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*Medio Ambiente *Geotécnica *Cálculos de Ingeniería *Materiales *Soporte Técnico

CI-6135-I

Medellín, 15 de Junio del 2016

Arquitecto

BILLY ANDRES HURTADO GARCIA

Coordinador de Proyecto

OBRA: Jardín en el predio Fontana grande – Portal de Lombardía.

Bogotá

Referencia: Servicios de consultoría en Cálculos de Ingeniería para la obra: “Elaboración de los estudios y diseños estructurales para la “Elaboración de estudios y diseños nuevos requeridos, para la obtención de las licencias de construcción en cualquiera de sus modalidades y/o licencia de urbanismo, junto con los permisos y aprobaciones necesarios, para el jardín en el predio Fontana grande – Portal de Lombardía” Ubicada en el Municipio de Bogotá.

Cordial saludo.

Por medio del presente le estoy enviando los resultados de la consultoría ejecutada para el diseño estructural del proyecto en referencia siguiendo la norma NSR - 10 ley 400 de 1997 decreto 926 de 2010, decreto 092 del 2011, decreto 0340 del 2012.

Espero le sea de su completa satisfacción, y quedo atento a cualquier inquietud.

Atentamente,

Ingeniero

GILBERTO OLIER GARCÍA

Consultor

Director General



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DISEÑO ESTRUCTURAL DE EDIFICACIONES

Jardín en el predio Fontana grande – Portal de Lombardía
Municipio de Bogotá

Arquitecto Billy Andrés Hurtado García

Junio del 2016



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CONTENIDO

INTRODUCCIÓN

- 1. DESCRIPCIÓN DEL PROYECTO**
- 2. CONSIDERACIONES E HIPÓTESIS DE CÁLCULO**
- 3. UNIDADES**
- 4. DESCRIPCIÓN DEL PROGRAMA DE COMPUTADORA Y MANEJO**
- 5. DEFINICIÓN DE ELEMENTOS ESTRUCTURALES**
- 6. ANÁLISIS Y DISEÑO DE LOSAS**
- 7. ANÁLISIS SÍSMICO**
- 8. ANÁLISIS ESTRUCTURAL**
- 9. ANÁLISIS Y DISEÑO DE VIGAS**
- 10. ANÁLISIS Y DISEÑO DE COLUMNAS Y MUROS**
- 11. ANÁLISIS Y DISEÑO DE FUNDACIONES**
- 12. CONSIDERACIONES DE LOS ELEMENTOS NO ESTRUCTURALES**
- 13. PLANOS DE DETALLADO Y ELEMENTOS ESPECIALES**

ANEXO

- ♦ COPIA MATRÍCULA PROFESIONAL INGENIERO RESPONSABLE
- ♦ MEMORIAS JUSTIFICATIVAS DE CÁLCULO
- ♦ PLANOS ESTRUCTURALES EN TAMAÑO CARTA Y PLANCHAS 50 X 70 cm.



INTRODUCCIÓN

Por solicitud del Arquitecto Billy Andrés Hurtado García se procedió a ejecutar el pre diseño estructural de una edificación a desarrollar en la Ciudad de Bogotá.

La edificación se encuentra situada en la zona Urbana de la ciudad. Las edificaciones revisten importancia de uso Tipo III.

1. DESCRIPCIÓN DEL PROYECTO

Se trata de una edificación de un nivel completo con cubierta de vigas y losas de concreto y pisos conformados estructuralmente en vigas y placas de concreto.

Se desarrollará en el área urbana de la ciudad de Bogotá y no se tienen condiciones especiales como para catalogar la edificación como un caso indispensable en su uso.

La estructura se plantea en Muros de concreto reforzado con vigas y columnas tanto de concreto reforzado como metálicas resistentes a momento.

La vecindad inmediata actual del proyecto presenta condiciones normales de otras obras de mediana magnitud, y la misma es una obra de muy baja magnitud respecto de sus vecindades.

El uso del proyecto es del tipo Educativo Público.

La configuración de la edificación tiene una irregular simetría arquitectónica y estructural en planta y en altura, para lo cual se considera una deriva máxima del 0,5 %. Los coeficientes considerados en planta y altura fueron 0.80 y 0.80 respectivamente y el coeficiente de redundancia también aplica de 1.0. No se tienen casos de elementos frágiles que obliguen al uso del coeficiente de sobrerresistencia sin embargo dichos coeficientes son evaluados y aplicados si son del caso.

La clara evaluación de las cargas arroja valores siguientes:

- Peso Muerto inercial promedio por metro cuadrado = 690 kg/m^2
- Peso Vivo por metro cuadrado planta contrapiso = 300 kg/m^2
- Peso Vivo por metro cuadrado granizo cubierta = 100 kg/m^2
- Peso Vivo por metro cuadrado cubierta = 50 kg/m^2
- Peso Vivo por metro cuadrado emposamiento cubierta = 300 kg/m^2
- El peso muerto total en servicio de la edificación considerada son 1650 toneladas



- El peso gravitante sísmico inercial a considerar son 1051 toneladas: Las vigas de base, la placa de contrapiso y los cimientos se consideraron de masa inercial = 0,0 ton.

La carga de servicio efectiva disponible del suelo al nivel de desplante del proyecto es de 2 ton/m².

En este caso se consideran todos los requisitos que plantea la NSR – 10 en su Título A, B, C y D.

- En todas las combinaciones se empleó el % de la tipología de carga local y de la NSR requerida ya que la estructura se concibió en el rango elástico de análisis e inelástico de diseño: Combinaciones de caso Vertical y COMBO1 a COMBO3 para el diseño de la superestructura y de caso Vertical y COMBO1 a COMBO3 para el diseño de la cimentación aplicando los factores de la NSR en cada ítem de carga CM, CV, CSx, CSy teniendo en cuenta la excentricidad accidental y la ortogonalidad sísmica en las dos direcciones principales.

- CM + CV
- CM + CV + CSx
- CM + CV + CSy
- CM + CV – CSx
- CM + CV – CSy
- CM + CV + CSx + CSy
- CM + CV – CSx – CSy
- CM + CV + CSx – CSy
- CM + CV – CSx + CSy

- Las fuerzas totales sísmicas del NSR 10 por piso son las indicadas adelante en el análisis sísmico y se distribuyen en los elementos en cada dirección según su rigidez relativa.
- Se han teniendo en cuenta los siguientes criterios en los elementos y sus ensambles para mitigar al máximo cualquier criterio de irregularidad y esbeltez de los muros:
 - El comportamiento es en el rango elástico de análisis e inelástico de diseño
 - La ductilidad es de detallado con comportamiento moderado
 - Se garantiza comportamiento de diafragma de las losas y placas



- ④ Las cuantías reales de cálculo consideran el área según la flexión positiva o negativa y cuando se excede el valor de 1,7% en las vigas se colocan capiteles laterales. En los muros se controla el 6% y son pantallas cortas
- ④ No se excede la tensión en más de la mitad de f'_c o f_y
- ④ La deriva máxima inelástica no excede el 1,00%
- ④ Se emplearon veinticuatro casos de combinación posible de carga
- ④ El factor de seguridad mínimo se verificó de DOS
- ④ La edificación es de mediana altura y no es enterrada
- ④ La cuantía volumétrica de acero supera el 0,85%
- ④ Se realiza verificación de ductilidad mayor o igual a 4

2. CONSIDERACIONES E HIPÓTESIS DE CÁLCULO

En este caso se consideran todos los requisitos que plantea la NSR - 10

3. UNIDADES

En este caso se consideran todos los requisitos que plantea la NSR – 10 y se contempla el modelo mks como el SI

4. DESCRIPCIÓN DEL PROGRAMA DE COMPUTADORA Y MANEJO

Esta oficina cuenta con programas de análisis y diseño estructural que fueron elaborados en la misma por ingenieros especializados en la materia, los cuales fueron patentados y verificados como se requiere en estos casos con programas convencionales. Se presenta El análisis y diseño con el programa ETABS 2015.

Los programas solicitan previamente las siguientes entradas de datos:

- ☐ Geometría general de los elementos y dimensiones
- ☐ Número de elementos estructurales
- ☐ Área en planta de cada piso o diafragma
- ☐ Tipos de cargas y ciclo de aplicación
- ☐ Capacidad del suelo y módulos de reacción o balasto
- ☐ Condición de ductilidad
- ☐ Capacidad de disipación de energía sísmica



- ☐ Coeficientes de sismo según la NSR – 10
- ☐ Coeficientes de forma en planta y altura

Con los datos de entrada el programa ejecuta seis casos de combinación posible considerando las dos direcciones principales.

El programa selecciona e indica los elementos que quedan por debajo de los límites mínimos de refuerzo según la NSR - 10 y los diseña para el caso mínimo o según el criterio que indique el ingeniero calculista.

Las placas y elementos estructurales son analizados por el método elástico y se redistribuyen los giros y desplazamientos según la NSR – 10 considerando máximo 1000 veces la deformación unitaria en el acero a tensión.

Los resultados del programa indican básicamente lo siguiente:

- ☐ La deriva elástica por piso o placa de diafragma
- ☐ El período fundamental de vibración del edificio
- ☐ Las cargas estáticas de sismo equivalentes por piso
- ☐ Los momentos hiperestáticos en cada elemento para cada combinación
- ☐ Las envolventes de fuerzas internas en vigas y columnas
- ☐ El diseño del refuerzo requerido en losas, vigas y columnas
- ☐ Las cargas de diseño en la fundación

5. DEFINICIÓN DE ELEMENTOS ESTRUCTURALES

Se escogieron los ejes en dos direcciones principales así:

- ☐ Dirección X: A hasta J
- ☐ Dirección Y: 1 hasta 22

6. ANÁLISIS Y DISEÑO DE LOSAS DE PISO

Se conciben como paneles conectados y apoyados en las vigas en dos direcciones, armado macizo y un espesor de 10 cm sobre vigas de 30 x 70 y 30 x 50 cm debajo de los muros y en los vanos. Se conectan a los muros y a las columnas a través de apoyo continuo.

Se realiza análisis elástico y diseño en rotura.



7. ANÁLISIS SÍSMICO

Se contempló lo siguiente para el espectro de respuesta sísmica:

- 🌐 Espectro Aa = 0.15
- 🌐 Espectro Av = 0.20
- 🌐 Disipación Moderada de energía
- 🌐 Uso e Importancia = 1.25
- 🌐 Perfil del suelo S = Ver estudio de suelos TIPO F
- 🌐 Coeficiente de modificación de respuesta Ro = 4.0
- 🌐 Coeficientes de forma en planta y altura y de redundancia Fi = 0.80 y 0.80, Fr = 1.00
- 🌐 H = 3.40 m
- 🌐 To = 0.16 sg
- 🌐 Tc = 1.77 sg
- 🌐 TI = 5.00 sg
- 🌐 Fa = 1.05
- 🌐 Fv = 2.90
- 🌐 Zona de micro zonificación = Ver Estudio de suelos

Se obtuvo lo siguiente: Ver espectro sísmico anexo,

- 🌐 Periodo inicial aproximado = $C_u * 0.049 * H^{0.75} = T = 0,15 \text{ sg.}$
- 🌐 Periodo dinámico modo fundamental = 0.072 sg.
- 🌐 Coeficiente sísmico equivalente de la masa inercial del edificio Sa = 0,49*g
- 🌐 Peso total modelado del edificio = 1650 ton.
- 🌐 Peso inercial neto del edificio = 1008 ton.
- 🌐 Cortante sísmica fuerza horizontal equivalente = $0.49 \times 1008 = 494 \text{ ton.}$
Caso sismo X y sismo Y antes de ajuste dinámico
- 🌐 Cortante sísmica CQC3 dinámica unidireccional del peso total en X = 827 ton.
- 🌐 Se podría ajustar el cortante sísmico $827/494 = 1.67 > 0.80$
- 🌐 Coeficiente sísmico ajustado en X de la masa inercial del edificio Sa = 0,49*g No se ajusta.



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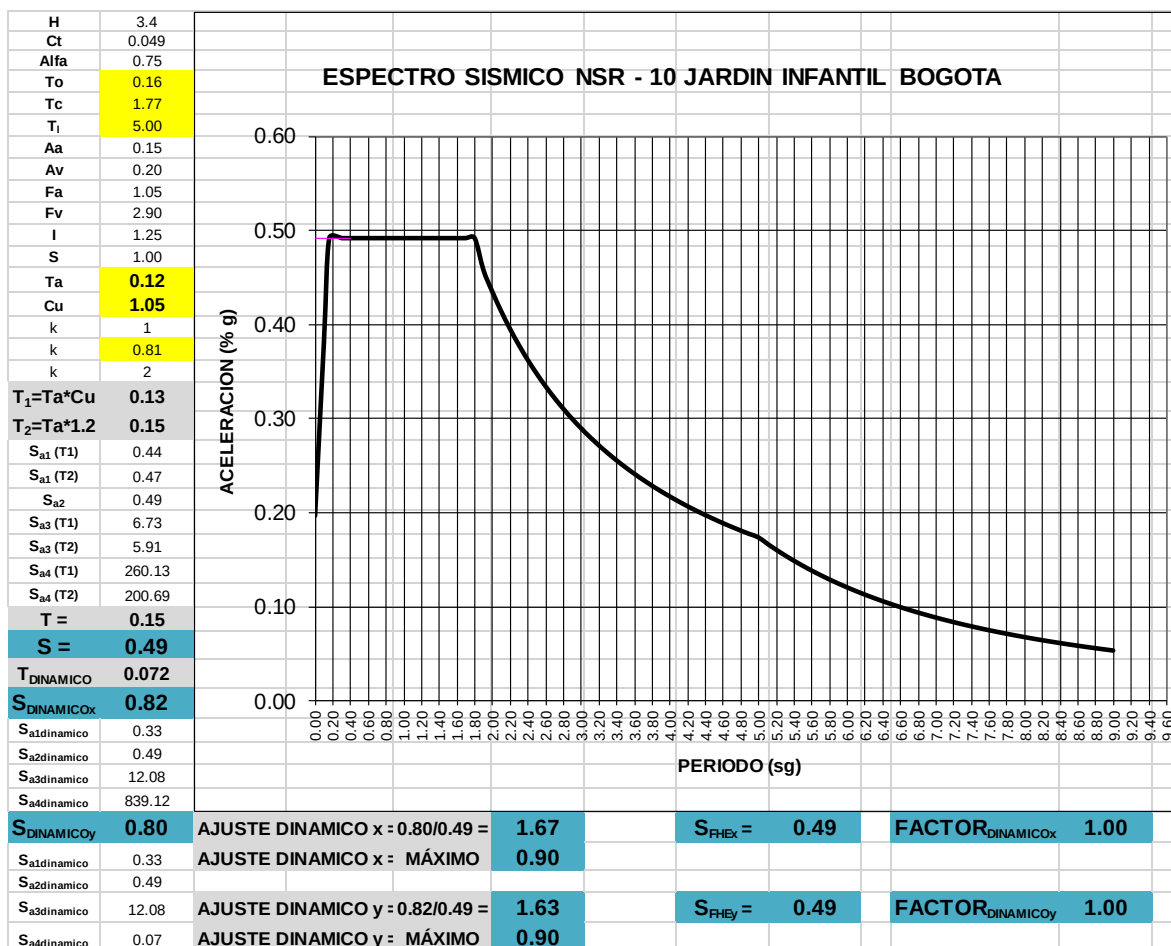
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- 🌐 Cortante sísmica CQC3 dinámica unidireccional del peso total en Y = 804 ton.
- 🌐 Se podría ajustar el cortante sísmico $804/494 = 1.63 \geq 0.80$
- 🌐 Coeficiente sísmico ajustado en Y de la masa inercial del edificio $S_a = 0.49g$ No se ajusta



Las deformaciones y derivas son muy pequeñas e implican que la condición de servicio se cumple en el material corroborado por las tensiones mostradas más adelante.

El Umbral de daño no es necesario analizar puesto que las derivas en el nivel de diseño no alcanzan siquiera el 0.1%.

La irregularidad es evidente y se toman los factores de ajuste ya indicados.

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8. ANÁLISIS ESTRUCTURAL

Anexo se presentan las memorias generales con los datos de entrada y de salida ejecutados en el programa ETABS 2015.

9. ANÁLISIS Y DISEÑO DE VIGAS Y LOSAS

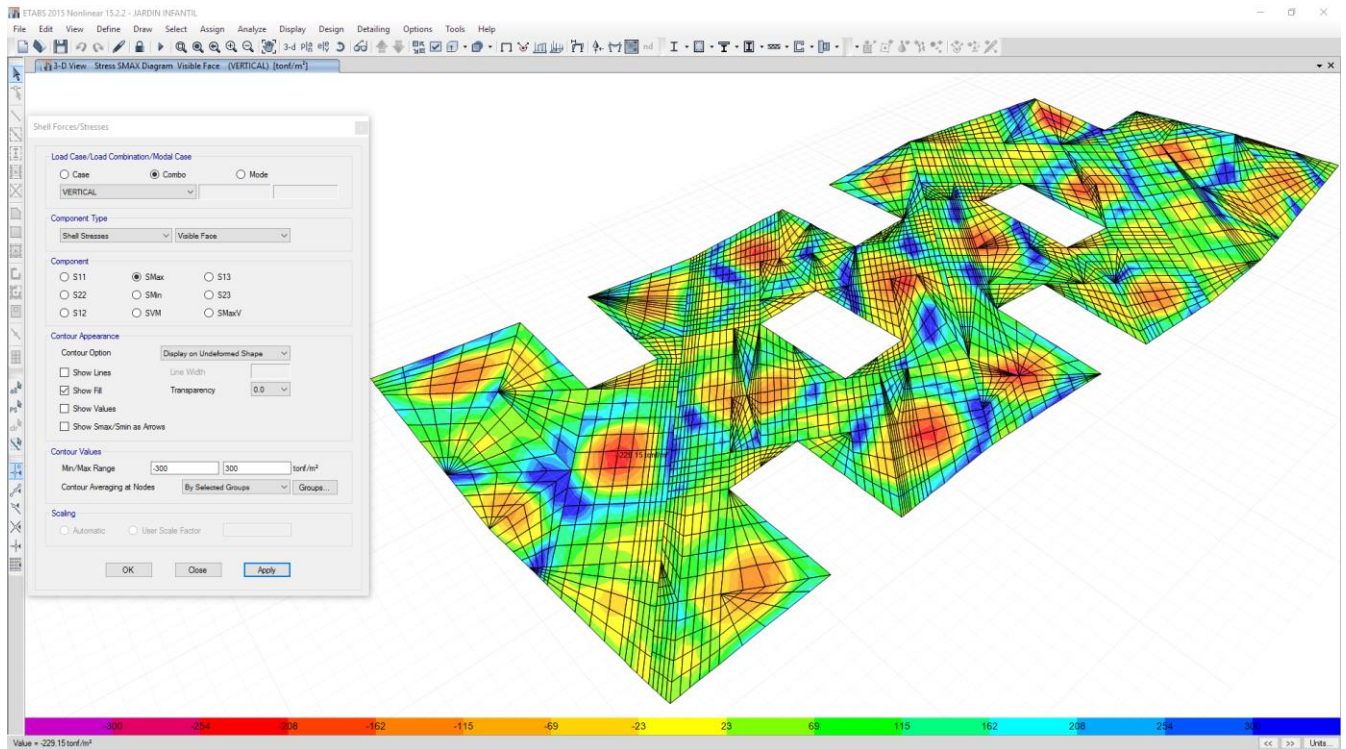
La losa de cubierta es placa maciza de 10 centímetros.

Las vigas de cubierta perimetral exterior e interior son elementos de sección 25 x 25 centímetros, las vigas limatesa y lima hoyo son elementos de sección 50 x 10 centímetros embebidos en la placa de cubierta.

Las vigas cintas de cubierta irán embebidas en la placa de cubierta con sección 25 x 10 centímetros.

Las vigas metálicas de cubierta son IPE 300

Las tensiones en el concreto no superan 20 kg/cm².





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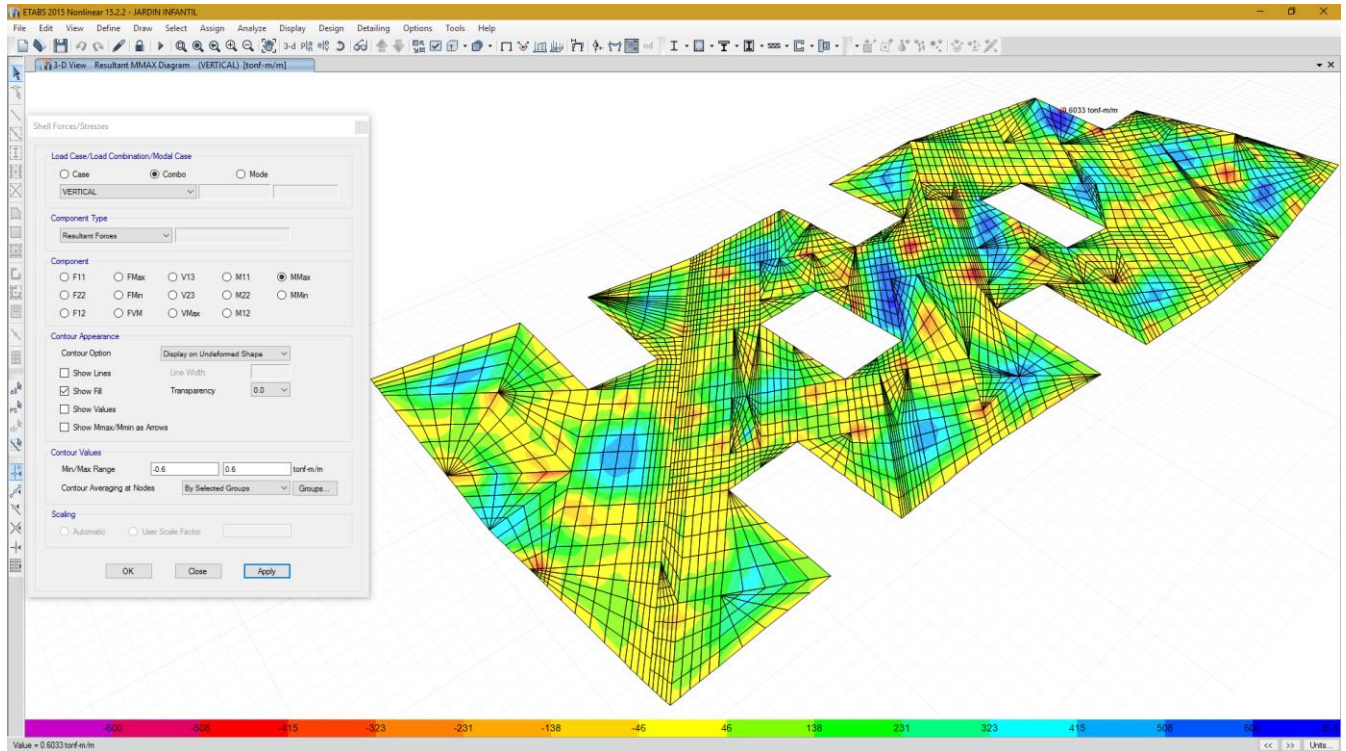
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Los momentos flexionantes en la losa no exceden 0.6 ton-m que corresponde a la resistencia suministrada con la doble malla superior e inferior D188





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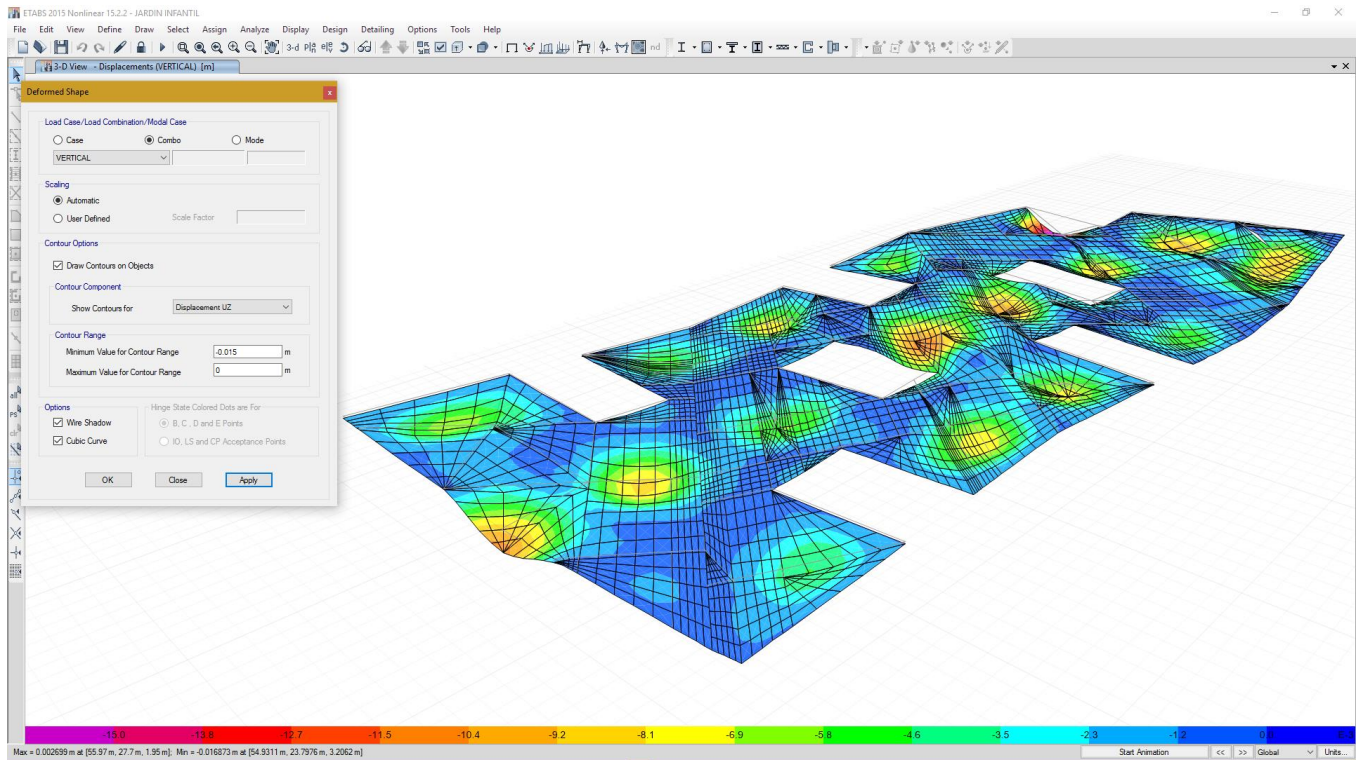
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La deflexión en la losa no supera el valor de 1.2 centímetros:



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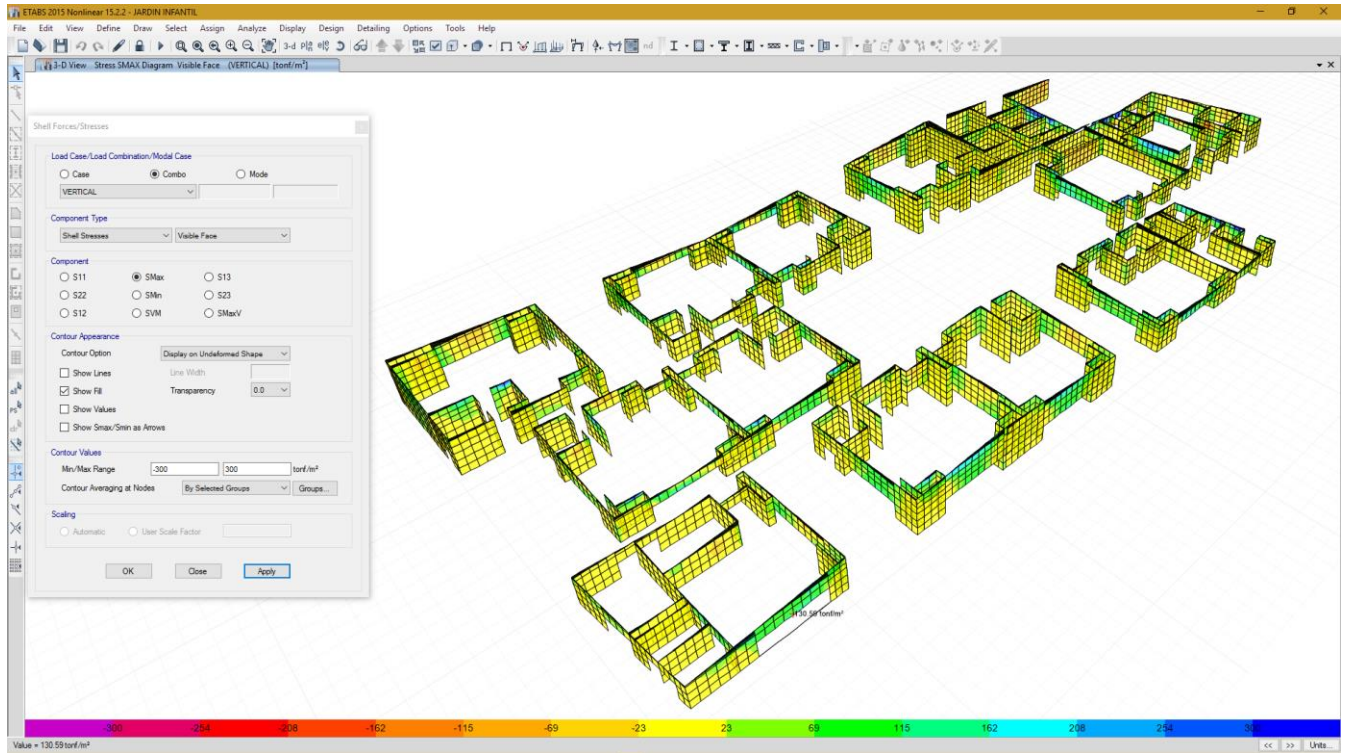
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10. ANÁLISIS Y DISEÑO DE MUROS Y COLUMNAS

Los muros son de concreto reforzado de 12 centímetros de espesor.

Las columnas tubulares metálicas son de sección 25 centímetros PIPESCH12.7.

La presión en los muros no excede los 10 kg/cm².





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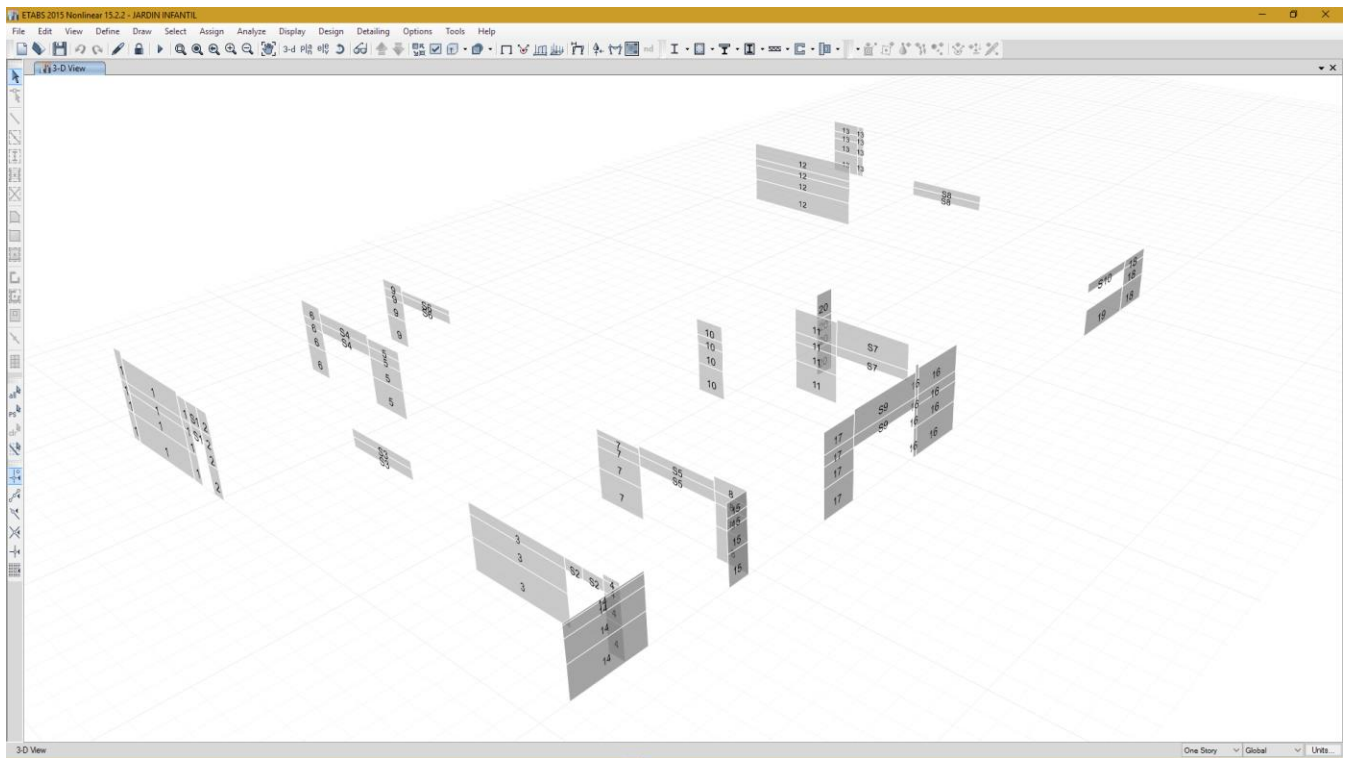
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Elementos Wall y spandrel más desfavorables:

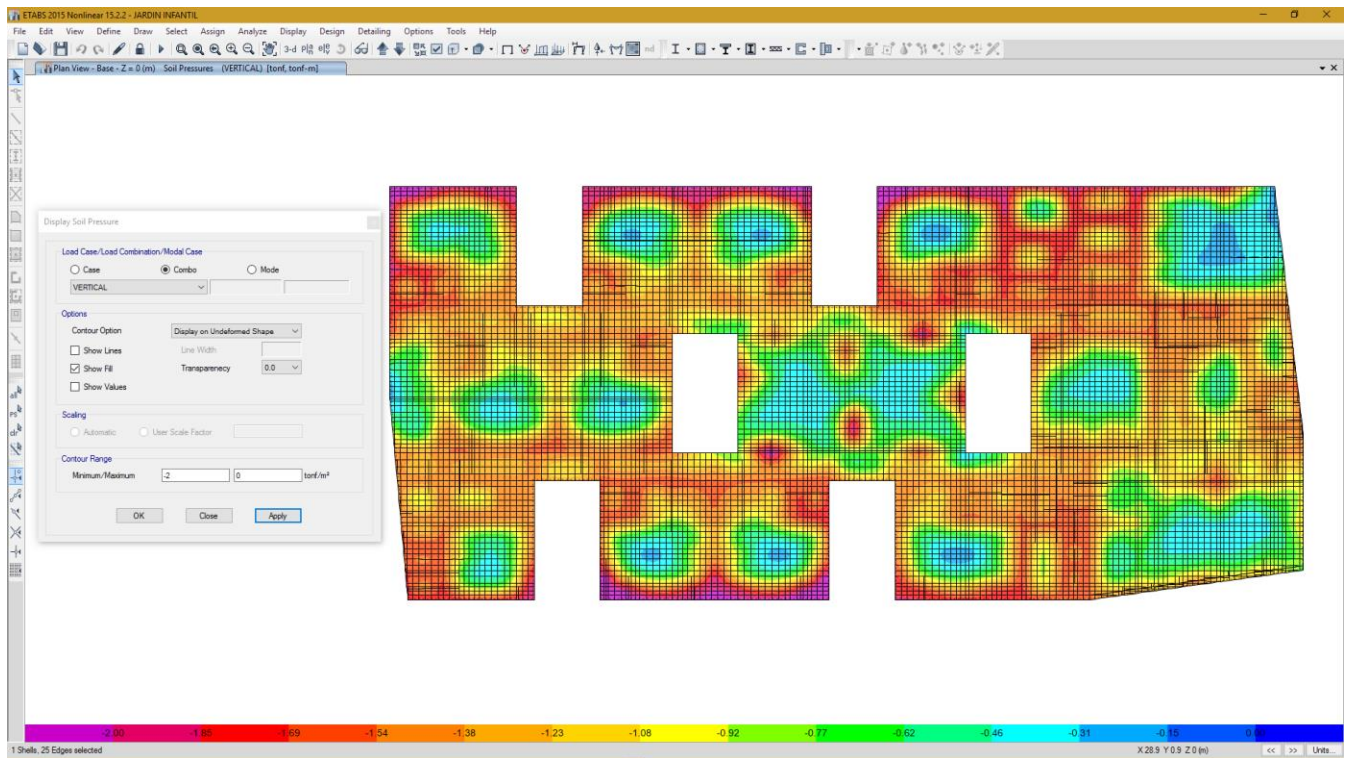




11. ANÁLISIS Y DISEÑO DE FUNDACIONES

Las vigas de fundación son de sección 30 x 70 centímetros y 30 x 50 centímetros y la placa de contrapiso de 10 centímetros de espesor.

No se excede la presión de 2 ton/m².





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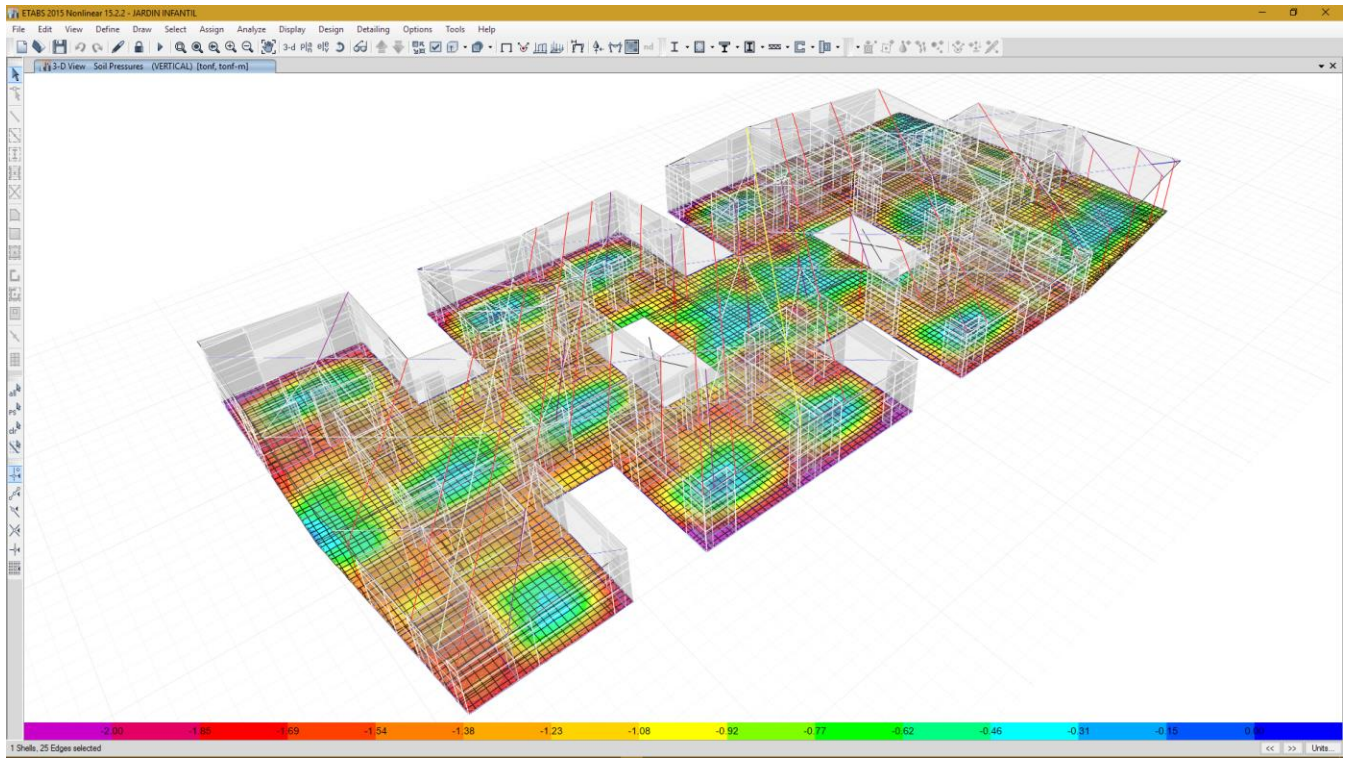
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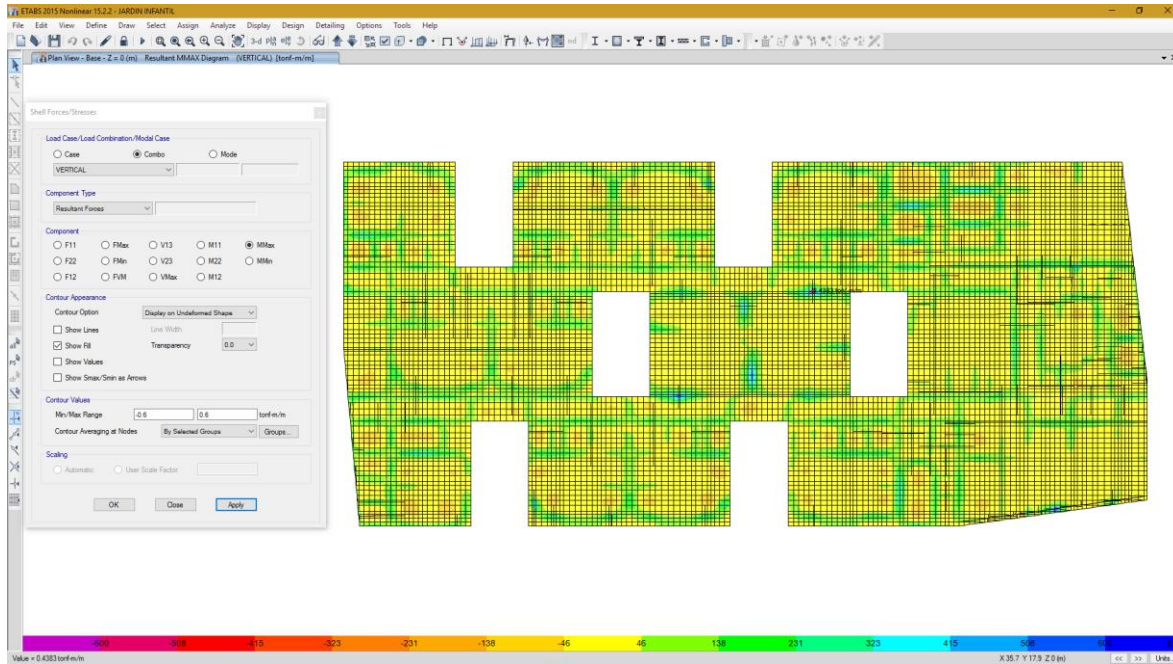
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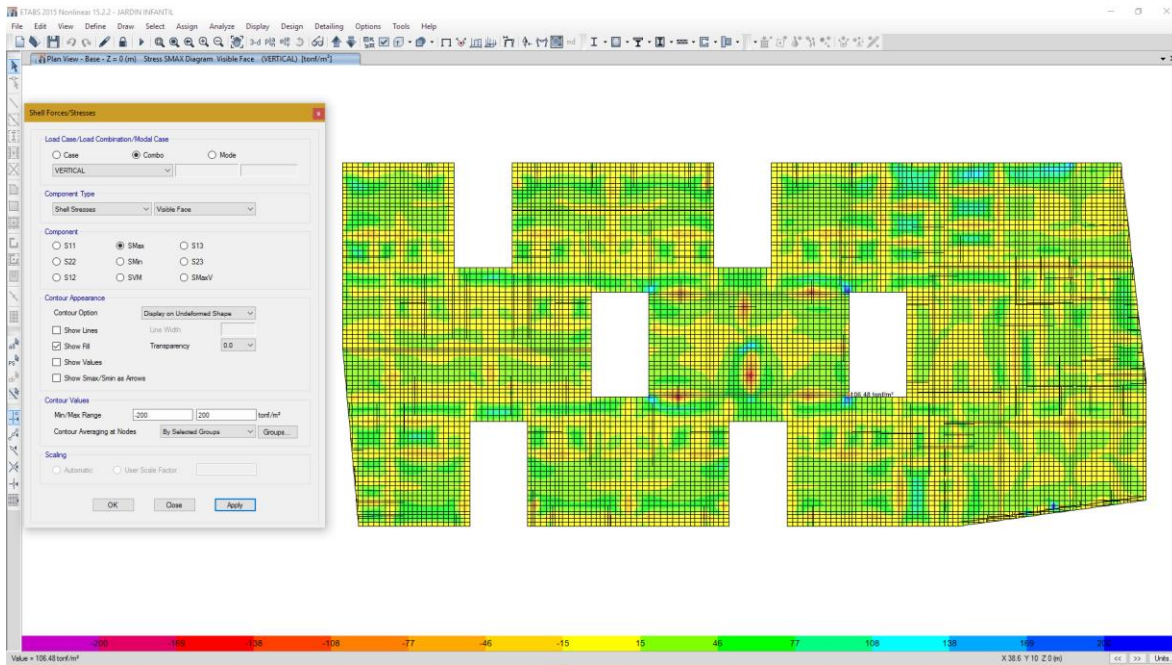


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Las tensiones en el concreto no superan 20 kg/cm².



12. CONSIDERACIONES DE LOS ELEMENTOS NO ESTRUCTURALES

No se tienen elementos secundarios en muros y placas.

Las deformaciones son muy mínimas en la estructura con lo cual se puede esperar un nivel imperceptible de daño en los elementos secundarios.

13. PLANOS DE DETALLADO Y ELEMENTOS ESPECIALES

Ver anexo



Especificaciones:

ESPECIFICACIONES GENERALES

ACERO CORRUGADO ASTM A706 NTC 2289: Diámetro barra $\varnothing \geq 3/8"$ $F_y = 420$ MPa. $F_u = 525$ MPa.

ACERO MALLA ELECTROSOLDADA NTC 2310, con $F_y=550$ MPa, $F_u= 600$ MPa, Diámetro barra $\varnothing < 3/8"$

CONCRETO

$f_c=210$ Kg/cm² a 90 días para todos los Muros.

$f_c=210$ Kg/cm² a 90 días para Placas y vigas de Cimentaciones.

Tamaño máximo de agregado 3/4" y en las pilas puede ser ciclópeo 40 %

PARAMETROS DE DISEÑO:

Diseño según norma sismoresistente NSR - 10 y recomendaciones del estudio de suelos.

Carga Estructura:**Carga Muerta:**

Total Carga Muerta Estructura = 0.85 T/m²

Total Carga Muerta Cubierta = 0.25 T/m²

Carga Viva:

Total Carga Viva Cubierta = 0.05 T/m²

Total Carga Viva Cubierta emposamiento = 0.05 T/m²

Total Carga Viva granizo = 0.10 T/m²

Total Carga Viva Cubierta Tanques = 0.00 T/m²

Coefficiente de Disipación Sísmica $R_o=4.00$

Capacidad MODERADA de Disipación de Energía (DMO)

Aceleración Pico Efectiva: $A_a=0.15$

Aceleración en el umbral de daño: $A_a=0.06$

Velocidad Pico Efectiva $A_v=0.20$

Coefficiente del Suelo: $F_a=1.05$, $F_v=2.9$ Perfil Suelo tipo F

Coefficiente de Importancia: $I=1.25$, Grupo 3.

- La longitud de la varilla incluye la longitud del Gancho. Excepto en aquellos casos donde se indique su longitud; los ganchos serán de: $\varnothing 1/2"$ 0.25, $\varnothing 5/8"$ 0.30, $\varnothing 3/4"$ 0.40. El gancho debe tener mínimo esta longitud y quedar totalmente empotrado en el elemento que lo recibe mínimo 10 cm.
- Los diseños se hicieron de acuerdo a la Norma Colombiana de Construcciones Sismo - Resistencia NSR - 10, por lo tanto, la construcción debe adelantarse cumpliendo lo especificado en dicha norma.
- Capacidad Portante del Terreno a Nivel de Cimentación $q_a=2$ T/m²
- Módulo de reacción del Terreno a Nivel de Cimentación en vigas $K_s=530$ T/m²
- Módulo de reacción del Terreno a Nivel de Cimentación en placa contrapiso $K_s=1763$ T/m³
- La longitud mínima de traslapo es 1.00 m y no puede ejecutarse en un lugar diferente.
- Cualquier cambio en la estructura deberá ser aprobado por el diseñador.
- TODAS LAS MEDIDAS TOMADAS EN METROS (m) A MENOS QUE SE ESPECIFIQUE LO CONTRARIO, Y DEBERÁN VERIFICARSE EN OBRA.
- LA CUBIERTA DEBE DISPONER DE SISTEMA AUXILIAR DE EVACUACION DEL EXCESO DE AGUA PARA EVENTUALES OBSTRUCCIONES DE LOS BAJANTES NORMALES. LA MÁXIMA LAMINA DE AGUA DE EMPESAMIENTO CONSIDERADA ES DE 5 CENTIMETROS.
- LAS COTAS Y NIVELES DEL TERRENO SE REGISTRARÁN POR LOS PLANOS ARQUITECTÓNICOS.
LAS DISTANCIAS Y LOS BORDES ARQUITECTÓNICOS PREDOMINAN SOBRE LOS ESTRUCTURALES.
LOS PLANOS ESTRUCTURALES NO DEBEN SER USADOS PARA UBICAR O DEFINIR LA LOCALIZACIÓN DE LOS ELEMENTOS.
ANTES DE INICIAR LA CONSTRUCCIÓN VERIFIQUE QUE TIENE LOS PLANOS COMPLETAMENTE ACTUALIZADOS Y QUE SE TIENE LA ULTIMA VERSION APROBADA POR EL INGENIERO CALCULISTA.



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ESPECIFICACIONES GENERALES

1. MATERIALES.

- Perfiles laminados y plátinas según norma ASTM A-50. Con $F_y=500$ Mpa, $F_u=550$ Mpa.
- Tubo Estructural, según norma ASTM -572 Gr.50 con $F_y=500$ Mpa, $F_u=550$ Mpa.
- Pernos y Barras de anclaje acero ASTM A-307
- Soldadura con electrodos E70XX, con procedimientos y soldadores certificados

2. PARAMETROS DE DISEÑO.

- Diseño según norma NSR-10 y recomendaciones ASC-LRFD.
- Carga Muerta=0.30 ton/m²
- Carga viva=0.30 ton/m²
- Coeficiente de disipación sísmica $R=4$
- Capacidad de disipación de energía moderada (DMO)
- Aceleración pico efectiva $A_s=0.15$
- Coeficiente del suelo: suelo tipo F
- Coeficiente de importancia $I=1.25$, Grupo III.

3. ACABADO

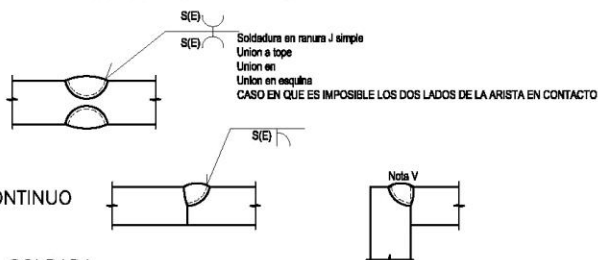
- Preparación superficie -Limpieza mecánica.
- Anticorrosivo epóxico fófato de Zinc 40 micrones.
- Esmalte poliuretano espesor de película 50 micrones.

4. Notas

- El método de izaje deberá ser diseñado por el montador y enviado al diseñador para su aprobación.
- Cualquier cambio estructural debe ser aprobado por el diseñador.
- Todas las medidas deben ser verificadas en obra.
- Soldadura cordón continuo grado E70, toda arista en contacto metal es soldada.

Proceso de Soldadura		Designación de la Unión	T ₁	T ₂	Preparación de la ranura		Tolerancias	Posiciones para soldar	Carga efectiva (E)	Notas
					Abrertura de raíz	Forma de la ranura				
SMAW	B-P7	12,7 min	-	-	R ₁ = 1/32 min	No limitado	+1,6, -0	+3,2, -1,6	T ₁ + S ₁	E, M ₁ , Q2
					R ₂ = 1/4 min	+6,4, -0	+1,6, -0	+1,6, -0		
GMAW	FCAW	12,7 min	-	-	R ₁ = 1/32 min	No limitado	+1,6, -0	+3,2, -1,6	T ₁ + S ₁	A, E, M ₁ , Q2
					R ₂ = 1/4 min	+6,4, -0	+1,6, -0	+1,6, -0		
SAW	B-P7-S	18,1 min	-	-	R ₁ = 1/4 min	No limitado	+1,6, -0	+3,2, -1,6	F	E, M ₁ , Q2
					R ₂ = 1/4 min	+6,4, -0	+1,6, -0	+1,6, -0		

Soldadura en ranura U
AMBOS LADOS DE LA UNIÓN O ARISTA EN CONTACTO



LA SOLDADURA ES SIEMPRE EN CORDÓN CONTINUO GRADO E70 de 1/4" en filete

TODA ARISTA EN CONTACTO METAL METAL ES SOLDADA

ESPECIFICACIONES MAMPOSTERIA:

- | | |
|--------------------------|---|
| 1. MURETE: | $f_m=5$ MPa. (MINIMO) |
| 2. UNIDAD: | $f_{cu}=5$ MPa. (MINIMO) |
| 3. MORTERO DE INYECCION: | $f_{cr}=12$ MPa. (MINIMO) |
| 4. MORTERO DE PEGA: | $f_{cp}=12$ MPa. (MINIMO) |
| 5. ACERO #2 Y MAYORES: | $f_y=420$ MPa. (4200 kg/cm ²) |
| 6. MALLA ELECTROSOLDADA: | $f_y=490$ MPa. (4900 kg/cm ²) |
| 7. ALAMBRE MILIMETRADO | $f_y=490$ MPa. (4900 kg/cm ²) |

- LAS LONGITUDES EN LAS VARILLAS INCLUYEN LOS GANCHOS.
- NO SOLDAR REFUERZO.
- LAS LONGITUDES DE LOS ANCLAJES CON ADITIVOS EPOXICOS DEBERAN SER AVALADOS POR EL FABRICANTE Y APROBADOS EN ESTA OFICINA.
- TODOS LOS MUROS PODRAN TRABARSE EN LAS ESQUINAS PARA MEJOR DESEMPEÑO.
- EVITAR LAS CANCHAS EXCESIVAS EN LOS MUROS DEBIDO A LA GENERACION DE INESTABILIDAD DEL ELEMENTO O LA APARICION FUTURA DE FISURAS EN EL REVOQUE. LAS CANCHAS DEBERAN REALIZARSE DE FORMA OPTIMA PARA EVITAR EL DAÑO DEL ELEMENTO. USAR MALLA DE NYLON O SINTETICA DE 2" DE ANCHO, ASENTADA CON RODILLO DE FELPA Y CUBIERTA CON ESTUCO PLASTICO O ACRILICO, EN LAS CANCHAS MAYORES A 5cm DE ANCHO PARA EVITAR FISURAS POR RETRACCION.
- NO USAR CEMENTO DE MAMPOSTERIA EN LA PREPARACION DE LOS MORTEROS DE PEGA O RELLENO.

NOTAS DE CONSTRUCCION

1. NO SE PERMITE LA INSTALACION DE TUBOS MEDIANTE REGATAS.
2. LOS TUBOS DEBEN INSTALARSE EN CELDAS QUE NO TENGAN REFUERZO VERTICAL.
3. TODAS LAS CELDAS CON O SIN REFUERZO DEBEN IR LLENAS CON MORTERO DE RELLENO (GROUTING) EN TODOS LOS PISOS.
4. DEBEN DEJARSE VENTANAS DE INSPECCION Y LIMPIEZA EN TODAS LAS CELDAS DE MUROS CON REFUERZO VERTICAL.
5. SE DEBEN RETIRAR LAS REBABAS INTERNAS Y EXTERNAS DE LA JUNTA DE PEGA.
6. LAS VARILLAS DEBEN COLOCARSE EN EL CENTRO DE LA CELDA.
7. EL MORTERO DE RELLENO DEBE APLICARSE DE TAL MANERA QUE TODO EL ESPACIO INYECTADO QUEDE COMPACTO Y HOMOGENEO.
8. DEBE COLOCARSE MORTERO DE PEGA EN TODAS LAS JUNTAS ENTRE PIEZAS DE MAMPOSTERIA.
9. TODO EL REFUERZO DEBE ESTAR LIBRE DE GRASAS, ARCILLAS Y DEMAS SUSTANCIAS PERJUDICIALES.
10. TODO EL REFUERZO DEBE CUMPLIR CON LA UBICACION INDICADAS EN LOS PLANOS.



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GILBERTO OLIER GARCÍA

Ingeniero

GILBERTO OLIER GARCÍA

Consultor

Director General



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DISEÑO ESTRUCTURAL DE EDIFICACIONES

