4-2B)	Combination				5087.63	0
N + 2.50	Top	(B.2.4-3A)	Combination				8881.8	0

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.50	Bottom	(B.2.4-3A)	Combination				4012.36	0
N + 2.50	Top	(B.2.4-3C)	Combination				4925.05	0
N + 2.50	Bottom	(B.2.4-3C)	Combination				2220.24	0
N + 2.50	Top	(B.2.4-3D)	Combination				8881.8	0
N + 2.50	Bottom	(B.2.4-3D)	Combination				4012.36	0
N + 2.50	Top	(B.2.4-3E)	Combination				4925.05	0
N + 2.50	Bottom	(B.2.4-3E)	Combination				2220.24	0
N + 2.50	Top	(B.2.4-3F)	Combination				4925.05	0
N + 2.50	Bottom	(B.2.4-3F)	Combination				2220.24	0
N + 2.50	Top	(B.2.4-4A)	Combination				8881.8	0
N + 2.50	Bottom	(B.2.4-4A)	Combination				4012.36	0
N + 2.50	Top	(B.2.4-4B)	Combination				8881.8	0
N + 2.50	Bottom	(B.2.4-4B)	Combination				4012.36	0
N + 2.50	Top	(B.2.4-4C)	Combination				8881.8	0
N + 2.50	Bottom	(B.2.4-4C)	Combination				4012.36	0
N + 2.50	Top	(B.2.4-4D)	Combination				8881.8	0
N + 2.50	Bottom	(B.2.4-4D)	Combination				4012.36	0
N + 2.50	Top	FHE_X / R	Combination	Max			0	-2030.53
N + 2.50	Bottom	FHE_X / R	Combination	Max			0	-104.93
N + 2.50	Top	FHE_X / R	Combination	Min			0	-2030.53
N + 2.50	Bottom	FHE_X / R	Combination	Min			0	-104.93
N + 2.50	Top	FHE_Y / R	Combination	Max			0	0
N + 2.50	Bottom	FHE_Y / R	Combination	Max			1495.23	0
N + 2.50	Top	FHE_Y / R	Combination	Min			0	0
N + 2.50	Bottom	FHE_Y / R	Combination	Min			1495.23	0
N + 2.50	Top	(B.2.4-5A1)	Combination	Max			8881.8	-2030.53
N + 2.50	Bottom	(B.2.4-5A1)	Combination	Max			4460.93	-104.93
N + 2.50	Top	(B.2.4-5A1)	Combination	Min			8881.8	-2030.53
N + 2.50	Bottom	(B.2.4-5A1)	Combination	Min			4460.93	-104.93
N + 2.50	Top	(B.2.4-5A3)	Combination	Max			8881.8	2030.53
N + 2.50	Bottom	(B.2.4-5A3)	Combination	Max			4460.93	104.93
N + 2.50	Top	(B.2.4-5A3)	Combination	Min			8881.8	2030.53
N + 2.50	Bottom	(B.2.4-5A3)	Combination	Min			4460.93	104.93
N + 2.50	Top	(B.2.4-5A4)	Combination	Max			8881.8	-2030.53
N + 2.50	Bottom	(B.2.4-5A4)	Combination	Max			3563.79	-104.93
N + 2.50	Top	(B.2.4-5A4)	Combination	Min			8881.8	-2030.53
N + 2.50	Bottom	(B.2.4-5A4)	Combination	Min			3563.79	-104.93
N + 2.50	Top	(B.2.4-5B1)	Combination	Max			8881.8	-609.16
N + 2.50	Bottom	(B.2.4-5B1)	Combination	Max			5507.59	-31.48
N + 2.50	Top	(B.2.4-5B1)	Combination	Min			8881.8	-609.16
N + 2.50	Bottom	(B.2.4-5B1)	Combination	Min			5507.59	-31.48
N + 2.50	Top	(B.2.4-5B2)	Combination	Max			8881.8	609.16
N + 2.50	Bottom	(B.2.4-5B2)	Combination	Max			2517.13	31.48
N + 2.50	Top	(B.2.4-5B2)	Combination	Min			8881.8	609.16

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.50	Bottom	(B.2.4-5B2)	Combination	Min			2517.13	31.48
N + 2.50	Top	(B.2.4-5B3)	Combination	Max			8881.8	-609.16
N + 2.50	Bottom	(B.2.4-5B3)	Combination	Max			2517.13	-31.48
N + 2.50	Top	(B.2.4-5B3)	Combination	Min			8881.8	-609.16
N + 2.50	Bottom	(B.2.4-5B3)	Combination	Min			2517.13	-31.48
N + 2.50	Top	(B.2.4-5B4)	Combination	Max			8881.8	609.16
N + 2.50	Bottom	(B.2.4-5B4)	Combination	Max			5507.59	31.48
N + 2.50	Top	(B.2.4-5B4)	Combination	Min			8881.8	609.16
N + 2.50	Bottom	(B.2.4-5B4)	Combination	Min			5507.59	31.48
N + 2.50	Top	(B.2.4-6A)	Combination				3693.79	0
N + 2.50	Bottom	(B.2.4-6A)	Combination				1665.18	0
N + 2.50	Top	(B.2.4-6B)	Combination				3693.79	0
N + 2.50	Bottom	(B.2.4-6B)	Combination				1665.18	0
N + 2.50	Top	(B.2.4-7A1)	Combination	Max			3693.79	-2030.53
N + 2.50	Bottom	(B.2.4-7A1)	Combination	Max			2113.75	-104.93
N + 2.50	Top	(B.2.4-7A1)	Combination	Min			3693.79	-2030.53
N + 2.50	Bottom	(B.2.4-7A1)	Combination	Min			2113.75	-104.93
N + 2.50	Top	(B.2.4-7A2)	Combination	Max			3693.79	2030.53
N + 2.50	Bottom	(B.2.4-7A2)	Combination	Max			1216.61	104.93
N + 2.50	Top	(B.2.4-7A2)	Combination	Min			3693.79	2030.53
N + 2.50	Bottom	(B.2.4-7A2)	Combination	Min			1216.61	104.93
N + 2.50	Top	(B.2.4-7A3)	Combination	Max			3693.79	2030.53
N + 2.50	Bottom	(B.2.4-7A3)	Combination	Max			2113.75	104.93
N + 2.50	Top	(B.2.4-7A3)	Combination	Min			3693.79	2030.53
N + 2.50	Bottom	(B.2.4-7A3)	Combination	Min			2113.75	104.93
N + 2.50	Top	(B.2.4-7A4)	Combination	Max			3693.79	-2030.53
N + 2.50	Bottom	(B.2.4-7A4)	Combination	Max			1216.61	-104.93
N + 2.50	Top	(B.2.4-7A4)	Combination	Min			3693.79	-2030.53
N + 2.50	Bottom	(B.2.4-7A4)	Combination	Min			1216.61	-104.93
N + 2.50	Top	(B.2.4-7B1)	Combination	Max			3693.79	-609.16
N + 2.50	Bottom	(B.2.4-7B1)	Combination	Max			3160.41	-31.48
N + 2.50	Top	(B.2.4-7B1)	Combination	Min			3693.79	-609.16
N + 2.50	Bottom	(B.2.4-7B1)	Combination	Min			3160.41	-31.48
N + 2.50	Top	(B.2.4-7B2)	Combination	Max			3693.79	609.16
N + 2.50	Bottom	(B.2.4-7B2)	Combination	Max			169.95	31.48
N + 2.50	Top	(B.2.4-7B2)	Combination	Min			3693.79	609.16
N + 2.50	Bottom	(B.2.4-7B2)	Combination	Min			169.95	31.48
N + 2.50	Top	(B.2.4-7B3)	Combination	Max			3693.79	-609.16
N + 2.50	Bottom	(B.2.4-7B3)	Combination	Max			169.95	-31.48
N + 2.50	Top	(B.2.4-7B3)	Combination	Min			3693.79	-609.16
N + 2.50	Bottom	(B.2.4-7B3)	Combination	Min			169.95	-31.48
N + 2.50	Top	(B.2.4-7B4)	Combination	Max			3693.79	609.16
N + 2.50	Bottom	(B.2.4-7B4)	Combination	Max			3160.41	31.48
N + 2.50	Top	(B.2.4-7B4)	Combination	Min			3693.79	609.16

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.50	Bottom	(B.2.4-7B4)	Combination	Min			3160.41	31.48
N + 2.50	Top	Seismic	Combination	Max			11255.85	2030.53
N + 2.50	Bottom	Seismic	Combination	Max			5507.59	104.93
N + 2.50	Top	Seismic	Combination	Min			3693.79	-2030.53
N + 2.50	Bottom	Seismic	Combination	Min			169.95	-104.93
N + 2.50	Top	(B.2.4-3B)	Combination				4925.05	0
N + 2.50	Bottom	(B.2.4-3B)	Combination				2220.24	0
N + 2.50	Top	L+D	Combination				4104.21	0
N + 2.50	Bottom	L+D	Combination				1850.2	0
N + 2.50	Top	CIM	Combination	Max			8060.96	1421.37
N + 2.50	Bottom	CIM	Combination	Max			3979.29	73.45
N + 2.50	Top	CIM	Combination	Min			4104.21	-1421.37
N + 2.50	Bottom	CIM	Combination	Min			803.54	-73.45
N + 2.50	Top	DER7: 0.6D+0.3FsX+Fsy	Combination				2462.53	-2303.21
N + 2.50	Bottom	DER7: 0.6D+0.3FsX+Fsy	Combination				6762.47	-119.02
N + 2.50	Top	DER8: 0.6D+FsX+0.3Fsy	Combination				2462.53	-7677.38
N + 2.50	Bottom	DER8: 0.6D+FsX+0.3Fsy	Combination				2805.83	-396.73
N + 2.50	Top	DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				7071.77	-1727.41
N + 2.50	Bottom	DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				7433.56	-89.26
N + 2.50	Top	DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				7071.77	-5758.04
N + 2.50	Bottom	DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				4466.07	-297.55
N + 2.50	Top	DER2: D+FsX+0.3FsY	Combination				4104.21	-7677.38
N + 2.50	Bottom	DER2: D+FsX+0.3FsY	Combination				3545.91	-396.73
N + 2.50	Top	DER1: D+0.3FsX+FsY	Combination				4104.21	-2303.21
N + 2.50	Bottom	DER1: D+0.3FsX+FsY	Combination				7502.55	-119.02
N + 2.50	Top	DERIVAS Y	Combination	Max			7071.77	-1727.41
N + 2.50	Bottom	DERIVAS Y	Combination	Max			7502.55	-89.26
N + 2.50	Top	DERIVAS Y	Combination	Min			2462.53	-2303.21
N + 2.50	Bottom	DERIVAS Y	Combination	Min			6762.47	-119.02
N + 2.50	Top	DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				7071.77	-1727.41
N + 2.50	Bottom	DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				7433.56	-89.26
N + 2.50	Top	DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				7071.77	-5758.04
N + 2.50	Bottom	DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				4466.07	-297.55
N + 2.50	Top	(C5)	Combination				4104.21	0
N + 2.50	Bottom	(C5)	Combination				1850.2	0
N + 2.50	Top	(C6)	Combination				8060.96	0
N + 2.50	Bottom	(C6)	Combination				3642.32	0
N + 2.50	Top	(C7.1)	Combination				4104.21	0
N + 2.50	Bottom	(C7.1)	Combination				1850.2	0
N + 2.50	Top	(C7.2)	Combination				4104.21	0
N + 2.50	Bottom	(C7.2)	Combination				1850.2	0
N + 2.50	Top	(C8.1)	Combination				7071.77	0
N + 2.50	Bottom	(C8.1)	Combination				3194.29	0
N + 2.50	Top	(C8.2)	Combination				7071.77	0

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.50	Bottom	(C8.2)	Combination				3194.29	0
N + 2.50	Top	(C9.1)	Combination				4104.21	0
N + 2.50	Bottom	(C9.1)	Combination				1850.2	0
N + 2.50	Top	(C9.2)	Combination				4104.21	0
N + 2.50	Bottom	(C9.2)	Combination				1850.2	0
N + 2.50	Top	(C10.A1)	Combination	Max			4104.21	-1421.37
N + 2.50	Bottom	(C10.A1)	Combination	Max			2164.2	-73.45
N + 2.50	Top	(C10.A1)	Combination	Min			4104.21	-1421.37
N + 2.50	Bottom	(C10.A1)	Combination	Min			2164.2	-73.45
N + 2.50	Top	(C10.A2)	Combination	Max			4104.21	1421.37
N + 2.50	Bottom	(C10.A2)	Combination	Max			1536.2	73.45
N + 2.50	Top	(C10.A2)	Combination	Min			4104.21	1421.37
N + 2.50	Bottom	(C10.A2)	Combination	Min			1536.2	73.45
N + 2.50	Top	(C10.A3)	Combination	Max			4104.21	-1421.37
N + 2.50	Bottom	(C10.A3)	Combination	Max			1536.2	-73.45
N + 2.50	Top	(C10.A3)	Combination	Min			4104.21	-1421.37
N + 2.50	Bottom	(C10.A3)	Combination	Min			1536.2	-73.45
N + 2.50	Top	(C10.A4)	Combination	Max			4104.21	1421.37
N + 2.50	Bottom	(C10.A4)	Combination	Max			2164.2	73.45
N + 2.50	Top	(C10.A4)	Combination	Min			4104.21	1421.37
N + 2.50	Bottom	(C10.A4)	Combination	Min			2164.2	73.45
N + 2.50	Top	(C10.B1)	Combination	Max			4104.21	-426.41
N + 2.50	Bottom	(C10.B1)	Combination	Max			2896.86	-22.03
N + 2.50	Top	(C10.B1)	Combination	Min			4104.21	-426.41
N + 2.50	Bottom	(C10.B1)	Combination	Min			2896.86	-22.03
N + 2.50	Top	(C10.B2)	Combination	Max			4104.21	426.41
N + 2.50	Bottom	(C10.B2)	Combination	Max			803.54	22.03
N + 2.50	Top	(C10.B2)	Combination	Min			4104.21	426.41
N + 2.50	Bottom	(C10.B2)	Combination	Min			803.54	22.03
N + 2.50	Top	(C10.B3)	Combination	Max			4104.21	-426.41
N + 2.50	Bottom	(C10.B3)	Combination	Max			803.54	-22.03
N + 2.50	Top	(C10.B3)	Combination	Min			4104.21	-426.41
N + 2.50	Bottom	(C10.B3)	Combination	Min			803.54	-22.03
N + 2.50	Top	(C10.B4)	Combination	Max			4104.21	426.41
N + 2.50	Bottom	(C10.B4)	Combination	Max			2896.86	22.03
N + 2.50	Top	(C10.B4)	Combination	Min			4104.21	426.41
N + 2.50	Bottom	(C10.B4)	Combination	Min			2896.86	22.03
N + 2.50	Top	(C11.1)	Combination				7071.77	0
N + 2.50	Bottom	(C11.1)	Combination				3194.29	0
N + 2.50	Top	(C11.2)	Combination				7071.77	0
N + 2.50	Bottom	(C11.2)	Combination				3194.29	0
N + 2.50	Top	(C11.3)	Combination				7071.77	0
N + 2.50	Bottom	(C11.3)	Combination				3194.29	0
N + 2.50	Top	(C11.4)	Combination				7071.77	0

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.50	Bottom	(C11.4)	Combination				3194.29	0
N + 2.50	Top	(C12.A1)	Combination	Max			7071.77	-1066.03
N + 2.50	Bottom	(C12.A1)	Combination	Max			3429.79	-55.09
N + 2.50	Top	(C12.A1)	Combination	Min			7071.77	-1066.03
N + 2.50	Bottom	(C12.A1)	Combination	Min			3429.79	-55.09
N + 2.50	Top	(C12.A2)	Combination	Max			7071.77	1066.03
N + 2.50	Bottom	(C12.A2)	Combination	Max			2958.79	55.09
N + 2.50	Top	(C12.A2)	Combination	Min			7071.77	1066.03
N + 2.50	Bottom	(C12.A2)	Combination	Min			2958.79	55.09
N + 2.50	Top	(C12.A3)	Combination	Max			7071.77	-1066.03
N + 2.50	Bottom	(C12.A3)	Combination	Max			2958.79	-55.09
N + 2.50	Top	(C12.A3)	Combination	Min			7071.77	-1066.03
N + 2.50	Bottom	(C12.A3)	Combination	Min			2958.79	-55.09
N + 2.50	Top	(C12.A4)	Combination	Max			7071.77	1066.03
N + 2.50	Bottom	(C12.A4)	Combination	Max			3429.79	55.09
N + 2.50	Top	(C12.A4)	Combination	Min			7071.77	1066.03
N + 2.50	Bottom	(C12.A4)	Combination	Min			3429.79	55.09
N + 2.50	Top	(C12.B1)	Combination	Max			7071.77	-319.81
N + 2.50	Bottom	(C12.B1)	Combination	Max			3979.29	-16.53
N + 2.50	Top	(C12.B1)	Combination	Min			7071.77	-319.81
N + 2.50	Bottom	(C12.B1)	Combination	Min			3979.29	-16.53
N + 2.50	Top	(C12.B2)	Combination	Max			7071.77	319.81
N + 2.50	Bottom	(C12.B2)	Combination	Max			2409.29	16.53
N + 2.50	Top	(C12.B2)	Combination	Min			7071.77	319.81
N + 2.50	Bottom	(C12.B2)	Combination	Min			2409.29	16.53
N + 2.50	Top	(C12.B3)	Combination	Max			7071.77	-319.81
N + 2.50	Bottom	(C12.B3)	Combination	Max			2409.29	-16.53
N + 2.50	Top	(C12.B3)	Combination	Min			7071.77	-319.81
N + 2.50	Bottom	(C12.B3)	Combination	Min			2409.29	-16.53
N + 2.50	Top	(C12.B4)	Combination	Max			7071.77	319.81
N + 2.50	Bottom	(C12.B4)	Combination	Max			3979.29	16.53
N + 2.50	Top	(C12.B4)	Combination	Min			7071.77	319.81
N + 2.50	Bottom	(C12.B4)	Combination	Min			3979.29	16.53
N + 2.50	Top	(C12.C1)	Combination	Max			7071.77	-1066.03
N + 2.50	Bottom	(C12.C1)	Combination	Max			3429.79	-55.09
N + 2.50	Top	(C12.C1)	Combination	Min			7071.77	-1066.03
N + 2.50	Bottom	(C12.C1)	Combination	Min			3429.79	-55.09
N + 2.50	Top	(C12.C2)	Combination	Max			7071.77	1066.03
N + 2.50	Bottom	(C12.C2)	Combination	Max			2958.79	55.09
N + 2.50	Top	(C12.C2)	Combination	Min			7071.77	1066.03
N + 2.50	Bottom	(C12.C2)	Combination	Min			2958.79	55.09
N + 2.50	Top	(C12.C3)	Combination	Max			7071.77	-1066.03
N + 2.50	Bottom	(C12.C3)	Combination	Max			2958.79	-55.09
N + 2.50	Top	(C12.C3)	Combination	Min			7071.77	-1066.03

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.50	Bottom	(C12.C3)	Combination	Min			2958.79	-55.09
N + 2.50	Top	(C12.C4)	Combination	Max			7071.77	1066.03
N + 2.50	Bottom	(C12.C4)	Combination	Max			3429.79	55.09
N + 2.50	Top	(C12.C4)	Combination	Min			7071.77	1066.03
N + 2.50	Bottom	(C12.C4)	Combination	Min			3429.79	55.09
N + 2.50	Top	(C12.D1)	Combination	Max			7071.77	-319.81
N + 2.50	Bottom	(C12.D1)	Combination	Max			3979.29	-16.53
N + 2.50	Top	(C12.D1)	Combination	Min			7071.77	-319.81
N + 2.50	Bottom	(C12.D1)	Combination	Min			3979.29	-16.53
N + 2.50	Top	(C12.D2)	Combination	Max			7071.77	319.81
N + 2.50	Bottom	(C12.D2)	Combination	Max			2409.29	16.53
N + 2.50	Top	(C12.D2)	Combination	Min			7071.77	319.81
N + 2.50	Bottom	(C12.D2)	Combination	Min			2409.29	16.53
N + 2.50	Top	(C12.D3)	Combination	Max			7071.77	-319.81
N + 2.50	Bottom	(C12.D3)	Combination	Max			2409.29	-16.53
N + 2.50	Top	(C12.D3)	Combination	Min			7071.77	-319.81
N + 2.50	Bottom	(C12.D3)	Combination	Min			2409.29	-16.53
N + 2.50	Top	(C12.D4)	Combination	Max			7071.77	319.81
N + 2.50	Bottom	(C12.D4)	Combination	Max			3979.29	16.53
N + 2.50	Top	(C12.D4)	Combination	Min			7071.77	319.81
N + 2.50	Bottom	(C12.D4)	Combination	Min			3979.29	16.53
N + 2.50	Top	DStlD1	Combination				4104.21	0
N + 2.50	Bottom	DStlD1	Combination				1850.2	0
N + 2.50	Top	DStlD2	Combination				8060.96	0
N + 2.50	Bottom	DStlD2	Combination				3642.32	0
N + 2.33	Top	D	LinStatic				2505.09	0
N + 2.33	Bottom	D	LinStatic				4014.93	0
N + 2.33	Top	L	LinStatic				5748.87	0
N + 2.33	Bottom	L	LinStatic				5748.87	0
N + 2.33	Top	SD	LinStatic				3449.32	0
N + 2.33	Bottom	SD	LinStatic				3449.32	0
N + 2.33	Top	ADEEx	LinRespSpec	Max			0	6333.09
N + 2.33	Bottom	ADEEx	LinRespSpec	Max			0	6333.09
N + 2.33	Top	ADEEy	LinRespSpec	Max			4483.78	0
N + 2.33	Bottom	ADEEy	LinRespSpec	Max			4483.78	0
N + 2.33	Top	Lr	LinStatic				0	0
N + 2.33	Bottom	Lr	LinStatic				0	0
N + 2.33	Top	W	LinStatic				0	0
N + 2.33	Bottom	W	LinStatic				0	0
N + 2.33	Top	FHE-X	LinStatic	Max			0	-9379.24
N + 2.33	Bottom	FHE-X	LinStatic	Max			0	-9379.24
N + 2.33	Top	FHE-X	LinStatic	Min			0	-9379.24
N + 2.33	Bottom	FHE-X	LinStatic	Min			0	-9379.24
N + 2.33	Top	FHE-Y	LinStatic	Max			7064.98	0

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.33	Bottom	FHE-Y	LinStatic	Max			7064.98	0
N + 2.33	Top	FHE-Y	LinStatic	Min			7064.98	0
N + 2.33	Bottom	FHE-Y	LinStatic	Min			7064.98	0
N + 2.33	Top	FHE-Y_{der}	LinStatic				5652.36	0
N + 2.33	Bottom	FHE-Y_{der}	LinStatic				5652.36	0
N + 2.33	Top	FHE-X_{der}	LinStatic				0	-7503.89
N + 2.33	Bottom	FHE-X_{der}	LinStatic				0	-7503.89
N + 2.33	Top	H	LinStatic				0	0
N + 2.33	Bottom	H	LinStatic				0	0
N + 2.33	Top	G	LinStatic				0	0
N + 2.33	Bottom	G	LinStatic				0	0
N + 2.33	Top	DERIVAS X	Combination	Max			11537.84	-5627.92
N + 2.33	Bottom	DERIVAS X	Combination	Max			13047.68	-5627.92
N + 2.33	Top	DERIVAS X	Combination	Min			5268.35	-7503.89
N + 2.33	Bottom	DERIVAS X	Combination	Min			6174.26	-7503.89
N + 2.33	Top	(B.2.4-5A2)	Combination	Max			12445.59	1984.65
N + 2.33	Bottom	(B.2.4-5A2)	Combination	Max			14257.4	1984.65
N + 2.33	Top	(B.2.4-5A2)	Combination	Min			12445.59	1984.65
N + 2.33	Bottom	(B.2.4-5A2)	Combination	Min			14257.4	1984.65
N + 2.33	Top	(B.2.4-1)	Combination				8336.17	0
N + 2.33	Bottom	(B.2.4-1)	Combination				10449.95	0
N + 2.33	Top	(B.2.4-2A)	Combination				16343.48	0
N + 2.33	Bottom	(B.2.4-2A)	Combination				18155.29	0
N + 2.33	Top	(B.2.4-2B)	Combination				16343.48	0
N + 2.33	Bottom	(B.2.4-2B)	Combination				18155.29	0
N + 2.33	Top	(B.2.4-3A)	Combination				12894.16	0
N + 2.33	Bottom	(B.2.4-3A)	Combination				14705.97	0
N + 2.33	Top	(B.2.4-3C)	Combination				7145.29	0
N + 2.33	Bottom	(B.2.4-3C)	Combination				8957.1	0
N + 2.33	Top	(B.2.4-3D)	Combination				12894.16	0
N + 2.33	Bottom	(B.2.4-3D)	Combination				14705.97	0
N + 2.33	Top	(B.2.4-3E)	Combination				7145.29	0
N + 2.33	Bottom	(B.2.4-3E)	Combination				8957.1	0
N + 2.33	Top	(B.2.4-3F)	Combination				7145.29	0
N + 2.33	Bottom	(B.2.4-3F)	Combination				8957.1	0
N + 2.33	Top	(B.2.4-4A)	Combination				12894.16	0
N + 2.33	Bottom	(B.2.4-4A)	Combination				14705.97	0
N + 2.33	Top	(B.2.4-4B)	Combination				12894.16	0
N + 2.33	Bottom	(B.2.4-4B)	Combination				14705.97	0
N + 2.33	Top	(B.2.4-4C)	Combination				12894.16	0
N + 2.33	Bottom	(B.2.4-4C)	Combination				14705.97	0
N + 2.33	Top	(B.2.4-4D)	Combination				12894.16	0
N + 2.33	Bottom	(B.2.4-4D)	Combination				14705.97	0
N + 2.33	Top	FHE_X / R	Combination	Max			0	-1984.65

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.33	Bottom	FHE_X / R	Combination	Max			0	-1984.65
N + 2.33	Top	FHE_X / R	Combination	Min			0	-1984.65
N + 2.33	Bottom	FHE_X / R	Combination	Min			0	-1984.65
N + 2.33	Top	FHE_Y / R	Combination	Max			1495.23	0
N + 2.33	Bottom	FHE_Y / R	Combination	Max			1495.23	0
N + 2.33	Top	FHE_Y / R	Combination	Min			1495.23	0
N + 2.33	Bottom	FHE_Y / R	Combination	Min			1495.23	0
N + 2.33	Top	(B.2.4-5A1)	Combination	Max			13342.73	-1984.65
N + 2.33	Bottom	(B.2.4-5A1)	Combination	Max			15154.54	-1984.65
N + 2.33	Top	(B.2.4-5A1)	Combination	Min			13342.73	-1984.65
N + 2.33	Bottom	(B.2.4-5A1)	Combination	Min			15154.54	-1984.65
N + 2.33	Top	(B.2.4-5A3)	Combination	Max			13342.73	1984.65
N + 2.33	Bottom	(B.2.4-5A3)	Combination	Max			15154.54	1984.65
N + 2.33	Top	(B.2.4-5A3)	Combination	Min			13342.73	1984.65
N + 2.33	Bottom	(B.2.4-5A3)	Combination	Min			15154.54	1984.65
N + 2.33	Top	(B.2.4-5A4)	Combination	Max			12445.59	-1984.65
N + 2.33	Bottom	(B.2.4-5A4)	Combination	Max			14257.4	-1984.65
N + 2.33	Top	(B.2.4-5A4)	Combination	Min			12445.59	-1984.65
N + 2.33	Bottom	(B.2.4-5A4)	Combination	Min			14257.4	-1984.65
N + 2.33	Top	(B.2.4-5B1)	Combination	Max			14389.39	-595.39
N + 2.33	Bottom	(B.2.4-5B1)	Combination	Max			16201.2	-595.39
N + 2.33	Top	(B.2.4-5B1)	Combination	Min			14389.39	-595.39
N + 2.33	Bottom	(B.2.4-5B1)	Combination	Min			16201.2	-595.39
N + 2.33	Top	(B.2.4-5B2)	Combination	Max			11398.93	595.39
N + 2.33	Bottom	(B.2.4-5B2)	Combination	Max			13210.74	595.39
N + 2.33	Top	(B.2.4-5B2)	Combination	Min			11398.93	595.39
N + 2.33	Bottom	(B.2.4-5B2)	Combination	Min			13210.74	595.39
N + 2.33	Top	(B.2.4-5B3)	Combination	Max			11398.93	-595.39
N + 2.33	Bottom	(B.2.4-5B3)	Combination	Max			13210.74	-595.39
N + 2.33	Top	(B.2.4-5B3)	Combination	Min			11398.93	-595.39
N + 2.33	Bottom	(B.2.4-5B3)	Combination	Min			13210.74	-595.39
N + 2.33	Top	(B.2.4-5B4)	Combination	Max			14389.39	595.39
N + 2.33	Bottom	(B.2.4-5B4)	Combination	Max			16201.2	595.39
N + 2.33	Top	(B.2.4-5B4)	Combination	Min			14389.39	595.39
N + 2.33	Bottom	(B.2.4-5B4)	Combination	Min			16201.2	595.39
N + 2.33	Top	(B.2.4-6A)	Combination				5358.97	0
N + 2.33	Bottom	(B.2.4-6A)	Combination				6717.82	0
N + 2.33	Top	(B.2.4-6B)	Combination				5358.97	0
N + 2.33	Bottom	(B.2.4-6B)	Combination				6717.82	0
N + 2.33	Top	(B.2.4-7A1)	Combination	Max			5807.54	-1984.65
N + 2.33	Bottom	(B.2.4-7A1)	Combination	Max			7166.39	-1984.65
N + 2.33	Top	(B.2.4-7A1)	Combination	Min			5807.54	-1984.65
N + 2.33	Bottom	(B.2.4-7A1)	Combination	Min			7166.39	-1984.65
N + 2.33	Top	(B.2.4-7A2)	Combination	Max			4910.4	1984.65

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.33	Bottom	(B.2.4-7A2)	Combination	Max			6269.25	1984.65
N + 2.33	Top	(B.2.4-7A2)	Combination	Min			4910.4	1984.65
N + 2.33	Bottom	(B.2.4-7A2)	Combination	Min			6269.25	1984.65
N + 2.33	Top	(B.2.4-7A3)	Combination	Max			5807.54	1984.65
N + 2.33	Bottom	(B.2.4-7A3)	Combination	Max			7166.39	1984.65
N + 2.33	Top	(B.2.4-7A3)	Combination	Min			5807.54	1984.65
N + 2.33	Bottom	(B.2.4-7A3)	Combination	Min			7166.39	1984.65
N + 2.33	Top	(B.2.4-7A4)	Combination	Max			4910.4	-1984.65
N + 2.33	Bottom	(B.2.4-7A4)	Combination	Max			6269.25	-1984.65
N + 2.33	Top	(B.2.4-7A4)	Combination	Min			4910.4	-1984.65
N + 2.33	Bottom	(B.2.4-7A4)	Combination	Min			6269.25	-1984.65
N + 2.33	Top	(B.2.4-7B1)	Combination	Max			6854.2	-595.39
N + 2.33	Bottom	(B.2.4-7B1)	Combination	Max			8213.06	-595.39
N + 2.33	Top	(B.2.4-7B1)	Combination	Min			6854.2	-595.39
N + 2.33	Bottom	(B.2.4-7B1)	Combination	Min			8213.06	-595.39
N + 2.33	Top	(B.2.4-7B2)	Combination	Max			3863.74	595.39
N + 2.33	Bottom	(B.2.4-7B2)	Combination	Max			5222.59	595.39
N + 2.33	Top	(B.2.4-7B2)	Combination	Min			3863.74	595.39
N + 2.33	Bottom	(B.2.4-7B2)	Combination	Min			5222.59	595.39
N + 2.33	Top	(B.2.4-7B3)	Combination	Max			3863.74	-595.39
N + 2.33	Bottom	(B.2.4-7B3)	Combination	Max			5222.59	-595.39
N + 2.33	Top	(B.2.4-7B3)	Combination	Min			3863.74	-595.39
N + 2.33	Bottom	(B.2.4-7B3)	Combination	Min			5222.59	-595.39
N + 2.33	Top	(B.2.4-7B4)	Combination	Max			6854.2	595.39
N + 2.33	Bottom	(B.2.4-7B4)	Combination	Max			8213.06	595.39
N + 2.33	Top	(B.2.4-7B4)	Combination	Min			6854.2	595.39
N + 2.33	Bottom	(B.2.4-7B4)	Combination	Min			8213.06	595.39
N + 2.33	Top	Seismic	Combination	Max			16343.48	1984.65
N + 2.33	Bottom	Seismic	Combination	Max			18155.29	1984.65
N + 2.33	Top	Seismic	Combination	Min			3863.74	-1984.65
N + 2.33	Bottom	Seismic	Combination	Min			5222.59	-1984.65
N + 2.33	Top	(B.2.4-3B)	Combination				7145.29	0
N + 2.33	Bottom	(B.2.4-3B)	Combination				8957.1	0
N + 2.33	Top	L+D	Combination				5954.41	0
N + 2.33	Bottom	L+D	Combination				7464.25	0
N + 2.33	Top	CIM	Combination	Max			11703.28	1389.25
N + 2.33	Bottom	CIM	Combination	Max			13213.12	1389.25
N + 2.33	Top	CIM	Combination	Min			4907.75	-1389.25
N + 2.33	Bottom	CIM	Combination	Min			6417.59	-1389.25
N + 2.33	Top	DER7: 0.6D+0.3FsX+Fsy	Combination				9225	-2251.17
N + 2.33	Bottom	DER7: 0.6D+0.3FsX+Fsy	Combination				10130.9	-2251.17
N + 2.33	Top	DER8: 0.6D+FsX+0.3Fsy	Combination				5268.35	-7503.89
N + 2.33	Bottom	DER8: 0.6D+FsX+0.3Fsy	Combination				6174.26	-7503.89
N + 2.33	Top	DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				14505.33	-1688.38

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.33	Bottom	DER3: D+0.75L+0.75Lr+0.225FsX+0.75FsY	Combination				16015.17	-1688.38
N + 2.33	Top	DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				11537.84	-5627.92
N + 2.33	Bottom	DER4: D+0.75L+0.75Lr+0.75FsX+0.225FsY	Combination				13047.68	-5627.92
N + 2.33	Top	DER2: D+FsX+0.3FsY	Combination				7650.12	-7503.89
N + 2.33	Bottom	DER2: D+FsX+0.3FsY	Combination				9159.96	-7503.89
N + 2.33	Top	DER1: D+0.3FsX+FsY	Combination				11606.76	-2251.17
N + 2.33	Bottom	DER1: D+0.3FsX+FsY	Combination				13116.6	-2251.17
N + 2.33	Top	DERIVAS Y	Combination	Max			14505.33	-1688.38
N + 2.33	Bottom	DERIVAS Y	Combination	Max			16015.17	-1688.38
N + 2.33	Top	DERIVAS Y	Combination	Min			9225	-2251.17
N + 2.33	Bottom	DERIVAS Y	Combination	Min			10130.9	-2251.17
N + 2.33	Top	DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				14505.33	-1688.38
N + 2.33	Bottom	DER5: D+0.75L+0.75G+0.225FsX+0.75FsY	Combination				16015.17	-1688.38
N + 2.33	Top	DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				11537.84	-5627.92
N + 2.33	Bottom	DER6: D+0.75L+0.75G+0.75FsX+0.225FsY	Combination				13047.68	-5627.92
N + 2.33	Top	(C5)	Combination				5954.41	0
N + 2.33	Bottom	(C5)	Combination				7464.25	0
N + 2.33	Top	(C6)	Combination				11703.28	0
N + 2.33	Bottom	(C6)	Combination				13213.12	0
N + 2.33	Top	(C7.1)	Combination				5954.41	0
N + 2.33	Bottom	(C7.1)	Combination				7464.25	0
N + 2.33	Top	(C7.2)	Combination				5954.41	0
N + 2.33	Bottom	(C7.2)	Combination				7464.25	0
N + 2.33	Top	(C8.1)	Combination				10266.06	0
N + 2.33	Bottom	(C8.1)	Combination				11775.9	0
N + 2.33	Top	(C8.2)	Combination				10266.06	0
N + 2.33	Bottom	(C8.2)	Combination				11775.9	0
N + 2.33	Top	(C9.1)	Combination				5954.41	0
N + 2.33	Bottom	(C9.1)	Combination				7464.25	0
N + 2.33	Top	(C9.2)	Combination				5954.41	0
N + 2.33	Bottom	(C9.2)	Combination				7464.25	0
N + 2.33	Top	(C10.A1)	Combination	Max			6268.41	-1389.25
N + 2.33	Bottom	(C10.A1)	Combination	Max			7778.25	-1389.25
N + 2.33	Top	(C10.A1)	Combination	Min			6268.41	-1389.25
N + 2.33	Bottom	(C10.A1)	Combination	Min			7778.25	-1389.25
N + 2.33	Top	(C10.A2)	Combination	Max			5640.41	1389.25
N + 2.33	Bottom	(C10.A2)	Combination	Max			7150.25	1389.25
N + 2.33	Top	(C10.A2)	Combination	Min			5640.41	1389.25
N + 2.33	Bottom	(C10.A2)	Combination	Min			7150.25	1389.25
N + 2.33	Top	(C10.A3)	Combination	Max			5640.41	-1389.25
N + 2.33	Bottom	(C10.A3)	Combination	Max			7150.25	-1389.25
N + 2.33	Top	(C10.A3)	Combination	Min			5640.41	-1389.25
N + 2.33	Bottom	(C10.A3)	Combination	Min			7150.25	-1389.25
N + 2.33	Top	(C10.A4)	Combination	Max			6268.41	1389.25

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.33	Bottom	(C10.A4)	Combination	Max			7778.25	1389.25
N + 2.33	Top	(C10.A4)	Combination	Min			6268.41	1389.25
N + 2.33	Bottom	(C10.A4)	Combination	Min			7778.25	1389.25
N + 2.33	Top	(C10.B1)	Combination	Max			7001.07	-416.78
N + 2.33	Bottom	(C10.B1)	Combination	Max			8510.91	-416.78
N + 2.33	Top	(C10.B1)	Combination	Min			7001.07	-416.78
N + 2.33	Bottom	(C10.B1)	Combination	Min			8510.91	-416.78
N + 2.33	Top	(C10.B2)	Combination	Max			4907.75	416.78
N + 2.33	Bottom	(C10.B2)	Combination	Max			6417.59	416.78
N + 2.33	Top	(C10.B2)	Combination	Min			4907.75	416.78
N + 2.33	Bottom	(C10.B2)	Combination	Min			6417.59	416.78
N + 2.33	Top	(C10.B3)	Combination	Max			4907.75	-416.78
N + 2.33	Bottom	(C10.B3)	Combination	Max			6417.59	-416.78
N + 2.33	Top	(C10.B3)	Combination	Min			4907.75	-416.78
N + 2.33	Bottom	(C10.B3)	Combination	Min			6417.59	-416.78
N + 2.33	Top	(C10.B4)	Combination	Max			7001.07	416.78
N + 2.33	Bottom	(C10.B4)	Combination	Max			8510.91	416.78
N + 2.33	Top	(C10.B4)	Combination	Min			7001.07	416.78
N + 2.33	Bottom	(C10.B4)	Combination	Min			8510.91	416.78
N + 2.33	Top	(C11.1)	Combination				10266.06	0
N + 2.33	Bottom	(C11.1)	Combination				11775.9	0
N + 2.33	Top	(C11.2)	Combination				10266.06	0
N + 2.33	Bottom	(C11.2)	Combination				11775.9	0
N + 2.33	Top	(C11.3)	Combination				10266.06	0
N + 2.33	Bottom	(C11.3)	Combination				11775.9	0
N + 2.33	Top	(C11.4)	Combination				10266.06	0
N + 2.33	Bottom	(C11.4)	Combination				11775.9	0
N + 2.33	Top	(C12.A1)	Combination	Max			10501.56	-1041.94
N + 2.33	Bottom	(C12.A1)	Combination	Max			12011.4	-1041.94
N + 2.33	Top	(C12.A1)	Combination	Min			10501.56	-1041.94
N + 2.33	Bottom	(C12.A1)	Combination	Min			12011.4	-1041.94
N + 2.33	Top	(C12.A2)	Combination	Max			10030.56	1041.94
N + 2.33	Bottom	(C12.A2)	Combination	Max			11540.4	1041.94
N + 2.33	Top	(C12.A2)	Combination	Min			10030.56	1041.94
N + 2.33	Bottom	(C12.A2)	Combination	Min			11540.4	1041.94
N + 2.33	Top	(C12.A3)	Combination	Max			10030.56	-1041.94
N + 2.33	Bottom	(C12.A3)	Combination	Max			11540.4	-1041.94
N + 2.33	Top	(C12.A3)	Combination	Min			10030.56	-1041.94
N + 2.33	Bottom	(C12.A3)	Combination	Min			11540.4	-1041.94
N + 2.33	Top	(C12.A4)	Combination	Max			10501.56	1041.94
N + 2.33	Bottom	(C12.A4)	Combination	Max			12011.4	1041.94
N + 2.33	Top	(C12.A4)	Combination	Min			10501.56	1041.94
N + 2.33	Bottom	(C12.A4)	Combination	Min			12011.4	1041.94
N + 2.33	Top	(C12.B1)	Combination	Max			11051.06	-312.58

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.33	Bottom	(C12.B1)	Combination	Max			12560.9	-312.58
N + 2.33	Top	(C12.B1)	Combination	Min			11051.06	-312.58
N + 2.33	Bottom	(C12.B1)	Combination	Min			12560.9	-312.58
N + 2.33	Top	(C12.B2)	Combination	Max			9481.06	312.58
N + 2.33	Bottom	(C12.B2)	Combination	Max			10990.9	312.58
N + 2.33	Top	(C12.B2)	Combination	Min			9481.06	312.58
N + 2.33	Bottom	(C12.B2)	Combination	Min			10990.9	312.58
N + 2.33	Top	(C12.B3)	Combination	Max			9481.06	-312.58
N + 2.33	Bottom	(C12.B3)	Combination	Max			10990.9	-312.58
N + 2.33	Top	(C12.B3)	Combination	Min			9481.06	-312.58
N + 2.33	Bottom	(C12.B3)	Combination	Min			10990.9	-312.58
N + 2.33	Top	(C12.B4)	Combination	Max			11051.06	312.58
N + 2.33	Bottom	(C12.B4)	Combination	Max			12560.9	312.58
N + 2.33	Top	(C12.B4)	Combination	Min			11051.06	312.58
N + 2.33	Bottom	(C12.B4)	Combination	Min			12560.9	312.58
N + 2.33	Top	(C12.C1)	Combination	Max			10501.56	-1041.94
N + 2.33	Bottom	(C12.C1)	Combination	Max			12011.4	-1041.94
N + 2.33	Top	(C12.C1)	Combination	Min			10501.56	-1041.94
N + 2.33	Bottom	(C12.C1)	Combination	Min			12011.4	-1041.94
N + 2.33	Top	(C12.C2)	Combination	Max			10030.56	1041.94
N + 2.33	Bottom	(C12.C2)	Combination	Max			11540.4	1041.94
N + 2.33	Top	(C12.C2)	Combination	Min			10030.56	1041.94
N + 2.33	Bottom	(C12.C2)	Combination	Min			11540.4	1041.94
N + 2.33	Top	(C12.C3)	Combination	Max			10030.56	-1041.94
N + 2.33	Bottom	(C12.C3)	Combination	Max			11540.4	-1041.94
N + 2.33	Top	(C12.C3)	Combination	Min			10030.56	-1041.94
N + 2.33	Bottom	(C12.C3)	Combination	Min			11540.4	-1041.94
N + 2.33	Top	(C12.C4)	Combination	Max			10501.56	1041.94
N + 2.33	Bottom	(C12.C4)	Combination	Max			12011.4	1041.94
N + 2.33	Top	(C12.C4)	Combination	Min			10501.56	1041.94
N + 2.33	Bottom	(C12.C4)	Combination	Min			12011.4	1041.94
N + 2.33	Top	(C12.D1)	Combination	Max			11051.06	-312.58
N + 2.33	Bottom	(C12.D1)	Combination	Max			12560.9	-312.58
N + 2.33	Top	(C12.D1)	Combination	Min			11051.06	-312.58
N + 2.33	Bottom	(C12.D1)	Combination	Min			12560.9	-312.58
N + 2.33	Top	(C12.D2)	Combination	Max			9481.06	312.58
N + 2.33	Bottom	(C12.D2)	Combination	Max			10990.9	312.58
N + 2.33	Top	(C12.D2)	Combination	Min			9481.06	312.58
N + 2.33	Bottom	(C12.D2)	Combination	Min			10990.9	312.58
N + 2.33	Top	(C12.D3)	Combination	Max			9481.06	-312.58
N + 2.33	Bottom	(C12.D3)	Combination	Max			10990.9	-312.58
N + 2.33	Top	(C12.D3)	Combination	Min			9481.06	-312.58
N + 2.33	Bottom	(C12.D3)	Combination	Min			10990.9	-312.58
N + 2.33	Top	(C12.D4)	Combination	Max			11051.06	312.58

Table 5.3 - Story Forces (Part 1 of 2, continued)

Story	Location	Output Case	Case Type	Step Type	Step Number	Step Label	P kgf	VX kgf
N + 2.33	Bottom	(C12.D4)	Combination	Max			12560.9	312.58
N + 2.33	Top	(C12.D4)	Combination	Min			11051.06	312.58
N + 2.33	Bottom	(C12.D4)	Combination	Min			12560.9	312.58
N + 2.33	Top	DStlD1	Combination				5954.41	0
N + 2.33	Bottom	DStlD1	Combination				7464.25	0
N + 2.33	Top	DStlD2	Combination				11703.28	0
N + 2.33	Bottom	DStlD2	Combination				13213.12	0

Table 5.3 - Story Forces (Part 2 of 2)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.50	Top	0	0	0	-744833.88
N + 2.50	Bottom	-156.38	-67321.19	180884.55	-333606.35
N + 2.50	Top	0	0	0	-1703380.88
N + 2.50	Bottom	-408.52	-175869.4	410830.81	-771507.5
N + 2.50	Top	0	0	0	-1022028.53
N + 2.50	Bottom	-245.11	-105521.64	246498.48	-462904.5
N + 2.50	Top	0	243469.1	0	0
N + 2.50	Bottom	0	72666.65	0	204530.73
N + 2.50	Top	5906.2	2542617.49	0	0
N + 2.50	Bottom	487.58	209904.48	583270.42	1930268.56
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	0	0	0
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	0	0	0
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	61157.94	0	-50198.1
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	61157.94	0	-50198.1
N + 2.50	Top	-9596.09	-4131116.78	0	0
N + 2.50	Bottom	-1081.04	-465388.92	921879.14	-3041472.2
N + 2.50	Top	-9596.09	-4131116.78	0	0
N + 2.50	Bottom	-1081.04	-465388.92	921879.14	-3041472.2
N + 2.50	Top	-7677.38	-3305112.24	0	0
N + 2.50	Bottom	-864.89	-372335.79	737552.14	-2433338.86
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	48929.59	0	-40161.14
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	0	0	0
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	0	0	0
N + 2.50	Top	-1727.41	-743650.25	0	-1060117.44
N + 2.50	Bottom	-500.36	-166476.84	901455.37	-1248069.31
N + 2.50	Top	-2303.21	-991533.67	0	-3044398.06
N + 2.50	Bottom	-902.49	-351823.24	477695.46	-1952763.58