Jardín en el predio Fontana grande – Portal de Lombardía
Municipio de Bogotá

ANEXOS

Imágenes de configuración estructural

Junio del 2016



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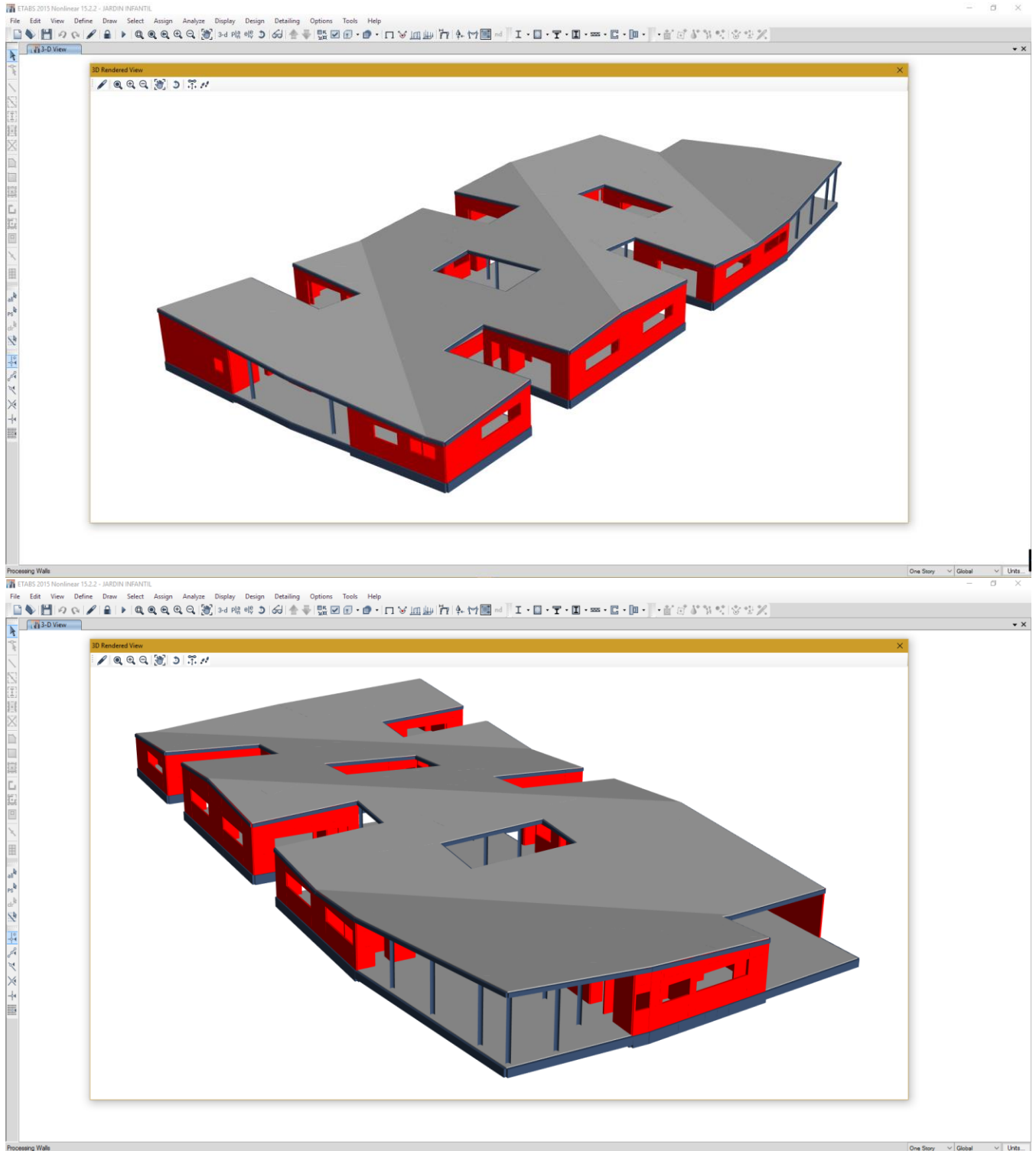
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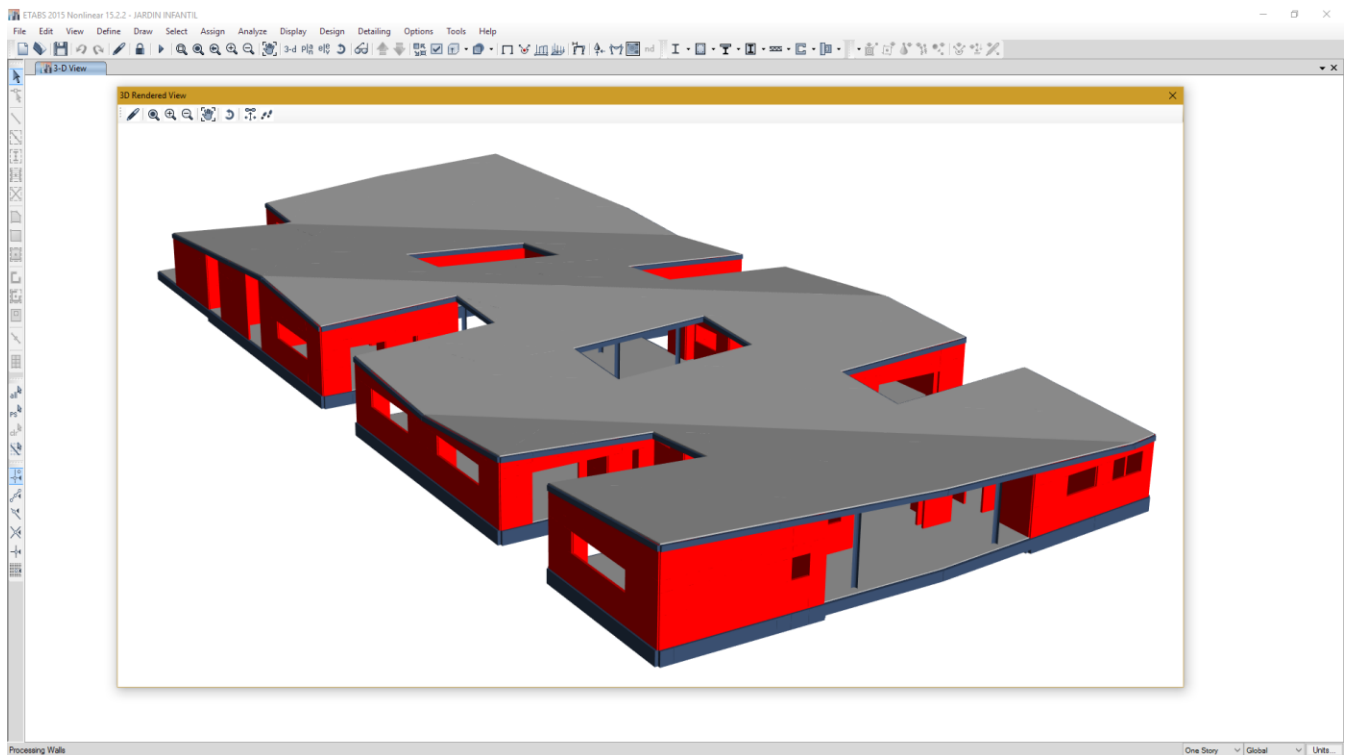
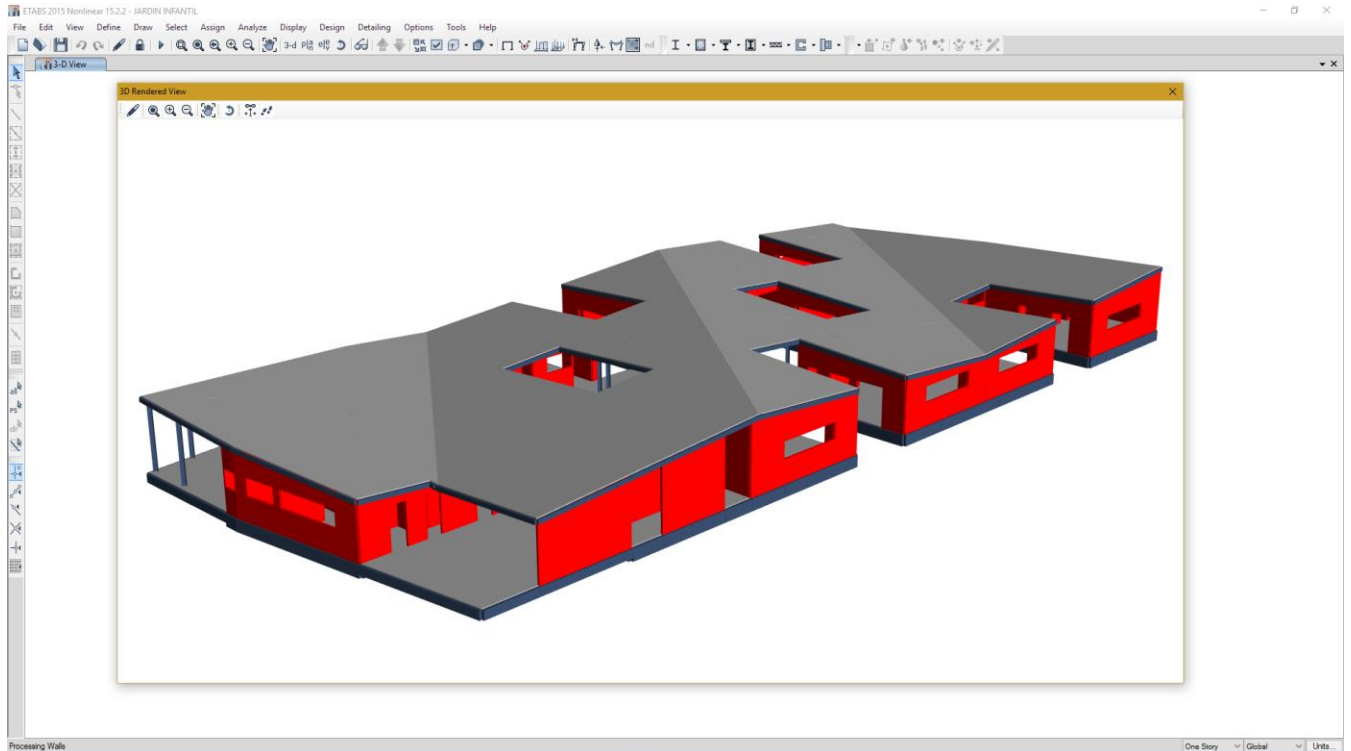
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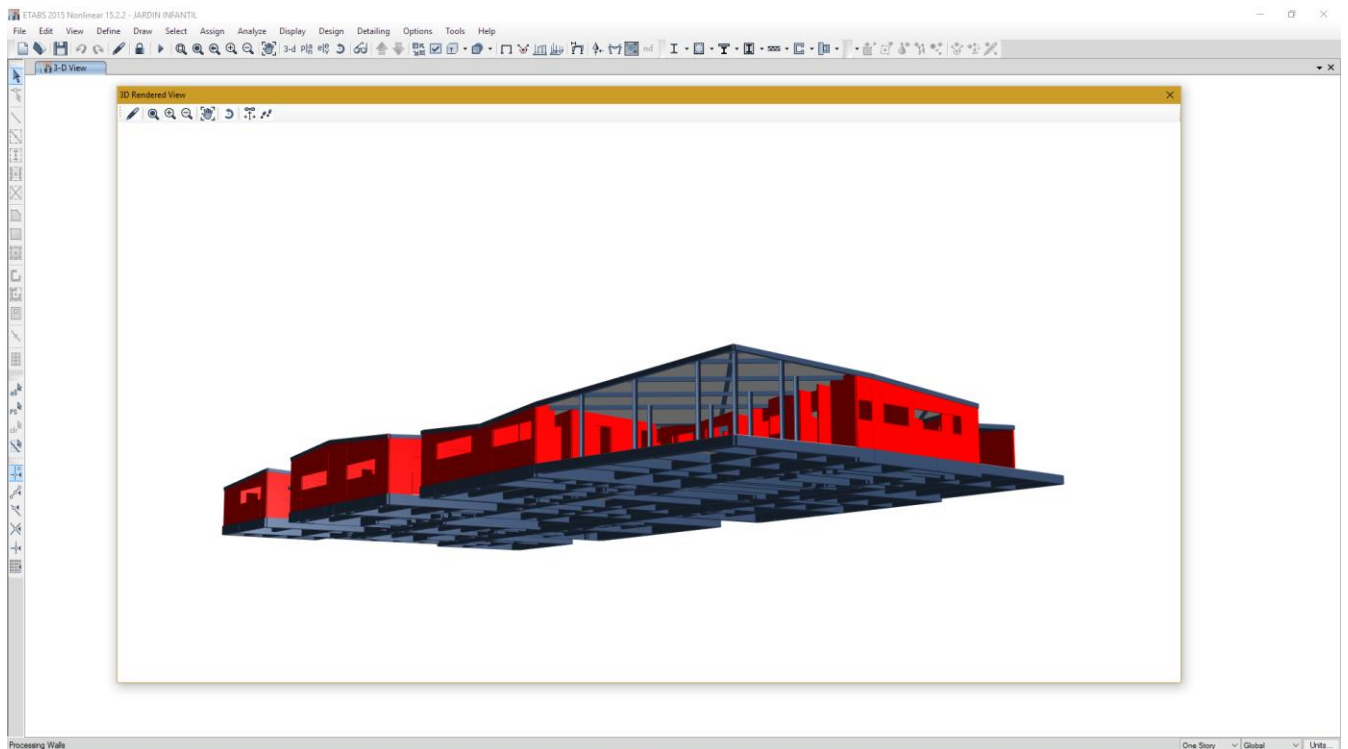
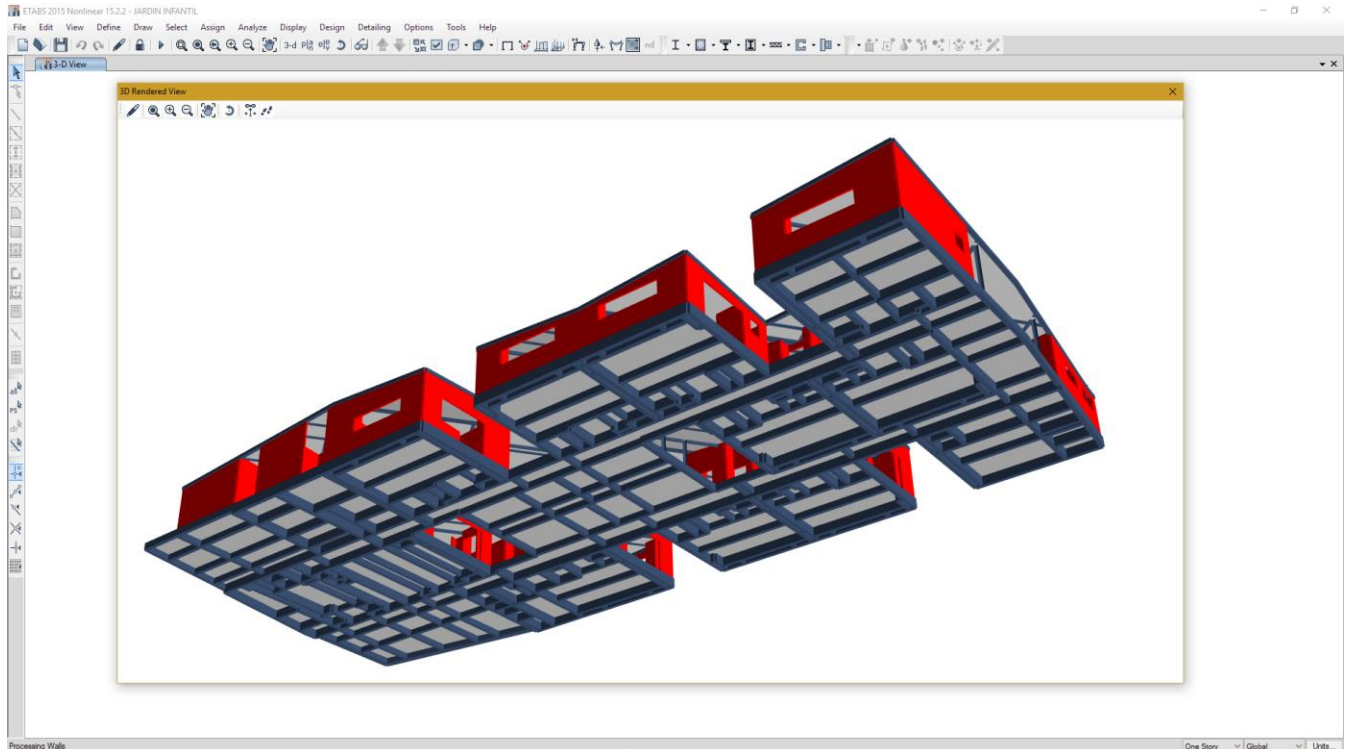
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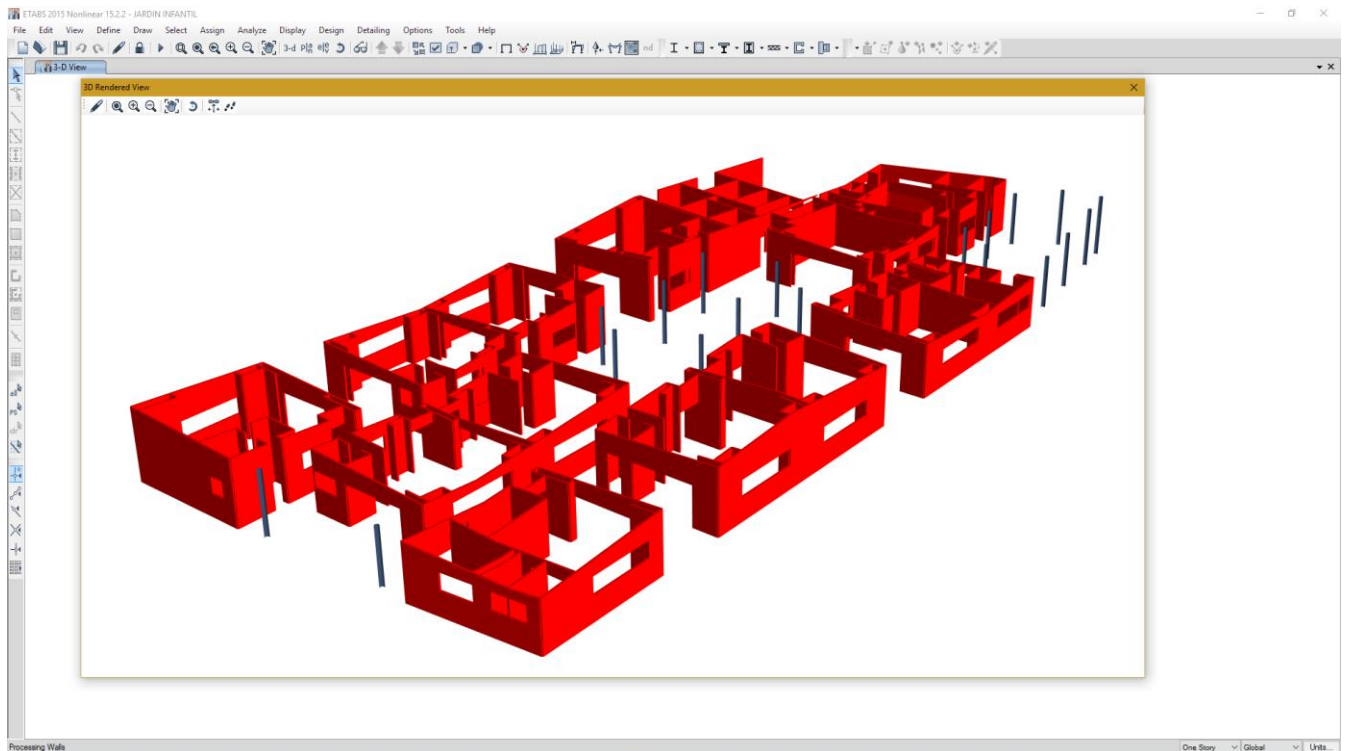
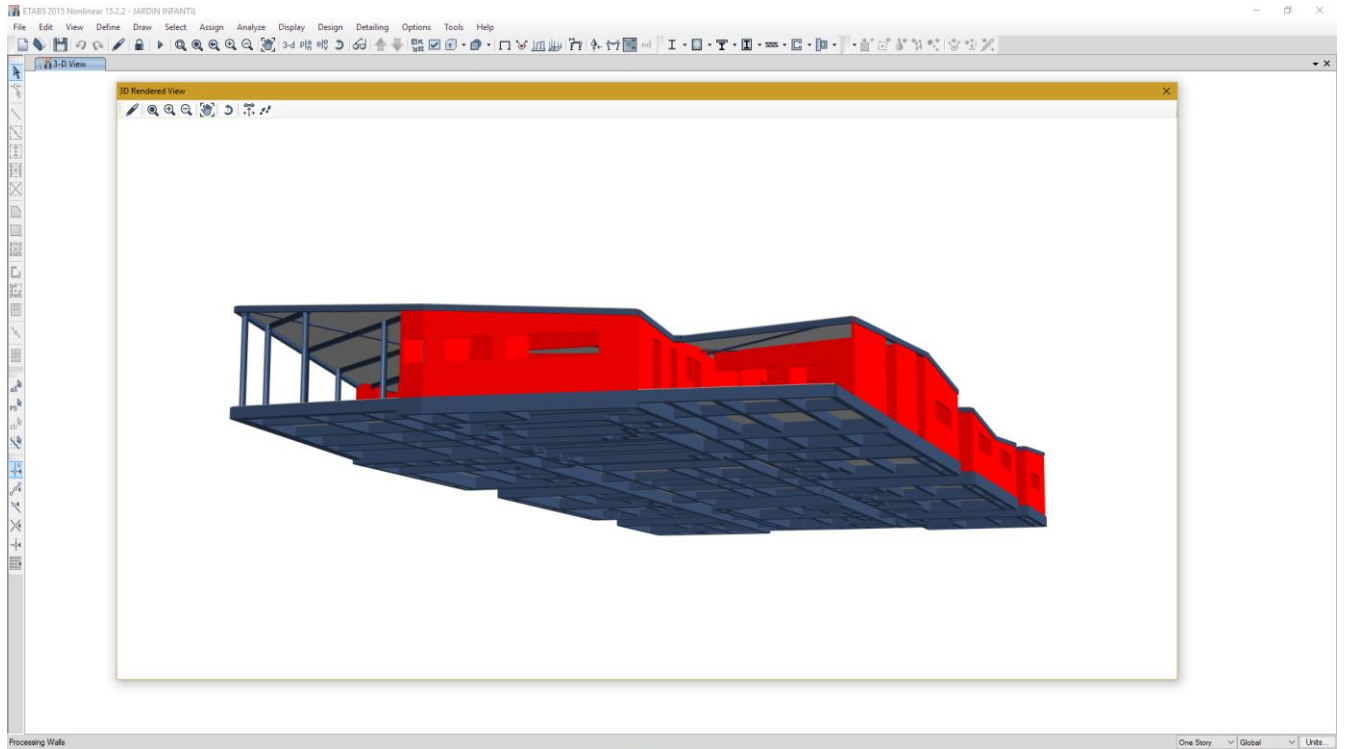
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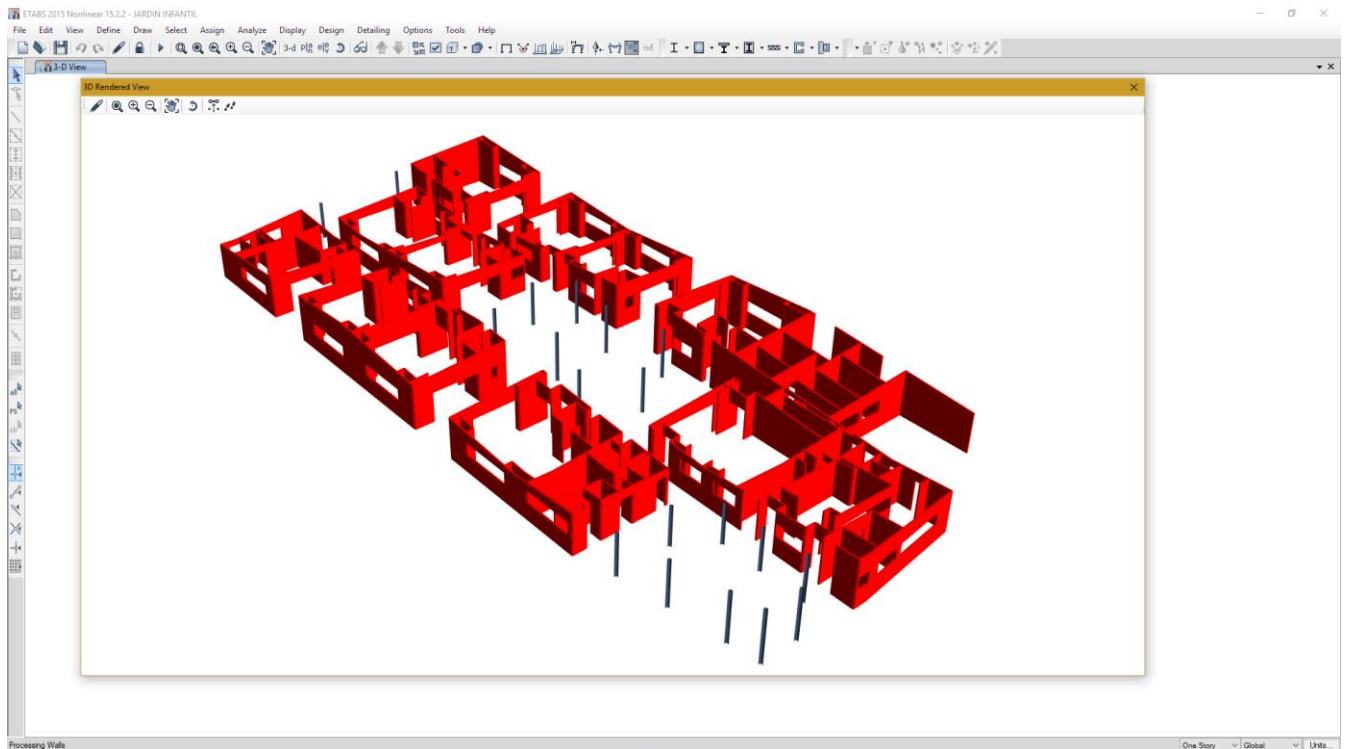
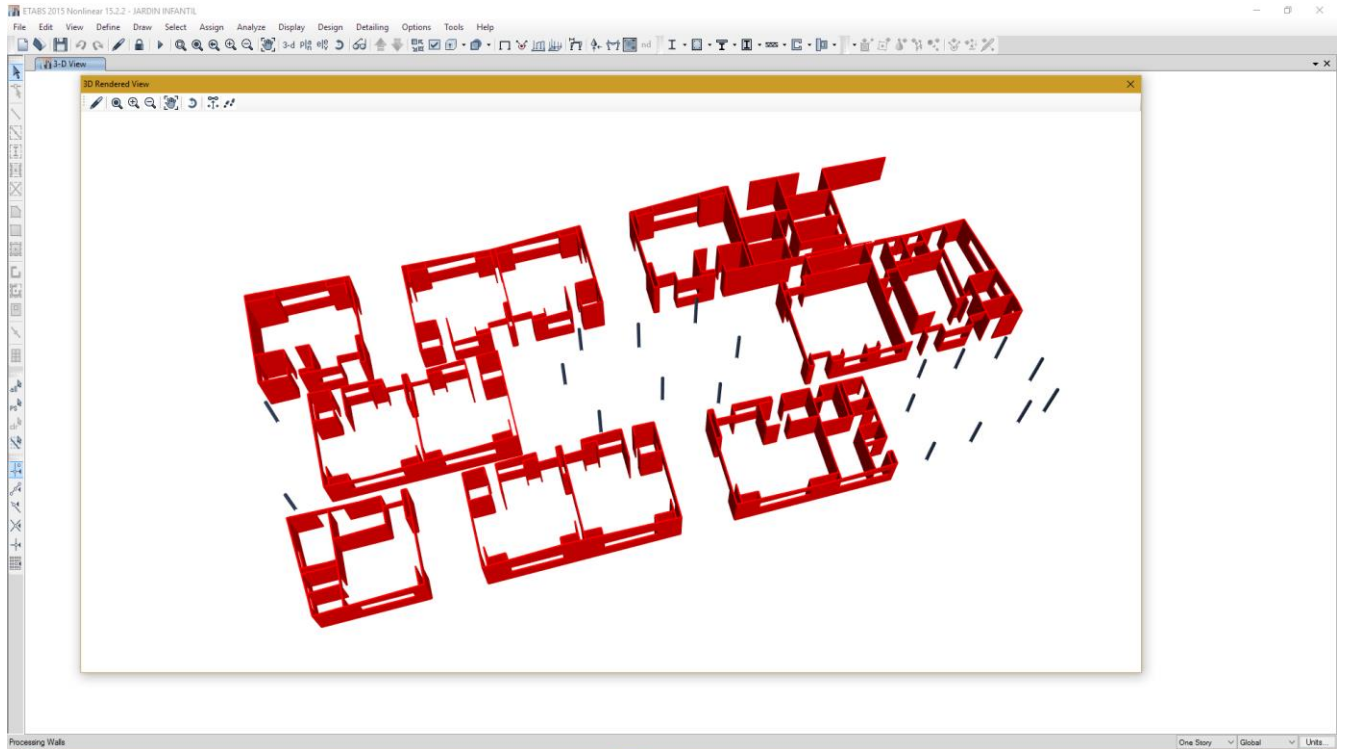
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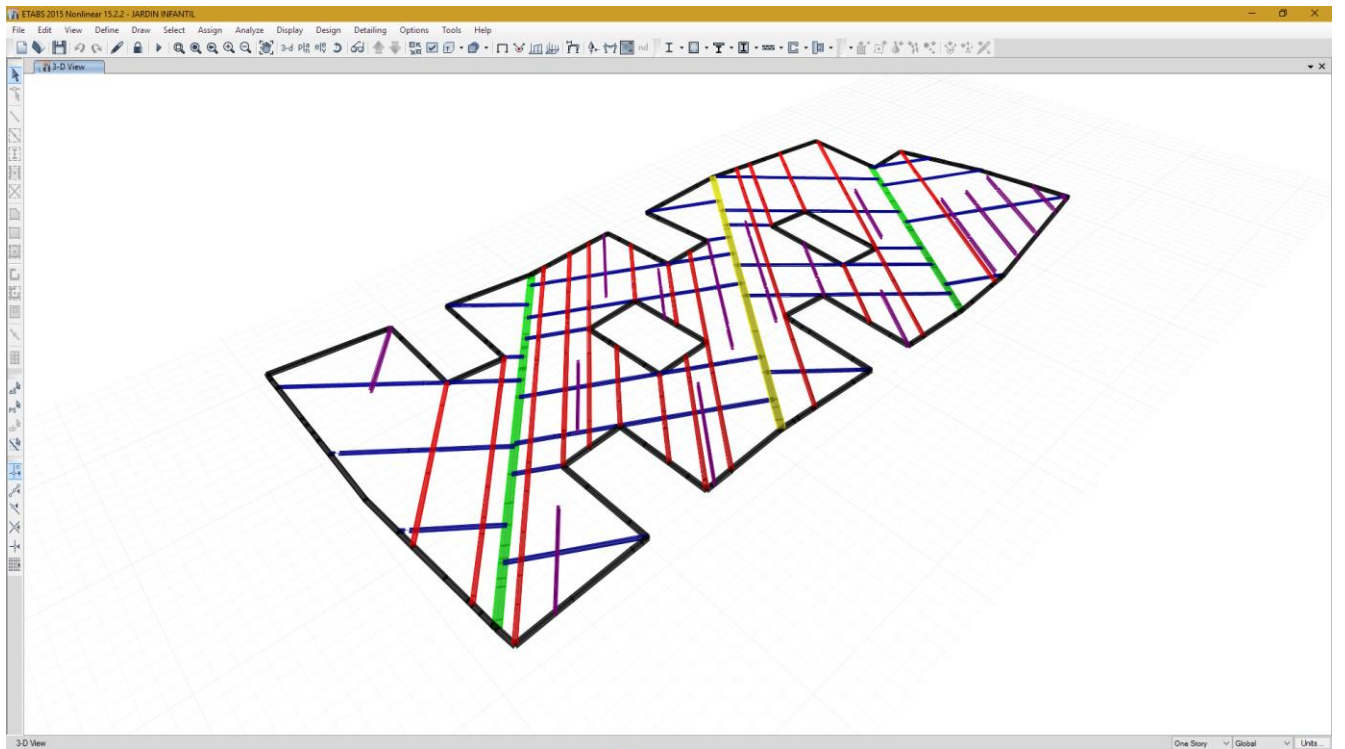
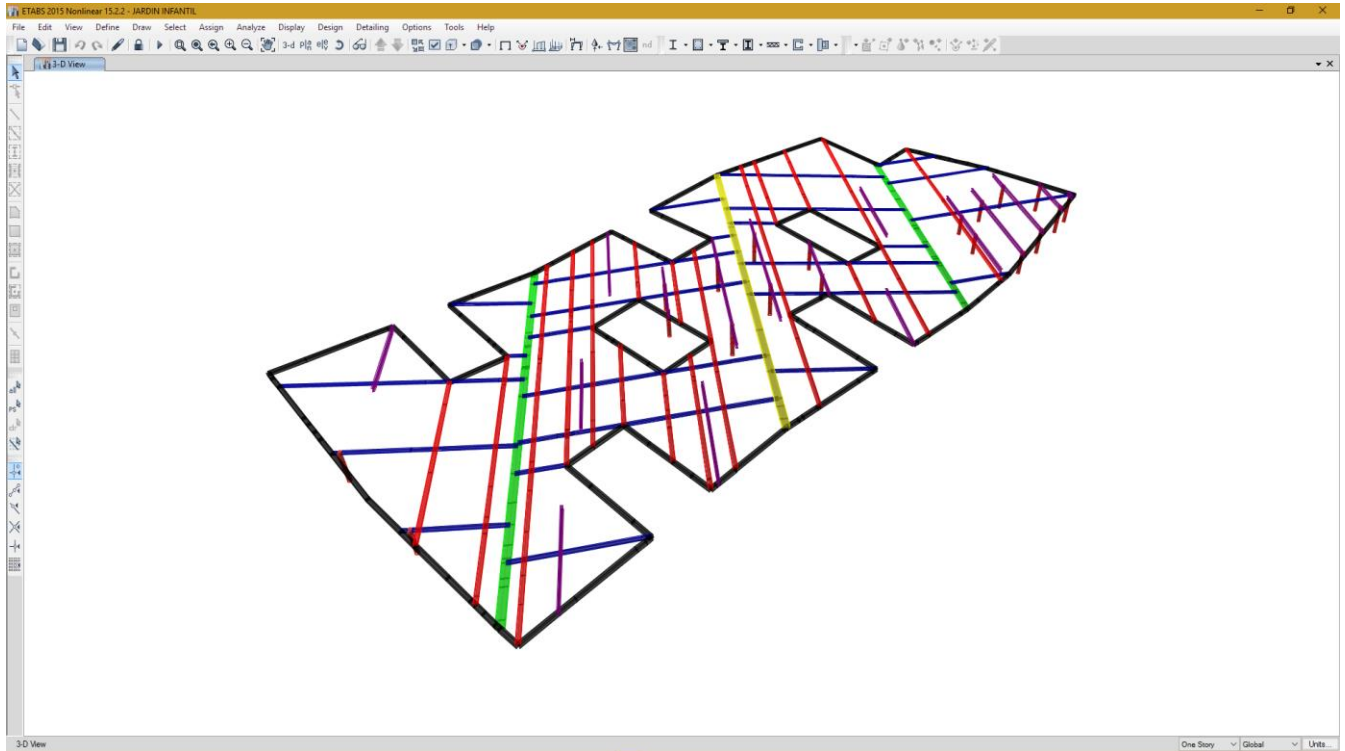
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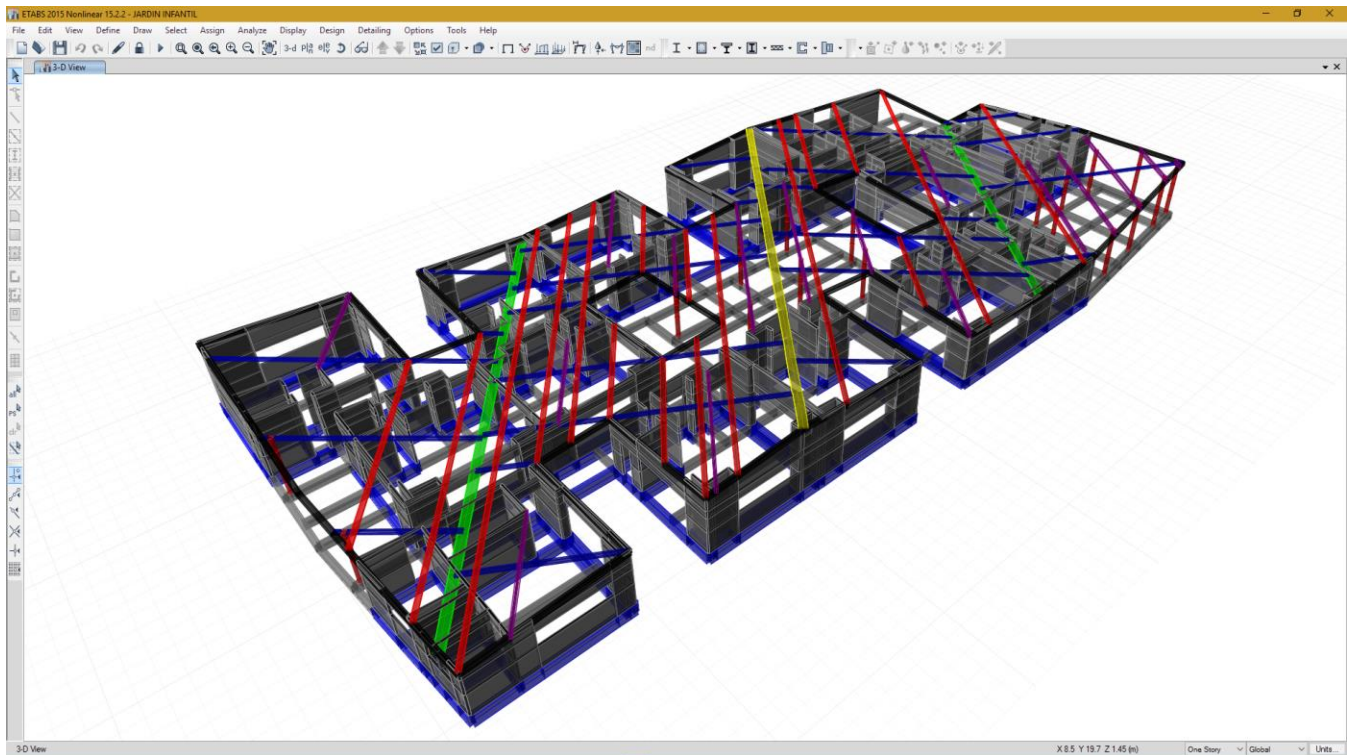
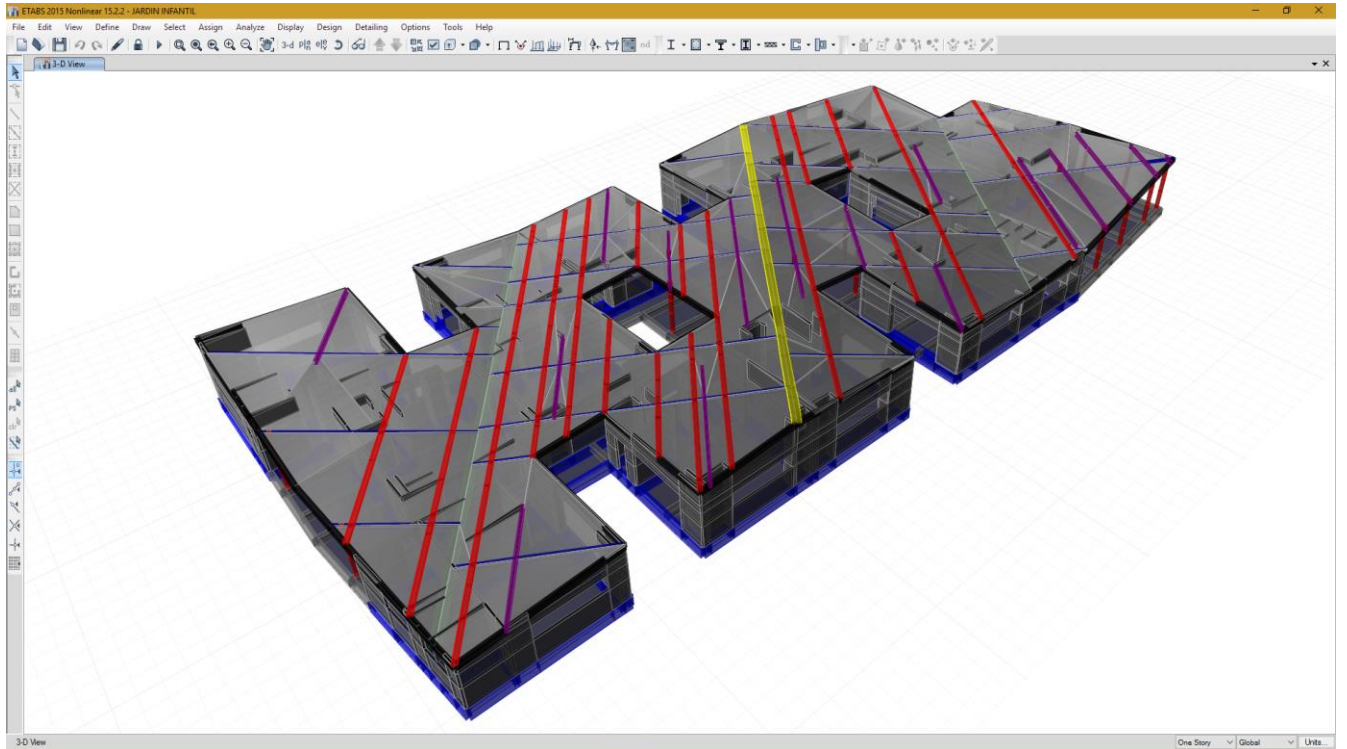
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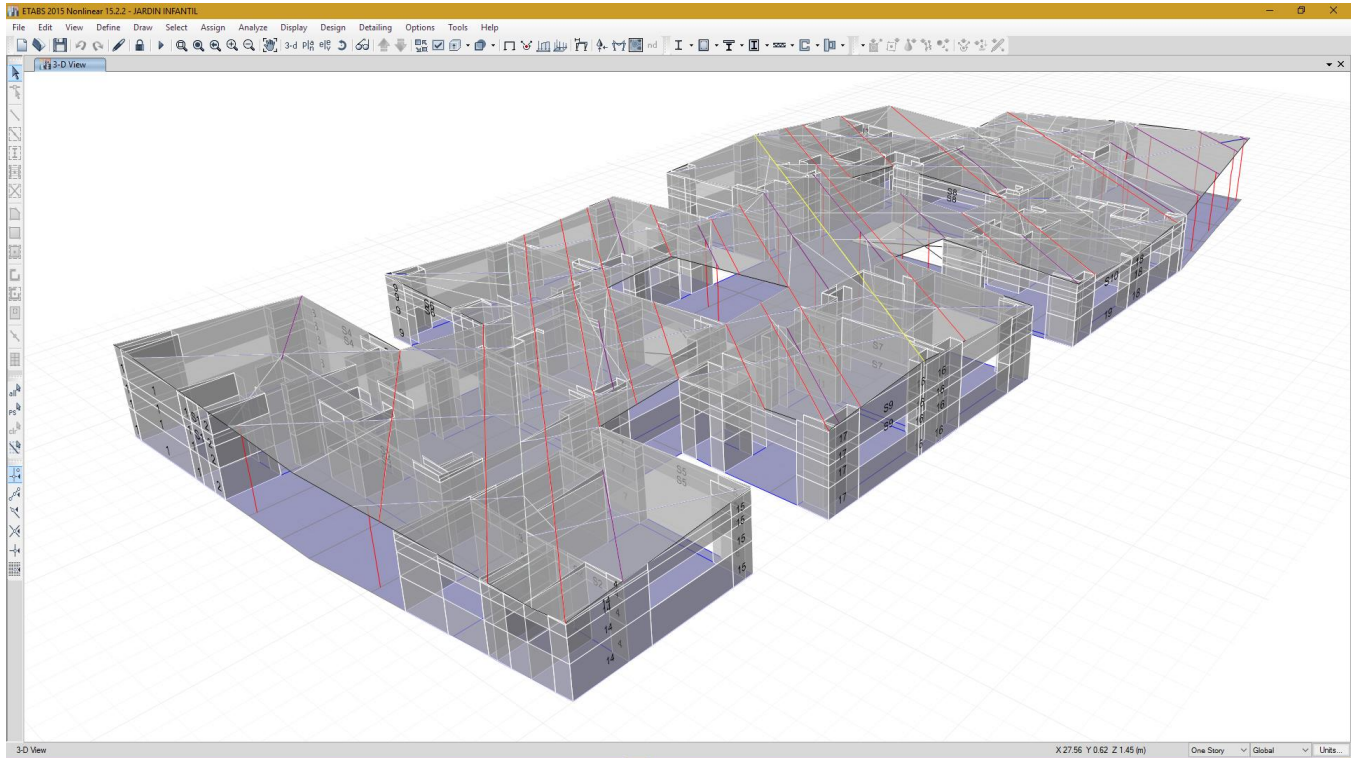
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Story Response - Maximum Story Displacement

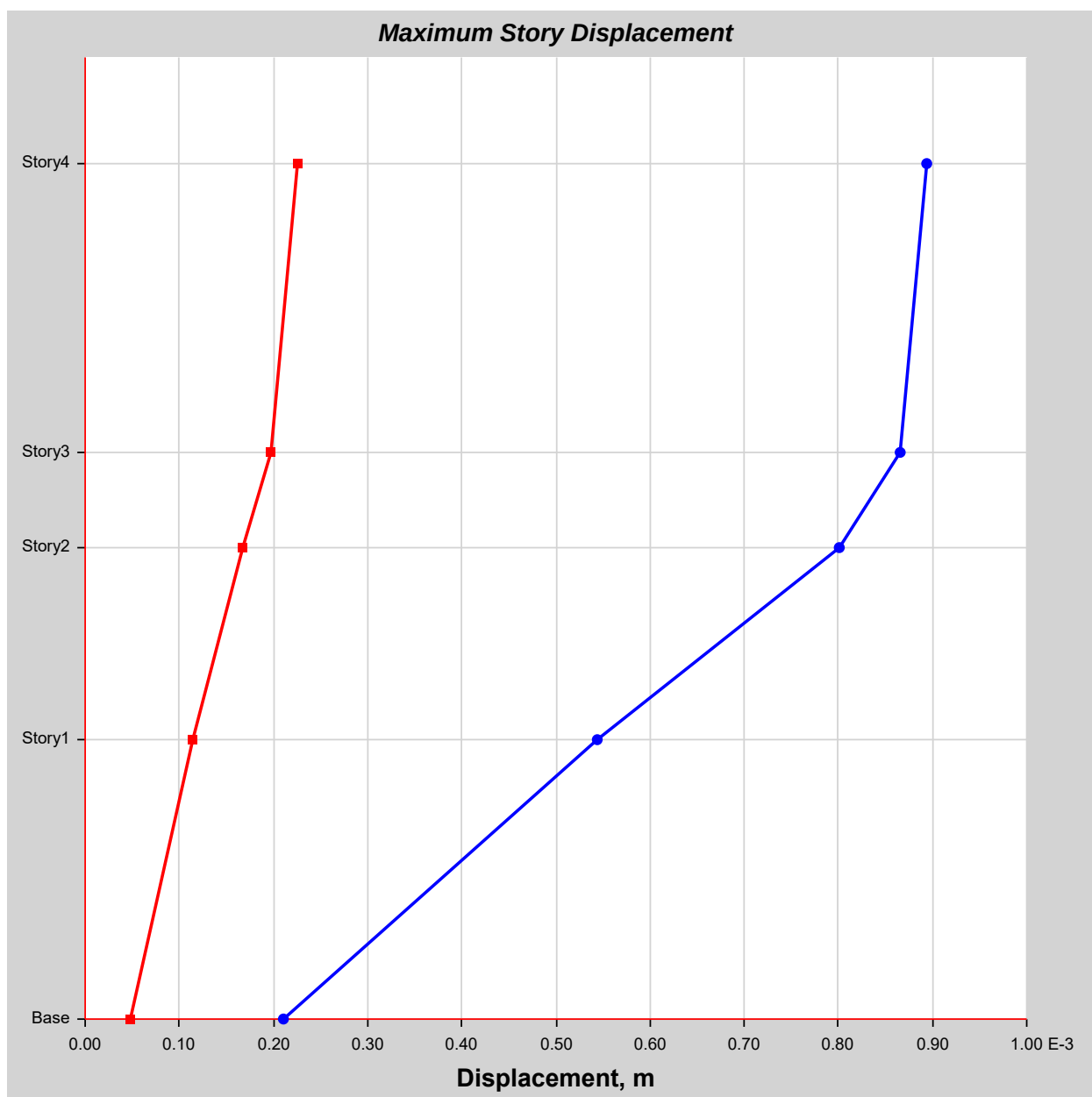
Summary Description

This is story response output for a specified range of stories and a selected load case or load combination.

Input Data

Name	StoryResp1		
Display Type	Max story displ	Story Range	All Stories
Load Case	SISMOX	Top Story	Story4
Output Type	Step Number 1	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir m	Y-Dir m
Story4	4.45	Top	0.000895	0.000226
Story3	2.95	Top	0.000865	0.000197
Story2	2.45	Top	0.0008	0.000168
Story1	1.45	Top	0.000544	0.000114
Base	0	Top	0.00021	0.000049

Story Response - Maximum Story Displacement

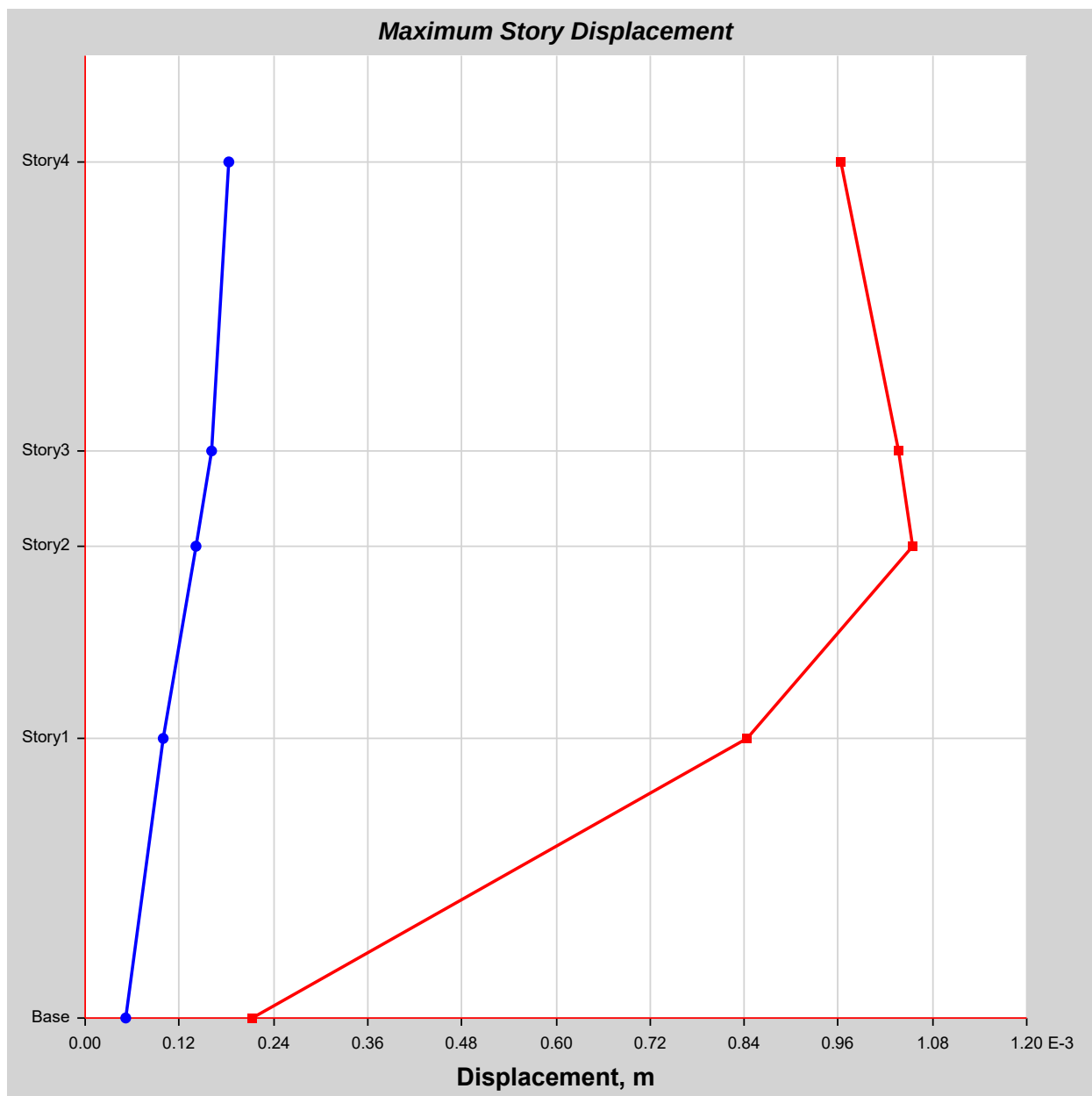
Summary Description

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Input Data

Name	StoryResp1		
Display Type	Max story displ	Story Range	All Stories
Load Case	SISMOY	Top Story	Story4
Output Type	Step Number 1	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir m	Y-Dir m
Story4	4.45	Top	0.000183	0.000963
Story3	2.95	Top	0.000161	0.001038
Story2	2.45	Top	0.000142	0.001054
Story1	1.45	Top	0.000099	0.000843
Base	0	Top	0.000052	0.000213

Story Response - Maximum Story Displacement

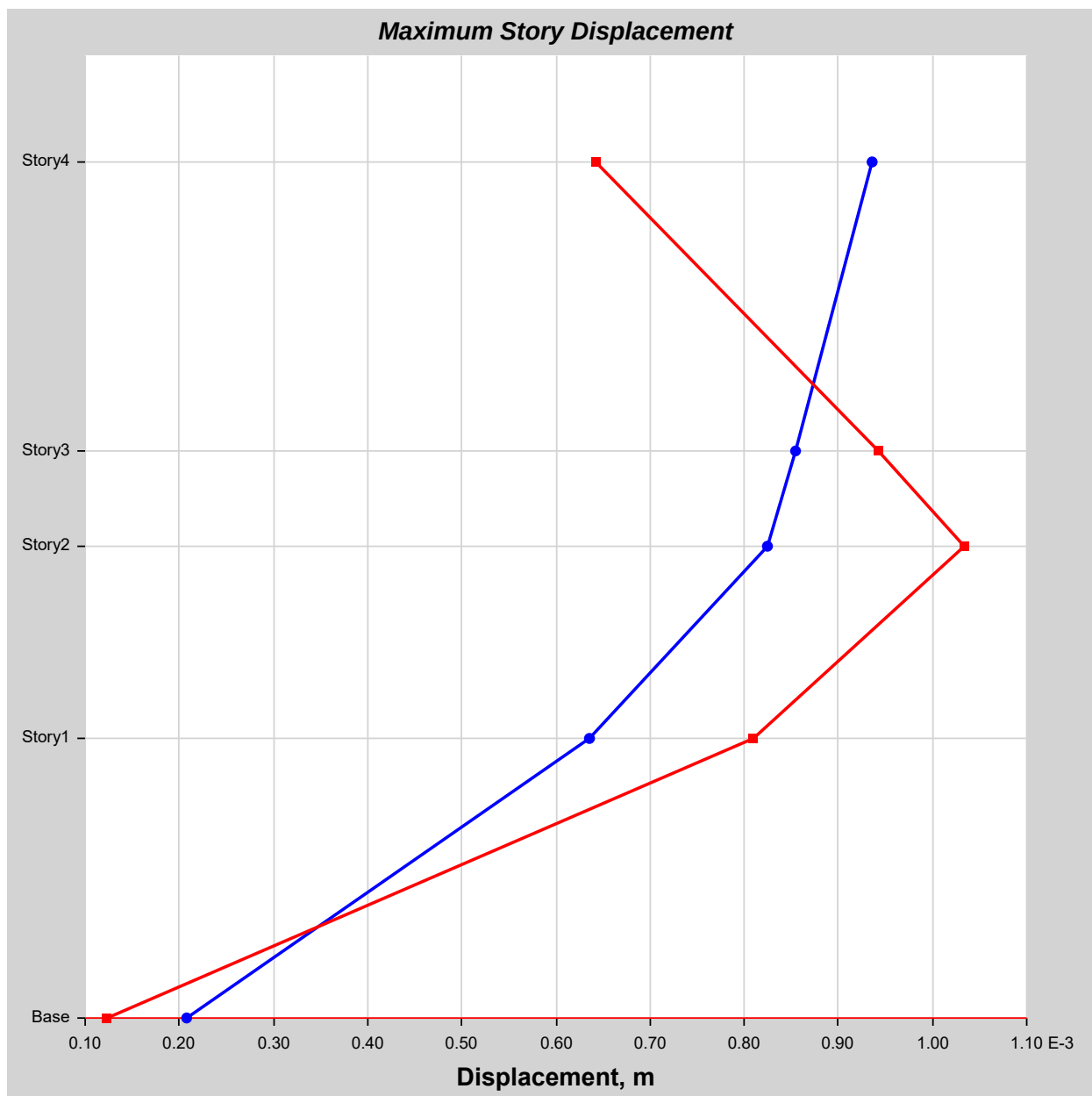
Summary Description

This is story response output for a specified range of stories and a selected load case or load combination.

Input Data

Name	StoryResp1		
Display Type	Max story displ	Story Range	All Stories
Load Case	SX	Top Story	Story4
Output Type	Not Applicable	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir m	Y-Dir m
Story4	4.45	Top	0.000935	0.000643
Story3	2.95	Top	0.000855	0.000942
Story2	2.45	Top	0.000825	0.001033
Story1	1.45	Top	0.000636	0.000809
Base	0	Top	0.000207	0.000124

Story Response - Maximum Story Drifts

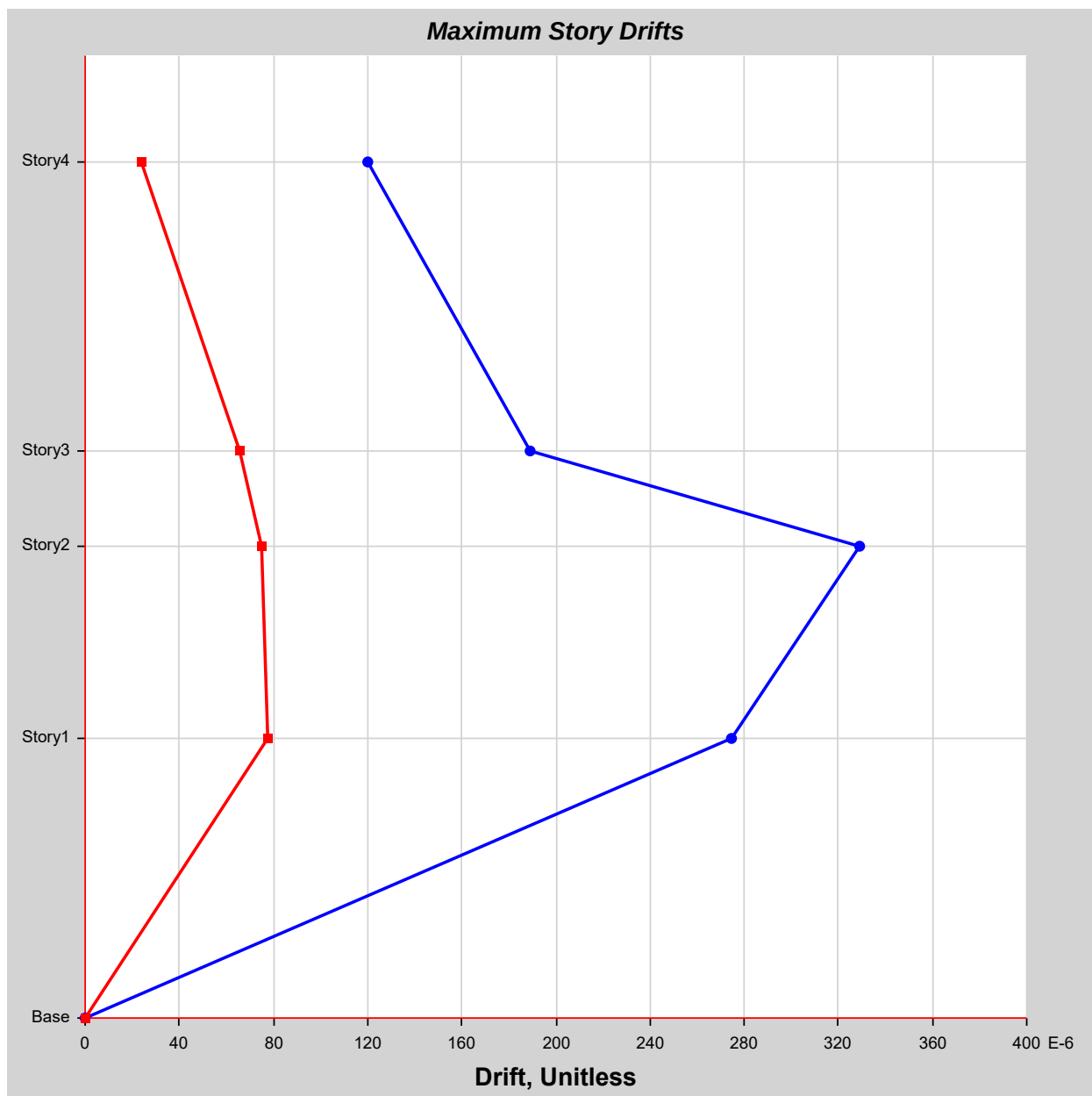
Summary Description

This is story response output for a specified range of stories and a selected load case or load combination.

Input Data

Name	StoryResp1		
Display Type	Max story drifts	Story Range	All Stories
Load Case	SISMOX	Top Story	Story4
Output Type	Step Number 1	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir	Y-Dir
Story4	4.45	Top	0.00012	0.000024
Story3	2.95	Top	0.000189	0.000066
Story2	2.45	Top	0.000329	0.000075
Story1	1.45	Top	0.000275	0.000078
Base	0	Top	0	0

Story Response - Maximum Story Drifts

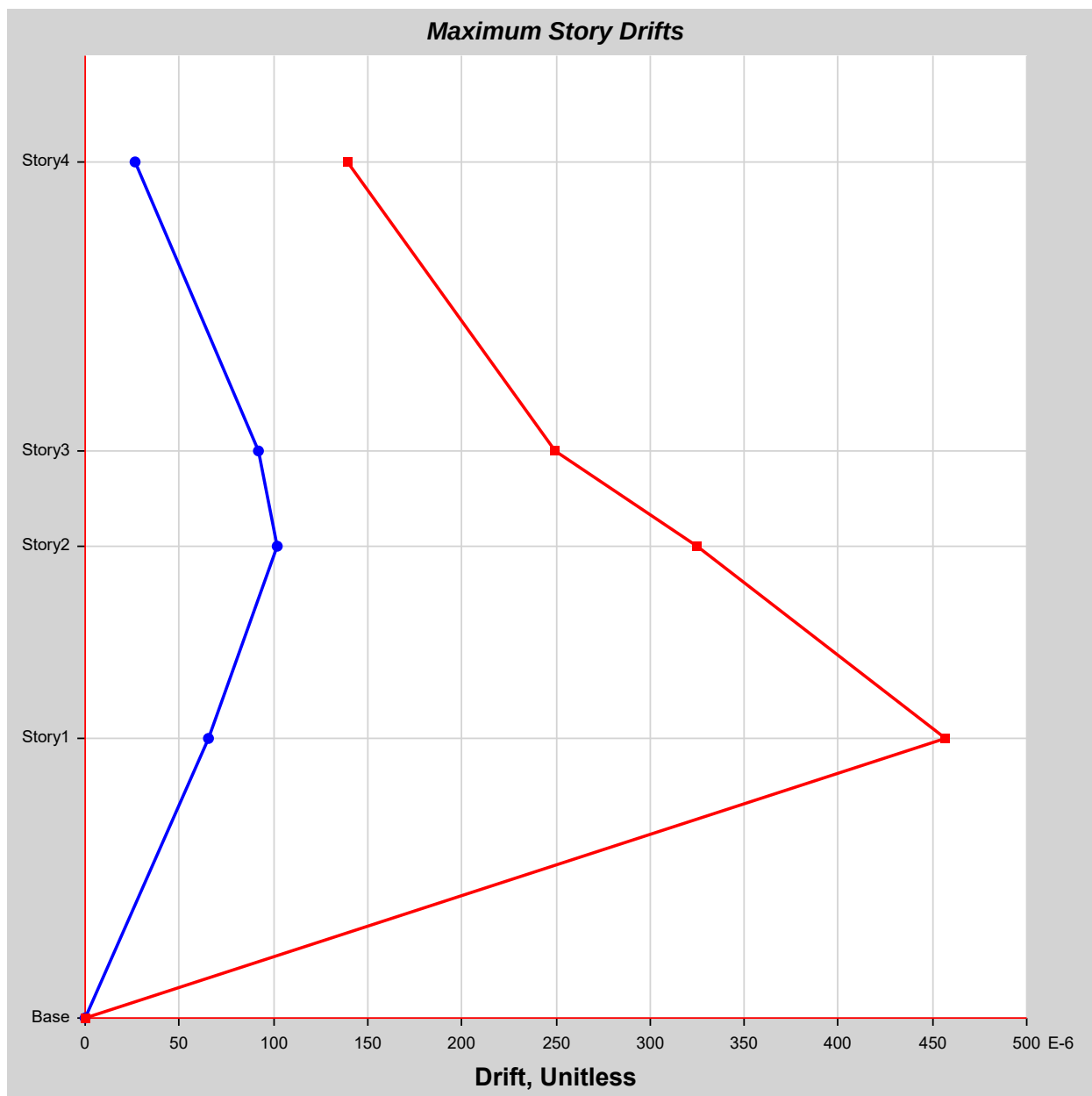
Summary Description

This is story response output for a specified range of stories and a selected load case or load combination.

Input Data

Name	StoryResp1		
Display Type	Max story drifts	Story Range	All Stories
Load Case	SISMOY	Top Story	Story4
Output Type	Step Number 1	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir	Y-Dir
Story4	4.45	Top	0.000026	0.00014
Story3	2.95	Top	0.000092	0.000249
Story2	2.45	Top	0.000102	0.000325
Story1	1.45	Top	0.000066	0.000457
Base	0	Top	0	0

Story Response - Maximum Story Drifts

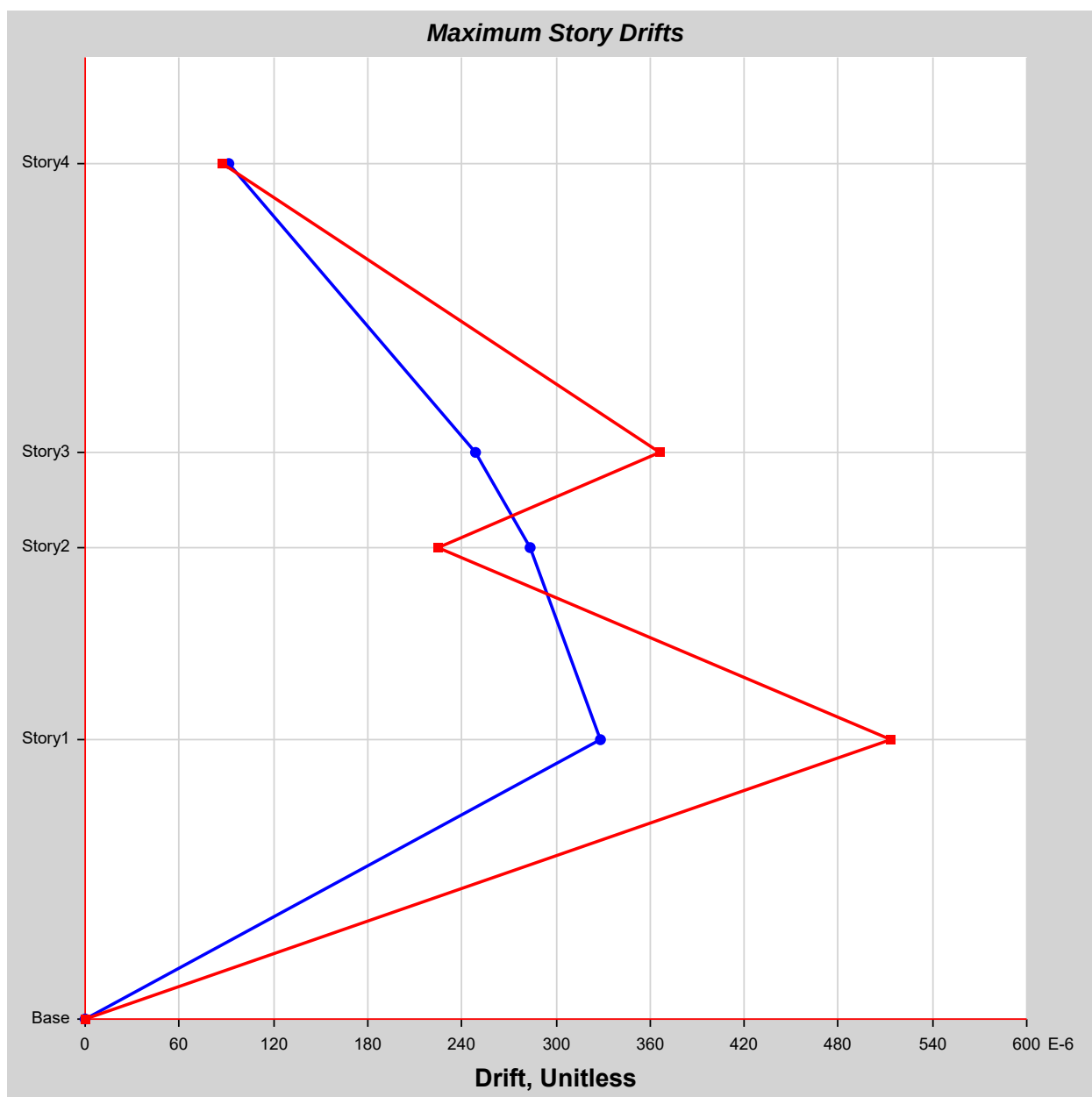
Summary Description

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Input Data

Name	StoryResp1		
Display Type	Max story drifts	Story Range	All Stories
Load Case	SX	Top Story	Story4
Output Type	Not Applicable	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir	Y-Dir
Story4	4.45	Top	0.000091	0.000088
Story3	2.95	Top	0.000249	0.000367
Story2	2.45	Top	0.000284	0.000225
Story1	1.45	Top	0.000329	0.000513
Base	0	Top	0	0

Story Response - Story Stiffness

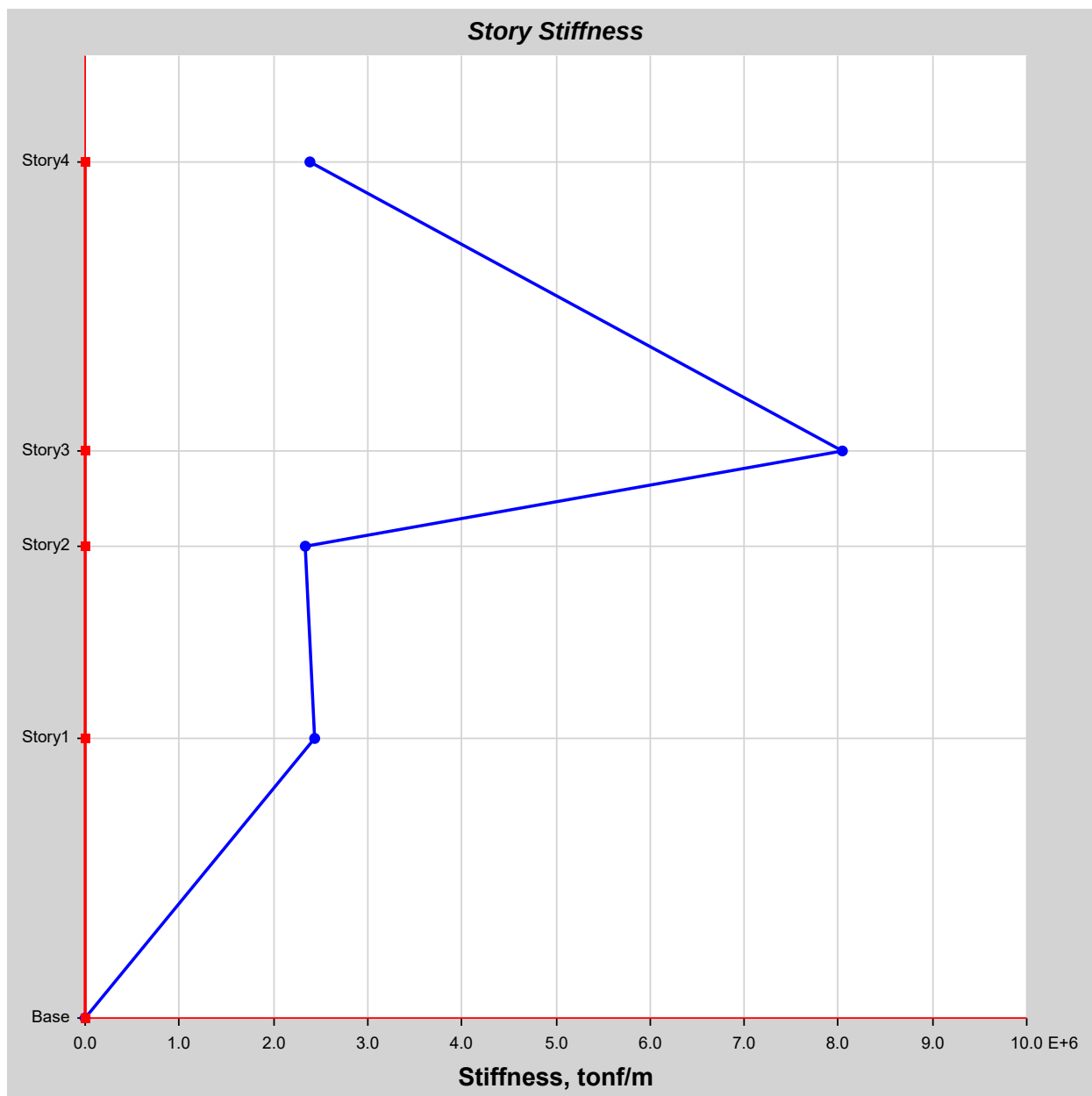
Summary Description

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Input Data

Name	StoryResp1		
Display Type	Story stiffness	Story Range	All Stories
Load Case	SISMOX	Top Story	Story4
Output Type	Step Number 1	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir tonf/m	Y-Dir tonf/m
Story4	4.45	Top	2388856.097	0
Story3	2.95	Top	8038952.524	0
Story2	2.45	Top	2331371.332	0
Story1	1.45	Top	2444953.058	0
Base	0	Top	0	0

Story Response - Story Stiffness

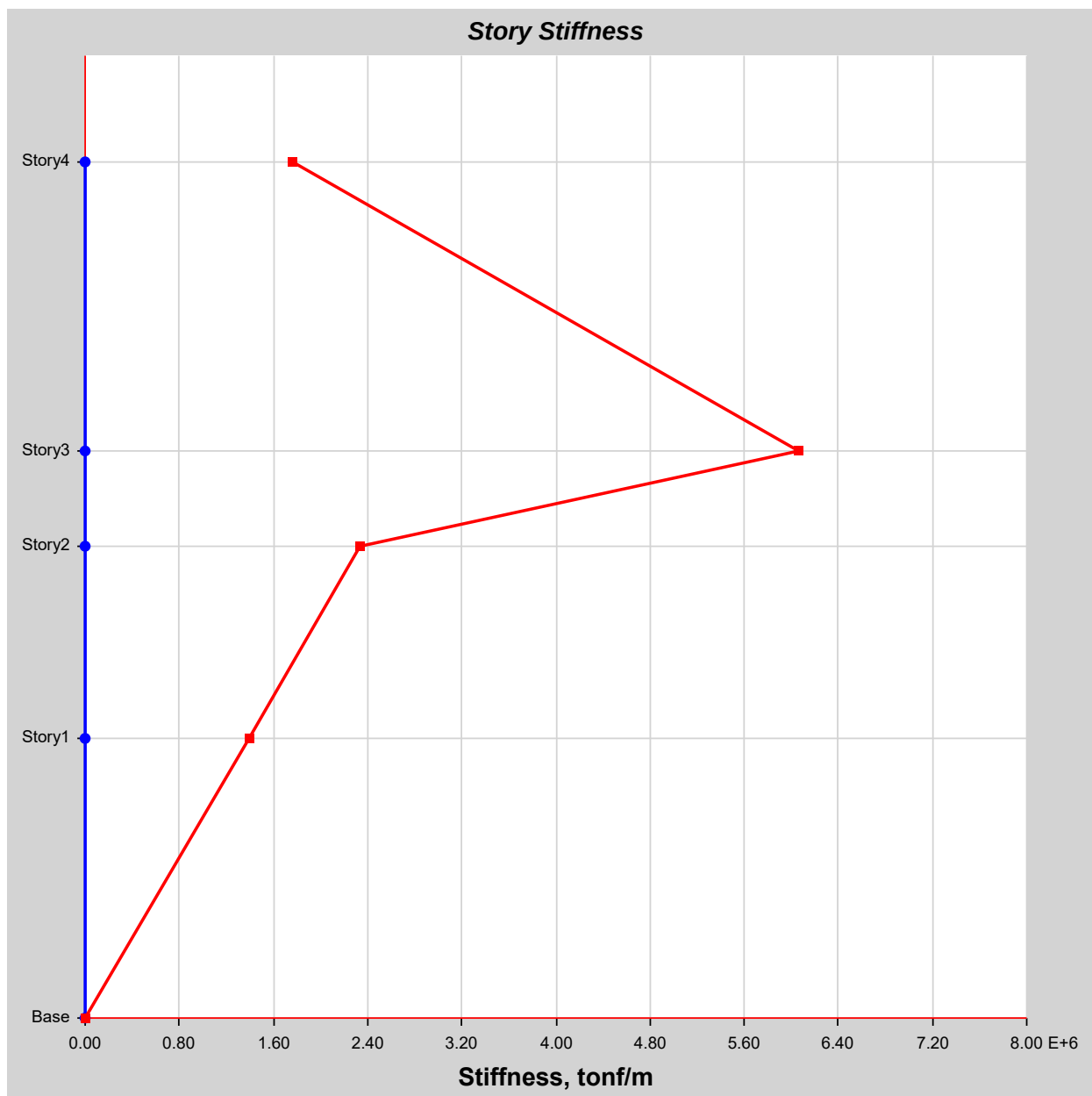
Summary Description

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Input Data

Name	StoryResp1		
Display Type	Story stiffness	Story Range	All Stories
Load Case	SISMOY	Top Story	Story4
Output Type	Step Number 1	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir tonf/m	Y-Dir tonf/m
Story4	4.45	Top	0	1758317.557
Story3	2.95	Top	0	6064277.134
Story2	2.45	Top	0	2330751.201
Story1	1.45	Top	0	1393734.906
Base	0	Top	0	0

Story Response - Story Stiffness

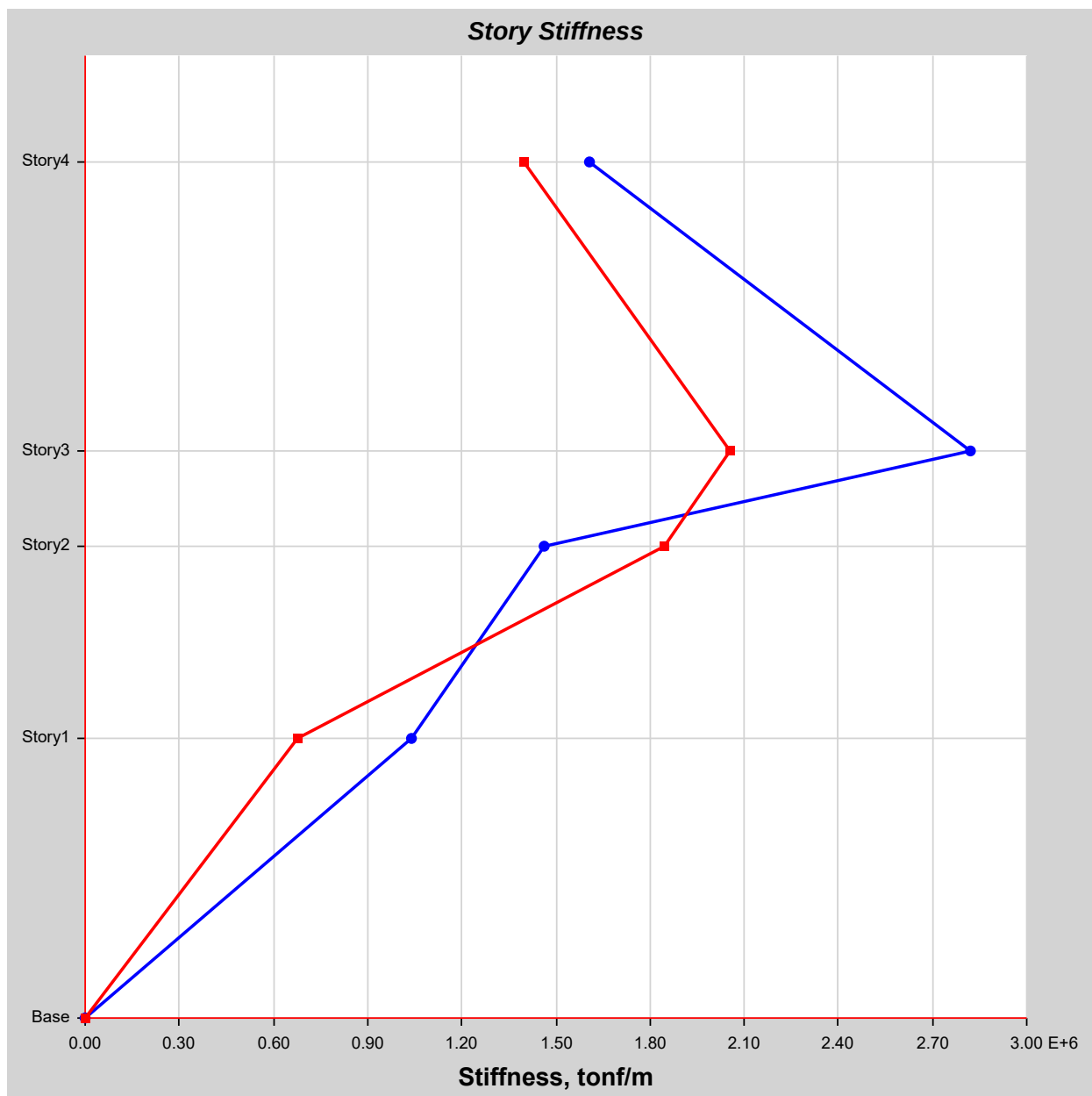
Summary Description

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Input Data

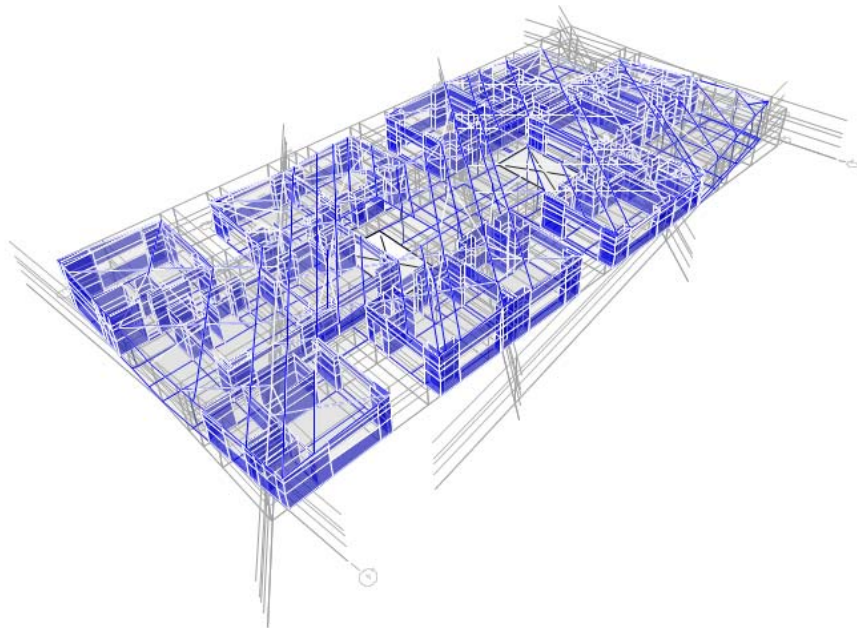
Name	StoryResp1		
Display Type	Story stiffness	Story Range	All Stories
Load Case	SX	Top Story	Story4
Output Type	Not Applicable	Bottom Story	Base

Plot



Tabulated Plot Coordinates**Story Response Values**

Story	Elevation m	Location	X-Dir tonf/m	Y-Dir tonf/m
Story4	4.45	Top	1605204.778	1396005.272
Story3	2.95	Top	2820070.937	2056714.816
Story2	2.45	Top	1464866.426	1847830.03
Story1	1.45	Top	1040041.155	674366.388
Base	0	Top	0	0



MEMORIA DE CALCULO 1

JARDIN PREDIO FONTANA GRANDE BOGOTA

Model File: CI-6135-I, Revision 0

15/06/2016

Table of Contents

1. Structure Data	4
1.1 Story Data	4
1.2 Mass	4
2. Properties	5
2.1 Materials	5
2.2 Frame Sections	5
2.3 Shell Sections	6
2.4 Spring Properties	7
3. Loads	8
3.1 Load Patterns	8
3.2 Auto Seismic Loading	8
3.3 Load Cases	13
3.4 Load Combinations	13
4. Analysis Results	16
4.1 Structure Results	16
4.2 Modal Results	17
5. Design Data	19
5.1 Steel Frame Design	19
5.2 Shear Wall Design	24

List of Tables

Table 1.1 Story Data	4
Table 1.2 Mass Source	4
Table 1.3 Mass Summary by Story	4
Table 2.1 Material Properties - Summary	5
Table 2.2 Material Properties - Steel	5
Table 2.3 Material Properties - Concrete	5
Table 2.4 Material Properties - Rebar	5
Table 2.5 Frame Sections - Summary	5
Table 2.6 Frame Sections	5
Table 2.7 Shell Sections - Summary	6
Table 2.8 Shell Sections - Slab	6
Table 2.9 Shell Sections - Wall	7
Table 2.10 Spring Properties - Line	7
Table 2.11 Spring Properties - Area	7
Table 3.1 Load Patterns	8
Table 3.2 Auto Seismic - User Coefficients	8
Table 3.5 Load Cases - Summary	13
Table 3.6 Load Cases - Static - Linear	13
Table 3.7 Load Cases - Modal - Eigen	13
Table 3.8 Load Cases - Response Spectrum	13
Table 3.9 P-delta Options	13
Table 3.10 Load Combinations	13
Table 4.1 Base Reactions	16
Table 4.2 Modal Periods and Frequencies	17
Table 4.3 Modal Participating Mass Ratios	17
Table 4.4 Modal Participation Factors	18
Table 4.5 Modal Load Participation Ratios	18
Table 4.6 Modal Direction Factors	18
Table 5.1 Steel Frame Preferences - AISC 360-10	19
Table 5.2 Steel Column Envelope	19
Table 5.3 Steel Beam Envelope	23
Table 5.4 Shear Wall Preferences - ACI 318-14	25
Table 5.5 Shear Wall Pier Summary - ACI 318-14	25
Table 5.6 Shear Wall Spandrel Summary - ACI 318-14	32

1 Structure Data

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

1.1 Story Data

Table 1.1 - Story Data

Name	Height m	Elevation m	Master Story	Similar To	Splice Story
Story4	1.5	4.45	No	None	No
Story3	0.5	2.95	No	None	No
Story2	1	2.45	No	None	No
Story1	1.45	1.45	No	None	No
Base	0	0	No	None	No

1.2 Mass

Table 1.2 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault
MsSrc1	Yes	No	No	Yes	No	Yes	Yes

Table 1.3 - Mass Summary by Story

Story	UX tonf-s ² /m	UY tonf-s ² /m	UZ tonf-s ² /m
Story4	47.85894	47.85894	0
Story3	14.08887	14.08887	0
Story2	16.04014	16.04014	0
Story1	24.782	24.782	0
Base	4.30333	4.30333	0

2 Properties

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

2.1 Materials

Table 2.1 - Material Properties - Summary

Name	Type	E tonf/m ²	ν	Unit Weight tonf/m ³	Design Strengths
A615Gr60	Rebar	20389019.16	0.3	7.849	Fy=42184.18 tonf/m ² , Fu=63276.27 tonf/m ²
H210	Concrete	2150000	0.2	2.4026	Fc=2100 tonf/m ²
STEEL	Steel	20389019.2	0.3	7.8334	Fy=35153.48 tonf/m ² , Fu=45699.53 tonf/m ²
VENA	Concrete	4300000	0.2	2.4026	Fc=2100 tonf/m ²

Table 2.2 - Material Properties - Steel

Name	E tonf/m ²	ν	α 1/C	G tonf/m ²	Unit Weight tonf/m ³	Unit Mass tonf-s ² /m ⁴	Fy tonf/m ²	Fu tonf/m ²
STEEL	20389019.2	0.3	1.17E-05	7841930.46	7.8334	0.7981	35153.48	45699.53

Table 2.3 - Material Properties - Concrete

Name	E tonf/m ²	ν	α 1/C	G tonf/m ²	Unit Weight tonf/m ³	Unit Mass tonf-s ² /m ⁴	Fc tonf/m ²	Lightweight?
H210	2150000	0.2	9.9E-06	895833.33	2.4026	0.2448	2100	No
VENA	4300000	0.2	9.9E-06	1791666.67	2.4026	0.2448	2100	No

Table 2.4 - Material Properties - Rebar

Name	E tonf/m ²	α 1/C	Unit Weight tonf/m ³	Unit Mass tonf-s ² /m ⁴	Fy tonf/m ²	Fu tonf/m ²
A615Gr60	20389019.16	1.17E-05	7.849	0.80038	42184.18	63276.27

2.2 Frame Sections

Table 2.5 - Frame Sections - Summary

Name	Material	Shape
IPE300	STEEL	Steel I/Wide Flange
PIPE10SCH80	STEEL	Steel Pipe
VB	H210	Concrete Rectangular
VB2	H210	Concrete Rectangular
VC	H210	Concrete Rectangular
VCA	VENA	Concrete Rectangular
VCB	VENA	Concrete Rectangular
VCUM	VENA	Concrete Rectangular
VLIM	VENA	Concrete Rectangular

Table 2.6 - Frame Sections (Part 1 of 3)

Name	Material	Shape	t3 m	t2 m	tf m	tw m	t2b m	tfb m	Radius m	Area m ²
IPE300	STEEL	Steel I/Wide Flange	0.3	0.15	0.0107	0.0071	0.15	0.0107	0.015	0.0054
PIPE10SCH80	STEEL	Steel Pipe	0.27432			0.0127				0.0097
VB	H210	Concrete Rectangular	0.7	0.3						0.21
VB2	H210	Concrete Rectangular	0.5	0.3						0.15
VC	H210	Concrete Rectangular	0.25	0.25						0.0625
VCA	VENA	Concrete Rectangular	0.1	0.25						0.025
VCB	VENA	Concrete Rectangular	0.1	0.25						0.025
VCUM	VENA	Concrete Rectangular	0.1	0.5						0.05
VLIM	VENA	Concrete Rectangular	0.1	0.5						0.05

Table 2.6 - Frame Sections (Part 2 of 3)

Name	AS2 m ²	AS3 m ²	J m ⁴	I22 m ⁴	I33 m ⁴	S22 m ³	S33 m ³	Z22 m ³	Z33 m ³	R22 m	R33 m
IPE300	0.0021	0.0027	1.99E-07	6E-06	8.4E-05	8.1E-05	0.000557	0.000125	0.000628	0.03351	0.12463
PIPE10SCH80	0.0052	0.0052	0.000166	8.3E-05	8.3E-05	0.000604	0.000604	0.000806	0.000806	0.09221	0.09221
VB	0.175	0.175	0.004604	0.001575	0.008575	0.0105	0.0245	0.01575	0.03675	0.0866	0.20207
VB2	0.125	0.125	0.002817	0.001125	0.003125	0.0075	0.0125	0.01125	0.01875	0.0866	0.14434
VC	0.0521	0.0521	0.00055	0.000326	0.000326	0.002604	0.002604	0.003906	0.003906	0.07217	0.07217
VCA	0.0208	0.0208	6.2E-05	0.00013	2.1E-05	0.001042	0.000417	0.001563	0.000625	0.07217	0.02887
VCB	0.0208	0.0208	6.2E-05	0.00013	2.1E-05	0.001042	0.000417	0.001563	0.000625	0.07217	0.02887
VCUM	0.0417	0.0417	0.000146	0.001042	4.2E-05	0.004167	0.000833	0.00625	0.00125	0.14434	0.02887
VLIM	0.0417	0.0417	0.000146	0.001042	4.2E-05	0.004167	0.000833	0.00625	0.00125	0.14434	0.02887

Table 2.6 - Frame Sections (Part 3 of 3)

Name	AS2 Modifier	AS3 Modifier	J Modifier	I22 Modifier	I33 Modifier	Mass Modifier	Weight Modifier
IPE300	1	1	1E-05	1	1	1	1
PIPE10SCH80	1	1	1E-05	1	1	1	1
VB	1	1	1E-05	1	1	0	0
VB2	1	1	1E-05	1	1	0	0
VC	1	1	1E-05	1	1	1	1
VCA	1	1	1E-05	1	1	1	1
VCB	1	1	1E-05	1	1	1	1
VCUM	1	1	1E-05	1	1	1	1
VLIM	1	1	1E-05	1	1	1	1

2.3 Shell Sections

Table 2.7 - Shell Sections - Summary

Name	Design Type	Element Type	Material	Total Thickness m
LB	Slab	Shell-Thick	H210	0.1
LC	Slab	Shell-Thick	H210	0.1
PANTALLA	Wall	Shell-Thick	H210	0.12

Table 2.8 - Shell Sections - Slab (Part 1 of 2)

Name	Material	Slab Type	Element Type	Slab Thickness m	f11 Modifier	f22 Modifier	f12 Modifier	m11 Modifier	m22 Modifier	m12 Modifier
LB	H210	Uniform	Shell-Thick	0.1	1	1	1	1	1	1
LC	H210	Uniform	Shell-Thick	0.1						

Table 2.8 - Shell Sections - Slab (Part 2 of 2)

Name	v13 Modifier	v23 Modifier	Mass Modifier	Weight Modifier
LB	1	1	0	0
LC				

Table 2.9 - Shell Sections - Wall

Name	Material	Element Type	Thickness m
PANTALLA	H210	Shell-Thick	0.12

2.4 Spring Properties

Table 2.10 - Spring Properties - Line

Name	U1 tonf/m/m	U2 tonf/m/m	U3 tonf/m/m	R1 tonf/rad	Nonlinear 2 Option	Nonlinear 3 Option
SV1	530	530	530	0	Compression Only	Compression Only

Table 2.11 - Spring Properties - Area

Name	U1 tonf/m/m ²	U2 tonf/m/m ²	U3 tonf/m/m ²	Nonlinear 3 Option
RL	1763	1763	1763	Compression Only

3 Loads

This chapter provides loading information as applied to the model.

3.1 Load Patterns

Table 3.1 - Load Patterns

Name	Type	Self Weight Multiplier	Auto Load
DEAD	Dead	1	
VIVA	Live	0	
SISMOX	Seismic	0	User Coefficient
SISMOY	Seismic	0	User Coefficient

3.2 Auto Seismic Loading

Table 3.2 - Auto Seismic - User Coefficients

Load Pattern	Type	Direction	Eccentricity %	Ecc. Overridden	Top Story	Bottom Story	C	K	Weight Used tonf	Base Shear tonf
SISMOX	Seismic	X		No	Story4	Base	0.49	1	1007.8289	493.8362
SISMOX	Seismic	X + Ecc. Y	5	No	Story4	Base	0.49	1	1007.8289	493.8362
SISMOX	Seismic	X - Ecc. Y	5	No	Story4	Base	0.49	1	1007.8289	493.8362
SISMOY	Seismic	Y		No	Story4	Base	0.49	1	1007.8289	493.8362
SISMOY	Seismic	Y + Ecc. X	5	No	Story4	Base	0.49	1	1007.8289	493.8362
SISMOY	Seismic	Y - Ecc. X	5	No	Story4	Base	0.49	1	1007.8289	493.8362

User Coefficient Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern SISMOX 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

$$C = 0.49$$

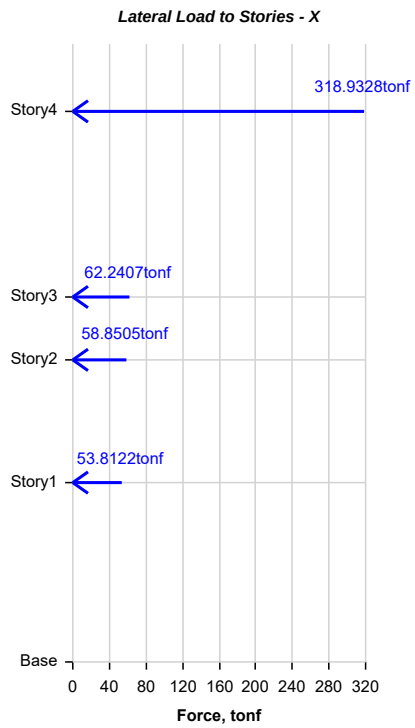
Base Shear, V

$$V = CW$$

Calculated Base Shear

Direction	Period Used (sec)	C	W (tonf)	V (tonf)
X	0	0	1007.82895	493.8362
X + Ecc. Y	0	0	1007.82895	493.8362
X - Ecc. Y	0	0	1007.82895	493.8362

Applied Story Forces



Story	Elevation m	X-Dir tonf	Y-Dir tonf
Story4	4.45	318.9328	0
Story3	2.95	62.2407	0
Story2	2.45	58.8505	0
Story1	1.45	53.8122	0
Base	0	0	0

User Coefficient Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern SISMOY 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

$$C = 0.49$$

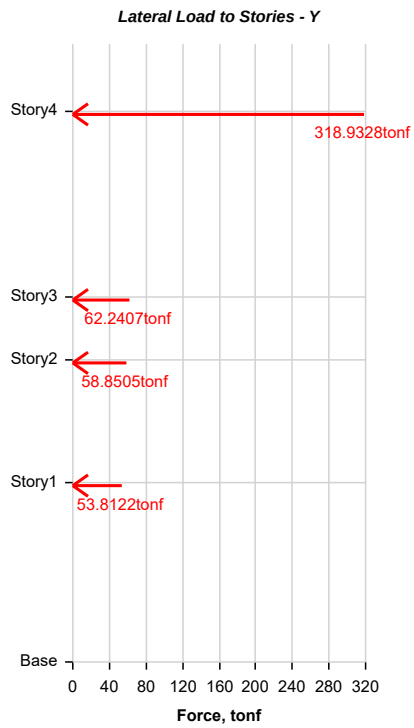
Base Shear, V

$$V = CW$$

Calculated Base Shear

Direction	Period Used (sec)	C	W (tonf)	V (tonf)
Y	0	0	1007.82895	493.8362
Y + Ecc. X	0	0	1007.82895	493.8362
Y - Ecc. X	0	0	1007.82895	493.8362

Applied Story Forces



Story	Elevation m	X-Dir tonf	Y-Dir tonf
Story4	4.45	0	318.9328
Story3	2.95	0	62.2407
Story2	2.45	0	58.8505
Story1	1.45	0	53.8122
Base	0	0	0

3.3 Load Cases

Table 3.5 - Load Cases - Summary

Name	Type
DEAD	Linear Static
VIVA	Linear Static
SISMOX	Linear Static
SISMOY	Linear Static
SX	Response Spectrum
SY	Response Spectrum

Table 3.6 - Load Cases - Static - Linear

Name	Stiffness From	Mass Source	Load Type	Load Name	Scale Factor	Design Load Type
DEAD	Preset P-delta	MsSrc1	Load Pattern	DEAD	1	Program Determined
VIVA	Preset P-delta	MsSrc1	Load Pattern	VIVA	1	Program Determined
SISMOX	Preset P-delta	MsSrc1	Load Pattern	SISMOX	1	Program Determined
SISMOY	Preset P-delta	MsSrc1	Load Pattern	SISMOY	1	Program Determined

Table 3.7 - Load Cases - Modal - Eigen

Name	Stiffness From	Mass Source	Max Number Modes	Min Number Modes	Frequency Shift cyc/sec	Cutoff Frequency cyc/sec	Convergence Tolerance	Auto Shift?	Design Load Type
Modal	Preset P-delta	MsSrc1	6	6	0	0	1E-07	Yes	Program Determined

Table 3.8 - Load Cases - Response Spectrum (Part 1 of 2)

Name	Mass Source	Load Type	Load Name	Function	Scale Factor	Coordinate System	Angle deg	Modal Case	Modal Combination Method
SX	Previous (MsSrc1)	Acceleration	U1	NSR10	9.8067	Global	0	Modal	CQC
SY	Previous (MsSrc1)	Acceleration	U2	UNIFRS	9.8067	Global	0	Modal	CQC

Table 3.8 - Load Cases - Response Spectrum (Part 2 of 2)

Name	Include Rigid Response	Directional Combination Method	Design Load Type	Eccentricity Ratio	Eccentricity Overrides	Constant Damping
SX	No	CQC3	Program Determined	0	No	0.05
SY	No	CQC3	Program Determined	0	No	0.05

Table 3.9 - P-delta Options

Automation Method
None

3.4 Load Combinations

Table 3.10 - Load Combinations

Name	Load Case/Combo	Scale Factor	Type	Auto
VERTICAL	DEAD	1.2	Linear Add	No
VERTICAL	VIVA	1.6		No
Comb1	DEAD	1.2	Linear Add	No
Comb1	VIVA	1		No
Comb1	SISMOX	0.4		No
Comb1	SISMOY	0.12		No
Comb2	DEAD	1.2	Linear Add	No
Comb2	VIVA	1		No
Comb2	SISMOX	-0.4		No
Comb2	SISMOY	0.12		No
Comb3	DEAD	1.2	Linear Add	No
Comb3	VIVA	1		No
Comb3	SISMOX	0.4		No
Comb3	SISMOY	-0.12		No
Comb4	DEAD	1.2	Linear Add	No
Comb4	VIVA	1		No
Comb4	SISMOX	-0.4		No
Comb4	SISMOY	-0.12		No
VERTICAL-1	DEAD	1.2	Linear Add	No
Comb1-1	DEAD	1.2	Linear Add	No
Comb1-1	VIVA	1		No
Comb1-1	SISMOY	0.4		No
Comb1-1	SISMOX	0.12		No
Comb2-1	DEAD	1.2	Linear Add	No
Comb2-1	VIVA	1		No
Comb2-1	SISMOY	-0.4		No
Comb2-1	SISMOX	0.12		No
Comb3-1	DEAD	1.2	Linear Add	No
Comb3-1	VIVA	1		No
Comb3-1	SISMOY	0.4		No
Comb3-1	SISMOX	-0.12		No
Comb4-1	DEAD	1.2	Linear Add	No
Comb4-1	VIVA	1		No
Comb4-1	SISMOY	-0.4		No
Comb4-1	SISMOX	-0.12		No
Comb1-2	DEAD	1.2	Linear Add	No
Comb1-2	VIVA	1		No
Comb1-2	SX	0.4		No
Comb2-2	DEAD	1.2	Linear Add	No
Comb2-2	VIVA	1		No
Comb2-2	SX	-0.4		No
Comb1-3	DEAD	1.2	Linear Add	No
Comb1-3	VIVA	1		No
Comb1-3	SY	0.4		No
Comb3-2	DEAD	1.2	Linear Add	No

Table 3.10 - Load Combinations (continued)

Name	Load Case/Combo	Scale Factor	Type	Auto
Comb3-2	VIVA	1		No
Comb3-2	SY	0.4		No
Comb4-2	DEAD	1.2	Linear Add	No
Comb4-2	VIVA	1		No
Comb4-2	SY	-0.4		No
Comb1-4	DEAD	0.9	Linear Add	No
Comb1-4	SISMOX	0.4		No
Comb1-4	SISMOY	0.12		No
Comb2-3	DEAD	0.9	Linear Add	No
Comb2-3	SISMOX	-0.4		No
Comb2-3	SISMOY	0.12		No
Comb3-3	DEAD	0.9	Linear Add	No
Comb3-3	SISMOX	0.4		No
Comb3-3	SISMOY	-0.12		No
Comb4-3	DEAD	0.9	Linear Add	No
Comb4-3	SISMOX	-0.4		No
Comb4-3	SISMOY	-0.12		No
Comb1-5	DEAD	0.9	Linear Add	No
Comb1-5	SISMOY	0.4		No
Comb1-5	SISMOX	0.12		No
Comb1-6	DEAD	0.9	Linear Add	No
Comb1-6	SX	0.4		No
Comb2-4	DEAD	0.9	Linear Add	No
Comb2-4	SISMOY	-0.4		No
Comb2-4	SISMOX	0.12		No
Comb2-5	DEAD	0.9	Linear Add	No
Comb2-5	SX	-0.4		No
Comb3-4	DEAD	0.9	Linear Add	No
Comb3-4	SISMOY	0.4		No
Comb3-4	SISMOX	-0.12		No
Comb3-5	DEAD	0.9	Linear Add	No
Comb3-5	SY	0.4		No

4 Analysis Results

This chapter provides analysis results.

4.1 Structure Results

Table 4.1 - Base Reactions

Load Case/Combo	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m	X m	Y m	Z m
DEAD	-4.902E-06	-0.013	1050.8781	14922.7698	-31097.8887	-0.4249	0	0	0
VIVA	-6.821E-07	-0.0035	576.7608	8010.5732	-17871.2234	-0.1143	0	0	0
SISMOX 1	-493.836	0.0047	-0.0002	-0.0237	-1522.6739	6982.4101	0	0	0
SISMOX 2	-493.836	0.0047	-0.0002	-0.0237	-1522.6739	6982.4101	0	0	0
SISMOX 3	-493.836	0.0047	-0.0002	-0.0237	-1522.6739	6982.4101	0	0	0
SISMOY 1	0.0006	-493.961	0.005	1523.3133	-0.1601	-14688.3398	0	0	0
SISMOY 2	0.0006	-493.961	0.005	1523.3133	-0.1601	-14688.3398	0	0	0
SISMOY 3	0.0006	-493.961	0.005	1523.3133	-0.1601	-14688.3398	0	0	0
SX Max	257.9361	263.7402	0.003	787.4408	754.0433	7339.2524	0	0	0
SY Max	827.5025	804.249	0.0092	2399.8747	2418.9198	22784.9139	0	0	0
VERTICAL	-6.973E-06	-0.0212	2183.871	30724.2409	-65911.4239	-0.6927	0	0	0
Comb1 Max	-197.5343	-59.2925	1837.815	26100.6851	-55797.7786	1029.7391	0	0	0
Comb1 Min	-197.5343	-59.2925	1837.815	26100.6851	-55797.7786	1029.7391	0	0	0
Comb2 Max	197.5345	-59.2963	1837.8152	26100.7041	-54579.6395	-4556.189	0	0	0
Comb2 Min	197.5345	-59.2963	1837.8152	26100.7041	-54579.6395	-4556.189	0	0	0
Comb3 Max	-197.5345	59.2581	1837.8138	25735.0899	-55797.7402	4554.9406	0	0	0
Comb3 Min	-197.5345	59.2581	1837.8138	25735.0899	-55797.7402	4554.9406	0	0	0
Comb4 Max	197.5343	59.2544	1837.814	25735.1089	-54579.6011	-1030.9874	0	0	0
Comb4 Min	197.5343	59.2544	1837.814	25735.1089	-54579.6011	-1030.9874	0	0	0
VERTICAL-1	-5.882E-06	-0.0156	1261.0537	17907.3238	-37317.4664	-0.5099	0	0	0
Comb1-1 Max	-59.2601	-197.6029	1837.8165	26527.2195	-55371.4747	-5038.0709	0	0	0
Comb1-1 Min	-59.2601	-197.6029	1837.8165	26527.2195	-55371.4747	-5038.0709	0	0	0
Comb2-1 Max	-59.2606	197.5659	1837.8125	25308.5688	-55371.3467	6712.601	0	0	0
Comb2-1 Min	-59.2606	197.5659	1837.8125	25308.5688	-55371.3467	6712.601	0	0	0
Comb3-1 Max	59.2606	-197.604	1837.8165	26527.2252	-55006.033	-6713.8493	0	0	0
Comb3-1 Min	59.2606	-197.604	1837.8165	26527.2252	-55006.033	-6713.8493	0	0	0
Comb4-1 Max	59.2601	197.5648	1837.8125	25308.5745	-55005.905	5036.8225	0	0	0
Comb4-1 Min	59.2601	197.5648	1837.8125	25308.5745	-55005.905	5036.8225	0	0	0
Comb1-2 Max	103.1744	105.477	1837.8157	26232.8733	-54887.0725	2935.0768	0	0	0
Comb1-2 Min	-103.1745	-105.5152	1837.8133	25602.9207	-55490.3072	-2936.3251	0	0	0
Comb2-2 Max	103.1744	105.477	1837.8157	26232.8733	-54887.0725	2935.0768	0	0	0
Comb2-2 Min	-103.1745	-105.5152	1837.8133	25602.9207	-55490.3072	-2936.3251	0	0	0
Comb1-3 Max	331.001	321.6805	1837.8182	26877.8469	-54221.1219	9113.3414	0	0	0
Comb1-3 Min	-331.001	-321.7187	1837.8108	24957.9471	-56156.2578	-9114.5897	0	0	0
Comb3-2 Max	331.001	321.6805	1837.8182	26877.8469	-54221.1219	9113.3414	0	0	0
Comb3-2 Min	-331.001	-321.7187	1837.8108	24957.9471	-56156.2578	-9114.5897	0	0	0
Comb4-2 Max	331.001	321.6805	1837.8182	26877.8469	-54221.1219	9113.3414	0	0	0
Comb4-2 Min	-331.001	-321.7187	1837.8108	24957.9471	-56156.2578	-9114.5897	0	0	0
Comb1-4 Max	-197.5343	-59.2851	945.7908	13613.2809	-28597.1886	1029.9808	0	0	0
Comb1-4 Min	-197.5343	-59.2851	945.7908	13613.2809	-28597.1886	1029.9808	0	0	0
Comb2-3 Max	197.5345	-59.2889	945.7909	13613.2999	-27379.0495	-4555.9472	0	0	0

Table 4.1 - Base Reactions (continued)

Load Case/Combo	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m	X m	Y m	Z m
Comb2-3 Min	197.5345	-59.2889	945.7909	13613.2999	-27379.0495	-4555.9472	0	0	0
Comb3-3 Max	-197.5345	59.2655	945.7896	13247.6857	-28597.1502	4555.1824	0	0	0
Comb3-3 Min	-197.5345	59.2655	945.7896	13247.6857	-28597.1502	4555.1824	0	0	0
Comb4-3 Max	197.5343	59.2618	945.7897	13247.7047	-27379.0111	-1030.7457	0	0	0
Comb4-3 Min	197.5343	59.2618	945.7897	13247.7047	-27379.0111	-1030.7457	0	0	0
Comb1-5 Max	-59.2601	-197.5955	945.7922	14039.8153	-28170.8847	-5037.8292	0	0	0
Comb1-5 Min	-59.2601	-197.5955	945.7922	14039.8153	-28170.8847	-5037.8292	0	0	0
Comb1-6 Max	103.1744	105.4844	945.7915	13745.4692	-27686.4825	2935.3185	0	0	0
Comb1-6 Min	-103.1745	-105.5078	945.789	13115.5165	-28289.7171	-2936.0834	0	0	0
Comb2-4 Max	-59.2606	197.5733	945.7882	12821.1647	-28170.7567	6712.8427	0	0	0
Comb2-4 Min	-59.2606	197.5733	945.7882	12821.1647	-28170.7567	6712.8427	0	0	0
Comb2-5 Max	103.1744	105.4844	945.7915	13745.4692	-27686.4825	2935.3185	0	0	0
Comb2-5 Min	-103.1745	-105.5078	945.789	13115.5165	-28289.7171	-2936.0834	0	0	0
Comb3-4 Max	59.2606	-197.5967	945.7923	14039.821	-27805.443	-6713.6076	0	0	0
Comb3-4 Min	59.2606	-197.5967	945.7923	14039.821	-27805.443	-6713.6076	0	0	0
Comb3-5 Max	331.001	321.6879	945.7939	14390.4427	-27020.5319	9113.5831	0	0	0
Comb3-5 Min	-331.001	-321.7113	945.7866	12470.5429	-28955.6677	-9114.348	0	0	0

4.2 Modal Results

Table 4.2 - Modal Periods and Frequencies

Case	Mode	Period sec	Frequency cyc/sec	Circular Frequency rad/sec	Eigenvalue rad ² /sec ²
Modal	1	0.072	13.885	87.2441	7611.5266
Modal	2	0.068	14.711	92.431	8543.489
Modal	3	0.063	15.924	100.0535	10010.7095
Modal	4	0.062	16.068	100.9608	10193.0801
Modal	5	0.057	17.68	111.0898	12340.9537
Modal	6	0.055	18.086	113.636	12913.1382

Table 4.3 - Modal Participating Mass Ratios (Part 1 of 2)

Case	Mode	Period sec	UX	UY	UZ	Sum UX	Sum UY	Sum UZ
Modal	1	0.072	0.004	0.728	0	0.004	0.728	0
Modal	2	0.068	0.0022	0.0014	0	0.0062	0.7294	0
Modal	3	0.063	0.634	0.0175	0	0.6402	0.7469	0
Modal	4	0.062	0.1007	0.0124	0	0.7409	0.7593	0
Modal	5	0.057	0.0684	0.0492	0	0.8093	0.8085	0
Modal	6	0.055	0.0284	0.0671	0	0.8376	0.8756	0

Table 4.3 - Modal Participating Mass Ratios (Part 2 of 2)

Case	Mode	RX	RY	RZ	Sum RX	Sum RY	Sum RZ
Modal	1	0.0893	0.0004	0.0622	0.0893	0.0004	0.0622
Modal	2	7.441E-06	0.0002	0.003	0.0893	0.0006	0.0652
Modal	3	0.0002	0.0537	0.0446	0.0895	0.0543	0.1099
Modal	4	0.0083	0.0109	0.6053	0.0978	0.0652	0.7152
Modal	5	9.892E-06	0.0033	0.0437	0.0978	0.0685	0.7589
Modal	6	0.0018	0.0011	0.0958	0.0996	0.0696	0.8547

Table 4.4 - Modal Participation Factors

Case	Mode	Period sec	UX tonf-m	UY tonf-m	UZ tonf-m	RX tonf-m	RY tonf-m	RZ tonf-m	Modal Mass tonf-m-s ²	Modal Stiffness tonf-m
Modal	1	0.072	0.655092	-8.828924	0	3.819969	0.264194	50.788364	1	7611.52663
Modal	2	0.068	-0.487736	0.383396	0	-0.034876	0.167034	11.203001	1	8543.48901
Modal	3	0.063	8.239307	1.367924	0	-0.178197	2.962998	-43.019674	1	10010.70955
Modal	4	0.062	-3.282975	-1.153589	0	1.167073	-1.336051	-158.433052	1	10193.08007
Modal	5	0.057	-2.705661	2.29591	0	-0.04021	-0.73052	42.564756	1	12340.95373
Modal	6	0.055	1.742483	-2.679456	0	0.537639	0.426402	-63.030595	1	12913.13819

Table 4.5 - Modal Load Participation Ratios

Case	Item Type	Item	Static %	Dynamic %
Modal	Acceleration	UX	93.7	83.76
Modal	Acceleration	UY	97.93	87.56
Modal	Acceleration	UZ	0	0

Table 4.6 - Modal Direction Factors

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.072	0.006	0.983	0	0.011
Modal	2	0.068	0.001	0	0	0.998
Modal	3	0.063	0.843	0.022	0	0.135
Modal	4	0.062	0.304	0.046	0	0.651
Modal	5	0.057	0.105	0.075	0	0.82
Modal	6	0.055	0.024	0.058	0	0.918

5 Design Data

This chapter provides design data and results.

5.1 Steel Frame Design

Table 5.1 - Steel Frame Preferences - AISC 360-10

Item	Value
Multi-Response Design	Step-by-Step - All
Frame Type	OMF
Seismic Design Grade	D
Importance Factor	1
Design System Rho	1
Design System Sds	0.5
Design System R	8
Design System Omega0	3
Design System Cd	5.5
Design Provision	LRFD
Analysis Method	Limited 1st Order
Second Order Method	General 2nd Order
Stiffness Reduction Method	Limited 1st Order
Phi (Bending)	0.9
Phi (Compression)	0.9
Phi (Tension-Yielding)	0.9
Phi (Tension-Fracture)	0.75
Phi (Shear)	0.9
Phi (Shear-Short Webbed Rolled I)	1
Phi (Torsion)	0.9
Ignore Seismic Code?	No
Ignore Special Seismic Load?	No
Doubler Plate Plug-Welded?	Yes
HSS Welding Type	ERW
Reduced HSS Thickness	No
Consider Deflection?	Yes
DL Ratio	120
SDL+LL Ratio	120
LL Ratio	360
Total Ratio	120
Total Camber Limit	120
Pattern Live Load Factor	0.75
D/C Ratio Limit	1.1

Table 5.2 - Steel Column Envelope (Part 1 of 2)

Label	Story	Section	Moment Interaction Check	PMM Combo	V22 Ratio	V33 Ratio	Class	Cont. Plate m ²
C5	Story4	PIPE10SCH80	$0.06 = 0.017 + 0.006 + 0.043$	VERTICAL	0.002	0.004	Seismic HD	
C8	Story4	PIPE10SCH80	$0.061 = 0.015 + 0.004 + 0.045$	VERTICAL	0.001	0.004	Seismic HD	
C11	Story4	PIPE10SCH80	$0.033 = 0.014 + 0.011 + 0.016$	Comb4-2	0.001	0.001	Seismic HD	-0.0097
C14	Story4	PIPE10SCH80	$0.102 = 0.031 + 0.061 + 0.036$	VERTICAL	0.006	0.003	Seismic HD	

Table 5.2 - Steel Column Envelope (Part 1 of 2, continued)

Label	Story	Section	Moment Interaction Check	PMM Combo	V22 Ratio	V33 Ratio	Class	Cont. Plate m ²
C17	Story4	PIPE10SCH80	$0.112 = 0.058 + 0.033 + 0.043$	VERTICAL	0.003	0.005	Seismic HD	
C20	Story4	PIPE10SCH80	$0.086 = 0.024 + 0.006 + 0.062$	VERTICAL	0.001	0.005	Seismic HD	
C23	Story4	PIPE10SCH80	$0.087 = 0.025 + 0.036 + 0.05$	VERTICAL	0.004	0.004	Seismic HD	
C26	Story4	PIPE10SCH80	$0.104 = 0.057 + 0.033 + 0.033$	VERTICAL	0.003	0.004	Seismic HD	
C29	Story4	PIPE10SCH80	$0.05 = 0.015 + 0.02 + 0.028$	Comb4-2	0.002	0.002	Seismic HD	-0.0097
C32	Story4	PIPE10SCH80	$0.1 = 0.038 + 0.062 + 0.004$	VERTICAL	0.006	0.001	Seismic HD	
C35	Story4	PIPE10SCH80	$0.044 = 0.018 + 0.015 + 0.021$	VERTICAL	0.002	0.003	Seismic HD	
C38	Story4	PIPE10SCH80	$0.035 = 0.02 + 0.009 + 0.012$	VERTICAL	0.001	0.002	Seismic HD	
C41	Story4	PIPE10SCH80	$0.058 = 0.051 + 0.004 + 0.006$	VERTICAL	0.001	0.001	Seismic HD	
C44	Story4	PIPE10SCH80	$0.1 = 0.028 + 0.017 + 0.07$	VERTICAL	0.002	0.007	Seismic HD	
C47	Story4	PIPE10SCH80	$0.119 = 0.013 + 0.003 + 0.106$	VERTICAL	0.001	0.012	Seismic HD	
C50	Story4	PIPE10SCH80	$0.139 = 0.016 + 0.008 + 0.123$	VERTICAL	0.001	0.011	Seismic HD	
C53	Story4	PIPE10SCH80	$0.074 = 0.011 + 0.028 + 0.056$	VERTICAL	0.003	0.004	Seismic HD	
C56	Story4	PIPE10SCH80	$0.061 = 0.01 + 0.051 + 0.002$	VERTICAL	0.005	0.0003242	Seismic HD	
C59	Story4	PIPE10SCH80	$0.007 = 0.002 + 0.003 + 0.003$	Comb4-2	0	0.0002919	Seismic HD	-0.0097
C4	Story3	PIPE10SCH80	$0.05 = 0.016 + 0.006 + 0.033$	Comb4-2	0.002	0.004	Seismic HD	-0.0097
C7	Story3	PIPE10SCH80	$0.054 = 0.016 + 0.003 + 0.039$	VERTICAL	0.001	0.004	Seismic HD	
C10	Story3	PIPE10SCH80	$0.03 = 0.014 + 0.008 + 0.014$	Comb4-2	0.001	0.002	Seismic HD	-0.0097
C13	Story3	PIPE10SCH80	$0.083 = 0.032 + 0.044 + 0.027$	VERTICAL	0.006	0.004	Seismic HD	
C16	Story3	PIPE10SCH80	$0.091 = 0.058 + 0.022 + 0.024$	VERTICAL	0.003	0.006	Seismic HD	
C19	Story3	PIPE10SCH80	$0.067 = 0.022 + 0.005 + 0.044$	Comb4-2	0.001	0.005	Seismic HD	-0.0097
C22	Story3	PIPE10SCH80	$0.065 = 0.023 + 0.021 + 0.036$	Comb4-2	0.004	0.004	Seismic HD	-0.0097
C25	Story3	PIPE10SCH80	$0.086 = 0.058 + 0.022 + 0.018$	VERTICAL	0.003	0.004	Seismic HD	
C28	Story3	PIPE10SCH80	$0.043 = 0.016 + 0.014 + 0.023$	Comb4-2	0.002	0.003	Seismic HD	-0.0097
C31	Story3	PIPE10SCH80	$0.084 = 0.038 + 0.045 + 0.003$	VERTICAL	0.006	0.001	Seismic HD	
C34	Story3	PIPE10SCH80	$0.041 = 0.018 + 0.014 + 0.019$	VERTICAL	0.003	0.004	Seismic HD	
C37	Story3	PIPE10SCH80	$0.034 = 0.02 + 0.009 + 0.011$	VERTICAL	0.001	0.002	Seismic HD	
C40	Story3	PIPE10SCH80	$0.057 = 0.051 + 0.003 + 0.005$	VERTICAL	0.001	0.001	Seismic HD	
C43	Story3	PIPE10SCH80	$0.08 = 0.028 + 0.012 + 0.05$	VERTICAL	0.002	0.007	Seismic HD	
C46	Story3	PIPE10SCH80	$0.1 = 0.013 + 0.003 + 0.087$	VERTICAL	0.001	0.012	Seismic HD	
C49	Story3	PIPE10SCH80	$0.11 = 0.016 + 0.005 + 0.094$	VERTICAL	0.002	0.011	Seismic HD	
C52	Story3	PIPE10SCH80	$0.055 = 0.011 + 0.018 + 0.04$	VERTICAL	0.003	0.004	Seismic HD	
C55	Story3	PIPE10SCH80	$0.044 = 0.01 + 0.034 + 0.001$	VERTICAL	0.005	0.001	Seismic HD	
C58	Story3	PIPE10SCH80	$0.006 = 0.003 + 0.003 + 0.003$	Comb4-2	0.000409	0.0004787	Seismic HD	-0.0097
C4	Story2	PIPE10SCH80	$0.043 = 0.016 + 0.004 + 0.026$	Comb4-2	0.002	0.004	Seismic HD	-0.0097
C7	Story2	PIPE10SCH80	$0.047 = 0.016 + 0.002 + 0.031$	VERTICAL	0.001	0.005	Seismic HD	
C10	Story2	PIPE10SCH80	$0.027 = 0.014 + 0.006 + 0.011$	Comb4-2	0.001	0.002	Seismic HD	-0.0097
C13	Story2	PIPE10SCH80	$0.07 = 0.032 + 0.033 + 0.021$	VERTICAL	0.006	0.004	Seismic HD	
C16	Story2	PIPE10SCH80	$0.082 = 0.058 + 0.017 + 0.015$	VERTICAL	0.003	0.006	Seismic HD	
C19	Story2	PIPE10SCH80	$0.057 = 0.022 + 0.003 + 0.035$	Comb4-2	0.001	0.005	Seismic HD	-0.0097
C22	Story2	PIPE10SCH80	$0.055 = 0.026 + 0.014 + 0.026$	VERTICAL	0.004	0.005	Seismic HD	
C25	Story2	PIPE10SCH80	$0.079 = 0.058 + 0.017 + 0.012$	VERTICAL	0.003	0.004	Seismic HD	
C28	Story2	PIPE10SCH80	$0.036 = 0.016 + 0.01 + 0.018$	Comb4-2	0.003	0.003	Seismic HD	-0.0097
C31	Story2	PIPE10SCH80	$0.073 = 0.038 + 0.034 + 0.002$	VERTICAL	0.006	0.001	Seismic HD	

Table 5.2 - Steel Column Envelope (Part 1 of 2, continued)

Label	Story	Section	Moment Interaction Check	PMM Combo	V22 Ratio	V33 Ratio	Class	Cont. Plate m ²
C34	Story2	PIPE10SCH80	$0.034 = 0.018 + 0.009 + 0.013$	VERTICAL	0.003	0.004	Seismic HD	
C37	Story2	PIPE10SCH80	$0.031 = 0.02 + 0.008 + 0.008$	VERTICAL	0.001	0.002	Seismic HD	
C40	Story2	PIPE10SCH80	$0.056 = 0.051 + 0.002 + 0.004$	VERTICAL	0.001	0.001	Seismic HD	
C43	Story2	PIPE10SCH80	$0.066 = 0.029 + 0.008 + 0.037$	VERTICAL	0.002	0.007	Seismic HD	
C46	Story2	PIPE10SCH80	$0.079 = 0.013 + 0.002 + 0.066$	VERTICAL	0.002	0.012	Seismic HD	
C49	Story2	PIPE10SCH80	$0.09 = 0.016 + 0.003 + 0.074$	VERTICAL	0.002	0.011	Seismic HD	
C52	Story2	PIPE10SCH80	$0.046 = 0.011 + 0.012 + 0.032$	VERTICAL	0.003	0.004	Seismic HD	
C55	Story2	PIPE10SCH80	$0.035 = 0.01 + 0.025 + 0.001$	VERTICAL	0.005	0.001	Seismic HD	
C58	Story2	PIPE10SCH80	$0.006 = 0.003 + 0.003 + 0.001$	Comb4-2	0.001	0.001	Seismic HD	-0.0097
C4	Story1	PIPE10SCH80	$0.035 = 0.017 + 0.014 + 0.011$	Comb4-2	0.002	0.004	Seismic HD	-0.0097
C7	Story1	PIPE10SCH80	$0.031 = 0.016 + 3.769E-04 + 0.016$	VERTICAL	0.002	0.005	Seismic HD	
C10	Story1	PIPE10SCH80	$0.025 = 0.014 + 0.008 + 0.008$	Comb4-2	0.002	0.002	Seismic HD	-0.0097
C13	Story1	PIPE10SCH80	$0.059 = 0.03 + 0.025 + 0.015$	Comb4-2	0.006	0.004	Seismic HD	-0.0097
C16	Story1	PIPE10SCH80	$0.094 = 0.054 + 0.009 + 0.039$	Comb4-2	0.003	0.006	Seismic HD	-0.0097
C19	Story1	PIPE10SCH80	$0.04 = 0.023 + 0.007 + 0.015$	Comb4-2	0.001	0.006	Seismic HD	-0.0097
C22	Story1	PIPE10SCH80	$0.051 = 0.024 + 0.023 + 0.014$	Comb4-2	0.004	0.005	Seismic HD	-0.0097
C25	Story1	PIPE10SCH80	$0.086 = 0.055 + 0.009 + 0.029$	Comb4-2	0.003	0.005	Seismic HD	-0.0097
C28	Story1	PIPE10SCH80	$0.032 = 0.016 + 0.013 + 0.009$	Comb4-2	0.003	0.003	Seismic HD	-0.0097
C31	Story1	PIPE10SCH80	$0.061 = 0.04 + 0.022 + 0.001$	VERTICAL	0.006	0.001	Seismic HD	
C34	Story1	PIPE10SCH80	$0.043 = 0.017 + 0.015 + 0.021$	Comb4-2	0.003	0.004	Seismic HD	-0.0097
C37	Story1	PIPE10SCH80	$0.034 = 0.019 + 0.009 + 0.011$	Comb4-2	0.001	0.002	Seismic HD	-0.0097
C40	Story1	PIPE10SCH80	$0.057 = 0.046 + 0.008 + 0.006$	Comb4-2	0.001	0.001	Seismic HD	-0.0097
C43	Story1	PIPE10SCH80	$0.061 = 0.027 + 0.013 + 0.032$	Comb4-2	0.002	0.007	Seismic HD	-0.0097
C46	Story1	PIPE10SCH80	$0.052 = 0.013 + 0.002 + 0.038$	VERTICAL	0.002	0.012	Seismic HD	
C49	Story1	PIPE10SCH80	$0.057 = 0.023 + 0.001 + 0.034$	VERTICAL	0.002	0.011	Seismic HD	
C52	Story1	PIPE10SCH80	$0.033 = 0.014 + 0.017 + 0.008$	Comb4-2	0.003	0.004	Seismic HD	-0.0097
C55	Story1	PIPE10SCH80	$0.03 = 0.01 + 0.019 + 0.007$	Comb4-2	0.005	0.001	Seismic HD	-0.0097
C58	Story1	PIPE10SCH80	$0.011 = 0.003 + 0.006 + 0.005$	Comb4-2	0.001	0.001	Seismic HD	-0.0097

Table 5.2 - Steel Column Envelope (Part 2 of 2)

Label	Story	DbL. Plate m	B/C Ratio Major	B/C Ratio Minor
C5	Story4			
C8	Story4			
C11	Story4	-0.27432	0	0
C14	Story4			
C17	Story4			
C20	Story4			
C23	Story4			
C26	Story4			
C29	Story4	-0.27432	0	0
C32	Story4			
C35	Story4			
C38	Story4			

Table 5.2 - Steel Column Envelope (Part 2 of 2, continued)

Label	Story	Dbl. Plate m	B/C Ratio Major	B/C Ratio Minor
C41	Story4			
C44	Story4			
C47	Story4			
C50	Story4			
C53	Story4			
C56	Story4			
C59	Story4	-0.27432	0	0
C4	Story3	-0.27432	0	0
C7	Story3			
C10	Story3	-0.27432	0	0
C13	Story3			
C16	Story3			
C19	Story3	-0.27432	0	0
C22	Story3	-0.27432	0	0
C25	Story3			
C28	Story3	-0.27432	0	0
C31	Story3			
C34	Story3			
C37	Story3			
C40	Story3			
C43	Story3			
C46	Story3			
C49	Story3			
C52	Story3			
C55	Story3			
C58	Story3	-0.27432	0	0
C4	Story2	-0.27432	0	0
C7	Story2			
C10	Story2	-0.27432	0	0
C13	Story2			
C16	Story2			
C19	Story2	-0.27432	0	0
C22	Story2			
C25	Story2			
C28	Story2	-0.27432	0	0
C31	Story2			
C34	Story2			
C37	Story2			
C40	Story2			
C43	Story2			
C46	Story2			
C49	Story2			
C52	Story2			
C55	Story2			

Table 5.2 - Steel Column Envelope (Part 2 of 2, continued)

Label	Story	Dbl. Plate m	B/C Ratio Major	B/C Ratio Minor
C58	Story2	-0.27432	0	0
C4	Story1	-0.27432	0	0
C7	Story1			
C10	Story1	-0.27432	0	0
C13	Story1	-0.27432	0	0
C16	Story1	-0.27432	0	0
C19	Story1	-0.27432	0	0
C22	Story1	-0.27432	0	0
C25	Story1	-0.27432	0	0
C28	Story1	-0.27432	0	0
C31	Story1			
C34	Story1	-0.27432	0	0
C37	Story1	-0.27432	0	0
C40	Story1	-0.27432	0	0
C43	Story1	-0.27432	0	0
C46	Story1			
C49	Story1			
C52	Story1	-0.27432	0	0
C55	Story1	-0.27432	0	0
C58	Story1	-0.27432	0	0

Table 5.3 - Steel Beam Envelope

Label	Story	Section	Moment Interaction Check	PMM Combo	V22 Ratio	V33 Ratio	Class	Conn. V I-End tonf	Conn. V J-End tonf
B1205	Story4	IPE300	$0.022 = 0.003 + 0.001 + 0.017$	VERTICAL	0.001	0.003	Seismic HD	0.0604	0
B1206	Story4	IPE300	$0.207 = 0.003 + 0.201 + 0.004$	VERTICAL	0.045	0.004	Seismic HD	-3.1381	-3.1346
B1207	Story4	IPE300	$0.144 = 0.002 + 0.139 + 0.002$	VERTICAL	0.017	0.0003414	Seismic HD	-1.3248	-1.286
B1208	Story4	IPE300	$0.08 = 0.012 + 0.062 + 0.006$	Comb4-2	0.05	0.001	Seismic HD	0	2.5729
B1209	Story4	IPE300	$0.061 = 0.002 + 0.054 + 0.005$	VERTICAL	0.012	0.002	Seismic HD	-0.0483	0.8773
B1210	Story4	IPE300	$0.143 = 4.717\text{E-}04 + 0.136 + 0.006$	VERTICAL	0.13	0.011	Seismic HD	0	6.8979
B1211	Story4	IPE300	$0.065 = 3.106\text{E-}04 + 0.061 + 0.004$	VERTICAL	0.017	0.001	Seismic HD	0.0712	0
B1212	Story4	IPE300	$0.14 = 0.001 + 0.139 + 0.001$	VERTICAL	0.025	0.0001428	Seismic HD	-1.603	-1.5608
B1213	Story4	IPE300	$0.186 = 1.577\text{E-}04 + 0.181 + 0.005$	VERTICAL	0.025	0.0003554	Seismic HD	1.904	1.9462
B1214	Story4	IPE300	$0.114 = 0.014 + 0.091 + 0.009$	VERTICAL	0.061	0.007	Seismic HD	0	3.8399
B1215	Story4	IPE300	$0.097 = 0 + 0.096 + 0.001$	VERTICAL	0.01	0.001	Seismic HD	0	0.6718
B1216	Story4	IPE300	$0.115 = 0.009 + 0.098 + 0.008$	VERTICAL	0.07	0.002	Seismic HD	0	3.5025
B1217	Story4	IPE300	$0.006 = 1.018\text{E-}04 + 0.006 + 4.935\text{E-}04$	Comb4-2	0.011	0.000276	Seismic HD	0	0.9337
B1218	Story4	IPE300	$0.01 = 0 + 0.009 + 0.001$	VERTICAL	0.008	0.0002044	Seismic HD	-0.7354	0
B1219	Story4	IPE300	$0.024 = 3.005\text{E-}04 + 0.021 + 0.002$	VERTICAL	0.076	0.006	Seismic HD	0	3.6488
B1220	Story4	IPE300	$0.081 = 0.001 + 0.077 + 0.003$	VERTICAL	0.028	0.001	Seismic HD	0	0.5427
B1221	Story4	IPE300	$0.038 = 0.001 + 0.035 + 0.002$	Comb4-2	0.019	0.001	Seismic HD	-1.0742	0
B1222	Story4	IPE300	$0.086 = 3.7\text{E-}04 + 0.083 + 0.003$	VERTICAL	0.024	0.001	Seismic HD	0	1.2782

Table 5.3 - Steel Beam Envelope (continued)

Label	Story	Section	Moment Interaction Check	PMM Combo	V22 Ratio	V33 Ratio	Class	Conn. V I-End tonf	Conn. V J-End tonf
B1223	Story4	IPE300	$0.224 = 0.006 + 0.211 + 0.007$	VERTICAL	0.06	0.008	Seismic HD	0	2.8035
B1224	Story4	IPE300	$0.161 = 0 + 0.155 + 0.006$	VERTICAL	0.025	0.001	Seismic HD	-0.4402	-0.1605
B1225	Story4	IPE300	$0.069 = 0.001 + 0.066 + 0.002$	Comb3	0.035	0.001	Seismic HD	0	2.0877
B1226	Story4	IPE300	$0.264 = 2.791\text{E-}04 + 0.257 + 0.007$	VERTICAL	0.088	0.0002481	Seismic HD	0	4.1595
B1227	Story4	IPE300	$0.227 = 0 + 0.22 + 0.007$	VERTICAL	0.175	0.002	Seismic HD	-8.2265	0.2185
B1228	Story4	IPE300	$0.04 = 0.001 + 0.039 + 0.001$	VERTICAL	0.009	0	Seismic HD	0	0.5042
B1229	Story4	IPE300	$0.125 = 0.001 + 0.118 + 0.006$	VERTICAL	0.127	0.001	Seismic HD	-6.217	1.0445
B1230	Story4	IPE300	$0.034 = 3.237\text{E-}04 + 0.033 + 1.063\text{E-}04$	VERTICAL	0.007	0.0003463	Seismic HD	0	0
B1231	Story4	IPE300	$0.084 = 0.003 + 0.079 + 0.003$	Comb4-2	0.038	0.002	Seismic HD	0.1143	2.8072
B1232	Story4	IPE300	$0.108 = 0.003 + 0.101 + 0.005$	VERTICAL	0.137	0.002	Seismic HD	-7.1106	0
B1233	Story4	IPE300	$0.073 = 0.002 + 0.065 + 0.006$	VERTICAL	0.031	0.001	Seismic HD	-0.0048	0
B1234	Story4	IPE300	$0.032 = 0.004 + 0.028 + 0.001$	Comb4-2	0.014	0.001	Seismic HD	-0.998	0
B1235	Story4	IPE300	$0.291 = 0.007 + 0.273 + 0.01$	VERTICAL	0.098	0.001	Seismic HD	0	5.3552
B1236	Story4	IPE300	$0.02 = 0.002 + 0.015 + 0.003$	Comb4-2	0.005	0.002	Seismic HD	0	0
B1237	Story4	IPE300	$0.136 = 0.004 + 0.128 + 0.004$	VERTICAL	0.035	0.001	Seismic HD	-0.2182	2.1375
B1238	Story4	IPE300	$0.2 = 0.017 + 0.177 + 0.006$	VERTICAL	0.2	0.002	Seismic HD	-9.3093	0
B1239	Story4	IPE300	$0.076 = 0.008 + 0.05 + 0.019$	Comb4-2	0.017	0.011	Seismic HD	0	0.6789
B1240	Story4	IPE300	$0.075 = 0.003 + 0.072 + 4.395\text{E-}04$	VERTICAL	0.025	0.001	Seismic HD	0	1.1547
B1241	Story4	IPE300	$0.085 = 0.002 + 0.079 + 0.003$	VERTICAL	0.043	0.001	Seismic HD	-2.2945	0
B1242	Story4	IPE300	$0.063 = 0.002 + 0.06 + 0.001$	Comb4-2	0.039	0.002	Seismic HD	-3.4909	0.2036
B1243	Story4	IPE300	$0.224 = 2.077\text{E-}04 + 0.219 + 0.005$	VERTICAL	0.031	0.0003991	Seismic HD	0	1.2887
B1244	Story4	IPE300	$0.214 = 0.001 + 0.205 + 0.008$	VERTICAL	0.024	0.001	Seismic HD	0	-1.2054
B1245	Story4	IPE300	$0.128 = 0 + 0.123 + 0.005$	VERTICAL	0.036	0.001	Seismic HD	0.872	0
B1246	Story4	IPE300	$0.072 = 0.003 + 0.065 + 0.004$	VERTICAL	0.116	0.001	Seismic HD	0	6.5319
B1247	Story4	IPE300	$0.225 = 3.751\text{E-}04 + 0.216 + 0.009$	VERTICAL	0.072	0.001	Seismic HD	0	3.5846
B1248	Story4	IPE300	$0.2 = 0.005 + 0.19 + 0.005$	VERTICAL	0.034	0.001	Seismic HD	0.9011	0
B1249	Story4	IPE300	$0.074 = 0 + 0.071 + 0.003$	VERTICAL	0.012	0.0004262	Seismic HD	-0.659	0
B1250	Story4	IPE300	$0.171 = 0.001 + 0.168 + 0.002$	VERTICAL	0.039	0.002	Seismic HD	-1.7829	0
B1251	Story4	IPE300	$0.188 = 0.003 + 0.179 + 0.006$	VERTICAL	0.082	0.002	Seismic HD	-4.9181	0
B1252	Story4	IPE300	$0.224 = 1.945\text{E-}04 + 0.214 + 0.01$	VERTICAL	0.086	0.001	Seismic HD	-4.7933	0
B1253	Story4	IPE300	$0.155 = 0.005 + 0.146 + 0.005$	Comb4-2	0.078	0.003	Seismic HD	0	4.9196
B1254	Story4	IPE300	$0.106 = 0.003 + 0.099 + 0.004$	VERTICAL	0.039	0.0003625	Seismic HD	0	1.8844
B1255	Story4	IPE300	$0.206 = 0 + 0.202 + 0.004$	VERTICAL	0.034	0.0002822	Seismic HD	0.6353	0
B1256	Story4	IPE300	$0.149 = 0.002 + 0.143 + 0.004$	VERTICAL	0.045	0.003	Seismic HD	-2.5689	0
B1257	Story4	IPE300	$0.119 = 0.001 + 0.116 + 0.002$	VERTICAL	0.036	0.001	Seismic HD	0	0
B1258	Story4	IPE300	$0.009 = 0 + 0.008 + 0.001$	VERTICAL	0.004	0.0001619	Seismic HD	0	0
B1259	Story4	IPE300	$0.105 = 0.001 + 0.101 + 0.003$	VERTICAL	0.127	0.0002926	Seismic HD	-6.278	0
B1260	Story4	IPE300	$0.381 = 1.695\text{E-}04 + 0.376 + 0.004$	VERTICAL	0.057	0.001	Seismic HD	-2.5752	0
B1261	Story4	IPE300	$0.199 = 0.004 + 0.188 + 0.008$	VERTICAL	0.073	0.001	Seismic HD	-3.3771	0
B1262	Story4	IPE300	$0.083 = 0.001 + 0.08 + 0.003$	VERTICAL	0.031	0.001	Seismic HD	-1.4538	0

5.2 Shear Wall Design

Table 5.4 - Shear Wall Preferences - ACI 318-14

Item	Value
Rebar Material	A615Gr60
Rebar Shear Material	A615Gr60
Importance Factor	1
System C _d	5.5
Phi (Tension)	0.9
Phi (Compression)	0.65
Phi (Shear and Torsion)	0.75
Phi (Shear Seismic)	0.6
PMax factor	0.8
# Interaction Curves	24
# Interaction Points	11
Edge Design PT-Max	0.06
Edge Design PC-Max	0.04
Section Design IP-Max	0.04
Section Design IP-Min	0.0015
D/C Ratio Limit	0.95

Table 5.5 - Shear Wall Pier Summary - ACI 318-14 (Part 1 of 2)

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Current Reinf %	Pier Leg	Leg X1 m	Leg Y1 m
Story4	1	Top	Uniform	#2	#2	0.25	0.15	0.35	Top Leg 1	0	27.08
Story4	1	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	0	21.42
Story3	1	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	0	21.42
Story3	1	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	0	21.42
Story2	1	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	0	21.42
Story2	1	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	0	21.42
Story1	1	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	0	21.42
Story1	1	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	0	21.42
Story4	2	Top	Uniform	#2	#2	0.25	0.15	0.26	Top Leg 1	0	19.7
Story4	2	Bottom	Uniform	#2	#2	0.25	0.15	0.26	Bottom Leg 1	0	19.7
Story3	2	Top	Uniform	#2	#2	0.25	0.15	0.26	Top Leg 1	0	19.7
Story3	2	Bottom	Uniform	#2	#2	0.25	0.15	0.26	Bottom Leg 1	0	19.7
Story2	2	Top	Uniform	#2	#2	0.25	0.15	0.26	Top Leg 1	0	19.7
Story2	2	Bottom	Uniform	#2	#2	0.25	0.15	0.26	Bottom Leg 1	0	19.7
Story1	2	Top	Uniform	#2	#2	0.25	0.15	0.26	Top Leg 1	0	19.7
Story1	2	Bottom	Uniform	#2	#2	0.25	0.15	0.26	Bottom Leg 1	0	19.7
Story3	3	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	3.58	2.72
Story3	3	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	3.58	2.72
Story2	3	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	3.58	2.72
Story2	3	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	3.58	2.72
Story1	3	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	3.58	2.72
Story1	3	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	3.58	2.72
Story4	4	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	3.58	0
Story4	4	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	3.58	0

Table 5.5 - Shear Wall Pier Summary - ACI 318-14 (Part 1 of 2, continued)

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Current Reinf %	Pier Leg	Leg X1 m	Leg Y1 m
Story3	4	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	3.58	0
Story3	4	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	3.58	0
Story2	4	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	3.58	0
Story2	4	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	3.58	0
Story1	4	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	3.58	0
Story1	4	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	3.58	0
Story4	5	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	8.5	19.7
Story4	5	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	8.5	19.7
Story3	5	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	8.5	19.7
Story3	5	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	8.5	19.7
Story2	5	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	8.5	19.7
Story2	5	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	8.5	19.7
Story1	5	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	8.5	19.7
Story1	5	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	8.5	19.7
Story4	6	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	8.5	26.1
Story4	6	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	8.5	26.1
Story3	6	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	8.5	26.1
Story3	6	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	8.5	26.1
Story2	6	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	8.5	26.1
Story2	6	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	8.5	26.1
Story1	6	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	8.5	26.1
Story1	6	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	8.5	26.1
Story4	7	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	9.7	5.56
Story4	7	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	9.7	5.56
Story3	7	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	9.7	5.56
Story3	7	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	9.7	5.56
Story2	7	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	9.7	5.56
Story2	7	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	9.7	5.56
Story1	7	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	9.7	5.56
Story1	7	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	9.7	5.56
Story4	8	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	9.7	0
Story4	8	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	9.7	0
Story3	8	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	9.7	0
Story3	8	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	9.7	0
Story2	8	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	9.7	0
Story2	8	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	9.7	0
Story1	8	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	9.7	0
Story1	8	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	9.7	0
Story4	9	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	12.9	26.1
Story4	9	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	12.9	26.1
Story3	9	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	12.9	26.1
Story3	9	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	12.9	26.1
Story2	9	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	12.9	26.1
Story2	9	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	12.9	26.1

Table 5.5 - Shear Wall Pier Summary - ACI 318-14 (Part 1 of 2, continued)

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Current Reinf %	Pier Leg	Leg X1 m	Leg Y1 m
Story1	9	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	12.9	26.1
Story1	9	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	12.9	26.1
Story4	10	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	18.96	9.85
Story4	10	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	18.96	9.85
Story3	10	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	18.96	9.85
Story3	10	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	18.96	9.85
Story2	10	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	18.96	9.85
Story2	10	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	18.96	9.85
Story1	10	Top	Uniform	#2	#2	0.25	0.15	0.27	Top Leg 1	18.96	9.85
Story1	10	Bottom	Uniform	#2	#2	0.25	0.15	0.27	Bottom Leg 1	18.96	9.85
Story4	11	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	22	5.56
Story4	11	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	22	5.56
Story3	11	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	22	5.56
Story3	11	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	22	5.56
Story2	11	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	22	5.56
Story2	11	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	22	5.56
Story1	11	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	22	5.56
Story1	11	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	22	5.56
Story4	12	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	41.4	19.7
Story4	12	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	41.4	19.7
Story3	12	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	41.4	19.7
Story3	12	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	41.4	19.7
Story2	12	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	41.4	19.7
Story2	12	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	41.4	19.7
Story1	12	Top	Uniform	#2	#2	0.25	0.15	0.22	Top Leg 1	41.4	19.7
Story1	12	Bottom	Uniform	#2	#2	0.25	0.15	0.22	Bottom Leg 1	41.4	19.7
Story4	13	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	50.03	25.58
Story4	13	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	50.03	25.06
Story3	13	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	50.03	25.06
Story3	13	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	50.03	25.06
Story2	13	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	50.03	25.06
Story2	13	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	50.03	25.06
Story1	13	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	50.03	25.06
Story1	13	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	50.03	25.06
Story4	14	Top	Uniform	#2	#2	0.25	0.15	0.23	Top Leg 1	1.2	0
Story4	14	Bottom	Uniform	#2	#2	0.25	0.15	0.23	Bottom Leg 1	1.2	0
Story3	14	Top	Uniform	#2	#2	0.25	0.15	0.23	Top Leg 1	1.2	0
Story3	14	Bottom	Uniform	#2	#2	0.25	0.15	0.23	Bottom Leg 1	1.2	0
Story2	14	Top	Uniform	#2	#2	0.25	0.15	0.23	Top Leg 1	1.2	0
Story2	14	Bottom	Uniform	#2	#2	0.25	0.15	0.23	Bottom Leg 1	1.2	0
Story1	14	Top	Uniform	#2	#2	0.25	0.15	0.23	Top Leg 1	1.2	0
Story1	14	Bottom	Uniform	#2	#2	0.25	0.15	0.23	Bottom Leg 1	1.2	0
Story4	15	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	8.64	0
Story4	15	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	8.64	0

Table 5.5 - Shear Wall Pier Summary - ACI 318-14 (Part 1 of 2, continued)

Story	Pier Label	Station	Design Type	Edge Rebar	End Rebar	Rebar Spacing m	Required Reinf %	Current Reinf %	Pier Leg	Leg X1 m	Leg Y1 m
Story3	15	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	8.64	0
Story3	15	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	8.64	0
Story2	15	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	8.64	0
Story2	15	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	8.64	0
Story1	15	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	8.64	0
Story1	15	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	8.64	0
Story4	16	Top	Uniform	#2	#2	0.25	0.61	0.5	Top Leg 1	20.22	0
Story4	16	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	20.22	0
Story3	16	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	20.22	0
Story3	16	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	20.22	0
Story2	16	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	20.22	0
Story2	16	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	20.22	0
Story1	16	Top	Uniform	#2	#2	0.25	0.15	0.24	Top Leg 1	20.22	0
Story1	16	Bottom	Uniform	#2	#2	0.25	0.15	0.24	Bottom Leg 1	20.22	0
Story4	17	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	14.1	0
Story4	17	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	14.1	0
Story3	17	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	14.1	0
Story3	17	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	14.1	0
Story2	17	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	14.1	0
Story2	17	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	14.1	0
Story1	17	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	14.1	0
Story1	17	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	14.1	0
Story3	18	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	40	-6.784E-08
Story3	18	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	40	-6.784E-08
Story2	18	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	40	-6.784E-08
Story2	18	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	40	-6.784E-08
Story1	18	Top	Uniform	#2	#2	0.25	0.15	0.25	Top Leg 1	40	-6.784E-08
Story1	18	Bottom	Uniform	#2	#2	0.25	0.15	0.25	Bottom Leg 1	40	-6.784E-08
Story1	19	Top	Uniform	#2	#2	0.25	0.15	0.23	Top Leg 1	35.8	-6.784E-08
Story1	19	Bottom	Uniform	#2	#2	0.25	0.15	0.23	Bottom Leg 1	35.8	-6.784E-08
Story4	20	Top	Uniform	#2	#2	0.25	0.15	0.29	Top Leg 1	23.6	8
Story4	20	Bottom	Uniform	#2	#2	0.25	0.15	0.29	Bottom Leg 1	23.6	8
Story3	20	Top	Uniform	#2	#2	0.25	0.15	0.29	Top Leg 1	23.6	8
Story3	20	Bottom	Uniform	#2	#2	0.25	0.15	0.29	Bottom Leg 1	23.6	8
Story2	20	Top	Uniform	#2	#2	0.25	0.15	0.29	Top Leg 1	23.6	8
Story2	20	Bottom	Uniform	#2	#2	0.25	0.15	0.29	Bottom Leg 1	23.6	8
Story1	20	Top	Uniform	#2	#2	0.25	0.15	0.29	Top Leg 1	23.6	8
Story1	20	Bottom	Uniform	#2	#2	0.25	0.15	0.29	Bottom Leg 1	23.6	8

Table 5.5 - Shear Wall Pier Summary - ACI 318-14 (Part 2 of 2)

Story	Pier Label	Station	Leg X2 m	Leg Y2 m	Shear Rebar m ² /m	Boundary Zone Left m	Boundary Zone Right m	Warnings	Errors
Story4	1	Top	0	27.7	0.0003			No Message	No Message
Story4	1	Bottom	0	27.7	0.0003			No Message	No Message
Story3	1	Top	0	27.7	0.0003			No Message	No Message
Story3	1	Bottom	0	27.7	0.0003			No Message	No Message
Story2	1	Top	0	27.7	0.0003			No Message	No Message
Story2	1	Bottom	0	27.7	0.0003			No Message	No Message
Story1	1	Top	0	27.7	0.0003			No Message	No Message
Story1	1	Bottom	0	27.7	0.0003			No Message	No Message
Story4	2	Top	0	20.52	0.0003			No Message	No Message
Story4	2	Bottom	0	20.52	0.0003			No Message	No Message
Story3	2	Top	0	20.52	0.0003			No Message	No Message
Story3	2	Bottom	0	20.52	0.0003			No Message	No Message
Story2	2	Top	0	20.52	0.0003			No Message	No Message
Story2	2	Bottom	0	20.52	0.0003			No Message	No Message
Story1	2	Top	0	20.52	0.0003			No Message	No Message
Story1	2	Bottom	0	20.52	0.0003			No Message	No Message
Story3	3	Top	3.58	8	0.0003			No Message	No Message
Story3	3	Bottom	3.58	8	0.0003			No Message	No Message
Story2	3	Top	3.58	8	0.0003			No Message	No Message
Story2	3	Bottom	3.58	8	0.0003			No Message	No Message
Story1	3	Top	3.58	8	0.0003			No Message	No Message
Story1	3	Bottom	3.58	8	0.0003			No Message	No Message
Story4	4	Top	3.58	0.8	0.0003			No Message	No Message
Story4	4	Bottom	3.58	0.8	0.0003			No Message	No Message
Story3	4	Top	3.58	0.8	0.0003			No Message	No Message
Story3	4	Bottom	3.58	0.8	0.0003			No Message	No Message
Story2	4	Top	3.58	0.8	0.0003			No Message	No Message
Story2	4	Bottom	3.58	0.8	0.0003			No Message	No Message
Story1	4	Top	3.58	0.8	0.0003			No Message	No Message
Story1	4	Bottom	3.58	0.8	0.0003			No Message	No Message
Story4	5	Top	8.5	22.14	0.0003			No Message	No Message
Story4	5	Bottom	8.5	22.14	0.0003			No Message	No Message
Story3	5	Top	8.5	22.14	0.0003			No Message	No Message
Story3	5	Bottom	8.5	22.14	0.0003			No Message	No Message
Story2	5	Top	8.5	22.14	0.0003			No Message	No Message
Story2	5	Bottom	8.5	22.14	0.0003			No Message	No Message
Story1	5	Top	8.5	22.14	0.0003			No Message	No Message
Story1	5	Bottom	8.5	22.14	0.0003			No Message	No Message
Story4	6	Top	8.5	27.7	0.0003			No Message	No Message
Story4	6	Bottom	8.5	27.7	0.0003			No Message	No Message
Story3	6	Top	8.5	27.7	0.0003			No Message	No Message
Story3	6	Bottom	8.5	27.7	0.0003			No Message	No Message
Story2	6	Top	8.5	27.7	0.0003			No Message	No Message
Story2	6	Bottom	8.5	27.7	0.0003			No Message	No Message