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.50	Top	609.28	262293.13	0	-3823615.76
N + 2.50	Bottom	-821.68	-366673.31	865158.43	-1523589.26
N + 2.50	Top	609.28	262293.13	0	-3823615.76
N + 2.50	Bottom	-821.68	-366673.31	865158.43	-1523589.26
N + 2.50	Top	0	0	0	-2473607.37
N + 2.50	Bottom	-562.09	-241979.96	598336.24	-1115115.19
N + 2.50	Top	0	0	0	-4845644.29
N + 2.50	Bottom	-1135.43	-488802.43	1170188.93	-2190225.03
N + 2.50	Top	0	0	0	-4845644.29
N + 2.50	Bottom	-1135.43	-488802.43	1170188.93	-2190225.03
N + 2.50	Top	0	0	0	-3823615.76
N + 2.50	Bottom	-890.32	-383280.79	923690.44	-1727320.53
N + 2.50	Top	0	0	0	-2120234.89
N + 2.50	Bottom	-481.79	-207411.39	512859.64	-955813.02
N + 2.50	Top	0	0	0	-3823615.76
N + 2.50	Bottom	-890.32	-383280.79	923690.44	-1727320.53
N + 2.50	Top	0	0	0	-2120234.89
N + 2.50	Bottom	-481.79	-207411.39	512859.64	-955813.02
N + 2.50	Top	0	0	0	-2120234.89
N + 2.50	Bottom	-481.79	-207411.39	512859.64	-955813.02
N + 2.50	Top	0	0	0	-3823615.76
N + 2.50	Bottom	-890.32	-383280.79	923690.44	-1727320.53
N + 2.50	Top	0	0	0	-3823615.76
N + 2.50	Bottom	-890.32	-383280.79	923690.44	-1727320.53
N + 2.50	Top	0	0	0	-3823615.76
N + 2.50	Bottom	-890.32	-383280.79	923690.44	-1727320.53
N + 2.50	Top	0	0	0	-3823615.76
N + 2.50	Bottom	-890.32	-383280.79	923690.44	-1727320.53
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	12941.02	0	-10621.92
N + 2.50	Top	0	0	0	0
N + 2.50	Bottom	0	12941.02	0	-10621.92
N + 2.50	Top	-2030.92	-874310.43	0	0
N + 2.50	Bottom	-228.79	-98495.01	195106.7	-643697.82
N + 2.50	Top	-2030.92	-874310.43	0	0
N + 2.50	Bottom	-228.79	-98495.01	195106.7	-643697.82
N + 2.50	Top	-609.28	-262293.13	0	-3823615.76
N + 2.50	Bottom	-958.95	-399888.28	982222.45	-1931051.79
N + 2.50	Top	-609.28	-262293.13	0	-3823615.76
N + 2.50	Bottom	-958.95	-399888.28	982222.45	-1931051.79
N + 2.50	Top	-609.28	-262293.13	0	-3823615.76
N + 2.50	Bottom	-958.95	-425770.32	982222.45	-1909807.95
N + 2.50	Top	-609.28	-262293.13	0	-3823615.76
N + 2.50	Bottom	-958.95	-425770.32	982222.45	-1909807.95
N + 2.50	Top	609.28	262293.13	0	-3823615.76

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.50	Bottom	-821.68	-340791.27	865158.43	-1544833.1
N + 2.50	Top	609.28	262293.13	0	-3823615.76
N + 2.50	Bottom	-821.68	-340791.27	865158.43	-1544833.1
N + 2.50	Top	-2030.92	-874310.43	0	-3823615.76
N + 2.50	Bottom	-1119.11	-477893.5	1118797.14	-2374204.92
N + 2.50	Top	-2030.92	-874310.43	0	-3823615.76
N + 2.50	Bottom	-1119.11	-477893.5	1118797.14	-2374204.92
N + 2.50	Top	2030.92	874310.43	0	-3823615.76
N + 2.50	Bottom	-661.52	-288668.09	728583.74	-1080436.13
N + 2.50	Top	2030.92	874310.43	0	-3823615.76
N + 2.50	Bottom	-661.52	-288668.09	728583.74	-1080436.13
N + 2.50	Top	2030.92	874310.43	0	-3823615.76
N + 2.50	Bottom	-661.52	-280903.48	728583.74	-1086809.28
N + 2.50	Top	2030.92	874310.43	0	-3823615.76
N + 2.50	Bottom	-661.52	-280903.48	728583.74	-1086809.28
N + 2.50	Top	-2030.92	-874310.43	0	-3823615.76
N + 2.50	Bottom	-1119.11	-485658.11	1118797.14	-2367831.77
N + 2.50	Top	-2030.92	-874310.43	0	-3823615.76
N + 2.50	Bottom	-1119.11	-485658.11	1118797.14	-2367831.77
N + 2.50	Top	0	0	0	-1590176.16
N + 2.50	Bottom	-361.34	-155558.55	384644.73	-716859.77
N + 2.50	Top	0	0	0	-1590176.16
N + 2.50	Bottom	-361.34	-155558.55	384644.73	-716859.77
N + 2.50	Top	-609.28	-262293.13	0	-1590176.16
N + 2.50	Bottom	-429.98	-172166.03	443176.74	-920591.03
N + 2.50	Top	-609.28	-262293.13	0	-1590176.16
N + 2.50	Bottom	-429.98	-172166.03	443176.74	-920591.03
N + 2.50	Top	609.28	262293.13	0	-1590176.16
N + 2.50	Bottom	-292.71	-138951.06	326112.72	-513128.5
N + 2.50	Top	609.28	262293.13	0	-1590176.16
N + 2.50	Bottom	-292.71	-138951.06	326112.72	-513128.5
N + 2.50	Top	-609.28	-262293.13	0	-1590176.16
N + 2.50	Bottom	-429.98	-198048.07	443176.74	-899347.2
N + 2.50	Top	-609.28	-262293.13	0	-1590176.16
N + 2.50	Bottom	-429.98	-198048.07	443176.74	-899347.2
N + 2.50	Top	609.28	262293.13	0	-1590176.16
N + 2.50	Bottom	-292.71	-113069.02	326112.72	-534372.34
N + 2.50	Top	609.28	262293.13	0	-1590176.16
N + 2.50	Bottom	-292.71	-113069.02	326112.72	-534372.34
N + 2.50	Top	-2030.92	-874310.43	0	-1590176.16
N + 2.50	Bottom	-590.14	-250171.25	579751.42	-1363744.16
N + 2.50	Top	-2030.92	-874310.43	0	-1590176.16
N + 2.50	Bottom	-590.14	-250171.25	579751.42	-1363744.16
N + 2.50	Top	2030.92	874310.43	0	-1590176.16
N + 2.50	Bottom	-132.55	-60945.84	189538.03	-69975.37

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.50	Top	2030.92	874310.43	0	-1590176.16
N + 2.50	Bottom	-132.55	-60945.84	189538.03	-69975.37
N + 2.50	Top	2030.92	874310.43	0	-1590176.16
N + 2.50	Bottom	-132.55	-53181.23	189538.03	-76348.52
N + 2.50	Top	2030.92	874310.43	0	-1590176.16
N + 2.50	Bottom	-132.55	-53181.23	189538.03	-76348.52
N + 2.50	Top	-2030.92	-874310.43	0	-1590176.16
N + 2.50	Bottom	-590.14	-257935.86	579751.42	-1357371.01
N + 2.50	Top	-2030.92	-874310.43	0	-1590176.16
N + 2.50	Bottom	-590.14	-257935.86	579751.42	-1357371.01
N + 2.50	Top	2030.92	874310.43	0	-1590176.16
N + 2.50	Bottom	-132.55	-53181.23	1170188.93	-69975.37
N + 2.50	Top	-2030.92	-874310.43	0	-4845644.29
N + 2.50	Bottom	-1135.43	-488802.43	189538.03	-2374204.92
N + 2.50	Top	0	0	0	-2120234.89
N + 2.50	Bottom	-481.79	-207411.39	512859.64	-955813.02
N + 2.50	Top	0	0	0	-1766862.41
N + 2.50	Bottom	-401.49	-172842.83	427383.03	-796510.85
N + 2.50	Top	1421.64	612017.3	0	-1766862.41
N + 2.50	Bottom	-241.34	-101178.71	838213.84	-343691.78
N + 2.50	Top	-1421.64	-612017.3	0	-3470243.28
N + 2.50	Bottom	-828	-358492.97	290808.34	-1714755.79
N + 2.50	Top	-7677.38	-3305112.24	0	-1060117.44
N + 2.50	Bottom	-1105.79	-461362.61	993981.96	-2923293.71
N + 2.50	Top	-2303.21	-991533.67	0	-1060117.44
N + 2.50	Bottom	-500.36	-166476.84	477695.46	-1248069.31
N + 2.50	Top	-5758.04	-2478834.18	0	-3044398.06
N + 2.50	Bottom	-1356.55	-572987.56	1288670.24	-3209181.88
N + 2.50	Top	-1727.41	-743650.25	0	-3044398.06
N + 2.50	Bottom	-902.49	-351823.24	901455.37	-1952763.58
N + 2.50	Top	-2303.21	-991533.67	0	-1766862.41
N + 2.50	Bottom	-660.96	-235613.97	648648.67	-1566673.65
N + 2.50	Top	-7677.38	-3305112.24	0	-1766862.41
N + 2.50	Bottom	-1266.38	-530499.74	1164935.17	-3241898.05
N + 2.50	Top	-5758.04	-2478834.18	0	-1060117.44
N + 2.50	Bottom	-1105.79	-461362.61	1288670.24	-2923293.71
N + 2.50	Top	-7677.38	-3305112.24	0	-3044398.06
N + 2.50	Bottom	-1356.55	-572987.56	993981.96	-3241898.05
N + 2.50	Top	-5758.04	-2478834.18	0	-3044398.06
N + 2.50	Bottom	-1356.55	-572987.56	1288670.24	-3209181.88
N + 2.50	Top	-1727.41	-743650.25	0	-3044398.06
N + 2.50	Bottom	-902.49	-351823.24	901455.37	-1952763.58
N + 2.50	Top	0	0	0	-1766862.41
N + 2.50	Bottom	-401.49	-172842.83	427383.03	-796510.85
N + 2.50	Top	0	0	0	-3470243.28

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.50	Bottom	-810.02	-348712.23	838213.84	-1568018.36
N + 2.50	Top	0	0	0	-1766862.41
N + 2.50	Bottom	-401.49	-172842.83	427383.03	-796510.85
N + 2.50	Top	0	0	0	-1766862.41
N + 2.50	Bottom	-401.49	-172842.83	427383.03	-796510.85
N + 2.50	Top	0	0	0	-3044398.06
N + 2.50	Bottom	-707.89	-304744.88	735506.13	-1375141.48
N + 2.50	Top	0	0	0	-3044398.06
N + 2.50	Bottom	-707.89	-304744.88	735506.13	-1375141.48
N + 2.50	Top	0	0	0	-1766862.41
N + 2.50	Bottom	-401.49	-172842.83	427383.03	-796510.85
N + 2.50	Top	0	0	0	-1766862.41
N + 2.50	Bottom	-401.49	-172842.83	427383.03	-796510.85
N + 2.50	Top	-426.49	-183605.19	0	-1766862.41
N + 2.50	Bottom	-449.54	-184468.07	468355.44	-939122.74
N + 2.50	Top	-426.49	-183605.19	0	-1766862.41
N + 2.50	Bottom	-449.54	-184468.07	468355.44	-939122.74
N + 2.50	Top	426.49	183605.19	0	-1766862.41
N + 2.50	Bottom	-353.45	-161217.59	386410.62	-653898.97
N + 2.50	Top	426.49	183605.19	0	-1766862.41
N + 2.50	Bottom	-353.45	-161217.59	386410.62	-653898.97
N + 2.50	Top	426.49	183605.19	0	-1766862.41
N + 2.50	Bottom	-353.45	-143100.16	386410.62	-668769.65
N + 2.50	Top	426.49	183605.19	0	-1766862.41
N + 2.50	Bottom	-353.45	-143100.16	386410.62	-668769.65
N + 2.50	Top	-426.49	-183605.19	0	-1766862.41
N + 2.50	Bottom	-449.54	-202585.49	468355.44	-924252.05
N + 2.50	Top	-426.49	-183605.19	0	-1766862.41
N + 2.50	Bottom	-449.54	-202585.49	468355.44	-924252.05
N + 2.50	Top	-1421.64	-612017.3	0	-1766862.41
N + 2.50	Bottom	-561.65	-239071.72	563957.72	-1249329.93
N + 2.50	Top	-1421.64	-612017.3	0	-1766862.41
N + 2.50	Bottom	-561.65	-239071.72	563957.72	-1249329.93
N + 2.50	Top	1421.64	612017.3	0	-1766862.41
N + 2.50	Bottom	-241.34	-106613.94	290808.34	-343691.78
N + 2.50	Top	1421.64	612017.3	0	-1766862.41
N + 2.50	Bottom	-241.34	-106613.94	290808.34	-343691.78
N + 2.50	Top	1421.64	612017.3	0	-1766862.41
N + 2.50	Bottom	-241.34	-101178.71	290808.34	-348152.98
N + 2.50	Top	1421.64	612017.3	0	-1766862.41
N + 2.50	Bottom	-241.34	-101178.71	290808.34	-348152.98
N + 2.50	Top	-1421.64	-612017.3	0	-1766862.41
N + 2.50	Bottom	-561.65	-244506.95	563957.72	-1244868.72
N + 2.50	Top	-1421.64	-612017.3	0	-1766862.41
N + 2.50	Bottom	-561.65	-244506.95	563957.72	-1244868.72

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.50	Top	0	0	0	-3044398.06
N + 2.50	Bottom	-707.89	-304744.88	735506.13	-1375141.48
N + 2.50	Top	0	0	0	-3044398.06
N + 2.50	Bottom	-707.89	-304744.88	735506.13	-1375141.48
N + 2.50	Top	0	0	0	-3044398.06
N + 2.50	Bottom	-707.89	-304744.88	735506.13	-1375141.48
N + 2.50	Top	0	0	0	-3044398.06
N + 2.50	Bottom	-707.89	-304744.88	735506.13	-1375141.48
N + 2.50	Top	-319.87	-137703.89	0	-3044398.06
N + 2.50	Bottom	-743.92	-313463.81	766235.44	-1482100.39
N + 2.50	Top	-319.87	-137703.89	0	-3044398.06
N + 2.50	Bottom	-743.92	-313463.81	766235.44	-1482100.39
N + 2.50	Top	319.87	137703.89	0	-3044398.06
N + 2.50	Bottom	-671.85	-296025.95	704776.83	-1268182.57
N + 2.50	Top	319.87	137703.89	0	-3044398.06
N + 2.50	Bottom	-671.85	-296025.95	704776.83	-1268182.57
N + 2.50	Top	319.87	137703.89	0	-3044398.06
N + 2.50	Bottom	-671.85	-282437.88	704776.83	-1279335.58
N + 2.50	Top	319.87	137703.89	0	-3044398.06
N + 2.50	Bottom	-671.85	-282437.88	704776.83	-1279335.58
N + 2.50	Top	-319.87	-137703.89	0	-3044398.06
N + 2.50	Bottom	-743.92	-327051.88	766235.44	-1470947.38
N + 2.50	Top	-319.87	-137703.89	0	-3044398.06
N + 2.50	Bottom	-743.92	-327051.88	766235.44	-1470947.38
N + 2.50	Top	-1066.23	-459012.98	0	-3044398.06
N + 2.50	Bottom	-828	-354416.55	837937.15	-1714755.79
N + 2.50	Top	-1066.23	-459012.98	0	-3044398.06
N + 2.50	Bottom	-828	-354416.55	837937.15	-1714755.79
N + 2.50	Top	1066.23	459012.98	0	-3044398.06
N + 2.50	Bottom	-587.77	-255073.21	633075.12	-1035527.17
N + 2.50	Top	1066.23	459012.98	0	-3044398.06
N + 2.50	Bottom	-587.77	-255073.21	633075.12	-1035527.17
N + 2.50	Top	1066.23	459012.98	0	-3044398.06
N + 2.50	Bottom	-587.77	-250996.79	633075.12	-1038873.08
N + 2.50	Top	1066.23	459012.98	0	-3044398.06
N + 2.50	Bottom	-587.77	-250996.79	633075.12	-1038873.08
N + 2.50	Top	-1066.23	-459012.98	0	-3044398.06
N + 2.50	Bottom	-828	-358492.97	837937.15	-1711409.88
N + 2.50	Top	-1066.23	-459012.98	0	-3044398.06
N + 2.50	Bottom	-828	-358492.97	837937.15	-1711409.88
N + 2.50	Top	-319.87	-137703.89	0	-3044398.06
N + 2.50	Bottom	-743.92	-313463.81	766235.44	-1482100.39
N + 2.50	Top	-319.87	-137703.89	0	-3044398.06
N + 2.50	Bottom	-743.92	-313463.81	766235.44	-1482100.39
N + 2.50	Top	319.87	137703.89	0	-3044398.06

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.50	Bottom	-671.85	-296025.95	704776.83	-1268182.57
N + 2.50	Top	319.87	137703.89	0	-3044398.06
N + 2.50	Bottom	-671.85	-296025.95	704776.83	-1268182.57
N + 2.50	Top	319.87	137703.89	0	-3044398.06
N + 2.50	Bottom	-671.85	-282437.88	704776.83	-1279335.58
N + 2.50	Top	319.87	137703.89	0	-3044398.06
N + 2.50	Bottom	-671.85	-282437.88	704776.83	-1279335.58
N + 2.50	Top	-319.87	-137703.89	0	-3044398.06
N + 2.50	Bottom	-743.92	-327051.88	766235.44	-1470947.38
N + 2.50	Top	-319.87	-137703.89	0	-3044398.06
N + 2.50	Bottom	-743.92	-327051.88	766235.44	-1470947.38
N + 2.50	Top	-1066.23	-459012.98	0	-3044398.06
N + 2.50	Bottom	-828	-354416.55	837937.15	-1714755.79
N + 2.50	Top	-1066.23	-459012.98	0	-3044398.06
N + 2.50	Bottom	-828	-354416.55	837937.15	-1714755.79
N + 2.50	Top	1066.23	459012.98	0	-3044398.06
N + 2.50	Bottom	-587.77	-255073.21	633075.12	-1035527.17
N + 2.50	Top	1066.23	459012.98	0	-3044398.06
N + 2.50	Bottom	-587.77	-255073.21	633075.12	-1035527.17
N + 2.50	Top	1066.23	459012.98	0	-3044398.06
N + 2.50	Bottom	-587.77	-250996.79	633075.12	-1038873.08
N + 2.50	Top	1066.23	459012.98	0	-3044398.06
N + 2.50	Bottom	-587.77	-250996.79	633075.12	-1038873.08
N + 2.50	Top	-1066.23	-459012.98	0	-3044398.06
N + 2.50	Bottom	-828	-358492.97	837937.15	-1711409.88
N + 2.50	Top	-1066.23	-459012.98	0	-3044398.06
N + 2.50	Bottom	-828	-358492.97	837937.15	-1711409.88
N + 2.50	Top	0	0	0	-1766862.41
N + 2.50	Bottom	-401.49	-172842.83	427383.03	-796510.85
N + 2.50	Top	0	0	0	-3470243.28
N + 2.50	Bottom	-810.02	-348712.23	838213.84	-1568018.36
N + 2.33	Top	-156.38	-67321.19	641107.11	-1078440.23
N + 2.33	Bottom	-156.38	-67321.19	1079160.87	-1728426.35
N + 2.33	Top	-408.52	-175869.4	1463326.31	-2474888.38
N + 2.33	Bottom	-408.52	-175869.4	1558512.3	-2474888.38
N + 2.33	Top	-245.11	-105521.64	877995.78	-1484933.03
N + 2.33	Bottom	-245.11	-105521.64	935107.38	-1484933.03
N + 2.33	Top	0	1538166.02	0	204530.73
N + 2.33	Bottom	0	1538166.02	0	1600914.78
N + 2.33	Top	6342.73	2730545.57	583270.42	1930268.56
N + 2.33	Bottom	6342.73	2730545.57	2061126.66	1930268.56
N + 2.33	Top	0	0	0	0
N + 2.33	Bottom	0	0	0	0
N + 2.33	Top	0	0	0	0
N + 2.33	Bottom	0	0	0	0

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.33	Top	0	2424132.92	0	-50198.1
N + 2.33	Bottom	0	2424132.92	0	-2235562.05
N + 2.33	Top	0	2424132.92	0	-50198.1
N + 2.33	Bottom	0	2424132.92	0	-2235562.05
N + 2.33	Top	-9964.41	-4289677.37	921879.14	-3041472.2
N + 2.33	Bottom	-9964.41	-4289677.37	3243586.06	-3041472.2
N + 2.33	Top	-9964.41	-4289677.37	921879.14	-3041472.2
N + 2.33	Bottom	-9964.41	-4289677.37	3243586.06	-3041472.2
N + 2.33	Top	-7972.05	-3431969.1	737552.14	-2433338.86
N + 2.33	Bottom	-7972.05	-3431969.1	2595040.65	-2433338.86
N + 2.33	Top	0	1939434.73	0	-40161.14
N + 2.33	Bottom	0	1939434.73	0	-1788568.05
N + 2.33	Top	0	0	0	0
N + 2.33	Bottom	0	0	0	0
N + 2.33	Top	0	0	0	0
N + 2.33	Bottom	0	0	0	0
N + 2.33	Top	-2501.6	806138.3	2782546.85	-2308186.75
N + 2.33	Bottom	-2501.6	806138.3	3767036.62	-4446585.34
N + 2.33	Top	-2793.11	377638.12	1132727.38	-4997161.64
N + 2.33	Bottom	-2793.11	377638.12	1987073.14	-6958452.94
N + 2.33	Top	-257.65	-623866.85	3227717.76	-5347205.02
N + 2.33	Bottom	-257.65	-623866.85	3769692.23	-5664765.35
N + 2.33	Top	-257.65	-623866.85	3227717.76	-5347205.02
N + 2.33	Bottom	-257.65	-623866.85	3769692.23	-5664765.35
N + 2.33	Top	-562.09	-241979.96	2126744.05	-3588722.56
N + 2.33	Bottom	-562.09	-241979.96	2819975.55	-4498703.13
N + 2.33	Top	-1135.43	-488802.43	4164245.56	-7035869.31
N + 2.33	Bottom	-1135.43	-488802.43	4910741.58	-7815852.66
N + 2.33	Top	-1135.43	-488802.43	4164245.56	-7035869.31
N + 2.33	Bottom	-1135.43	-488802.43	4910741.58	-7815852.66
N + 2.33	Top	-890.32	-383280.79	3286249.77	-5550936.29
N + 2.33	Bottom	-890.32	-383280.79	3975634.2	-6330919.63
N + 2.33	Top	-481.79	-207411.39	1822923.47	-3076047.91
N + 2.33	Bottom	-481.79	-207411.39	2417121.9	-3856031.25
N + 2.33	Top	-890.32	-383280.79	3286249.77	-5550936.29
N + 2.33	Bottom	-890.32	-383280.79	3975634.2	-6330919.63
N + 2.33	Top	-481.79	-207411.39	1822923.47	-3076047.91
N + 2.33	Bottom	-481.79	-207411.39	2417121.9	-3856031.25
N + 2.33	Top	-481.79	-207411.39	1822923.47	-3076047.91
N + 2.33	Bottom	-481.79	-207411.39	2417121.9	-3856031.25
N + 2.33	Top	-890.32	-383280.79	3286249.77	-5550936.29
N + 2.33	Bottom	-890.32	-383280.79	3975634.2	-6330919.63
N + 2.33	Top	-890.32	-383280.79	3286249.77	-5550936.29
N + 2.33	Bottom	-890.32	-383280.79	3975634.2	-6330919.63
N + 2.33	Top	-890.32	-383280.79	3286249.77	-5550936.29

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.33	Bottom	-890.32	-383280.79	3975634.2	-6330919.63
N + 2.33	Top	-890.32	-383280.79	3286249.77	-5550936.29
N + 2.33	Bottom	-890.32	-383280.79	3975634.2	-6330919.63
N + 2.33	Top	0	512946.53	0	-10621.92
N + 2.33	Bottom	0	512946.53	0	-473044.93
N + 2.33	Top	0	512946.53	0	-10621.92
N + 2.33	Bottom	0	512946.53	0	-473044.93
N + 2.33	Top	-2108.87	-907868.23	195106.7	-643697.82
N + 2.33	Bottom	-2108.87	-907868.23	686473.24	-643697.82
N + 2.33	Top	-2108.87	-907868.23	195106.7	-643697.82
N + 2.33	Bottom	-2108.87	-907868.23	686473.24	-643697.82
N + 2.33	Top	-1522.98	-142694.74	3344781.78	-5754667.55
N + 2.33	Bottom	-1522.98	-142694.74	4181576.17	-6997073.91
N + 2.33	Top	-1522.98	-142694.74	3344781.78	-5754667.55
N + 2.33	Bottom	-1522.98	-142694.74	4181576.17	-6997073.91
N + 2.33	Top	-1522.98	-1168587.79	3344781.78	-5733423.71
N + 2.33	Bottom	-1522.98	-1168587.79	4181576.17	-6050984.05
N + 2.33	Top	-1522.98	-1168587.79	3344781.78	-5733423.71
N + 2.33	Bottom	-1522.98	-1168587.79	4181576.17	-6050984.05
N + 2.33	Top	-257.65	402026.2	3227717.76	-5368448.86
N + 2.33	Bottom	-257.65	402026.2	3769692.23	-6610855.22
N + 2.33	Top	-257.65	402026.2	3227717.76	-5368448.86
N + 2.33	Bottom	-257.65	402026.2	3769692.23	-6610855.22
N + 2.33	Top	-2999.18	-1137265.06	3481356.47	-6197820.68
N + 2.33	Bottom	-2999.18	-1137265.06	4662107.44	-7116530.93
N + 2.33	Top	-2999.18	-1137265.06	3481356.47	-6197820.68
N + 2.33	Bottom	-2999.18	-1137265.06	4662107.44	-7116530.93
N + 2.33	Top	1218.55	370703.48	3091143.08	-4904051.89
N + 2.33	Bottom	1218.55	370703.48	3289160.96	-5545308.33
N + 2.33	Top	1218.55	370703.48	3091143.08	-4904051.89
N + 2.33	Bottom	1218.55	370703.48	3289160.96	-5545308.33
N + 2.33	Top	1218.55	678471.39	3091143.08	-4910425.04
N + 2.33	Bottom	1218.55	678471.39	3289160.96	-5829135.29
N + 2.33	Top	1218.55	678471.39	3091143.08	-4910425.04
N + 2.33	Bottom	1218.55	678471.39	3289160.96	-5829135.29
N + 2.33	Top	-2999.18	-1445032.98	3481356.47	-6191447.53
N + 2.33	Bottom	-2999.18	-1445032.98	4662107.44	-6832703.97
N + 2.33	Top	-2999.18	-1445032.98	3481356.47	-6191447.53
N + 2.33	Bottom	-2999.18	-1445032.98	4662107.44	-6832703.97
N + 2.33	Top	-361.34	-155558.55	1367192.6	-2307035.93
N + 2.33	Bottom	-361.34	-155558.55	1812841.42	-2892023.44
N + 2.33	Top	-361.34	-155558.55	1367192.6	-2307035.93
N + 2.33	Bottom	-361.34	-155558.55	1812841.42	-2892023.44
N + 2.33	Top	-994	85027.51	1425724.61	-2510767.2
N + 2.33	Bottom	-994	85027.51	2018783.4	-3558177.72

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.33	Top	-994	85027.51	1425724.61	-2510767.2
N + 2.33	Bottom	-994	85027.51	2018783.4	-3558177.72
N + 2.33	Top	271.32	-396144.6	1308660.59	-2103304.67
N + 2.33	Bottom	271.32	-396144.6	1606899.45	-2225869.16
N + 2.33	Top	271.32	-396144.6	1308660.59	-2103304.67
N + 2.33	Bottom	271.32	-396144.6	1606899.45	-2225869.16
N + 2.33	Top	-994	-940865.54	1425724.61	-2489523.36
N + 2.33	Bottom	-994	-940865.54	2018783.4	-2612087.86
N + 2.33	Top	-994	-940865.54	1425724.61	-2489523.36
N + 2.33	Bottom	-994	-940865.54	2018783.4	-2612087.86
N + 2.33	Top	271.32	629748.45	1308660.59	-2124548.5
N + 2.33	Bottom	271.32	629748.45	1606899.45	-3171959.03
N + 2.33	Top	271.32	629748.45	1308660.59	-2124548.5
N + 2.33	Bottom	271.32	629748.45	1606899.45	-3171959.03
N + 2.33	Top	-2470.21	-909542.82	1562299.3	-2953920.33
N + 2.33	Bottom	-2470.21	-909542.82	2499314.66	-3677634.74
N + 2.33	Top	-2470.21	-909542.82	1562299.3	-2953920.33
N + 2.33	Bottom	-2470.21	-909542.82	2499314.66	-3677634.74
N + 2.33	Top	1747.53	598425.72	1172085.9	-1660151.54
N + 2.33	Bottom	1747.53	598425.72	1126368.18	-2106412.14
N + 2.33	Top	1747.53	598425.72	1172085.9	-1660151.54
N + 2.33	Bottom	1747.53	598425.72	1126368.18	-2106412.14
N + 2.33	Top	1747.53	906193.64	1172085.9	-1666524.69
N + 2.33	Bottom	1747.53	906193.64	1126368.18	-2390239.1
N + 2.33	Top	1747.53	906193.64	1172085.9	-1666524.69
N + 2.33	Bottom	1747.53	906193.64	1126368.18	-2390239.1
N + 2.33	Top	-2470.21	-1217310.73	1562299.3	-2947547.18
N + 2.33	Bottom	-2470.21	-1217310.73	2499314.66	-3393807.78
N + 2.33	Top	-2470.21	-1217310.73	1562299.3	-2947547.18
N + 2.33	Bottom	-2470.21	-1217310.73	2499314.66	-3393807.78
N + 2.33	Top	1747.53	906193.64	4164245.56	-1660151.54
N + 2.33	Bottom	1747.53	906193.64	4910741.58	-2106412.14
N + 2.33	Top	-2999.18	-1445032.98	1172085.9	-7035869.31
N + 2.33	Bottom	-2999.18	-1445032.98	1126368.18	-7815852.66
N + 2.33	Top	-481.79	-207411.39	1822923.47	-3076047.91
N + 2.33	Bottom	-481.79	-207411.39	2417121.9	-3856031.25
N + 2.33	Top	-401.49	-172842.83	1519102.89	-2563373.26
N + 2.33	Bottom	-401.49	-172842.83	2014268.25	-3213359.38
N + 2.33	Top	1074.72	570383.7	2982429.2	-2110554.18
N + 2.33	Bottom	1074.72	570383.7	3572780.55	-2663431.47
N + 2.33	Top	-1877.7	-916069.36	1382528.2	-5038261.64
N + 2.33	Bottom	-1877.7	-916069.36	1533736.98	-5688247.76
N + 2.33	Top	-8212.95	-2953844.38	1649013.88	-3983411.15
N + 2.33	Bottom	-8212.95	-2953844.38	3803601.6	-4897924.9
N + 2.33	Top	-2632.51	806138.3	1132727.38	-2308186.75

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.33	Bottom	-2632.51	806138.3	1987073.14	-4446585.34
N + 2.33	Top	-6686.93	-2442348.89	3169761.73	-6253579.94
N + 2.33	Bottom	-6686.93	-2442348.89	5129432.96	-7296957.61
N + 2.33	Top	-2501.6	377638.12	2782546.85	-4997161.64
N + 2.33	Bottom	-2501.6	377638.12	3767036.62	-6958452.94
N + 2.33	Top	-2793.11	737001.17	1740368.53	-3333536.06
N + 2.33	Bottom	-2793.11	737001.17	2792780.44	-5731929.09
N + 2.33	Top	-8373.55	-3022981.51	2256655.03	-5008760.46
N + 2.33	Bottom	-8373.55	-3022981.51	4609308.9	-6183268.65
N + 2.33	Top	-6686.93	-2442348.89	3169761.73	-3983411.15
N + 2.33	Bottom	-6686.93	-2442348.89	5129432.96	-4897924.9
N + 2.33	Top	-8373.55	-3022981.51	1649013.88	-6253579.94
N + 2.33	Bottom	-8373.55	-3022981.51	3803601.6	-7296957.61
N + 2.33	Top	-6686.93	-2442348.89	3169761.73	-6253579.94
N + 2.33	Bottom	-6686.93	-2442348.89	5129432.96	-7296957.61
N + 2.33	Top	-2501.6	377638.12	2782546.85	-4997161.64
N + 2.33	Bottom	-2501.6	377638.12	3767036.62	-6958452.94
N + 2.33	Top	-401.49	-172842.83	1519102.89	-2563373.26
N + 2.33	Bottom	-401.49	-172842.83	2014268.25	-3213359.38
N + 2.33	Top	-810.02	-348712.23	2982429.2	-5038261.64
N + 2.33	Bottom	-810.02	-348712.23	3572780.55	-5688247.76
N + 2.33	Top	-401.49	-172842.83	1519102.89	-2563373.26
N + 2.33	Bottom	-401.49	-172842.83	2014268.25	-3213359.38
N + 2.33	Top	-401.49	-172842.83	1519102.89	-2563373.26
N + 2.33	Bottom	-401.49	-172842.83	2014268.25	-3213359.38
N + 2.33	Top	-707.89	-304744.88	2616597.62	-4419539.54
N + 2.33	Bottom	-707.89	-304744.88	3183152.47	-5069525.66
N + 2.33	Top	-707.89	-304744.88	2616597.62	-4419539.54
N + 2.33	Bottom	-707.89	-304744.88	3183152.47	-5069525.66
N + 2.33	Top	-401.49	-172842.83	1519102.89	-2563373.26
N + 2.33	Bottom	-401.49	-172842.83	2014268.25	-3213359.38
N + 2.33	Top	-401.49	-172842.83	1519102.89	-2563373.26
N + 2.33	Bottom	-401.49	-172842.83	2014268.25	-3213359.38
N + 2.33	Top	-844.36	-4432.59	1560075.3	-2705985.14
N + 2.33	Bottom	-844.36	-4432.59	2158427.63	-3679667.37
N + 2.33	Top	-844.36	-4432.59	1560075.3	-2705985.14
N + 2.33	Bottom	-844.36	-4432.59	2158427.63	-3679667.37
N + 2.33	Top	41.37	-341253.07	1478130.48	-2420761.37
N + 2.33	Bottom	41.37	-341253.07	1870108.87	-2747051.38
N + 2.33	Top	41.37	-341253.07	1478130.48	-2420761.37
N + 2.33	Bottom	41.37	-341253.07	1870108.87	-2747051.38
N + 2.33	Top	41.37	376872.07	1478130.48	-2435632.06
N + 2.33	Bottom	41.37	376872.07	1870108.87	-3409314.29
N + 2.33	Top	41.37	376872.07	1478130.48	-2435632.06
N + 2.33	Bottom	41.37	376872.07	1870108.87	-3409314.29

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.33	Top	-844.36	-722557.72	1560075.3	-2691114.46
N + 2.33	Bottom	-844.36	-722557.72	2158427.63	-3017404.47
N + 2.33	Top	-844.36	-722557.72	1560075.3	-2691114.46
N + 2.33	Bottom	-844.36	-722557.72	2158427.63	-3017404.47
N + 2.33	Top	-1877.7	-700631.82	1655677.58	-3016192.34
N + 2.33	Bottom	-1877.7	-700631.82	2494799.52	-3763287.29
N + 2.33	Top	-1877.7	-700631.82	1655677.58	-3016192.34
N + 2.33	Bottom	-1877.7	-700631.82	2494799.52	-3763287.29
N + 2.33	Top	1074.72	354946.16	1382528.2	-2110554.18
N + 2.33	Bottom	1074.72	354946.16	1533736.98	-2663431.47
N + 2.33	Top	1074.72	354946.16	1382528.2	-2110554.18
N + 2.33	Bottom	1074.72	354946.16	1533736.98	-2663431.47
N + 2.33	Top	1074.72	570383.7	1382528.2	-2115015.39
N + 2.33	Bottom	1074.72	570383.7	1533736.98	-2862110.34
N + 2.33	Top	1074.72	570383.7	1382528.2	-2115015.39
N + 2.33	Bottom	1074.72	570383.7	1533736.98	-2862110.34
N + 2.33	Top	-1877.7	-916069.36	1655677.58	-3011731.13
N + 2.33	Bottom	-1877.7	-916069.36	2494799.52	-3564608.42
N + 2.33	Top	-1877.7	-916069.36	1655677.58	-3011731.13
N + 2.33	Bottom	-1877.7	-916069.36	2494799.52	-3564608.42
N + 2.33	Top	-707.89	-304744.88	2616597.62	-4419539.54
N + 2.33	Bottom	-707.89	-304744.88	3183152.47	-5069525.66
N + 2.33	Top	-707.89	-304744.88	2616597.62	-4419539.54
N + 2.33	Bottom	-707.89	-304744.88	3183152.47	-5069525.66
N + 2.33	Top	-707.89	-304744.88	2616597.62	-4419539.54
N + 2.33	Bottom	-707.89	-304744.88	3183152.47	-5069525.66
N + 2.33	Top	-707.89	-304744.88	2616597.62	-4419539.54
N + 2.33	Bottom	-707.89	-304744.88	3183152.47	-5069525.66
N + 2.33	Top	-1040.03	-178437.2	2647326.92	-4526498.45
N + 2.33	Bottom	-1040.03	-178437.2	3291272.01	-5419256.66
N + 2.33	Top	-1040.03	-178437.2	2647326.92	-4526498.45
N + 2.33	Bottom	-1040.03	-178437.2	3291272.01	-5419256.66
N + 2.33	Top	-375.74	-431052.56	2585868.31	-4312580.63
N + 2.33	Bottom	-375.74	-431052.56	3075032.94	-4719794.67
N + 2.33	Top	-375.74	-431052.56	2585868.31	-4312580.63
N + 2.33	Bottom	-375.74	-431052.56	3075032.94	-4719794.67
N + 2.33	Top	-375.74	107541.29	2585868.31	-4323733.64
N + 2.33	Bottom	-375.74	107541.29	3075032.94	-5216491.84
N + 2.33	Top	-375.74	107541.29	2585868.31	-4323733.64
N + 2.33	Bottom	-375.74	107541.29	3075032.94	-5216491.84
N + 2.33	Top	-1040.03	-717031.05	2647326.92	-4515345.44
N + 2.33	Bottom	-1040.03	-717031.05	3291272.01	-4922559.48
N + 2.33	Top	-1040.03	-717031.05	2647326.92	-4515345.44
N + 2.33	Bottom	-1040.03	-717031.05	3291272.01	-4922559.48
N + 2.33	Top	-1815.04	-700586.62	2719028.64	-4759153.85

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.33	Bottom	-1815.04	-700586.62	3543550.92	-5481971.59
N + 2.33	Top	-1815.04	-700586.62	2719028.64	-4759153.85
N + 2.33	Bottom	-1815.04	-700586.62	3543550.92	-5481971.59
N + 2.33	Top	399.27	91096.86	2514166.6	-4079925.23
N + 2.33	Bottom	399.27	91096.86	2822754.02	-4657079.73
N + 2.33	Top	399.27	91096.86	2514166.6	-4079925.23
N + 2.33	Bottom	399.27	91096.86	2822754.02	-4657079.73
N + 2.33	Top	399.27	252675.02	2514166.6	-4083271.14
N + 2.33	Bottom	399.27	252675.02	2822754.02	-4806088.88
N + 2.33	Top	399.27	252675.02	2514166.6	-4083271.14
N + 2.33	Bottom	399.27	252675.02	2822754.02	-4806088.88
N + 2.33	Top	-1815.04	-862164.77	2719028.64	-4755807.94
N + 2.33	Bottom	-1815.04	-862164.77	3543550.92	-5332962.44
N + 2.33	Top	-1815.04	-862164.77	2719028.64	-4755807.94
N + 2.33	Bottom	-1815.04	-862164.77	3543550.92	-5332962.44
N + 2.33	Top	-1040.03	-178437.2	2647326.92	-4526498.45
N + 2.33	Bottom	-1040.03	-178437.2	3291272.01	-5419256.66
N + 2.33	Top	-1040.03	-178437.2	2647326.92	-4526498.45
N + 2.33	Bottom	-1040.03	-178437.2	3291272.01	-5419256.66
N + 2.33	Top	-375.74	-431052.56	2585868.31	-4312580.63
N + 2.33	Bottom	-375.74	-431052.56	3075032.94	-4719794.67
N + 2.33	Top	-375.74	-431052.56	2585868.31	-4312580.63
N + 2.33	Bottom	-375.74	-431052.56	3075032.94	-4719794.67
N + 2.33	Top	-375.74	107541.29	2585868.31	-4323733.64
N + 2.33	Bottom	-375.74	107541.29	3075032.94	-5216491.84
N + 2.33	Top	-375.74	107541.29	2585868.31	-4323733.64
N + 2.33	Bottom	-375.74	107541.29	3075032.94	-5216491.84
N + 2.33	Top	-1040.03	-717031.05	2647326.92	-4515345.44
N + 2.33	Bottom	-1040.03	-717031.05	3291272.01	-4922559.48
N + 2.33	Top	-1040.03	-717031.05	2647326.92	-4515345.44
N + 2.33	Bottom	-1040.03	-717031.05	3291272.01	-4922559.48
N + 2.33	Top	-1815.04	-700586.62	2719028.64	-4759153.85
N + 2.33	Bottom	-1815.04	-700586.62	3543550.92	-5481971.59
N + 2.33	Top	-1815.04	-700586.62	2719028.64	-4759153.85
N + 2.33	Bottom	-1815.04	-700586.62	3543550.92	-5481971.59
N + 2.33	Top	399.27	91096.86	2514166.6	-4079925.23
N + 2.33	Bottom	399.27	91096.86	2822754.02	-4657079.73
N + 2.33	Top	399.27	91096.86	2514166.6	-4079925.23
N + 2.33	Bottom	399.27	91096.86	2822754.02	-4657079.73
N + 2.33	Top	399.27	252675.02	2514166.6	-4083271.14
N + 2.33	Bottom	399.27	252675.02	2822754.02	-4806088.88
N + 2.33	Top	399.27	252675.02	2514166.6	-4083271.14
N + 2.33	Bottom	399.27	252675.02	2822754.02	-4806088.88
N + 2.33	Top	-1815.04	-862164.77	2719028.64	-4755807.94
N + 2.33	Bottom	-1815.04	-862164.77	3543550.92	-5332962.44

Table 5.3 - Story Forces (Part 2 of 2, continued)

Story	Location	VY kgf	T kgf-cm	MX kgf-cm	MY kgf-cm
N + 2.33	Top	-1815.04	-862164.77	2719028.64	-4755807.94
N + 2.33	Bottom	-1815.04	-862164.77	3543550.92	-5332962.44
N + 2.33	Top	-401.49	-172842.83	1519102.89	-2563373.26
N + 2.33	Bottom	-401.49	-172842.83	2014268.25	-3213359.38
N + 2.33	Top	-810.02	-348712.23	2982429.2	-5038261.64
N + 2.33	Bottom	-810.02	-348712.23	3572780.55	-5688247.76

5.3 Modal Results

Table 5.4 - Modal Periods And Frequencies

Case	Mode	Period sec	Frequency cyc/sec	CircFreq rad/sec	Eigenvalue rad2/sec2
Modal	1	0.122	8.202	51.5371	2656.0737
Modal	2	0.12	8.328	52.3237	2737.7674
Modal	3	0.102	9.838	61.8128	3820.8207
Modal	4	0.089	11.264	70.7759	5009.2298
Modal	5	0.077	13.046	81.9687	6718.865
Modal	6	0.014	72.825	457.5733	209373.3647
Modal	7	0.014	73.561	462.1978	213626.8053
Modal	8	0.01	97.801	614.4998	377609.9947
Modal	9	0.009	105.912	665.4634	442841.5017
Modal	10	0.009	106.407	668.5762	446994.1549
Modal	11	0.008	129.707	814.97	664176.1705
Modal	12	0.008	129.734	815.1453	664461.8135

Table 5.5 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	SumUX	SumUY	SumUZ	RX	RY	RZ
Modal	1	0.122	0	0.8648	0	0	0.8648	0	0.8533	0	0
Modal	2	0.12	0.9783	0	0	0.9783	0.8648	0	0	0.9945	0.0136
Modal	3	0.102	0.0145	0	0	0.9928	0.8648	0	0	0.005	0.9845
Modal	4	0.089	0	0.1352	0	0.9928	1	0	0.1335	0	0
Modal	5	0.077	0.0072	0	0	1	1	0	0	0.0004	0.0019
Modal	6	0.014	0	0	0	1	1	0	0	0	0
Modal	7	0.014	0	0	0	1	1	0	0	0	0
Modal	8	0.01	0	7.055E-07	0	1	1	0	0.0062	0	0
Modal	9	0.009	0	0	0	1	1	0	0	5.631E-07	0
Modal	10	0.009	0	0	0	1	1	0	0	0	0
Modal	11	0.008	0	0	0	1	1	0	0	0	1.161E-06
Modal	12	0.008	0	8.045E-07	0	1	1	0	0.007	0	0

Table 5.5 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	SumRX	SumRY	SumRZ
Modal	1	0.8533	0	0
Modal	2	0.8533	0.9945	0.0136
Modal	3	0.8533	0.9996	0.9981

Table 5.5 - Modal Participating Mass Ratios (Part 2 of 2, continued)

Case	Mode	SumRX	SumRY	SumRZ
Modal	4	0.9868	0.9996	0.9981
Modal	5	0.9868	1	1
Modal	6	0.9868	1	1
Modal	7	0.9868	1	1
Modal	8	0.993	1	1
Modal	9	0.993	1	1
Modal	10	0.993	1	1
Modal	11	0.993	1	1
Modal	12	1	1	1

6 Design Data

This chapter provides design data and results.