Table 5.5 - Shear Wall Pier Summary - ACI 318-14 (Part 2 of 2, continued)

Story	Pier Label	Station	Leg X2 m	Leg Y2 m	Shear Rebar m ² /m	Boundary Zone Left m	Boundary Zone Right m	Warnings	Errors
Story1	6	Top	8.5	27.7	0.0003			No Message	No Message
Story1	6	Bottom	8.5	27.7	0.0003			No Message	No Message
Story4	7	Top	9.7	8	0.0003			No Message	No Message
Story4	7	Bottom	9.7	8	0.0003			No Message	No Message
Story3	7	Top	9.7	8	0.0003			No Message	No Message
Story3	7	Bottom	9.7	8	0.0003			No Message	No Message
Story2	7	Top	9.7	8	0.0003			No Message	No Message
Story2	7	Bottom	9.7	8	0.0003			No Message	No Message
Story1	7	Top	9.7	8	0.0003			No Message	No Message
Story1	7	Bottom	9.7	8	0.0003			No Message	No Message
Story4	8	Top	9.7	1.6	0.0003			No Message	No Message
Story4	8	Bottom	9.7	1.6	0.0003			No Message	No Message
Story3	8	Top	9.7	1.6	0.0003			No Message	No Message
Story3	8	Bottom	9.7	1.6	0.0003			No Message	No Message
Story2	8	Top	9.7	1.6	0.0003			No Message	No Message
Story2	8	Bottom	9.7	1.6	0.0003			No Message	No Message
Story1	8	Top	9.7	1.6	0.0003			No Message	No Message
Story1	8	Bottom	9.7	1.6	0.0003			No Message	No Message
Story4	9	Top	12.9	27.7	0.0003			No Message	No Message
Story4	9	Bottom	12.9	27.7	0.0003			No Message	No Message
Story3	9	Top	12.9	27.7	0.0003			No Message	No Message
Story3	9	Bottom	12.9	27.7	0.0003			No Message	No Message
Story2	9	Top	12.9	27.7	0.0003			No Message	No Message
Story2	9	Bottom	12.9	27.7	0.0003			No Message	No Message
Story1	9	Top	12.9	27.7	0.0003			No Message	No Message
Story1	9	Bottom	12.9	27.7	0.0003			No Message	No Message
Story4	10	Top	18.96	11.45	0.0003			No Message	No Message
Story4	10	Bottom	18.96	11.45	0.0003			No Message	No Message
Story3	10	Top	18.96	11.45	0.0003			No Message	No Message
Story3	10	Bottom	18.96	11.45	0.0003			No Message	No Message
Story2	10	Top	18.96	11.45	0.0003			No Message	No Message
Story2	10	Bottom	18.96	11.45	0.0003			No Message	No Message
Story1	10	Top	18.96	11.45	0.0003			No Message	No Message
Story1	10	Bottom	18.96	11.45	0.0003			No Message	No Message
Story4	11	Top	22	8	0.0003			No Message	No Message
Story4	11	Bottom	22	8	0.0003			No Message	No Message
Story3	11	Top	22	8	0.0003			No Message	No Message
Story3	11	Bottom	22	8	0.0003			No Message	No Message
Story2	11	Top	22	8	0.0003			No Message	No Message
Story2	11	Bottom	22	8	0.0003			No Message	No Message
Story1	11	Top	22	8	0.0003			No Message	No Message
Story1	11	Bottom	22	8	0.0003			No Message	No Message

Table 5.5 - Shear Wall Pier Summary - ACI 318-14 (Part 2 of 2, continued)

Story	Pier Label	Station	Leg X2 m	Leg Y2 m	Shear Rebar m ² /m	Boundary Zone Left m	Boundary Zone Right m	Warnings	Errors
Story4	12	Top	41.4	27.7	0.0003			No Message	No Message
Story4	12	Bottom	41.4	27.7	0.0003			No Message	No Message
Story3	12	Top	41.4	27.7	0.0003			No Message	No Message
Story3	12	Bottom	41.4	27.7	0.0003			No Message	No Message
Story2	12	Top	41.4	27.7	0.0003			No Message	No Message
Story2	12	Bottom	41.4	27.7	0.0003			No Message	No Message
Story1	12	Top	41.4	27.7	0.0003			No Message	No Message
Story1	12	Bottom	41.4	27.7	0.0003			No Message	No Message
Story4	13	Top	50.03	27.7	0.0003			No Message	No Message
Story4	13	Bottom	50.03	27.7	0.0003			No Message	No Message
Story3	13	Top	50.03	27.7	0.0003			No Message	No Message
Story3	13	Bottom	50.03	27.7	0.0003			No Message	No Message
Story2	13	Top	50.03	27.7	0.0003			No Message	No Message
Story2	13	Bottom	50.03	27.7	0.0003			No Message	No Message
Story1	13	Top	50.03	27.7	0.0003			No Message	No Message
Story1	13	Bottom	50.03	27.7	0.0003			No Message	No Message
Story4	14	Top	4.64	0	0.0003			No Message	No Message
Story4	14	Bottom	4.64	0	0.0003			No Message	No Message
Story3	14	Top	4.64	0	0.0003			No Message	No Message
Story3	14	Bottom	4.64	0	0.0003			No Message	No Message
Story2	14	Top	4.64	0	0.0003			No Message	No Message
Story2	14	Bottom	4.64	0	0.0003			No Message	No Message
Story1	14	Top	4.64	0	0.0003			No Message	No Message
Story1	14	Bottom	4.64	0	0.0003			No Message	No Message
Story4	15	Top	9.7	0	0.0003			No Message	No Message
Story4	15	Bottom	9.7	0	0.0003			No Message	No Message
Story3	15	Top	9.7	0	0.0003			No Message	No Message
Story3	15	Bottom	9.7	0	0.0003			No Message	No Message
Story2	15	Top	9.7	0	0.0003			No Message	No Message
Story2	15	Bottom	9.7	0	0.0003			No Message	No Message
Story1	15	Top	9.7	0	0.0003			No Message	No Message
Story1	15	Bottom	9.7	0	0.0003			No Message	No Message
Story4	16	Top	20.43333	0	0.0003			No Message	No Message
Story4	16	Bottom	23.36	0	0.0003			No Message	No Message
Story3	16	Top	23.36	0	0.0003			No Message	No Message
Story3	16	Bottom	23.36	0	0.0003			No Message	No Message
Story2	16	Top	23.36	0	0.0003			No Message	No Message
Story2	16	Bottom	23.36	0	0.0003			No Message	No Message
Story1	16	Top	23.36	0	0.0003			No Message	No Message
Story1	16	Bottom	23.36	0	0.0003			No Message	No Message
Story4	17	Top	16.02	0	0.0003			No Message	No Message
Story4	17	Bottom	16.02	0	0.0003			No Message	No Message

Table 5.5 - Shear Wall Pier Summary - ACI 318-14 (Part 2 of 2, continued)

Story	Pier Label	Station	Leg X2 m	Leg Y2 m	Shear Rebar m ² /m	Boundary Zone Left m	Boundary Zone Right m	Warnings	Errors
Story3	17	Top	16.02	0	0.0003			No Message	No Message
Story3	17	Bottom	16.02	0	0.0003			No Message	No Message
Story2	17	Top	16.02	0	0.0003			No Message	No Message
Story2	17	Bottom	16.02	0	0.0003			No Message	No Message
Story1	17	Top	16.02	0	0.0003			No Message	No Message
Story1	17	Bottom	16.02	0	0.0003			No Message	No Message
Story3	18	Top	42.38	-6.784E-08	0.0003			No Message	No Message
Story3	18	Bottom	42.38	-6.784E-08	0.0003			No Message	No Message
Story2	18	Top	42.38	-6.784E-08	0.0003			No Message	No Message
Story2	18	Bottom	42.38	-6.784E-08	0.0003			No Message	No Message
Story1	18	Top	42.38	-6.784E-08	0.0003			No Message	No Message
Story1	18	Bottom	42.38	-6.784E-08	0.0003			No Message	No Message
Story1	19	Top	40	0	0.0003			No Message	No Message
Story1	19	Bottom	40	0	0.0003			No Message	No Message
Story4	20	Top	24.72	8	0.0003			No Message	No Message
Story4	20	Bottom	24.72	8	0.0003			No Message	No Message
Story3	20	Top	24.72	8	0.0003			No Message	No Message
Story3	20	Bottom	24.72	8	0.0003			No Message	No Message
Story2	20	Top	24.72	8	0.0003			No Message	No Message
Story2	20	Bottom	24.72	8	0.0003			No Message	No Message
Story1	20	Top	24.72	8	0.0003			No Message	No Message
Story1	20	Bottom	24.72	8	0.0003			No Message	No Message

Table 5.6 - Shear Wall Spandrel Summary - ACI 318-14 (Part 1 of 2)

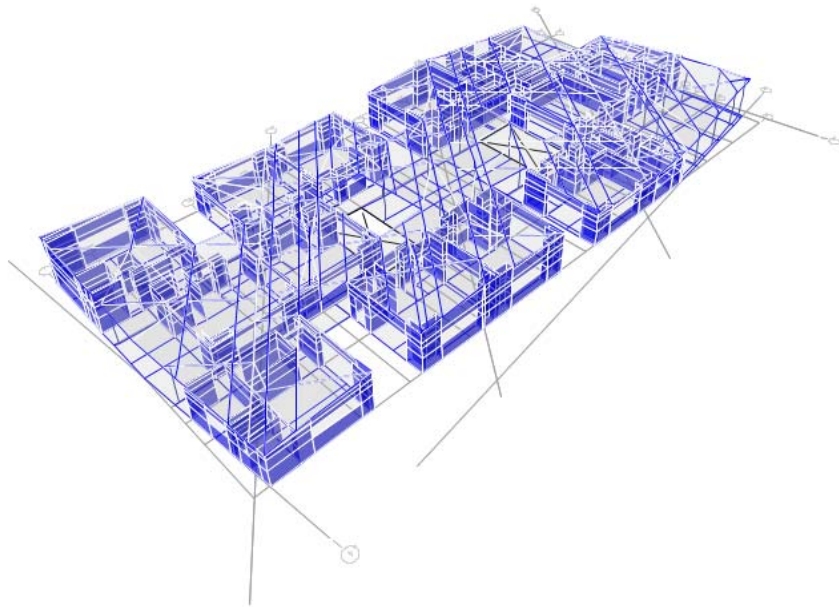
Story	Spandrel Label	Station	Top Rebar m ²	Top Rebar Ratio	Top Rebar Combo	Top Design Moment tonf-m	Bottom Rebar m ²	Bottom Rebar Ratio	Bottom Rebar Combo	Bottom Design Moment tonf-m	Av Vert m ² /m	Av Horz m ² /m
Story3	S1	Left	3.6E-05	0.000191	Comb4-2	-1.4371					0.0003	0.0003
Story3	S1	Right	4E-06	2E-05	Comb3-5	-0.1505	2.6E-05	0.000138	Comb4-2	1.0368	0.0003	0.0003
Story3	S2	Left	5E-06	7.9E-05	Comb3-5	-0.0609	4.4E-05	0.000726	Comb4-2	0.5539	0.0003	0.0003
Story3	S2	Right	5.8E-05	0.000973	Comb4-2	-0.7411	2.8E-05	0.000464	Comb3-5	0.3554	0.0003	0.0003
Story3	S3	Left	0.000148	0.001435	Comb4-2	-3.1962	5.9E-05	0.000573	Comb3-5	1.2885	0.00012	0
Story3	S3	Right	0.000156	0.001517	Comb4-2	-3.3773	3.7E-05	0.000359	Comb3-5	0.8074	0.0001	0
Story3	S4	Left	0.000172	0.001336	Comb4-2	-4.6837	3.6E-05	0.000282	Comb3-5	1.0003	0.0003	0.0003
Story3	S4	Right	5.6E-05	0.000438	Comb3-5	-1.5485	9E-05	0.000694	Comb4-2	2.4495	0.0003	0.0003
Story3	S5	Left	5.3E-05	0.000483	Comb3-5	-1.2264	6.3E-05	0.000578	Comb4-2	1.467	0.0001	0
Story3	S5	Right	0.000149	0.00136	Comb4-2	-3.4248	2.6E-05	0.000237	Comb3-5	0.6036	0.0001	0
Story3	S6	Left	0.000146	0.001614	Comb4-2	-2.7622	5E-05	0.000555	Comb3-5	0.9601	0.0001	0
Story3	S6	Right	8.1E-05	0.000894	Comb4-2	-1.5416	6.9E-05	0.000762	Comb3-5	1.3155	0.0001	0
Story3	S7	Left	6.5E-05	0.000297	Comb3-5	-2.9988	0.000181	0.00083	Comb4-2	8.3283	0.0003	0.0003
Story3	S7	Right	0.000313	0.001437	Comb4-2	-14.337	8E-05	0.00037	Comb3-5	3.7284	0.0003	0.0003
Story3	S8	Left	0.000111	0.000984	Comb4-2	-2.6322	2.1E-05	0.000187	Comb3-5	0.5054	0.0001	0
Story3	S8	Right	8.5E-05	0.000752	Comb4-2	-2.0164	2.8E-05	0.000252	Comb3-5	0.6782	0.0001	0

Table 5.6 - Shear Wall Spandrel Summary - ACI 318-14 (Part 1 of 2, continued)

Story	Spandrel Label	Station	Top Rebar m ²	Top Rebar Ratio	Top Rebar Combo	Top Design Moment tonf-m	Bottom Rebar m ²	Bottom Rebar Ratio	Bottom Rebar Combo	Bottom Design Moment tonf-m	Av Vert m ² /m	Av Horz m ² /m
Story3	S9	Left	6.3E-05	0.000312	Comb4-2	-2.6899	6.3E-05	0.000314	Comb3-5	2.7001	0.0003	0.0003
Story3	S9	Right	9.6E-05	0.000476	Comb4-2	-4.0891	2.9E-05	0.000144	Comb3-5	1.2382	0.0003	0.0003
Story3	S10	Left	4E-05	0.000662	Comb4-2	-0.5059	5E-06	8.9E-05	Comb3-5	0.0684	0.0001	0
Story3	S10	Right	7.3E-05	0.00122	Comb4-2	-0.9263					0.0001	0

Table 5.6 - Shear Wall Spandrel Summary - ACI 318-14 (Part 2 of 2)

Story	Spandrel Label	Station	Shear Combo	Design Shear tonf	Av Diag m ² /m	Diag Shear Combo	Design Shear Diag. tonf	Warnings	Errors
Story3	S1	Left	Comb1-3	3.7368				No Message	No Message
Story3	S1	Right	Comb1-3	3.0822				No Message	No Message
Story3	S2	Left	Comb1-3	1.0411				No Message	No Message
Story3	S2	Right	Comb1-3	1.7482				No Message	No Message
Story3	S3	Left	Comb1-3	6.2015				No Message	No Message
Story3	S3	Right	Comb1-3	4.6657				No Message	No Message
Story3	S4	Left	Comb1-3	6.4085				No Message	No Message
Story3	S4	Right	Comb1-3	2.8933				No Message	No Message
Story3	S5	Left	Comb1-3	2.5158				No Message	No Message
Story3	S5	Right	Comb1-3	4.9142				No Message	No Message
Story3	S6	Left	Comb1-3	4.1173				No Message	No Message
Story3	S6	Right	Comb1-3	2.9065				No Message	No Message
Story3	S7	Left	Comb1-3	7.4767				No Message	No Message
Story3	S7	Right	Comb1-3	13.0905				No Message	No Message
Story3	S8	Left	Comb1-3	4.1288				No Message	No Message
Story3	S8	Right	Comb1-3	3.4487				No Message	No Message
Story3	S9	Left	Comb1-3	4.5281				No Message	No Message
Story3	S9	Right	Comb1-3	5.3869				No Message	No Message
Story3	S10	Left	Comb1-3	1.3351				No Message	No Message
Story3	S10	Right	Comb1-3	2.1462				No Message	No Message



MEMORIA DE CALCULO 2

JARDIN PREDIO FONTANA GRANDE BOGOTA

Model File: CI-6135-I, Revision 0

15/06/2016

Table of Contents

1. Design Data	4
1.1 Concrete Frame Design	4

List of Tables

Table 1.1 Concrete Frame Preferences - ACI 318-11	4
Table 1.2 Concrete Beam Flexure Envelope	4
Table 1.3 Concrete Beam Shear Envelope	52

1 Design Data

This chapter provides design data and results.

1.1 Concrete Frame Design

Table 1.1 - Concrete Frame Preferences - ACI 318-11

Item	Value
Multi-Response Design	Step-by-Step
Seismic Design Category	D
# Interaction Curves	24
# Interaction Points	11
Minimum Eccentricity	Yes
Phi (Tension)	0.9
Phi (Compression Tied)	0.65
Phi (Compression Spiral)	0.7
Phi (Shear and Torsion)	0.85
Phi (Shear Seismic)	0.6
Phi (Shear Joint)	0.85
Pattern Live Load Factor	0.75
D/C Ratio Limit	0.95

Table 1.2 - Concrete Beam Flexure Envelope

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B683	Story4	End-I	VC	-0.1057	Comb4-2	1.9E-05	0.0528	Comb4-2	9E-06
B683	Story4	Middle	VC	-0.0816	VERTICAL	1.4E-05	0.154	VERTICAL	2.7E-05
B683	Story4	End-J	VC	-0.0858	Comb4-2	1.5E-05	0.0429	Comb4-2	8E-06
B684	Story4	End-I	VC	-0.0313	Comb3-5	6E-06	0.0489	Comb4-2	9E-06
B684	Story4	Middle	VC	-0.0875	VERTICAL	1.5E-05	0.1882	VERTICAL	3.3E-05
B684	Story4	End-J	VC	-0.1179	Comb4-2	2.1E-05	0.1623	Comb4-2	2.9E-05
B685	Story4	End-I	VC	-0.023	Comb4-2	4E-06	0.0243	Comb4-2	4E-06
B685	Story4	Middle	VC	-0.023	Comb4-2	4E-06	0.0716	Comb4-2	1.3E-05
B685	Story4	End-J	VC	-0.3289	VERTICAL	5.8E-05	0.046	Comb4-2	8E-06
B686	Story4	End-I	VC	-0.1346	Comb4-2	2.4E-05	0.0673	Comb4-2	1.2E-05
B686	Story4	Middle	VC	-0.0723	Comb4-2	1.3E-05	0.0336	Comb4-2	6E-06
B686	Story4	End-J	VC	-0.0182	Comb4-2	3E-06	0.0091	Comb4-2	2E-06
B687	Story4	End-I	VC	-0.0957	Comb4-2	1.7E-05	0.0478	Comb4-2	8E-06
B687	Story4	Middle	VC	-0.0373	Comb4-2	7E-06	0.0401	VERTICAL	7E-06
B687	Story4	End-J	VC	-0.1223	Comb4-2	2.2E-05	0.0611	Comb4-2	1.1E-05
B688	Story4	End-I	VC	-0.1607	Comb4-2	2.8E-05	0.0945	Comb4-2	1.7E-05
B688	Story4	Middle	VC	-0.0494	Comb4-2	9E-06	0.1668	VERTICAL	2.9E-05
B688	Story4	End-J	VC	-0.0494	Comb4-2	9E-06	0.1976	Comb4-2	3.5E-05
B689	Story4	End-I	VC	-0.1373	Comb4-2	2.4E-05	0.0686	Comb4-2	1.2E-05
B689	Story4	Middle	VC	-0.0638	Comb4-2	1.1E-05	0.0977	Comb4-2	1.7E-05
B689	Story4	End-J	VC	-0.1852	Comb4-2	3.3E-05	0.0926	Comb4-2	1.6E-05
B690	Story4	End-I	VC	-0.5721	Comb4-2	0.000102	0.286	Comb4-2	5.1E-05
B690	Story4	Middle	VC	-0.1725	Comb4-2	3E-05	0.5065	VERTICAL	9E-05
B690	Story4	End-J	VC	-0.6899	Comb4-2	0.000124	0.345	Comb4-2	6.1E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B691	Story4	End-I	VC	-0.3614	Comb4-2	6.4E-05	0.1807	Comb4-2	3.2E-05
B691	Story4	Middle	VC	-0.0903	Comb4-2	1.6E-05	0.0903	Comb4-2	1.6E-05
B691	Story4	End-J	VC	-0.0348	Comb4-2	6E-06	0.0174	Comb4-2	3E-06
B692	Story4	End-I	VC	-0.0303	Comb4-2	5E-06	0.0277	Comb4-2	5E-06
B692	Story4	Middle	VC	-0.0392	Comb4-2	7E-06	0.0122	Comb4-2	2E-06
B692	Story4	End-J	VC	-0.0289	Comb4-2	5E-06	0.0144	Comb4-2	3E-06
B693	Story4	End-I	VC	-0.0311	Comb4-2	5E-06	0.0155	Comb4-2	3E-06
B693	Story4	Middle	VC	-0.1059	Comb4-2	1.9E-05	0.0527	Comb4-2	9E-06
B693	Story4	End-J	VC	-0.2107	Comb4-2	3.7E-05	0.1054	Comb4-2	1.9E-05
B694	Story4	End-I	VC	-0.1389	Comb4-2	2.4E-05	0.0694	Comb4-2	1.2E-05
B694	Story4	Middle	VC	-0.0676	Comb4-2	1.2E-05	0.1783	VERTICAL	3.1E-05
B694	Story4	End-J	VC	-0.16	Comb4-2	2.8E-05	0.2198	Comb4-2	3.9E-05
B695	Story4	End-I	VC	-0.0739	Comb4-2	1.3E-05	0.0529	Comb3-5	9E-06
B695	Story4	Middle	VC	-0.1492	Comb4-2	2.6E-05	0.1742	Comb4-2	3.1E-05
B695	Story4	End-J	VC	-0.229	VERTICAL	4.1E-05	0.1145	VERTICAL	2E-05
B696	Story4	End-I	VC	-0.0133	Comb4-2	2E-06	0.0066	Comb4-2	1E-06
B696	Story4	Middle	VC	-0.0523	VERTICAL	9E-06	0.0256	VERTICAL	4E-06
B696	Story4	End-J	VC	-0.1024	VERTICAL	1.8E-05	0.0512	VERTICAL	9E-06
B697	Story4	End-I	VC	-0.1616	Comb4-2	2.9E-05	0.0808	Comb4-2	1.4E-05
B697	Story4	Middle	VC	-0.2599	VERTICAL	4.6E-05	0.3811	VERTICAL	6.8E-05
B697	Story4	End-J	VC	-0.0404	Comb4-2	7E-06	0.0404	Comb4-2	7E-06
B698	Story4	End-I	VC	-0.1074	Comb4-2	1.9E-05	0.0375	Comb4-2	7E-06
B698	Story4	Middle	VC	-0.0308	Comb4-2	5E-06	0.2979	VERTICAL	5.3E-05
B698	Story4	End-J	VC	-0.1138	Comb4-2	2E-05	0.1399	Comb4-2	2.5E-05
B699	Story4	End-I	VC	-0.1218	VERTICAL	2.1E-05	0.0609	VERTICAL	1.1E-05
B699	Story4	Middle	VC	-0.0502	Comb4-2	9E-06	0.0334	Comb4-2	6E-06
B699	Story4	End-J	VC	-0.1337	Comb4-2	2.4E-05	0.0669	Comb4-2	1.2E-05
B700	Story4	End-I	VC	-0.1288	VERTICAL	2.3E-05	0.0644	VERTICAL	1.1E-05
B700	Story4	Middle	VC	-0.1285	VERTICAL	2.3E-05	0.0322	VERTICAL	6E-06
B700	Story4	End-J	VC	-0.1284	VERTICAL	2.3E-05	0.0642	VERTICAL	1.1E-05
B701	Story4	End-I	VC	0	Comb3-5	0	0.1599	Comb4-2	2.8E-05
B701	Story4	Middle	VC	-0.04	Comb4-2	7E-06	0.0798	VERTICAL	1.4E-05
B701	Story4	End-J	VC	-0.0119	Comb3-5	2E-06	0.0303	Comb4-2	5E-06
B702	Story4	End-I	VC	-0.1469	Comb4-2	2.6E-05	0.0735	Comb4-2	1.3E-05
B702	Story4	Middle	VC	-0.0367	Comb4-2	6E-06	0.0962	Comb4-2	1.7E-05
B702	Story4	End-J	VC	-0.0367	Comb4-2	6E-06	0.1314	VERTICAL	2.3E-05
B703	Story4	End-I	VC	-0.1867	VERTICAL	3.3E-05	0.0933	VERTICAL	1.6E-05
B703	Story4	Middle	VC	-0.1505	VERTICAL	2.7E-05	0.0467	VERTICAL	8E-06
B703	Story4	End-J	VC	-0.0467	VERTICAL	8E-06	0.0467	VERTICAL	8E-06
B704	Story4	End-I	VC	0	Comb3-5	0	0.1179	VERTICAL	2.1E-05
B704	Story4	Middle	VC	-0.1813	Comb4-2	3.2E-05	0.0528	VERTICAL	9E-06
B704	Story4	End-J	VC	-0.081	Comb4-2	1.4E-05	0.1358	Comb4-2	2.4E-05
B705	Story4	End-I	VC	-0.0835	Comb4-2	1.5E-05	0.0417	Comb4-2	7E-06
B705	Story4	Middle	VC	-0.055	Comb4-2	1E-05	0.0251	Comb3-5	4E-06
B705	Story4	End-J	VC	-0.034	Comb4-2	6E-06	0.017	Comb4-2	3E-06

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B706	Story4	End-I	VC	-0.0384	Comb4-2	7E-06	0.0192	Comb4-2	3E-06
B706	Story4	Middle	VC	-0.0178	Comb3-5	3E-06	0.0216	Comb4-2	4E-06
B706	Story4	End-J	VC	-0.0529	Comb4-2	9E-06	0.1036	VERTICAL	1.8E-05
B707	Story4	End-I	VC	-0.0431	Comb4-2	8E-06	0.0215	Comb4-2	4E-06
B707	Story4	Middle	VC	-0.1399	VERTICAL	2.5E-05	0.1397	VERTICAL	2.5E-05
B707	Story4	End-J	VC	-0.5587	VERTICAL	0.0001	0.2794	VERTICAL	4.9E-05
B708	Story4	End-I	VC	-0.1354	Comb4-2	2.4E-05	0.0873	Comb4-2	1.5E-05
B708	Story4	Middle	VC	-0.0873	Comb4-2	1.5E-05	0.1034	VERTICAL	1.8E-05
B708	Story4	End-J	VC	-0.3493	Comb4-2	6.2E-05	0.1747	Comb4-2	3.1E-05
B709	Story4	End-I	VC	-0.0379	Comb4-2	7E-06	0.0983	Comb4-2	1.7E-05
B709	Story4	Middle	VC	-0.1865	VERTICAL	3.3E-05	0.3328	VERTICAL	5.9E-05
B709	Story4	End-J	VC	-0.1313	Comb4-2	2.3E-05	0.142	Comb4-2	2.5E-05
B710	Story4	End-I	VC	-0.2905	Comb4-2	5.1E-05	0.1453	Comb4-2	2.6E-05
B710	Story4	Middle	VC	-0.0726	Comb4-2	1.3E-05	0.0726	Comb4-2	1.3E-05
B710	Story4	End-J	VC	-0.0394	Comb4-2	7E-06	0.0268	Comb3-5	5E-06
B711	Story4	End-I	VC	-0.1888	VERTICAL	3.3E-05	0.0944	VERTICAL	1.7E-05
B711	Story4	Middle	VC	-0.1193	VERTICAL	2.1E-05	0.0472	VERTICAL	8E-06
B711	Story4	End-J	VC	-0.0645	Comb4-2	1.1E-05	0.0323	Comb4-2	6E-06
B712	Story4	End-I	VC	-0.0661	Comb4-2	1.2E-05	0.0331	Comb4-2	6E-06
B712	Story4	Middle	VC	-0.1027	VERTICAL	1.8E-05	0.031	VERTICAL	5E-06
B712	Story4	End-J	VC	-0.1563	VERTICAL	2.8E-05	0.2511	VERTICAL	4.4E-05
B713	Story4	End-I	VC	-0.0338	Comb4-2	6E-06	0.0273	Comb4-2	5E-06
B713	Story4	Middle	VC	-0.1736	VERTICAL	3.1E-05	0.4052	VERTICAL	7.2E-05
B713	Story4	End-J	VC	-0.1056	Comb4-2	1.9E-05	0.0528	Comb4-2	9E-06
B714	Story4	End-I	VC	-0.0955	Comb4-2	1.7E-05	0.1027	VERTICAL	1.8E-05
B714	Story4	Middle	VC	-0.0624	VERTICAL	1.1E-05	0.0624	VERTICAL	1.1E-05
B714	Story4	End-J	VC	-0.2495	VERTICAL	4.4E-05	0.1247	VERTICAL	2.2E-05
B715	Story4	End-I	VC	-0.1595	Comb4-2	2.8E-05	0.0798	Comb4-2	1.4E-05
B715	Story4	Middle	VC	-0.0659	Comb4-2	1.2E-05	0.0601	Comb4-2	1.1E-05
B715	Story4	End-J	VC	0	Comb3-5	0	0.1731	VERTICAL	3.1E-05
B716	Story4	End-I	VC	-0.2492	Comb4-2	4.4E-05	0.1327	Comb3-5	2.3E-05
B716	Story4	Middle	VC	-0.0714	Comb4-2	1.3E-05	0.1647	Comb4-2	2.9E-05
B716	Story4	End-J	VC	-0.2856	Comb4-2	5.1E-05	0.1428	Comb4-2	2.5E-05
B717	Story4	End-I	VC	-0.1061	Comb4-2	1.9E-05	0.058	Comb4-2	1E-05
B717	Story4	Middle	VC	-0.0453	VERTICAL	8E-06	0.0797	VERTICAL	1.4E-05
B717	Story4	End-J	VC	-0.0601	Comb4-2	1.1E-05	0.03	Comb4-2	5E-06
B718	Story4	End-I	VC	-0.2243	Comb4-2	4E-05	0.1122	Comb4-2	2E-05
B718	Story4	Middle	VC	-0.0561	Comb4-2	1E-05	0.131	Comb4-2	2.3E-05
B718	Story4	End-J	VC	-0.1499	Comb4-2	2.6E-05	0.075	Comb4-2	1.3E-05
B721	Story4	End-I	VC	0	Comb3-5	0	0.0547	VERTICAL	1E-05
B721	Story4	Middle	VC	-0.0252	Comb4-2	4E-06	0.0137	VERTICAL	2E-06
B721	Story4	End-J	VC	-0.0137	VERTICAL	2E-06	0.0332	Comb4-2	6E-06
B723	Story4	End-I	VC	-0.1154	VERTICAL	2E-05	0.1395	VERTICAL	2.5E-05
B723	Story4	Middle	VC	-0.0187	VERTICAL	3E-06	0.0187	VERTICAL	3E-06
B723	Story4	End-J	VC	-0.0187	VERTICAL	3E-06	0.0318	Comb4-2	6E-06

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B724	Story4	End-I	VC	-0.03	VERTICAL	5E-06	0.0511	Comb4-2	9E-06
B724	Story4	Middle	VC	-0.03	VERTICAL	5E-06	0.03	VERTICAL	5E-06
B724	Story4	End-J	VC	-0.12	VERTICAL	2.1E-05	0.06	VERTICAL	1.1E-05
B725	Story4	End-I	VC	-0.2655	Comb4-2	4.7E-05	0.3537	VERTICAL	6.3E-05
B725	Story4	Middle	VC	-0.1328	VERTICAL	2.3E-05	0.0884	VERTICAL	1.6E-05
B725	Story4	End-J	VC	-0.0375	Comb4-2	7E-06	0.0188	Comb4-2	3E-06
B726	Story4	End-I	VC	-0.0553	VERTICAL	1E-05	0.1205	VERTICAL	2.1E-05
B726	Story4	Middle	VC	-0.0156	Comb4-2	3E-06	0.0453	VERTICAL	8E-06
B726	Story4	End-J	VC	-0.1124	Comb4-2	2E-05	0.0297	Comb4-2	5E-06
B727	Story4	End-I	VC	-0.0301	Comb4-2	5E-06	0.023	Comb4-2	4E-06
B727	Story4	Middle	VC	-0.0383	Comb4-2	7E-06	0.0345	VERTICAL	6E-06
B727	Story4	End-J	VC	0	Comb3-5	0	0.0626	Comb4-2	1.1E-05
B729	Story4	End-I	VC	-0.4329	Comb4-2	7.7E-05	0.2164	Comb4-2	3.8E-05
B729	Story4	Middle	VC	-0.128	VERTICAL	2.3E-05	0.4021	VERTICAL	7.2E-05
B729	Story4	End-J	VC	-0.5121	VERTICAL	9.1E-05	0.2561	VERTICAL	4.5E-05
B730	Story4	End-I	VC	-0.2052	Comb4-2	3.6E-05	0.1026	Comb4-2	1.8E-05
B730	Story4	Middle	VC	-0.0513	Comb4-2	9E-06	0.2106	VERTICAL	3.7E-05
B730	Story4	End-J	VC	-0.0513	Comb4-2	9E-06	0.1314	Comb4-2	2.3E-05
B731	Story4	End-I	VC	-0.0348	Comb4-2	6E-06	0.0174	Comb4-2	3E-06
B731	Story4	Middle	VC	-0.0145	Comb4-2	3E-06	0.0087	Comb4-2	2E-06
B731	Story4	End-J	VC	-0.0122	Comb4-2	2E-06	0.0061	Comb4-2	1E-06
B732	Story4	End-I	VC	-0.2144	VERTICAL	3.8E-05	0.2517	Comb4-2	4.5E-05
B732	Story4	Middle	VC	-0.2144	VERTICAL	3.8E-05	0.2542	Comb4-2	4.5E-05
B732	Story4	End-J	VC	-0.8575	VERTICAL	0.000155	0.4287	VERTICAL	7.6E-05
B733	Story4	End-I	VC	-0.2862	VERTICAL	5.1E-05	0.2862	VERTICAL	5.1E-05
B733	Story4	Middle	VC	-0.2862	VERTICAL	5.1E-05	0.5346	VERTICAL	9.5E-05
B733	Story4	End-J	VC	-1.0453	Comb4-2	0.000167	0.5725	VERTICAL	0.000102
B734	Story4	End-I	VC	-0.4551	VERTICAL	8.1E-05	0.2275	VERTICAL	4E-05
B734	Story4	Middle	VC	-0.2016	VERTICAL	3.6E-05	0.6483	VERTICAL	0.000116
B734	Story4	End-J	VC	-0.8062	VERTICAL	0.000145	0.4031	VERTICAL	7.2E-05
B735	Story4	End-I	VC	-0.3267	VERTICAL	5.8E-05	0.1633	VERTICAL	2.9E-05
B735	Story4	Middle	VC	-0.0817	VERTICAL	1.4E-05	0.1	VERTICAL	1.8E-05
B735	Story4	End-J	VC	-0.0817	VERTICAL	1.4E-05	0.1362	VERTICAL	2.4E-05
B736	Story4	End-I	VC	-0.0065	Comb3-5	1E-06	0.0394	Comb4-2	7E-06
B736	Story4	Middle	VC	-0.0099	Comb4-2	2E-06	0.0195	Comb4-2	3E-06
B736	Story4	End-J	VC	-0.0192	Comb4-2	3E-06	0.0096	Comb4-2	2E-06
B737	Story4	End-I	VC	-0.1468	VERTICAL	2.6E-05	0.0734	VERTICAL	1.3E-05
B737	Story4	Middle	VC	-0.1464	VERTICAL	2.6E-05	0.0367	VERTICAL	6E-06
B737	Story4	End-J	VC	-0.1461	VERTICAL	2.6E-05	0.073	VERTICAL	1.3E-05
B738	Story4	End-I	VC	-0.0173	Comb4-2	3E-06	0.0308	Comb4-2	5E-06
B738	Story4	Middle	VC	-0.0173	Comb4-2	3E-06	0.0445	Comb4-2	8E-06
B738	Story4	End-J	VC	0	Comb3-5	0	0.0693	Comb4-2	1.2E-05
B739	Story4	End-I	VC	-0.3042	VERTICAL	5.4E-05	0.2918	VERTICAL	5.2E-05
B739	Story4	Middle	VC	-0.0514	Comb4-2	9E-06	0.2281	VERTICAL	4E-05
B739	Story4	End-J	VC	-0.1244	Comb4-2	2.2E-05	0.1925	VERTICAL	3.4E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B740	Story4	End-I	VC	-0.0973	VERTICAL	1.7E-05	0.0487	VERTICAL	9E-06
B740	Story4	Middle	VC	-0.0533	Comb4-2	9E-06	0.0247	Comb4-2	4E-06
B740	Story4	End-J	VC	-0.0989	Comb4-2	1.7E-05	0.0495	Comb4-2	9E-06
B741	Story4	End-I	VC	-0.0018	Comb3-5	3.191E-07	0.0065	Comb4-2	1E-06
B741	Story4	Middle	VC	-0.0288	Comb4-2	5E-06	0.0314	Comb4-2	6E-06
B741	Story4	End-J	VC	-0.0633	Comb4-2	1.1E-05	0.0381	Comb3-5	7E-06
B742	Story4	End-I	VC	-0.0518	Comb4-2	9E-06	0.105	Comb4-2	1.8E-05
B742	Story4	Middle	VC	-0.0194	Comb4-2	3E-06	0.0809	VERTICAL	1.4E-05
B742	Story4	End-J	VC	-0.0775	Comb4-2	1.4E-05	0.0388	Comb4-2	7E-06
B743	Story4	End-I	VC	-0.0513	Comb4-2	9E-06	0.0257	Comb4-2	5E-06
B743	Story4	Middle	VC	-0.0319	Comb4-2	6E-06	0.0502	Comb4-2	9E-06
B743	Story4	End-J	VC	-0.0302	Comb3-5	5E-06	0.1275	Comb4-2	2.2E-05
B744	Story4	End-I	VC	-0.1078	Comb4-2	1.9E-05	0.1078	Comb4-2	1.9E-05
B744	Story4	Middle	VC	-0.1078	Comb4-2	1.9E-05	0.1078	Comb4-2	1.9E-05
B744	Story4	End-J	VC	-0.4312	Comb4-2	7.7E-05	0.2156	Comb4-2	3.8E-05
B745	Story4	End-I	VC	0	Comb3-5	0	0.126	VERTICAL	2.2E-05
B745	Story4	Middle	VC	-0.1146	Comb4-2	2E-05	0.1895	VERTICAL	3.3E-05
B745	Story4	End-J	VC	-0.1047	Comb4-2	1.8E-05	0.1577	Comb4-2	2.8E-05
B746	Story4	End-I	VC	-0.6332	Comb4-2	0.000113	0.3166	Comb4-2	5.6E-05
B746	Story4	Middle	VC	-0.1583	Comb4-2	2.8E-05	0.5824	VERTICAL	0.000104
B746	Story4	End-J	VC	-0.5675	Comb4-2	0.000101	0.2838	Comb4-2	5E-05
B747	Story4	End-I	VC	-0.1786	Comb4-2	3.2E-05	0.0893	Comb4-2	1.6E-05
B747	Story4	Middle	VC	-0.0447	Comb4-2	8E-06	0.0447	Comb4-2	8E-06
B747	Story4	End-J	VC	-0.025	Comb3-5	4E-06	0.0494	Comb4-2	9E-06
B748	Story4	End-I	VC	-0.0482	Comb4-2	8E-06	0.0582	Comb4-2	1E-05
B748	Story4	Middle	VC	-0.0355	Comb4-2	6E-06	0.0759	Comb4-2	1.3E-05
B748	Story4	End-J	VC	-0.0944	Comb4-2	1.7E-05	0.0535	Comb4-2	9E-06
B749	Story4	End-I	VC	-0.0608	Comb4-2	1.1E-05	0.0304	Comb4-2	5E-06
B749	Story4	Middle	VC	-0.0267	Comb3-5	5E-06	0.023	Comb4-2	4E-06
B749	Story4	End-J	VC	-0.0524	Comb4-2	9E-06	0.0262	Comb4-2	5E-06
B750	Story4	End-I	VC	-0.0867	Comb4-2	1.5E-05	0.0305	Comb4-2	5E-06
B750	Story4	Middle	VC	-0.0152	Comb4-2	3E-06	0.0152	Comb4-2	3E-06
B750	Story4	End-J	VC	-0.0217	Comb4-2	4E-06	0.0108	Comb4-2	2E-06
B751	Story4	End-I	VC	-0.0223	Comb4-2	4E-06	0.0111	Comb4-2	2E-06
B751	Story4	Middle	VC	-0.0962	Comb4-2	1.7E-05	0.0321	Comb4-2	6E-06
B751	Story4	End-J	VC	-0.1282	Comb4-2	2.3E-05	0.0641	Comb4-2	1.1E-05
B752	Story4	End-I	VC	-0.0404	Comb4-2	7E-06	0.0202	Comb4-2	4E-06
B752	Story4	Middle	VC	-0.159	VERTICAL	2.8E-05	0.0402	VERTICAL	7E-06
B752	Story4	End-J	VC	-0.1612	VERTICAL	2.8E-05	0.0804	VERTICAL	1.4E-05
B753	Story4	End-I	VC	-0.1409	VERTICAL	2.5E-05	0.0705	VERTICAL	1.2E-05
B753	Story4	Middle	VC	-0.1491	VERTICAL	2.6E-05	0.0715	VERTICAL	1.3E-05
B753	Story4	End-J	VC	-0.2861	VERTICAL	5.1E-05	0.1431	VERTICAL	2.5E-05
B754	Story4	End-I	VC	-0.0955	VERTICAL	1.7E-05	0.2466	VERTICAL	4.4E-05
B754	Story4	Middle	VC	-0.2301	VERTICAL	4.1E-05	0.2369	VERTICAL	4.2E-05
B754	Story4	End-J	VC	-0.1619	Comb4-2	2.9E-05	0.081	Comb4-2	1.4E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B755	Story4	End-I	VC	-0.0837	Comb4-2	1.5E-05	0.0418	Comb4-2	7E-06
B755	Story4	Middle	VC	-0.0738	VERTICAL	1.3E-05	0.0209	Comb4-2	4E-06
B755	Story4	End-J	VC	-0.0671	VERTICAL	1.2E-05	0.0336	VERTICAL	6E-06
B756	Story4	End-I	VC	-0.0957	Comb4-2	1.7E-05	0.0479	Comb4-2	8E-06
B756	Story4	Middle	VC	-0.0786	Comb4-2	1.4E-05	0.1143	Comb4-2	2E-05
B756	Story4	End-J	VC	-0.0326	Comb4-2	6E-06	0.0163	Comb4-2	3E-06
B757	Story4	End-I	VC	-0.0256	Comb3-5	4E-06	0.0471	Comb4-2	8E-06
B757	Story4	Middle	VC	-0.0461	Comb4-2	8E-06	0.0172	Comb4-2	3E-06
B757	Story4	End-J	VC	-0.0637	Comb4-2	1.1E-05	0.0319	Comb4-2	6E-06
B758	Story4	End-I	VC	-0.1069	Comb4-2	1.9E-05	0.0534	Comb4-2	9E-06
B758	Story4	Middle	VC	-0.0299	Comb4-2	5E-06	0.0796	Comb4-2	1.4E-05
B758	Story4	End-J	VC	-0.0658	Comb4-2	1.2E-05	0.0827	Comb4-2	1.5E-05
B759	Story4	End-I	VC	-0.0674	Comb4-2	1.2E-05	0.0347	Comb4-2	6E-06
B759	Story4	Middle	VC	-0.1072	VERTICAL	1.9E-05	0.1212	Comb4-2	2.1E-05
B759	Story4	End-J	VC	-0.1386	Comb4-2	2.4E-05	0.0693	Comb4-2	1.2E-05
B760	Story4	End-I	VC	-0.0735	Comb4-2	1.3E-05	0.0368	Comb4-2	6E-06
B760	Story4	Middle	VC	-0.0424	Comb4-2	7E-06	0.0184	Comb4-2	3E-06
B760	Story4	End-J	VC	-0.0203	Comb3-5	4E-06	0.0102	Comb3-5	2E-06
B761	Story4	End-I	VC	-0.1781	Comb4-2	3.1E-05	0.0891	Comb4-2	1.6E-05
B761	Story4	Middle	VC	-0.0445	Comb4-2	8E-06	0.0445	Comb4-2	8E-06
B761	Story4	End-J	VC	-0.11	Comb4-2	1.9E-05	0.055	Comb4-2	1E-05
B762	Story4	End-I	VC	-0.1041	Comb4-2	1.8E-05	0.129	Comb4-2	2.3E-05
B762	Story4	Middle	VC	-0.0831	Comb4-2	1.5E-05	0.0177	Comb3-5	3E-06
B762	Story4	End-J	VC	-0.0408	Comb4-2	7E-06	0.0204	Comb4-2	4E-06
B763	Story4	End-I	VC	-0.1692	Comb4-2	3E-05	0.0846	Comb4-2	1.5E-05
B763	Story4	Middle	VC	-0.0494	Comb4-2	9E-06	0.0494	Comb4-2	9E-06
B763	Story4	End-J	VC	-0.1975	Comb4-2	3.5E-05	0.0987	Comb4-2	1.7E-05
B764	Story4	End-I	VC	-0.1357	Comb4-2	2.4E-05	0.1339	Comb4-2	2.4E-05
B764	Story4	Middle	VC	-0.0997	Comb4-2	1.8E-05	0.2793	VERTICAL	4.9E-05
B764	Story4	End-J	VC	-0.0518	Comb4-2	9E-06	0.207	Comb4-2	3.7E-05
B765	Story4	End-I	VC	-0.0929	Comb4-2	1.6E-05	0.0465	Comb4-2	8E-06
B765	Story4	Middle	VC	-0.0689	Comb4-2	1.2E-05	0.0689	Comb4-2	1.2E-05
B765	Story4	End-J	VC	-0.2754	Comb4-2	4.9E-05	0.1377	Comb4-2	2.4E-05
B766	Story4	End-I	VC	-0.0892	Comb4-2	1.6E-05	0.1191	VERTICAL	2.1E-05
B766	Story4	Middle	VC	-0.0651	VERTICAL	1.1E-05	0.1714	VERTICAL	3E-05
B766	Story4	End-J	VC	-0.0905	Comb4-2	1.6E-05	0.1616	VERTICAL	2.9E-05
B767	Story4	End-I	VC	-0.0524	Comb4-2	9E-06	0.0262	Comb4-2	5E-06
B767	Story4	Middle	VC	-0.0156	Comb4-2	3E-06	0.0131	Comb4-2	2E-06
B767	Story4	End-J	VC	-0.0233	VERTICAL-1	4E-06	0.0116	VERTICAL-1	2E-06
B768	Story4	End-I	VC	-0.088	VERTICAL	1.5E-05	0.088	VERTICAL	1.5E-05
B768	Story4	Middle	VC	-0.1895	VERTICAL	3.3E-05	0.088	VERTICAL	1.5E-05
B768	Story4	End-J	VC	-0.352	VERTICAL	6.3E-05	0.176	VERTICAL	3.1E-05
B769	Story4	End-I	VC	-1.6393	VERTICAL	0.000228	0.8197	VERTICAL	0.000148
B769	Story4	Middle	VC	-0.4098	VERTICAL	7.3E-05	0.7426	VERTICAL	0.000134
B769	Story4	End-J	VC	-0.4098	VERTICAL	7.3E-05	1.4546	VERTICAL	0.000201

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B770	Story4	End-I	VC	-0.645	VERTICAL	0.000116	0.4482	VERTICAL	8E-05
B770	Story4	Middle	VC	-1.3717	VERTICAL	0.000189	0.4482	VERTICAL	8E-05
B770	Story4	End-J	VC	-1.7927	VERTICAL	0.000251	0.8963	VERTICAL	0.000162
B771	Story4	End-I	VC	-0.0884	VERTICAL	1.6E-05	0.0884	VERTICAL	1.6E-05
B771	Story4	Middle	VC	-0.0884	VERTICAL	1.6E-05	0.4544	Comb4-2	8.1E-05
B771	Story4	End-J	VC	-0.3536	VERTICAL	6.3E-05	0.1768	VERTICAL	3.1E-05
B772	Story4	End-I	VC	-0.0367	Comb4-2	6E-06	0.0184	Comb4-2	3E-06
B772	Story4	Middle	VC	-0.0279	Comb4-2	5E-06	0.1109	VERTICAL	2E-05
B772	Story4	End-J	VC	-0.0264	Comb4-2	5E-06	0.1041	Comb4-2	1.8E-05
B773	Story4	End-I	VC	-0.0097	Comb4-2	2E-06	0.0168	Comb4-2	3E-06
B773	Story4	Middle	VC	-0.0183	Comb4-2	3E-06	0.0134	Comb3-5	2E-06
B773	Story4	End-J	VC	-0.0388	Comb4-2	7E-06	0.0194	Comb4-2	3E-06
B774	Story4	End-I	VC	-0.0381	Comb4-2	7E-06	0.0233	Comb3-5	4E-06
B774	Story4	Middle	VC	-0.0647	Comb4-2	1.1E-05	0.04	Comb4-2	7E-06
B774	Story4	End-J	VC	-0.0338	Comb4-2	6E-06	0.0158	Comb4-2	3E-06
B775	Story4	End-I	VC	-0.0351	Comb4-2	6E-06	0.0175	Comb4-2	3E-06
B775	Story4	Middle	VC	-0.0369	Comb4-2	6E-06	0.0194	Comb3-5	3E-06
B775	Story4	End-J	VC	-0.0469	Comb4-2	8E-06	0.0344	Comb4-2	6E-06
B776	Story4	End-I	VC	-0.0261	Comb4-2	5E-06	0.013	Comb4-2	2E-06
B776	Story4	Middle	VC	-0.0267	Comb4-2	5E-06	0.0085	Comb4-2	1E-06
B776	Story4	End-J	VC	-0.0338	Comb4-2	6E-06	0.0169	Comb4-2	3E-06
B777	Story4	End-I	VC	-0.0308	Comb4-2	5E-06	0.0781	Comb4-2	1.4E-05
B777	Story4	Middle	VC	-0.0263	Comb4-2	5E-06	0.0656	Comb4-2	1.2E-05
B777	Story4	End-J	VC	-0.0073	Comb4-2	1E-06	0.0217	Comb4-2	4E-06
B778	Story4	End-I	VC	-0.0126	Comb4-2	2E-06	0.0063	Comb4-2	1E-06
B778	Story4	Middle	VC	-0.0442	Comb4-2	8E-06	0.0542	VERTICAL	1E-05
B778	Story4	End-J	VC	0	Comb3-5	0	0.0283	Comb4-2	5E-06
B779	Story4	End-I	VC	0	Comb3-5	0	0.0235	Comb4-2	4E-06
B779	Story4	Middle	VC	-0.0096	Comb4-2	2E-06	0.0096	Comb4-2	2E-06
B779	Story4	End-J	VC	-0.0383	Comb4-2	7E-06	0.0192	Comb4-2	3E-06
B780	Story4	End-I	VC	-0.0181	Comb4-2	3E-06	0.0091	Comb4-2	2E-06
B780	Story4	Middle	VC	-0.0312	Comb4-2	5E-06	0.013	Comb4-2	2E-06
B780	Story4	End-J	VC	-0.0383	Comb4-2	7E-06	0.1129	VERTICAL	2E-05
B781	Story4	End-I	VC	-0.0074	Comb3-5	1E-06	0.249	Comb4-2	4.4E-05
B781	Story4	Middle	VC	-0.0623	Comb4-2	1.1E-05	0.0653	Comb4-2	1.1E-05
B781	Story4	End-J	VC	-0.0026	Comb3-5	4.558E-07	0.0016	Comb4-2	2.8E-07
B782	Story4	End-I	VC	-1.3311	VERTICAL	0.000183	0.6656	VERTICAL	0.000119
B782	Story4	Middle	VC	-0.3328	VERTICAL	5.9E-05	0.3328	VERTICAL	5.9E-05
B782	Story4	End-J	VC	-0.3328	VERTICAL	5.9E-05	0.6618	Comb4-2	0.000119
B783	Story4	End-I	VC	-0.5834	VERTICAL	0.000104	1.4854	VERTICAL	0.000206
B783	Story4	Middle	VC	-0.5834	VERTICAL	0.000104	0.9468	VERTICAL	0.000167
B783	Story4	End-J	VC	-2.3335	VERTICAL	0.000334	1.0908	Comb4-2	0.000167
B784	Story4	End-I	VC	-0.8145	Comb4-2	0.000147	0.4073	Comb4-2	7.2E-05
B784	Story4	Middle	VC	-0.2036	Comb4-2	3.6E-05	0.5146	VERTICAL	9.2E-05
B784	Story4	End-J	VC	-0.2036	Comb4-2	3.6E-05	0.4183	VERTICAL	7.4E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B785	Story4	End-I	VC	-0.1255	Comb4-2	2.2E-05	0.0905	Comb3-5	1.6E-05
B785	Story4	Middle	VC	-0.0788	Comb4-2	1.4E-05	0.1258	VERTICAL	2.2E-05
B785	Story4	End-J	VC	-0.0595	Comb4-2	1E-05	0.1258	VERTICAL	2.2E-05
B786	Story4	End-I	VC	0	Comb3-5	0	0.0149	Comb4-2	3E-06
B786	Story4	Middle	VC	-0.1481	Comb4-2	2.6E-05	0.0801	Comb4-2	1.4E-05
B786	Story4	End-J	VC	-0.1683	Comb4-2	3E-05	0.0841	Comb4-2	1.5E-05
B787	Story4	End-I	VC	-0.0371	Comb3-5	7E-06	0.0557	Comb4-2	1E-05
B787	Story4	Middle	VC	-0.1163	Comb4-2	2E-05	0.0563	Comb4-2	1E-05
B787	Story4	End-J	VC	-0.2071	Comb4-2	3.7E-05	0.1036	Comb4-2	1.8E-05
B788	Story4	End-I	VC	-0.967	Comb4-2	0.000167	0.5124	VERTICAL	9.1E-05
B788	Story4	Middle	VC	-0.2562	VERTICAL	4.5E-05	0.5506	VERTICAL	9.8E-05
B788	Story4	End-J	VC	-0.2562	VERTICAL	4.5E-05	0.6447	VERTICAL	0.000116
B789	Story4	End-I	VC	-0.9755	Comb4-2	0.000167	0.5086	VERTICAL	9.1E-05
B789	Story4	Middle	VC	-0.2543	VERTICAL	4.5E-05	0.628	VERTICAL	0.000113
B789	Story4	End-J	VC	-0.2543	VERTICAL	4.5E-05	0.6182	VERTICAL	0.000111
B790	Story4	End-I	VC	-0.0621	Comb4-2	1.1E-05	0.0311	Comb4-2	5E-06
B790	Story4	Middle	VC	-0.1098	Comb4-2	1.9E-05	0.0366	Comb4-2	6E-06
B790	Story4	End-J	VC	-0.1464	Comb4-2	2.6E-05	0.0732	Comb4-2	1.3E-05
B791	Story4	End-I	VC	-0.0428	Comb4-2	8E-06	0.0214	Comb4-2	4E-06
B791	Story4	Middle	VC	-0.0362	Comb3-5	6E-06	0.0572	Comb4-2	1E-05
B791	Story4	End-J	VC	-0.0586	Comb4-2	1E-05	0.0134	Comb4-2	2E-06
B792	Story4	End-I	VC	-0.071	Comb4-2	1.2E-05	0.2014	Comb4-2	3.6E-05
B792	Story4	Middle	VC	-0.2075	VERTICAL	3.7E-05	0.4035	VERTICAL	7.2E-05
B792	Story4	End-J	VC	-0.1198	Comb4-2	2.1E-05	0.3397	VERTICAL	6E-05
B793	Story4	End-I	VC	-0.2107	VERTICAL	3.7E-05	0.1054	VERTICAL	1.9E-05
B793	Story4	Middle	VC	-0.1418	VERTICAL	2.5E-05	0.0527	VERTICAL	9E-06
B793	Story4	End-J	VC	-0.0945	Comb4-2	1.7E-05	0.0472	Comb4-2	8E-06
B794	Story4	End-I	VC	-1.3013	VERTICAL	0.000179	0.6507	VERTICAL	0.000117
B794	Story4	Middle	VC	-0.3253	VERTICAL	5.8E-05	0.8898	VERTICAL	0.000161
B794	Story4	End-J	VC	-0.3253	VERTICAL	5.8E-05	0.7733	VERTICAL	0.000139
B795	Story4	End-I	VC	-0.3383	VERTICAL	6E-05	0.6235	VERTICAL	0.000112
B795	Story4	Middle	VC	-0.3383	VERTICAL	6E-05	0.3383	VERTICAL	6E-05
B795	Story4	End-J	VC	-1.3532	VERTICAL	0.000186	0.6766	VERTICAL	0.000121
B796	Story4	End-I	VC	-0.0708	VERTICAL	1.2E-05	0.0708	VERTICAL	1.2E-05
B796	Story4	Middle	VC	-0.0708	VERTICAL	1.2E-05	0.1155	VERTICAL	2E-05
B796	Story4	End-J	VC	-0.283	VERTICAL	5E-05	0.1415	VERTICAL	2.5E-05
B797	Story4	End-I	VC	-0.0583	VERTICAL	1E-05	0.2331	VERTICAL	4.1E-05
B797	Story4	Middle	VC	-0.0583	VERTICAL	1E-05	0.0583	VERTICAL	1E-05
B797	Story4	End-J	VC	-0.0777	Comb4-2	1.4E-05	0.0389	Comb4-2	7E-06
B798	Story4	End-I	VC	-2.0227	VERTICAL	0.000286	0.9585	VERTICAL	0.000167
B798	Story4	Middle	VC	-2.1833	VERTICAL	0.00031	0.5661	VERTICAL	0.000101
B798	Story4	End-J	VC	-2.2644	VERTICAL	0.000323	1.0279	Comb4-2	0.000167
B799	Story4	End-I	VC	-0.2072	Comb4-2	3.7E-05	0.1036	Comb4-2	1.8E-05
B799	Story4	Middle	VC	-0.1197	Comb4-2	2.1E-05	0.1042	VERTICAL	1.8E-05
B799	Story4	End-J	VC	-0.0518	Comb4-2	9E-06	0.0518	Comb4-2	9E-06

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B800	Story4	End-I	VC	-0.0694	Comb4-2	1.2E-05	0.0685	VERTICAL	1.2E-05
B800	Story4	Middle	VC	-0.0896	Comb4-2	1.6E-05	0.2434	VERTICAL	4.3E-05
B800	Story4	End-J	VC	-0.0685	VERTICAL	1.2E-05	0.2742	VERTICAL	4.9E-05
B801	Story4	End-I	VC	-0.1294	Comb4-2	2.3E-05	0.0763	Comb4-2	1.3E-05
B801	Story4	Middle	VC	-0.0933	Comb4-2	1.6E-05	0.0544	Comb3-5	1E-05
B801	Story4	End-J	VC	-0.11	Comb4-2	1.9E-05	0.055	Comb4-2	1E-05
B802	Story4	End-I	VC	-0.0483	Comb4-2	8E-06	0.1608	Comb4-2	2.8E-05
B802	Story4	Middle	VC	-0.0424	Comb3-5	7E-06	0.1524	VERTICAL	2.7E-05
B802	Story4	End-J	VC	-0.0946	Comb3-5	1.7E-05	0.1031	Comb4-2	1.8E-05
B803	Story4	End-I	VC	-0.9986	Comb4-2	0.000167	0.5111	VERTICAL	9.1E-05
B803	Story4	Middle	VC	-0.2555	VERTICAL	4.5E-05	0.2555	VERTICAL	4.5E-05
B803	Story4	End-J	VC	-0.2555	VERTICAL	4.5E-05	0.3889	Comb4-2	6.9E-05
B804	Story4	End-I	VC	-0.0953	VERTICAL	1.7E-05	0.4351	Comb4-2	7.7E-05
B804	Story4	Middle	VC	-0.0953	VERTICAL	1.7E-05	0.5282	VERTICAL	9.4E-05
B804	Story4	End-J	VC	-0.0953	VERTICAL	1.7E-05	0.5204	VERTICAL	9.3E-05
B805	Story4	End-I	VC	-0.3777	VERTICAL	6.7E-05	0.3896	VERTICAL	6.9E-05
B805	Story4	Middle	VC	-0.5866	VERTICAL	0.000105	0.3777	VERTICAL	6.7E-05
B805	Story4	End-J	VC	-1.5106	VERTICAL	0.000209	0.7553	VERTICAL	0.000136
B806	Story4	End-I	VC	-1.3594	VERTICAL	0.000187	0.6797	VERTICAL	0.000122
B806	Story4	Middle	VC	-0.4591	VERTICAL	8.2E-05	0.3398	VERTICAL	6E-05
B806	Story4	End-J	VC	-0.3398	VERTICAL	6E-05	0.6097	VERTICAL	0.000109
B807	Story4	End-I	VC	-0.141	VERTICAL	2.5E-05	1.0083	Comb4-2	0.000167
B807	Story4	Middle	VC	-0.141	VERTICAL	2.5E-05	1.2297	VERTICAL	0.000169
B807	Story4	End-J	VC	-0.141	VERTICAL	2.5E-05	0.7425	VERTICAL	0.000134
B808	Story4	End-I	VC	-0.1019	Comb4-2	1.8E-05	0.0483	Comb4-2	8E-06
B808	Story4	Middle	VC	-0.0337	Comb4-2	6E-06	0.0439	Comb4-2	8E-06
B808	Story4	End-J	VC	-0.0337	Comb4-2	6E-06	0.1348	Comb4-2	2.4E-05
B809	Story4	End-I	VC	-0.0454	Comb4-2	8E-06	0.0176	Comb3-5	3E-06
B809	Story4	Middle	VC	-0.1451	Comb4-2	2.6E-05	0.1264	VERTICAL	2.2E-05
B809	Story4	End-J	VC	-0.1047	Comb4-2	1.8E-05	0.1291	VERTICAL	2.3E-05
B810	Story4	End-I	VC	-0.2712	VERTICAL	4.8E-05	0.1356	VERTICAL	2.4E-05
B810	Story4	Middle	VC	-0.2743	VERTICAL	4.9E-05	0.0694	VERTICAL	1.2E-05
B810	Story4	End-J	VC	-0.2778	VERTICAL	4.9E-05	0.1389	VERTICAL	2.4E-05
B811	Story4	End-I	VC	-0.2451	VERTICAL	4.3E-05	0.1726	Comb4-2	3E-05
B811	Story4	Middle	VC	-0.1019	VERTICAL	1.8E-05	0.2065	VERTICAL	3.6E-05
B811	Story4	End-J	VC	-0.0735	Comb4-2	1.3E-05	0.1141	VERTICAL	2E-05
B812	Story4	End-I	VC	-0.1179	Comb4-2	2.1E-05	0.0442	Comb4-2	8E-06
B812	Story4	Middle	VC	-0.0378	VERTICAL	7E-06	0.0975	VERTICAL	1.7E-05
B812	Story4	End-J	VC	-0.0378	VERTICAL	7E-06	0.1511	VERTICAL	2.7E-05
B813	Story4	End-I	VC	-0.0642	Comb4-2	1.1E-05	0.1461	VERTICAL	2.6E-05
B813	Story4	Middle	VC	-0.0797	Comb4-2	1.4E-05	0.2574	VERTICAL	4.6E-05
B813	Story4	End-J	VC	-0.1937	Comb4-2	3.4E-05	0.1707	VERTICAL	3E-05
B814	Story4	End-I	VC	-0.2294	Comb4-2	4.1E-05	0.1147	Comb4-2	2E-05
B814	Story4	Middle	VC	-0.2112	Comb4-2	3.7E-05	0.0573	Comb4-2	1E-05
B814	Story4	End-J	VC	-0.1939	Comb4-2	3.4E-05	0.0969	Comb4-2	1.7E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B815	Story4	End-I	VC	-0.0381	VERTICAL	7E-06	0.0381	VERTICAL	7E-06
B815	Story4	Middle	VC	-0.0683	VERTICAL	1.2E-05	0.0381	VERTICAL	7E-06
B815	Story4	End-J	VC	-0.1525	VERTICAL	2.7E-05	0.0762	VERTICAL	1.3E-05
B816	Story4	End-I	VC	-0.0331	Comb4-2	6E-06	0.0847	Comb4-2	1.5E-05
B816	Story4	Middle	VC	-0.0681	Comb4-2	1.2E-05	0.0331	Comb4-2	6E-06
B816	Story4	End-J	VC	-0.191	Comb4-2	3.4E-05	0.0663	Comb4-2	1.2E-05
B817	Story4	End-I	VC	-0.071	Comb4-2	1.3E-05	0.0939	Comb4-2	1.7E-05
B817	Story4	Middle	VC	-0.0533	Comb4-2	9E-06	0.0776	VERTICAL	1.4E-05
B817	Story4	End-J	VC	-0.0492	Comb4-2	9E-06	0.0214	Comb4-2	4E-06
B818	Story4	End-I	VC	-0.0289	Comb4-2	5E-06	0.0974	Comb4-2	1.7E-05
B818	Story4	Middle	VC	-0.051	Comb4-2	9E-06	0.0871	VERTICAL	1.5E-05
B818	Story4	End-J	VC	-0.1155	Comb4-2	2E-05	0.0577	Comb4-2	1E-05
B819	Story4	End-I	VC	-0.5316	Comb4-2	9.5E-05	0.2658	Comb4-2	4.7E-05
B819	Story4	Middle	VC	-0.1329	Comb4-2	2.3E-05	0.2437	Comb4-2	4.3E-05
B819	Story4	End-J	VC	-0.1329	Comb4-2	2.3E-05	0.2939	Comb4-2	5.2E-05
B820	Story4	End-I	VC	-0.0547	Comb4-2	1E-05	0.2187	Comb4-2	3.9E-05
B820	Story4	Middle	VC	-0.074	Comb4-2	1.3E-05	0.0946	Comb4-2	1.7E-05
B820	Story4	End-J	VC	-0.34	Comb4-2	6E-05	0.0931	Comb4-2	1.6E-05
B821	Story4	End-I	VC	-0.5062	Comb4-2	9E-05	0.2531	Comb4-2	4.5E-05
B821	Story4	Middle	VC	-0.1265	Comb4-2	2.2E-05	0.2009	Comb4-2	3.5E-05
B821	Story4	End-J	VC	-0.1265	Comb4-2	2.2E-05	0.3087	Comb4-2	5.5E-05
B822	Story4	End-I	VC	-0.1286	Comb4-2	2.3E-05	0.3235	Comb4-2	5.7E-05
B822	Story4	Middle	VC	-0.1286	Comb4-2	2.3E-05	0.2053	Comb4-2	3.6E-05
B822	Story4	End-J	VC	-0.5144	Comb4-2	9.2E-05	0.2572	Comb4-2	4.6E-05
B823	Story4	End-I	VC	-0.1126	Comb4-2	2E-05	0.0563	Comb4-2	1E-05
B823	Story4	Middle	VC	-0.1233	Comb4-2	2.2E-05	0.0341	Comb4-2	6E-06
B823	Story4	End-J	VC	-0.1363	Comb4-2	2.4E-05	0.0681	Comb4-2	1.2E-05
B824	Story4	End-I	VC	-0.3355	VERTICAL	6E-05	0.2619	VERTICAL	4.6E-05
B824	Story4	Middle	VC	-0.0733	VERTICAL	1.3E-05	0.2948	VERTICAL	5.2E-05
B824	Story4	End-J	VC	-0.0538	Comb4-2	9E-06	0.1183	VERTICAL	2.1E-05
B825	Story4	End-I	VC	-0.0419	Comb4-2	7E-06	0.1112	Comb4-2	2E-05
B825	Story4	Middle	VC	-0.0425	Comb4-2	7E-06	0.1356	Comb4-2	2.4E-05
B825	Story4	End-J	VC	-0.1676	Comb4-2	3E-05	0.1498	VERTICAL	2.6E-05
B826	Story4	End-I	VC	-0.0359	Comb3-5	6E-06	0.0494	Comb4-2	9E-06
B826	Story4	Middle	VC	-0.0792	Comb4-2	1.4E-05	0.1341	Comb4-2	2.4E-05
B826	Story4	End-J	VC	-0.0184	Comb4-2	3E-06	0.017	Comb4-2	3E-06
B827	Story4	End-I	VC	-0.1536	Comb4-2	2.7E-05	0.0768	Comb4-2	1.4E-05
B827	Story4	Middle	VC	-0.1349	VERTICAL	2.4E-05	0.0756	VERTICAL	1.3E-05
B827	Story4	End-J	VC	-0.0384	Comb4-2	7E-06	0.0874	VERTICAL	1.5E-05
B828	Story4	End-I	VC	-0.1191	Comb4-2	2.1E-05	0.0596	Comb4-2	1E-05
B828	Story4	Middle	VC	-0.1172	Comb4-2	2.1E-05	0.0298	Comb4-2	5E-06
B828	Story4	End-J	VC	-0.1155	Comb4-2	2E-05	0.0578	Comb4-2	1E-05
B829	Story4	End-I	VC	-0.0392	Comb3-5	7E-06	0.0554	Comb4-2	1E-05
B829	Story4	Middle	VC	-0.0809	Comb4-2	1.4E-05	0.0522	Comb4-2	9E-06
B829	Story4	End-J	VC	-0.2089	Comb4-2	3.7E-05	0.1044	Comb4-2	1.8E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B830	Story4	End-I	VC	-0.0215	Comb4-2	4E-06	0.0332	Comb4-2	6E-06
B830	Story4	Middle	VC	-0.0408	VERTICAL	7E-06	0.0396	Comb4-2	7E-06
B830	Story4	End-J	VC	-0.0602	Comb4-2	1.1E-05	0.0308	Comb4-2	5E-06
B831	Story4	End-I	VC	-0.0467	Comb4-2	8E-06	0.0234	Comb4-2	4E-06
B831	Story4	Middle	VC	-0.0467	Comb4-2	8E-06	0.0117	Comb4-2	2E-06
B831	Story4	End-J	VC	-0.0467	Comb4-2	8E-06	0.0234	Comb4-2	4E-06
B832	Story4	End-I	VC	-0.1309	Comb4-2	2.3E-05	0.0654	Comb4-2	1.2E-05
B832	Story4	Middle	VC	-0.1517	Comb4-2	2.7E-05	0.0438	Comb4-2	8E-06
B832	Story4	End-J	VC	-0.1751	Comb4-2	3.1E-05	0.0875	Comb4-2	1.5E-05
B833	Story4	End-I	VC	-0.57	VERTICAL	0.000102	1.0447	VERTICAL	0.000167
B833	Story4	Middle	VC	-0.6305	VERTICAL	0.000113	0.6088	VERTICAL	0.000109
B833	Story4	End-J	VC	-0.3134	VERTICAL	5.6E-05	0.3069	VERTICAL	5.4E-05
B834	Story4	End-I	VC	-2.4889	VERTICAL	0.000358	1.2445	VERTICAL	0.000171
B834	Story4	Middle	VC	-0.6222	VERTICAL	0.000111	2.5719	VERTICAL	0.000371
B834	Story4	End-J	VC	-0.6222	VERTICAL	0.000111	1.6353	VERTICAL	0.000228
B835	Story4	End-I	VC	-1.0004	Comb4-2	0.000167	0.5325	Comb4-2	9.5E-05
B835	Story4	Middle	VC	-0.9932	Comb4-2	0.000167	0.2663	Comb4-2	4.7E-05
B835	Story4	End-J	VC	-0.9417	Comb4-2	0.000167	0.4582	VERTICAL	8.2E-05
B836	Story4	End-I	VC	-0.0525	Comb4-2	9E-06	0.0263	Comb4-2	5E-06
B836	Story4	Middle	VC	-0.0329	Comb4-2	6E-06	0.0131	Comb4-2	2E-06
B836	Story4	End-J	VC	-0.0289	Comb4-2	5E-06	0.0221	Comb3-5	4E-06
B837	Story4	End-I	VC	-0.0156	Comb3-5	3E-06	0.0276	Comb4-2	5E-06
B837	Story4	Middle	VC	-0.059	Comb4-2	1E-05	0.034	Comb4-2	6E-06
B837	Story4	End-J	VC	-0.0515	Comb4-2	9E-06	0.0257	Comb4-2	5E-06
B838	Story4	End-I	VCA	-0.0456	VERTICAL	3.3E-05	0.0228	VERTICAL	1.6E-05
B838	Story4	Middle	VCA	-0.0114	VERTICAL	8E-06	0.0114	VERTICAL	8E-06
B838	Story4	End-J	VCA	0	Comb3-5	0	0.0431	VERTICAL	3.1E-05
B839	Story4	End-I	VCA	-0.0995	VERTICAL	5.5E-05	0.0498	VERTICAL	3.6E-05
B839	Story4	Middle	VCA	-0.0474	VERTICAL	3.4E-05	0.0249	VERTICAL	1.8E-05
B839	Story4	End-J	VCA	-0.0017	Comb4-2	1E-06	0.0032	Comb3-5	2E-06
B841	Story4	End-I	VCA	-0.0814	VERTICAL	4.5E-05	0.1485	VERTICAL	8.5E-05
B841	Story4	Middle	VCA	-0.0599	Comb4-2	4.2E-05	0.1524	VERTICAL	8.8E-05
B841	Story4	End-J	VCA	-0.1886	VERTICAL	0.000111	0.06	Comb4-2	4.2E-05
B842	Story4	End-I	VCA	-0.0287	Comb4-2	2E-05	0.038	Comb4-2	2.7E-05
B842	Story4	Middle	VCA	-0.0287	Comb4-2	2E-05	0.0287	Comb4-2	2E-05
B842	Story4	End-J	VCA	-0.1148	Comb4-2	6.4E-05	0.0574	Comb4-2	4.2E-05
B843	Story4	End-I	VCA	-0.2423	VERTICAL	0.000148	0.1418	VERTICAL	8.1E-05
B843	Story4	Middle	VCA	-0.0606	VERTICAL	4.2E-05	0.1645	VERTICAL	9.5E-05
B843	Story4	End-J	VCA	-0.1146	VERTICAL	6.4E-05	0.0606	VERTICAL	4.2E-05
B844	Story4	End-I	VCA	-0.1305	VERTICAL	7.4E-05	0.0265	VERTICAL	1.9E-05
B844	Story4	Middle	VCA	-0.017	VERTICAL	1.2E-05	0.1016	VERTICAL	5.7E-05
B844	Story4	End-J	VCA	-0.0655	Comb4-2	4.2E-05	0.0341	VERTICAL	2.4E-05
B845	Story4	End-I	VCA	-0.0235	Comb4-2	1.7E-05	0.0118	Comb4-2	8E-06
B845	Story4	Middle	VCA	-0.0341	Comb4-2	2.4E-05	0.0069	VERTICAL	5E-06
B845	Story4	End-J	VCA	-0.0277	VERTICAL	2E-05	0.0139	VERTICAL	1E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B846	Story4	End-I	VCA	-0.0362	Comb4-2	2.6E-05	0.0181	Comb4-2	1.3E-05
B846	Story4	Middle	VCA	-0.0262	Comb4-2	1.9E-05	0.0091	Comb4-2	6E-06
B846	Story4	End-J	VCA	-0.0223	VERTICAL	1.6E-05	0.0112	VERTICAL	8E-06
B847	Story4	End-I	VCA	-0.0281	Comb4-2	2E-05	0.0546	Comb4-2	3.9E-05
B847	Story4	Middle	VCA	-0.0281	Comb4-2	2E-05	0.0601	Comb4-2	4.2E-05
B847	Story4	End-J	VCA	-0.1125	Comb4-2	6.3E-05	0.0563	Comb4-2	4.1E-05
B848	Story4	End-I	VCA	-0.0253	Comb4-2	1.8E-05	0.0126	Comb4-2	9E-06
B848	Story4	Middle	VCA	-0.0136	Comb4-2	1E-05	0.0063	Comb4-2	4E-06
B848	Story4	End-J	VCA	-0.007	Comb4-2	5E-06	0.004	Comb3-5	3E-06
B849	Story4	End-I	VCA	-0.0252	Comb4-2	1.8E-05	0.0126	Comb4-2	9E-06
B849	Story4	Middle	VCA	-0.0158	Comb4-2	1.1E-05	0.0063	Comb4-2	4E-06
B849	Story4	End-J	VCA	-0.0072	Comb3-5	5E-06	0.0086	Comb4-2	6E-06
B850	Story4	End-I	VCA	-0.0745	Comb4-2	4.2E-05	0.0337	Comb4-2	2.4E-05
B850	Story4	Middle	VCA	-0.0627	Comb4-2	4.2E-05	0.0169	Comb4-2	1.2E-05
B850	Story4	End-J	VCA	-0.0477	Comb4-2	3.4E-05	0.0205	Comb4-2	1.5E-05
B851	Story4	End-I	VCA	-0.0366	Comb4-2	2.6E-05	0.0183	Comb4-2	1.3E-05
B851	Story4	Middle	VCA	-0.0491	Comb4-2	3.5E-05	0.0157	Comb4-2	1.1E-05
B851	Story4	End-J	VCA	-0.0628	Comb4-2	4.2E-05	0.0314	Comb4-2	2.2E-05
B852	Story4	End-I	VCA	-0.1033	Comb4-2	5.8E-05	0.0517	Comb4-2	3.7E-05
B852	Story4	Middle	VCA	-0.0591	Comb4-2	4.2E-05	0.093	Comb4-2	5.1E-05
B852	Story4	End-J	VCA	0	Comb3-5	0	0.2568	VERTICAL	0.000159
B853	Story4	End-I	VCA		O/S		0.1439	VERTICAL	8.2E-05
B853	Story4	Middle	VCA	-0.0891	VERTICAL	4.9E-05		O/S	
B853	Story4	End-J	VCA		O/S		0.267	VERTICAL	0.000167
B854	Story4	End-I	VCA	-0.0865	Comb4-2	4.8E-05	0.0433	Comb4-2	3.1E-05
B854	Story4	Middle	VCA	-0.1691	VERTICAL	9.8E-05	0.0591	Comb4-2	4.2E-05
B854	Story4	End-J	VCA	-0.2547	VERTICAL	0.000158	0.1273	VERTICAL	7.2E-05
B855	Story4	End-I	VCA	-0.1613	VERTICAL	9.3E-05	0.0807	VERTICAL	4.4E-05
B855	Story4	Middle	VCA	-0.1733	VERTICAL	0.000101	0.0582	Comb4-2	4.2E-05
B855	Story4	End-J	VCA		O/S		0.1282	VERTICAL	7.3E-05
B856	Story4	End-I	VCA	-0.0294	VERTICAL	2.1E-05	0.1888	VERTICAL	0.000111
B856	Story4	Middle	VCA	-0.0294	VERTICAL	2.1E-05	0.2091	VERTICAL	0.000125
B856	Story4	End-J	VCA	-0.049	VERTICAL	3.5E-05	0.1106	VERTICAL	6.2E-05
B857	Story4	End-I	VCA	-0.2296	VERTICAL	0.000139	0.1148	VERTICAL	6.4E-05
B857	Story4	Middle	VCA	-0.0574	VERTICAL	4.2E-05	0.0574	VERTICAL	4.2E-05
B857	Story4	End-J	VCA	-0.0574	VERTICAL	4.2E-05	0.1366	VERTICAL	7.8E-05
B858	Story4	End-I	VCA		O/S			O/S	
B858	Story4	Middle	VCA	-0.1875	VERTICAL	0.00011	0.1492	VERTICAL	8.5E-05
B858	Story4	End-J	VCA	-0.0286	Comb4-2	2E-05	0.0143	Comb4-2	1E-05
B859	Story4	End-I	VCA	0	Comb3-5	0	0.0179	VERTICAL	1.3E-05
B859	Story4	Middle	VCA	-0.1427	VERTICAL	8.1E-05	0.0374	Comb4-2	2.7E-05
B859	Story4	End-J	VCA	-0.2503	VERTICAL	0.000154	0.0748	Comb4-2	4.2E-05
B860	Story4	End-I	VCA	-0.0314	Comb4-2	2.2E-05	0.0156	VERTICAL	1.1E-05
B860	Story4	Middle	VCA	-0.0376	VERTICAL	2.7E-05	0.0554	VERTICAL	4E-05
B860	Story4	End-J	VCA	-0.0596	Comb4-2	4.2E-05	0.0546	VERTICAL	3.9E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B861	Story4	End-I	VCA	-0.0068	VERTICAL	5E-06	0.0183	Comb4-2	1.3E-05
B861	Story4	Middle	VCA	-0.0085	Comb4-2	6E-06	0.0199	Comb4-2	1.4E-05
B861	Story4	End-J	VCA	-0.0273	VERTICAL	1.9E-05	0.0136	VERTICAL	1E-05
B862	Story4	End-I	VCA	-0.017	Comb4-2	1.2E-05	0.0085	Comb4-2	6E-06
B862	Story4	Middle	VCA	-0.0549	VERTICAL	4E-05	0.0281	VERTICAL	2E-05
B862	Story4	End-J	VCA	-0.1269	VERTICAL	7.2E-05	0.0561	VERTICAL	4.1E-05
B863	Story4	End-I	VCA	-0.2278	VERTICAL	0.000138	0.0655	Comb4-2	4.2E-05
B863	Story4	Middle	VCA	-0.0441	VERTICAL	3.2E-05	0.2136	VERTICAL	0.000128
B863	Story4	End-J	VCA	-0.1765	VERTICAL	0.000103	0.165	VERTICAL	9.6E-05
B864	Story4	End-I	VCA	-0.0167	VERTICAL	1.2E-05	0.0629	Comb4-2	4.2E-05
B864	Story4	Middle	VCA	-0.0167	VERTICAL	1.2E-05	0.0337	Comb4-2	2.4E-05
B864	Story4	End-J	VCA	-0.0203	Comb4-2	1.4E-05	0.0167	VERTICAL	1.2E-05
B865	Story4	End-I	VCA	-0.0113	Comb4-2	8E-06	0.0057	Comb4-2	4E-06
B865	Story4	Middle	VCA	-0.1195	VERTICAL	6.7E-05	0.0505	VERTICAL	3.6E-05
B865	Story4	End-J	VCA	-0.2019	VERTICAL	0.00012	0.1009	VERTICAL	5.6E-05
B866	Story4	End-I	VCA		O/S		0.1055	VERTICAL	5.9E-05
B866	Story4	Middle	VCA	-0.2354	VERTICAL	0.000143	0.0527	VERTICAL	3.8E-05
B866	Story4	End-J	VCA	-0.0067	Comb4-2	5E-06	0.0033	Comb4-2	2E-06
B867	Story4	End-I	VCA	-0.0536	VERTICAL	3.9E-05	0.0647	Comb4-2	4.2E-05
B867	Story4	Middle	VCA	-0.0536	VERTICAL	3.9E-05	0.1719	VERTICAL	0.0001
B867	Story4	End-J	VCA	-0.0536	VERTICAL	3.9E-05	0.2146	VERTICAL	0.000129
B868	Story4	End-I	VCA	-0.0493	VERTICAL	3.5E-05	0.2087	VERTICAL	0.000125
B868	Story4	Middle	VCA	-0.0493	VERTICAL	3.5E-05	0.1995	VERTICAL	0.000118
B868	Story4	End-J	VCA	-0.0493	VERTICAL	3.5E-05	0.1801	VERTICAL	0.000105
B869	Story4	End-I	VCA	-0.0931	VERTICAL	5.2E-05	0.1805	VERTICAL	0.000106
B869	Story4	Middle	VCA	-0.1656	VERTICAL	9.6E-05	0.0931	VERTICAL	5.2E-05
B869	Story4	End-J	VCA		O/S		0.1862	VERTICAL	0.000109
B870	Story4	End-I	VCA		O/S		0.2084	VERTICAL	0.000124
B870	Story4	Middle	VCA	-0.2513	VERTICAL	0.000155	0.1042	VERTICAL	5.8E-05
B870	Story4	End-J	VCA	-0.0889	VERTICAL	4.9E-05	0.0444	VERTICAL	3.2E-05
B871	Story4	End-I	VCA	-0.1111	VERTICAL	6.2E-05	0.0555	VERTICAL	4E-05
B871	Story4	Middle	VCA	-0.0278	VERTICAL	2E-05	0.056	VERTICAL	4.1E-05
B871	Story4	End-J	VCA	-0.1083	VERTICAL	6.1E-05	0.0541	VERTICAL	3.9E-05
B872	Story4	End-I	VCA		O/S		0.1624	VERTICAL	9.4E-05
B872	Story4	Middle	VCA	-0.0812	VERTICAL	4.5E-05	0.1297	VERTICAL	7.3E-05
B872	Story4	End-J	VCA	-0.0812	VERTICAL	4.5E-05	0.1676	VERTICAL	9.7E-05
B873	Story4	End-I	VCA	-0.0605	Comb4-2	4.2E-05	0.1144	VERTICAL	6.4E-05
B873	Story4	Middle	VCA	-0.0787	VERTICAL	4.3E-05	0.0605	Comb4-2	4.2E-05
B873	Story4	End-J	VCA	-0.2631	VERTICAL	0.000164	0.1315	VERTICAL	7.5E-05
B874	Story4	End-I	VCA		O/S		0.1452	VERTICAL	8.3E-05
B874	Story4	Middle	VCA	-0.0975	VERTICAL	5.4E-05	0.0678	Comb4-2	4.2E-05
B874	Story4	End-J	VCA	-0.0678	Comb4-2	4.2E-05	0.0663	Comb4-2	4.2E-05
B875	Story4	End-I	VCA	-0.0441	VERTICAL	3.2E-05	0.0279	Comb4-2	2E-05
B875	Story4	Middle	VCA	-0.0881	Comb4-2	4.9E-05	0.0279	Comb4-2	2E-05
B875	Story4	End-J	VCA	-0.1205	Comb4-2	6.8E-05	0.0558	Comb4-2	4E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B876	Story4	End-I	VCA	-0.2074	Comb4-2	0.000124	0.1037	Comb4-2	5.8E-05
B876	Story4	Middle	VCA	-0.0518	Comb4-2	3.7E-05	0.0518	Comb4-2	3.7E-05
B876	Story4	End-J	VCA	-0.0518	Comb4-2	3.7E-05	0.0555	Comb4-2	4E-05
B877	Story4	End-I	VCA	-0.0982	VERTICAL	5.5E-05	0.0491	VERTICAL	3.5E-05
B877	Story4	Middle	VCA	-0.0257	VERTICAL	1.8E-05	0.0246	VERTICAL	1.7E-05
B877	Story4	End-J	VCA	-0.0246	VERTICAL	1.7E-05	0.0414	VERTICAL	3E-05
B878	Story4	End-I	VCA	-0.0272	VERTICAL	1.9E-05	0.0579	Comb4-2	4.2E-05
B878	Story4	Middle	VCA	-0.0272	VERTICAL	1.9E-05	0.0497	VERTICAL	3.6E-05
B878	Story4	End-J	VCA	-0.1087	VERTICAL	6.1E-05	0.0543	VERTICAL	3.9E-05
B879	Story4	End-I	VCA	-0.085	VERTICAL	4.7E-05	0.0425	VERTICAL	3.1E-05
B879	Story4	Middle	VCA	-0.0588	VERTICAL	4.2E-05	0.0213	VERTICAL	1.5E-05
B879	Story4	End-J	VCA	-0.0526	VERTICAL	3.8E-05	0.023	VERTICAL	1.6E-05
B880	Story4	End-I	VCA	-0.0584	VERTICAL	4.2E-05	0.0219	VERTICAL	1.6E-05
B880	Story4	Middle	VCA	-0.0357	Comb4-2	2.6E-05	0.011	VERTICAL	8E-06
B880	Story4	End-J	VCA	-0.0373	Comb4-2	2.7E-05	0.0145	Comb4-2	1E-05
B881	Story4	End-I	VCA	-0.0191	Comb4-2	1.4E-05	0.0095	Comb4-2	7E-06
B881	Story4	Middle	VCA	-0.0147	Comb4-2	1E-05	0.0086	Comb3-5	6E-06
B881	Story4	End-J	VCA	-0.0112	Comb3-5	8E-06	0.0113	Comb4-2	8E-06
B882	Story4	End-I	VCA	-0.0358	Comb4-2	2.6E-05	0.0179	Comb4-2	1.3E-05
B882	Story4	Middle	VCA	-0.0396	Comb4-2	2.8E-05	0.0123	Comb4-2	9E-06
B882	Story4	End-J	VCA	-0.0492	Comb4-2	3.5E-05	0.0246	Comb4-2	1.7E-05
B883	Story4	End-I	VCA	-0.093	Comb4-2	5.1E-05	0.042	Comb4-2	3E-05
B883	Story4	Middle	VCA	-0.0294	Comb4-2	2.1E-05	0.0294	Comb4-2	2.1E-05
B883	Story4	End-J	VCA	-0.0294	Comb4-2	2.1E-05	0.1174	Comb4-2	6.6E-05
B884	Story4	End-I	VCA	-0.0942	VERTICAL	5.2E-05	0.0942	VERTICAL	5.2E-05
B884	Story4	Middle	VCA	-0.1393	VERTICAL	7.9E-05	0.0942	VERTICAL	5.2E-05
B884	Story4	End-J	VCA		O/S		0.1883	VERTICAL	0.000111
B885	Story4	End-I	VCA		O/S		0.1758	VERTICAL	0.000103
B885	Story4	Middle	VCA	-0.2534	VERTICAL	0.000157	0.0879	VERTICAL	4.9E-05
B885	Story4	End-J	VCA	-0.1145	VERTICAL	6.4E-05	0.0879	VERTICAL	4.9E-05
B886	Story4	End-I	VCA	-0.0584	Comb4-2	4.2E-05	0.0584	Comb4-2	4.2E-05
B886	Story4	Middle	VCA	-0.0584	Comb4-2	4.2E-05	0.1996	VERTICAL	0.000118
B886	Story4	End-J	VCA	-0.0584	Comb4-2	4.2E-05	0.2548	VERTICAL	0.000158
B887	Story4	End-I	VCA	-0.0583	Comb4-2	4.2E-05	0.2542	VERTICAL	0.000157
B887	Story4	Middle	VCA	-0.0583	Comb4-2	4.2E-05	0.2091	VERTICAL	0.000125
B887	Story4	End-J	VCA	-0.0583	Comb4-2	4.2E-05	0.1117	VERTICAL	6.3E-05
B888	Story4	End-I	VCA	-0.0294	Comb4-2	2.1E-05	0.0663	Comb4-2	4.2E-05
B888	Story4	Middle	VCA	-0.0294	Comb4-2	2.1E-05	0.0602	Comb4-2	4.2E-05
B888	Story4	End-J	VCA	-0.1177	Comb4-2	6.6E-05	0.0589	Comb4-2	4.2E-05
B889	Story4	End-I	VCA	-0.0219	Comb4-2	1.6E-05	0.0109	Comb4-2	8E-06
B889	Story4	Middle	VCA	-0.0379	Comb4-2	2.7E-05	0.0055	Comb4-2	4E-06
B889	Story4	End-J	VCA	-0.0324	Comb4-2	2.3E-05	0.0218	Comb4-2	1.5E-05
B890	Story4	End-I	VCA	-0.0011	Comb3-5	1E-06	0.0196	Comb4-2	1.4E-05
B890	Story4	Middle	VCA	-0.0078	Comb3-5	6E-06	0.0464	Comb4-2	3.3E-05
B890	Story4	End-J	VCA	0	Comb3-5	0	0.025	Comb4-2	1.8E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B891	Story4	End-I	VCA	0	Comb3-5	0	0.0414	Comb4-2	3E-05
B891	Story4	Middle	VCA	-0.0132	Comb3-5	9E-06	0.0355	Comb4-2	2.5E-05
B891	Story4	End-J	VCA	-0.0201	Comb4-2	1.4E-05	0.0156	Comb4-2	1.1E-05
B892	Story4	End-I	VCA	-0.0528	Comb4-2	3.8E-05	0.0173	Comb4-2	1.2E-05
B892	Story4	Middle	VCA	-0.0235	Comb4-2	1.7E-05	0.0207	Comb4-2	1.5E-05
B892	Story4	End-J	VCA	-0.0008	Comb3-5	1E-06	0.0178	Comb4-2	1.3E-05
B893	Story4	End-I	VCA	-0.0297	Comb4-2	2.1E-05	0.0297	Comb4-2	2.1E-05
B893	Story4	Middle	VCA	-0.0324	Comb4-2	2.3E-05	0.0297	Comb4-2	2.1E-05
B893	Story4	End-J	VCA	-0.1187	Comb4-2	6.7E-05	0.0594	Comb4-2	4.2E-05
B894	Story4	End-I	VCA	-0.0997	VERTICAL	5.5E-05	0.0498	VERTICAL	3.6E-05
B894	Story4	Middle	VCA	-0.1169	VERTICAL	6.6E-05	0.0336	VERTICAL	2.4E-05
B894	Story4	End-J	VCA	-0.1345	VERTICAL	7.6E-05	0.0622	Comb4-2	4.2E-05
B895	Story4	End-I	VCA		O/S		0.0622	Comb4-2	4.2E-05
B895	Story4	Middle	VCA	-0.239	VERTICAL	0.000146	0.0336	VERTICAL	2.4E-05
B895	Story4	End-J	VCA	-0.1541	VERTICAL	8.9E-05	0.0336	VERTICAL	2.4E-05
B896	Story4	End-I	VCA	-0.1448	VERTICAL	8.3E-05	0.0656	Comb4-2	4.2E-05
B896	Story4	Middle	VCA	-0.0362	VERTICAL	2.6E-05	0.1037	VERTICAL	5.8E-05
B896	Story4	End-J	VCA	-0.0362	VERTICAL	2.6E-05	0.1182	VERTICAL	6.6E-05
B897	Story4	End-I	VCA	-0.015	VERTICAL	1.1E-05	0.0905	VERTICAL	5E-05
B897	Story4	Middle	VCA	-0.015	VERTICAL	1.1E-05	0.0656	Comb4-2	4.2E-05
B897	Story4	End-J	VCA	-0.015	VERTICAL	1.1E-05	0.0343	VERTICAL	2.4E-05
B898	Story4	End-I	VCA	-0.0248	VERTICAL	1.8E-05	0.0295	VERTICAL	2.1E-05
B898	Story4	Middle	VCA	-0.0248	VERTICAL	1.8E-05	0.0605	Comb4-2	4.2E-05
B898	Story4	End-J	VCA	-0.0248	VERTICAL	1.8E-05	0.0993	VERTICAL	5.5E-05
B899	Story4	End-I	VCA	-0.0251	VERTICAL	1.8E-05	0.1178	VERTICAL	6.6E-05
B899	Story4	Middle	VCA	-0.0251	VERTICAL	1.8E-05	0.137	VERTICAL	7.8E-05
B899	Story4	End-J	VCA	-0.0251	VERTICAL	1.8E-05	0.113	VERTICAL	6.3E-05
B900	Story4	End-I	VCA	0	Comb3-5	0	0.0541	VERTICAL	3.9E-05
B900	Story4	Middle	VCA	-0.2534	VERTICAL	0.000157	0.0146	VERTICAL	1E-05
B900	Story4	End-J	VCA	-0.1	VERTICAL	5.6E-05	0.0292	VERTICAL	2.1E-05
B901	Story4	End-I	VCA	-0.0511	VERTICAL	3.7E-05	0.0256	VERTICAL	1.8E-05
B901	Story4	Middle	VCA	-0.0324	Comb4-2	2.3E-05	0.0128	VERTICAL	9E-06
B901	Story4	End-J	VCA	-0.0436	Comb4-2	3.1E-05	0.0218	Comb4-2	1.5E-05
B902	Story4	End-I	VCA	-0.0529	VERTICAL	3.8E-05	0.0264	VERTICAL	1.9E-05
B902	Story4	Middle	VCA	-0.0785	Comb4-2	4.3E-05	0.0287	Comb4-2	2E-05
B902	Story4	End-J	VCA	-0.1149	Comb4-2	6.4E-05	0.0574	Comb4-2	4.2E-05
B903	Story4	End-I	VCA	-0.1618	Comb4-2	9.3E-05	0.0809	Comb4-2	4.4E-05
B903	Story4	Middle	VCA	-0.0404	Comb4-2	2.9E-05	0.0585	Comb4-2	4.2E-05
B903	Story4	End-J	VCA	-0.0404	Comb4-2	2.9E-05	0.064	Comb4-2	4.2E-05
B904	Story4	End-I	VCA	-0.0182	VERTICAL	1.3E-05	0.0713	Comb4-2	4.2E-05
B904	Story4	Middle	VCA	-0.0947	Comb4-2	5.2E-05	0.0214	Comb4-2	1.5E-05
B904	Story4	End-J	VCA	-0.1733	Comb4-2	0.000101	0.0185	Comb4-2	1.3E-05
B905	Story4	End-I	VCA	-0.0059	Comb3-5	4E-06	0.0216	Comb4-2	1.5E-05
B905	Story4	Middle	VCA	-0.051	Comb4-2	3.7E-05	0.0267	VERTICAL	1.9E-05
B905	Story4	End-J	VCA	-0.1068	VERTICAL	6E-05	0.0534	VERTICAL	3.9E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B906	Story4	End-I	VCA	-0.047	VERTICAL	3.4E-05	0.0091	Comb4-2	6E-06
B906	Story4	Middle	VCA	-0.0518	VERTICAL	3.7E-05	0.0081	Comb4-2	6E-06
B906	Story4	End-J	VCA	-0.0323	Comb4-2	2.3E-05	0.0161	Comb4-2	1.1E-05
B907	Story4	End-I	VCA	-0.0483	VERTICAL	3.5E-05	0.0232	VERTICAL	1.6E-05
B907	Story4	Middle	VCA	-0.0506	VERTICAL	3.6E-05	0.0195	VERTICAL	1.4E-05
B907	Story4	End-J	VCA	-0.078	VERTICAL	4.3E-05	0.039	VERTICAL	2.8E-05
B908	Story4	End-I	VCA	-0.1788	VERTICAL	0.000104	0.0894	VERTICAL	4.9E-05
B908	Story4	Middle	VCA	-0.1121	VERTICAL	6.3E-05	0.0447	VERTICAL	3.2E-05
B908	Story4	End-J	VCA	-0.0523	VERTICAL	3.8E-05	0.0447	VERTICAL	3.2E-05
B909	Story4	End-I	VCA	-0.0381	VERTICAL	2.7E-05	0.019	VERTICAL	1.4E-05
B909	Story4	Middle	VCA	-0.0677	Comb4-2	4.2E-05	0.0095	VERTICAL	7E-06
B909	Story4	End-J	VCA	-0.0708	Comb4-2	4.2E-05	0.0176	Comb4-2	1.2E-05
B910	Story4	End-I	VCA	-0.0424	Comb4-2	3E-05	0.0212	Comb4-2	1.5E-05
B910	Story4	Middle	VCA	-0.0478	Comb4-2	3.4E-05	0.0106	Comb4-2	7E-06
B910	Story4	End-J	VCA	-0.0242	Comb4-2	1.7E-05	0.0121	Comb4-2	9E-06
B911	Story4	End-I	VCA	-0.0024	Comb3-5	2E-06	0.0043	Comb4-2	3E-06
B911	Story4	Middle	VCA	-0.0049	VERTICAL	3E-06	0.0119	Comb4-2	8E-06
B911	Story4	End-J	VCA	0	Comb3-5	0	0.0194	VERTICAL	1.4E-05
B912	Story4	End-I	VCA	-0.0799	VERTICAL	4.4E-05	0.04	VERTICAL	2.9E-05
B912	Story4	Middle	VCA	-0.0307	Comb4-2	2.2E-05	0.02	VERTICAL	1.4E-05
B912	Story4	End-J	VCA	0	Comb3-5	0	0.0258	Comb4-2	1.8E-05
B913	Story4	End-I	VCA	0	Comb3-5	0	0.0532	Comb4-2	3.8E-05
B913	Story4	Middle	VCA	-0.0133	Comb4-2	9E-06	0.0577	Comb4-2	4.2E-05
B913	Story4	End-J	VCA	0	Comb3-5	0	0.0521	Comb4-2	3.8E-05
B914	Story4	End-I	VCA	-0.0587	Comb4-2	4.2E-05	0.0148	Comb4-2	1E-05
B914	Story4	Middle	VCA	-0.0644	Comb4-2	4.2E-05	0.0323	Comb4-2	2.3E-05
B914	Story4	End-J	VCA	-0.0591	Comb4-2	4.2E-05	0.0295	Comb4-2	2.1E-05
B915	Story4	End-I	VCA	-0.0421	Comb4-2	3E-05	0.0405	Comb4-2	2.9E-05
B915	Story4	Middle	VCA	-0.0265	Comb4-2	1.9E-05	0.0584	VERTICAL	4.2E-05
B915	Story4	End-J	VCA	-0.1059	Comb4-2	5.9E-05	0.0529	Comb4-2	3.8E-05
B916	Story4	End-I	VCA	-0.1048	VERTICAL	5.8E-05	0.0524	VERTICAL	3.8E-05
B916	Story4	Middle	VCA	-0.0262	VERTICAL	1.9E-05	0.0586	VERTICAL	4.2E-05
B916	Story4	End-J	VCA	-0.0703	Comb4-2	4.2E-05	0.0457	VERTICAL	3.3E-05
B917	Story4	End-I	VCA		O/S		0.0501	VERTICAL	3.6E-05
B917	Story4	Middle	VCA	-0.236	VERTICAL	0.000144	0.0268	VERTICAL	1.9E-05
B917	Story4	End-J	VCA	-0.0283	Comb4-2	2E-05	0.1074	VERTICAL	6E-05
B918	Story4	End-I	VCA	-0.0266	VERTICAL	1.9E-05	0.097	VERTICAL	5.4E-05
B918	Story4	Middle	VCA	-0.0266	VERTICAL	1.9E-05	0.1056	VERTICAL	5.9E-05
B918	Story4	End-J	VCA	-0.0266	VERTICAL	1.9E-05	0.1065	VERTICAL	5.9E-05
B919	Story4	End-I	VCA	-0.0472	VERTICAL	3.4E-05	0.123	VERTICAL	6.9E-05
B919	Story4	Middle	VCA	-0.0472	VERTICAL	3.4E-05	0.1673	VERTICAL	9.7E-05
B919	Story4	End-J	VCA	-0.0472	VERTICAL	3.4E-05	0.1888	VERTICAL	0.000111
B920	Story4	End-I	VCA	-0.0954	VERTICAL	5.3E-05	0.176	VERTICAL	0.000103
B920	Story4	Middle	VCA	-0.0954	VERTICAL	5.3E-05	0.1266	VERTICAL	7.2E-05
B920	Story4	End-J	VCA		O/S		0.1908	VERTICAL	0.000112

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B921	Story4	End-I	VCA		O/S		0.1911	VERTICAL	0.000113
B921	Story4	Middle	VCA		O/S		0.0956	VERTICAL	5.3E-05
B921	Story4	End-J	VCA		O/S		0.1913	VERTICAL	0.000113
B922	Story4	End-I	VCA	-0.1288	VERTICAL	7.3E-05	0.0578	Comb4-2	4.2E-05
B922	Story4	Middle	VCA	-0.073	Comb4-2	4.2E-05	0.0393	VERTICAL	2.8E-05
B922	Story4	End-J	VCA	-0.0556	Comb4-2	4E-05	0.0322	VERTICAL	2.3E-05
B923	Story4	End-I	VCA	-0.037	Comb4-2	2.6E-05	0.0316	Comb4-2	2.3E-05
B923	Story4	Middle	VCA	-0.0316	Comb4-2	2.3E-05	0.046	VERTICAL	3.3E-05
B923	Story4	End-J	VCA	-0.1262	Comb4-2	7.1E-05	0.0631	Comb4-2	4.2E-05
B924	Story4	End-I	VCA	-0.0576	VERTICAL	4.2E-05	0.029	VERTICAL	2.1E-05
B924	Story4	Middle	VCA	-0.1496	VERTICAL	8.6E-05	0.029	VERTICAL	2.1E-05
B924	Story4	End-J	VCA	-0.1562	VERTICAL	9E-05	0.0579	VERTICAL	4.2E-05
B925	Story4	End-I	VCA	-0.1446	VERTICAL	8.3E-05	0.0648	Comb4-2	4.2E-05
B925	Story4	Middle	VCA	-0.0361	VERTICAL	2.6E-05	0.0439	VERTICAL	3.2E-05
B925	Story4	End-J	VCA	-0.0361	VERTICAL	2.6E-05	0.0434	VERTICAL	3.1E-05
B926	Story4	End-I	VCA	-0.0174	Comb4-2	1.2E-05	0.1488	VERTICAL	8.5E-05
B926	Story4	Middle	VCA	-0.0174	Comb4-2	1.2E-05	0.121	VERTICAL	6.8E-05
B926	Story4	End-J	VCA	-0.181	VERTICAL	0.000106	0.0348	Comb4-2	2.5E-05
B927	Story4	End-I	VCA	-0.1504	Comb4-2	8.6E-05	0.0752	Comb4-2	4.2E-05
B927	Story4	Middle	VCA	-0.0732	Comb4-2	4.2E-05	0.0376	Comb4-2	2.7E-05
B927	Story4	End-J	VCA	-0.006	Comb4-2	4E-06	0.003	Comb4-2	2E-06
B928	Story4	End-I	VCA	-0.1039	VERTICAL	5.8E-05	0.0519	VERTICAL	3.7E-05
B928	Story4	Middle	VCA	-0.0863	VERTICAL	4.8E-05	0.026	VERTICAL	1.8E-05
B928	Story4	End-J	VCA	-0.026	VERTICAL	1.8E-05	0.0602	VERTICAL	4.2E-05
B929	Story4	End-I	VCA	-0.0176	VERTICAL	1.2E-05	0.0844	VERTICAL	4.6E-05
B929	Story4	Middle	VCA	-0.0176	VERTICAL	1.2E-05	0.1058	VERTICAL	5.9E-05
B929	Story4	End-J	VCA	-0.0031	Comb3-5	2E-06	0.0026	Comb4-2	2E-06
B930	Story4	End-I	VCA	-0.0174	VERTICAL	1.2E-05	0.0174	VERTICAL	1.2E-05
B930	Story4	Middle	VCA	-0.0174	VERTICAL	1.2E-05	0.0396	Comb4-2	2.8E-05
B930	Story4	End-J	VCA	0	Comb3-5	0	0.0681	Comb4-2	4.2E-05
B931	Story4	End-I	VCA	-0.0891	VERTICAL	4.9E-05	0.0236	VERTICAL	1.7E-05
B931	Story4	Middle	VCA	-0.0236	VERTICAL	1.7E-05	0.099	VERTICAL	5.5E-05
B931	Story4	End-J	VCA	-0.0942	VERTICAL	5.2E-05	0.0494	VERTICAL	3.6E-05
B932	Story4	End-I	VCA	-0.0867	VERTICAL	4.8E-05	0.0433	VERTICAL	3.1E-05
B932	Story4	Middle	VCA	-0.0217	VERTICAL	1.5E-05	0.0278	VERTICAL	2E-05
B932	Story4	End-J	VCA	-0.0129	VERTICAL	9E-06	0.0065	VERTICAL	5E-06
B933	Story4	End-I	VCA	-0.0129	Comb4-2	9E-06	0.0084	Comb4-2	6E-06
B933	Story4	Middle	VCA	-0.0032	Comb4-2	2E-06	0.0086	Comb4-2	6E-06
B933	Story4	End-J	VCA	-0.0005	Comb3-5	3.348E-07	0.0044	Comb4-2	3E-06
B934	Story4	End-I	VCA	-0.059	Comb4-2	4.2E-05	0.0073	Comb4-2	5E-06
B934	Story4	Middle	VCA	-0.0766	VERTICAL	4.2E-05	0.0048	Comb4-2	3E-06
B934	Story4	End-J	VCA	0	Comb3-5	0	0.0193	Comb4-2	1.4E-05
B935	Story4	End-I	VCA	-0.0188	Comb4-2	1.3E-05	0.0575	VERTICAL	4.2E-05
B935	Story4	Middle	VCA	-0.0188	Comb4-2	1.3E-05	0.0783	VERTICAL	4.3E-05
B935	Story4	End-J	VCA	-0.0188	Comb4-2	1.3E-05	0.0855	VERTICAL	4.7E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B936	Story4	End-I	VCA	0	Comb3-5	0	0.0636	Comb4-2	4.2E-05
B936	Story4	Middle	VCA	-0.0159	Comb4-2	1.1E-05	0.0473	Comb4-2	3.4E-05
B936	Story4	End-J	VCA	-0.0933	Comb4-2	5.2E-05	0.0284	VERTICAL	2E-05
B937	Story4	End-I	VCA	-0.0778	Comb4-2	4.3E-05	0.0353	Comb4-2	2.5E-05
B937	Story4	Middle	VCA	-0.037	Comb4-2	2.6E-05	0.0176	Comb4-2	1.2E-05
B937	Story4	End-J	VCA	-0.0025	Comb3-5	2E-06	0.013	Comb4-2	9E-06
B938	Story4	End-I	VCA	-0.247	VERTICAL	0.000152	0.1235	VERTICAL	7E-05
B938	Story4	Middle	VCA	-0.1647	VERTICAL	9.5E-05	0.0618	VERTICAL	4.2E-05
B938	Story4	End-J	VCA	-0.0845	VERTICAL	4.7E-05	0.0422	VERTICAL	3E-05
B939	Story4	End-I	VCA	-0.0676	Comb4-2	4.2E-05	0.0397	VERTICAL	2.8E-05
B939	Story4	Middle	VCA	-0.083	VERTICAL	4.6E-05	0.0397	VERTICAL	2.8E-05
B939	Story4	End-J	VCA	-0.2281	VERTICAL	0.000138	0.0793	VERTICAL	4.4E-05
B940	Story4	End-I	VCA	-0.0175	VERTICAL	1.2E-05	0.0863	VERTICAL	4.8E-05
B940	Story4	Middle	VCA	-0.0175	VERTICAL	1.2E-05	0.0832	VERTICAL	4.6E-05
B940	Story4	End-J	VCA	-0.0298	VERTICAL	2.1E-05	0.0175	VERTICAL	1.2E-05
B941	Story4	End-I	VCA	-0.0095	Comb4-2	7E-06	0.0048	Comb4-2	3E-06
B941	Story4	Middle	VCA	-0.0108	VERTICAL	8E-06	0.0198	VERTICAL	1.4E-05
B941	Story4	End-J	VCA	0	Comb3-5	0	0.0431	VERTICAL	3.1E-05
B942	Story4	End-I	VCA	-0.0818	Comb4-2	4.5E-05	0.0535	VERTICAL	3.9E-05
B942	Story4	Middle	VCA	-0.0205	Comb4-2	1.5E-05	0.0558	VERTICAL	4E-05
B942	Story4	End-J	VCA	-0.0645	Comb4-2	4.2E-05	0.0205	Comb4-2	1.5E-05
B943	Story4	End-I	VCA	-0.0324	Comb4-2	2.3E-05	0.0162	Comb4-2	1.1E-05
B943	Story4	Middle	VCA	-0.0543	VERTICAL	3.9E-05	0.0204	VERTICAL	1.4E-05
B943	Story4	End-J	VCA	-0.0816	VERTICAL	4.5E-05	0.0408	VERTICAL	2.9E-05
B944	Story4	End-I	VCA	-0.102	VERTICAL	5.7E-05	0.051	VERTICAL	3.7E-05
B944	Story4	Middle	VCA	-0.0914	VERTICAL	5.1E-05	0.0282	VERTICAL	2E-05
B944	Story4	End-J	VCA	-0.0209	Comb4-2	1.5E-05	0.0104	Comb4-2	7E-06
B945	Story4	End-I	VCA	0	Comb3-5	0	0.1942	VERTICAL	0.000115
B945	Story4	Middle	VCA	-0.0729	Comb4-2	4.2E-05	0.1378	VERTICAL	7.8E-05
B945	Story4	End-J	VCA		O/S		0.1112	VERTICAL	6.2E-05
B946	Story4	End-I	VCA	-0.0402	VERTICAL	2.9E-05	0.1168	VERTICAL	6.6E-05
B946	Story4	Middle	VCA	-0.0402	VERTICAL	2.9E-05	0.1558	VERTICAL	9E-05
B946	Story4	End-J	VCA	-0.0402	VERTICAL	2.9E-05	0.1661	VERTICAL	9.6E-05
B947	Story4	End-I	VCA		O/S		0.1605	VERTICAL	9.3E-05
B947	Story4	Middle	VCA	-0.0802	VERTICAL	4.4E-05	0.0813	VERTICAL	4.5E-05
B947	Story4	End-J	VCA	-0.0802	VERTICAL	4.4E-05	0.1357	VERTICAL	7.7E-05
B948	Story4	End-I	VCA	-0.0148	Comb4-2	1E-05	0.0127	Comb3-5	9E-06
B948	Story4	Middle	VCA	-0.0396	Comb4-2	2.8E-05	0.01	VERTICAL	7E-06
B948	Story4	End-J	VCA	-0.0399	VERTICAL	2.9E-05	0.0199	VERTICAL	1.4E-05
B949	Story4	End-I	VCA	-0.1788	VERTICAL	0.000105	0.0894	VERTICAL	4.9E-05
B949	Story4	Middle	VCA	-0.0613	VERTICAL	4.2E-05	0.0447	VERTICAL	3.2E-05
B949	Story4	End-J	VCA	-0.0447	VERTICAL	3.2E-05	0.0447	VERTICAL	3.2E-05
B950	Story4	End-I	VCA	-0.1355	VERTICAL	7.7E-05	0.0517	VERTICAL	3.7E-05
B950	Story4	Middle	VCA	-0.161	VERTICAL	9.3E-05	0.0358	VERTICAL	2.6E-05
B950	Story4	End-J	VCA	-0.159	VERTICAL	9.2E-05	0.0692	Comb4-2	4.2E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B951	Story4	End-I	VCA	-0.0506	VERTICAL	3.7E-05	0.2025	VERTICAL	0.00012
B951	Story4	Middle	VCA	-0.0506	VERTICAL	3.7E-05	0.1039	VERTICAL	5.8E-05
B951	Story4	End-J	VCA	-0.1203	VERTICAL	6.8E-05	0.0602	VERTICAL	4.2E-05
B952	Story4	End-I	VCA	-0.0232	Comb4-2	1.6E-05	0.03	VERTICAL	2.1E-05
B952	Story4	Middle	VCA	-0.0364	Comb4-2	2.6E-05	0.0447	Comb4-2	3.2E-05
B952	Story4	End-J	VCA	-0.0927	Comb4-2	5.1E-05	0.0463	Comb4-2	3.3E-05
B953	Story4	End-I	VCA	-0.0335	VERTICAL	2.4E-05	0.1338	VERTICAL	7.6E-05
B953	Story4	Middle	VCA	-0.0335	VERTICAL	2.4E-05	0.0854	VERTICAL	4.7E-05
B953	Story4	End-J	VCA	-0.0335	VERTICAL	2.4E-05	0.0335	VERTICAL	2.4E-05
B954	Story4	End-I	VCA		O/S		0.16	VERTICAL	9.2E-05
B954	Story4	Middle	VCA	-0.08	VERTICAL	4.4E-05	0.2117	VERTICAL	0.000127
B954	Story4	End-J	VCA	-0.08	VERTICAL	4.4E-05	0.2134	VERTICAL	0.000128
B955	Story4	End-I	VCA	-0.0838	VERTICAL	4.6E-05	0.0838	VERTICAL	4.6E-05
B955	Story4	Middle	VCA	-0.0838	VERTICAL	4.6E-05	0.0838	VERTICAL	4.6E-05
B955	Story4	End-J	VCA		O/S		0.1676	VERTICAL	9.7E-05
B956	Story4	End-I	VCA	-0.0662	Comb4-2	4.2E-05	0.039	VERTICAL	2.8E-05
B956	Story4	Middle	VCA	-0.039	VERTICAL	2.8E-05	0.039	VERTICAL	2.8E-05
B956	Story4	End-J	VCA	-0.039	VERTICAL	2.8E-05	0.156	VERTICAL	9E-05
B957	Story4	End-I	VCA	-0.0529	VERTICAL	3.8E-05	0.0228	Comb4-2	1.6E-05
B957	Story4	Middle	VCA	-0.0359	VERTICAL	2.6E-05	0.0167	VERTICAL	1.2E-05
B957	Story4	End-J	VCA	-0.0639	Comb4-2	4.2E-05	0.0335	VERTICAL	2.4E-05
B958	Story4	End-I	VCA	-0.0393	VERTICAL	2.8E-05	0.0197	VERTICAL	1.4E-05
B958	Story4	Middle	VCA	-0.0137	VERTICAL	1E-05	0.0468	VERTICAL	3.4E-05
B958	Story4	End-J	VCA	-0.0548	VERTICAL	4E-05	0.0274	VERTICAL	2E-05
B959	Story4	End-I	VCA	-0.0216	VERTICAL	1.5E-05	0.0108	VERTICAL	8E-06
B959	Story4	Middle	VCA	-0.0215	VERTICAL	1.5E-05	0.0054	VERTICAL	4E-06
B959	Story4	End-J	VCA	-0.0215	VERTICAL	1.5E-05	0.0107	VERTICAL	8E-06
B960	Story4	End-I	VCA		O/S		0.1371	VERTICAL	7.8E-05
B960	Story4	Middle	VCA	-0.1237	VERTICAL	7E-05	0.0644	Comb4-2	4.2E-05
B960	Story4	End-J	VCA	-0.0644	Comb4-2	4.2E-05	0.0644	Comb4-2	4.2E-05
B961	Story4	End-I	VCA	-0.0992	VERTICAL	5.5E-05	0.0681	Comb4-2	4.2E-05
B961	Story4	Middle	VCA	-0.1979	VERTICAL	0.000117	0.0681	Comb4-2	4.2E-05
B961	Story4	End-J	VCA		O/S		0.1445	VERTICAL	8.3E-05
B962	Story4	End-I	VCA	-0.2114	VERTICAL	0.000126	0.1057	VERTICAL	5.9E-05
B962	Story4	Middle	VCA	-0.0529	VERTICAL	3.8E-05	0.2082	VERTICAL	0.000124
B962	Story4	End-J	VCA	-0.0529	VERTICAL	3.8E-05	0.0761	VERTICAL	4.2E-05
B963	Story4	End-I	VCA	-0.0597	VERTICAL	4.2E-05	0.0299	VERTICAL	2.1E-05
B963	Story4	Middle	VCA	-0.1221	VERTICAL	6.9E-05	0.095	VERTICAL	5.3E-05
B963	Story4	End-J	VCA	-0.05	Comb4-2	3.6E-05	0.025	Comb4-2	1.8E-05
B964	Story4	End-I	VCA	-0.0601	VERTICAL	4.2E-05	0.053	Comb4-2	3.8E-05
B964	Story4	Middle	VCA	-0.0343	VERTICAL	2.4E-05	0.0141	VERTICAL	1E-05
B964	Story4	End-J	VCA	-0.0563	VERTICAL	4.1E-05	0.0282	VERTICAL	2E-05
B965	Story4	End-I	VCA	0	Comb3-5	0	0.0188	Comb4-2	1.3E-05
B965	Story4	Middle	VCA	-0.0253	VERTICAL	1.8E-05	0.0253	VERTICAL	1.8E-05
B965	Story4	End-J	VCA	-0.1011	VERTICAL	5.6E-05	0.0505	VERTICAL	3.6E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B966	Story4	End-I	VCA	-0.1612	VERTICAL	9.3E-05	0.0806	VERTICAL	4.4E-05
B966	Story4	Middle	VCA	-0.0403	VERTICAL	2.9E-05	0.0598	Comb4-2	4.2E-05
B966	Story4	End-J	VCA	-0.0403	VERTICAL	2.9E-05	0.0606	VERTICAL	4.2E-05
B967	Story4	End-I	VCA	-0.0479	VERTICAL	3.5E-05	0.0563	VERTICAL	4.1E-05
B967	Story4	Middle	VCA	-0.1006	VERTICAL	5.6E-05	0.0479	VERTICAL	3.5E-05
B967	Story4	End-J	VCA	-0.1918	VERTICAL	0.000113	0.0959	VERTICAL	5.3E-05
B968	Story4	End-I	VCA	-0.2205	VERTICAL	0.000133	0.1102	VERTICAL	6.2E-05
B968	Story4	Middle	VCA	-0.0551	VERTICAL	4E-05	0.1375	VERTICAL	7.8E-05
B968	Story4	End-J	VCA	-0.0551	VERTICAL	4E-05	0.148	VERTICAL	8.5E-05
B969	Story4	End-I	VCA	-0.048	VERTICAL	3.5E-05	0.192	VERTICAL	0.000113
B969	Story4	Middle	VCA	-0.048	VERTICAL	3.5E-05	0.1279	VERTICAL	7.2E-05
B969	Story4	End-J	VCA	-0.1871	VERTICAL	0.00011	0.0936	VERTICAL	5.2E-05
B970	Story4	End-I	VCA	-0.1608	VERTICAL	9.3E-05	0.0804	VERTICAL	4.4E-05
B970	Story4	Middle	VCA	-0.0465	VERTICAL	3.3E-05	0.1316	VERTICAL	7.5E-05
B970	Story4	End-J	VCA	0	Comb3-5	0	0.1861	VERTICAL	0.000109
B971	Story4	End-I	VCA	-0.0194	Comb4-2	1.4E-05	0.0097	Comb4-2	7E-06
B971	Story4	Middle	VCA	-0.0622	Comb4-2	4.2E-05	0.0242	VERTICAL	1.7E-05
B971	Story4	End-J	VCA	-0.1254	VERTICAL	7.1E-05	0.0483	VERTICAL	3.5E-05
B972	Story4	End-I	VCA	0	Comb3-5	0	0.0385	Comb4-2	2.8E-05
B972	Story4	Middle	VCA	-0.0114	VERTICAL	8E-06	0.0114	VERTICAL	8E-06
B972	Story4	End-J	VCA	-0.0455	VERTICAL	3.3E-05	0.0227	VERTICAL	1.6E-05
B973	Story4	End-I	VCA	-0.0334	Comb4-2	2.4E-05	0.0317	VERTICAL	2.3E-05
B973	Story4	Middle	VCA	-0.049	Comb4-2	3.5E-05	0.0597	VERTICAL	4.2E-05
B973	Story4	End-J	VCA	-0.0966	Comb4-2	5.4E-05	0.0483	Comb4-2	3.5E-05
B974	Story4	End-I	VCA	-0.008	Comb3	6E-06	0.004	Comb3	3E-06
B974	Story4	Middle	VCA	-0.0141	VERTICAL	1E-05	0.0048	VERTICAL	3E-06
B974	Story4	End-J	VCA	-0.0301	Comb4-2	2.1E-05	0.0096	VERTICAL	7E-06
B975	Story4	End-I	VCA	-0.0883	VERTICAL	4.9E-05	0.0441	VERTICAL	3.2E-05
B975	Story4	Middle	VCA	-0.0221	VERTICAL	1.6E-05	0.0521	VERTICAL	3.8E-05
B975	Story4	End-J	VCA	-0.0278	VERTICAL	2E-05	0.0401	VERTICAL	2.9E-05
B976	Story4	End-I	VCA	0	Comb3-5	0	0.0103	VERTICAL	7E-06
B976	Story4	Middle	VCA	-0.0124	VERTICAL	9E-06	0.0041	Comb4-2	3E-06
B976	Story4	End-J	VCA	-0.0163	Comb4-2	1.2E-05	0.0082	Comb4-2	6E-06
B977	Story4	End-I	VCA	-0.0306	VERTICAL	2.2E-05	0.0153	VERTICAL	1.1E-05
B977	Story4	Middle	VCA	-0.0275	Comb4-2	2E-05	0.0088	VERTICAL	6E-06
B977	Story4	End-J	VCA	-0.04	VERTICAL	2.9E-05	0.0177	VERTICAL	1.3E-05
B978	Story4	End-I	VCA	-0.0182	VERTICAL	1.3E-05	0.0091	VERTICAL	6E-06
B978	Story4	Middle	VCA	-0.0076	VERTICAL	5E-06	0.0162	VERTICAL	1.2E-05
B978	Story4	End-J	VCA	-0.0194	Comb4-2	1.4E-05	0.0097	Comb4-2	7E-06
B979	Story4	End-I	VCA	-0.0814	VERTICAL	4.5E-05	0.0407	VERTICAL	2.9E-05
B979	Story4	Middle	VCA	-0.0594	Comb4-2	4.2E-05	0.0693	Comb4-2	4.2E-05
B979	Story4	End-J	VCA	-0.0204	VERTICAL	1.4E-05	0.0923	VERTICAL	5.1E-05
B980	Story4	End-I	VCA	-0.2337	VERTICAL	0.000142	0.1169	VERTICAL	6.6E-05
B980	Story4	Middle	VCA	-0.0584	VERTICAL	4.2E-05	0.165	VERTICAL	9.6E-05
B980	Story4	End-J	VCA	-0.0584	VERTICAL	4.2E-05	0.1671	VERTICAL	9.7E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B981	Story4	End-I	VCA	-0.1783	VERTICAL	0.000104	0.0891	VERTICAL	4.9E-05
B981	Story4	Middle	VCA	-0.0934	VERTICAL	5.2E-05	0.0446	VERTICAL	3.2E-05
B981	Story4	End-J	VCA	-0.0591	VERTICAL	4.2E-05	0.0446	VERTICAL	3.2E-05
B982	Story4	End-I	VCA	-0.2141	VERTICAL	0.000128	0.107	VERTICAL	6E-05
B982	Story4	Middle	VCA	-0.0535	VERTICAL	3.9E-05	0.0535	VERTICAL	3.9E-05
B982	Story4	End-J	VCA	-0.1793	VERTICAL	0.000105	0.0897	VERTICAL	5E-05
B983	Story4	End-I	VCA	-0.0597	VERTICAL	4.2E-05	0.1649	VERTICAL	9.6E-05
B983	Story4	Middle	VCA	-0.0597	VERTICAL	4.2E-05	0.1276	VERTICAL	7.2E-05
B983	Story4	End-J	VCA	-0.2387	VERTICAL	0.000146	0.1193	VERTICAL	6.7E-05
B984	Story4	End-I	VCA	-0.0591	VERTICAL	4.2E-05	0.0295	VERTICAL	2.1E-05
B984	Story4	Middle	VCA	-0.0176	VERTICAL	1.2E-05	0.0148	VERTICAL	1E-05
B984	Story4	End-J	VCA	0	Comb3-5	0	0.0215	Comb4-2	1.5E-05
B985	Story4	End-I	VCA	-0.2292	VERTICAL	0.000139	0.101	VERTICAL	5.6E-05
B985	Story4	Middle	VCA	-0.1017	VERTICAL	5.7E-05	0.059	VERTICAL	4.2E-05
B985	Story4	End-J	VCA	-0.0505	VERTICAL	3.6E-05	0.1333	VERTICAL	7.6E-05
B986	Story4	End-I	VCA	0	Comb3-5	0	0.0899	VERTICAL	5E-05
B986	Story4	Middle	VCA	-0.0225	VERTICAL	1.6E-05	0.0894	VERTICAL	4.9E-05
B986	Story4	End-J	VCA	0	Comb3-5	0	0.0889	VERTICAL	4.9E-05
B987	Story4	End-I	VCA	0	Comb3-5	0	0.1099	VERTICAL	6.1E-05
B987	Story4	Middle	VCA	-0.0275	VERTICAL	2E-05	0.1397	VERTICAL	8E-05
B987	Story4	End-J	VCA	-0.0275	VERTICAL	2E-05	0.1389	VERTICAL	7.9E-05
B988	Story4	End-I	VCA	0	Comb3-5	0	0.0808	VERTICAL	4.4E-05
B988	Story4	Middle	VCA	-0.0844	VERTICAL	4.6E-05	0.1765	VERTICAL	0.000103
B988	Story4	End-J	VCA	-0.0243	VERTICAL	1.7E-05	0.0855	VERTICAL	4.7E-05
B989	Story4	End-I	VCA	-0.0332	VERTICAL	2.4E-05	0.0166	VERTICAL	1.2E-05
B989	Story4	Middle	VCA	-0.2059	VERTICAL	0.000123	0.0226	VERTICAL	1.6E-05
B989	Story4	End-J	VCA	-0.0905	VERTICAL	5E-05	0.0453	VERTICAL	3.3E-05
B990	Story4	End-I	VCA	-0.0953	VERTICAL	5.3E-05	0.0443	VERTICAL	3.2E-05
B990	Story4	Middle	VCA	-0.0916	VERTICAL	5.1E-05	0.0221	VERTICAL	1.6E-05
B990	Story4	End-J	VCA	-0.083	VERTICAL	4.6E-05	0.0271	VERTICAL	1.9E-05
B991	Story4	End-I	VCA	-0.0226	VERTICAL	1.6E-05	0.0815	VERTICAL	4.5E-05
B991	Story4	Middle	VCA	-0.0226	VERTICAL	1.6E-05	0.0612	Comb4-2	4.2E-05
B991	Story4	End-J	VCA	-0.0906	VERTICAL	5E-05	0.0453	VERTICAL	3.3E-05
B992	Story4	End-I	VCA	-0.2257	VERTICAL	0.000136	0.1089	VERTICAL	6.1E-05
B992	Story4	Middle	VCA	-0.0609	VERTICAL	4.2E-05	0.0545	VERTICAL	3.9E-05
B992	Story4	End-J	VCA	-0.0545	VERTICAL	3.9E-05	0.0612	Comb4-2	4.2E-05
B993	Story4	End-I	VCA	0	Comb3-5	0	0.0636	Comb4-2	4.2E-05
B993	Story4	Middle	VCA	-0.0172	VERTICAL	1.2E-05	0.0637	Comb4-2	4.2E-05
B993	Story4	End-J	VCA	0	Comb3-5	0	0.0637	Comb4-2	4.2E-05
B994	Story4	End-I	VCA	-0.0559	VERTICAL	4E-05	0.0594	Comb4-2	4.2E-05
B994	Story4	Middle	VCA	-0.0904	VERTICAL	5E-05	0.0559	VERTICAL	4E-05
B994	Story4	End-J	VCA	-0.2234	VERTICAL	0.000135	0.1117	VERTICAL	6.3E-05
B995	Story4	End-I	VC	-0.0112	VERTICAL	2E-06	0.0112	VERTICAL	2E-06
B995	Story4	Middle	VC	-0.0112	VERTICAL	2E-06	0.0235	Comb4-2	4E-06
B995	Story4	End-J	VC	0	Comb3-5	0	0.0449	VERTICAL	8E-06