6.1 Concrete Frame Design

Table 6.1 - Concrete Frame Design Preferences - ACI 318-08 (Part 1 of 3)

Multi-Response Design	# Interaction Curves	# Interaction Points	Minimum Eccentricity?	Design for BCCR?	Ignore Beneficial Pu for Beam Design?
Multi-Response Design	Step-by-Step - All	# Interaction Curves	24	# Interaction Points	11

Table 6.1 - Concrete Frame Design Preferences - ACI 318-08 (Part 2 of 3)

Seismic Design Category	Design System Rho	Design System Sds	Phi (Tension)	Phi (Compression Tied)	Phi (Compression Spiral)
Minimum Eccentricity?	Yes	Design for BCCR?	Yes	Ignore Beneficial Pu for Beam Design?	Yes

Table 6.1 - Concrete Frame Design Preferences - ACI 318-08 (Part 3 of 3)

Phi (Shear Seismic)	Phi (Shear Joint)	Pattern Live Load Factor	Utlization Factor Limit
D	Design System Rho	1	Design System Sds

Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Design Type	Design Section	Frame Type	LLRF	Unbraced Length Ratio (Major)	Unbraced Length Ratio (Minor)	Effective Length Factor (K Major)
N + 2.50	C1	1	Column	Program Determined	Program Determined	0	0	0	0
N + 2.50	C3	5	Column	Program Determined	Program Determined	0	0	0	0
N + 2.50	C5	9	Column	Program Determined	Program Determined	0	0	0	0
N + 2.33	C2	2	Column	Program Determined	Program Determined	0	0	0	0
N + 2.33	C4	6	Column	Program Determined	Program Determined	0	0	0	0
N + 2.33	C6	10	Column	Program Determined	Program Determined	0	0	0	0

Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 2 of 2)

Effective Length Factor (K Minor)	Moment Coefficient (Cm Major)	Moment Coefficient (Cm Minor)	Non Sway Moment Factor (Dns Major)	Non Sway Moment Factor (Dns Minor)	Sway Moment Factor (Ds Major)	Sway Moment Factor (Ds Minor)	Consider Minimum Eccentricity?
0	0	0	0	0	0	0	Program Determined
0	0	0	0	0	0	0	Program Determined
0	0	0	0	0	0	0	Program Determined
0	0	0	0	0	0	0	Program Determined

Table 6.2 - Concrete Column Overwrites - ACI 318-08 (Part 2 of 2, continued)

Effective Length Factor (K Minor)	Moment Coefficient (Cm Major)	Moment Coefficient (Cm Minor)	Non Sway Moment Factor (Dns Major)	Non Sway Moment Factor (Dns Minor)	Sway Moment Factor (Ds Major)	Sway Moment Factor (Ds Minor)	Consider Minimum Eccentricity?
0	0	0	0	0	0	0	Program Determined
0	0	0	0	0	0	0	Program Determined

Table 6.3 - Concrete Beam Overwrites - ACI 318-08 (Part 1 of 2)

Story	Label	Unique Name	Design Type	Design Section	Frame Type	LLRF	Unbraced Length Ratio (Major)	Unbraced Length Ratio (Minor)
N + 2.50	B1	3	Beam	Program Determined	Program Determined	0	0	0
N + 2.50	B3	7	Beam	Program Determined	Program Determined	0	0	0
N + 2.50	B5	11	Beam	Program Determined	Program Determined	0	0	0
N + 2.50	B9	20	Beam	Program Determined	Program Determined	0	0	0
N + 2.50	B10	21	Beam	Program Determined	Program Determined	0	0	0
N + 2.33	B7	18	Beam	Program Determined	Program Determined	0	0	0
N + 2.33	B8	19	Beam	Program Determined	Program Determined	0	0	0
N +/- 0.00	B2	4	Beam	Program Determined	Program Determined	0	0	0
N +/- 0.00	B4	8	Beam	Program Determined	Program Determined	0	0	0
N +/- 0.00	B6	12	Beam	Program Determined	Program Determined	0	0	0
N +/- 0.00	B7	13	Beam	Program Determined	Program Determined	0	0	0
N +/- 0.00	B8	14	Beam	Program Determined	Program Determined	0	0	0
N +/- 0.00	B9	15	Beam	Program Determined	Program Determined	0	0	0
N +/- 0.00	B10	16	Beam	Program Determined	Program Determined	0	0	0

Table 6.3 - Concrete Beam Overwrites - ACI 318-08 (Part 2 of 2)

Consider Torsion?	Ignore Beneficial Pu for Beam Design?
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined
Program Determined	Program Determined

Table 6.4 - Concrete Column PMM Envelope - ACI 318-08

Story	Label	UniqueName	Section	Location	P kgf	M Major kgf-cm	M Minor kgf-cm	PMM Combo	PMM Ratio or Rebar %
N + 2.50	C1	1	C 30x30	Top	844.8	227957.7	73690.33	Seismic	1 %
N + 2.50	C1	1	C 30x30	Bottom	1272.48	-143262.57	-97295.54	Seismic	1 %
N + 2.50	C3	5	C 30x30	Top	2184.88	463060.61	111746.77	Seismic	1.43 %
N + 2.50	C3	5	C 30x30	Bottom	2612.56	-106519.56	-142444.52	Seismic	1 %
N + 2.50	C5	9	C 30x30	Top	844.8	-227957.7	73690.33	Seismic	1 %
N + 2.50	C5	9	C 30x30	Bottom	1272.48	143262.57	-97295.54	Seismic	1 %
N + 2.33	C2	2	C 30x30	Top	902.42	60961.13	-120947.57	Seismic	1 %
N + 2.33	C2	2	C 30x30	Bottom	1297.05	-104463.64	103252.31	Seismic	1 %
N + 2.33	C4	6	C 30x30	Top	2098.65	-185899.74	-110792.2	Seismic	1 %
N + 2.33	C4	6	C 30x30	Bottom	2493.28	-103660.69	148469.12	Seismic	1 %
N + 2.33	C6	10	C 30x30	Top	902.42	-60961.13	-120947.57	Seismic	1 %
N + 2.33	C6	10	C 30x30	Bottom	1297.05	104463.64	103252.31	Seismic	1 %

Table 6.5 - Concrete Column Shear Envelope - ACI 318-08

Story	Label	UniqueName	Section	Location	V Major kgf	V Major Combo	At Major cm2/cm	V Minor kgf	V Minor Combo	At Minor cm2/cm
N + 2.50	C1	1	C 30x30	Top	2092.94	Seismic	0.0264	1080.82	Seismic	0.025
N + 2.50	C1	1	C 30x30	Bottom	2092.94	Seismic	0.0264	1080.82	Seismic	0.025
N + 2.50	C3	5	C 30x30	Top	4249.13	Seismic	0.0536	1630.91	Seismic	0.025
N + 2.50	C3	5	C 30x30	Bottom	4249.13	Seismic	0.0536	1630.91	Seismic	0.025
N + 2.50	C5	9	C 30x30	Top	2092.94	Seismic	0.0264	1080.82	Seismic	0.025
N + 2.50	C5	9	C 30x30	Bottom	2092.94	Seismic	0.0264	1080.82	Seismic	0.025
N + 2.33	C2	2	C 30x30	Top	988.98	Seismic	0.025	1196.38	Seismic	0.025
N + 2.33	C2	2	C 30x30	Bottom	988.98	Seismic	0.025	1196.38	Seismic	0.025
N + 2.33	C4	6	C 30x30	Top	1840.08	Seismic	0.025	1788.61	Seismic	0.025
N + 2.33	C4	6	C 30x30	Bottom	1840.08	Seismic	0.025	1788.61	Seismic	0.025
N + 2.33	C6	10	C 30x30	Top	988.98	Seismic	0.025	1196.38	Seismic	0.025
N + 2.33	C6	10	C 30x30	Bottom	988.98	Seismic	0.025	1196.38	Seismic	0.025

Table 6.6 - Concrete Beam Flexure Envelope - ACI 318-08

Story	Label	UniqueName	Section	Location	-ve Moment Combo	-ve Moment kgf-cm	As Top cm2	+ve Moment Combo	+ve Moment kgf-cm	As Bot cm2
N + 2.50	B1	3	V 30x30	End-I	Seismic	-76075.03	1.08	Seismic	44843.43	0.63
N + 2.50	B1	3	V 30x30	Middle	Seismic	-19018.76	0.27	(B.2.4-2A)	68354.75	0.97
N + 2.50	B1	3	V 30x30	End-J	Seismic	-73467.94	1.05	Seismic	41134.31	0.59
N + 2.50	B3	7	V 30x30	End-I	Seismic	-114252.86	1.64	Seismic	57690.82	0.82
N + 2.50	B3	7	V 30x30	Middle	Seismic	-28563.22	0.4	(B.2.4-2A)	122942.18	1.76
N + 2.50	B3	7	V 30x30	End-J	Seismic	-111294.76	1.6	Seismic	55647.38	0.8
N + 2.50	B5	11	V 30x30	End-I	Seismic	-76075.03	1.08	Seismic	44843.43	0.63
N + 2.50	B5	11	V 30x30	Middle	Seismic	-19018.76	0.27	(B.2.4-2A)	68354.75	0.97
N + 2.50	B5	11	V 30x30	End-J	Seismic	-73467.94	1.05	Seismic	41134.31	0.59
N + 2.50	B9	20	V 30x30	End-I	Seismic	-143673.67	2.07	(B.2.4-2A)	126464.34	1.82

Table 6.6 - Concrete Beam Flexure Envelope - ACI 318-08 (continued)

Story	Label	UniqueName	Section	Location	-ve Moment Combo	-ve Moment kgf-cm	As Top cm2	+ve Moment Combo	+ve Moment kgf-cm	As Bot cm2
N + 2.50	B9	20	V 30x30	Middle	Seismic	-58037.71	0.82	(B.2.4-2A)	206504.87	2.5
N + 2.50	B9	20	V 30x30	End-J	Seismic	-232150.86	2.55	Seismic	116075.43	1.66
N + 2.50	B10	21	V 30x30	End-I	Seismic	-232150.86	2.55	Seismic	116075.43	1.66
N + 2.50	B10	21	V 30x30	Middle	Seismic	-58037.71	0.82	(B.2.4-2A)	206504.87	2.5
N + 2.50	B10	21	V 30x30	End-J	Seismic	-143673.67	2.07	(B.2.4-2A)	126464.34	1.82
N + 2.33	B7	18	V 30x30	End-I	Seismic	-62660.69	0.89	Seismic	44339.09	0.63
N + 2.33	B7	18	V 30x30	Middle	Seismic	-19435.9	0.27	Seismic	42297.13	0.6
N + 2.33	B7	18	V 30x30	End-J	Seismic	-77743.59	1.11	Seismic	38871.79	0.55
N + 2.33	B8	19	V 30x30	End-I	Seismic	-77743.59	1.11	Seismic	38871.79	0.55
N + 2.33	B8	19	V 30x30	Middle	Seismic	-19435.9	0.27	Seismic	42297.13	0.6
N + 2.33	B8	19	V 30x30	End-J	Seismic	-62660.69	0.89	Seismic	44339.09	0.63
N +/- 0.00	B2	4	VF 30x30	End-I	Seismic	-17830.51	0.25	Seismic	8915.26	0.13
N +/- 0.00	B2	4	VF 30x30	Middle	Seismic	-4457.63	0.06	Seismic	8915.26	0.13
N +/- 0.00	B2	4	VF 30x30	End-J	Seismic	-17830.51	0.25	Seismic	8915.26	0.13
N +/- 0.00	B4	8	VF 30x30	End-I	Seismic	-17830.51	0.25	Seismic	8915.26	0.13
N +/- 0.00	B4	8	VF 30x30	Middle	Seismic	-4457.63	0.06	Seismic	8915.26	0.13
N +/- 0.00	B4	8	VF 30x30	End-J	Seismic	-17830.51	0.25	Seismic	8915.26	0.13
N +/- 0.00	B6	12	VF 30x30	End-I	Seismic	-17830.51	0.25	Seismic	8915.26	0.13
N +/- 0.00	B6	12	VF 30x30	Middle	Seismic	-4457.63	0.06	Seismic	8915.26	0.13
N +/- 0.00	B6	12	VF 30x30	End-J	Seismic	-17830.51	0.25	Seismic	8915.26	0.13
N +/- 0.00	B7	13	VF 30x30	End-I	Seismic	-46703.22	0.66	Seismic	23351.61	0.33
N +/- 0.00	B7	13	VF 30x30	Middle	Seismic	-11675.81	0.16	Seismic	22486.74	0.32
N +/- 0.00	B7	13	VF 30x30	End-J	Seismic	-46703.22	0.66	Seismic	23351.61	0.33
N +/- 0.00	B8	14	VF 30x30	End-I	Seismic	-46703.22	0.66	Seismic	23351.61	0.33
N +/- 0.00	B8	14	VF 30x30	Middle	Seismic	-11675.81	0.16	Seismic	22486.74	0.32
N +/- 0.00	B8	14	VF 30x30	End-J	Seismic	-46703.22	0.66	Seismic	23351.61	0.33
N +/- 0.00	B9	15	VF 30x30	End-I	Seismic	-46703.22	0.66	Seismic	23351.61	0.33
N +/- 0.00	B9	15	VF 30x30	Middle	Seismic	-11675.81	0.16	Seismic	22486.74	0.32
N +/- 0.00	B9	15	VF 30x30	End-J	Seismic	-46703.22	0.66	Seismic	23351.61	0.33
N +/- 0.00	B10	16	VF 30x30	End-I	Seismic	-46703.22	0.66	Seismic	23351.61	0.33
N +/- 0.00	B10	16	VF 30x30	Middle	Seismic	-11675.81	0.16	Seismic	22486.74	0.32
N +/- 0.00	B10	16	VF 30x30	End-J	Seismic	-46703.22	0.66	Seismic	23351.61	0.33

Table 6.7 - Concrete Beam Shear Envelope - ACI 318-08 (Part 1 of 2)

Story	Label	UniqueName	Location	Section	Shear Design Combo	Shear Force kgf	Torsion for Av/s kgf-cm	VRebar (Av/s) cm2/cm	TTrnCombo
N + 2.50	B1	3	End-I	V 30x30	Seismic	1643.01	17984.93	0.025	Seismic
N + 2.50	B1	3	Middle	V 30x30	Seismic	922.47	17984.93	0.025	Seismic
N + 2.50	B1	3	End-J	V 30x30	Seismic	1646.6	17984.93	0.025	Seismic
N + 2.50	B3	7	End-I	V 30x30	Seismic	2403.85	188.53	0.0304	(B.2.4-5A2)
N + 2.50	B3	7	Middle	V 30x30	Seismic	1322.88	188.53	0.025	(B.2.4-5A2)
N + 2.50	B3	7	End-J	V 30x30	Seismic	2413.85	188.53	0.0305	(B.2.4-5A2)
N + 2.50	B5	11	End-I	V 30x30	Seismic	1643.01	3676.29	0.025	(B.2.4-2B)

Table 6.7 - Concrete Beam Shear Envelope - ACI 318-08 (Part 1 of 2, continued)

Story	Label	UniqueName	Location	Section	Shear Design Combo	Shear Force kgf	Torsion for Av/s kgf-cm	VRebar (Av/s) cm2/cm	TTrnCombo
N + 2.50	B5	11	Middle	V 30x30	Seismic	922.47	3676.29	0.025	(B.2.4-2B)
N + 2.50	B5	11	End-J	V 30x30	Seismic	1646.6	3676.29	0.025	(B.2.4-2B)
N + 2.50	B9	20	End-I	V 30x30	(B.2.4-7B4)	2012.01	2176.83	0.0254	Seismic
N + 2.50	B9	20	Middle	V 30x30	Seismic	2339.76	3840.63	0.025	Seismic
N + 2.50	B9	20	End-J	V 30x30	(B.2.4-7B4)	2194.35	2176.83	0.0277	Seismic
N + 2.50	B10	21	End-I	V 30x30	(B.2.4-7B4)	2194.35	2229.71	0.0277	(B.2.4-5B4)
N + 2.50	B10	21	Middle	V 30x30	Seismic	2339.76	790.25	0.025	(B.2.4-5B4)
N + 2.50	B10	21	End-J	V 30x30	(B.2.4-7B4)	2012.01	2229.71	0.0254	(B.2.4-5B4)
N + 2.33	B7	18	End-I	V 30x30	(B.2.4-7B4)	867.02	891.77	0.025	(B.2.4-5B2)
N + 2.33	B7	18	Middle	V 30x30	(B.2.4-7B4)	688.07	891.77	0.025	(B.2.4-5B2)
N + 2.33	B7	18	End-J	V 30x30	(B.2.4-7B4)	947.59	891.77	0.025	(B.2.4-5B2)
N + 2.33	B8	19	End-I	V 30x30	(B.2.4-7B4)	947.59	954.32	0.025	Seismic
N + 2.33	B8	19	Middle	V 30x30	(B.2.4-7B4)	688.07	954.32	0.025	Seismic
N + 2.33	B8	19	End-J	V 30x30	(B.2.4-7B4)	867.02	954.32	0.025	Seismic
N +/- 0.00	B2	4	End-I	VF 30x30	Seismic	588.08	0	0	(B.2.4-3B)
N +/- 0.00	B2	4	Middle	VF 30x30	Seismic	319.96	0	0	(B.2.4-3B)
N +/- 0.00	B2	4	End-J	VF 30x30	Seismic	588.08	0	0	(B.2.4-3B)
N +/- 0.00	B4	8	End-I	VF 30x30	Seismic	588.08	0	0	(B.2.4-3B)
N +/- 0.00	B4	8	Middle	VF 30x30	Seismic	319.96	0	0	(B.2.4-3B)
N +/- 0.00	B4	8	End-J	VF 30x30	Seismic	588.08	0	0	(B.2.4-3B)
N +/- 0.00	B6	12	End-I	VF 30x30	Seismic	588.08	0	0	(B.2.4-3B)
N +/- 0.00	B6	12	Middle	VF 30x30	Seismic	319.96	0	0	(B.2.4-3B)
N +/- 0.00	B6	12	End-J	VF 30x30	Seismic	588.08	0	0	(B.2.4-3B)
N +/- 0.00	B7	13	End-I	VF 30x30	Seismic	950.95	0	0	(B.2.4-3B)
N +/- 0.00	B7	13	Middle	VF 30x30	Seismic	517.01	0	0	(B.2.4-3B)
N +/- 0.00	B7	13	End-J	VF 30x30	Seismic	950.95	0	0	(B.2.4-3B)
N +/- 0.00	B8	14	End-I	VF 30x30	Seismic	950.95	0	0	(B.2.4-3B)
N +/- 0.00	B8	14	Middle	VF 30x30	Seismic	517.01	0	0	(B.2.4-3B)
N +/- 0.00	B8	14	End-J	VF 30x30	Seismic	950.95	0	0	(B.2.4-3B)
N +/- 0.00	B9	15	End-I	VF 30x30	Seismic	950.95	0	0	(B.2.4-3B)
N +/- 0.00	B9	15	Middle	VF 30x30	Seismic	517.01	0	0	(B.2.4-3B)
N +/- 0.00	B9	15	End-J	VF 30x30	Seismic	950.95	0	0	(B.2.4-3B)
N +/- 0.00	B10	16	End-I	VF 30x30	Seismic	950.95	0	0	(B.2.4-3B)
N +/- 0.00	B10	16	Middle	VF 30x30	Seismic	517.01	0	0	(B.2.4-3B)
N +/- 0.00	B10	16	End-J	VF 30x30	Seismic	950.95	0	0	(B.2.4-3B)

Table 6.7 - Concrete Beam Shear Envelope - ACI 318-08 (Part 2 of 2)

Story	Label	UniqueName	Location	Torsion for TTrnRebar kgf-cm	TTrnRebar (At/s) cm2/cm	TLngCombo	Torsion for TLngRebar kgf-cm	TLngRebar (Al) cm2
N + 2.50	B1	3	End-I	17984.93	0	Seismic	17984.93	0
N + 2.50	B1	3	Middle	17984.93	0	Seismic	17984.93	0
N + 2.50	B1	3	End-J	17984.93	0	Seismic	17984.93	0
N + 2.50	B3	7	End-I	188.53	0	(B.2.4-5A2)	188.53	0

Table 6.7 - Concrete Beam Shear Envelope - ACI 318-08 (Part 2 of 2, continued)

Story	Label	UniqueName	Location	Torsion for TTrnRebar kgf-cm	TTrnRebar (At/s) cm2/cm	TLngCombo	Torsion for TLngRebar kgf-cm	TLngRebar (Al) cm2
N + 2.50	B3	7	Middle	188.53	0	(B.2.4-5A2)	188.53	0
N + 2.50	B3	7	End-J	188.53	0	(B.2.4-5A2)	188.53	0
N + 2.50	B5	11	End-I	17984.93	0	(B.2.4-2B)	17984.93	0
N + 2.50	B5	11	Middle	17984.93	0	(B.2.4-2B)	17984.93	0
N + 2.50	B5	11	End-J	17984.93	0	(B.2.4-2B)	17984.93	0
N + 2.50	B9	20	End-I	3840.63	0	Seismic	3840.63	0
N + 2.50	B9	20	Middle	3840.63	0	Seismic	3840.63	0
N + 2.50	B9	20	End-J	3840.63	0	Seismic	3840.63	0
N + 2.50	B10	21	End-I	3840.63	0	(B.2.4-5B4)	3840.63	0
N + 2.50	B10	21	Middle	3840.63	0	(B.2.4-5B4)	3840.63	0
N + 2.50	B10	21	End-J	3840.63	0	(B.2.4-5B4)	3840.63	0
N + 2.33	B7	18	End-I	4323.25	0	(B.2.4-5B2)	4323.25	0
N + 2.33	B7	18	Middle	4323.25	0	(B.2.4-5B2)	4323.25	0
N + 2.33	B7	18	End-J	4323.25	0	(B.2.4-5B2)	4323.25	0
N + 2.33	B8	19	End-I	4323.25	0	Seismic	4323.25	0
N + 2.33	B8	19	Middle	4323.25	0	Seismic	4323.25	0
N + 2.33	B8	19	End-J	4323.25	0	Seismic	4323.25	0
N +/- 0.00	B2	4	End-I	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B2	4	Middle	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B2	4	End-J	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B4	8	End-I	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B4	8	Middle	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B4	8	End-J	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B6	12	End-I	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B6	12	Middle	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B6	12	End-J	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B7	13	End-I	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B7	13	Middle	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B7	13	End-J	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B8	14	End-I	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B8	14	Middle	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B8	14	End-J	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B9	15	End-I	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B9	15	Middle	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B9	15	End-J	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B10	16	End-I	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B10	16	Middle	0	0	(B.2.4-3B)	0	0
N +/- 0.00	B10	16	End-J	0	0	(B.2.4-3B)	0	0

Table 6.8 - Concrete Joint Envelope - ACI 318-08

Story	Label	UniqueName	Section	B/C Major Combo	B/C Major Ratio	B/C Minor Combo	B/C Minor Ratio	JS Major Combo	JS Major Ratio	JS Minor Combo	JS Minor Ratio
N + 2.50	C1	1	C 30x30	(B.2.4-7B1)	0.557	(B.2.4-7B1)	0.288	(B.2.4-5A2)	0.309	(B.2.4-5A2)	0.156
N + 2.50	C3	5	C 30x30	(B.2.4-7B1)	0.851	(B.2.4-7B1)	0.312	(B.2.4-5A2)	0.504	(B.2.4-5A2)	0.191
N + 2.50	C5	9	C 30x30	(B.2.4-7B4)	0.557	(B.2.4-7B4)	0.288	(B.2.4-5A2)	0.309	(B.2.4-5A2)	0.156
N + 2.33	C2	2	C 30x30	(B.2.4-7B3)	0.244	(B.2.4-7B3)	0.297	(B.2.4-5A2)	0.133	(B.2.4-5A2)	0.161
N + 2.33	C4	6	C 30x30	(B.2.4-7B2)	0.445	(B.2.4-7B2)	0.433	(B.2.4-5A2)	0.198	(B.2.4-5A2)	0.195
N + 2.33	C6	10	C 30x30	(B.2.4-7B2)	0.244	(B.2.4-7B2)	0.297	(B.2.4-5A2)	0.133	(B.2.4-5A2)	0.161

Table 6.9 - Concrete Column Design Summary - ACI 318-08 (Part 1 of 3)