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B996	Story4	End-I	VC	-0.0196	Comb4-2	3E-06	0.0139	VERTICAL	2E-06
B996	Story4	Middle	VC	-0.0139	VERTICAL	2E-06	0.0471	VERTICAL	8E-06
B996	Story4	End-J	VC	-0.0139	VERTICAL	2E-06	0.0565	VERTICAL	1E-05
B1005	Story4	End-I	VCUM	-0.0011	Comb3-5	1E-06	0.0336	Comb4-2	2.4E-05
B1005	Story4	Middle	VCUM	-0.0476	VERTICAL	3.4E-05	0.0691	VERTICAL	4.9E-05
B1005	Story4	End-J	VCUM	-0.0706	VERTICAL	5.1E-05	0.0353	VERTICAL	2.5E-05
B1006	Story4	End-I	VCUM	-0.0986	VERTICAL	7.1E-05	0.0493	VERTICAL	3.5E-05
B1006	Story4	Middle	VCUM	-0.0247	VERTICAL	1.7E-05	0.1266	VERTICAL	8.3E-05
B1006	Story4	End-J	VCUM	-0.0632	Comb4-2	4.5E-05	0.0316	Comb4-2	2.2E-05
B1007	Story4	End-I	VCUM	-0.0823	Comb4-2	5.9E-05	0.0411	Comb4-2	2.9E-05
B1007	Story4	Middle	VCUM	-0.0698	Comb4-2	5E-05	0.0698	Comb4-2	5E-05
B1007	Story4	End-J	VCUM	-0.2793	Comb4-2	0.000159	0.1396	Comb4-2	8.3E-05
B1008	Story4	End-I	VCUM	-0.2451	Comb4-2	0.000138	0.1225	Comb4-2	8.3E-05
B1008	Story4	Middle	VCUM	-0.0762	Comb4-2	5.5E-05	0.0613	Comb4-2	4.4E-05
B1008	Story4	End-J	VCUM	0	Comb3-5	0	0.0714	Comb4-2	5.1E-05
B1039	Story4	End-I	VCUM	-0.0814	Comb4-2	5.8E-05	0.1383	Comb4-2	8.3E-05
B1039	Story4	Middle	VCUM	-0.0814	Comb4-2	5.8E-05	0.1077	VERTICAL	7.8E-05
B1039	Story4	End-J	VCUM	-0.3258	Comb4-2	0.000188	0.1629	Comb4-2	9E-05
B1040	Story4	End-I	VCUM	-0.0217	Comb4-2	1.5E-05	0.0203	Comb4-2	1.4E-05
B1040	Story4	Middle	VCUM	-0.0171	Comb4-2	1.2E-05	0.1348	Comb4-2	8.3E-05
B1040	Story4	End-J	VCUM	-0.0652	VERTICAL	4.7E-05	0.0684	Comb4-2	4.9E-05
B1041	Story4	End-I	VCUM	0	Comb3-5	0	0.0736	Comb4-2	5.3E-05
B1041	Story4	Middle	VCUM	-0.2423	Comb4-2	0.000136	0.065	Comb4-2	4.6E-05
B1041	Story4	End-J	VCUM	-0.3438	Comb4-2	0.0002	0.1301	Comb4-2	8.3E-05
B1042	Story4	End-I	VCUM	-0.107	VERTICAL	7.7E-05	0.107	VERTICAL	7.7E-05
B1042	Story4	Middle	VCUM	-0.1749	VERTICAL	9.7E-05	0.107	VERTICAL	7.7E-05
B1042	Story4	End-J	VCUM	-0.428	VERTICAL	0.000257	0.214	VERTICAL	0.000119
B1043	Story4	End-I	VCUM	-0.481	VERTICAL	0.000294	0.2405	VERTICAL	0.000135
B1043	Story4	Middle	VCUM	0			0		
B1043	Story4	End-J	VCUM	-0.4757	VERTICAL	0.00029	0.2378	VERTICAL	0.000134
B1054	Story4	End-I	VCUM	-0.2425	VERTICAL	0.000137	0.1204	Comb4-2	8.3E-05
B1054	Story4	Middle	VCUM	-0.1362	Comb4-2	8.3E-05	0.0606	VERTICAL	4.3E-05
B1054	Story4	End-J	VCUM	-0.0486	Comb4-2	3.5E-05	0.0243	Comb4-2	1.7E-05
B1055	Story4	End-I	VCUM	-0.0779	VERTICAL	5.6E-05	0.0779	VERTICAL	5.6E-05
B1055	Story4	Middle	VCUM	-0.0779	VERTICAL	5.6E-05	0.1303	VERTICAL	8.3E-05
B1055	Story4	End-J	VCUM	-0.3115	VERTICAL	0.000179	0.1557	VERTICAL	8.5E-05
B1056	Story4	End-I	VCUM	-0.3797	VERTICAL	0.000224	0.1899	VERTICAL	0.000105
B1056	Story4	Middle	VCUM	-0.0949	VERTICAL	6.8E-05	0.2367	VERTICAL	0.000133
B1056	Story4	End-J	VCUM	0	Comb3-5	0	0.0804	VERTICAL	5.8E-05
B1057	Story4	End-I	VCUM	-0.0272	VERTICAL	1.9E-05	0.0831	VERTICAL	6E-05
B1057	Story4	Middle	VCUM	-0.2082	VERTICAL	0.000116	0.2551	VERTICAL	0.000144
B1057	Story4	End-J	VCUM	-0.0208	VERTICAL	1.5E-05	0.0376	Comb4-2	2.7E-05
B1058	Story4	End-I	VCUM	-0.1131	VERTICAL	8.2E-05	0.0872	VERTICAL	6.3E-05
B1058	Story4	Middle	VCUM	-0.0842	VERTICAL	6E-05	0.0799	Comb4-2	5.7E-05
B1058	Story4	End-J	VCUM	-0.0279	VERTICAL	2E-05	0.0638	Comb4-2	4.6E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1059	Story4	End-I	VCUM	-0.514	VERTICAL	0.000319	0.257	VERTICAL	0.000145
B1059	Story4	Middle	VCUM	-0.1216	Comb4-2	8.3E-05	0.1216	Comb4-2	8.3E-05
B1059	Story4	End-J	VCUM	-0.1216	Comb4-2	8.3E-05	0.1216	Comb4-2	8.3E-05
B1060	Story4	End-I	VCUM	0	Comb3-5	0	0.1049	VERTICAL	7.6E-05
B1060	Story4	Middle	VCUM	-0.078	Comb4-2	5.6E-05	0.0289	Comb4-2	2E-05
B1060	Story4	End-J	VCUM	-0.0262	VERTICAL	1.9E-05	0.052	VERTICAL	3.7E-05
B1062	Story4	End-I	VCUM	-0.0347	VERTICAL	2.5E-05	0.0991	VERTICAL	7.1E-05
B1062	Story4	Middle	VCUM	-0.0347	VERTICAL	2.5E-05	0.1284	Comb4-2	8.3E-05
B1062	Story4	End-J	VCUM	-0.0347	VERTICAL	2.5E-05	0.1251	Comb4-2	8.3E-05
B840	Story4	End-I	VCUM	-0.3551	VERTICAL	0.000207	0.1776	VERTICAL	9.8E-05
B840	Story4	Middle	VCUM	-0.0888	VERTICAL	6.4E-05	0.1168	VERTICAL	8.3E-05
B840	Story4	End-J	VCUM	-0.0888	VERTICAL	6.4E-05	0.0888	VERTICAL	6.4E-05
B1061	Story4	End-I	VCB	-0.0392	VERTICAL	2.8E-05	0.0274	Comb4-2	2E-05
B1061	Story4	Middle	VCB	-0.0416	Comb4-2	3E-05	0.0274	Comb4-2	2E-05
B1061	Story4	End-J	VCB	-0.1097	Comb4-2	6.1E-05	0.0549	Comb4-2	4E-05
B1071	Story4	End-I	VCB	-0.1408	VERTICAL	8E-05	0.0691	Comb4-2	4.2E-05
B1071	Story4	Middle	VCB	-0.0352	VERTICAL	2.5E-05	0.1374	VERTICAL	7.8E-05
B1071	Story4	End-J	VCB	-0.1366	VERTICAL	7.8E-05	0.0607	Comb4-2	4.2E-05
B1072	Story4	End-I	VCB	-0.1315	VERTICAL	7.5E-05	0.0597	Comb4-2	4.2E-05
B1072	Story4	Middle	VCB	-0.0329	VERTICAL	2.3E-05	0.0329	VERTICAL	2.3E-05
B1072	Story4	End-J	VCB	-0.0329	VERTICAL	2.3E-05	0.0496	VERTICAL	3.6E-05
B1073	Story4	End-I	VCB	-0.017	Comb4-2	1.2E-05	0.058	Comb4-2	4.2E-05
B1073	Story4	Middle	VCB	-0.0343	VERTICAL	2.5E-05	0.06	Comb4-2	4.2E-05
B1073	Story4	End-J	VCB	-0.0956	VERTICAL	5.3E-05	0.0339	Comb4-2	2.4E-05
B1074	Story4	End-I	VCB	-0.0557	Comb4-2	4E-05	0.0279	Comb4-2	2E-05
B1074	Story4	Middle	VCB	-0.035	Comb4-2	2.5E-05	0.0139	Comb4-2	1E-05
B1074	Story4	End-J	VCB	-0.0474	Comb4-2	3.4E-05	0.0237	Comb4-2	1.7E-05
B1075	Story4	End-I	VCB	-0.0168	Comb4-2	1.2E-05	0.0089	Comb3-5	6E-06
B1075	Story4	Middle	VCB	-0.0145	Comb4-2	1E-05	0.0089	Comb3-5	6E-06
B1075	Story4	End-J	VCB	-0.0198	Comb4-2	1.4E-05	0.0099	Comb4-2	7E-06
B1076	Story4	End-I	VCB	-0.0255	VERTICAL	1.8E-05	0.0127	VERTICAL	9E-06
B1076	Story4	Middle	VCB	0			0		
B1076	Story4	End-J	VCB	-0.0146	VERTICAL	1E-05	0.0073	VERTICAL	5E-06
B1077	Story4	End-I	VCB	-0.0228	VERTICAL	1.6E-05	0.0114	VERTICAL	8E-06
B1077	Story4	Middle	VCB	-0.0083	VERTICAL	6E-06	0.0422	VERTICAL	3E-05
B1077	Story4	End-J	VCB	-0.0333	VERTICAL	2.4E-05	0.0166	VERTICAL	1.2E-05
B1078	Story4	End-I	VCB	-0.0405	Comb4-2	2.9E-05	0.0277	Comb4-2	2E-05
B1078	Story4	Middle	VCB	-0.0223	Comb4-2	1.6E-05	0.0474	VERTICAL	3.4E-05
B1078	Story4	End-J	VCB	-0.0893	Comb4-2	4.9E-05	0.0447	Comb4-2	3.2E-05
B1079	Story4	End-I	VCB	-0.1873	VERTICAL	0.00011	0.0664	Comb4-2	4.2E-05
B1079	Story4	Middle	VCB	-0.0519	VERTICAL	3.7E-05	0.0775	VERTICAL	4.3E-05
B1079	Story4	End-J	VCB	-0.0365	VERTICAL	2.6E-05	0.0981	VERTICAL	5.4E-05
B1080	Story4	End-I	VCB	-0.0237	VERTICAL	1.7E-05	0.1153	VERTICAL	6.5E-05
B1080	Story4	Middle	VCB	-0.128	Comb4-2	7.2E-05	0.1085	VERTICAL	6.1E-05
B1080	Story4	End-J	VCB	-0.1198	VERTICAL	6.7E-05	0.0292	VERTICAL	2.1E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1081	Story4	End-I	VCB	-0.1113	Comb4-2	6.2E-05	0.0557	Comb4-2	4E-05
B1081	Story4	Middle	VCB	0			0		
B1081	Story4	End-J	VCB	-0.0652	Comb4-2	4.2E-05	0.0339	VERTICAL	2.4E-05
B1082	Story4	End-I	VCB	-0.061	Comb4-2	4.2E-05	0.0305	Comb4-2	2.2E-05
B1082	Story4	Middle	VCB	0			0		
B1082	Story4	End-J	VCB	-0.0401	Comb4-2	2.9E-05	0.02	Comb4-2	1.4E-05
B1083	Story4	End-I	VCB	-0.0134	Comb3-5	9E-06	0.0195	Comb4-2	1.4E-05
B1083	Story4	Middle	VCB	0			0		
B1083	Story4	End-J	VCB	-0.008	Comb3-5	6E-06	0.0272	Comb4-2	1.9E-05
B1084	Story4	End-I	VCB	-0.0333	Comb4-2	2.4E-05	0.057	Comb4-2	4.1E-05
B1084	Story4	Middle	VCB	-0.0333	Comb4-2	2.4E-05	0.0635	Comb4-2	4.2E-05
B1084	Story4	End-J	VCB	-0.1331	Comb4-2	7.5E-05	0.0665	Comb4-2	4.2E-05
B1085	Story4	End-I	VCB	-0.0264	Comb4-2	1.9E-05	0.0132	Comb4-2	9E-06
B1085	Story4	Middle	VCB	-0.0089	Comb4-2	6E-06	0.0066	Comb4-2	5E-06
B1085	Story4	End-J	VCB	0	Comb3-5	0	0.0059	Comb4-2	4E-06
B1086	Story4	End-I	VCB	-0.0261	VERTICAL	1.9E-05	0.0131	VERTICAL	9E-06
B1086	Story4	Middle	VCB	-0.0177	Comb4-2	1.3E-05	0.0065	VERTICAL	5E-06
B1086	Story4	End-J	VCB	-0.0129	Comb4-2	9E-06	0.0126	Comb4-2	9E-06
B1087	Story4	End-I	VCB	-0.0051	Comb4-2	4E-06	0.0285	VERTICAL	2E-05
B1087	Story4	Middle	VCB	-0.0051	Comb4-2	4E-06	0.0273	VERTICAL	1.9E-05
B1087	Story4	End-J	VCB	-0.0203	Comb4-2	1.4E-05	0.0101	Comb4-2	7E-06
B1088	Story4	End-I	VCB	-0.0837	VERTICAL	4.6E-05	0.0367	VERTICAL	2.6E-05
B1088	Story4	Middle	VCB	-0.0421	VERTICAL	3E-05	0.0184	VERTICAL	1.3E-05
B1088	Story4	End-J	VCB	0	Comb3-5	0	0.0167	VERTICAL	1.2E-05
B1089	Story4	End-I	VCB	-0.0145	VERTICAL	1E-05	0.0476	VERTICAL	3.4E-05
B1089	Story4	Middle	VCB	-0.0145	VERTICAL	1E-05	0.031	VERTICAL	2.2E-05
B1089	Story4	End-J	VCB	-0.0581	VERTICAL	4.2E-05	0.0291	VERTICAL	2.1E-05
B1090	Story4	End-I	VCB	-0.0452	VERTICAL	3.2E-05	0.0031	Comb3-5	2E-06
B1090	Story4	Middle	VCB	-0.0122	Comb3-5	9E-06	0.0126	VERTICAL	9E-06
B1090	Story4	End-J	VCB	-0.0114	Comb4-2	8E-06	0.0103	Comb4-2	7E-06
B1091	Story4	End-I	VCB	-0.0195	Comb4-2	1.4E-05	0.0117	Comb4-2	8E-06
B1091	Story4	Middle	VCB	-0.0179	Comb4-2	1.3E-05	0.0118	Comb3-5	8E-06
B1091	Story4	End-J	VCB	-0.0374	Comb4-2	2.7E-05	0.0187	Comb4-2	1.3E-05
B1092	Story4	End-I	VCB	-0.0058	Comb3-5	4E-06	0.017	Comb4-2	1.2E-05
B1092	Story4	Middle	VCB	-0.0883	Comb4-2	4.9E-05	0.0155	Comb4-2	1.1E-05
B1092	Story4	End-J	VCB	-0.062	Comb4-2	4.2E-05	0.031	Comb4-2	2.2E-05
B1093	Story4	End-I	VCB	-0.0596	Comb4-2	4.2E-05	0.0298	Comb4-2	2.1E-05
B1093	Story4	Middle	VCB	-0.0149	Comb4-2	1.1E-05	0.0185	Comb4-2	1.3E-05
B1093	Story4	End-J	VCB	-0.0149	Comb4-2	1.1E-05	0.0149	Comb4-2	1.1E-05
B1094	Story4	End-I	VCB	-0.0055	Comb4-2	4E-06	0.0311	Comb4-2	2.2E-05
B1094	Story4	Middle	VCB		O/S		0.0643	Comb4-2	4.2E-05
B1094	Story4	End-J	VCB	-0.0346	VERTICAL	2.5E-05	0.0218	Comb4-2	1.6E-05
B1095	Story4	End-I	VCB	-0.0226	VERTICAL	1.6E-05	0.053	Comb4-2	3.8E-05
B1095	Story4	Middle	VCB	-0.0226	VERTICAL	1.6E-05	0.0584	VERTICAL	4.2E-05
B1095	Story4	End-J	VCB	-0.0905	VERTICAL	5E-05	0.0452	VERTICAL	3.3E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1096	Story4	End-I	VCB	-0.03	Comb4-2	2.1E-05	0.0241	Comb3-5	1.7E-05
B1096	Story4	Middle	VCB	0			0		
B1096	Story4	End-J	VCB	-0.0631	Comb4-2	4.2E-05	0.0315	Comb4-2	2.3E-05
B1097	Story4	End-I	VCB	-0.0739	Comb4-2	4.2E-05	0.0364	Comb4-2	2.6E-05
B1097	Story4	Middle	VCB	-0.0191	Comb4-2	1.4E-05	0.0239	VERTICAL	1.7E-05
B1097	Story4	End-J	VCB	-0.0579	Comb3-5	4.2E-05	0.0417	Comb3-5	3E-05
B1098	Story4	End-I	VCB	-0.0096	VERTICAL	7E-06	0.0048	VERTICAL	3E-06
B1098	Story4	Middle	VCB	0			0		
B1098	Story4	End-J	VCB	-0.0129	Comb4-2	9E-06	0.0096	Comb3-5	7E-06
B1099	Story4	End-I	VCB	-0.083	VERTICAL	4.6E-05	0.0267	VERTICAL	1.9E-05
B1099	Story4	Middle	VCB	-0.0616	Comb4-2	4.2E-05	0.0134	VERTICAL	9E-06
B1099	Story4	End-J	VCB	-0.0134	VERTICAL	9E-06	0.0349	Comb4-2	2.5E-05
B1100	Story4	End-I	VCB	-0.0101	VERTICAL	7E-06	0.0539	VERTICAL	3.9E-05
B1100	Story4	Middle	VCB	-0.0101	VERTICAL	7E-06	0.0638	VERTICAL	4.2E-05
B1100	Story4	End-J	VCB	-0.0444	VERTICAL	3.2E-05	0.0132	Comb4-2	9E-06
B1101	Story4	End-I	VCB	-0.0452	Comb4-2	3.2E-05	0.0226	Comb4-2	1.6E-05
B1101	Story4	Middle	VCB	-0.0374	Comb4-2	2.7E-05	0.0113	Comb4-2	8E-06
B1101	Story4	End-J	VCB	-0.0254	Comb4-2	1.8E-05	0.0119	Comb4-2	8E-06
B1102	Story4	End-I	VCB	-0.0069	Comb3-5	5E-06	0.0084	Comb4-2	6E-06
B1102	Story4	Middle	VCB	-0.0466	VERTICAL	3.3E-05	0.0097	VERTICAL	7E-06
B1102	Story4	End-J	VCB	-0.0386	VERTICAL	2.8E-05	0.0193	VERTICAL	1.4E-05
B1103	Story4	End-I	VCB	-0.0278	Comb4-2	2E-05	0.0139	Comb4-2	1E-05
B1103	Story4	Middle	VCB	-0.0314	VERTICAL	2.2E-05	0.007	Comb4-2	5E-06
B1103	Story4	End-J	VCB	-0.0026	Comb3-5	2E-06	0.0063	Comb4-2	4E-06
B1104	Story4	End-I	VCB	-0.1129	Comb4-2	6.3E-05	0.0565	Comb4-2	4.1E-05
B1104	Story4	Middle	VCB	-0.0282	Comb4-2	2E-05	0.0587	Comb4-2	4.2E-05
B1104	Story4	End-J	VCB	-0.0684	Comb4-2	4.2E-05	0.0342	Comb4-2	2.4E-05
B1105	Story4	End-I	VCB	-0.0101	Comb3-5	7E-06	0.0157	Comb4-2	1.1E-05
B1105	Story4	Middle	VCB	0			0		
B1105	Story4	End-J	VCB	0	Comb3-5	0	0.0526	Comb4-2	3.8E-05
B1106	Story4	End-I	VCB	-0.1178	VERTICAL	6.6E-05	0.0589	VERTICAL	4.2E-05
B1106	Story4	Middle	VCB	0			0		
B1106	Story4	End-J	VCB	-0.0451	Comb4-2	3.2E-05	0.0225	Comb4-2	1.6E-05
B1107	Story4	End-I	VCB	-0.1304	VERTICAL	7.4E-05	0.0642	Comb4-2	4.2E-05
B1107	Story4	Middle	VCB	0			0		
B1107	Story4	End-J	VCB	-0.0906	Comb4-2	5E-05	0.0453	Comb4-2	3.3E-05
B1108	Story4	End-I	VCB	-0.1451	VERTICAL	8.3E-05	0.0385	VERTICAL	2.8E-05
B1108	Story4	Middle	VCB	-0.0205	Comb4-2	1.5E-05	0.1213	VERTICAL	6.8E-05
B1108	Story4	End-J	VCB	-0.1036	Comb4-2	5.8E-05	0.041	Comb4-2	2.9E-05
B1109	Story4	End-I	VCB	-0.0698	Comb4-2	4.2E-05	0.0349	Comb4-2	2.5E-05
B1109	Story4	Middle	VCB	-0.0278	Comb4-2	2E-05	0.0386	Comb4-2	2.8E-05
B1109	Story4	End-J	VCB	-0.0215	Comb4-2	1.5E-05	0.0339	Comb4-2	2.4E-05
B1110	Story4	End-I	VCB	-0.0154	Comb4-2	1.1E-05	0.0172	Comb4-2	1.2E-05
B1110	Story4	Middle	VCB	-0.0414	Comb4-2	3E-05	0.0257	Comb3-5	1.8E-05
B1110	Story4	End-J	VCB	-0.0617	Comb4-2	4.2E-05	0.0309	Comb4-2	2.2E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1111	Story4	End-I	VCB	-0.0314	Comb4-2	2.2E-05	0.0157	Comb4-2	1.1E-05
B1111	Story4	Middle	VCB	0			0		
B1111	Story4	End-J	VCB	-0.0182	Comb4-2	1.3E-05	0.0091	Comb4-2	6E-06
B1112	Story4	End-I	VCB	-0.0038	Comb3-5	3E-06	0.0081	Comb4-2	6E-06
B1112	Story4	Middle	VCB	0			0		
B1112	Story4	End-J	VCB	-0.0306	Comb4-2	2.2E-05	0.0153	Comb4-2	1.1E-05
B1113	Story4	End-I	VCB	-0.0582	Comb4-2	4.2E-05	0.0291	Comb4-2	2.1E-05
B1113	Story4	Middle	VCB	-0.0776	Comb4-2	4.3E-05	0.0146	Comb4-2	1E-05
B1113	Story4	End-J	VCB	-0.0563	Comb4-2	4.1E-05	0.0281	Comb4-2	2E-05
B1114	Story4	End-I	VCB	-0.1324	VERTICAL	7.5E-05	0.0633	Comb4-2	4.2E-05
B1114	Story4	Middle	VCB	0			0		
B1114	Story4	End-J	VCB	-0.0245	Comb4-2	1.7E-05	0.0123	Comb4-2	9E-06
B1115	Story4	End-I	VCB	-0.0062	Comb4-2	4E-06	0.0221	VERTICAL	1.6E-05
B1115	Story4	Middle	VCB	-0.0647	Comb4-2	4.2E-05	0.0383	VERTICAL	2.7E-05
B1115	Story4	End-J	VCB	-0.0338	Comb4-2	2.4E-05	0.0124	Comb4-2	9E-06
B1116	Story4	End-I	VCB	-0.0766	VERTICAL	4.2E-05	0.0247	Comb4-2	1.8E-05
B1116	Story4	Middle	VCB	-0.1173	VERTICAL	6.6E-05	0.0124	Comb4-2	9E-06
B1116	Story4	End-J	VCB	0	Comb3-5	0	0.02	Comb4-2	1.4E-05
B1117	Story4	End-I	VCB	-0.0199	VERTICAL	1.4E-05	0.1408	VERTICAL	8E-05
B1117	Story4	Middle	VCB	-0.0199	VERTICAL	1.4E-05	0.141	VERTICAL	8E-05
B1117	Story4	End-J	VCB	-0.0796	VERTICAL	4.4E-05	0.0398	VERTICAL	2.9E-05
B1118	Story4	End-I	VCB	-0.0053	Comb4-2	4E-06	0.0288	Comb4-2	2.1E-05
B1118	Story4	Middle	VCB	-0.0053	Comb4-2	4E-06	0.0391	Comb4-2	2.8E-05
B1118	Story4	End-J	VCB	-0.0225	Comb4-2	1.6E-05	0.0511	Comb4-2	3.7E-05
B1119	Story4	End-I	VCB	-0.1381	VERTICAL	7.9E-05	0.068	Comb4-2	4.2E-05
B1119	Story4	Middle	VCB	-0.1219	VERTICAL	6.9E-05	0.0345	VERTICAL	2.5E-05
B1119	Story4	End-J	VCB	-0.1194	VERTICAL	6.7E-05	0.0584	Comb4-2	4.2E-05
B1120	Story4	End-I	VCB	-0.185	VERTICAL	0.000109	0.0925	VERTICAL	5.1E-05
B1120	Story4	Middle	VCB	-0.1003	VERTICAL	5.6E-05	0.0863	VERTICAL	4.8E-05
B1120	Story4	End-J	VCB	-0.0463	VERTICAL	3.3E-05	0.1238	VERTICAL	7E-05
B1121	Story4	End-I	VCB	-0.0373	VERTICAL	2.7E-05	0.1493	VERTICAL	8.6E-05
B1121	Story4	Middle	VCB	-0.1121	VERTICAL	6.3E-05	0.0777	VERTICAL	4.3E-05
B1121	Story4	End-J	VCB	-0.1452	VERTICAL	8.3E-05	0.0721	Comb4-2	4.2E-05
B1122	Story4	End-I	VCB	-0.0918	VERTICAL	5.1E-05	0.0373	VERTICAL	2.7E-05
B1122	Story4	Middle	VCB	-0.0279	Comb4-2	2E-05	0.0403	VERTICAL	2.9E-05
B1122	Story4	End-J	VCB	-0.0493	Comb4-2	3.6E-05	0.0247	Comb4-2	1.8E-05
B1123	Story4	End-I	VCB	-0.1333	Comb4-2	7.6E-05	0.0666	Comb4-2	4.2E-05
B1123	Story4	Middle	VCB	-0.0333	Comb4-2	2.4E-05	0.058	Comb4-2	4.2E-05
B1123	Story4	End-J	VCB	-0.1088	Comb4-2	6.1E-05	0.0392	Comb4-2	2.8E-05
B1124	Story4	End-I	VCB	-0.0438	Comb4-2	3.1E-05	0.0219	Comb4-2	1.6E-05
B1124	Story4	Middle	VCB	0			0		
B1124	Story4	End-J	VCB	-0.0156	Comb3-5	1.1E-05	0.0156	Comb4-2	1.1E-05
B1125	Story4	End-I	VCB	-0.0365	Comb4-2	2.6E-05	0.0183	Comb4-2	1.3E-05
B1125	Story4	Middle	VCB	0			0		
B1125	Story4	End-J	VCB	-0.0468	VERTICAL	3.4E-05	0.0234	VERTICAL	1.7E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1126	Story4	End-I	VCB	-0.0579	Comb4-2	4.2E-05	0.032	VERTICAL	2.3E-05
B1126	Story4	Middle	VCB	0			0		
B1126	Story4	End-J	VCB	-0.0867	VERTICAL	4.8E-05	0.0433	VERTICAL	3.1E-05
B1127	Story4	End-I	VCB	-0.1433	VERTICAL	8.2E-05	0.0289	VERTICAL	2.1E-05
B1127	Story4	Middle	VCB	-0.1155	VERTICAL	6.5E-05	0.0265	VERTICAL	1.9E-05
B1127	Story4	End-J	VCB	-0.0265	VERTICAL	1.9E-05	0.1062	VERTICAL	5.9E-05
B1128	Story4	End-I	VCB	-0.0292	VERTICAL	2.1E-05	0.1427	VERTICAL	8.1E-05
B1128	Story4	Middle	VCB	-0.0548	VERTICAL	4E-05	0.1386	VERTICAL	7.9E-05
B1128	Story4	End-J	VCB	-0.221	VERTICAL	0.000133	0.0584	VERTICAL	4.2E-05
B1129	Story4	End-I	VCB	-0.1288	Comb4-2	7.3E-05	0.0644	Comb4-2	4.2E-05
B1129	Story4	Middle	VCB	-0.0435	Comb4-2	3.1E-05	0.0322	Comb4-2	2.3E-05
B1129	Story4	End-J	VCB	-0.0467	VERTICAL	3.4E-05	0.0378	Comb4-2	2.7E-05
B1130	Story4	End-I	VCB	-0.0505	Comb4-2	3.6E-05	0.0252	Comb4-2	1.8E-05
B1130	Story4	Middle	VCB	-0.0304	Comb4-2	2.2E-05	0.0167	Comb4-2	1.2E-05
B1130	Story4	End-J	VCB	-0.0126	Comb4-2	9E-06	0.0425	VERTICAL	3.1E-05
B1131	Story4	End-I	VCB	-0.0195	VERTICAL	1.4E-05	0.1217	VERTICAL	6.9E-05
B1131	Story4	Middle	VCB	-0.0416	VERTICAL	3E-05	0.1085	VERTICAL	6.1E-05
B1131	Story4	End-J	VCB	-0.0872	VERTICAL	4.8E-05	0.0391	VERTICAL	2.8E-05
B1132	Story4	End-I	VCB	-0.0458	Comb4-2	3.3E-05	0.0257	Comb4-2	1.8E-05
B1132	Story4	Middle	VCB	-0.0257	Comb4-2	1.8E-05	0.1031	VERTICAL	5.7E-05
B1132	Story4	End-J	VCB	-0.1027	Comb4-2	5.7E-05	0.0658	VERTICAL	4.2E-05
B1133	Story4	End-I	VCB	0	Comb3-5	0	0.1289	VERTICAL	7.3E-05
B1133	Story4	Middle	VCB	0			0		
B1133	Story4	End-J	VCB	0	Comb3-5	0	0.1482	VERTICAL	8.5E-05
B1134	Story4	End-I	VCB	-0.0117	VERTICAL	8E-06	0.0425	Comb4-2	3.1E-05
B1134	Story4	Middle	VCB	-0.129	VERTICAL	7.3E-05	0.0117	VERTICAL	8E-06
B1134	Story4	End-J	VCB	-0.0844	VERTICAL	4.6E-05	0.0235	VERTICAL	1.7E-05
B1135	Story4	End-I	VCB	-0.0441	Comb4-2	3.2E-05	0.0416	VERTICAL	3E-05
B1135	Story4	Middle	VCB	-0.0121	Comb4-2	9E-06	0.0426	VERTICAL	3.1E-05
B1135	Story4	End-J	VCB	-0.0485	Comb4-2	3.5E-05	0.031	Comb4-2	2.2E-05
B1136	Story4	End-I	VCB	-0.0598	Comb4-2	4.2E-05	0.044	Comb4-2	3.2E-05
B1136	Story4	Middle	VCB	-0.0461	Comb4-2	3.3E-05	0.0268	Comb4-2	1.9E-05
B1136	Story4	End-J	VCB	-0.099	Comb4-2	5.5E-05	0.0495	Comb4-2	3.6E-05
B1137	Story4	End-I	VCB	-0.0088	Comb4-2	6E-06	0.0083	Comb3-5	6E-06
B1137	Story4	Middle	VCB	-0.0265	VERTICAL	1.9E-05	0.016	Comb4-2	1.1E-05
B1137	Story4	End-J	VCB	-0.0639	Comb4-2	4.2E-05	0.0319	Comb4-2	2.3E-05
B1138	Story4	End-I	VCB	-0.124	VERTICAL	7E-05	0.0583	Comb4-2	4.2E-05
B1138	Story4	Middle	VCB	0			0		
B1138	Story4	End-J	VCB	-0.1463	VERTICAL	8.4E-05	0.0703	Comb4-2	4.2E-05
B1139	Story4	End-I	VCB	-0.1735	VERTICAL	0.000101	0.0538	VERTICAL	3.9E-05
B1139	Story4	Middle	VCB	-0.0269	VERTICAL	1.9E-05	0.1028	VERTICAL	5.7E-05
B1139	Story4	End-J	VCB	-0.0269	VERTICAL	1.9E-05	0.0958	VERTICAL	5.3E-05
B1140	Story4	End-I	VCB	-0.0249	VERTICAL	1.8E-05	0.0357	VERTICAL	2.6E-05
B1140	Story4	Middle	VCB	-0.113	VERTICAL	6.3E-05	0.0286	VERTICAL	2E-05
B1140	Story4	End-J	VCB	-0.0996	VERTICAL	5.5E-05	0.0498	VERTICAL	3.6E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1141	Story4	End-I	VCB	-0.0666	Comb4-2	4.2E-05	0.0345	VERTICAL	2.5E-05
B1141	Story4	Middle	VCB	0			0		
B1141	Story4	End-J	VCB	-0.1119	Comb4-2	6.3E-05	0.0559	Comb4-2	4E-05
B1142	Story4	End-I	VCB	-0.1047	Comb4-2	5.8E-05	0.0524	Comb4-2	3.8E-05
B1142	Story4	Middle	VCB	-0.0745	Comb4-2	4.2E-05	0.0262	Comb4-2	1.9E-05
B1142	Story4	End-J	VCB	-0.061	Comb4-2	4.2E-05	0.0313	VERTICAL	2.2E-05
B1143	Story4	End-I	VCB	-0.0586	Comb4-2	4.2E-05	0.0311	Comb4-2	2.2E-05
B1143	Story4	Middle	VCB	-0.0581	Comb4-2	4.2E-05	0.0155	Comb4-2	1.1E-05
B1143	Story4	End-J	VCB	-0.045	VERTICAL	3.2E-05	0.0206	VERTICAL	1.5E-05
B1144	Story4	End-I	VCB	-0.1646	VERTICAL	9.5E-05	0.0823	VERTICAL	4.5E-05
B1144	Story4	Middle	VCB	-0.0411	VERTICAL	3E-05	0.1312	VERTICAL	7.4E-05
B1144	Story4	End-J	VCB	-0.0411	VERTICAL	3E-05	0.1458	VERTICAL	8.3E-05
B1145	Story4	End-I	VCB	-0.0236	VERTICAL	1.7E-05	0.0944	VERTICAL	5.2E-05
B1145	Story4	Middle	VCB	-0.1717	VERTICAL	0.0001	0.0236	VERTICAL	1.7E-05
B1145	Story4	End-J	VCB	-0.125	VERTICAL	7.1E-05	0.0317	VERTICAL	2.3E-05
B1146	Story4	End-I	VCB	-0.058	VERTICAL	4.2E-05	0.029	VERTICAL	2.1E-05
B1146	Story4	Middle	VCB	-0.034	Comb4-2	2.4E-05	0.0145	VERTICAL	1E-05
B1146	Story4	End-J	VCB	-0.0019	Comb3-5	1E-06	0.0125	Comb4-2	9E-06
B1147	Story4	End-I	VCB	-0.095	Comb4-2	5.3E-05	0.0475	Comb4-2	3.4E-05
B1147	Story4	Middle	VCB	0			0		
B1147	Story4	End-J	VCB	-0.1338	Comb4-2	7.6E-05	0.0669	Comb4-2	4.2E-05
B1148	Story4	End-I	VCB		O/S		0.1514	Comb4-2	8.7E-05
B1148	Story4	Middle	VCB	-0.0757	Comb4-2	4.2E-05	0.0757	Comb4-2	4.2E-05
B1148	Story4	End-J	VCB	-0.0757	Comb4-2	4.2E-05	0.0612	Comb4-2	4.2E-05
B1149	Story4	End-I	VCB	-0.0604	Comb4-2	4.2E-05	0.0244	VERTICAL	1.7E-05
B1149	Story4	Middle	VCB	-0.0394	VERTICAL	2.8E-05	0.0591	Comb4-2	4.2E-05
B1149	Story4	End-J	VCB	-0.0244	VERTICAL	1.7E-05	0.1114	VERTICAL	6.2E-05
B1150	Story4	End-I	VCB	-0.0247	VERTICAL	1.8E-05	0.0989	VERTICAL	5.5E-05
B1150	Story4	Middle	VCB	-0.0589	VERTICAL	4.2E-05	0.0626	VERTICAL	4.2E-05
B1150	Story4	End-J	VCB	-0.1202	VERTICAL	6.8E-05	0.0433	VERTICAL	3.1E-05
B1151	Story4	End-I	VCB	-0.0809	VERTICAL	4.5E-05	0.0405	VERTICAL	2.9E-05
B1151	Story4	Middle	VCB	-0.0441	VERTICAL	3.2E-05	0.0202	VERTICAL	1.4E-05
B1151	Story4	End-J	VCB	-0.0313	VERTICAL	2.2E-05	0.0202	VERTICAL	1.4E-05
B1152	Story4	End-I	VCB	-0.0184	Comb4-2	1.3E-05	0.0153	VERTICAL	1.1E-05
B1152	Story4	Middle	VCB	-0.0643	Comb4-2	4.2E-05	0.0173	VERTICAL	1.2E-05
B1152	Story4	End-J	VCB	-0.0153	VERTICAL	1.1E-05	0.0613	VERTICAL	4.2E-05
B1153	Story4	End-I	VCB	-0.0565	VERTICAL	4.1E-05	0.0616	Comb4-2	4.2E-05
B1153	Story4	Middle	VCB	-0.0565	VERTICAL	4.1E-05	0.0805	VERTICAL	4.4E-05
B1153	Story4	End-J	VCB	-0.2259	VERTICAL	0.000137	0.1129	VERTICAL	6.3E-05
B1154	Story4	End-I	VCB	-0.0203	VERTICAL	1.4E-05	0.081	VERTICAL	4.5E-05
B1154	Story4	Middle	VCB	-0.0295	Comb4-2	2.1E-05	0.0203	VERTICAL	1.4E-05
B1154	Story4	End-J	VCB	-0.1002	VERTICAL	5.6E-05	0.022	Comb4-2	1.6E-05
B1155	Story4	End-I	VCB	-0.0509	Comb4-2	3.7E-05	0.0337	VERTICAL	2.4E-05
B1155	Story4	Middle	VCB	-0.0337	VERTICAL	2.4E-05	0.0793	VERTICAL	4.4E-05
B1155	Story4	End-J	VCB	-0.1349	VERTICAL	7.7E-05	0.0662	Comb4-2	4.2E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1156	Story4	End-I	VCB	-0.1565	VERTICAL	9E-05	0.0783	VERTICAL	4.3E-05
B1156	Story4	Middle	VCB	-0.0391	VERTICAL	2.8E-05	0.1231	VERTICAL	6.9E-05
B1156	Story4	End-J	VCB	-0.072	Comb4-2	4.2E-05	0.0827	VERTICAL	4.6E-05
B1157	Story4	End-I	VCB	-0.235	VERTICAL	0.000143	0.1175	VERTICAL	6.6E-05
B1157	Story4	Middle	VCB	-0.0949	VERTICAL	5.3E-05	0.0908	VERTICAL	5E-05
B1157	Story4	End-J	VCB	-0.0588	VERTICAL	4.2E-05	0.1598	VERTICAL	9.2E-05
B1158	Story4	End-I	VCB	-0.0619	Comb4-2	4.2E-05	0.199	VERTICAL	0.000118
B1158	Story4	Middle	VCB	-0.0619	Comb4-2	4.2E-05	0.1311	VERTICAL	7.4E-05
B1158	Story4	End-J	VCB		O/S		0.137	VERTICAL	7.8E-05
B1159	Story4	End-I	VCB	-0.072	Comb4-2	4.2E-05	0.0362	VERTICAL	2.6E-05
B1159	Story4	Middle	VCB	-0.0504	VERTICAL	3.6E-05	0.0181	VERTICAL	1.3E-05
B1159	Story4	End-J	VCB	-0.0274	Comb4-2	2E-05	0.0181	VERTICAL	1.3E-05
B1160	Story4	End-I	VCB	-0.0647	Comb4-2	4.2E-05	0.052	VERTICAL	3.7E-05
B1160	Story4	Middle	VCB	-0.155	VERTICAL	8.9E-05	0.0502	VERTICAL	3.6E-05
B1160	Story4	End-J	VCB	-0.0334	VERTICAL	2.4E-05	0.1335	VERTICAL	7.6E-05
B1161	Story4	End-I	VCB	-0.0335	VERTICAL	2.4E-05	0.1423	VERTICAL	8.1E-05
B1161	Story4	Middle	VCB	-0.1114	VERTICAL	6.2E-05	0.1204	VERTICAL	6.8E-05
B1161	Story4	End-J	VCB	-0.1441	VERTICAL	8.2E-05	0.0335	VERTICAL	2.4E-05
B1162	Story4	End-I	VCB	-0.0233	VERTICAL	1.7E-05	0.0808	VERTICAL	4.4E-05
B1162	Story4	Middle	VCB	-0.1654	VERTICAL	9.6E-05	0.0417	VERTICAL	3E-05
B1162	Story4	End-J	VCB	-0.0233	VERTICAL	1.7E-05	0.0932	VERTICAL	5.2E-05
B1163	Story4	End-I	VCB	-0.0308	VERTICAL	2.2E-05	0.0154	VERTICAL	1.1E-05
B1163	Story4	Middle	VCB	-0.0145	Comb4-2	1E-05	0.0096	VERTICAL	7E-06
B1163	Story4	End-J	VCB	-0.0476	VERTICAL	3.4E-05	0.0192	VERTICAL	1.4E-05
B1164	Story4	End-I	VCB	-0.0391	VERTICAL	2.8E-05	0.0195	VERTICAL	1.4E-05
B1164	Story4	Middle	VCB	-0.0098	Comb4-2	7E-06	0.0111	Comb4-2	8E-06
B1164	Story4	End-J	VCB	-0.0218	Comb4-2	1.5E-05	0.0251	VERTICAL	1.8E-05
B1165	Story4	End-I	VCB	-0.0212	VERTICAL	1.5E-05	0.0143	VERTICAL	1E-05
B1165	Story4	Middle	VCB	-0.0409	VERTICAL	2.9E-05	0.0257	Comb4-2	1.8E-05
B1165	Story4	End-J	VCB	-0.0143	VERTICAL	1E-05	0.0571	VERTICAL	4.1E-05
B1166	Story4	End-I	VCB	-0.0266	Comb4-2	1.9E-05	0.0823	VERTICAL	4.5E-05
B1166	Story4	Middle	VCB	-0.0266	Comb4-2	1.9E-05	0.0755	Comb4-2	4.2E-05
B1166	Story4	End-J	VCB	-0.1065	Comb4-2	5.9E-05	0.0532	Comb4-2	3.8E-05
B1167	Story4	End-I	VCB	-0.0368	VERTICAL	2.6E-05	0.1473	VERTICAL	8.4E-05
B1167	Story4	Middle	VCB	-0.0458	Comb4-2	3.3E-05	0.0389	VERTICAL	2.8E-05
B1167	Story4	End-J	VCB	-0.0579	Comb4-2	4.2E-05	0.0368	VERTICAL	2.6E-05
B1168	Story4	End-I	VCB	-0.0443	VERTICAL	3.2E-05	0.0222	VERTICAL	1.6E-05
B1168	Story4	Middle	VCB	-0.0582	VERTICAL	4.2E-05	0.0111	VERTICAL	8E-06
B1168	Story4	End-J	VCB	-0.0483	VERTICAL	3.5E-05	0.0222	VERTICAL	1.6E-05
B1169	Story4	End-I	VCB	-0.034	VERTICAL	2.4E-05	0.017	VERTICAL	1.2E-05
B1169	Story4	Middle	VCB	0			0		
B1169	Story4	End-J	VCB	-0.0316	VERTICAL	2.3E-05	0.0158	VERTICAL	1.1E-05
B1170	Story4	End-I	VCB	-0.0459	VERTICAL	3.3E-05	0.023	VERTICAL	1.6E-05
B1170	Story4	Middle	VCB	-0.0131	VERTICAL	9E-06	0.0387	VERTICAL	2.8E-05
B1170	Story4	End-J	VCB	-0.0524	VERTICAL	3.8E-05	0.0262	VERTICAL	1.9E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1171	Story4	End-I	VCB	-0.0746	Comb4-2	4.2E-05	0.0377	VERTICAL	2.7E-05
B1171	Story4	Middle	VCB	-0.042	Comb4-2	3E-05	0.0188	VERTICAL	1.3E-05
B1171	Story4	End-J	VCB	-0.0111	Comb4-2	8E-06	0.0056	Comb4-2	4E-06
B1172	Story4	End-I	VCB	-0.0215	VERTICAL	1.5E-05	0.0875	VERTICAL	4.8E-05
B1172	Story4	Middle	VCB	-0.0215	VERTICAL	1.5E-05	0.0727	Comb4-2	4.2E-05
B1172	Story4	End-J	VCB	-0.086	VERTICAL	4.7E-05	0.043	VERTICAL	3.1E-05
B1173	Story4	End-I	VCB	-0.0713	Comb4-2	4.2E-05	0.0356	Comb4-2	2.5E-05
B1173	Story4	Middle	VCB	-0.0178	Comb4-2	1.3E-05	0.0178	Comb4-2	1.3E-05
B1173	Story4	End-J	VCB	-0.0178	Comb4-2	1.3E-05	0.0201	Comb4-2	1.4E-05
B1174	Story4	End-I	VCB	-0.027	Comb4-2	1.9E-05	0.0135	Comb4-2	1E-05
B1174	Story4	Middle	VCB	-0.0074	Comb3-5	5E-06	0.0098	Comb4-2	7E-06
B1174	Story4	End-J	VCB	-0.0098	Comb4-2	7E-06	0.0049	Comb4-2	3E-06
B1175	Story4	End-I	VCB	-0.0237	Comb4-2	1.7E-05	0.0119	Comb4-2	8E-06
B1175	Story4	Middle	VCB	-0.0079	VERTICAL	6E-06	0.0307	VERTICAL	2.2E-05
B1175	Story4	End-J	VCB	-0.0079	VERTICAL	6E-06	0.0378	VERTICAL	2.7E-05
B1176	Story4	End-I	VCB	0	Comb3-5	0	0.0187	VERTICAL	1.3E-05
B1176	Story4	Middle	VCB	-0.011	Comb4-2	8E-06	0.0234	VERTICAL	1.7E-05
B1176	Story4	End-J	VCB	-0.03	VERTICAL	2.1E-05	0.015	VERTICAL	1.1E-05
B1177	Story4	End-I	VCB	-0.0225	VERTICAL	1.6E-05	0.0112	VERTICAL	8E-06
B1177	Story4	Middle	VCB	0			0		
B1177	Story4	End-J	VCB	-0.0189	VERTICAL	1.3E-05	0.0094	VERTICAL	7E-06
B1178	Story4	End-I	VCB	-0.0235	VERTICAL	1.7E-05	0.0118	VERTICAL	8E-06
B1178	Story4	Middle	VCB	-0.0062	Comb4-2	4E-06	0.0089	VERTICAL	6E-06
B1178	Story4	End-J	VCB	-0.0247	Comb4-2	1.8E-05	0.0271	VERTICAL	1.9E-05
B1179	Story4	End-I	VCB	-0.0476	VERTICAL	3.4E-05	0.0272	VERTICAL	1.9E-05
B1179	Story4	Middle	VCB	-0.0119	VERTICAL	8E-06	0.046	VERTICAL	3.3E-05
B1179	Story4	End-J	VCB	-0.0119	VERTICAL	8E-06	0.027	VERTICAL	1.9E-05
B1180	Story4	End-I	VCB	-0.0034	Comb4-2	2E-06	0.0019	Comb3-5	1E-06
B1180	Story4	Middle	VCB	0			0		
B1180	Story4	End-J	VCB	-0.0306	Comb4-2	2.2E-05	0.0153	Comb4-2	1.1E-05
B1181	Story4	End-I	VCB	-0.0415	Comb4-2	3E-05	0.0207	Comb4-2	1.5E-05
B1181	Story4	Middle	VCB	-0.0104	Comb4-2	7E-06	0.0614	Comb4-2	4.2E-05
B1181	Story4	End-J	VCB	-0.0173	VERTICAL	1.2E-05	0.0527	VERTICAL	3.8E-05
B1182	Story4	End-I	VCB	-0.0274	VERTICAL	2E-05	0.0274	VERTICAL	2E-05
B1182	Story4	Middle	VCB	-0.0346	VERTICAL	2.5E-05	0.0274	VERTICAL	2E-05
B1182	Story4	End-J	VCB	-0.1095	VERTICAL	6.1E-05	0.0548	VERTICAL	4E-05
B1183	Story4	End-I	VCB	-0.1241	VERTICAL	7E-05	0.0587	Comb4-2	4.2E-05
B1183	Story4	Middle	VCB	-0.1157	VERTICAL	6.5E-05	0.0426	VERTICAL	3.1E-05
B1183	Story4	End-J	VCB	-0.0426	VERTICAL	3.1E-05	0.1704	VERTICAL	9.9E-05
B1184	Story4	End-I	VCB	-0.0805	VERTICAL	4.4E-05	0.0403	VERTICAL	2.9E-05
B1184	Story4	Middle	VCB	0			0		
B1184	Story4	End-J	VCB	-0.0807	VERTICAL	4.4E-05	0.0403	VERTICAL	2.9E-05
B1185	Story4	End-I	VCB	-0.1592	VERTICAL	9.2E-05	0.0653	Comb4-2	4.2E-05
B1185	Story4	Middle	VCB	-0.0361	VERTICAL	2.6E-05	0.1435	VERTICAL	8.2E-05
B1185	Story4	End-J	VCB	-0.0361	VERTICAL	2.6E-05	0.1466	VERTICAL	8.4E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1186	Story4	End-I	VCB	-0.0341	Comb4-2	2.4E-05	0.0364	Comb4-2	2.6E-05
B1186	Story4	Middle	VCB	-0.1409	VERTICAL	8E-05	0.0272	VERTICAL	1.9E-05
B1186	Story4	End-J	VCB	-0.2222	VERTICAL	0.000134	0.0544	VERTICAL	3.9E-05
B1187	Story4	End-I	VCB	-0.1097	VERTICAL	6.1E-05	0.0549	VERTICAL	4E-05
B1187	Story4	Middle	VCB	-0.0274	VERTICAL	2E-05	0.0523	VERTICAL	3.8E-05
B1187	Story4	End-J	VCB	-0.0274	VERTICAL	2E-05	0.0347	Comb4-2	2.5E-05
B1188	Story4	End-I	VCB	-0.002	Comb3-5	1E-06	0.0129	Comb4-2	9E-06
B1188	Story4	Middle	VCB	0			0		
B1188	Story4	End-J	VCB	-0.0404	Comb4-2	2.9E-05	0.0202	Comb4-2	1.4E-05
B1189	Story4	End-I	VCB	-0.0942	Comb4-2	5.2E-05	0.0278	Comb4-2	2E-05
B1189	Story4	Middle	VCB	-0.0238	Comb4-2	1.7E-05	0.0854	VERTICAL	4.7E-05
B1189	Story4	End-J	VCB	-0.0951	Comb4-2	5.3E-05	0.0496	VERTICAL	3.6E-05
B1190	Story4	End-I	VCB	-0.0967	VERTICAL	5.4E-05	0.0483	VERTICAL	3.5E-05
B1190	Story4	Middle	VCB	-0.0805	VERTICAL	4.4E-05	0.0242	VERTICAL	1.7E-05
B1190	Story4	End-J	VCB	-0.0694	Comb4-2	4.2E-05	0.0367	VERTICAL	2.6E-05
B1191	Story4	End-I	VCB	-0.0856	VERTICAL	4.7E-05	0.0428	VERTICAL	3.1E-05
B1191	Story4	Middle	VCB	0			0		
B1191	Story4	End-J	VCB	-0.0536	VERTICAL	3.9E-05	0.0268	VERTICAL	1.9E-05
B1192	Story4	End-I	VCB	-0.1528	VERTICAL	8.8E-05	0.0439	VERTICAL	3.2E-05
B1192	Story4	Middle	VCB	-0.0639	Comb4-2	4.2E-05	0.1133	VERTICAL	6.4E-05
B1192	Story4	End-J	VCB	-0.0318	VERTICAL	2.3E-05	0.1487	VERTICAL	8.5E-05
B1193	Story4	End-I	VCB	-0.0469	VERTICAL	3.4E-05	0.1062	VERTICAL	5.9E-05
B1193	Story4	Middle	VCB	-0.0515	VERTICAL	3.7E-05	0.0992	VERTICAL	5.5E-05
B1193	Story4	End-J	VCB	-0.1875	VERTICAL	0.00011	0.0938	VERTICAL	5.2E-05
B1194	Story4	End-I	VCB	-0.1262	VERTICAL	7.1E-05	0.059	Comb4-2	4.2E-05
B1194	Story4	Middle	VCB	-0.0612	VERTICAL	4.2E-05	0.0316	VERTICAL	2.3E-05
B1194	Story4	End-J	VCB	-0.0375	VERTICAL	2.7E-05	0.0316	VERTICAL	2.3E-05
B1195	Story4	End-I	VCB	-0.0842	VERTICAL	4.6E-05	0.0421	VERTICAL	3E-05
B1195	Story4	Middle	VCB	-0.0594	VERTICAL	4.2E-05	0.0211	VERTICAL	1.5E-05
B1195	Story4	End-J	VCB	-0.0437	VERTICAL	3.1E-05	0.0219	VERTICAL	1.6E-05
B1196	Story4	End-I	VCB		O/S		0.1406	VERTICAL	8E-05
B1196	Story4	Middle	VCB	-0.064	Comb4-2	4.2E-05	0.2095	VERTICAL	0.000125
B1196	Story4	End-J	VCB	-0.064	Comb4-2	4.2E-05	0.1606	VERTICAL	9.3E-05
B1197	Story4	End-I	VCB	-0.0774	VERTICAL	4.2E-05	0.1015	VERTICAL	5.6E-05
B1197	Story4	Middle	VCB	-0.1141	VERTICAL	6.4E-05	0.0997	VERTICAL	5.5E-05
B1197	Story4	End-J	VCB	-0.1351	VERTICAL	7.7E-05	0.0617	Comb4-2	4.2E-05
B1198	Story4	End-I	VCB	-0.0095	Comb4-2	7E-06	0.0341	VERTICAL	2.4E-05
B1198	Story4	Middle	VCB	-0.0588	Comb4-2	4.2E-05	0.0095	Comb4-2	7E-06
B1198	Story4	End-J	VCB	-0.0802	VERTICAL	4.4E-05	0.019	Comb4-2	1.4E-05
B1199	Story4	End-I	VCB	-0.1504	VERTICAL	8.6E-05	0.0675	Comb4-2	4.2E-05
B1199	Story4	Middle	VCB	-0.1152	VERTICAL	6.5E-05	0.0478	VERTICAL	3.4E-05
B1199	Story4	End-J	VCB	-0.0376	VERTICAL	2.7E-05	0.058	VERTICAL	4.2E-05
B1200	Story4	End-I	VCB	0	Comb3-5	0	0.058	VERTICAL	4.2E-05
B1200	Story4	Middle	VCB	0			0		
B1200	Story4	End-J	VCB	0	Comb3-5	0	0.0567	VERTICAL	4.1E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1201	Story4	End-I	VCB	-0.0381	VERTICAL	2.7E-05	0.1076	VERTICAL	6E-05
B1201	Story4	Middle	VCB	-0.1032	VERTICAL	5.7E-05	0.0381	VERTICAL	2.7E-05
B1201	Story4	End-J	VCB	-0.1699	VERTICAL	9.9E-05	0.0763	VERTICAL	4.2E-05
B1202	Story4	End-I	VCB	-0.125	VERTICAL	7.1E-05	0.0625	VERTICAL	4.2E-05
B1202	Story4	Middle	VCB	-0.0488	VERTICAL	3.5E-05	0.0312	VERTICAL	2.2E-05
B1202	Story4	End-J	VCB	-0.0312	VERTICAL	2.2E-05	0.0312	VERTICAL	2.2E-05
B1203	Story4	End-I	VCB	-0.1511	VERTICAL	8.7E-05	0.036	VERTICAL	2.6E-05
B1203	Story4	Middle	VCB	-0.0626	VERTICAL	4.2E-05	0.1581	VERTICAL	9.1E-05
B1203	Story4	End-J	VCB	-0.0203	VERTICAL	1.4E-05	0.1699	VERTICAL	9.9E-05
B1204	Story4	End-I	VCB	-0.0061	VERTICAL	4E-06	0.011	Comb4-2	8E-06
B1204	Story4	Middle	VCB	0			0		
B1204	Story4	End-J	VCB	0	Comb3-5	0	0.0245	VERTICAL	1.7E-05
B1265	Story4	End-I	VC	-0.0108	Comb4-2	2E-06	0.0287	Comb4-2	5E-06
B1265	Story4	Middle	VC	-0.0108	Comb4-2	2E-06	0.0431	Comb4-2	8E-06
B1265	Story4	End-J	VC	-0.0108	Comb4-2	2E-06	0.0432	Comb4-2	8E-06
B1267	Story4	End-I	VC	-0.2753	Comb4-2	4.9E-05	0.1289	Comb4-2	2.3E-05
B1267	Story4	Middle	VC	-0.313	Comb4-2	5.6E-05	0.0879	Comb4-2	1.5E-05
B1267	Story4	End-J	VC	-0.3515	Comb4-2	6.2E-05	0.1758	Comb4-2	3.1E-05
B720	Story4	End-I	VC	-0.0419	VERTICAL	7E-06	0.0419	VERTICAL	7E-06
B720	Story4	Middle	VC	-0.0602	VERTICAL	1.1E-05	0.0419	VERTICAL	7E-06
B720	Story4	End-J	VC	-0.1674	VERTICAL	3E-05	0.0837	VERTICAL	1.5E-05
B1285	Story4	End-I	VC	0	Comb3-5	0	0.0287	VERTICAL	5E-06
B1285	Story4	Middle	VC	-0.0218	Comb4-2	4E-06	0.0111	Comb4-2	2E-06
B1285	Story4	End-J	VC	-0.0445	Comb4-2	8E-06	0.0372	Comb4-2	7E-06
B1286	Story4	End-I	VC	-0.066	Comb4-2	1.2E-05	0.033	Comb4-2	6E-06
B1286	Story4	Middle	VC	-0.0393	Comb4-2	7E-06	0.0566	Comb4-2	1E-05
B1286	Story4	End-J	VC	-0.0165	Comb4-2	3E-06	0.0653	Comb4-2	1.1E-05
B1287	Story4	End-I	VC	-0.0201	Comb4-2	4E-06	0.042	Comb4-2	7E-06
B1287	Story4	Middle	VC	-0.0202	Comb4-2	4E-06	0.0164	Comb4-2	3E-06
B1287	Story4	End-J	VC	-0.0703	Comb4-2	1.2E-05	0.0328	Comb4-2	6E-06
B1288	Story4	End-I	VC	-0.0459	Comb4-2	8E-06	0.0229	Comb4-2	4E-06
B1288	Story4	Middle	VC	-0.0173	VERTICAL	3E-06	0.0241	VERTICAL	4E-06
B1288	Story4	End-J	VC	0	Comb3-5	0	0.0691	VERTICAL	1.2E-05
B997	Story3	End-I	VLIM	-0.0209	Comb4-2	1.5E-05	0.0105	Comb4-2	7E-06
B997	Story3	Middle	VLIM	0			0		
B997	Story3	End-J	VLIM	0	Comb3-5	0	0.0107	Comb4-2	8E-06
B998	Story3	End-I	VLIM	-0.0353	Comb4-2	2.5E-05	0.0205	Comb4-2	1.4E-05
B998	Story3	Middle	VLIM	-0.0088	Comb4-2	6E-06	0.0141	VERTICAL	1E-05
B998	Story3	End-J	VLIM	-0.0149	Comb4-2	1E-05	0.0134	Comb4-2	9E-06
B999	Story3	End-I	VLIM	-0.0333	Comb4-2	2.4E-05	0.0166	Comb4-2	1.2E-05
B999	Story3	Middle	VLIM	-0.0116	Comb4-2	8E-06	0.0313	VERTICAL	2.2E-05
B999	Story3	End-J	VLIM	-0.0465	Comb4-2	3.3E-05	0.0233	Comb4-2	1.6E-05
B1000	Story3	End-I	VLIM	-0.0147	Comb4-2	1E-05	0.0074	Comb4-2	5E-06
B1000	Story3	Middle	VLIM	-0.0125	Comb4-2	9E-06	0.0277	VERTICAL	2E-05
B1000	Story3	End-J	VLIM	-0.0243	Comb4-2	1.7E-05	0.0096	Comb4-2	7E-06

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1001	Story3	End-I	VLIM	-0.0673	Comb4-2	4.8E-05	0.0474	Comb3-5	3.4E-05
B1001	Story3	Middle	VLIM	0			0		
B1001	Story3	End-J	VLIM	-0.0656	Comb3-5	4.7E-05	0.0734	Comb4-2	5.3E-05
B1002	Story3	End-I	VLIM	-0.0727	Comb4-2	5.2E-05	0.045	Comb3-5	3.2E-05
B1002	Story3	Middle	VLIM	0			0		
B1002	Story3	End-J	VLIM	-0.064	Comb4-2	4.6E-05	0.032	Comb4-2	2.3E-05
B1003	Story3	End-I	VLIM	-0.1381	Comb4-2	8.3E-05	0.0697	Comb4-2	5E-05
B1003	Story3	Middle	VLIM	-0.1214	Comb4-2	8.3E-05	0.0348	Comb4-2	2.5E-05
B1003	Story3	End-J	VLIM	0	Comb3-5	0	0.0316	Comb4-2	2.2E-05
B1004	Story3	End-I	VC	-0.0005	Comb4-2	9.281E-08	0.0043	Comb3-5	1E-06
B1004	Story3	Middle	VC	0			0		
B1004	Story3	End-J	VC	-0.0083	Comb4-2	1E-06	0.0041	Comb4-2	1E-06
B1009	Story3	End-I	VLIM	0	Comb3-5	0	0.0728	VERTICAL	5.2E-05
B1009	Story3	Middle	VLIM	-0.0438	Comb4-2	3.1E-05	0.0355	VERTICAL	2.5E-05
B1009	Story3	End-J	VLIM	-0.1395	Comb4-2	8.3E-05	0.0709	VERTICAL	5.1E-05
B1010	Story3	End-I	VLIM	-0.0147	Comb4-2	1E-05	0.0074	Comb4-2	5E-06
B1010	Story3	Middle	VLIM	-0.0281	Comb4-2	2E-05	0.0037	Comb4-2	3E-06
B1010	Story3	End-J	VLIM	-0.0061	Comb4-2	4E-06	0.003	Comb4-2	2E-06
B1011	Story3	End-I	VLIM	-0.2371	Comb4-2	0.000133	0.1162	VERTICAL	8.3E-05
B1011	Story3	Middle	VLIM	-0.0593	Comb4-2	4.2E-05	0.1219	VERTICAL	8.3E-05
B1011	Story3	End-J	VLIM	-0.2079	Comb4-2	0.000116	0.1093	VERTICAL	7.9E-05
B1012	Story3	End-I	VLIM	-0.0783	Comb4-2	5.6E-05	0.0392	Comb4-2	2.8E-05
B1012	Story3	Middle	VLIM	0			0		
B1012	Story3	End-J	VLIM	-0.079	Comb4-2	5.7E-05	0.0395	Comb4-2	2.8E-05
B1013	Story3	End-I	VLIM	-0.0609	Comb4-2	4.3E-05	0.0367	Comb3-5	2.6E-05
B1013	Story3	Middle	VLIM	0			0		
B1013	Story3	End-J	VLIM	-0.1902	Comb4-2	0.000105	0.0951	Comb4-2	6.8E-05
B1014	Story3	End-I	VLIM	-0.1223	Comb4-2	8.3E-05	0.0669	VERTICAL	4.8E-05
B1014	Story3	Middle	VLIM	-0.2054	VERTICAL	0.000114	0.0831	VERTICAL	6E-05
B1014	Story3	End-J	VLIM	-0.1222	Comb4-2	8.3E-05	0.114	VERTICAL	8.2E-05
B1015	Story3	End-I	VLIM	-0.0293	VERTICAL	2.1E-05	0.0146	VERTICAL	1E-05
B1015	Story3	Middle	VLIM	0			0		
B1015	Story3	End-J	VLIM	-0.0622	Comb4-2	4.4E-05	0.2464	VERTICAL	0.000139
B1016	Story3	End-I	VLIM	-0.1559	Comb4-2	8.6E-05	0.0956	Comb4-2	6.9E-05
B1016	Story3	Middle	VLIM	-0.0544	Comb4-2	3.9E-05	0.1267	Comb4-2	8.3E-05
B1016	Story3	End-J	VLIM	-0.0725	Comb4-2	5.2E-05	0.0535	Comb3-5	3.8E-05
B1017	Story3	End-I	VLIM	-0.0441	Comb3-5	3.1E-05	0.0519	Comb4-2	3.7E-05
B1017	Story3	Middle	VLIM	-0.0566	Comb3-5	4E-05	0.0809	Comb4-2	5.8E-05
B1017	Story3	End-J	VLIM	-0.1363	Comb4-2	8.3E-05	0.077	Comb4-2	5.5E-05
B1018	Story3	End-I	VLIM	-0.0847	Comb4-2	6.1E-05	0.0424	Comb4-2	3E-05
B1018	Story3	Middle	VLIM	-0.0614	Comb4-2	4.4E-05	0.0281	Comb3-5	2E-05
B1018	Story3	End-J	VLIM	-0.0702	Comb4-2	5E-05	0.0488	Comb3-5	3.5E-05
B1019	Story3	End-I	VLIM	-0.2504	Comb4-2	0.000141	0.1252	Comb4-2	8.3E-05
B1019	Story3	Middle	VLIM	0			0		
B1019	Story3	End-J	VLIM	-0.1532	Comb4-2	8.4E-05	0.0841	Comb3-5	6E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1020	Story3	End-I	VLIM	-0.1109	Comb4-2	8E-05	0.0555	Comb4-2	4E-05
B1020	Story3	Middle	VLIM	-0.0321	Comb4-2	2.3E-05	0.129	Comb4-2	8.3E-05
B1020	Story3	End-J	VLIM	-0.0066	Comb3-5	5E-06	0.029	Comb4-2	2.1E-05
B1021	Story3	End-I	VLIM	-0.0242	Comb4-2	1.7E-05	0.0121	Comb4-2	9E-06
B1021	Story3	Middle	VLIM	-0.0219	Comb4-2	1.5E-05	0.0061	Comb4-2	4E-06
B1021	Story3	End-J	VLIM	-0.0152	Comb4-2	1.1E-05	0.01	Comb3-5	7E-06
B1022	Story3	End-I	VLIM	-0.1811	Comb4-2	0.0001	0.0906	Comb4-2	6.5E-05
B1022	Story3	Middle	VLIM	-0.0453	Comb4-2	3.2E-05	0.0817	VERTICAL	5.9E-05
B1022	Story3	End-J	VLIM	-0.0453	Comb4-2	3.2E-05	0.1342	Comb4-2	8.3E-05
B1023	Story3	End-I	VLIM	-0.0532	Comb4-2	3.8E-05	0.0221	Comb4-2	1.6E-05
B1023	Story3	Middle	VLIM	-0.0623	VERTICAL	4.4E-05	0.0385	VERTICAL	2.7E-05
B1023	Story3	End-J	VLIM	-0.011	Comb4-2	8E-06	0.043	VERTICAL	3.1E-05
B1024	Story3	End-I	VLIM	-0.0243	Comb4-2	1.7E-05	0.0243	Comb4-2	1.7E-05
B1024	Story3	Middle	VLIM	-0.0733	Comb4-2	5.2E-05	0.0243	Comb4-2	1.7E-05
B1024	Story3	End-J	VLIM	-0.1011	Comb4-2	7.3E-05	0.0814	Comb4-2	5.8E-05
B1025	Story3	End-I	VLIM	-0.0195	VERTICAL	1.4E-05	0.0929	VERTICAL	6.7E-05
B1025	Story3	Middle	VLIM	-0.0195	VERTICAL	1.4E-05	0.0976	VERTICAL	7E-05
B1025	Story3	End-J	VLIM	-0.0243	Comb4-2	1.7E-05	0.0625	Comb4-2	4.5E-05
B1026	Story3	End-I	VLIM	-0.0358	Comb4-2	2.5E-05	0.0179	Comb4-2	1.3E-05
B1026	Story3	Middle	VLIM	-0.2742	VERTICAL	0.000156	0.0867	VERTICAL	6.2E-05
B1026	Story3	End-J	VLIM	-0.3467	VERTICAL	0.000202	0.1733	VERTICAL	9.6E-05
B1027	Story3	End-I	VLIM		O/S		0.2809	VERTICAL	0.00016
B1027	Story3	Middle	VLIM	-0.1316	Comb4-2	8.3E-05	0.1316	Comb4-2	8.3E-05
B1027	Story3	End-J	VLIM	-0.1316	Comb4-2	8.3E-05	0.1316	Comb4-2	8.3E-05
B1028	Story3	End-I	VLIM	-0.0271	VERTICAL	1.9E-05	0.1177	VERTICAL	8.3E-05
B1028	Story3	Middle	VLIM	-0.0271	VERTICAL	1.9E-05	0.1221	VERTICAL	8.3E-05
B1028	Story3	End-J	VLIM	-0.0271	VERTICAL	1.9E-05	0.1113	VERTICAL	8E-05
B1029	Story3	End-I	VLIM	-0.0674	Comb4-2	4.8E-05	0.0337	Comb4-2	2.4E-05
B1029	Story3	Middle	VLIM	-0.0168	Comb4-2	1.2E-05	0.046	Comb4-2	3.3E-05
B1029	Story3	End-J	VLIM	-0.0382	Comb4-2	2.7E-05	0.0191	Comb4-2	1.3E-05
B1030	Story3	End-I	VLIM	0	Comb3-5	0	0.0556	Comb4-2	4E-05
B1030	Story3	Middle	VLIM	-0.0878	VERTICAL	6.3E-05	0.0878	VERTICAL	6.3E-05
B1030	Story3	End-J	VLIM	-0.3512	VERTICAL	0.000205	0.1756	VERTICAL	9.7E-05
B1031	Story3	End-I	VLIM	0	Comb3-5	0	0.1038	Comb4-2	7.5E-05
B1031	Story3	Middle	VLIM	0			0		
B1031	Story3	End-J	VLIM	0	Comb3-5	0	0.0637	Comb4-2	4.5E-05
B1032	Story3	End-I	VLIM	-0.0778	Comb4-2	5.6E-05	0.1157	VERTICAL	8.3E-05
B1032	Story3	Middle	VLIM	-0.0778	Comb4-2	5.6E-05	0.1238	Comb4-2	8.3E-05
B1032	Story3	End-J	VLIM	-0.3111	Comb4-2	0.000179	0.1555	Comb4-2	8.5E-05
B1033	Story3	End-I	VLIM	-0.0299	Comb4-2	2.1E-05	0.0236	Comb4-2	1.7E-05
B1033	Story3	Middle	VLIM	0			0		
B1033	Story3	End-J	VLIM	-0.0315	Comb4-2	2.2E-05	0.0157	Comb4-2	1.1E-05
B1034	Story3	End-I	VLIM	-0.0683	Comb4-2	4.9E-05	0.0342	Comb4-2	2.4E-05
B1034	Story3	Middle	VLIM	0			0		
B1034	Story3	End-J	VLIM	-0.1596	Comb4-2	8.8E-05	0.0798	Comb4-2	5.7E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1035	Story3	End-I	VLIM	-0.0816	Comb4-2	5.8E-05	0.0455	Comb4-2	3.2E-05
B1035	Story3	Middle	VLIM	-0.1072	Comb4-2	7.7E-05	0.0996	VERTICAL	7.2E-05
B1035	Story3	End-J	VLIM	-0.1819	Comb4-2	0.000101	0.0909	Comb4-2	6.5E-05
B1036	Story3	End-I	VLIM	-0.2245	Comb4-2	0.000126	0.1122	Comb4-2	8.1E-05
B1036	Story3	Middle	VLIM	0			0		
B1036	Story3	End-J	VLIM	-0.2417	Comb4-2	0.000136	0.1208	Comb4-2	8.3E-05
B1037	Story3	End-I	VLIM	-0.0406	VERTICAL	2.9E-05	0.0324	VERTICAL	2.3E-05
B1037	Story3	Middle	VLIM	-0.0324	VERTICAL	2.3E-05	0.0324	VERTICAL	2.3E-05
B1037	Story3	End-J	VLIM	-0.0324	VERTICAL	2.3E-05	0.1175	Comb4-2	8.3E-05
B1038	Story3	End-I	VLIM	0	Comb3-5	0	0.027	Comb4-2	1.9E-05
B1038	Story3	Middle	VLIM	0			0		
B1038	Story3	End-J	VLIM	-0.0701	VERTICAL	5E-05	0.0351	VERTICAL	2.5E-05
B1044	Story3	End-I	VLIM	-0.0995	Comb4-2	7.2E-05	0.0356	VERTICAL	2.5E-05
B1044	Story3	Middle	VLIM	-0.0178	VERTICAL	1.3E-05	0.0385	VERTICAL	2.7E-05
B1044	Story3	End-J	VLIM	-0.0178	VERTICAL	1.3E-05	0.0375	VERTICAL	2.7E-05
B1045	Story3	End-I	VLIM	-0.0504	Comb4-2	3.6E-05	0.0252	Comb4-2	1.8E-05
B1045	Story3	Middle	VLIM	-0.0398	Comb4-2	2.8E-05	0.0224	Comb4-2	1.6E-05
B1045	Story3	End-J	VLIM	-0.0898	Comb4-2	6.5E-05	0.0449	Comb4-2	3.2E-05
B1046	Story3	End-I	VLIM	-0.0675	VERTICAL	4.8E-05	0.0338	VERTICAL	2.4E-05
B1046	Story3	Middle	VLIM	-0.0428	Comb4-2	3E-05	0.0169	VERTICAL	1.2E-05
B1046	Story3	End-J	VLIM	-0.0307	Comb4-2	2.2E-05	0.0154	Comb4-2	1.1E-05
B1047	Story3	End-I	VLIM	-0.0275	Comb4-2	1.9E-05	0.0137	Comb4-2	1E-05
B1047	Story3	Middle	VLIM	0			0		
B1047	Story3	End-J	VLIM	-0.0258	Comb4-2	1.8E-05	0.0129	Comb4-2	9E-06
B1048	Story3	End-I	VLIM	-0.0133	Comb4-2	9E-06	0.0067	Comb4-2	5E-06
B1048	Story3	Middle	VLIM	-0.0078	Comb4-2	6E-06	0.0078	Comb4-2	6E-06
B1048	Story3	End-J	VLIM	-0.0313	Comb4-2	2.2E-05	0.0157	Comb4-2	1.1E-05
B1049	Story3	End-I	VLIM	-0.0727	Comb4-2	5.2E-05	0.0273	Comb4-2	1.9E-05
B1049	Story3	Middle	VLIM	-0.0137	Comb4-2	1E-05	0.1082	VERTICAL	7.8E-05
B1049	Story3	End-J	VLIM	-0.022	Comb4-2	1.6E-05	0.0137	Comb4-2	1E-05
B1050	Story3	End-I	VLIM	-0.0569	VERTICAL	4.1E-05	0.0284	VERTICAL	2E-05
B1050	Story3	Middle	VLIM	0			0		
B1050	Story3	End-J	VLIM	-0.0576	VERTICAL	4.1E-05	0.0288	VERTICAL	2E-05
B1051	Story3	End-I	VLIM	-0.0128	Comb4-2	9E-06	0.0064	Comb4-2	5E-06
B1051	Story3	Middle	VLIM	0			0		
B1051	Story3	End-J	VLIM	-0.0107	Comb4-2	8E-06	0.0053	Comb4-2	4E-06
B1052	Story3	End-I	VLIM	-0.1331	Comb4-2	8.3E-05	0.1331	Comb4-2	8.3E-05
B1052	Story3	Middle	VLIM	-0.1331	Comb4-2	8.3E-05	0.1331	Comb4-2	8.3E-05
B1052	Story3	End-J	VLIM		O/S		0.2923	VERTICAL	0.000167
B1053	Story3	End-I	VLIM	-0.0206	VERTICAL	1.5E-05	0.1103	VERTICAL	8E-05
B1053	Story3	Middle	VLIM	-0.1538	VERTICAL	8.4E-05	0.1041	VERTICAL	7.5E-05
B1053	Story3	End-J	VLIM	-0.4572	VERTICAL	0.000277	0.0386	Comb4-2	2.7E-05
B1063	Story3	End-I	VLIM	-0.4519	VERTICAL	0.000273	0.226	VERTICAL	0.000127
B1063	Story3	Middle	VLIM	-0.3655	VERTICAL	0.000214	0.113	VERTICAL	8.2E-05
B1063	Story3	End-J	VLIM	-0.3443	VERTICAL	0.0002	0.1721	VERTICAL	9.5E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1064	Story3	End-I	VLIM		O/S		0.3394	VERTICAL	0.000197
B1064	Story3	Middle	VLIM	-0.4426	VERTICAL	0.000267	0.1697	VERTICAL	9.4E-05
B1064	Story3	End-J	VLIM	-0.364	VERTICAL	0.000213	0.1726	VERTICAL	9.5E-05
B1065	Story3	End-I	VLIM	-0.0289	VERTICAL	2E-05	0.089	VERTICAL	6.4E-05
B1065	Story3	Middle	VLIM	-0.0346	Comb4-2	2.4E-05	0.0289	VERTICAL	2E-05
B1065	Story3	End-J	VLIM	-0.0792	Comb4-2	5.7E-05	0.1154	VERTICAL	8.3E-05
B1066	Story3	End-I	VLIM	-0.0066	Comb4-2	5E-06	0.0209	Comb4-2	1.5E-05
B1066	Story3	Middle	VLIM	-0.0702	VERTICAL	5E-05	0.0386	VERTICAL	2.7E-05
B1066	Story3	End-J	VLIM	-0.0264	Comb4-2	1.9E-05	0.0132	Comb4-2	9E-06
B1067	Story3	End-I	VLIM	-0.3799	VERTICAL	0.000224	0.1899	VERTICAL	0.000105
B1067	Story3	Middle	VLIM	-0.158	VERTICAL	8.7E-05	0.095	VERTICAL	6.8E-05
B1067	Story3	End-J	VLIM	-0.1953	VERTICAL	0.000108	0.0977	VERTICAL	7E-05
B1068	Story3	End-I	VLIM	-0.0446	VERTICAL	3.2E-05	0.0775	Comb4-2	5.6E-05
B1068	Story3	Middle	VLIM	-0.0446	VERTICAL	3.2E-05	0.2147	VERTICAL	0.00012
B1068	Story3	End-J	VLIM	-0.0446	VERTICAL	3.2E-05	0.198	VERTICAL	0.00011
B1069	Story3	End-I	VLIM	-0.3045	VERTICAL	0.000175	0.1523	VERTICAL	8.4E-05
B1069	Story3	Middle	VLIM	-0.1136	VERTICAL	8.2E-05	0.0761	VERTICAL	5.5E-05
B1069	Story3	End-J	VLIM	0	Comb3-5	0	0.061	VERTICAL	4.3E-05
B1070	Story3	End-I	VLIM	-0.0473	VERTICAL	3.4E-05	0.1264	VERTICAL	8.3E-05
B1070	Story3	Middle	VLIM	-0.0473	VERTICAL	3.4E-05	0.0787	VERTICAL	5.6E-05
B1070	Story3	End-J	VLIM	-0.1893	VERTICAL	0.000105	0.0946	VERTICAL	6.8E-05
B1	Base	End-I	VB	-0.2031	Comb4-2	1.1E-05	0.2031	Comb4-2	1.1E-05
B1	Base	Middle	VB	-0.2776	Comb3-5	1.5E-05	0.3551	Comb4-2	1.9E-05
B1	Base	End-J	VB	-0.4112	Comb3-5	2.2E-05	0.8124	Comb4-2	4.4E-05
B2	Base	End-I	VB	-0.5064	Comb3-5	2.7E-05	0.8253	Comb4-2	4.5E-05
B2	Base	Middle	VB	-0.4519	Comb4-2	2.4E-05	0.2437	Comb3-5	1.3E-05
B2	Base	End-J	VB	-0.5783	Comb4-2	3.1E-05	0.7239	Comb4-2	3.9E-05
B17	Base	End-I	VB	-0.0686	Comb3-5	4E-06	0.1562	Comb4-2	8E-06
B17	Base	Middle	VB	-0.3608	Comb4-2	2E-05	0.0683	Comb4-2	4E-06
B17	Base	End-J	VB	-0.1342	Comb4-2	7E-06	0.2733	Comb4-2	1.5E-05
B18	Base	End-I	VB	0	Comb3-5	0	0.2368	Comb4-2	1.3E-05
B18	Base	Middle	VB	-0.0592	Comb4-2	3E-06	0.1154	Comb4-2	6E-06
B18	Base	End-J	VB	-0.0083	Comb3-5	4.472E-07	0.0312	Comb4-2	2E-06
B19	Base	End-I	VB	-0.5831	Comb4-2	3.2E-05	0.5831	Comb4-2	3.2E-05
B19	Base	Middle	VB	-0.5831	Comb4-2	3.2E-05	1.2563	Comb4-2	6.8E-05
B19	Base	End-J	VB	-0.5831	Comb4-2	3.2E-05	2.3325	Comb4-2	0.000127
B20	Base	End-I	VB	0	Comb3-5	0	0.4487	Comb4-2	2.4E-05
B20	Base	Middle	VB	-0.1122	Comb4-2	6E-06	0.5039	Comb4-2	2.7E-05
B20	Base	End-J	VB	-0.0132	Comb3-5	1E-06	0.0423	Comb4-2	2E-06
B41	Base	End-I	VB	-0.0829	Comb4-2	4E-06	0.0415	Comb4-2	2E-06
B41	Base	Middle	VB	0			0		
B41	Base	End-J	VB	-0.0422	Comb4-2	2E-06	0.0454	Comb3-5	2E-06
B42	Base	End-I	VB	-0.1816	Comb4-2	1E-05	0.1816	Comb4-2	1E-05
B42	Base	Middle	VB	-0.3344	Comb3-5	1.8E-05	0.4399	Comb4-2	2.4E-05
B42	Base	End-J	VB	-0.3169	Comb3-5	1.7E-05	0.7263	Comb4-2	3.9E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B43	Base	End-I	VB	-0.3628	Comb3-5	2E-05	0.7458	Comb4-2	4E-05
B43	Base	Middle	VB	-0.228	Comb4-2	1.2E-05	0.208	Comb3-5	1.1E-05
B43	Base	End-J	VB	-0.4947	Comb3-5	2.7E-05	0.6235	Comb4-2	3.4E-05
B44	Base	End-I	VB	-0.4715	Comb3-5	2.6E-05	0.5124	Comb4-2	2.8E-05
B44	Base	Middle	VB	-0.3973	Comb3-5	2.1E-05	0.3216	Comb4-2	1.7E-05
B44	Base	End-J	VB	0	Comb3-5	0	0.3913	Comb4-2	2.1E-05
B61	Base	End-I	VB	-1.9043	Comb3-5	0.000103	2.0539	Comb4-2	0.000112
B61	Base	Middle	VB	-1.6093	Comb4-2	8.7E-05	0.9324	Comb3-5	5E-05
B61	Base	End-J	VB	-1.4168	Comb4-2	7.7E-05	0.7534	Comb3-5	4.1E-05
B62	Base	End-I	VB	-0.1893	Comb3-5	1E-05	0.5375	Comb4-2	2.9E-05
B62	Base	Middle	VB	-0.881	Comb3-5	4.8E-05	0.9493	Comb4-2	5.1E-05
B62	Base	End-J	VB	-1.5366	Comb3-5	8.3E-05	1.7088	Comb4-2	9.3E-05
B63	Base	End-I	VB	-0.4008	Comb3-5	2.2E-05	0.4188	Comb4-2	2.3E-05
B63	Base	Middle	VB	-0.5666	Comb4-2	3.1E-05	0.3397	Comb3-5	1.8E-05
B63	Base	End-J	VB	-0.516	Comb4-2	2.8E-05	0.6864	Comb4-2	3.7E-05
B64	Base	End-I	VB	-1.5946	Comb3-5	8.6E-05	1.8379	Comb4-2	0.0001
B64	Base	Middle	VB	-0.7957	Comb3-5	4.3E-05	0.8078	Comb4-2	4.4E-05
B64	Base	End-J	VB	-0.1486	Comb3-5	8E-06	0.4619	Comb4-2	2.5E-05
B65	Base	End-I	VB	-1.0163	Comb3-5	5.5E-05	2.8129	Comb4-2	0.000153
B65	Base	Middle	VB	-0.736	Comb3-5	4E-05	1.1026	Comb4-2	6E-05
B65	Base	End-J	VB	-1.5277	Comb4-2	8.3E-05	1.7416	Comb3-5	9.5E-05
B66	Base	End-I	VB	-0.0374	Comb3-5	2E-06	0.3354	Comb4-2	1.8E-05
B66	Base	Middle	VB	-0.1597	Comb4-2	9E-06	0.7612	Comb4-2	4.1E-05
B66	Base	End-J	VB	-0.0308	Comb3-5	2E-06	0.6389	Comb4-2	3.5E-05
B67	Base	End-I	VB	-0.2861	Comb4-2	1.5E-05	0.6425	Comb4-2	3.5E-05
B67	Base	Middle	VB	-0.2861	Comb4-2	1.5E-05	0.7584	Comb4-2	4.1E-05
B67	Base	End-J	VB	-0.3763	Comb3-5	2E-05	1.1442	Comb4-2	6.2E-05
B68	Base	End-I	VB	-0.528	Comb3-5	2.9E-05	1.4389	Comb4-2	7.8E-05
B68	Base	Middle	VB	-1.0836	Comb3-5	5.9E-05	2.3247	Comb4-2	0.000126
B68	Base	End-J	VB	-1.5751	Comb3-5	8.5E-05	2.9684	Comb4-2	0.000162
B69	Base	End-I	VB	-1.7164	Comb3-5	9.3E-05	3.2274	Comb4-2	0.000176
B69	Base	Middle	VB	-2.0984	Comb4-2	0.000114	0.8132	Comb4-2	4.4E-05
B69	Base	End-J	VB	-1.569	Comb4-2	8.5E-05	3.253	Comb4-2	0.000177
B70	Base	End-I	VB	-0.7872	Comb3-5	4.3E-05	2.8683	Comb4-2	0.000156
B70	Base	Middle	VB	-0.7171	Comb4-2	3.9E-05	2.4721	Comb4-2	0.000134
B70	Base	End-J	VB	-0.7171	Comb4-2	3.9E-05	0.7171	Comb4-2	3.9E-05
B71	Base	End-I	VB	-0.0152	Comb3-5	1E-06	0.1423	Comb4-2	8E-06
B71	Base	Middle	VB	-0.4963	Comb4-2	2.7E-05	1.6309	Comb4-2	8.8E-05
B71	Base	End-J	VB	-0.4963	Comb4-2	2.7E-05	1.9853	Comb4-2	0.000108
B72	Base	End-I	VB	-1.4057	Comb4-2	7.6E-05	2.1532	Comb4-2	0.000117
B72	Base	Middle	VB	-2.1458	Comb4-2	0.000117	0.6257	Comb4-2	3.4E-05
B72	Base	End-J	VB	-1.0814	Comb4-2	5.9E-05	2.5028	Comb4-2	0.000136
B73	Base	End-I	VB	-0.5597	Comb4-2	3E-05	2.2388	Comb4-2	0.000122
B73	Base	Middle	VB	-0.5597	Comb4-2	3E-05	1.8109	Comb4-2	9.8E-05
B73	Base	End-J	VB	0	Comb3-5	0	0.5351	Comb4-2	2.9E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B78	Base	End-I	VB	-0.5577	Comb4-2	3E-05	0.5577	Comb4-2	3E-05
B78	Base	Middle	VB	-0.5577	Comb4-2	3E-05	1.4306	Comb4-2	7.8E-05
B78	Base	End-J	VB	-0.5577	Comb4-2	3E-05	2.2309	Comb4-2	0.000121
B79	Base	End-I	VB	-0.2434	Comb3-5	1.3E-05	2.5208	Comb4-2	0.000137
B79	Base	Middle	VB	-0.6302	Comb4-2	3.4E-05	1.8544	Comb4-2	0.000101
B79	Base	End-J	VB	0	Comb3-5	0	1.9725	Comb4-2	0.000107
B80	Base	End-I	VB	0	Comb3-5	0	0.6361	Comb4-2	3.4E-05
B80	Base	Middle	VB	-0.159	Comb4-2	9E-06	1.0123	Comb4-2	5.5E-05
B80	Base	End-J	VB	0	Comb3-5	0	0.4791	Comb4-2	2.6E-05
B81	Base	End-I	VB	-0.1051	Comb3-5	6E-06	0.3606	Comb4-2	1.9E-05
B81	Base	Middle	VB	-0.1766	Comb4-2	1E-05	0.4812	Comb4-2	2.6E-05
B81	Base	End-J	VB	-0.1766	Comb4-2	1E-05	0.7062	Comb4-2	3.8E-05
B82	Base	End-I	VB	-0.1162	Comb3-5	6E-06	0.6123	Comb4-2	3.3E-05
B82	Base	Middle	VB	-0.1531	Comb4-2	8E-06	0.6492	Comb4-2	3.5E-05
B82	Base	End-J	VB	0	Comb3-5	0	0.3781	Comb4-2	2E-05
B83	Base	End-I	VB	-0.6712	Comb4-2	3.6E-05	0.5133	Comb3-5	2.8E-05
B83	Base	Middle	VB	-0.4195	Comb4-2	2.3E-05	0.3682	Comb3-5	2E-05
B83	Base	End-J	VB	-0.1711	Comb3-5	9E-06	0.6032	Comb4-2	3.3E-05
B84	Base	End-I	VB	-0.2134	Comb3-5	1.2E-05	0.4142	Comb4-2	2.2E-05
B84	Base	Middle	VB	-0.5286	Comb4-2	2.9E-05	0.5774	Comb3-5	3.1E-05
B84	Base	End-J	VB	-0.5723	Comb4-2	3.1E-05	0.4975	Comb3-5	2.7E-05
B85	Base	End-I	VB	0	Comb3-5	0	0.4599	Comb4-2	2.5E-05
B85	Base	Middle	VB	-0.115	Comb4-2	6E-06	0.3736	Comb4-2	2E-05
B85	Base	End-J	VB	-0.0259	Comb4-2	1E-06	0.013	Comb4-2	1E-06
B86	Base	End-I	VB	0	Comb3-5	0	0.5128	Comb4-2	2.8E-05
B86	Base	Middle	VB	-0.1496	Comb4-2	8E-06	0.7572	Comb4-2	4.1E-05
B86	Base	End-J	VB	-0.1496	Comb4-2	8E-06	0.6903	Comb4-2	3.7E-05
B87	Base	End-I	VB	-0.1299	Comb4-2	7E-06	0.0649	Comb4-2	4E-06
B87	Base	Middle	VB	0			0		
B87	Base	End-J	VB	0	Comb3-5	0	0.3956	Comb4-2	2.1E-05
B98	Base	End-I	VB	0	Comb3-5	0	0.3401	Comb4-2	1.8E-05
B98	Base	Middle	VB	-0.085	Comb4-2	5E-06	0.4256	Comb4-2	2.3E-05
B98	Base	End-J	VB	-0.0241	Comb4-2	1E-06	0.0133	Comb3-5	1E-06
B99	Base	End-I	VB	0	Comb3-5	0	0.355	Comb4-2	1.9E-05
B99	Base	Middle	VB	-0.0887	Comb4-2	5E-06	0.458	Comb4-2	2.5E-05
B99	Base	End-J	VB	-0.0064	Comb4-2	3.432E-07	0.016	Comb3-5	1E-06
B103	Base	End-I	VB	0	Comb3-5	0	1.4274	Comb4-2	7.7E-05
B103	Base	Middle	VB	0			0		
B103	Base	End-J	VB	0	Comb3-5	0	1.5225	Comb4-2	8.3E-05
B104	Base	End-I	VB	-0.0439	Comb3-5	2E-06	0.2083	Comb4-2	1.1E-05
B104	Base	Middle	VB	-0.2481	Comb3-5	1.3E-05	0.404	Comb4-2	2.2E-05
B104	Base	End-J	VB	-0.2763	Comb4-2	1.5E-05	0.4073	Comb4-2	2.2E-05
B105	Base	End-I	VB	-0.0257	Comb3-5	1E-06	0.4137	Comb4-2	2.2E-05
B105	Base	Middle	VB	0			0		
B105	Base	End-J	VB	-0.0138	Comb3-5	1E-06	1.0826	Comb4-2	5.9E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B106	Base	End-I	VB	-0.2002	Comb3-5	1.1E-05	1.5956	Comb4-2	8.7E-05
B106	Base	Middle	VB	0			0		
B106	Base	End-J	VB	-0.1941	Comb3-5	1E-05	1.4203	Comb4-2	7.7E-05
B119	Base	End-I	VB	-0.2923	Comb4-2	1.6E-05	0.2471	Comb4-2	1.3E-05
B119	Base	Middle	VB	-0.5421	Comb4-2	2.9E-05	0.4355	Comb3-5	2.4E-05
B119	Base	End-J	VB	-0.5285	Comb3-5	2.9E-05	0.9886	Comb4-2	5.4E-05
B169	Base	End-I	VB	-0.0009	Comb3-5	4.629E-08	0.4598	Comb4-2	2.5E-05
B169	Base	Middle	VB	0			0		
B169	Base	End-J	VB	0	Comb3-5	0	1.3411	Comb4-2	7.3E-05
B193	Base	End-I	VB	-0.6715	Comb3-5	3.6E-05	0.777	Comb4-2	4.2E-05
B193	Base	Middle	VB	-0.4668	Comb3-5	2.5E-05	0.8064	Comb4-2	4.4E-05
B193	Base	End-J	VB	0	Comb3-5	0	0.6274	Comb4-2	3.4E-05
B194	Base	End-I	VB	0	Comb3-5	0	0.4757	Comb4-2	2.6E-05
B194	Base	Middle	VB	0			0		
B194	Base	End-J	VB	0	Comb3-5	0	0.5649	Comb4-2	3.1E-05
B195	Base	End-I	VB	0	Comb3-5	0	0.5089	Comb4-2	2.8E-05
B195	Base	Middle	VB	-0.7373	Comb4-2	4E-05	0.4557	Comb3-5	2.5E-05
B195	Base	End-J	VB	-0.8938	Comb4-2	4.8E-05	0.5865	Comb3-5	3.2E-05
B196	Base	End-I	VB	-0.9332	Comb4-2	5.1E-05	0.6626	Comb3-5	3.6E-05
B196	Base	Middle	VB	-0.8472	Comb4-2	4.6E-05	0.4147	Comb3-5	2.2E-05
B196	Base	End-J	VB	-0.4873	Comb3-5	2.6E-05	1.1152	Comb4-2	6E-05
B197	Base	End-I	VB	-0.4145	Comb3-5	2.2E-05	1.08	Comb4-2	5.9E-05
B197	Base	Middle	VB	-0.3452	Comb4-2	1.9E-05	1.0109	Comb4-2	5.5E-05
B197	Base	End-J	VB	-0.3452	Comb4-2	1.9E-05	1.3809	Comb4-2	7.5E-05
B198	Base	End-I	VB	-0.0952	Comb3-5	5E-06	1.8368	Comb4-2	0.0001
B198	Base	Middle	VB	0			0		
B198	Base	End-J	VB	-0.2802	Comb3-5	1.5E-05	2.2668	Comb4-2	0.000123
B199	Base	End-I	VB	-0.7627	Comb4-2	4.1E-05	0.841	Comb4-2	4.6E-05
B199	Base	Middle	VB	-0.7627	Comb4-2	4.1E-05	2.3436	Comb4-2	0.000127
B199	Base	End-J	VB	-1.2183	Comb3-5	6.6E-05	3.0506	Comb4-2	0.000166
B200	Base	End-I	VB	-1.4964	Comb4-2	8.1E-05	3.4536	Comb4-2	0.000188
B200	Base	Middle	VB	-1.8122	Comb4-2	9.8E-05	0.8634	Comb4-2	4.7E-05
B200	Base	End-J	VB	-1.5796	Comb4-2	8.6E-05	2.9533	Comb4-2	0.000161
B201	Base	End-I	VB	-1.4114	Comb3-5	7.7E-05	2.7164	Comb4-2	0.000148
B201	Base	Middle	VB	-0.8844	Comb3-5	4.8E-05	2.0424	Comb4-2	0.000111
B201	Base	End-J	VB	-0.3147	Comb3-5	1.7E-05	1.1594	Comb4-2	6.3E-05
B202	Base	End-I	VB	-0.2246	Comb4-2	1.2E-05	0.8983	Comb4-2	4.9E-05
B202	Base	Middle	VB	-0.2246	Comb4-2	1.2E-05	0.7287	Comb4-2	3.9E-05
B202	Base	End-J	VB	-0.2246	Comb4-2	1.2E-05	0.7271	Comb4-2	3.9E-05
B203	Base	End-I	VB	-0.8708	Comb3-5	4.7E-05	2.0716	Comb4-2	0.000113
B203	Base	Middle	VB	-0.5359	Comb4-2	2.9E-05	1.5698	Comb4-2	8.5E-05
B203	Base	End-J	VB	-0.5359	Comb4-2	2.9E-05	2.1437	Comb4-2	0.000116
B204	Base	End-I	VB	-0.4446	Comb3-5	2.4E-05	0.4574	Comb4-2	2.5E-05
B204	Base	Middle	VB	-0.5448	Comb4-2	2.9E-05	0.8723	Comb4-2	4.7E-05
B204	Base	End-J	VB	-0.9415	Comb3-5	5.1E-05	2.179	Comb4-2	0.000118

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B205	Base	End-I	VB	-0.7474	Comb4-2	4E-05	0.5385	Comb3-5	2.9E-05
B205	Base	Middle	VB	-0.7376	Comb4-2	4E-05	0.2771	Comb3-5	1.5E-05
B205	Base	End-J	VB	-0.6239	Comb4-2	3.4E-05	0.3797	Comb4-2	2.1E-05
B206	Base	End-I	VB	-1.0393	Comb3-5	5.6E-05	1.9704	Comb4-2	0.000107
B206	Base	Middle	VB	-0.6059	Comb3-5	3.3E-05	1.0901	Comb4-2	5.9E-05
B206	Base	End-J	VB	-0.4995	Comb3-5	2.7E-05	0.5396	Comb4-2	2.9E-05
B207	Base	End-I	VB	-1.2646	Comb4-2	6.9E-05	1.1564	Comb3-5	6.3E-05
B207	Base	Middle	VB	-1.028	Comb4-2	5.6E-05	0.9434	Comb4-2	5.1E-05
B207	Base	End-J	VB	-1.3968	Comb3-5	7.6E-05	2.5275	Comb4-2	0.000137
B208	Base	End-I	VB	-1.4783	Comb3-5	8E-05	1.6677	Comb4-2	9E-05
B208	Base	Middle	VB	0			0		
B208	Base	End-J	VB	-1.3381	Comb4-2	7.3E-05	1.2606	Comb3-5	6.8E-05
B209	Base	End-I	VB	-2.1214	Comb4-2	0.000115	2.2091	Comb3-5	0.00012
B209	Base	Middle	VB	-1.2568	Comb4-2	6.8E-05	0.7066	Comb3-5	3.8E-05
B209	Base	End-J	VB	-1.4538	Comb3-5	7.9E-05	1.6242	Comb4-2	8.8E-05
B225	Base	End-I	VB	-0.3446	Comb3-5	1.9E-05	2.5876	Comb4-2	0.000141
B225	Base	Middle	VB	-0.6469	Comb4-2	3.5E-05	1.8525	Comb4-2	0.000101
B225	Base	End-J	VB	-0.2011	Comb4-2	1.1E-05	0.1006	Comb4-2	5E-06
B226	Base	End-I	VB	0	Comb3-5	0	0.363	Comb4-2	2E-05
B226	Base	Middle	VB	-0.3394	Comb4-2	1.8E-05	1.1716	Comb4-2	6.3E-05
B226	Base	End-J	VB	0	Comb3-5	0	1.3577	Comb4-2	7.4E-05
B228	Base	End-I	VB	-0.0491	Comb3-5	3E-06	0.1515	Comb4-2	8E-06
B228	Base	Middle	VB	-0.3775	Comb4-2	2E-05	1.2698	Comb4-2	6.9E-05
B228	Base	End-J	VB	-0.434	Comb3-5	2.3E-05	1.5101	Comb4-2	8.2E-05
B229	Base	End-I	VB	-0.0124	Comb3-5	1E-06	0.3186	Comb4-2	1.7E-05
B229	Base	Middle	VB	-0.0796	Comb4-2	4E-06	0.4777	Comb4-2	2.6E-05
B229	Base	End-J	VB	0	Comb3-5	0	0.3047	Comb4-2	1.6E-05
B230	Base	End-I	VB	-1.2048	Comb4-2	6.5E-05	1.6946	Comb4-2	9.2E-05
B230	Base	Middle	VB	-1.5047	Comb4-2	8.2E-05	0.552	Comb4-2	3E-05
B230	Base	End-J	VB	-0.9174	Comb4-2	5E-05	2.2078	Comb4-2	0.00012
B231	Base	End-I	VB	-0.5197	Comb4-2	2.8E-05	2.0787	Comb4-2	0.000113
B231	Base	Middle	VB	-0.5197	Comb4-2	2.8E-05	1.5471	Comb4-2	8.4E-05
B231	Base	End-J	VB	0	Comb3-5	0	0.2219	Comb4-2	1.2E-05
B232	Base	End-I	VB	-0.0532	Comb3-5	3E-06	0.4755	Comb4-2	2.6E-05
B232	Base	Middle	VB	-0.1634	Comb4-2	9E-06	0.6046	Comb4-2	3.3E-05
B232	Base	End-J	VB	0	Comb3-5	0	0.6537	Comb4-2	3.5E-05
B233	Base	End-I	VB	0	Comb3-5	0	0.4331	Comb4-2	2.3E-05
B233	Base	Middle	VB	-0.1083	Comb4-2	6E-06	0.5361	Comb4-2	2.9E-05
B233	Base	End-J	VB	0	Comb3-5	0	0.3553	Comb4-2	1.9E-05
B234	Base	End-I	VB	-0.1584	Comb4-2	9E-06	0.6863	Comb4-2	3.7E-05
B234	Base	Middle	VB	-0.1584	Comb4-2	9E-06	0.8262	Comb4-2	4.5E-05
B234	Base	End-J	VB	0	Comb3-5	0	0.4494	Comb4-2	2.4E-05
B235	Base	End-I	VB	0	Comb3-5	0	0.3327	Comb4-2	1.8E-05
B235	Base	Middle	VB	0			0		
B235	Base	End-J	VB	-0.1064	Comb4-2	6E-06	0.0532	Comb4-2	3E-06

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B248	Base	End-I	VB	-1.8794	Comb3-5	0.000102	2.9729	Comb4-2	0.000162
B248	Base	Middle	VB	-1.0163	Comb3-5	5.5E-05	2.3419	Comb4-2	0.000127
B248	Base	End-J	VB	-0.7432	Comb4-2	4E-05	0.7432	Comb4-2	4E-05
B249	Base	End-I	VB	0	Comb3-5	0	1.8956	Comb4-2	0.000103
B249	Base	Middle	VB	0			0		
B249	Base	End-J	VB	0	Comb3-5	0	1.971	Comb4-2	0.000107
B250	Base	End-I	VB	-2.0032	Comb3-5	0.000109	3.0633	Comb4-2	0.000167
B250	Base	Middle	VB	-1.2823	Comb3-5	7E-05	2.4264	Comb4-2	0.000132
B250	Base	End-J	VB	-0.7658	Comb4-2	4.1E-05	0.7658	Comb4-2	4.1E-05
B251	Base	End-I	VB	0	Comb3-5	0	1.2273	Comb4-2	6.7E-05
B251	Base	Middle	VB	0			0		
B251	Base	End-J	VB	0	Comb3-5	0	0.4788	Comb4-2	2.6E-05
B252	Base	End-I	VB	0	Comb3-5	0	1.2055	Comb4-2	6.5E-05
B252	Base	Middle	VB	-0.464	Comb4-2	2.5E-05	1.5775	Comb4-2	8.6E-05
B252	Base	End-J	VB	-0.464	Comb4-2	2.5E-05	1.8586	Comb4-2	0.000101
B253	Base	End-I	VB	-1.3451	Comb3-5	7.3E-05	1.8766	Comb4-2	0.000102
B253	Base	Middle	VB	-0.7366	Comb3-5	4E-05	0.8461	Comb4-2	4.6E-05
B253	Base	End-J	VB	-0.4692	Comb4-2	2.5E-05	0.4692	Comb4-2	2.5E-05
B254	Base	End-I	VB	0	Comb3-5	0	1.0356	Comb4-2	5.6E-05
B254	Base	Middle	VB	-0.3118	Comb4-2	1.7E-05	1.1907	Comb4-2	6.5E-05
B254	Base	End-J	VB	-0.0239	Comb3-5	1E-06	1.2473	Comb4-2	6.8E-05
B255	Base	End-I	VB	-0.0639	Comb3-5	3E-06	1.2741	Comb4-2	6.9E-05
B255	Base	Middle	VB	0			0		
B255	Base	End-J	VB	0	Comb3-5	0	0.5174	Comb4-2	2.8E-05
B256	Base	End-I	VB	-0.3221	Comb3-5	1.7E-05	0.6128	Comb4-2	3.3E-05
B256	Base	Middle	VB	-0.2284	Comb3-5	1.2E-05	0.6033	Comb4-2	3.3E-05
B256	Base	End-J	VB	-0.1196	Comb4-2	6E-06	0.1828	Comb4-2	1E-05
B257	Base	End-I	VB	-0.1071	Comb4-2	6E-06	1.1906	Comb4-2	6.5E-05
B257	Base	Middle	VB	-0.1071	Comb4-2	6E-06	1.0595	Comb4-2	5.7E-05
B257	Base	End-J	VB	-0.1071	Comb4-2	6E-06	0.4305	Comb4-2	2.3E-05
B258	Base	End-I	VB	0	Comb3-5	0	2.124	Comb4-2	0.000115
B258	Base	Middle	VB	-0.6371	Comb4-2	3.4E-05	1.7757	Comb4-2	9.6E-05
B258	Base	End-J	VB	-0.4954	Comb3-5	2.7E-05	2.5485	Comb4-2	0.000139
B259	Base	End-I	VB	-0.5285	Comb3-5	2.9E-05	2.3228	Comb4-2	0.000126
B259	Base	Middle	VB	-0.5807	Comb4-2	3.1E-05	1.5783	Comb4-2	8.6E-05
B259	Base	End-J	VB	-0.5807	Comb4-2	3.1E-05	0.5807	Comb4-2	3.1E-05
B260	Base	End-I	VB	-0.3644	Comb3-5	2E-05	0.4732	Comb4-2	2.6E-05
B260	Base	Middle	VB	-0.2155	Comb3-5	1.2E-05	0.5232	Comb4-2	2.8E-05
B260	Base	End-J	VB	-0.0008	Comb3-5	4.45E-08	0.2683	Comb4-2	1.5E-05
B261	Base	End-I	VB	-0.3897	Comb3-5	2.1E-05	0.7166	Comb4-2	3.9E-05
B261	Base	Middle	VB	-0.4114	Comb4-2	2.2E-05	0.3602	Comb3-5	1.9E-05
B261	Base	End-J	VB	-0.4424	Comb4-2	2.4E-05	0.4302	Comb4-2	2.3E-05
B262	Base	End-I	VB	0	Comb3-5	0	0.2307	Comb4-2	1.2E-05
B262	Base	Middle	VB	-0.273	Comb3-5	1.5E-05	0.7367	Comb4-2	4E-05
B262	Base	End-J	VB	-0.3022	Comb3-5	1.6E-05	0.7262	Comb4-2	3.9E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B263	Base	End-I	VB	-1.6459	Comb4-2	8.9E-05	3.9612	Comb4-2	0.000216
B263	Base	Middle	VB	-2.2761	Comb4-2	0.000124	0.9903	Comb4-2	5.4E-05
B263	Base	End-J	VB	-2.236	Comb4-2	0.000121	3.1458	Comb4-2	0.000171
B264	Base	End-I	VB	-0.9717	Comb4-2	5.3E-05	2.1589	Comb4-2	0.000117
B264	Base	Middle	VB	-0.9717	Comb4-2	5.3E-05	3.6096	Comb4-2	0.000197
B264	Base	End-J	VB	-1.165	Comb3-5	6.3E-05	3.8867	Comb4-2	0.000212
B265	Base	End-I	VB	-0.9899	Comb4-2	5.4E-05	2.2042	Comb4-2	0.00012
B265	Base	Middle	VB	-1.0208	Comb3-5	5.5E-05	3.699	Comb4-2	0.000202
B265	Base	End-J	VB	-1.3174	Comb3-5	7.1E-05	3.9596	Comb4-2	0.000216
B266	Base	End-I	VB	-1.6774	Comb4-2	9.1E-05	4.0856	Comb4-2	0.000223
B266	Base	Middle	VB	-2.3094	Comb4-2	0.000125	1.0214	Comb4-2	5.5E-05
B266	Base	End-J	VB	-2.3063	Comb4-2	0.000125	3.2427	Comb4-2	0.000177
B267	Base	End-I	VB	0	Comb3-5	0	0.2534	Comb4-2	1.4E-05
B267	Base	Middle	VB	-0.3447	Comb4-2	1.9E-05	1.1908	Comb4-2	6.5E-05
B267	Base	End-J	VB	0	Comb3-5	0	1.3789	Comb4-2	7.5E-05
B268	Base	End-I	VB	-2.2604	Comb4-2	0.000123	1.7972	Comb3-5	9.8E-05
B268	Base	Middle	VB	-1.2192	Comb4-2	6.6E-05	0.5651	Comb4-2	3.1E-05
B268	Base	End-J	VB	-0.5639	Comb3-5	3.1E-05	0.8628	Comb4-2	4.7E-05
B269	Base	End-I	VB	-0.6452	Comb4-2	3.5E-05	0.6354	Comb3-5	3.4E-05
B269	Base	Middle	VB	-0.9363	Comb4-2	5.1E-05	0.7206	Comb3-5	3.9E-05
B269	Base	End-J	VB	-1.5464	Comb3-5	8.4E-05	2.0951	Comb4-2	0.000114
B270	Base	End-I	VB	-0.062	Comb3-5	3E-06	0.3601	Comb4-2	1.9E-05
B270	Base	Middle	VB	-0.09	Comb4-2	5E-06	0.5108	Comb4-2	2.8E-05
B270	Base	End-J	VB	-0.0409	Comb3-5	2E-06	0.2592	Comb4-2	1.4E-05
B271	Base	End-I	VB	-0.0137	Comb3-5	1E-06	0.4096	Comb4-2	2.2E-05
B271	Base	Middle	VB	-0.1024	Comb4-2	6E-06	0.3854	Comb4-2	2.1E-05
B271	Base	End-J	VB	-0.0559	Comb3-5	3E-06	0.3263	Comb4-2	1.8E-05
B274	Base	End-I	VB	-1.0585	Comb4-2	5.7E-05	1.2534	Comb4-2	6.8E-05
B274	Base	Middle	VB	-1.0553	Comb4-2	5.7E-05	0.5007	Comb4-2	2.7E-05
B274	Base	End-J	VB	-0.7182	Comb4-2	3.9E-05	2.0027	Comb4-2	0.000109
B294	Base	End-I	VB	-1.3586	Comb4-2	7.4E-05	1.6193	Comb4-2	8.8E-05
B294	Base	Middle	VB	-1.6333	Comb4-2	8.9E-05	0.6322	Comb4-2	3.4E-05
B294	Base	End-J	VB	-0.9147	Comb4-2	5E-05	2.5287	Comb4-2	0.000137
B585	Base	End-I	VB	-0.9588	Comb4-2	5.2E-05	2.1672	Comb4-2	0.000118
B585	Base	Middle	VB	-1.3559	Comb4-2	7.4E-05	0.7934	Comb4-2	4.3E-05
B585	Base	End-J	VB	-1.2823	Comb4-2	7E-05	3.1735	Comb4-2	0.000173
B590	Base	End-I	VB2	-0.6079	Comb4-2	4.8E-05	2.4316	Comb4-2	0.000192
B590	Base	Middle	VB2	-0.6829	Comb4-2	5.3E-05	0.6079	Comb4-2	4.8E-05
B590	Base	End-J	VB2	-0.6566	Comb4-2	5.1E-05	0.6079	Comb4-2	4.8E-05
B591	Base	End-I	VB2	-0.6681	VERTICAL	5.2E-05	2.6724	VERTICAL	0.000211
B591	Base	Middle	VB2	-0.6681	VERTICAL	5.2E-05	1.0551	VERTICAL	8.3E-05
B591	Base	End-J	VB2	-0.6681	VERTICAL	5.2E-05	0.6681	VERTICAL	5.2E-05
B592	Base	End-I	VB2	-0.6582	Comb4-2	5.2E-05	2.6327	Comb4-2	0.000208
B592	Base	Middle	VB2	-1.0205	Comb4-2	8E-05	0.6582	Comb4-2	5.2E-05
B592	Base	End-J	VB2	-0.9253	Comb4-2	7.3E-05	0.6582	Comb4-2	5.2E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B605	Base	End-I	VB2	-1.079	Comb4-2	8.5E-05	0.3771	VERTICAL	2.9E-05
B605	Base	Middle	VB2	-1.1623	Comb4-2	9.1E-05	0.3771	VERTICAL	2.9E-05
B605	Base	End-J	VB2	-0.3771	VERTICAL	2.9E-05	1.5084	VERTICAL	0.000119
B606	Base	End-I	VB2	0	Comb3-5	0	0.0202	VERTICAL	2E-06
B606	Base	Middle	VB2	-0.1421	VERTICAL	1.1E-05	0.3212	VERTICAL	2.5E-05
B606	Base	End-J	VB2	0	Comb3-5	0	0.5685	VERTICAL	4.5E-05
B608	Base	End-I	VB2	-0.3504	Comb4-2	2.7E-05	0.7748	Comb4-2	6.1E-05
B608	Base	Middle	VB2	-0.3314	Comb4-2	2.6E-05	0.1937	Comb4-2	1.5E-05
B608	Base	End-J	VB2	-0.1937	Comb4-2	1.5E-05	0.6163	Comb4-2	4.8E-05
B609	Base	End-I	VB2	-0.5636	VERTICAL	4.4E-05	0.9039	Comb4-2	7.1E-05
B609	Base	Middle	VB2	-0.6569	VERTICAL	5.1E-05	0.5636	VERTICAL	4.4E-05
B609	Base	End-J	VB2	-0.5636	VERTICAL	4.4E-05	2.2546	VERTICAL	0.000178
B610	Base	End-I	VB2	-0.5784	VERTICAL	4.5E-05	2.3136	VERTICAL	0.000183
B610	Base	Middle	VB2	-0.8873	VERTICAL	7E-05	0.5784	VERTICAL	4.5E-05
B610	Base	End-J	VB2	-0.5784	VERTICAL	4.5E-05	0.7591	Comb4-2	5.9E-05
B611	Base	End-I	VB2	-0.2457	VERTICAL	1.9E-05	0.9828	VERTICAL	7.7E-05
B611	Base	Middle	VB2	-0.4234	Comb4-2	3.3E-05	0.2457	VERTICAL	1.9E-05
B611	Base	End-J	VB2	-0.2954	Comb4-2	2.3E-05	0.2457	VERTICAL	1.9E-05
B612	Base	End-I	VB2	-0.2462	Comb4-2	1.9E-05	0.224	VERTICAL	1.8E-05
B612	Base	Middle	VB2	-0.2979	Comb4-2	2.3E-05	0.224	VERTICAL	1.8E-05
B612	Base	End-J	VB2	-0.224	VERTICAL	1.8E-05	0.8959	VERTICAL	7E-05
B613	Base	End-I	VB2	-0.2288	Comb4-2	1.8E-05	0.9152	Comb4-2	7.2E-05
B613	Base	Middle	VB2	-0.6283	Comb4-2	4.9E-05	0.2288	Comb4-2	1.8E-05
B613	Base	End-J	VB2	-0.5604	Comb4-2	4.4E-05	0.2288	Comb4-2	1.8E-05
B615	Base	End-I	VB2	-0.2076	Comb4-2	1.6E-05	0.8101	VERTICAL	6.3E-05
B615	Base	Middle	VB2	-0.6623	Comb4-2	5.2E-05	0.2383	Comb4-2	1.9E-05
B615	Base	End-J	VB2	-0.8303	Comb4-2	6.5E-05	0.4152	Comb4-2	3.2E-05
B616	Base	End-I	VB2	-0.8451	Comb4-2	6.6E-05	0.4225	Comb4-2	3.3E-05
B616	Base	Middle	VB2	-0.5499	Comb4-2	4.3E-05	0.3332	Comb4-2	2.6E-05
B616	Base	End-J	VB2	-0.3332	Comb4-2	2.6E-05	1.3328	Comb4-2	0.000105
B619	Base	End-I	VB2	-0.7581	Comb4-2	5.9E-05	1.4717	Comb4-2	0.000116
B619	Base	Middle	VB2	-1.1347	Comb4-2	8.9E-05	0.3679	Comb4-2	2.9E-05
B619	Base	End-J	VB2	-0.3679	Comb4-2	2.9E-05	1.2102	VERTICAL	9.5E-05
B621	Base	End-I	VB2	-1.0282	Comb4-2	8.1E-05	0.5141	Comb4-2	4E-05
B621	Base	Middle	VB2	-0.8367	Comb4-2	6.6E-05	0.257	Comb4-2	2E-05
B621	Base	End-J	VB2	-0.257	Comb4-2	2E-05	1.0067	Comb4-2	7.9E-05
B622	Base	End-I	VB2	-0.3349	VERTICAL	2.6E-05	1.3395	VERTICAL	0.000105
B622	Base	Middle	VB2	-0.8515	Comb4-2	6.7E-05	0.3349	VERTICAL	2.6E-05
B622	Base	End-J	VB2	-1.0112	Comb4-2	7.9E-05	0.5056	Comb4-2	4E-05
B628	Base	End-I	VB2	-0.3932	Comb4-2	3.1E-05	0.3414	VERTICAL	2.7E-05
B628	Base	Middle	VB2	-0.4046	Comb4-2	3.2E-05	0.3414	VERTICAL	2.7E-05
B628	Base	End-J	VB2	-0.3414	VERTICAL	2.7E-05	1.3655	VERTICAL	0.000107
B629	Base	End-I	VB2	-1.1577	VERTICAL	9.1E-05	0.7171	VERTICAL	5.6E-05
B629	Base	Middle	VB2	-0.7703	VERTICAL	6E-05	0.8493	VERTICAL	6.7E-05
B629	Base	End-J	VB2	-0.7171	VERTICAL	5.6E-05	2.8685	VERTICAL	0.000227

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B630	Base	End-I	VB2	-0.6311	VERTICAL	4.9E-05	0.3128	VERTICAL	2.4E-05
B630	Base	Middle	VB2	-0.6117	VERTICAL	4.8E-05	0.1877	VERTICAL	1.5E-05
B630	Base	End-J	VB2	-0.1877	VERTICAL	1.5E-05	0.7509	VERTICAL	5.9E-05
B631	Base	End-I	VB2	-0.4756	VERTICAL	3.7E-05	0.8912	VERTICAL	7E-05
B631	Base	Middle	VB2	-0.4604	VERTICAL	3.6E-05	0.2819	VERTICAL	2.2E-05
B631	Base	End-J	VB2	-0.5843	Comb4-2	4.6E-05	0.4591	VERTICAL	3.6E-05
B632	Base	End-I	VB2	-0.6792	VERTICAL	5.3E-05	0.0837	VERTICAL	7E-06
B632	Base	Middle	VB2	-0.7449	VERTICAL	5.8E-05	0.0837	VERTICAL	7E-06
B632	Base	End-J	VB2	-0.5298	VERTICAL	4.1E-05	0.1675	VERTICAL	1.3E-05
B633	Base	End-I	VB2	-0.6877	VERTICAL	5.4E-05	0.285	VERTICAL	2.2E-05
B633	Base	Middle	VB2	-0.9626	VERTICAL	7.6E-05	0.285	VERTICAL	2.2E-05
B633	Base	End-J	VB2	-1.1399	VERTICAL	8.9E-05	0.5699	VERTICAL	4.5E-05
B634	Base	End-I	VB2	-0.4178	Comb4-2	3.3E-05	0.2724	VERTICAL	2.1E-05
B634	Base	Middle	VB2	-0.6831	VERTICAL	5.4E-05	0.1556	VERTICAL	1.2E-05
B634	Base	End-J	VB2	-0.669	VERTICAL	5.2E-05	0.3112	VERTICAL	2.4E-05
B635	Base	End-I	VB2	-0.3906	Comb4-2	3.1E-05	1.4086	Comb4-2	0.000111
B635	Base	Middle	VB2	-0.7361	Comb4-2	5.8E-05	0.3521	Comb4-2	2.8E-05
B635	Base	End-J	VB2	-0.3521	Comb4-2	2.8E-05	0.9587	Comb4-2	7.5E-05
B636	Base	End-I	VB2	-0.7144	VERTICAL	5.6E-05	0.5556	VERTICAL	4.3E-05
B636	Base	Middle	VB2	-0.5556	VERTICAL	4.3E-05	0.757	VERTICAL	5.9E-05
B636	Base	End-J	VB2	-0.5556	VERTICAL	4.3E-05	2.2225	VERTICAL	0.000175
B637	Base	End-I	VB2	0	Comb3-5	0	1.9148	VERTICAL	0.000151
B637	Base	Middle	VB2	-0.4787	VERTICAL	3.7E-05	0.8561	VERTICAL	6.7E-05
B637	Base	End-J	VB2	-0.4725	VERTICAL	3.7E-05	0.2362	VERTICAL	1.8E-05
B638	Base	End-I	VB2	-0.6549	VERTICAL	5.1E-05	0.3189	VERTICAL	2.5E-05
B638	Base	Middle	VB2	-0.6664	VERTICAL	5.2E-05	0.3189	VERTICAL	2.5E-05
B638	Base	End-J	VB2	-0.3189	VERTICAL	2.5E-05	1.2755	VERTICAL	0.0001
B639	Base	End-I	VB2	0	Comb3-5	0	1.6269	VERTICAL	0.000128
B639	Base	Middle	VB2	-0.4067	VERTICAL	3.2E-05	1.0759	VERTICAL	8.4E-05
B639	Base	End-J	VB2	0	Comb3-5	0	0.2955	VERTICAL	2.3E-05
B640	Base	End-I	VB2	-0.0704	VERTICAL	5E-06	0.2815	VERTICAL	2.2E-05
B640	Base	Middle	VB2	-0.2166	Comb4-2	1.7E-05	0.0704	VERTICAL	5E-06
B640	Base	End-J	VB2	-0.2284	Comb4-2	1.8E-05	0.0704	VERTICAL	5E-06
B641	Base	End-I	VB2	-0.2042	VERTICAL	1.6E-05	0.2042	VERTICAL	1.6E-05
B641	Base	Middle	VB2	-0.2042	VERTICAL	1.6E-05	0.2492	Comb4-2	1.9E-05
B641	Base	End-J	VB2	-0.2042	VERTICAL	1.6E-05	0.817	VERTICAL	6.4E-05
B642	Base	End-I	VB2	-0.0062	Comb4-2	4.802E-07	0.0031	Comb4-2	2.401E-07
B642	Base	Middle	VB2	-0.0826	VERTICAL	6E-06	0.0383	VERTICAL	3E-06
B642	Base	End-J	VB2	-0.1533	VERTICAL	1.2E-05	0.0767	VERTICAL	6E-06
B643	Base	End-I	VB2	0	Comb3-5	0	0.0186	VERTICAL	1E-06
B643	Base	Middle	VB2	0			0		
B643	Base	End-J	VB2	-0.0549	Comb4-2	4E-06	0.0274	Comb4-2	2E-06
B644	Base	End-I	VB2	0	Comb3-5	0	0.0237	Comb4-2	2E-06
B644	Base	Middle	VB2	0			0		
B644	Base	End-J	VB2	-0.0753	VERTICAL	6E-06	0.3012	VERTICAL	2.4E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B646	Base	End-I	VB2	-0.1633	Comb4-2	1.3E-05	0.61	Comb4-2	4.8E-05
B646	Base	Middle	VB2	-0.5463	Comb4-2	4.3E-05	0.1633	Comb4-2	1.3E-05
B646	Base	End-J	VB2	-0.6534	Comb4-2	5.1E-05	0.3267	Comb4-2	2.6E-05
B647	Base	End-I	VB2	-0.6415	Comb4-2	5E-05	0.3208	Comb4-2	2.5E-05
B647	Base	Middle	VB2	-0.1604	Comb4-2	1.3E-05	0.8175	VERTICAL	6.4E-05
B647	Base	End-J	VB2	-0.1604	Comb4-2	1.3E-05	0.2518	VERTICAL	2E-05
B648	Base	End-I	VB2	-0.4036	VERTICAL	3.2E-05	0.1622	VERTICAL	1.3E-05
B648	Base	Middle	VB2	-0.404	VERTICAL	3.2E-05	0.173	Comb4-2	1.4E-05
B648	Base	End-J	VB2	-0.1622	VERTICAL	1.3E-05	0.6489	VERTICAL	5.1E-05
B649	Base	End-I	VB2	-0.1593	VERTICAL	1.2E-05	0.6373	VERTICAL	5E-05
B649	Base	Middle	VB2	-0.1593	VERTICAL	1.2E-05	0.3365	VERTICAL	2.6E-05
B649	Base	End-J	VB2	-0.1593	VERTICAL	1.2E-05	0.1593	VERTICAL	1.2E-05
B652	Base	End-I	VB2	-0.2063	VERTICAL	1.6E-05	0.8254	VERTICAL	6.5E-05
B652	Base	Middle	VB2	-0.6114	Comb4-2	4.8E-05	0.2063	VERTICAL	1.6E-05
B652	Base	End-J	VB2	-0.706	VERTICAL	5.5E-05	0.3503	VERTICAL	2.7E-05
B653	Base	End-I	VB2	-0.6	Comb4-2	4.7E-05	2.3999	Comb4-2	0.00019
B653	Base	Middle	VB2	-0.7236	Comb4-2	5.7E-05	0.6	Comb4-2	4.7E-05
B653	Base	End-J	VB2	-0.6	Comb4-2	4.7E-05	0.9459	Comb4-2	7.4E-05
B659	Base	End-I	VB2	-0.6747	VERTICAL	5.3E-05	2.699	VERTICAL	0.000214
B659	Base	Middle	VB2	-1.3173	Comb4-2	0.000104	0.6747	VERTICAL	5.3E-05
B659	Base	End-J	VB2	-0.6747	VERTICAL	5.3E-05	1.6003	Comb4-2	0.000126
B660	Base	End-I	VB2	-1.0365	VERTICAL	8.1E-05	4.146	VERTICAL	0.000331
B660	Base	Middle	VB2	-1.299	VERTICAL	0.000102	1.0365	VERTICAL	8.1E-05
B660	Base	End-J	VB2	-1.0365	VERTICAL	8.1E-05	1.0365	VERTICAL	8.1E-05
B661	Base	End-I	VB2	-0.6716	VERTICAL	5.3E-05	0.6716	VERTICAL	5.3E-05
B661	Base	Middle	VB2	-0.6716	VERTICAL	5.3E-05	1.03	VERTICAL	8.1E-05
B661	Base	End-J	VB2	-0.6716	VERTICAL	5.3E-05	2.6864	VERTICAL	0.000213
B662	Base	End-I	VB2	-0.2239	Comb4-2	1.7E-05	0.112	Comb4-2	9E-06
B662	Base	Middle	VB2	0			0		
B662	Base	End-J	VB2	-0.256	Comb4-2	2E-05	0.128	Comb4-2	1E-05
B665	Base	End-I	VB2	-1.1503	VERTICAL	9E-05	1.1503	VERTICAL	9E-05
B665	Base	Middle	VB2	-1.1503	VERTICAL	9E-05	1.3919	VERTICAL	0.000109
B665	Base	End-J	VB2	-1.1503	VERTICAL	9E-05	4.601	VERTICAL	0.000368
B666	Base	End-I	VB2	-0.7646	VERTICAL	6E-05	3.0585	VERTICAL	0.000243
B666	Base	Middle	VB2	-0.7646	VERTICAL	6E-05	0.7675	VERTICAL	6E-05
B666	Base	End-J	VB2	-0.7646	VERTICAL	6E-05	0.7646	VERTICAL	6E-05
B667	Base	End-I	VB2	-0.0725	Comb4-2	6E-06	0.0363	Comb4-2	3E-06
B667	Base	Middle	VB2	0			0		
B667	Base	End-J	VB2	-0.0707	Comb4-2	6E-06	0.0353	Comb4-2	3E-06
B670	Base	End-I	VB2	-1.0321	VERTICAL	8.1E-05	1.0321	VERTICAL	8.1E-05
B670	Base	Middle	VB2	-1.205	VERTICAL	9.5E-05	1.0321	VERTICAL	8.1E-05
B670	Base	End-J	VB2	-1.0321	VERTICAL	8.1E-05	4.1284	VERTICAL	0.000329
B672	Base	End-I	VB2	-1.1869	VERTICAL	9.3E-05	4.7478	VERTICAL	0.00038
B672	Base	Middle	VB2	-1.1869	VERTICAL	9.3E-05	2.2927	VERTICAL	0.000181
B672	Base	End-J	VB2	-1.1869	VERTICAL	9.3E-05	1.1869	VERTICAL	9.3E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B673	Base	End-I	VB2	-1.004	VERTICAL	7.9E-05	1.6125	Comb4-2	0.000127
B673	Base	Middle	VB2	-1.2913	VERTICAL	0.000101	1.004	VERTICAL	7.9E-05
B673	Base	End-J	VB2	-1.004	VERTICAL	7.9E-05	4.016	VERTICAL	0.00032
B675	Base	End-I	VB2	-0.6862	Comb4-2	5.4E-05	0.6387	VERTICAL	5E-05
B675	Base	Middle	VB2	-0.8323	VERTICAL	6.5E-05	0.6387	VERTICAL	5E-05
B675	Base	End-J	VB2	-0.6387	VERTICAL	5E-05	2.555	VERTICAL	0.000202
B676	Base	End-I	VB2	-1.3698	VERTICAL	0.000108	1.3698	VERTICAL	0.000108
B676	Base	Middle	VB2	-1.3698	VERTICAL	0.000108	3.671	VERTICAL	0.000292
B676	Base	End-J	VB2	0	Comb3-5	0	5.4791	VERTICAL	0.00044
B677	Base	End-I	VB2	-0.8062	VERTICAL	6.3E-05	0.9443	Comb4-2	7.4E-05
B677	Base	Middle	VB2	-1.1427	Comb4-2	9E-05	0.8062	VERTICAL	6.3E-05
B677	Base	End-J	VB2	-0.8062	VERTICAL	6.3E-05	3.2248	VERTICAL	0.000256
B678	Base	End-I	VB2	-1.2461	VERTICAL	9.8E-05	4.9845	VERTICAL	0.000399
B678	Base	Middle	VB2	-1.2461	VERTICAL	9.8E-05	1.9539	VERTICAL	0.000154
B678	Base	End-J	VB2	-1.2461	VERTICAL	9.8E-05	1.2461	VERTICAL	9.8E-05
B682	Base	End-I	VB	-1.2614	Comb4-2	6.8E-05	2.4799	Comb4-2	0.000135
B682	Base	Middle	VB	-2.906	Comb4-2	0.000158	0.6228	Comb4-2	3.4E-05
B682	Base	End-J	VB	-1.3756	Comb4-2	7.5E-05	2.4912	Comb4-2	0.000135
B1283	Base	End-I	VB	-0.0755	Comb4-2	4E-06	0.3019	Comb4-2	1.6E-05
B1283	Base	Middle	VB	-0.0755	Comb4-2	4E-06	0.1642	Comb4-2	9E-06
B1283	Base	End-J	VB	-0.0755	Comb4-2	4E-06	0.212	Comb4-2	1.1E-05
B1284	Base	End-I	VB	-0.0528	VERTICAL	3E-06	0.2361	Comb4-2	1.3E-05
B1284	Base	Middle	VB	-0.149	Comb4-2	8E-06	0.188	Comb4-2	1E-05
B1284	Base	End-J	VB	-0.1807	Comb4-2	1E-05	0.1562	Comb3-5	8E-06
B1301	Base	End-I	VB	-0.2378	Comb4-2	1.3E-05	0.951	Comb4-2	5.2E-05
B1301	Base	Middle	VB	-0.2378	Comb4-2	1.3E-05	0.2378	Comb4-2	1.3E-05
B1301	Base	End-J	VB	-0.2378	Comb4-2	1.3E-05	0.2945	Comb4-2	1.6E-05
B1326	Base	End-I	VB	0	Comb3-5	0	0.4688	Comb4-2	2.5E-05
B1326	Base	Middle	VB	-0.4965	Comb3-5	2.7E-05	1.1424	Comb4-2	6.2E-05
B1326	Base	End-J	VB	-0.5606	Comb3-5	3E-05	1.1999	Comb4-2	6.5E-05
B284	Base	End-I	VB2	-2.0929	Comb4-2	0.000165	0.4007	Comb4-2	3.1E-05
B284	Base	Middle	VB2	-1.6624	Comb4-2	0.000131	0.2598	Comb4-2	2E-05
B284	Base	End-J	VB2	-1.2382	Comb4-2	9.7E-05	0.1002	Comb4-2	8E-06
B285	Base	End-I	VB2	-0.7698	Comb4-2	6E-05	3.0794	Comb4-2	0.000244
B285	Base	Middle	VB2	-0.9799	Comb4-2	7.7E-05	0.7698	Comb4-2	6E-05
B285	Base	End-J	VB2	-2.2074	Comb4-2	0.000174	1.1037	Comb4-2	8.7E-05
B286	Base	End-I	VB2	-2.2064	Comb4-2	0.000174	1.1032	Comb4-2	8.7E-05
B286	Base	Middle	VB2	-2.057	Comb4-2	0.000162	0.5516	Comb4-2	4.3E-05
B286	Base	End-J	VB2	-1.0395	Comb4-2	8.2E-05	0.5516	Comb4-2	4.3E-05
B310	Base	End-I	VB2	-1.2265	Comb4-2	9.6E-05	0.4617	Comb4-2	3.6E-05
B310	Base	Middle	VB2	-1.0847	Comb4-2	8.5E-05	0.4617	Comb4-2	3.6E-05
B310	Base	End-J	VB2	-0.4617	Comb4-2	3.6E-05	1.8469	Comb4-2	0.000146
B323	Base	End-I	VB2	-0.684	Comb4-2	5.4E-05	1.881	Comb4-2	0.000148
B323	Base	Middle	VB2	-1.02	Comb4-2	8E-05	0.584	Comb4-2	4.6E-05
B323	Base	End-J	VB2	-0.584	Comb4-2	4.6E-05	2.3359	Comb4-2	0.000185

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B325	Base	End-I	VB2	0	Comb3-5	0	1.5051	Comb4-2	0.000118
B325	Base	Middle	VB2	-0.3763	Comb4-2	2.9E-05	0.8648	Comb4-2	6.8E-05
B325	Base	End-J	VB2	-0.066	Comb4-2	5E-06	0.1035	Comb3-5	8E-06
B326	Base	End-I	VB2	-0.1487	Comb3-5	1.2E-05	1.4644	Comb4-2	0.000115
B326	Base	Middle	VB2	-0.3661	Comb4-2	2.9E-05	0.85	Comb4-2	6.7E-05
B326	Base	End-J	VB2	-0.0445	Comb3-5	3E-06	0.1416	Comb4-2	1.1E-05
B345	Base	End-I	VB2	-0.3691	Comb4-2	2.9E-05	1.4762	Comb4-2	0.000116
B345	Base	Middle	VB2	-1.0107	Comb4-2	7.9E-05	0.3691	Comb4-2	2.9E-05
B345	Base	End-J	VB2	-1.0903	Comb4-2	8.6E-05	0.3691	Comb4-2	2.9E-05
B353	Base	End-I	VB2	0	Comb3-5	0	1.5367	VERTICAL	0.000121
B353	Base	Middle	VB2	0			0		
B353	Base	End-J	VB2	0	Comb3-5	0	1.547	VERTICAL	0.000122
B354	Base	End-I	VB2	-0.4347	Comb4-2	3.4E-05	1.7387	Comb4-2	0.000137
B354	Base	Middle	VB2	-0.5577	Comb4-2	4.4E-05	0.4347	Comb4-2	3.4E-05
B354	Base	End-J	VB2	-0.4347	Comb4-2	3.4E-05	1.4608	VERTICAL	0.000115
B358	Base	End-I	VB2	-1.786	Comb3-5	0.000141	2.4454	Comb4-2	0.000193
B358	Base	Middle	VB2	-1.0711	Comb4-2	8.4E-05	0.6114	Comb4-2	4.8E-05
B358	Base	End-J	VB2	-0.6719	Comb3-5	5.3E-05	0.7799	Comb4-2	6.1E-05
B359	Base	End-I	VB2	-0.4385	Comb3-5	3.4E-05	3.5859	Comb4-2	0.000285
B359	Base	Middle	VB2	-0.8965	Comb4-2	7E-05	1.2098	Comb4-2	9.5E-05
B359	Base	End-J	VB2	-0.0201	Comb3-5	2E-06	0.0192	Comb4-2	1E-06
B360	Base	End-I	VB2	-0.5832	Comb3-5	4.6E-05	3.5044	Comb4-2	0.000279
B360	Base	Middle	VB2	-0.8761	Comb4-2	6.9E-05	1.1508	Comb4-2	9E-05
B360	Base	End-J	VB2	-0.0328	Comb4-2	3E-06	0.0164	Comb4-2	1E-06
B366	Base	End-I	VB2	-0.4741	Comb4-2	3.7E-05	1.7268	Comb4-2	0.000136
B366	Base	Middle	VB2	-1.0081	Comb4-2	7.9E-05	0.471	Comb4-2	3.7E-05
B366	Base	End-J	VB2	-0.471	Comb4-2	3.7E-05	1.8841	Comb4-2	0.000148
B367	Base	End-I	VB2	-0.4955	Comb4-2	3.9E-05	1.9731	Comb4-2	0.000156
B367	Base	Middle	VB2	-0.9496	Comb4-2	7.4E-05	0.4955	Comb4-2	3.9E-05
B367	Base	End-J	VB2	-0.5744	Comb4-2	4.5E-05	1.9821	Comb4-2	0.000156
B370	Base	End-I	VB2	-0.0764	Comb4-2	6E-06	0.1052	Comb3-5	8E-06
B370	Base	Middle	VB2	-0.315	Comb4-2	2.5E-05	0.7118	Comb4-2	5.6E-05
B370	Base	End-J	VB2	0	Comb3-5	0	1.26	Comb4-2	9.9E-05
B371	Base	End-I	VB2	-0.0728	Comb4-2	6E-06	0.1005	Comb3-5	8E-06
B371	Base	Middle	VB2	-0.2775	Comb4-2	2.2E-05	0.5845	Comb4-2	4.6E-05
B371	Base	End-J	VB2	0	Comb3-5	0	1.11	Comb4-2	8.7E-05
B372	Base	End-I	VB2	-0.736	Comb4-2	5.8E-05	0.736	Comb4-2	5.8E-05
B372	Base	Middle	VB2	-0.736	Comb4-2	5.8E-05	0.736	Comb4-2	5.8E-05
B372	Base	End-J	VB2	-1.1287	Comb3-5	8.9E-05	2.9439	Comb4-2	0.000233
B373	Base	End-I	VB2	-0.3133	Comb4-2	2.4E-05	0.1344	Comb3-5	1E-05
B373	Base	Middle	VB2	-0.6252	Comb4-2	4.9E-05	0.1344	Comb3-5	1E-05
B373	Base	End-J	VB2	-0.5962	Comb4-2	4.7E-05	0.3282	Comb4-2	2.6E-05
B375	Base	End-I	VB2	-0.4137	Comb4-2	3.2E-05	0.03	Comb4-2	2E-06
B375	Base	Middle	VB2	-0.4236	Comb4-2	3.3E-05	0.03	Comb4-2	2E-06
B375	Base	End-J	VB2	-0.223	VERTICAL	1.7E-05	0.06	Comb4-2	5E-06

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B378	Base	End-I	VB2	-0.9357	Comb4-2	7.3E-05	3.743	Comb4-2	0.000298
B378	Base	Middle	VB2	-0.9357	Comb4-2	7.3E-05	1.0407	Comb4-2	8.2E-05
B378	Base	End-J	VB2	-0.9357	Comb4-2	7.3E-05	0.9357	Comb4-2	7.3E-05
B379	Base	End-I	VB2	-0.9132	Comb3-5	7.2E-05	2.6937	Comb4-2	0.000213
B379	Base	Middle	VB2	-0.6734	Comb4-2	5.3E-05	0.6734	Comb4-2	5.3E-05
B379	Base	End-J	VB2	-0.6734	Comb4-2	5.3E-05	0.6734	Comb4-2	5.3E-05
B380	Base	End-I	VB2	-0.493	Comb3-5	3.9E-05	0.6627	Comb4-2	5.2E-05
B380	Base	Middle	VB2	-0.5952	Comb4-2	4.7E-05	0.1657	Comb4-2	1.3E-05
B380	Base	End-J	VB2	-0.3498	Comb4-2	2.7E-05	0.1657	Comb4-2	1.3E-05
B381	Base	End-I	VB2	-0.4027	VERTICAL	3.1E-05	0.1392	VERTICAL	1.1E-05
B381	Base	Middle	VB2	-0.5804	Comb4-2	4.5E-05	0.0696	VERTICAL	5E-06
B381	Base	End-J	VB2	-0.4571	Comb4-2	3.6E-05	0.0866	Comb4-2	7E-06
B383	Base	End-I	VB2	-0.9003	Comb4-2	7.1E-05	0.9003	Comb4-2	7.1E-05
B383	Base	Middle	VB2	-0.9003	Comb4-2	7.1E-05	1.0145	Comb4-2	8E-05
B383	Base	End-J	VB2	-0.9003	Comb4-2	7.1E-05	3.6012	Comb4-2	0.000286
B1352	Base	End-I	VB2	-0.2923	Comb4-2	2.3E-05	1.1694	Comb4-2	9.2E-05
B1352	Base	Middle	VB2	-0.2923	Comb4-2	2.3E-05	0.4431	Comb4-2	3.5E-05
B1352	Base	End-J	VB2	-0.2923	Comb4-2	2.3E-05	0.2923	Comb4-2	2.3E-05
B1353	Base	End-I	VB2	-0.7187	VERTICAL	5.6E-05	2.8749	VERTICAL	0.000228
B1353	Base	Middle	VB2	-0.7187	VERTICAL	5.6E-05	1.3099	VERTICAL	0.000103
B1353	Base	End-J	VB2	-0.7187	VERTICAL	5.6E-05	0.7187	VERTICAL	5.6E-05
B1354	Base	End-I	VB2	-0.3666	VERTICAL	2.9E-05	1.4666	VERTICAL	0.000115
B1354	Base	Middle	VB2	-0.3666	VERTICAL	2.9E-05	0.5969	Comb4-2	4.7E-05
B1354	Base	End-J	VB2	-0.3666	VERTICAL	2.9E-05	0.3666	VERTICAL	2.9E-05
B1355	Base	End-I	VB2	-0.4752	Comb4-2	3.7E-05	0.2926	Comb4-2	2.3E-05
B1355	Base	Middle	VB2	-0.4728	Comb4-2	3.7E-05	0.2926	Comb4-2	2.3E-05
B1355	Base	End-J	VB2	-0.2926	Comb4-2	2.3E-05	1.1706	Comb4-2	9.2E-05
B374	Base	End-I	VB2	-0.6673	Comb4-2	5.2E-05	1.4153	Comb4-2	0.000111
B374	Base	Middle	VB2	-0.9836	Comb4-2	7.7E-05	0.4527	Comb4-2	3.5E-05
B374	Base	End-J	VB2	-0.6521	Comb4-2	5.1E-05	1.811	Comb4-2	0.000143
B382	Base	End-I	VB2	-0.5429	Comb4-2	4.2E-05	1.3784	Comb4-2	0.000108
B382	Base	Middle	VB2	-0.789	Comb4-2	6.2E-05	0.4444	Comb4-2	3.5E-05
B382	Base	End-J	VB2	-0.5655	VERTICAL	4.4E-05	1.7775	Comb4-2	0.00014
B722	Base	End-I	VB2	-0.4478	Comb4-2	3.5E-05	1.6121	Comb4-2	0.000127
B722	Base	Middle	VB2	-0.9016	VERTICAL	7.1E-05	0.403	Comb4-2	3.2E-05
B722	Base	End-J	VB2	-0.9013	Comb4-2	7.1E-05	0.4912	Comb4-2	3.8E-05
B1278	Base	End-I	VB2	-0.4923	Comb4-2	3.9E-05	1.431	Comb4-2	0.000113
B1278	Base	Middle	VB2	-0.8656	Comb4-2	6.8E-05	0.3577	Comb4-2	2.8E-05
B1278	Base	End-J	VB2	-0.8604	Comb4-2	6.7E-05	0.5644	Comb4-2	4.4E-05
B1358	Base	End-I	VB2	-0.6007	Comb3-5	4.7E-05	1.2408	Comb4-2	9.7E-05
B1358	Base	Middle	VB2	-0.3102	Comb4-2	2.4E-05	0.6249	Comb4-2	4.9E-05
B1358	Base	End-J	VB2	0	Comb3-5	0	0.5467	Comb4-2	4.3E-05
B1359	Base	End-I	VB2	-0.1256	Comb4-2	1E-05	0.1628	Comb4-2	1.3E-05
B1359	Base	Middle	VB2	-0.1668	Comb3-5	1.3E-05	0.3252	Comb4-2	2.5E-05
B1359	Base	End-J	VB2	-0.1493	Comb3-5	1.2E-05	0.5026	Comb4-2	3.9E-05

Table 1.2 - Concrete Beam Flexure Envelope (continued)

Label	Story	Location	Section	(-) Moment tonf-m	(-) Combo	As Top m ²	(+) Moment tonf-m	(+) Combo	As Bot m ²
B1367	Base	End-I	VB2	-0.5529	Comb4-2	4.3E-05	0.8427	Comb4-2	6.6E-05
B1367	Base	Middle	VB2	-1.0345	Comb4-2	8.1E-05	0.5318	Comb4-2	4.2E-05
B1367	Base	End-J	VB2	-0.5318	Comb4-2	4.2E-05	2.1272	Comb4-2	0.000168