Story	Label	UniqueName	Station cm	DesignSect	DesignOpt	Status	PMMRatio	PMMCombo	AsMin cm2
N + 2.50	C1	1	0	C 30x30	Design	No Message		Seismic	9
N + 2.50	C1	1	110	C 30x30	Design	No Message		Seismic	9
N + 2.50	C1	1	220	C 30x30	Design	No Message		Seismic	9
N + 2.50	C3	5	0	C 30x30	Design	No Message		Seismic	9
N + 2.50	C3	5	110	C 30x30	Design	No Message		Seismic	9
N + 2.50	C3	5	220	C 30x30	Design	No Message		Seismic	9
N + 2.50	C5	9	0	C 30x30	Design	No Message		Seismic	9
N + 2.50	C5	9	110	C 30x30	Design	No Message		Seismic	9
N + 2.50	C5	9	220	C 30x30	Design	No Message		Seismic	9
N + 2.33	C2	2	0	C 30x30	Design	No Message		Seismic	9
N + 2.33	C2	2	101.5	C 30x30	Design	No Message		Seismic	9
N + 2.33	C2	2	203	C 30x30	Design	No Message		Seismic	9
N + 2.33	C4	6	0	C 30x30	Design	No Message		Seismic	9
N + 2.33	C4	6	101.5	C 30x30	Design	No Message		Seismic	9
N + 2.33	C4	6	203	C 30x30	Design	No Message		Seismic	9
N + 2.33	C6	10	0	C 30x30	Design	No Message		Seismic	9
N + 2.33	C6	10	101.5	C 30x30	Design	No Message		Seismic	9
N + 2.33	C6	10	203	C 30x30	Design	No Message		Seismic	9

Table 6.9 - Concrete Column Design Summary - ACI 318-08 (Part 2 of 3)

Story	Label	UniqueName	Station cm	As cm2	Mid Bar As cm2	CornerBarAs cm2	VMajCombo	VMajRebar cm2/cm	VMinCombo
N + 2.50	C1	1	0	9	0.75	0.75	Seismic	0.0264	Seismic
N + 2.50	C1	1	110	9	0.75	0.75	Seismic	0.0264	Seismic
N + 2.50	C1	1	220	9	0.75	0.75	Seismic	0.0264	Seismic
N + 2.50	C3	5	0	9	0.75	0.75	Seismic	0.0536	Seismic
N + 2.50	C3	5	110	9	0.75	0.75	Seismic	0.0536	Seismic
N + 2.50	C3	5	220	12.86	1.07	1.07	Seismic	0.0536	Seismic
N + 2.50	C5	9	0	9	0.75	0.75	Seismic	0.0264	Seismic
N + 2.50	C5	9	110	9	0.75	0.75	Seismic	0.0264	Seismic
N + 2.50	C5	9	220	9	0.75	0.75	Seismic	0.0264	Seismic
N + 2.33	C2	2	0	9	0.75	0.75	Seismic	0.025	Seismic
N + 2.33	C2	2	101.5	9	0.75	0.75	Seismic	0.025	Seismic
N + 2.33	C2	2	203	9	0.75	0.75	Seismic	0.025	Seismic

Table 6.9 - Concrete Column Design Summary - ACI 318-08 (Part 2 of 3, continued)

Story	Label	UniqueName	Station cm	As cm2	Mid Bar As cm2	CornerBarAs cm2	VMajCombo	VMajRebar cm2/cm	VMinCombo
N + 2.33	C4	6	0	9	0.75	0.75	Seismic	0.025	Seismic
N + 2.33	C4	6	101.5	9	0.75	0.75	Seismic	0.025	Seismic
N + 2.33	C4	6	203	9	0.75	0.75	Seismic	0.025	Seismic
N + 2.33	C6	10	0	9	0.75	0.75	Seismic	0.025	Seismic
N + 2.33	C6	10	101.5	9	0.75	0.75	Seismic	0.025	Seismic
N + 2.33	C6	10	203	9	0.75	0.75	Seismic	0.025	Seismic

Table 6.9 - Concrete Column Design Summary - ACI 318-08 (Part 3 of 3)

Story	Label	UniqueName	Station cm	WarnMsg	ErrMsg
N + 2.50	C1	1	0	No Message	No Message
N + 2.50	C1	1	110	No Message	No Message
N + 2.50	C1	1	220	No Message	No Message
N + 2.50	C3	5	0	No Message	No Message
N + 2.50	C3	5	110	No Message	No Message
N + 2.50	C3	5	220	No Message	No Message
N + 2.50	C5	9	0	No Message	No Message
N + 2.50	C5	9	110	No Message	No Message
N + 2.50	C5	9	220	No Message	No Message
N + 2.33	C2	2	0	No Message	No Message
N + 2.33	C2	2	101.5	No Message	No Message
N + 2.33	C2	2	203	No Message	No Message
N + 2.33	C4	6	0	No Message	No Message
N + 2.33	C4	6	101.5	No Message	No Message
N + 2.33	C4	6	203	No Message	No Message
N + 2.33	C6	10	0	No Message	No Message
N + 2.33	C6	10	101.5	No Message	No Message
N + 2.33	C6	10	203	No Message	No Message

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 1 of 4)

Story	Label	UniqueName	Station cm	DesignSect	Status	AsTopCombo	AsMinTop cm2	AsTop cm2
N + 2.50	B1	3	14.878	V 30x30	No Message	Seismic	1.08	1.08
N + 2.50	B1	3	133.271	V 30x30	No Message	Seismic	0.27	0.27
N + 2.50	B1	3	251.664	V 30x30	No Message	Seismic	1.05	1.05
N + 2.50	B3	7	14.878	V 30x30	No Message	Seismic	1.64	1.64
N + 2.50	B3	7	133.271	V 30x30	No Message	Seismic	0.4	0.4
N + 2.50	B3	7	251.664	V 30x30	No Message	Seismic	1.6	1.6
N + 2.50	B5	11	14.878	V 30x30	No Message	Seismic	1.08	1.08
N + 2.50	B5	11	133.271	V 30x30	No Message	Seismic	0.27	0.27
N + 2.50	B5	11	251.664	V 30x30	No Message	Seismic	1.05	1.05
N + 2.50	B9	20	15	V 30x30	No Message	Seismic	2.07	2.07
N + 2.50	B9	20	59.5	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B9	20	104	V 30x30	No Message	Seismic	0.82	0.82

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 1 of 4, continued)

Story	Label	UniqueName	Station cm	DesignSect	Status	AsTopCombo	AsMinTop cm2	AsTop cm2
N + 2.50	B9	20	148.5	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B9	20	193	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B9	20	237.5	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B9	20	282	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B9	20	326.5	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B9	20	371	V 30x30	No Message	Seismic	1.56	1.56
N + 2.50	B9	20	415.5	V 30x30	No Message	Seismic	2.5	2.55
N + 2.50	B10	21	15	V 30x30	No Message	Seismic	2.5	2.55
N + 2.50	B10	21	59.5	V 30x30	No Message	Seismic	1.56	1.56
N + 2.50	B10	21	104	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B10	21	148.5	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B10	21	193	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B10	21	237.5	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B10	21	282	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B10	21	326.5	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B10	21	371	V 30x30	No Message	Seismic	0.82	0.82
N + 2.50	B10	21	415.5	V 30x30	No Message	Seismic	2.07	2.07
N + 2.33	B7	18	15	V 30x30	No Message	Seismic	0.89	0.89
N + 2.33	B7	18	59.5	V 30x30	No Message	Seismic	0.53	0.53
N + 2.33	B7	18	104	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B7	18	148.5	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B7	18	193	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B7	18	237.5	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B7	18	282	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B7	18	326.5	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B7	18	371	V 30x30	No Message	Seismic	0.64	0.64
N + 2.33	B7	18	415.5	V 30x30	No Message	Seismic	1.11	1.11
N + 2.33	B8	19	15	V 30x30	No Message	Seismic	1.11	1.11
N + 2.33	B8	19	59.5	V 30x30	No Message	Seismic	0.64	0.64
N + 2.33	B8	19	104	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B8	19	148.5	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B8	19	193	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B8	19	237.5	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B8	19	282	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B8	19	326.5	V 30x30	No Message	Seismic	0.27	0.27
N + 2.33	B8	19	371	V 30x30	No Message	Seismic	0.53	0.53
N + 2.33	B8	19	415.5	V 30x30	No Message	Seismic	0.89	0.89
N +/- 0.00	B2	4	0	VF 30x30	No Message	Seismic	0.25	0.25
N +/- 0.00	B2	4	44.333	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B2	4	88.667	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B2	4	133	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B2	4	177.333	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B2	4	221.667	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B2	4	266	VF 30x30	No Message	Seismic	0.25	0.25
N +/- 0.00	B4	8	0	VF 30x30	No Message	Seismic	0.25	0.25

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 1 of 4, continued)

Story	Label	UniqueName	Station cm	DesignSect	Status	AsTopCombo	AsMinTop cm2	AsTop cm2
N +/- 0.00	B4	8	44.333	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B4	8	88.667	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B4	8	133	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B4	8	177.333	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B4	8	221.667	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B4	8	266	VF 30x30	No Message	Seismic	0.25	0.25
N +/- 0.00	B6	12	0	VF 30x30	No Message	Seismic	0.25	0.25
N +/- 0.00	B6	12	44.333	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B6	12	88.667	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B6	12	133	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B6	12	177.333	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B6	12	221.667	VF 30x30	No Message	Seismic	0.06	0.06
N +/- 0.00	B6	12	266	VF 30x30	No Message	Seismic	0.25	0.25
N +/- 0.00	B7	13	0	VF 30x30	No Message	Seismic	0.66	0.66
N +/- 0.00	B7	13	47.833	VF 30x30	No Message	Seismic	0.27	0.27
N +/- 0.00	B7	13	95.667	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B7	13	143.5	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B7	13	191.333	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B7	13	239.167	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B7	13	287	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B7	13	334.833	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B7	13	382.667	VF 30x30	No Message	Seismic	0.27	0.27
N +/- 0.00	B7	13	430.5	VF 30x30	No Message	Seismic	0.66	0.66
N +/- 0.00	B8	14	0	VF 30x30	No Message	Seismic	0.66	0.66
N +/- 0.00	B8	14	47.833	VF 30x30	No Message	Seismic	0.27	0.27
N +/- 0.00	B8	14	95.667	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B8	14	143.5	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B8	14	191.333	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B8	14	239.167	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B8	14	287	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B8	14	334.833	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B8	14	382.667	VF 30x30	No Message	Seismic	0.27	0.27
N +/- 0.00	B8	14	430.5	VF 30x30	No Message	Seismic	0.66	0.66
N +/- 0.00	B9	15	0	VF 30x30	No Message	Seismic	0.66	0.66
N +/- 0.00	B9	15	47.833	VF 30x30	No Message	Seismic	0.27	0.27
N +/- 0.00	B9	15	95.667	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B9	15	143.5	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B9	15	191.333	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B9	15	239.167	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B9	15	287	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B9	15	334.833	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B9	15	382.667	VF 30x30	No Message	Seismic	0.27	0.27
N +/- 0.00	B9	15	430.5	VF 30x30	No Message	Seismic	0.66	0.66
N +/- 0.00	B10	16	0	VF 30x30	No Message	Seismic	0.66	0.66
N +/- 0.00	B10	16	47.833	VF 30x30	No Message	Seismic	0.27	0.27

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 1 of 4, continued)

Story	Label	UniqueName	Station cm	DesignSect	Status	AsTopCombo	AsMinTop cm2	AsTop cm2
N +/- 0.00	B10	16	95.667	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B10	16	143.5	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B10	16	191.333	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B10	16	239.167	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B10	16	287	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B10	16	334.833	VF 30x30	No Message	Seismic	0.16	0.16
N +/- 0.00	B10	16	382.667	VF 30x30	No Message	Seismic	0.27	0.27
N +/- 0.00	B10	16	430.5	VF 30x30	No Message	Seismic	0.66	0.66

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 2 of 4)

Story	Label	UniqueName	Station cm	AsBotCombo	AsMinBot cm2	AsBot cm2	VCombo	VRebar cm2/cm	TLngCombo
N + 2.50	B1	3	14.878	Seismic	0.63	0.63	Seismic	0.025	Seismic
N + 2.50	B1	3	133.271	(B.2.4-2A)	0.97	0.97	Seismic	0.025	Seismic
N + 2.50	B1	3	251.664	Seismic	0.59	0.59	Seismic	0.025	Seismic
N + 2.50	B3	7	14.878	Seismic	0.82	0.82	Seismic	0.0304	(B.2.4-5A2)
N + 2.50	B3	7	133.271	(B.2.4-2A)	1.76	1.76	Seismic	0.025	(B.2.4-5A2)
N + 2.50	B3	7	251.664	Seismic	0.8	0.8	Seismic	0.0305	(B.2.4-5A2)
N + 2.50	B5	11	14.878	Seismic	0.63	0.63	Seismic	0.025	(B.2.4-2B)
N + 2.50	B5	11	133.271	(B.2.4-2A)	0.97	0.97	Seismic	0.025	(B.2.4-2B)
N + 2.50	B5	11	251.664	Seismic	0.59	0.59	Seismic	0.025	(B.2.4-2B)
N + 2.50	B9	20	15	Seismic	1.02	1.02	(B.2.4-7B4)	0.0254	Seismic
N + 2.50	B9	20	59.5	Seismic	0.82	0.82	Seismic	0.025	Seismic
N + 2.50	B9	20	104	(B.2.4-2A)	1.82	1.82	Seismic	0.025	Seismic
N + 2.50	B9	20	148.5	(B.2.4-2A)	2.5	2.5	(B.2.4-7B4)	0.025	Seismic
N + 2.50	B9	20	193	(B.2.4-2A)	2.5	2.5	(B.2.4-7B4)	0.025	Seismic
N + 2.50	B9	20	237.5	(B.2.4-2A)	2.5	2.5	(B.2.4-7B4)	0.025	Seismic
N + 2.50	B9	20	282	(B.2.4-2A)	2.39	2.39	Seismic	0.025	Seismic
N + 2.50	B9	20	326.5	(B.2.4-2A)	1.42	1.42	Seismic	0.025	Seismic
N + 2.50	B9	20	371	Seismic	0.82	0.82	(B.2.4-7B4)	0.0261	Seismic
N + 2.50	B9	20	415.5	Seismic	1.66	1.66	(B.2.4-7B4)	0.0277	Seismic
N + 2.50	B10	21	15	Seismic	1.66	1.66	(B.2.4-7B4)	0.0277	(B.2.4-5B4)
N + 2.50	B10	21	59.5	Seismic	0.82	0.82	(B.2.4-7B4)	0.0261	(B.2.4-5B4)
N + 2.50	B10	21	104	(B.2.4-2A)	1.42	1.42	Seismic	0.025	(B.2.4-5B4)
N + 2.50	B10	21	148.5	(B.2.4-2A)	2.39	2.39	Seismic	0.025	(B.2.4-5B4)
N + 2.50	B10	21	193	(B.2.4-2A)	2.5	2.5	(B.2.4-7B4)	0.025	(B.2.4-5B4)
N + 2.50	B10	21	237.5	(B.2.4-2A)	2.5	2.5	(B.2.4-7B4)	0.025	(B.2.4-5B4)
N + 2.50	B10	21	282	(B.2.4-2A)	2.5	2.5	(B.2.4-7B4)	0.025	(B.2.4-5B4)
N + 2.50	B10	21	326.5	(B.2.4-2A)	1.82	1.82	Seismic	0.025	(B.2.4-5B4)
N + 2.50	B10	21	371	Seismic	0.82	0.82	Seismic	0.025	(B.2.4-5B4)
N + 2.50	B10	21	415.5	Seismic	1.02	1.02	(B.2.4-7B4)	0.0254	(B.2.4-5B4)
N + 2.33	B7	18	15	Seismic	0.5	0.5	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B7	18	59.5	Seismic	0.58	0.58	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B7	18	104	Seismic	0.63	0.63	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B7	18	148.5	Seismic	0.6	0.6	(B.2.4-7B4)	0.025	(B.2.4-5B2)

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 2 of 4, continued)

Story	Label	UniqueName	Station cm	AsBotCombo	AsMinBot cm2	AsBot cm2	VCombo	VRebar cm2/cm	TLngCombo
N + 2.33	B7	18	193	Seismic	0.5	0.5	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B7	18	237.5	Seismic	0.37	0.37	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B7	18	282	Seismic	0.35	0.35	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B7	18	326.5	Seismic	0.31	0.31	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B7	18	371	Seismic	0.27	0.27	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B7	18	415.5	Seismic	0.55	0.55	(B.2.4-7B4)	0.025	(B.2.4-5B2)
N + 2.33	B8	19	15	Seismic	0.55	0.55	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	59.5	Seismic	0.27	0.27	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	104	Seismic	0.31	0.31	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	148.5	Seismic	0.35	0.35	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	193	Seismic	0.37	0.37	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	237.5	Seismic	0.5	0.5	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	282	Seismic	0.6	0.6	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	326.5	Seismic	0.63	0.63	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	371	Seismic	0.58	0.58	(B.2.4-7B4)	0.025	Seismic
N + 2.33	B8	19	415.5	Seismic	0.5	0.5	(B.2.4-7B4)	0.025	Seismic
N +/- 0.00	B2	4	0	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B2	4	44.333	Seismic	0.06	0.06	Seismic	0	(B.2.4-3B)
N +/- 0.00	B2	4	88.667	Seismic	0.08	0.08	Seismic	0	(B.2.4-3B)
N +/- 0.00	B2	4	133	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B2	4	177.333	Seismic	0.08	0.08	Seismic	0	(B.2.4-3B)
N +/- 0.00	B2	4	221.667	Seismic	0.06	0.06	Seismic	0	(B.2.4-3B)
N +/- 0.00	B2	4	266	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B4	8	0	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B4	8	44.333	Seismic	0.06	0.06	Seismic	0	(B.2.4-3B)
N +/- 0.00	B4	8	88.667	Seismic	0.08	0.08	Seismic	0	(B.2.4-3B)
N +/- 0.00	B4	8	133	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B4	8	177.333	Seismic	0.08	0.08	Seismic	0	(B.2.4-3B)
N +/- 0.00	B4	8	221.667	Seismic	0.06	0.06	Seismic	0	(B.2.4-3B)
N +/- 0.00	B4	8	266	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B6	12	0	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B6	12	44.333	Seismic	0.06	0.06	Seismic	0	(B.2.4-3B)
N +/- 0.00	B6	12	88.667	Seismic	0.08	0.08	Seismic	0	(B.2.4-3B)
N +/- 0.00	B6	12	133	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B6	12	177.333	Seismic	0.08	0.08	Seismic	0	(B.2.4-3B)
N +/- 0.00	B6	12	221.667	Seismic	0.06	0.06	Seismic	0	(B.2.4-3B)
N +/- 0.00	B6	12	266	Seismic	0.13	0.13	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	0	Seismic	0.33	0.33	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	47.833	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	95.667	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	143.5	Seismic	0.22	0.22	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	191.333	Seismic	0.32	0.32	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	239.167	Seismic	0.32	0.32	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	287	Seismic	0.22	0.22	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	334.833	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 2 of 4, continued)

Story	Label	UniqueName	Station cm	AsBotCombo	AsMinBot cm2	AsBot cm2	VCombo	VRebar cm2/cm	TLngCombo
N +/- 0.00	B7	13	382.667	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B7	13	430.5	Seismic	0.33	0.33	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	0	Seismic	0.33	0.33	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	47.833	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	95.667	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	143.5	Seismic	0.22	0.22	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	191.333	Seismic	0.32	0.32	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	239.167	Seismic	0.32	0.32	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	287	Seismic	0.22	0.22	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	334.833	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	382.667	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B8	14	430.5	Seismic	0.33	0.33	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	0	Seismic	0.33	0.33	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	47.833	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	95.667	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	143.5	Seismic	0.22	0.22	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	191.333	Seismic	0.32	0.32	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	239.167	Seismic	0.32	0.32	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	287	Seismic	0.22	0.22	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	334.833	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	382.667	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B9	15	430.5	Seismic	0.33	0.33	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	0	Seismic	0.33	0.33	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	47.833	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	95.667	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	143.5	Seismic	0.22	0.22	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	191.333	Seismic	0.32	0.32	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	239.167	Seismic	0.32	0.32	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	287	Seismic	0.22	0.22	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	334.833	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	382.667	Seismic	0.16	0.16	Seismic	0	(B.2.4-3B)
N +/- 0.00	B10	16	430.5	Seismic	0.33	0.33	Seismic	0	(B.2.4-3B)

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 3 of 4)

Story	Label	UniqueName	Station cm	TTrnCombo	TTrnRebar cm2/cm	AsTopTotal cm2	AsBotTotal cm2	AtTrnTotal cm2/cm
N + 2.50	B1	3	14.878	Seismic	0	1.08	0.63	0.025
N + 2.50	B1	3	133.271	Seismic	0	0.27	0.97	0.025
N + 2.50	B1	3	251.664	Seismic	0	1.05	0.59	0.025
N + 2.50	B3	7	14.878	(B.2.4-5A2)	0	1.64	0.82	0.0304
N + 2.50	B3	7	133.271	(B.2.4-5A2)	0	0.4	1.76	0.025
N + 2.50	B3	7	251.664	(B.2.4-5A2)	0	1.6	0.8	0.0305
N + 2.50	B5	11	14.878	(B.2.4-2B)	0	1.08	0.63	0.025
N + 2.50	B5	11	133.271	(B.2.4-2B)	0	0.27	0.97	0.025
N + 2.50	B5	11	251.664	(B.2.4-2B)	0	1.05	0.59	0.025

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 3 of 4, continued)

Story	Label	UniqueName	Station cm	TTrnCombo	TTrnRebar cm2/cm	AsTopTotal cm2	AsBotTotal cm2	AtTrnTotal cm2/cm
N + 2.50	B9	20	15	Seismic	0	2.07	1.02	0.0254
N + 2.50	B9	20	59.5	Seismic	0	0.82	0.82	0.025
N + 2.50	B9	20	104	Seismic	0	0.82	1.82	0.025
N + 2.50	B9	20	148.5	Seismic	0	0.82	2.5	0.025
N + 2.50	B9	20	193	Seismic	0	0.82	2.5	0.025
N + 2.50	B9	20	237.5	Seismic	0	0.82	2.5	0.025
N + 2.50	B9	20	282	Seismic	0	0.82	2.39	0.025
N + 2.50	B9	20	326.5	Seismic	0	0.82	1.42	0.025
N + 2.50	B9	20	371	Seismic	0	1.56	0.82	0.0261
N + 2.50	B9	20	415.5	Seismic	0	2.55	1.66	0.0277
N + 2.50	B10	21	15	(B.2.4-5B4)	0	2.55	1.66	0.0277
N + 2.50	B10	21	59.5	(B.2.4-5B4)	0	1.56	0.82	0.0261
N + 2.50	B10	21	104	(B.2.4-5B4)	0	0.82	1.42	0.025
N + 2.50	B10	21	148.5	(B.2.4-5B4)	0	0.82	2.39	0.025
N + 2.50	B10	21	193	(B.2.4-5B4)	0	0.82	2.5	0.025
N + 2.50	B10	21	237.5	(B.2.4-5B4)	0	0.82	2.5	0.025
N + 2.50	B10	21	282	(B.2.4-5B4)	0	0.82	2.5	0.025
N + 2.50	B10	21	326.5	(B.2.4-5B4)	0	0.82	1.82	0.025
N + 2.50	B10	21	371	(B.2.4-5B4)	0	0.82	0.82	0.025
N + 2.50	B10	21	415.5	(B.2.4-5B4)	0	2.07	1.02	0.0254
N + 2.33	B7	18	15	(B.2.4-5B2)	0	0.89	0.5	0.025
N + 2.33	B7	18	59.5	(B.2.4-5B2)	0	0.53	0.58	0.025
N + 2.33	B7	18	104	(B.2.4-5B2)	0	0.27	0.63	0.025
N + 2.33	B7	18	148.5	(B.2.4-5B2)	0	0.27	0.6	0.025
N + 2.33	B7	18	193	(B.2.4-5B2)	0	0.27	0.5	0.025
N + 2.33	B7	18	237.5	(B.2.4-5B2)	0	0.27	0.37	0.025
N + 2.33	B7	18	282	(B.2.4-5B2)	0	0.27	0.35	0.025
N + 2.33	B7	18	326.5	(B.2.4-5B2)	0	0.27	0.31	0.025
N + 2.33	B7	18	371	(B.2.4-5B2)	0	0.64	0.27	0.025
N + 2.33	B7	18	415.5	(B.2.4-5B2)	0	1.11	0.55	0.025
N + 2.33	B8	19	15	Seismic	0	1.11	0.55	0.025
N + 2.33	B8	19	59.5	Seismic	0	0.64	0.27	0.025
N + 2.33	B8	19	104	Seismic	0	0.27	0.31	0.025
N + 2.33	B8	19	148.5	Seismic	0	0.27	0.35	0.025
N + 2.33	B8	19	193	Seismic	0	0.27	0.37	0.025
N + 2.33	B8	19	237.5	Seismic	0	0.27	0.5	0.025
N + 2.33	B8	19	282	Seismic	0	0.27	0.6	0.025
N + 2.33	B8	19	326.5	Seismic	0	0.27	0.63	0.025
N + 2.33	B8	19	371	Seismic	0	0.53	0.58	0.025
N + 2.33	B8	19	415.5	Seismic	0	0.89	0.5	0.025
N +/- 0.00	B2	4	0	(B.2.4-3B)	0	0.25	0.13	0
N +/- 0.00	B2	4	44.333	(B.2.4-3B)	0	0.06	0.06	0
N +/- 0.00	B2	4	88.667	(B.2.4-3B)	0	0.06	0.08	0
N +/- 0.00	B2	4	133	(B.2.4-3B)	0	0.06	0.13	0
N +/- 0.00	B2	4	177.333	(B.2.4-3B)	0	0.06	0.08	0

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 3 of 4, continued)

Story	Label	UniqueName	Station cm	TTrnCombo	TTrnRebar cm2/cm	AsTopTotal cm2	AsBotTotal cm2	AtTrnTotal cm2/cm
N +/- 0.00	B2	4	221.667	(B.2.4-3B)	0	0.06	0.06	0
N +/- 0.00	B2	4	266	(B.2.4-3B)	0	0.25	0.13	0
N +/- 0.00	B4	8	0	(B.2.4-3B)	0	0.25	0.13	0
N +/- 0.00	B4	8	44.333	(B.2.4-3B)	0	0.06	0.06	0
N +/- 0.00	B4	8	88.667	(B.2.4-3B)	0	0.06	0.08	0
N +/- 0.00	B4	8	133	(B.2.4-3B)	0	0.06	0.13	0
N +/- 0.00	B4	8	177.333	(B.2.4-3B)	0	0.06	0.08	0
N +/- 0.00	B4	8	221.667	(B.2.4-3B)	0	0.06	0.06	0
N +/- 0.00	B4	8	266	(B.2.4-3B)	0	0.25	0.13	0
N +/- 0.00	B6	12	0	(B.2.4-3B)	0	0.25	0.13	0
N +/- 0.00	B6	12	44.333	(B.2.4-3B)	0	0.06	0.06	0
N +/- 0.00	B6	12	88.667	(B.2.4-3B)	0	0.06	0.08	0
N +/- 0.00	B6	12	133	(B.2.4-3B)	0	0.06	0.13	0
N +/- 0.00	B6	12	177.333	(B.2.4-3B)	0	0.06	0.08	0
N +/- 0.00	B6	12	221.667	(B.2.4-3B)	0	0.06	0.06	0
N +/- 0.00	B6	12	266	(B.2.4-3B)	0	0.25	0.13	0
N +/- 0.00	B7	13	0	(B.2.4-3B)	0	0.66	0.33	0
N +/- 0.00	B7	13	47.833	(B.2.4-3B)	0	0.27	0.16	0
N +/- 0.00	B7	13	95.667	(B.2.4-3B)	0	0.16	0.16	0
N +/- 0.00	B7	13	143.5	(B.2.4-3B)	0	0.16	0.22	0
N +/- 0.00	B7	13	191.333	(B.2.4-3B)	0	0.16	0.32	0
N +/- 0.00	B7	13	239.167	(B.2.4-3B)	0	0.16	0.32	0
N +/- 0.00	B7	13	287	(B.2.4-3B)	0	0.16	0.22	0
N +/- 0.00	B7	13	334.833	(B.2.4-3B)	0	0.16	0.16	0
N +/- 0.00	B7	13	382.667	(B.2.4-3B)	0	0.27	0.16	0
N +/- 0.00	B7	13	430.5	(B.2.4-3B)	0	0.66	0.33	0
N +/- 0.00	B8	14	0	(B.2.4-3B)	0	0.66	0.33	0
N +/- 0.00	B8	14	47.833	(B.2.4-3B)	0	0.27	0.16	0
N +/- 0.00	B8	14	95.667	(B.2.4-3B)	0	0.16	0.16	0
N +/- 0.00	B8	14	143.5	(B.2.4-3B)	0	0.16	0.22	0
N +/- 0.00	B8	14	191.333	(B.2.4-3B)	0	0.16	0.32	0
N +/- 0.00	B8	14	239.167	(B.2.4-3B)	0	0.16	0.32	0
N +/- 0.00	B8	14	287	(B.2.4-3B)	0	0.16	0.22	0
N +/- 0.00	B8	14	334.833	(B.2.4-3B)	0	0.16	0.16	0
N +/- 0.00	B8	14	382.667	(B.2.4-3B)	0	0.27	0.16	0
N +/- 0.00	B8	14	430.5	(B.2.4-3B)	0	0.66	0.33	0
N +/- 0.00	B9	15	0	(B.2.4-3B)	0	0.66	0.33	0
N +/- 0.00	B9	15	47.833	(B.2.4-3B)	0	0.27	0.16	0
N +/- 0.00	B9	15	95.667	(B.2.4-3B)	0	0.16	0.16	0
N +/- 0.00	B9	15	143.5	(B.2.4-3B)	0	0.16	0.22	0
N +/- 0.00	B9	15	191.333	(B.2.4-3B)	0	0.16	0.32	0
N +/- 0.00	B9	15	239.167	(B.2.4-3B)	0	0.16	0.32	0
N +/- 0.00	B9	15	287	(B.2.4-3B)	0	0.16	0.22	0
N +/- 0.00	B9	15	334.833	(B.2.4-3B)	0	0.16	0.16	0
N +/- 0.00	B9	15	382.667	(B.2.4-3B)	0	0.27	0.16	0

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 3 of 4, continued)

Story	Label	UniqueName	Station cm	TTrnCombo	TTrnRebar cm2/cm	AsTopTotal cm2	AsBotTotal cm2	AtTrnTotal cm2/cm
N +/- 0.00	B9	15	430.5	(B.2.4-3B)	0	0.66	0.33	0
N +/- 0.00	B10	16	0	(B.2.4-3B)	0	0.66	0.33	0
N +/- 0.00	B10	16	47.833	(B.2.4-3B)	0	0.27	0.16	0
N +/- 0.00	B10	16	95.667	(B.2.4-3B)	0	0.16	0.16	0
N +/- 0.00	B10	16	143.5	(B.2.4-3B)	0	0.16	0.22	0
N +/- 0.00	B10	16	191.333	(B.2.4-3B)	0	0.16	0.32	0
N +/- 0.00	B10	16	239.167	(B.2.4-3B)	0	0.16	0.32	0
N +/- 0.00	B10	16	287	(B.2.4-3B)	0	0.16	0.22	0
N +/- 0.00	B10	16	334.833	(B.2.4-3B)	0	0.16	0.16	0
N +/- 0.00	B10	16	382.667	(B.2.4-3B)	0	0.27	0.16	0
N +/- 0.00	B10	16	430.5	(B.2.4-3B)	0	0.66	0.33	0

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 4 of 4)

Story	Label	UniqueName	Station cm	ErrMsg
N + 2.50	B1	3	14.878	No Message
N + 2.50	B1	3	133.271	No Message
N + 2.50	B1	3	251.664	No Message
N + 2.50	B3	7	14.878	No Message
N + 2.50	B3	7	133.271	No Message
N + 2.50	B3	7	251.664	No Message
N + 2.50	B5	11	14.878	No Message
N + 2.50	B5	11	133.271	No Message
N + 2.50	B5	11	251.664	No Message
N + 2.50	B9	20	15	No Message
N + 2.50	B9	20	59.5	No Message
N + 2.50	B9	20	104	No Message
N + 2.50	B9	20	148.5	No Message
N + 2.50	B9	20	193	No Message
N + 2.50	B9	20	237.5	No Message
N + 2.50	B9	20	282	No Message
N + 2.50	B9	20	326.5	No Message
N + 2.50	B9	20	371	No Message
N + 2.50	B9	20	415.5	No Message
N + 2.50	B10	21	15	No Message
N + 2.50	B10	21	59.5	No Message
N + 2.50	B10	21	104	No Message
N + 2.50	B10	21	148.5	No Message
N + 2.50	B10	21	193	No Message
N + 2.50	B10	21	237.5	No Message
N + 2.50	B10	21	282	No Message
N + 2.50	B10	21	326.5	No Message
N + 2.50	B10	21	371	No Message
N + 2.50	B10	21	415.5	No Message
N + 2.33	B7	18	15	No Message

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 4 of 4, continued)

Story	Label	UniqueName	Station cm	ErrMsg
N + 2.33	B7	18	59.5	No Message
N + 2.33	B7	18	104	No Message
N + 2.33	B7	18	148.5	No Message
N + 2.33	B7	18	193	No Message
N + 2.33	B7	18	237.5	No Message
N + 2.33	B7	18	282	No Message
N + 2.33	B7	18	326.5	No Message
N + 2.33	B7	18	371	No Message
N + 2.33	B7	18	415.5	No Message
N + 2.33	B8	19	15	No Message
N + 2.33	B8	19	59.5	No Message
N + 2.33	B8	19	104	No Message
N + 2.33	B8	19	148.5	No Message
N + 2.33	B8	19	193	No Message
N + 2.33	B8	19	237.5	No Message
N + 2.33	B8	19	282	No Message
N + 2.33	B8	19	326.5	No Message
N + 2.33	B8	19	371	No Message
N + 2.33	B8	19	415.5	No Message
N +/- 0.00	B2	4	0	No Message
N +/- 0.00	B2	4	44.333	No Message
N +/- 0.00	B2	4	88.667	No Message
N +/- 0.00	B2	4	133	No Message
N +/- 0.00	B2	4	177.333	No Message
N +/- 0.00	B2	4	221.667	No Message
N +/- 0.00	B2	4	266	No Message
N +/- 0.00	B4	8	0	No Message
N +/- 0.00	B4	8	44.333	No Message
N +/- 0.00	B4	8	88.667	No Message
N +/- 0.00	B4	8	133	No Message
N +/- 0.00	B4	8	177.333	No Message
N +/- 0.00	B4	8	221.667	No Message
N +/- 0.00	B4	8	266	No Message
N +/- 0.00	B6	12	0	No Message
N +/- 0.00	B6	12	44.333	No Message
N +/- 0.00	B6	12	88.667	No Message
N +/- 0.00	B6	12	133	No Message
N +/- 0.00	B6	12	177.333	No Message
N +/- 0.00	B6	12	221.667	No Message
N +/- 0.00	B6	12	266	No Message
N +/- 0.00	B7	13	0	No Message
N +/- 0.00	B7	13	47.833	No Message
N +/- 0.00	B7	13	95.667	No Message
N +/- 0.00	B7	13	143.5	No Message
N +/- 0.00	B7	13	191.333	No Message

Table 6.10 - Concrete Beam Design Summary - ACI 318-08 (Part 4 of 4, continued)

Story	Label	UniqueName	Station cm	ErrMsg
N +/- 0.00	B7	13	239.167	No Message
N +/- 0.00	B7	13	287	No Message
N +/- 0.00	B7	13	334.833	No Message
N +/- 0.00	B7	13	382.667	No Message
N +/- 0.00	B7	13	430.5	No Message
N +/- 0.00	B8	14	0	No Message
N +/- 0.00	B8	14	47.833	No Message
N +/- 0.00	B8	14	95.667	No Message
N +/- 0.00	B8	14	143.5	No Message
N +/- 0.00	B8	14	191.333	No Message
N +/- 0.00	B8	14	239.167	No Message
N +/- 0.00	B8	14	287	No Message
N +/- 0.00	B8	14	334.833	No Message
N +/- 0.00	B8	14	382.667	No Message
N +/- 0.00	B8	14	430.5	No Message
N +/- 0.00	B9	15	0	No Message
N +/- 0.00	B9	15	47.833	No Message
N +/- 0.00	B9	15	95.667	No Message
N +/- 0.00	B9	15	143.5	No Message
N +/- 0.00	B9	15	191.333	No Message
N +/- 0.00	B9	15	239.167	No Message
N +/- 0.00	B9	15	287	No Message
N +/- 0.00	B9	15	334.833	No Message
N +/- 0.00	B9	15	382.667	No Message
N +/- 0.00	B9	15	430.5	No Message
N +/- 0.00	B10	16	0	No Message
N +/- 0.00	B10	16	47.833	No Message
N +/- 0.00	B10	16	95.667	No Message
N +/- 0.00	B10	16	143.5	No Message
N +/- 0.00	B10	16	191.333	No Message
N +/- 0.00	B10	16	239.167	No Message
N +/- 0.00	B10	16	287	No Message
N +/- 0.00	B10	16	334.833	No Message
N +/- 0.00	B10	16	382.667	No Message
N +/- 0.00	B10	16	430.5	No Message

Table 6.11 - Concrete Joint Design Summary - ACI 318-08 (Part 1 of 2)

Story	Label	UniqueName	DesignSect	Status	BCMajCombo	BCMajRatio	BCMinCombo	BCMinRatio
N + 2.50	C1	1	C 30x30	No Message	(B.2.4-7B1)	0.557	(B.2.4-7B1)	0.288
N + 2.50	C3	5	C 30x30	No Message	(B.2.4-7B1)	0.851	(B.2.4-7B1)	0.312
N + 2.50	C5	9	C 30x30	No Message	(B.2.4-7B4)	0.557	(B.2.4-7B4)	0.288
N + 2.33	C2	2	C 30x30	No Message	(B.2.4-7B3)	0.244	(B.2.4-7B3)	0.297
N + 2.33	C4	6	C 30x30	No Message	(B.2.4-7B2)	0.445	(B.2.4-7B2)	0.433
N + 2.33	C6	10	C 30x30	No Message	(B.2.4-7B2)	0.244	(B.2.4-7B2)	0.297

Table 6.11 - Concrete Joint Design Summary - ACI 318-08 (Part 2 of 2)

Story	Label	UniqueName	JSMajCombo	JSMajRatio	JSMinCombo	JSMinRatio	WarnMsg	ErrMsg
N + 2.50	C1	1	(B.2.4-5A2)	0.309	(B.2.4-5A2)	0.156	No Message	No Message
N + 2.50	C3	5	(B.2.4-5A2)	0.504	(B.2.4-5A2)	0.191	No Message	No Message
N + 2.50	C5	9	(B.2.4-5A2)	0.309	(B.2.4-5A2)	0.156	No Message	No Message
N + 2.33	C2	2	(B.2.4-5A2)	0.133	(B.2.4-5A2)	0.161	No Message	No Message
N + 2.33	C4	6	(B.2.4-5A2)	0.198	(B.2.4-5A2)	0.195	No Message	No Message
N + 2.33	C6	10	(B.2.4-5A2)	0.133	(B.2.4-5A2)	0.161	No Message	No Message

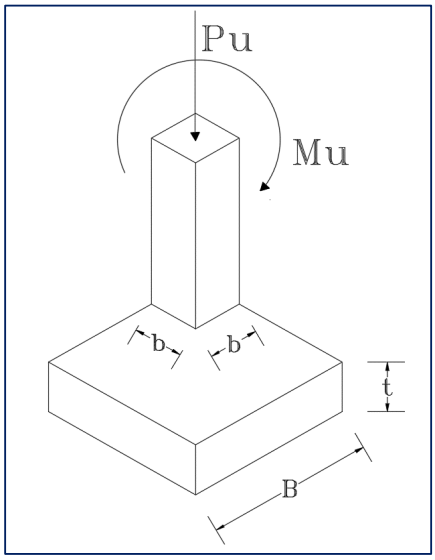
Diseño de Zapatas Excéntricas Z1

Datos Extraídos del análisis:

Esfuerzo Admisible del suelo (Ton/m²)		
μu	13.23	(Carga de Servicio)

Resistencia		
F'c	210	(kgf/cm²)
Fy	4200	(kgf/cm²)

Separación entre ejes de columna	
4.305	m



Datos Columna Exterior

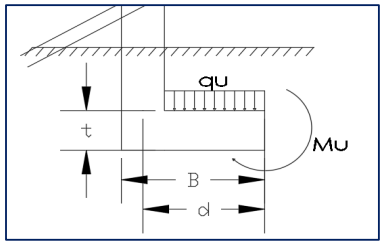
Dimensiones (m):	b (m) =	0.3	h(m) =	0.3

Carga de Servicio + Sismo:	P_s (Ton)	7.85
Carga mayorada:	P_u (Ton)=	10.64

Determinación de las dimensiones de la zapata excéntrica:

B Asumido :	B(m) =		0.77
	C(m) =		0.65
Excentricidad :	e(m)	=	0.350
Carga Contrapeso (Ton)	DR	=	0.694
Reacciones Mayoradas (Ton)	Fu	=	8.539

B utilizado (m)	=	1.00
d(m)	=	0.85
C Utilizado (m)	=	1.00
t (m)	=	0.3



Viga de Enlace

Ancho asumido	b(m)	=	0.300
	Mu(Ton-m)	=	2.399
	h(m)	=	0.300
	K	=	0.009
	Cuantía	=	0.003
	As(cm^2)	=	3.218

Diseño Zapata Exterior Excéntrica

qu	=	8.539
Mu borde	=	3.085
K	=	0.005
Vu borde	=	7.258
Vu	=	2.419
Ø	=	0.850
Ø Vn	=	6.528
Vn= 0.53*Raíz(F'c)	=	7.680
Comprobación	=	Correcto

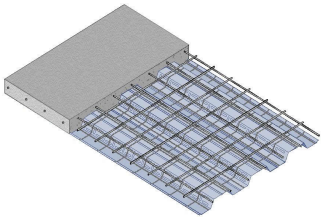
As(cm^2)	=	4.050
ρ	=	0.00180

Barra (cm^2)	No 4	1.29
N° de barras	=	4
Acero colocado	=	5.16
Cuantía Colocada	=	0.00229
Comprobación	=	Correcto
Separación (cm)	=	23
	=	20
Barras colocadas =	**1 No 4 @ 20 cm**	

Momentos maximos en cada dirección		
Mx (kg - m)	=	772.530
My (kg - m)	=	745.640

Revisión excentricidad				
Mx (kg - m) / P (kg)	0.098	**< B/6**	0.17	Correcto
My (kg - m) / P (kg)	0.095	**< B/6**	0.17	Correcto

Corpalosa Tipo: Corpalosa 2



Materiales

Módulo de elasticidad acero (kg/cm²):	2040000
Esf. de fluencia Corpalosa Fy (kg/cm²):	2800
Módulo de elasticidad concreto (kg/cm²):	181000
Esf. fluencia acero de refuerzo negativo (kg/cm²):	4200
f'c Concreto (kg/cm²):	210

Especificaciones de la Corpalosa

Espesor de la losa t(cm):	10
Luz entre apoyos permanentes de la lam. (m):	1.45
Número de luces:	2 Luces
Voladizo:	No
	Nota: Apuntalar voladizo en etapa constructiva
Tipo de apuntalamiento:	Sin apuntalamiento

Cargas

Carga acabados (kg/m²):	110
Muros y tabiques (kg/m²):	0.00
Carga viva de servicio (kg/m²):	500

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

	Calibre 22	Calibre 20	Calibre 18	Calibre 16
Diseño en la etapa constructiva				
Deflexión por peso propio Δpp (cm):	**0.06**	**0.05**	**0.04**	**0.03**
Δadm L/180 (cm):	**0.81**	**0.81**	**0.81**	**0.81**
Δpp/Δadm:	**0.07**	**0.06**	**0.04**	**0.04**
Mu(+) (kg-m):	159.07	159.42	160.11	160.81
ϕ·Mn(+) (kg-m):	403.79	520.83	764.75	1003.62
Mu/ϕ·Mn(+) :	0.39	0.31	0.21	0.16
ϕ·Mn(-) (kg-m):	**114.26**	**114.72**	**115.62**	**116.53**
Mu(-) (kg-m):	**468.43**	**566.31**	**760.49**	**945.9**
Mu/ϕMn:	**0.24**	**0.2**	**0.15**	**0.12**
Vu (kg):	425	426.57	429.69	432.81
ϕVn (kg):	3368.27	6745.33	8431.67	8431.67
Vu/ϕVn:	0.13	0.06	0.05	0.05
Interacción Flexión y Corte:	0.41	0.31	0.22	0.17
Diseño en la etapa de funcionamiento				
M(+) (kg-m/m):	**212.31**	**212.56**	**213.07**	**213.58**
ϕMn (kg-m/m):	**1566.5**	**1842.04**	**2351.6**	**2808.54**
M(+) / ϕMn:	**0.14**	**0.12**	**0.09**	**0.08**
V max (adherencia a cortante) (kg/m):	718.31	719.4	721.56	723.72
ϕVn (kg/m):	1647.59	1940.7	2717.91	3704.49
Vmax / ϕ Vn :	0.44	0.37	0.27	0.2
v max (cortante en el concreto) (kg/cm²):	**1.82**	**1.83**	**1.83**	**1.84**
ϕ vn (kg/cm²):	**6.53**	**6.53**	**6.53**	**6.53**
Vmax / ϕVn :	**0.28**	**0.28**	**0.28**	**0.28**
Deflexión carga viva ΔCV (cm):	0.03	0.03	0.02	0.02
Δadm L/360 (cm):	0.4	0.4	0.4	0.4
ΔCV/Δadm:	0.07	0.06	0.05	0.05
Deflexión CM+CV ΔTOTAL (cm):	0.09	0.08	0.06	0.05
Δadm L/240 (cm):	0.6	0.6	0.6	0.6
ΔTOTAL/Δadm:	0.15	0.13	0.1	0.08
Deflexión en voladizo ΔVOL (cm):	**NA**	**NA**	**NA**	**NA**
Δadm L/120 (cm):	**NA**	**NA**	**NA**	**NA**
ΔVOL/Δadm:	**NA**	**NA**	**NA**	**NA**
Diseño Tipo:	Subreforzado	Subreforzado	Subreforzado	**Sobrereforzado**
Detalles Adicionales				
Área de acero para ref. negativo (cm²):	1.1	1.11	1.11	1.11
Área de acero para retr. de fraguado(cm²):	0.89	0.89	0.89	0.89
Refuerzo mínimo requerido	5.0mm c/15	5.0mm c/15	5.0mm c/15	5.0mm c/15
Refuerzo adicional en voladizo	NA	NA	NA	NA

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

Elección De Perfil: Calibre 20

Características de la lámina	
As (lámina) (cm²):	11.62
Is (lámina) (cm4):	57.24
Spe (cm³):	19.58
Sne (cm³):	21.29
Peso Lámina (kg/m²):	8.85
Espesor nominal de la lámina (cm):	0.12

AVALUO DE CARGAS

Carga Muerta

Peso del concreto Wcto (kg/m²):	170.43
Peso de la lámina Wlam (kg/m²):	8.85
Peso Propio Wpp (kg/m²):	179.28
Peso propio húmedo Wpph (kg/m²):	230.41
Peso de los Acabados (kg/m²):	110
Peso de Muros y/o Tabiques (kg/m²):	0

Carga Viva

Carga viva de servicio (kg/m²):	500
Carga viva de Construcción Distribuida Wc (kg/m²):	100
Carga viva de Construcción Puntual Pc (kg):	220

Carga Sobreimpuesta Ws (kg/m²): **610**

DISEÑO PARA ETAPA CONSTRUCTIVA

Verificación de Apuntalamiento

Longitud de apuntalamiento La (m):	1.45
C1:	0.0054
Deflexión por peso propio Δpp (cm):	0.0471
ΔADMpp L/180 (cm):	0.8056
ΔADMpp (cm):	2

$$\Delta_{pp} = C_1 \cdot W_{pph} \frac{L_a^4 \cdot 100^3}{E_s \cdot I_s}$$

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

Combinaciones de carga método LRFD

C2:	0.203
C3:	0.096
C4:	0.096
C5:	0.125
C6:	0.5
C7:	0.625

$$Wu = \gamma_D \cdot CM + \gamma_L CV$$
$$Mu(+) = C_2 \cdot P_C \cdot L_a + C_3 \cdot W_{pph} \cdot L_a^2$$
$$Mu(+) = C_4 \cdot (W_{pph} + W_C) \cdot L_a^2$$
$$Mu(-) = C_5 \cdot (W_{pph} + W_C) \cdot L_a^2$$
$$Vu = C_6 \cdot P_C + C_7 \cdot W_{pph} \cdot L_a$$
$$Vu = C_7 \cdot (W_{pph} + W_C) \cdot L_a$$

Análisis de Hipótesis de Carga

Combos	γCM (kg/m²)	γCV (kg/m²)	γCV (kg)	M(+) (kg-m)	M(-)(kg-m)	Vu(kg)
1.4CM + 0CV	322.57	0	0	65.11	84.78	292.33
1.2CM + 1.6CV	276.49	160	352	159.42	114.72	426.57

Diseño para carga de construcción a flexión

Mu(+) (kg m):	159.42
Mu(-) (kg m):	114.72
ø·Mn (+) (kg m):	520.83
ø·Mn (-) (kg m):	566.31

Diseño para carga de construcción a corte

Fv (kg/cm²):	1680
Aw (cm²):	4.23
Vu (kg m):	426.57
øvVn (kg):	6745.33
h/t:	48.92
√(5.34 x E/Fy)	62.37
√(12.18 x E/Fy):	94.2

$$\phi Mn(+) = 0.95 \cdot Sp_e \cdot Fy$$
$$\phi Mn(-) = 0.95 \cdot Sn_e \cdot Fy$$
$$Vn = A_w \cdot F_v, \quad \phi_v = 0.95$$
$$Fv = 0.6 \cdot Fy, \quad \text{si } h/t \le \sqrt{k_v \cdot E/Fy}$$
$$Fv = 0.6 \cdot \sqrt{k_v \cdot E \cdot Fy}/(h/t), \quad \text{si } \sqrt{k_v \cdot E/Fy} \le h/t \le 1.51\sqrt{k_v \cdot E/Fy}$$
$$Fv = 0.904 \cdot k_v \cdot E/(h/t)^2, \quad \text{si } h/t > 1.51\sqrt{k_v \cdot E/Fy}$$

Verificación de flexión y corte combinados

Interacción momento flector y corte:	0.31

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

DISEÑO PARA ETAPA DE FUNCIONAMIENTO

Combinaciones de Carga Metodo LRFD

C8:	0.07
C9:	0.096
C10:	0.125
C11:	0.125
C12:	0.625
C13:	0.625

$$Wu = \gamma_D \cdot CM + \gamma_L CV$$
$$Mu^{(+)} = C_8 \cdot W_D \cdot L^2 + C_9 \cdot W_L \cdot L^2$$
$$Mu^{(-)} = C_{10} \cdot W_D \cdot L^2 + C_{11} \cdot W_L \cdot L^2$$
$$Vu = C_{12} \cdot W_D \cdot L + C_{13} \cdot W_L \cdot L$$

Análisis de Hipótesis de Carga

Combos	γCM (kg/m²)	γCV (kg/m²)	M(+) (kg-m)	M(-)(kg-m)	Vu(kg)
1.4CM + 0CV	404.99	0	59.6	106.44	367.02
1.2CM + 1.6CV	347.14	800	212.56	301.48	1039.59

Mu(+) (kg m):	213
Mu(-) (kg m):	301
Vu (kg m):	1040

DISEÑO POR FLEXION

Cálculo de la Cuantía Balanceada de Acero

β1:	0.85
h (Altura del perfil Corpalosa)(cm):	5.08
t (Espesor de la placa) (cm):	10
d (cm):	7.572
ρ bal:	0.0242

$$\rho_{bal} = 0.85 \cdot \beta_1 \cdot \left(\frac{f'c}{Fy}\right) \cdot \left(\frac{\varepsilon_c}{\varepsilon_c + \varepsilon_y}\right) \cdot \left(\frac{t-h}{d}\right)$$

Cálculo de la Cuantía Disponible

Calibre de la Corpalosa:	20
Area de acero para refuerzo (As) (cm²):	11.62
ρo:	0.02
Dist. borde de placa - eje neutro a (cm):	1.82
ø·Mn (kg m):	1842.04

$$\rho_o = \frac{A_s}{b \cdot d}$$

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

Revisión por Adherencia de Cortante Corpalosa - Concreto

l'=L/4 (cm):	36.25
m:	815
k:	0.04
b (cm):	100
Vu (kg):	719.4
Vn (kg):	2425.88
ø·Vn (kg):	1940.7

$$Vn = b \cdot d \cdot \left(k \cdot \sqrt{f'c} + m \cdot \frac{\rho \cdot d}{l'} \right)$$

Revisión por Cortante en el Concreto

Vu (kg):	1039.592
Area que soporta cortante Ac (cm²)/m:	569.082
Esfuerzo cort. último (vu =Vu/Ac) (kg/cm²):	1.827
vc (0,53 √f'c) (kg/cm²):	7.68
ø vc (kg/cm²):	6.528

$$\phi v_c = \phi \cdot 0.53 \cdot \sqrt{f'_c}, \quad \phi = 0.85$$

Verificación de deflexiones

n:	11.27
I prom (cm4):	4340.56
C14:	0.01
C15:	0.01
Wcsi (kg/m²):	610
Δ CV (cm):	0.03
ΔCM+CV (cm):	0.08
ΔADM CV (cm) L/360:	0.4
ΔADM CM+CV (cm) L/240:	0.6

$$\Delta_{CSI} = \frac{L^4 \times 100^3}{E_C \times I_{PROM}} (C_{14} \times W_D + C_{15} \times W_L)$$

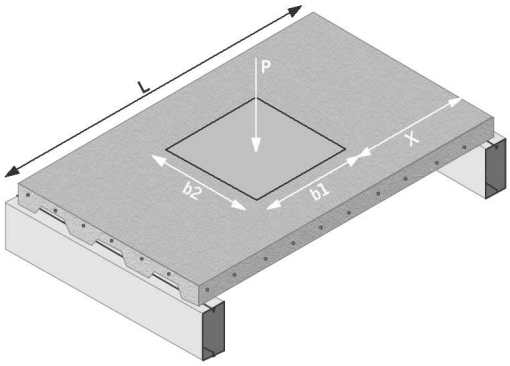
NOTA: Estas memorias de cálculo deben ser revisadas y aprobadas por un Ingeniero Calculista.

Capacidad para cargas concentradas

b1 (Dimensión paralela a la luz) (cm):	10
b2 (Dimensión perpendicular a la lámina) (cm):	10
Espesor de concreto sobre la cresta tc(cm):	4.92
Dist. entre apoyo y base de carga X(cm):	67.5
Distancia efectiva d(cm):	7.46
Resistencia a cortante (0,291√ f'c) (kg/cm²):	4.22

Cortante por Punzonamiento

Ancho efectivo be (cm):	68.94
Máxima carga por punzonamiento P(kg):	1430.41



Cortante Vertical

Ancho efectivo be (cm):	56.92
Máxima carga por cortante P(kg):	1707.39

Distribución a Flexión

Ancho efectivo be (cm):	41.56
Carga efectiva a flexión (kg/m):	4108.74
δ b(cm):	0.03
L/360(cm):	0.4

Nota: Para cargas puntuales mayores a 1000 kg se recomienda reforzar la zona con doble malla electrosoldada.

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

DETALLES ADICIONALES (Refuerzo Losa)

Area de Acero para Momento Negativo (para apoyos internos)

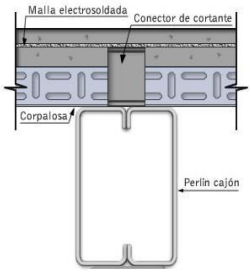
b (cm):	45
d (cm):	7.5
Fy refuerzo (kg/cm²):	4200
As (cm²):	1.11
Refuerzo para momento negativo:	5.0mm c/15

Area de Acero para Retracción y Fraguado

ρ min T°:	0.0018
b (cm):	100
As T° (cm²):	0.8856
Refuerzo para retracción y fraguado:	4.5mm c/15

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

Sección tipo: Seccion 1



Propiedades de la Vigueta

Módulo del acero Es(kg/cm²):	2040000
Fluencia del Perlín Fy (kg/cm²):	3500
Fluencia de la platina Fy (kg/cm²):	3500
Luz entre apoyos (m):	2.66
Separación de viguetas (m):	1.45

Propiedades del Entrepiso

Resistencia del concreto (kg/cm²):	210
Peso del concreto (kg/m³):	2300
Mod. elast. concreto E(kg/cm²) :	181142
Altura Corpalosa hr(pulg):	2
Espesor losa (cm):	10
Calibre de lámina:	20

Condiciones de Luz

Apuntalamiento temporal:	Sin apuntalamiento
Tipo de luz:	Luz continua un extremo

Conectores de Cortante

Fu conector (kg/cm²):	4200
Tipo de conector:	Varilla
Forma del conector:	L
Separación conectores Sc(cm):	30
Diámetro del conector (pulg):	3/8
Número de ramas en c/ fila Nr (un):	1

Cargas

Acabados (kg/m²):	110
Muros y tabiques (kg/m²):	0.00
Viva (kg/m²):	500
Carga sobreimpuesta (kg/m²):	610.00

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

Selección: 2P-125-14

Perlín	% Sección Compuesta	Peso (kg/m)	Clasificación			Mu(+)	Diseño Plástico	Diseño Elástico		Deflexiones		Cortante Perlín	Momento Negativo	
			h/tw	Tipo de sección	Tipo de Diseño	(kg-m)	Mu/ϕ Mn	δs/ϕFy	δc/ϕ0.85f'c	δv/δadm (CV)	δv/δadm (CV+CM)	Rigidizador	Mu(-)/ϕ Mn	Refuerzo
2P-125-12	13	9.42	46	Compacta	Diseño plástico	1317	0.58	0.72	0.61	0.24	0.26	No Requiere	0.51	Sin Refuerzo
2P-125-11	11	11.3	38	Compacta	Diseño plástico	1319	0.52	0.64	0.62	0.23	0.24	No Requiere	0.43	Sin Refuerzo
2P-150-14	14	8.32	72	Compacta	Diseño plástico	1316	0.54	0.69	0.51	0.2	0.22	No Requiere	0.48	Sin Refuerzo
2P-150-12	12	10.4	56	Compacta	Diseño plástico	1318	0.47	0.6	0.51	0.18	0.2	No Requiere	0.39	Sin Refuerzo
2P-150-11	10	12.48	46	Compacta	Diseño plástico	1320	0.42	0.53	0.51	0.17	0.18	No Requiere	0.34	Sin Refuerzo
2P-6-14	13	9.26	72	Compacta	Diseño plástico	1317	0.48	0.62	0.5	0.19	0.2	No Requiere	0.41	Sin Refuerzo
2P-6-12	11	11.56	56	Compacta	Diseño plástico	1319	0.42	0.53	0.49	0.17	0.18	No Requiere	0.33	Sin Refuerzo
2P-6-11	10	13.88	46	Compacta	Diseño plástico	1321	0.37	0.46	0.48	0.15	0.16	No Requiere	0.28	Sin Refuerzo
2P-8-14	11	10.84	97	No Compacta	Diseño elástico	1318	0.35	0.46	0.37	0.12	0.12	No Requiere	0.28	Sin Refuerzo
2P-8-12	10	13.56	77	Compacta	Diseño plástico	1321	0.3	0.38	0.36	0.1	0.11	No Requiere	0.23	Sin Refuerzo
2P-8-11	10	16.28	63	Compacta	Diseño plástico	1323	0.26	0.33	0.34	0.09	0.1	No Requiere	0.19	Sin Refuerzo
2P-9-14	11	11.64	110	No Compacta	Diseño elástico	1319	0.3	0.4	0.32	0.09	0.1	No Requiere	0.24	Sin Refuerzo
2P-9-12	10	14.56	87	Compacta	Diseño elástico	1322	0.25	0.33	0.31	0.08	0.09	No Requiere	0.19	Sin Refuerzo
2P-9-11	10	17.46	72	Compacta	Diseño plástico	1324	0.22	0.28	0.29	0.07	0.08	No Requiere	0.16	Sin Refuerzo
2P-10-14	10	12.44	122	No Compacta	Diseño elástico	1320	0.26	0.35	0.29	0.08	0.08	No Requiere	0.2	Sin Refuerzo
2P-10-12	10	15.56	97	No Compacta	Diseño elástico	1323	0.22	0.29	0.27	0.07	0.07	No Requiere	0.17	Sin Refuerzo
2P-10-11	10	18.66	80	Compacta	Diseño elástico	1326	0.19	0.24	0.26	0.06	0.06	No Requiere	0.14	Sin Refuerzo
2P-12-14	10	14.04	148	No Compacta	Diseño elástico	1321	0.2	0.27	0.23	0.05	0.06	No Requiere	0.16	Sin Refuerzo
2P-12-12	10	17.54	117	No Compacta	Diseño elástico	1324	0.17	0.22	0.22	0.04	0.05	No Requiere	0.13	Sin Refuerzo
2P-12-11	10	21.06	97	No Compacta	Diseño elástico	1328	0.15	0.19	0.2	0.04	0.04	No Requiere	0.11	Sin Refuerzo
2P-14-14	10	15.64	173	No Compacta	Diseño elástico	1323	0.16	0.22	0.19	0.04	0.04	No Requiere	0.13	Sin Refuerzo
2P-14-12	10	19.54	138	No Compacta	Diseño elástico	1326	0.14	0.18	0.17	0.03	0.03	No Requiere	0.1	Sin Refuerzo
2P-14-11	10	23.44	114	No Compacta	Diseño elástico	1330	0.12	0.15	0.17	0.03	0.03	No Requiere	0.09	Sin Refuerzo
2P3-16-14	10	18.34	76	Compacta	Diseño plástico	1325	0.13	0.17	0.15	0.03	0.03	No Requiere	0.09	Sin Refuerzo
2P4-16-14	10	19.94	76	Compacta	Diseño plástico	1327	0.11	0.15	0.14	0.02	0.03	No Requiere	0.08	Sin Refuerzo
2P3-18-14	10	19.94	102	No Compacta	Diseño elástico	1327	0.11	0.14	0.13	0.02	0.02	No Requiere	0.08	Sin Refuerzo
2P4-18-14	10	21.54	102	No Compacta	Diseño elástico	1328	0.1	0.12	0.12	0.02	0.02	No Requiere	0.07	Sin Refuerzo
2P3-16-12	10	22.92	61	Compacta	Diseño plástico	1330	0.11	0.14	0.14	0.02	0.02	No Requiere	0.08	Sin Refuerzo
2P4-16-12	10	24.92	61	Compacta	Diseño plástico	1331	0.09	0.12	0.13	0.02	0.02	No Requiere	0.07	Sin Refuerzo
2P3-18-12	10	24.92	81	Compacta	Diseño plástico	1331	0.09	0.11	0.12	0.02	0.02	No Requiere	0.06	Sin Refuerzo
2P4-18-12	10	26.92	81	Compacta	Diseño plástico	1333	0.08	0.1	0.11	0.02	0.02	No Requiere	0.06	Sin Refuerzo
2P3-16-11	10	27.52	51	Compacta	Diseño plástico	1334	0.09	0.11	0.13	0.02	0.02	No Requiere	0.06	Sin Refuerzo
2P4-16-11	10	29.9	51	Compacta	Diseño plástico	1336	0.08	0.1	0.13	0.02	0.02	No Requiere	0.06	Sin Refuerzo
2P3-18-11	10	29.9	68	Compacta	Diseño plástico	1336	0.08	0.1	0.11	0.01	0.02	No Requiere	0.05	Sin Refuerzo

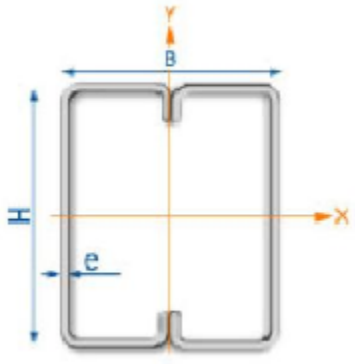
Relación Luz/Altura del perlín > 25.
Si selecciona esta opción se recomienda revisar vibraciones.

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

Diseño a flexión de Perlines en Cajón y Corpalosa en Sección Compuesta

Denominación Comercial (Tipo 1)		P-125-14	Perlín C	
Alma del perfil:	A=	12.5	cm	
Ancho del perfil:	B=	5	cm	
Pestaña del perfil:	C=	2	cm	
Espesor del perfil:	e=	0.2	cm	
Radio de giro al eje del elemento:	r'=	0.35	cm	
Área del perfil:	A(cm²)=	5.02	cm²	

Platina inferior		NO	
Ancho de la platina inferior	Bpl=	0	cm
Espesor de la platina inferior	tpl=	0	cm
Longitud de la platina	% L=	0	%
Área del perfil:	A(cm²)=	0	cm²

Propiedades de la Sección Metálica Ensamblada			
Altura Hv =		12.5	cm
Ancho B =		10	cm
Espesor e =		0.2	cm
Peso =		7.54	kg/m
Area =		10	cm²
Yb =		6.25	cm
Ixx =		240	cm4
Sx inf =		38	cm³
Sx sup =		38	cm³
Esf. fibra inf =		3500	kg/cm²
ϕ*Fy*Sx inf =		1207.09	kg-m

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

Revisión de la Sección Compacta ó No-Compacta	
3.76*(E/fy)^0.5	90.78
h/tw	58.96
Conclusión	COMPACTA

Avalúo de Cargas		
Concreto de losa	172	kg/m²
Lamina colaborante	8.85	kg/m²
Viguetería	5.2	kg/m²
Carga muerta propio (CM1)	185.63	kg/m²
Carga muerta sobreimpuesta (CM2)	110	kg/m²
Carga muerta (CM)	295.63	kg/m²
Carga viva (CV)	500	kg/m²

Análisis de Cargas		
Coeficiente de momento MCL	fact M+	0.111
Coeficiente de momento MA	fac MA-	0
Coeficiente de momento MB	fac MB-	0.062
Coeficiente de cortante CA	fac V	0.55

Combinaciones de Carga

Combinaciones	Carga Última Qu (kg/m²)	Carga Última Wu (kg/m)	Momento Mu(+) (kg·m)	Momento Mu(-) izq. (kg-m)	Momento Mu(-) der. (kg-m)	Cortante Vu (kg)
1.2CM+1.6CV	1155	1674	1315	0	740	2450
1.4CM + 1CV	914	1325	1041	0	586	1939

Solicitaciones del Elemento		
Momento último centro de luz (Mu +)	1315	kg-m
Momento último apoyos Mu izq.(-)	0	kg-m
Momento último apoyos Mu der.(-)	740	kg-m
Cortante último (Vu)	2450	kg

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

Capacidades de la Sección y sus Componentes

Resistencia del Concreto a Compresión		
Lc/4	0.665	m
Aferencia	1.45	m
Ancho efectivo (be)	66.500	cm
Espesor efectivo placa (te)	4.92	cm
Ae concreto en compresión	327	cm²
0.85*f'c*Ae	58402	kg
Resistencia de la Vigueta a tracción		
As Vigueta metálica	10.04	cm²
As*fy	35130	kg
Resistencia a corte de los conectores		
Fu	4200	kg/cm²
As conector	0.71	cm²
Coeficiente experimental de reducción γ	0.6	
Capacidad de un conector (Qn)	1117	kg
No. filas en semi Luz	5	un
Σ Qn	5583	kg
Cf	35130	kg
% de sección compuesta('')	15.89	%

Diseño Plástico		
a) Eje neutro plástico en la losa		
T=As*fy	35130	kg
C/a=0.85*f'c*be	11870.25	kg/cm
a= C/0.85f'cbe	2.96	cm
ϕ Mn	N/A	kg-m
b) Eje neutro plástico en el patín superior		
As*fy	35130	kg
C1=Suma Qn	5583	kg
a=Ci/be	0.47	cm
C2=(As*fy-C1)/2	14773	kg
y1=(As*fy-C1)/(2*fy*bf)	0.44	cm
ϕ Mn	N/A	kg-m
c) Eje Neutro plástico en el alma		
As*fy=	35130	kg
C1=Suma Qn	5583	kg
a=Ci/be	0.47	cm
C2=(As*fy-C1)/2	14773	kg
y1=(As*fy-C1)/(2*fy*bf)	5.75	cm
ϕ Mn	2009	kg-m

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

Diseño Elástico		
SECCION COMPUESTA PARCIAL	15.89	%
Sx viga	38	cm³
Sx compuesta total	104	cm³
Sx compuesta efectiva	50	cm³
Luz apuntalada	2.66	m
Mupp (Momento último por Peso Propio)	286	kg-m
σ1	745	kg/cm²
Mupp' (Momento último por efecto apuntalamiento)	0	kg-m
σ2	0	kg/cm²
Musi (Momento último por carga sobreimpuesta)	1061	kg-m
σ3	2114	kg/cm²
Mu(+) (Momento último total)	1347	kg-m
σS tensión	2859	kg/cm²
ϕFy x 1.10	3465	kg/cm²
σ compresión	87	kg/cm²
ϕ0.85 f`c	143	kg/cm²

Cálculo de Inercias		
n = Es/Ec	11.26	
be transformado =be/n	5.9	cm
A (placa)	29.05	cm²
A (viga)	10.04	cm²
Sumatoria de A	39.09	cm²
ycg (placa)	20.04	cm
ycg (viga)	6.25	cm
A*ycg (placa)	582	cm³
A*ysg (viga)	63	cm³
Sumatoria A*ycg	645	cm³
Yc = Sumatoria (A*ycg) / Sumatoria A	16.5	cm
Io concreto	59	cm4
Io viga	240	cm4
Suma de Io	298	cm4
A*(Yc-ycg)² (placa)	364	cm²
A*(Yc-ysg)² (viga)	1054	cm²
Sumatoria A*(Yc-ycg)²	1419	cm4
Icomp total = 100.0% secc. compuesta	1717	cm4
Icomp efectiva = 16 % secc. compuesta	828	cm4

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

Resistencia a Cortante		
(E Kv / Fy)^0.5	55.79	
Kv	5	
h/tw	58.96	
Aw (cm²)	4.64	
ϕ Vn	8752.97	kg
Rigidizador	No Requiere	

Análisis de Deflexiones		
Δ contrucción	0.54	cm
Δ CV permanente	0.2	cm
Δ CM+CV permanente	0.31	cm
Δ ADM contrucción (L/180, 2.0cm)	1.48	cm
Δ ADM CV permanente (L/360)	0.74	cm
Δ ADM CV+CM permanente L/240)	1.11	cm

Revisión en el Apoyo (viga continua)		
Mu(-)	740	kg-m
Posición del refuerzo en la placa d'=	3.00	cm
Varilla de refuerzo negativo	Sin Refuerzo	
Área de refuerzo	0	cm²
Tensión máxima aportada por los conectores	1117	kg
Tensión del refuerzo	0	kg
Centroide de la sección compuesta (refuerzo - Perlín)	6.25	cm
øMn de la sección compuesta (refuerzo - Perlín)	1207	kg-m

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