Table 1.3 - Concrete Beam Shear Envelope

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B683	Story4	VC	End-I	0.1743	Comb3-5	0	8.414E-07	Comb3-5	0	8.414E-07	Comb3-5	0
B683	Story4	VC	Middle	0.1584	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B683	Story4	VC	End-J	0.2309	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B684	Story4	VC	End-I	0.0837	Comb3-5	0	2.106E-06	Comb3-5	0	2.106E-06	Comb3-5	0
B684	Story4	VC	Middle	0.0743	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B684	Story4	VC	End-J	0.2605	Comb3-5	0	8.995E-07	Comb3-5	0	8.995E-07	Comb3-5	0
B685	Story4	VC	End-I	0.1524	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B685	Story4	VC	Middle	0.2807	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B685	Story4	VC	End-J	0.6845	Comb3-5	0	2.082E-06	Comb3-5	0	2.082E-06	Comb3-5	0
B686	Story4	VC	End-I	0.9208	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B686	Story4	VC	Middle	0.8829	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B686	Story4	VC	End-J	0.8451	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B687	Story4	VC	End-I	0.2862	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B687	Story4	VC	Middle	0.3194	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B687	Story4	VC	End-J	0.3734	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B688	Story4	VC	End-I	0.3048	Comb3-5	0	1.659E-06	Comb3-5	0	1.659E-06	Comb3-5	0
B688	Story4	VC	Middle	0.2317	Comb3-5	0	5.582E-07	Comb3-5	0	5.582E-07	Comb3-5	0
B688	Story4	VC	End-J	0.1514	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B689	Story4	VC	End-I	0.2056	Comb4-2	4E-05	5.86E-07	Comb3-5	0	5.86E-07	Comb3-5	0
B689	Story4	VC	Middle	0.3404	Comb3-5	0	1.457E-06	Comb3-5	0	1.457E-06	Comb3-5	0
B689	Story4	VC	End-J	0.0816	Comb3-5	2E-05	1.427E-06	Comb3-5	0	1.427E-06	Comb3-5	0
B690	Story4	VC	End-I	0.5674	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B690	Story4	VC	Middle	0.6264	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B690	Story4	VC	End-J	0.8852	Comb3-5	0	1.461E-06	Comb3-5	0	1.461E-06	Comb3-5	0
B691	Story4	VC	End-I	1.1451	Comb4-2	0.00018	1.537E-06	Comb3-5	0	1.537E-06	Comb3-5	0
B691	Story4	VC	Middle	1.0712	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B691	Story4	VC	End-J	0.8663	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B692	Story4	VC	End-I	0.1417	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B692	Story4	VC	Middle	0.1595	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B692	Story4	VC	End-J	0.185	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B693	Story4	VC	End-I	0.6039	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B693	Story4	VC	Middle	0.7112	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B693	Story4	VC	End-J	0.7761	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B694	Story4	VC	End-I	0.1921	Comb3-5	0	1.448E-06	Comb3-5	0	1.448E-06	Comb3-5	0
B694	Story4	VC	Middle	0.3712	Comb3-5	0	6.76E-07	Comb3-5	0	6.76E-07	Comb3-5	0
B694	Story4	VC	End-J	0.2246	Comb3-5	4E-05	1.782E-06	Comb3-5	0	1.782E-06	Comb3-5	0
B695	Story4	VC	End-I	0.4446	Comb3-5	7E-05	1.772E-06	Comb3-5	0	1.772E-06	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B695	Story4	VC	Middle	0.5555	Comb3-5	9E-05	1.199E-06	Comb3-5	0	1.199E-06	Comb3-5	0
B695	Story4	VC	End-J	0.6096	Comb3-5	0.0001	1.199E-06	Comb3-5	0	1.199E-06	Comb3-5	0
B696	Story4	VC	End-I	0.6251	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B696	Story4	VC	Middle	0.6629	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B696	Story4	VC	End-J	0.7007	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B697	Story4	VC	End-I	0.308	Comb3-5	5E-05	1.269E-06	Comb3-5	0	1.269E-06	Comb3-5	0
B697	Story4	VC	Middle	0.3837	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B697	Story4	VC	End-J	0.3686	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B698	Story4	VC	End-I	0.0943	Comb3-5	0	1.982E-06	Comb3-5	0	1.982E-06	Comb3-5	0
B698	Story4	VC	Middle	0.5667	Comb3-5	0	1.42E-06	Comb3-5	0	1.42E-06	Comb3-5	0
B698	Story4	VC	End-J	0.2429	Comb3-5	0	1.472E-06	Comb3-5	0	1.472E-06	Comb3-5	0
B699	Story4	VC	End-I	0.4412	Comb3-5	7E-05	7.66E-07	Comb3-5	0	7.66E-07	Comb3-5	0
B699	Story4	VC	Middle	0.3799	Comb3-5	6E-05	7.665E-07	Comb3-5	0	7.665E-07	Comb3-5	0
B699	Story4	VC	End-J	0.4093	Comb3-5	6E-05	7.665E-07	Comb3-5	0	7.665E-07	Comb3-5	0
B700	Story4	VC	End-I	6.6781	Comb4-2	0.00106	7.525E-07	Comb3-5	0	7.525E-07	Comb3-5	0
B700	Story4	VC	Middle	6.6733	Comb4-2	0.00105	7.525E-07	Comb3-5	0	7.525E-07	Comb3-5	0
B700	Story4	VC	End-J	6.6685	Comb4-2	0.00105	7.525E-07	Comb3-5	0	7.525E-07	Comb3-5	0
B701	Story4	VC	End-I	1.1907	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B701	Story4	VC	Middle	1.2339	Comb4-2	0.0002	0	Comb3-5	0	0	Comb3-5	0
B701	Story4	VC	End-J	1.0996	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B702	Story4	VC	End-I	0.5643	Comb3-5	9E-05	2.016E-06	Comb3-5	0	2.016E-06	Comb3-5	0
B702	Story4	VC	Middle	0.5255	Comb3-5	8E-05	9.357E-07	Comb3-5	0	9.357E-07	Comb3-5	0
B702	Story4	VC	End-J	0.4572	Comb3-5	7E-05	1.119E-06	Comb3-5	0	1.119E-06	Comb3-5	0
B703	Story4	VC	End-I	1.0918	Comb4-2	0.00017	6.59E-07	Comb3-5	0	6.59E-07	Comb3-5	0
B703	Story4	VC	Middle	1.0767	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B703	Story4	VC	End-J	0.9411	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B704	Story4	VC	End-I	0.278	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B704	Story4	VC	Middle	0.3887	Comb3-5	0	6.72E-07	Comb3-5	0	6.72E-07	Comb3-5	0
B704	Story4	VC	End-J	0.2435	Comb3-5	0	8.288E-07	Comb3-5	0	8.288E-07	Comb3-5	0
B705	Story4	VC	End-I	0.353	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B705	Story4	VC	Middle	0.3488	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B705	Story4	VC	End-J	0.3114	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B706	Story4	VC	End-I	0.1963	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B706	Story4	VC	Middle	0.3199	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B706	Story4	VC	End-J	0.1449	Comb3-5	0	6.014E-07	Comb3-5	0	6.014E-07	Comb3-5	0
B707	Story4	VC	End-I	1.42	Comb4-2	0.00022	6.011E-07	Comb3-5	0	6.011E-07	Comb3-5	0
B707	Story4	VC	Middle	2.1408	Comb4-2	0.00034	6.141E-07	Comb3-5	0	6.141E-07	Comb3-5	0
B707	Story4	VC	End-J	2.2147	Comb4-2	0.00035	6.141E-07	Comb3-5	0	6.141E-07	Comb3-5	0
B708	Story4	VC	End-I	0.4611	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B708	Story4	VC	Middle	0.5276	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B708	Story4	VC	End-J	0.5101	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B709	Story4	VC	End-I	0.139	Comb3-5	0	1.523E-06	Comb3-5	0	1.523E-06	Comb3-5	0
B709	Story4	VC	Middle	0.1397	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B709	Story4	VC	End-J	0.3149	Comb3-5	0	5.517E-07	Comb3-5	0	5.517E-07	Comb3-5	0
B710	Story4	VC	End-I	0.6721	Comb3-5	0.00011	2.329E-06	Comb3-5	0	2.329E-06	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B710	Story4	VC	Middle	0.3917	Comb3-5	6E-05	2.334E-06	Comb3-5	0	2.334E-06	Comb3-5	0
B710	Story4	VC	End-J	0.3994	Comb3-5	6E-05	2.333E-06	Comb3-5	0	2.333E-06	Comb3-5	0
B711	Story4	VC	End-I	1.2675	Comb4-2	0.0002	0	Comb3-5	0	0	Comb3-5	0
B711	Story4	VC	Middle	1.2297	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B711	Story4	VC	End-J	1.1918	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B712	Story4	VC	End-I	0.2543	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B712	Story4	VC	Middle	0.3129	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B712	Story4	VC	End-J	0.8191	Comb3-5	0	1.038E-06	Comb3-5	0	1.038E-06	Comb3-5	0
B713	Story4	VC	End-I	0.2076	Comb3-5	0	1.121E-06	Comb3-5	0	1.121E-06	Comb3-5	0
B713	Story4	VC	Middle	0.3537	Comb3-5	0	1.669E-06	Comb3-5	0	1.669E-06	Comb3-5	0
B713	Story4	VC	End-J	0.2308	Comb3-5	0	1.75E-06	Comb3-5	0	1.75E-06	Comb3-5	0
B714	Story4	VC	End-I	0.3496	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B714	Story4	VC	Middle	0.2867	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B714	Story4	VC	End-J	0.5852	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B715	Story4	VC	End-I	1.3691	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B715	Story4	VC	Middle	1.8633	Comb4-2	0.00029	0	Comb3-5	0	0	Comb3-5	0
B715	Story4	VC	End-J	1.8285	Comb4-2	0.00029	0	Comb3-5	0	0	Comb3-5	0
B716	Story4	VC	End-I	0.0129	Comb3-5	2.539E-06	2.085E-06	Comb3-5	0	2.085E-06	Comb3-5	0
B716	Story4	VC	Middle	0.1165	Comb3-5	2E-05	1.9E-06	Comb3-5	0	1.9E-06	Comb3-5	0
B716	Story4	VC	End-J	0.2285	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B717	Story4	VC	End-I	0.1507	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B717	Story4	VC	Middle	0.1284	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B717	Story4	VC	End-J	0.2505	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B718	Story4	VC	End-I	0.4991	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B718	Story4	VC	Middle	0.4124	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B718	Story4	VC	End-J	0.4756	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B721	Story4	VC	End-I	0.155	Comb3-5	0	1.456E-06	Comb3-5	0	1.456E-06	Comb3-5	0
B721	Story4	VC	Middle	0.1457	Comb3-5	0	1.562E-06	Comb3-5	0	1.562E-06	Comb3-5	0
B721	Story4	VC	End-J	0.1019	Comb3-5	0	9.015E-07	Comb3-5	0	9.015E-07	Comb3-5	0
B723	Story4	VC	End-I	0.2633	Comb3-5	0	6.899E-07	Comb3-5	0	6.899E-07	Comb3-5	0
B723	Story4	VC	Middle	0.102	Comb3-5	0	6.934E-07	Comb3-5	0	6.934E-07	Comb3-5	0
B723	Story4	VC	End-J	0.1653	Comb3-5	0	6.826E-07	Comb3-5	0	6.826E-07	Comb3-5	0
B724	Story4	VC	End-I	0.1328	Comb3-5	0	1.151E-06	Comb3-5	0	1.151E-06	Comb3-5	0
B724	Story4	VC	Middle	0.2463	Comb3-5	0	1.172E-06	Comb3-5	0	1.172E-06	Comb3-5	0
B724	Story4	VC	End-J	0.2932	Comb3-5	0	1.172E-06	Comb3-5	0	1.172E-06	Comb3-5	0
B725	Story4	VC	End-I	0.6114	Comb3-5	0	4.261E-06	Comb3-5	0	4.261E-06	Comb3-5	0
B725	Story4	VC	Middle	0.5197	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B725	Story4	VC	End-J	0.472	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B726	Story4	VC	End-I	0.337	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B726	Story4	VC	Middle	0.1918	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B726	Story4	VC	End-J	0.0645	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B727	Story4	VC	End-I	0.1215	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B727	Story4	VC	Middle	0.179	Comb3-5	0	5.548E-07	Comb3-5	0	5.548E-07	Comb3-5	0
B727	Story4	VC	End-J	0.1194	Comb3-5	0	5.548E-07	Comb3-5	0	5.548E-07	Comb3-5	0
B729	Story4	VC	End-I	0.5084	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B729	Story4	VC	Middle	0.4723	Comb3-5	0	1.824E-06	Comb3-5	0	1.824E-06	Comb3-5	0
B729	Story4	VC	End-J	0.6404	Comb3-5	0	1.173E-06	Comb3-5	0	1.173E-06	Comb3-5	0
B730	Story4	VC	End-I	0.4908	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B730	Story4	VC	Middle	0.2334	Comb3-5	0	1.372E-06	Comb3-5	0	1.372E-06	Comb3-5	0
B730	Story4	VC	End-J	0.2453	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B731	Story4	VC	End-I	0.1863	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B731	Story4	VC	Middle	0.1294	Comb4-2	2E-05	0	Comb3-5	0	0	Comb3-5	0
B731	Story4	VC	End-J	0.167	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B732	Story4	VC	End-I	0.7144	Comb3-5	0.00011	2.549E-06	Comb3-5	0	2.549E-06	Comb3-5	0
B732	Story4	VC	Middle	0.7612	Comb3-5	0.00012	1.295E-06	Comb3-5	0	1.295E-06	Comb3-5	0
B732	Story4	VC	End-J	1.0243	Comb3-5	0.00016	1.334E-06	Comb3-5	0	1.334E-06	Comb3-5	0
B733	Story4	VC	End-I	0.5937	Comb3-5	0	1.919E-06	Comb3-5	0	1.919E-06	Comb3-5	0
B733	Story4	VC	Middle	0.7642	Comb3-5	0	5.453E-07	Comb3-5	0	5.453E-07	Comb3-5	0
B733	Story4	VC	End-J	1.1059	Comb3-5	0	3.255E-06	Comb3-5	0	3.255E-06	Comb3-5	0
B734	Story4	VC	End-I	0.6787	Comb3-5	0	1.221E-06	Comb3-5	0	1.221E-06	Comb3-5	0
B734	Story4	VC	Middle	0.6046	Comb3-5	0	1.326E-06	Comb3-5	0	1.326E-06	Comb3-5	0
B734	Story4	VC	End-J	1.0868	Comb3-5	0	4.554E-06	Comb3-5	0	4.554E-06	Comb3-5	0
B735	Story4	VC	End-I	0.5878	Comb3-5	9E-05	7.083E-07	Comb3-5	0	7.083E-07	Comb3-5	0
B735	Story4	VC	Middle	0.517	Comb3-5	8E-05	1.332E-06	Comb3-5	0	1.332E-06	Comb3-5	0
B735	Story4	VC	End-J	0.3667	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B736	Story4	VC	End-I	0.2359	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B736	Story4	VC	Middle	0.2831	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B736	Story4	VC	End-J	0.3303	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B737	Story4	VC	End-I	1.3071	Comb4-2	0.00021	5.489E-07	Comb3-5	0	5.489E-07	Comb3-5	0
B737	Story4	VC	Middle	1.3036	Comb4-2	0.00021	5.489E-07	Comb3-5	0	5.489E-07	Comb3-5	0
B737	Story4	VC	End-J	1.3001	Comb4-2	0.00021	5.489E-07	Comb3-5	0	5.489E-07	Comb3-5	0
B738	Story4	VC	End-I	0.7537	Comb4-2	0.00012	5.76E-07	Comb3-5	0	5.76E-07	Comb3-5	0
B738	Story4	VC	Middle	0.7282	Comb4-2	0.00012	5.76E-07	Comb3-5	0	5.76E-07	Comb3-5	0
B738	Story4	VC	End-J	0.6938	Comb4-2	0.00011	5.76E-07	Comb3-5	0	5.76E-07	Comb3-5	0
B739	Story4	VC	End-I	0.3577	Comb3-5	0	1.804E-06	Comb3-5	0	1.804E-06	Comb3-5	0
B739	Story4	VC	Middle	0.2676	Comb3-5	0	1.503E-06	Comb3-5	0	1.503E-06	Comb3-5	0
B739	Story4	VC	End-J	0.0738	Comb3-5	0	2.255E-06	Comb3-5	0	2.255E-06	Comb3-5	0
B740	Story4	VC	End-I	0.4509	Comb4-2	7E-05	1.092E-06	Comb3-5	0	1.092E-06	Comb3-5	0
B740	Story4	VC	Middle	0.3728	Comb4-2	6E-05	1.105E-06	Comb3-5	0	1.105E-06	Comb3-5	0
B740	Story4	VC	End-J	0.4064	Comb4-2	6E-05	1.105E-06	Comb3-5	0	1.105E-06	Comb3-5	0
B741	Story4	VC	End-I	0.1442	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B741	Story4	VC	Middle	0.1495	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B741	Story4	VC	End-J	0.143	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B742	Story4	VC	End-I	0.0841	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B742	Story4	VC	Middle	0.0753	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B742	Story4	VC	End-J	0.2083	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B743	Story4	VC	End-I	1.0127	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B743	Story4	VC	Middle	1.0745	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B743	Story4	VC	End-J	1.0285	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B744	Story4	VC	End-I	0.4727	Comb3-5	7E-05	5.267E-07	Comb3-5	0	5.267E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B744	Story4	VC	Middle	0.4547	Comb3-5	7E-05	8.739E-07	Comb3-5	0	8.739E-07	Comb3-5	0
B744	Story4	VC	End-J	0.7106	Comb3-5	0.00011	1.042E-06	Comb3-5	0	1.042E-06	Comb3-5	0
B745	Story4	VC	End-I	0.2815	Comb3-5	0	5.262E-07	Comb3-5	0	5.262E-07	Comb3-5	0
B745	Story4	VC	Middle	0.2089	Comb3-5	0	7.884E-07	Comb3-5	0	7.884E-07	Comb3-5	0
B745	Story4	VC	End-J	0.397	Comb3-5	0	5.903E-07	Comb3-5	0	5.903E-07	Comb3-5	0
B746	Story4	VC	End-I	0.6175	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B746	Story4	VC	Middle	0.5549	Comb3-5	0	1.147E-06	Comb3-5	0	1.147E-06	Comb3-5	0
B746	Story4	VC	End-J	0.7808	Comb3-5	0	6.375E-07	Comb3-5	0	6.375E-07	Comb3-5	0
B747	Story4	VC	End-I	0.466	Comb3-5	7E-05	1.935E-06	Comb3-5	0	1.935E-06	Comb3-5	0
B747	Story4	VC	Middle	0.2828	Comb3-5	4E-05	1.942E-06	Comb3-5	0	1.942E-06	Comb3-5	0
B747	Story4	VC	End-J	0.2652	Comb3-5	4E-05	1.937E-06	Comb3-5	0	1.937E-06	Comb3-5	0
B748	Story4	VC	End-I	0.0429	Comb3-5	1E-05	1.248E-06	Comb3-5	0	1.248E-06	Comb3-5	0
B748	Story4	VC	Middle	0.1098	Comb3-5	2E-05	6.346E-07	Comb3-5	0	6.346E-07	Comb3-5	0
B748	Story4	VC	End-J	0.2432	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B749	Story4	VC	End-I	0.3086	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B749	Story4	VC	Middle	0.2821	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B749	Story4	VC	End-J	0.347	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B750	Story4	VC	End-I	0.2779	Comb3-5	4E-05	0	Comb3-5	0	0	Comb3-5	0
B750	Story4	VC	Middle	0.1549	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B750	Story4	VC	End-J	0.2064	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B751	Story4	VC	End-I	0.4158	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B751	Story4	VC	Middle	0.4897	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B751	Story4	VC	End-J	0.3231	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B752	Story4	VC	End-I	1.014	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B752	Story4	VC	Middle	1.1157	Comb4-2	0.00018	6.67E-07	Comb3-5	0	6.67E-07	Comb3-5	0
B752	Story4	VC	End-J	1.0925	Comb4-2	0.00017	8.229E-07	Comb3-5	0	8.229E-07	Comb3-5	0
B753	Story4	VC	End-I	0.7295	Comb3-5	0.00012	8.021E-07	Comb3-5	0	8.021E-07	Comb3-5	0
B753	Story4	VC	Middle	1.3852	Comb3-5	0.00022	1.555E-06	Comb3-5	0	1.555E-06	Comb3-5	0
B753	Story4	VC	End-J	1.4003	Comb3-5	0.00022	1.555E-06	Comb3-5	0	1.555E-06	Comb3-5	0
B754	Story4	VC	End-I	0.6658	Comb3-5	0	6.598E-07	Comb3-5	0	6.598E-07	Comb3-5	0
B754	Story4	VC	Middle	0.8065	Comb3-5	0	6.521E-07	Comb3-5	0	6.521E-07	Comb3-5	0
B754	Story4	VC	End-J	0.8269	Comb3-5	0	1.283E-06	Comb3-5	0	1.283E-06	Comb3-5	0
B755	Story4	VC	End-I	1.1009	Comb4-2	0.00017	1.079E-06	Comb3-5	0	1.079E-06	Comb3-5	0
B755	Story4	VC	Middle	1.0817	Comb4-2	0.00017	1.079E-06	Comb3-5	0	1.079E-06	Comb3-5	0
B755	Story4	VC	End-J	1.0625	Comb4-2	0.00017	1.079E-06	Comb3-5	0	1.079E-06	Comb3-5	0
B756	Story4	VC	End-I	0.4286	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B756	Story4	VC	Middle	0.1997	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B756	Story4	VC	End-J	0.2656	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B757	Story4	VC	End-I	0.5567	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B757	Story4	VC	Middle	0.5653	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B757	Story4	VC	End-J	0.5854	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B758	Story4	VC	End-I	0.3947	Comb3-5	6E-05	5.361E-07	Comb3-5	0	5.361E-07	Comb3-5	0
B758	Story4	VC	Middle	0.3393	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B758	Story4	VC	End-J	0.3328	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B759	Story4	VC	End-I	0.6275	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B759	Story4	VC	Middle	0.4023	Comb3-5	6E-05	5.935E-07	Comb3-5	0	5.935E-07	Comb3-5	0
B759	Story4	VC	End-J	0.3742	Comb3-5	6E-05	5.935E-07	Comb3-5	0	5.935E-07	Comb3-5	0
B760	Story4	VC	End-I	0.5395	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B760	Story4	VC	Middle	0.5017	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B760	Story4	VC	End-J	0.4638	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B761	Story4	VC	End-I	0.246	Comb4-2	5E-05	8.453E-07	Comb3-5	0	8.453E-07	Comb3-5	0
B761	Story4	VC	Middle	0.2486	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B761	Story4	VC	End-J	0.3297	Comb4-2	5E-05	7.593E-07	Comb3-5	0	7.593E-07	Comb3-5	0
B762	Story4	VC	End-I	0.1643	Comb3-5	0	9.051E-07	Comb3-5	0	9.051E-07	Comb3-5	0
B762	Story4	VC	Middle	0.153	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B762	Story4	VC	End-J	0.1776	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B763	Story4	VC	End-I	0.2905	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B763	Story4	VC	Middle	0.3608	Comb3-5	6E-05	6.751E-07	Comb3-5	0	6.751E-07	Comb3-5	0
B763	Story4	VC	End-J	0.3888	Comb3-5	6E-05	6.334E-07	Comb3-5	0	6.334E-07	Comb3-5	0
B764	Story4	VC	End-I	0.1619	Comb3-5	0	7.378E-07	Comb3-5	0	7.378E-07	Comb3-5	0
B764	Story4	VC	Middle	0.2238	Comb3-5	0	8.668E-07	Comb3-5	0	8.668E-07	Comb3-5	0
B764	Story4	VC	End-J	0.3787	Comb3-5	0	8.662E-07	Comb3-5	0	8.662E-07	Comb3-5	0
B765	Story4	VC	End-I	0.4605	Comb3-5	7E-05	2.273E-06	Comb3-5	0	2.273E-06	Comb3-5	0
B765	Story4	VC	Middle	0.6292	Comb3-5	0.0001	2.267E-06	Comb3-5	0	2.267E-06	Comb3-5	0
B765	Story4	VC	End-J	0.6833	Comb3-5	0.00011	2.267E-06	Comb3-5	0	2.267E-06	Comb3-5	0
B766	Story4	VC	End-I	0.1424	Comb3-5	0	1.396E-06	Comb3-5	0	1.396E-06	Comb3-5	0
B766	Story4	VC	Middle	0.0889	Comb3-5	0	1.428E-06	Comb3-5	0	1.428E-06	Comb3-5	0
B766	Story4	VC	End-J	0.0931	Comb3-5	0	1.015E-06	Comb3-5	0	1.015E-06	Comb3-5	0
B767	Story4	VC	End-I	0.3294	Comb4-2	5E-05	1.005E-06	Comb3-5	0	1.005E-06	Comb3-5	0
B767	Story4	VC	Middle	0.2717	Comb4-2	4E-05	9.957E-07	Comb3-5	0	9.957E-07	Comb3-5	0
B767	Story4	VC	End-J	0.2606	Comb4-2	4E-05	9.957E-07	Comb3-5	0	9.957E-07	Comb3-5	0
B768	Story4	VC	End-I	2.3239	Comb4-2	0.00037	9.977E-07	Comb3-5	0	9.977E-07	Comb3-5	0
B768	Story4	VC	Middle	2.3498	Comb4-2	0.00037	9.977E-07	Comb3-5	0	9.977E-07	Comb3-5	0
B768	Story4	VC	End-J	2.3876	Comb4-2	0.00038	9.977E-07	Comb3-5	0	9.977E-07	Comb3-5	0
B769	Story4	VC	End-I	2.2848	Comb4-2	0.00036	1.087E-06	Comb3-5	0	1.087E-06	Comb3-5	0
B769	Story4	VC	Middle	1.9811	Comb4-2	0.00031	2.381E-06	Comb3-5	0	2.381E-06	Comb3-5	0
B769	Story4	VC	End-J	1.8609	Comb4-2	0.00029	1.824E-06	Comb3-5	0	1.824E-06	Comb3-5	0
B770	Story4	VC	End-I	0.8639	Comb3-5	0	1.502E-06	Comb3-5	0	1.502E-06	Comb3-5	0
B770	Story4	VC	Middle	0.8545	Comb3-5	0	4.695E-06	Comb3-5	0	4.695E-06	Comb3-5	0
B770	Story4	VC	End-J	0.5635	Comb3-5	0	1.608E-06	Comb3-5	0	1.608E-06	Comb3-5	0
B771	Story4	VC	End-I	0.1117	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B771	Story4	VC	Middle	0.5151	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B771	Story4	VC	End-J	0.714	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B772	Story4	VC	End-I	0.0994	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B772	Story4	VC	Middle	0.057	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B772	Story4	VC	End-J	0.2648	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B773	Story4	VC	End-I	0.1425	Comb4-2	2E-05	0	Comb3-5	0	0	Comb3-5	0
B773	Story4	VC	Middle	0.1716	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B773	Story4	VC	End-J	0.2073	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B774	Story4	VC	End-I	0.2401	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B774	Story4	VC	Middle	0.1886	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B774	Story4	VC	End-J	0.1409	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B775	Story4	VC	End-I	0.1687	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B775	Story4	VC	Middle	0.1907	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B775	Story4	VC	End-J	0.1552	Comb4-2	2E-05	0	Comb3-5	0	0	Comb3-5	0
B776	Story4	VC	End-I	0.2362	Comb3-5	4E-05	0	Comb3-5	0	0	Comb3-5	0
B776	Story4	VC	Middle	0.2686	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B776	Story4	VC	End-J	0.3019	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B777	Story4	VC	End-I	0.0749	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B777	Story4	VC	Middle	0.0295	Comb3-5	1E-05	0	Comb3-5	0	0	Comb3-5	0
B777	Story4	VC	End-J	0.0703	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B778	Story4	VC	End-I	0.2525	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B778	Story4	VC	Middle	0.2101	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B778	Story4	VC	End-J	0.1682	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B779	Story4	VC	End-I	0.1853	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B779	Story4	VC	Middle	0.2502	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B779	Story4	VC	End-J	0.2417	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B780	Story4	VC	End-I	0.1771	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B780	Story4	VC	Middle	0.1607	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B780	Story4	VC	End-J	0.3359	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B781	Story4	VC	End-I	0.7613	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B781	Story4	VC	Middle	0.8352	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B781	Story4	VC	End-J	0.6503	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B782	Story4	VC	End-I	2.759	Comb4-2	0.00044	0	Comb3-5	0	0	Comb3-5	0
B782	Story4	VC	Middle	2.6139	Comb4-2	0.00041	0	Comb3-5	0	0	Comb3-5	0
B782	Story4	VC	End-J	2.475	Comb4-2	0.00039	0	Comb3-5	0	0	Comb3-5	0
B783	Story4	VC	End-I	1.2988	Comb3-5	0.00021	1.636E-06	Comb3-5	0	1.636E-06	Comb3-5	0
B783	Story4	VC	Middle	1.7379	Comb3-5	0.00027	1.219E-06	Comb3-5	0	1.219E-06	Comb3-5	0
B783	Story4	VC	End-J	1.9525	Comb3-5	0.00031	0	Comb3-5	0	0	Comb3-5	0
B784	Story4	VC	End-I	0.6864	Comb3-5	0	1.482E-06	Comb3-5	0	1.482E-06	Comb3-5	0
B784	Story4	VC	Middle	0.3832	Comb3-5	0	1.045E-06	Comb3-5	0	1.045E-06	Comb3-5	0
B784	Story4	VC	End-J	0.6643	Comb3-5	0	3.415E-06	Comb3-5	0	3.415E-06	Comb3-5	0
B785	Story4	VC	End-I	0.2199	Comb4-2	4E-05	5.614E-07	Comb3-5	0	5.614E-07	Comb3-5	0
B785	Story4	VC	Middle	0.2973	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B785	Story4	VC	End-J	0.2282	Comb3-5	4E-05	0	Comb3-5	0	0	Comb3-5	0
B786	Story4	VC	End-I	0.6637	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B786	Story4	VC	Middle	0.621	Comb4-2	0.0001	6.415E-07	Comb3-5	0	6.415E-07	Comb3-5	0
B786	Story4	VC	End-J	0.5258	Comb4-2	8E-05	6.415E-07	Comb3-5	0	6.415E-07	Comb3-5	0
B787	Story4	VC	End-I	0.3173	Comb4-2	5E-05	2.049E-06	Comb3-5	0	2.049E-06	Comb3-5	0
B787	Story4	VC	Middle	0.4883	Comb4-2	8E-05	2.117E-06	Comb3-5	0	2.117E-06	Comb3-5	0
B787	Story4	VC	End-J	0.3712	Comb4-2	7E-05	2.117E-06	Comb3-5	0	2.117E-06	Comb3-5	0
B788	Story4	VC	End-I	0.798	Comb3-5	0	2.058E-06	Comb3-5	0	2.058E-06	Comb3-5	0
B788	Story4	VC	Middle	0.4905	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B788	Story4	VC	End-J	0.8109	Comb3-5	0	1.638E-06	Comb3-5	0	1.638E-06	Comb3-5	0
B789	Story4	VC	End-I	0.7825	Comb3-5	0	1.734E-06	Comb3-5	0	1.734E-06	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B789	Story4	VC	Middle	0.4532	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B789	Story4	VC	End-J	0.8225	Comb3-5	0	2.967E-06	Comb3-5	0	2.967E-06	Comb3-5	0
B790	Story4	VC	End-I	0.3608	Comb4-2	6E-05	1.454E-06	Comb3-5	0	1.454E-06	Comb3-5	0
B790	Story4	VC	Middle	0.4482	Comb4-2	7E-05	1.67E-06	Comb3-5	0	1.67E-06	Comb3-5	0
B790	Story4	VC	End-J	0.3629	Comb4-2	6E-05	1.67E-06	Comb3-5	0	1.67E-06	Comb3-5	0
B791	Story4	VC	End-I	0.16	Comb3-5	0	2.867E-06	Comb3-5	0	2.867E-06	Comb3-5	0
B791	Story4	VC	Middle	0.1142	Comb3-5	0	1.584E-06	Comb3-5	0	1.584E-06	Comb3-5	0
B791	Story4	VC	End-J	0.801	Comb3-5	0.00016	1.688E-06	Comb3-5	0	1.688E-06	Comb3-5	0
B792	Story4	VC	End-I	0.1264	Comb3-5	0	1.712E-06	Comb3-5	0	1.712E-06	Comb3-5	0
B792	Story4	VC	Middle	0.1393	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B792	Story4	VC	End-J	0.2225	Comb3-5	0	2.93E-06	Comb3-5	0	2.93E-06	Comb3-5	0
B793	Story4	VC	End-I	0.6054	Comb4-2	0.0001	1.655E-06	Comb3-5	0	1.655E-06	Comb3-5	0
B793	Story4	VC	Middle	0.6232	Comb4-2	0.0001	1.642E-06	Comb3-5	0	1.642E-06	Comb3-5	0
B793	Story4	VC	End-J	0.458	Comb4-2	7E-05	1.642E-06	Comb3-5	0	1.642E-06	Comb3-5	0
B794	Story4	VC	End-I	1.6801	Comb3-5	0.00027	1.537E-06	Comb3-5	0	1.537E-06	Comb3-5	0
B794	Story4	VC	Middle	1.2756	Comb3-5	0.0002	2.727E-06	Comb3-5	0	2.727E-06	Comb3-5	0
B794	Story4	VC	End-J	1.0326	Comb3-5	0.00016	1.903E-06	Comb3-5	0	1.903E-06	Comb3-5	0
B795	Story4	VC	End-I	0.8712	Comb3-5	0.00014	1.304E-06	Comb3-5	0	1.304E-06	Comb3-5	0
B795	Story4	VC	Middle	1.1076	Comb3-5	0.00018	1.805E-06	Comb3-5	0	1.805E-06	Comb3-5	0
B795	Story4	VC	End-J	1.1415	Comb3-5	0.00018	2.118E-06	Comb3-5	0	2.118E-06	Comb3-5	0
B796	Story4	VC	End-I	0.2394	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B796	Story4	VC	Middle	0.3091	Comb3-5	0	6.618E-07	Comb3-5	0	6.618E-07	Comb3-5	0
B796	Story4	VC	End-J	0.6362	Comb3-5	0	1.25E-06	Comb3-5	0	1.25E-06	Comb3-5	0
B797	Story4	VC	End-I	0.6855	Comb4-2	0.00011	1.471E-06	Comb3-5	0	1.471E-06	Comb3-5	0
B797	Story4	VC	Middle	0.7397	Comb4-2	0.00012	1.509E-06	Comb3-5	0	1.509E-06	Comb3-5	0
B797	Story4	VC	End-J	0.6793	Comb4-2	0.00011	1.509E-06	Comb3-5	0	1.509E-06	Comb3-5	0
B798	Story4	VC	End-I	7.8815	Comb4-2	0.00125	0	Comb3-5	0	0	Comb3-5	0
B798	Story4	VC	Middle	7.8088	Comb4-2	0.00123	1.405E-06	VERTICAL	0	1.405E-06	VERTICAL	0.000218
B798	Story4	VC	End-J	7.7963	Comb4-2	0.00123	2.195E-06	VERTICAL	0	2.195E-06	VERTICAL	0.000218
B799	Story4	VC	End-I	0.393	Comb3-5	0	3.409E-06	Comb3-5	0	3.409E-06	Comb3-5	0
B799	Story4	VC	Middle	0.2687	Comb3-5	0	2.633E-06	Comb3-5	0	2.633E-06	Comb3-5	0
B799	Story4	VC	End-J	0.1601	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B800	Story4	VC	End-I	0.2169	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B800	Story4	VC	Middle	0.2388	Comb3-5	0	6.815E-07	Comb3-5	0	6.815E-07	Comb3-5	0
B800	Story4	VC	End-J	0.584	Comb3-5	0	6.626E-07	Comb3-5	0	6.626E-07	Comb3-5	0
B801	Story4	VC	End-I	0.158	Comb3-5	2E-05	8.885E-07	Comb3-5	0	8.885E-07	Comb3-5	0
B801	Story4	VC	Middle	0.1715	Comb3-5	3E-05	9.039E-07	Comb3-5	0	9.039E-07	Comb3-5	0
B801	Story4	VC	End-J	0.1978	Comb3-5	3E-05	9.039E-07	Comb3-5	0	9.039E-07	Comb3-5	0
B802	Story4	VC	End-I	0.2579	Comb3-5	0	7.899E-07	Comb3-5	0	7.899E-07	Comb3-5	0
B802	Story4	VC	Middle	0.1058	Comb3-5	2E-05	1.507E-06	Comb3-5	0	1.507E-06	Comb3-5	0
B802	Story4	VC	End-J	0.2396	Comb3-5	5E-05	2.056E-06	Comb3-5	0	2.056E-06	Comb3-5	0
B803	Story4	VC	End-I	1.8207	Comb4-2	0.00029	2.784E-06	Comb3-5	0	2.784E-06	Comb3-5	0
B803	Story4	VC	Middle	1.5922	Comb4-2	0.00025	2.484E-06	Comb3-5	0	2.484E-06	Comb3-5	0
B803	Story4	VC	End-J	1.2548	Comb4-2	0.0002	2.205E-06	Comb3-5	0	2.205E-06	Comb3-5	0
B804	Story4	VC	End-I	0.5282	Comb4-2	8E-05	7.825E-07	Comb3-5	0	7.825E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B804	Story4	VC	Middle	0.4325	Comb4-2	7E-05	1.022E-06	Comb3-5	0	1.022E-06	Comb3-5	0
B804	Story4	VC	End-J	0.5492	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B805	Story4	VC	End-I	1.0773	Comb3-5	0.00017	1.996E-06	Comb3-5	0	1.996E-06	Comb3-5	0
B805	Story4	VC	Middle	1.1958	Comb3-5	0.00019	2.909E-06	Comb3-5	0	2.909E-06	Comb3-5	0
B805	Story4	VC	End-J	1.3609	Comb3-5	0.00022	2.415E-06	Comb3-5	0	2.415E-06	Comb3-5	0
B806	Story4	VC	End-I	3.5932	Comb4-2	0.00057	4.053E-06	Comb3-5	0	4.053E-06	Comb3-5	0
B806	Story4	VC	Middle	3.167	Comb4-2	0.0005	0	Comb3-5	0	0	Comb3-5	0
B806	Story4	VC	End-J	3.0621	Comb4-2	0.00048	1.194E-06	Comb3-5	0	1.194E-06	Comb3-5	0
B807	Story4	VC	End-I	0.6425	Comb3-5	0	3.189E-06	Comb3-5	0	3.189E-06	Comb3-5	0
B807	Story4	VC	Middle	0.3555	Comb3-5	0	2.245E-06	Comb3-5	0	2.245E-06	Comb3-5	0
B807	Story4	VC	End-J	0.6359	Comb3-5	0	6.308E-07	Comb3-5	0	6.308E-07	Comb3-5	0
B808	Story4	VC	End-I	0.1814	Comb3-5	0	2.141E-06	Comb3-5	0	2.141E-06	Comb3-5	0
B808	Story4	VC	Middle	0.1848	Comb3-5	0	1.407E-06	Comb3-5	0	1.407E-06	Comb3-5	0
B808	Story4	VC	End-J	0.3317	Comb3-5	0	1.398E-06	Comb3-5	0	1.398E-06	Comb3-5	0
B809	Story4	VC	End-I	0.2133	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B809	Story4	VC	Middle	0.2303	Comb3-5	0	7.916E-07	Comb3-5	0	7.916E-07	Comb3-5	0
B809	Story4	VC	End-J	0.1687	Comb3-5	0	9.444E-07	Comb3-5	0	9.444E-07	Comb3-5	0
B810	Story4	VC	End-I	0.3131	Comb4-2	5E-05	1.38E-06	Comb3-5	0	1.38E-06	Comb3-5	0
B810	Story4	VC	Middle	0.3198	Comb4-2	5E-05	1.38E-06	Comb3-5	0	1.38E-06	Comb3-5	0
B810	Story4	VC	End-J	0.3264	Comb4-2	5E-05	1.38E-06	Comb3-5	0	1.38E-06	Comb3-5	0
B811	Story4	VC	End-I	0.2646	Comb3-5	0	1.341E-06	Comb3-5	0	1.341E-06	Comb3-5	0
B811	Story4	VC	Middle	0.1771	Comb3-5	0	1.188E-06	Comb3-5	0	1.188E-06	Comb3-5	0
B811	Story4	VC	End-J	0.2622	Comb3-5	0	1.116E-06	Comb3-5	0	1.116E-06	Comb3-5	0
B812	Story4	VC	End-I	0.1891	Comb3-5	0	2.644E-06	Comb3-5	0	2.644E-06	Comb3-5	0
B812	Story4	VC	Middle	0.223	Comb3-5	0	6.608E-07	Comb3-5	0	6.608E-07	Comb3-5	0
B812	Story4	VC	End-J	0.3375	Comb3-5	0	6.302E-07	Comb3-5	0	6.302E-07	Comb3-5	0
B813	Story4	VC	End-I	0.3829	Comb3-5	0	1.736E-06	Comb3-5	0	1.736E-06	Comb3-5	0
B813	Story4	VC	Middle	0.4702	Comb3-5	0	2.882E-06	Comb3-5	0	2.882E-06	Comb3-5	0
B813	Story4	VC	End-J	0.4607	Comb3-5	0	2.889E-06	Comb3-5	0	2.889E-06	Comb3-5	0
B814	Story4	VC	End-I	0.3632	Comb3-5	6E-05	2.429E-06	Comb3-5	0	2.429E-06	Comb3-5	0
B814	Story4	VC	Middle	0.3541	Comb3-5	6E-05	2.429E-06	Comb3-5	0	2.429E-06	Comb3-5	0
B814	Story4	VC	End-J	0.345	Comb3-5	5E-05	2.429E-06	Comb3-5	0	2.429E-06	Comb3-5	0
B815	Story4	VC	End-I	0.5052	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B815	Story4	VC	Middle	0.7041	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B815	Story4	VC	End-J	0.7473	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B816	Story4	VC	End-I	0.5686	Comb3-5	9E-05	1.002E-06	Comb3-5	0	1.002E-06	Comb3-5	0
B816	Story4	VC	Middle	0.5942	Comb3-5	9E-05	1.002E-06	Comb3-5	0	1.002E-06	Comb3-5	0
B816	Story4	VC	End-J	0.6289	Comb3-5	0.0001	2.248E-06	Comb3-5	0	2.248E-06	Comb3-5	0
B817	Story4	VC	End-I	0.1579	Comb3-5	0	7.808E-07	Comb3-5	0	7.808E-07	Comb3-5	0
B817	Story4	VC	Middle	0.0572	Comb3-5	1E-05	0	Comb3-5	0	0	Comb3-5	0
B817	Story4	VC	End-J	0.0129	Comb3-5	2.547E-06	0	Comb3-5	0	0	Comb3-5	0
B818	Story4	VC	End-I	0.1723	Comb3-5	0	1.113E-06	Comb3-5	0	1.113E-06	Comb3-5	0
B818	Story4	VC	Middle	0.1196	Comb3-5	0	2.377E-06	Comb3-5	0	2.377E-06	Comb3-5	0
B818	Story4	VC	End-J	0.2401	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B819	Story4	VC	End-I	1.0793	Comb3-5	0.00017	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B819	Story4	VC	Middle	0.9729	Comb3-5	0.00015	2.12E-06	Comb3-5	0	2.12E-06	Comb3-5	0
B819	Story4	VC	End-J	0.7007	Comb3-5	0.00011	1.571E-06	Comb3-5	0	1.571E-06	Comb3-5	0
B820	Story4	VC	End-I	0.2642	Comb3-5	0	6.797E-07	Comb3-5	0	6.797E-07	Comb3-5	0
B820	Story4	VC	Middle	0.3862	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B820	Story4	VC	End-J	0.1903	Comb3-5	4E-05	3.292E-06	Comb3-5	0	3.292E-06	Comb3-5	0
B821	Story4	VC	End-I	0.8381	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B821	Story4	VC	Middle	0.6958	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B821	Story4	VC	End-J	0.5141	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B822	Story4	VC	End-I	0.4957	Comb3-5	8E-05	9.769E-07	Comb3-5	0	9.769E-07	Comb3-5	0
B822	Story4	VC	Middle	0.6533	Comb3-5	0.0001	1.844E-06	Comb3-5	0	1.844E-06	Comb3-5	0
B822	Story4	VC	End-J	0.787	Comb3-5	0.00012	1.754E-06	Comb3-5	0	1.754E-06	Comb3-5	0
B823	Story4	VC	End-I	0.1357	Comb4-2	2E-05	6.283E-07	Comb3-5	0	6.283E-07	Comb3-5	0
B823	Story4	VC	Middle	0.1554	Comb4-2	2E-05	6.283E-07	Comb3-5	0	6.283E-07	Comb3-5	0
B823	Story4	VC	End-J	0.1751	Comb4-2	3E-05	6.283E-07	Comb3-5	0	6.283E-07	Comb3-5	0
B824	Story4	VC	End-I	0.2196	Comb3-5	0	1.287E-06	Comb3-5	0	1.287E-06	Comb3-5	0
B824	Story4	VC	Middle	0.1397	Comb3-5	0	2.663E-06	Comb3-5	0	2.663E-06	Comb3-5	0
B824	Story4	VC	End-J	0.3252	Comb3-5	0	2.821E-06	Comb3-5	0	2.821E-06	Comb3-5	0
B825	Story4	VC	End-I	0.1788	Comb3-5	0	9.397E-07	Comb3-5	0	9.397E-07	Comb3-5	0
B825	Story4	VC	Middle	0.1845	Comb3-5	0	1.833E-06	Comb3-5	0	1.833E-06	Comb3-5	0
B825	Story4	VC	End-J	0.288	Comb3-5	6E-05	6.435E-07	Comb3-5	0	6.435E-07	Comb3-5	0
B826	Story4	VC	End-I	0.0705	Comb3-5	0	6.037E-07	Comb3-5	0	6.037E-07	Comb3-5	0
B826	Story4	VC	Middle	0.0705	Comb3-5	1E-05	0	Comb3-5	0	0	Comb3-5	0
B826	Story4	VC	End-J	0.1142	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B827	Story4	VC	End-I	0.638	Comb3-5	0.0001	1.666E-06	Comb3-5	0	1.666E-06	Comb3-5	0
B827	Story4	VC	Middle	0.5878	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B827	Story4	VC	End-J	0.4336	Comb3-5	7E-05	1.067E-06	Comb3-5	0	1.067E-06	Comb3-5	0
B828	Story4	VC	End-I	0.3462	Comb4-2	5E-05	2.215E-06	Comb3-5	0	2.215E-06	Comb3-5	0
B828	Story4	VC	Middle	0.3403	Comb4-2	5E-05	2.215E-06	Comb3-5	0	2.215E-06	Comb3-5	0
B828	Story4	VC	End-J	0.3343	Comb4-2	5E-05	2.215E-06	Comb3-5	0	2.215E-06	Comb3-5	0
B829	Story4	VC	End-I	0.4946	Comb3-5	8E-05	1.075E-06	Comb3-5	0	1.075E-06	Comb3-5	0
B829	Story4	VC	Middle	0.5163	Comb3-5	8E-05	1.043E-06	Comb3-5	0	1.043E-06	Comb3-5	0
B829	Story4	VC	End-J	0.4448	Comb4-2	9E-05	1.043E-06	Comb3-5	0	1.043E-06	Comb3-5	0
B830	Story4	VC	End-I	0.1541	Comb3-5	0	1.732E-06	Comb3-5	0	1.732E-06	Comb3-5	0
B830	Story4	VC	Middle	0.1064	Comb3-5	0	2.25E-06	Comb3-5	0	2.25E-06	Comb3-5	0
B830	Story4	VC	End-J	0.1558	Comb3-5	0	2.041E-06	Comb3-5	0	2.041E-06	Comb3-5	0
B831	Story4	VC	End-I	0.0716	Comb4-2	1E-05	9.919E-07	Comb3-5	0	9.919E-07	Comb3-5	0
B831	Story4	VC	Middle	0.0703	Comb4-2	1E-05	9.919E-07	Comb3-5	0	9.919E-07	Comb3-5	0
B831	Story4	VC	End-J	0.0701	Comb4-2	1E-05	9.919E-07	Comb3-5	0	9.919E-07	Comb3-5	0
B832	Story4	VC	End-I	0.1449	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B832	Story4	VC	Middle	0.1965	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B832	Story4	VC	End-J	0.2125	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B833	Story4	VC	End-I	2.4882	Comb4-2	0.00021	2.088E-06	Comb3-5	0	2.088E-06	Comb3-5	0
B833	Story4	VC	Middle	2.5502	Comb4-2	0.00021	1.48E-06	Comb3-5	0	1.48E-06	Comb3-5	0
B833	Story4	VC	End-J	0.3957	Comb3-5	0	6.613E-07	Comb3-5	0	6.613E-07	Comb3-5	0
B834	Story4	VC	End-I	1.3139	Comb3-5	0	8.675E-07	Comb3-5	0	8.675E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B834	Story4	VC	Middle	0.6464	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B834	Story4	VC	End-J	1.1923	Comb3-5	0	9.122E-07	Comb3-5	0	9.122E-07	Comb3-5	0
B835	Story4	VC	End-I	11.0445	Comb4-2	0.00175	2.456E-06	Comb3-5	0	2.456E-06	Comb3-5	0
B835	Story4	VC	Middle	11.0648	Comb4-2	0.00175	1.718E-06	Comb3-5	0	1.718E-06	Comb3-5	0
B835	Story4	VC	End-J	11.1541	Comb4-2	0.00176	4.633E-06	Comb3-5	0	4.633E-06	Comb3-5	0
B836	Story4	VC	End-I	0.2714	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B836	Story4	VC	Middle	0.226	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B836	Story4	VC	End-J	0.2648	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B837	Story4	VC	End-I	0.1551	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B837	Story4	VC	Middle	0.2406	Comb3-5	4E-05	0	Comb3-5	0	0	Comb3-5	0
B837	Story4	VC	End-J	0.2033	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B838	Story4	VCA	End-I	0.4738	Comb4-2	0.0003	0	Comb3-5	0	0	Comb3-5	0
B838	Story4	VCA	Middle	0.455	Comb4-2	0.00029	0	Comb3-5	0	0	Comb3-5	0
B838	Story4	VCA	End-J	0.4362	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B839	Story4	VCA	End-I	0.4582	Comb4-2	0.00029	0	Comb3-5	0	0	Comb3-5	0
B839	Story4	VCA	Middle	0.4393	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B839	Story4	VCA	End-J	0.4205	Comb4-2	0.00027	0	Comb3-5	0	0	Comb3-5	0
B841	Story4	VCA	End-I	0.0813	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B841	Story4	VCA	Middle	0.0629	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B841	Story4	VCA	End-J	0.2243	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B842	Story4	VCA	End-I	0.203	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B842	Story4	VCA	Middle	0.2694	Comb3-5	0.00017	5.179E-07	Comb3-5	0	5.179E-07	Comb3-5	0
B842	Story4	VCA	End-J	0.3014	Comb3-5	0.00019	6.343E-07	Comb3-5	0	6.343E-07	Comb3-5	0
B843	Story4	VCA	End-I	0.1166	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B843	Story4	VCA	Middle	0.0844	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B843	Story4	VCA	End-J	0.1226	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B844	Story4	VCA	End-I	0.1408	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B844	Story4	VCA	Middle	0.1106	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B844	Story4	VCA	End-J	0.1619	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B845	Story4	VCA	End-I	0.0986	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B845	Story4	VCA	Middle	0.0943	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B845	Story4	VCA	End-J	0.0919	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B846	Story4	VCA	End-I	0.2043	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B846	Story4	VCA	Middle	0.1855	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B846	Story4	VCA	End-J	0.1679	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B847	Story4	VCA	End-I	0.0751	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B847	Story4	VCA	Middle	0.0873	Comb3-5	0	5.415E-07	Comb3-5	0	5.415E-07	Comb3-5	0
B847	Story4	VCA	End-J	0.0581	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B848	Story4	VCA	End-I	0.1981	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B848	Story4	VCA	Middle	0.1851	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B848	Story4	VCA	End-J	0.1721	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B849	Story4	VCA	End-I	0.4947	Comb4-2	0.00031	0	Comb3-5	0	0	Comb3-5	0
B849	Story4	VCA	Middle	0.4889	Comb4-2	0.00031	0	Comb3-5	0	0	Comb3-5	0
B849	Story4	VCA	End-J	0.483	Comb4-2	0.00031	0	Comb3-5	0	0	Comb3-5	0
B850	Story4	VCA	End-I	0.2492	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B850	Story4	VCA	Middle	0.2918	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B850	Story4	VCA	End-J	0.1874	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B851	Story4	VCA	End-I	0.7679	Comb4-2	0.00049	0	Comb3-5	0	0	Comb3-5	0
B851	Story4	VCA	Middle	0.7759	Comb4-2	0.00049	0	Comb3-5	0	0	Comb3-5	0
B851	Story4	VCA	End-J	0.7839	Comb4-2	0.0005	0	Comb3-5	0	0	Comb3-5	0
B852	Story4	VCA	End-I		O/S		0	Comb3-5	0	0	Comb3-5	0
B852	Story4	VCA	Middle		O/S		0	Comb3-5	0	0	Comb3-5	0
B852	Story4	VCA	End-J		O/S		0	Comb3-5	0	0	Comb3-5	0
B853	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B853	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B853	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B854	Story4	VCA	End-I		O/S		8.394E-07	Comb3-5	0	8.394E-07	Comb3-5	0
B854	Story4	VCA	Middle		O/S		8.394E-07	Comb3-5	0	8.394E-07	Comb3-5	0
B854	Story4	VCA	End-J		O/S		8.394E-07	Comb3-5	0	8.394E-07	Comb3-5	0
B855	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B855	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B855	Story4	VCA	End-J	0	Comb3-5	0	2.264E-05	Comb3-5	0	2.264E-05	Comb3-5	0
B856	Story4	VCA	End-I	0.104	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B856	Story4	VCA	Middle	0.1347	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B856	Story4	VCA	End-J	0.2014	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B857	Story4	VCA	End-I	0.5945	Comb3-5	0.00038	0	Comb3-5	0	0	Comb3-5	0
B857	Story4	VCA	Middle	0.558	Comb3-5	0.00035	0	Comb3-5	0	0	Comb3-5	0
B857	Story4	VCA	End-J	0.5124	Comb3-5	0.00032	0	Comb3-5	0	0	Comb3-5	0
B858	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B858	Story4	VCA	Middle	0	Comb3-5	0	7.54E-07	Comb3-5	0	7.54E-07	Comb3-5	0
B858	Story4	VCA	End-J	0	Comb3-5	0	7.54E-07	Comb3-5	0	7.54E-07	Comb3-5	0
B859	Story4	VCA	End-I	1.0979	Comb3-5	0.00069	0	Comb3-5	0	0	Comb3-5	0
B859	Story4	VCA	Middle	1.2566	Comb3-5	0.00079	0	Comb3-5	0	0	Comb3-5	0
B859	Story4	VCA	End-J	1.2665	Comb3-5	0.0008	0	Comb3-5	0	0	Comb3-5	0
B860	Story4	VCA	End-I	0.0371	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B860	Story4	VCA	Middle	0.0503	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B860	Story4	VCA	End-J	0.1385	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B861	Story4	VCA	End-I	0.0818	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B861	Story4	VCA	Middle	0.1157	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B861	Story4	VCA	End-J	0.1274	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B862	Story4	VCA	End-I	0.1851	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B862	Story4	VCA	Middle	0.2418	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B862	Story4	VCA	End-J	1.2429	Comb4-2	0.00053	0	Comb3-5	0	0	Comb3-5	0
B863	Story4	VCA	End-I	0.1879	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B863	Story4	VCA	Middle	0.0743	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B863	Story4	VCA	End-J	0.2131	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B864	Story4	VCA	End-I	0.2355	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B864	Story4	VCA	Middle	0.2384	Comb4-2	0.00015	5.031E-07	Comb3-5	0	5.031E-07	Comb3-5	0
B864	Story4	VCA	End-J	0.2544	Comb4-2	0.00016	5.701E-07	Comb3-5	0	5.701E-07	Comb3-5	0
B865	Story4	VCA	End-I	0.5003	Comb4-2	0.00032	7.351E-07	Comb3-5	0	7.351E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B865	Story4	VCA	Middle	0.5304	Comb4-2	0.00034	9.237E-07	Comb3-5	0	9.237E-07	Comb3-5	0
B865	Story4	VCA	End-J	0.5524	Comb4-2	0.00035	9.237E-07	Comb3-5	0	9.237E-07	Comb3-5	0
B866	Story4	VCA	End-I	0	Comb3-5	0	1.112E-06	Comb3-5	0	1.112E-06	Comb3-5	0
B866	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B866	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B867	Story4	VCA	End-I	0.3645	Comb3-5	0.00023	0	Comb3-5	0	0	Comb3-5	0
B867	Story4	VCA	Middle	0.3231	Comb3-5	0.0002	0	Comb3-5	0	0	Comb3-5	0
B867	Story4	VCA	End-J	0.2711	Comb3-5	0.00017	0	Comb3-5	0	0	Comb3-5	0
B868	Story4	VCA	End-I	0.2468	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B868	Story4	VCA	Middle	0.2625	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B868	Story4	VCA	End-J	0.2928	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B869	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B869	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B869	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B870	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B870	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B870	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B871	Story4	VCA	End-I	0.1356	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B871	Story4	VCA	Middle	0.0907	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B871	Story4	VCA	End-J	0.2044	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B872	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B872	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B872	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B873	Story4	VCA	End-I	0.3453	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B873	Story4	VCA	Middle	0.4538	Comb4-2	0.00029	0	Comb3-5	0	0	Comb3-5	0
B873	Story4	VCA	End-J	0.5241	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B874	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B874	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B874	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B875	Story4	VCA	End-I		O/S		0	Comb3-5	0	0	Comb3-5	0
B875	Story4	VCA	Middle		O/S		0	Comb3-5	0	0	Comb3-5	0
B875	Story4	VCA	End-J		O/S		0	Comb3-5	0	0	Comb3-5	0
B876	Story4	VCA	End-I	0.3918	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B876	Story4	VCA	Middle	0.3233	Comb3-5	0.0002	0	Comb3-5	0	0	Comb3-5	0
B876	Story4	VCA	End-J	0.2479	Comb3-5	0.00016	0	Comb3-5	0	0	Comb3-5	0
B877	Story4	VCA	End-I	0.4	Comb4-2	0.00025	0	Comb3-5	0	0	Comb3-5	0
B877	Story4	VCA	Middle	0.358	Comb4-2	0.00023	0	Comb3-5	0	0	Comb3-5	0
B877	Story4	VCA	End-J	0.3044	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B878	Story4	VCA	End-I	0.1373	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B878	Story4	VCA	Middle	0.1856	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B878	Story4	VCA	End-J	0.204	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B879	Story4	VCA	End-I	0.4032	Comb4-2	0.00025	7.063E-07	Comb3-5	0	7.063E-07	Comb3-5	0
B879	Story4	VCA	Middle	0.3847	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B879	Story4	VCA	End-J	0.3437	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B880	Story4	VCA	End-I	0.19	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B880	Story4	VCA	Middle	0.1877	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B880	Story4	VCA	End-J	0.1704	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B881	Story4	VCA	End-I	0.4009	Comb4-2	0.00025	0	Comb3-5	0	0	Comb3-5	0
B881	Story4	VCA	Middle	0.395	Comb4-2	0.00025	0	Comb3-5	0	0	Comb3-5	0
B881	Story4	VCA	End-J	0.3892	Comb4-2	0.00025	0	Comb3-5	0	0	Comb3-5	0
B882	Story4	VCA	End-I	0.3421	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B882	Story4	VCA	Middle	0.355	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B882	Story4	VCA	End-J	0.368	Comb4-2	0.00023	0	Comb3-5	0	0	Comb3-5	0
B883	Story4	VCA	End-I	0.146	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B883	Story4	VCA	Middle	0.1274	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B883	Story4	VCA	End-J	0.1383	Comb3-5	9E-05	5.782E-07	Comb3-5	0	5.782E-07	Comb3-5	0
B884	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B884	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B884	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B885	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B885	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B885	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B886	Story4	VCA	End-I	0.3802	Comb3-5	0.00024	0	Comb3-5	0	0	Comb3-5	0
B886	Story4	VCA	Middle	0.3335	Comb3-5	0.00021	0	Comb3-5	0	0	Comb3-5	0
B886	Story4	VCA	End-J	0.2804	Comb3-5	0.00018	0	Comb3-5	0	0	Comb3-5	0
B887	Story4	VCA	End-I	0.2423	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B887	Story4	VCA	Middle	0.3191	Comb4-2	0.0002	0	Comb3-5	0	0	Comb3-5	0
B887	Story4	VCA	End-J	0.3715	Comb4-2	0.00023	0	Comb3-5	0	0	Comb3-5	0
B888	Story4	VCA	End-I	0.2489	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B888	Story4	VCA	Middle	0.2728	Comb3-5	0	6.032E-07	Comb3-5	0	6.032E-07	Comb3-5	0
B888	Story4	VCA	End-J	0.3196	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B889	Story4	VCA	End-I	0.2634	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B889	Story4	VCA	Middle	0.2773	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B889	Story4	VCA	End-J	0.2608	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B890	Story4	VCA	End-I	0.1104	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B890	Story4	VCA	Middle	0.1312	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B890	Story4	VCA	End-J	0.138	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B891	Story4	VCA	End-I	0.2265	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B891	Story4	VCA	Middle	0.2566	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B891	Story4	VCA	End-J	0.303	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B892	Story4	VCA	End-I	0.1131	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B892	Story4	VCA	Middle	0.1044	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B892	Story4	VCA	End-J	0.0674	Comb3-5	4E-05	0	Comb3-5	0	0	Comb3-5	0
B893	Story4	VCA	End-I	0.0838	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B893	Story4	VCA	Middle	0.0827	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B893	Story4	VCA	End-J	0.0012	Comb3-5	9.867E-07	0	Comb3-5	0	0	Comb3-5	0
B894	Story4	VCA	End-I	2.6169	Comb4-2	0.00165	5.154E-07	Comb3-5	0	5.154E-07	Comb3-5	0
B894	Story4	VCA	Middle	2.6226	Comb4-2	0.00166	0	Comb3-5	0	0	Comb3-5	0
B894	Story4	VCA	End-J	2.6268	Comb4-2	0.00166	0	Comb3-5	0	0	Comb3-5	0
B895	Story4	VCA	End-I	0	Comb3-5	0	6.729E-07	Comb3-5	0	6.729E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B895	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B895	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B896	Story4	VCA	End-I	0.3425	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B896	Story4	VCA	Middle	0.2736	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B896	Story4	VCA	End-J	0.2179	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B897	Story4	VCA	End-I	0.2214	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B897	Story4	VCA	Middle	0.2013	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B897	Story4	VCA	End-J	0.1776	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B898	Story4	VCA	End-I	0.2523	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B898	Story4	VCA	Middle	0.2351	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B898	Story4	VCA	End-J	0.2294	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B899	Story4	VCA	End-I	0.0718	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B899	Story4	VCA	Middle	0.1297	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B899	Story4	VCA	End-J	0.1841	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B900	Story4	VCA	End-I	0.2493	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B900	Story4	VCA	Middle	0.1755	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B900	Story4	VCA	End-J	0.1165	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B901	Story4	VCA	End-I	0.3273	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B901	Story4	VCA	Middle	0.3085	Comb4-2	0.0002	0	Comb3-5	0	0	Comb3-5	0
B901	Story4	VCA	End-J	0.2926	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B902	Story4	VCA	End-I	0.4631	Comb4-2	0.00029	0	Comb3-5	0	0	Comb3-5	0
B902	Story4	VCA	Middle	0.4819	Comb4-2	0.0003	0	Comb3-5	0	0	Comb3-5	0
B902	Story4	VCA	End-J	0.5007	Comb4-2	0.00032	0	Comb3-5	0	0	Comb3-5	0
B903	Story4	VCA	End-I	0.3198	Comb3-5	0.0002	5.323E-07	Comb3-5	0	5.323E-07	Comb3-5	0
B903	Story4	VCA	Middle	0.2385	Comb3-5	0.00015	0	Comb3-5	0	0	Comb3-5	0
B903	Story4	VCA	End-J	0.1886	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B904	Story4	VCA	End-I	0.1848	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B904	Story4	VCA	Middle	0.2482	Comb3-5	0	6.54E-07	Comb3-5	0	6.54E-07	Comb3-5	0
B904	Story4	VCA	End-J	0.1506	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B905	Story4	VCA	End-I	1.0086	Comb4-2	0.00064	0	Comb3-5	0	0	Comb3-5	0
B905	Story4	VCA	Middle	1.0189	Comb4-2	0.00064	0	Comb3-5	0	0	Comb3-5	0
B905	Story4	VCA	End-J	1.0292	Comb4-2	0.00065	0	Comb3-5	0	0	Comb3-5	0
B906	Story4	VCA	End-I	0.0862	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B906	Story4	VCA	Middle	0.1098	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B906	Story4	VCA	End-J	0.1381	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B907	Story4	VCA	End-I	0.0961	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B907	Story4	VCA	Middle	0.1011	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B907	Story4	VCA	End-J	0.1215	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B908	Story4	VCA	End-I	0.4765	Comb4-2	0.0003	0	Comb3-5	0	0	Comb3-5	0
B908	Story4	VCA	Middle	0.4439	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B908	Story4	VCA	End-J	0.3857	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B909	Story4	VCA	End-I	0.0847	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B909	Story4	VCA	Middle	0.1064	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B909	Story4	VCA	End-J	0.1244	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B910	Story4	VCA	End-I	0.2769	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B910	Story4	VCA	Middle	0.3459	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B910	Story4	VCA	End-J	0.3328	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B911	Story4	VCA	End-I	0.2432	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B911	Story4	VCA	Middle	0.2346	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B911	Story4	VCA	End-J	0.2261	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B912	Story4	VCA	End-I	0.8673	Comb4-2	0.00055	0	Comb3-5	0	0	Comb3-5	0
B912	Story4	VCA	Middle	0.857	Comb4-2	0.00054	0	Comb3-5	0	0	Comb3-5	0
B912	Story4	VCA	End-J	0.8467	Comb4-2	0.00054	0	Comb3-5	0	0	Comb3-5	0
B913	Story4	VCA	End-I	0.7202	Comb4-2	0.00046	0	Comb3-5	0	0	Comb3-5	0
B913	Story4	VCA	Middle	0.7373	Comb4-2	0.00047	0	Comb3-5	0	0	Comb3-5	0
B913	Story4	VCA	End-J	0.7423	Comb4-2	0.00047	0	Comb3-5	0	0	Comb3-5	0
B914	Story4	VCA	End-I	0.1128	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B914	Story4	VCA	Middle	0.2022	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B914	Story4	VCA	End-J	0.2196	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B915	Story4	VCA	End-I	0.1391	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B915	Story4	VCA	Middle	0.003	Comb3-5	2.378E-06	0	Comb3-5	0	0	Comb3-5	0
B915	Story4	VCA	End-J	0.0664	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B916	Story4	VCA	End-I	0.1118	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B916	Story4	VCA	Middle	0.0972	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B916	Story4	VCA	End-J	0.1812	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B917	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B917	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B917	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B918	Story4	VCA	End-I	0.5226	Comb3-5	0.00033	0	Comb3-5	0	0	Comb3-5	0
B918	Story4	VCA	Middle	0.5068	Comb3-5	0.00032	0	Comb3-5	0	0	Comb3-5	0
B918	Story4	VCA	End-J	0.4912	Comb3-5	0.00031	0	Comb3-5	0	0	Comb3-5	0
B919	Story4	VCA	End-I	0.4352	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B919	Story4	VCA	Middle	0.3888	Comb4-2	0.00025	0	Comb3-5	0	0	Comb3-5	0
B919	Story4	VCA	End-J	0.3269	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B920	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B920	Story4	VCA	Middle	0	Comb3-5	0	5.362E-07	Comb3-5	0	5.362E-07	Comb3-5	0
B920	Story4	VCA	End-J	0	Comb3-5	0	6.654E-07	Comb3-5	0	6.654E-07	Comb3-5	0
B921	Story4	VCA	End-I	0	Comb3-5	0	6.647E-07	Comb3-5	0	6.647E-07	Comb3-5	0
B921	Story4	VCA	Middle	0	Comb3-5	0	6.647E-07	Comb3-5	0	6.647E-07	Comb3-5	0
B921	Story4	VCA	End-J	0	Comb3-5	0	6.647E-07	Comb3-5	0	6.647E-07	Comb3-5	0
B922	Story4	VCA	End-I	0.8406	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B922	Story4	VCA	Middle	0.3284	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B922	Story4	VCA	End-J	0.2759	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B923	Story4	VCA	End-I	0.1476	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B923	Story4	VCA	Middle	0.1461	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B923	Story4	VCA	End-J	0.1948	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B924	Story4	VCA	End-I	0.2971	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B924	Story4	VCA	Middle	0.3854	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B924	Story4	VCA	End-J	0.4027	Comb4-2	0.00025	0	Comb3-5	0	0	Comb3-5	0
B925	Story4	VCA	End-I	0.2378	Comb3-5	0.00015	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B925	Story4	VCA	Middle	0.2047	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B925	Story4	VCA	End-J	0.1691	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B926	Story4	VCA	End-I	0.0573	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B926	Story4	VCA	Middle	0.0808	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B926	Story4	VCA	End-J	0.3155	Comb3-5	0.00025	2.396E-06	Comb3-5	0	2.396E-06	Comb3-5	0
B927	Story4	VCA	End-I	0.6615	Comb4-2	0.00042	0	Comb3-5	0	0	Comb3-5	0
B927	Story4	VCA	Middle	0.6427	Comb4-2	0.00041	0	Comb3-5	0	0	Comb3-5	0
B927	Story4	VCA	End-J	0.6239	Comb4-2	0.00039	0	Comb3-5	0	0	Comb3-5	0
B928	Story4	VCA	End-I	0.2166	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B928	Story4	VCA	Middle	0.2693	Comb3-5	0.00017	0	Comb3-5	0	0	Comb3-5	0
B928	Story4	VCA	End-J	0.2836	Comb3-5	0.00018	0	Comb3-5	0	0	Comb3-5	0
B929	Story4	VCA	End-I	0.125	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B929	Story4	VCA	Middle	0.0877	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B929	Story4	VCA	End-J	0.1066	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B930	Story4	VCA	End-I	0.208	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B930	Story4	VCA	Middle	0.1831	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B930	Story4	VCA	End-J	0.1485	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B931	Story4	VCA	End-I	0.0904	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B931	Story4	VCA	Middle	0.0832	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B931	Story4	VCA	End-J	0.1723	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B932	Story4	VCA	End-I	0.0937	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B932	Story4	VCA	Middle	0.0868	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B932	Story4	VCA	End-J	0.0957	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B933	Story4	VCA	End-I	0.0673	Comb4-2	4E-05	0	Comb3-5	0	0	Comb3-5	0
B933	Story4	VCA	Middle	0.053	Comb4-2	3E-05	0	Comb3-5	0	0	Comb3-5	0
B933	Story4	VCA	End-J	0.0747	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B934	Story4	VCA	End-I	0.0738	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B934	Story4	VCA	Middle	0.1299	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B934	Story4	VCA	End-J	0.0916	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B935	Story4	VCA	End-I	0.1433	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B935	Story4	VCA	Middle	0.1054	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B935	Story4	VCA	End-J	0.0716	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B936	Story4	VCA	End-I	0.0619	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B936	Story4	VCA	Middle	0.087	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B936	Story4	VCA	End-J	1.2097	Comb4-2	0.0005	3.495E-06	Comb3-5	0	3.495E-06	Comb3-5	0
B937	Story4	VCA	End-I	0.2952	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B937	Story4	VCA	Middle	0.2862	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B937	Story4	VCA	End-J	0.2688	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B938	Story4	VCA	End-I	1.6382	Comb4-2	0.00104	0	Comb3-5	0	0	Comb3-5	0
B938	Story4	VCA	Middle	1.6261	Comb4-2	0.00103	0	Comb3-5	0	0	Comb3-5	0
B938	Story4	VCA	End-J	1.6139	Comb4-2	0.00102	0	Comb3-5	0	0	Comb3-5	0
B939	Story4	VCA	End-I	0.1194	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B939	Story4	VCA	Middle	0.2357	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B939	Story4	VCA	End-J	2.4659	Comb4-2	0.00149	0	Comb3-5	0	0	Comb3-5	0
B940	Story4	VCA	End-I	0.1424	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B940	Story4	VCA	Middle	0.1493	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B940	Story4	VCA	End-J	0.1728	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B941	Story4	VCA	End-I	0.346	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B941	Story4	VCA	Middle	0.3307	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B941	Story4	VCA	End-J	0.3154	Comb4-2	0.0002	0	Comb3-5	0	0	Comb3-5	0
B942	Story4	VCA	End-I	0.0603	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B942	Story4	VCA	Middle	0.0773	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B942	Story4	VCA	End-J	0.0947	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B943	Story4	VCA	End-I	0.3367	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B943	Story4	VCA	Middle	0.3555	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B943	Story4	VCA	End-J	0.3743	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B944	Story4	VCA	End-I	0.1948	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B944	Story4	VCA	Middle	0.2177	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B944	Story4	VCA	End-J	0.2485	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B945	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B945	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B945	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B946	Story4	VCA	End-I	0.312	Comb4-2	0.0002	0	Comb3-5	0	0	Comb3-5	0
B946	Story4	VCA	Middle	0.2623	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B946	Story4	VCA	End-J	0.2337	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B947	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B947	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B947	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B948	Story4	VCA	End-I	0.1329	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B948	Story4	VCA	Middle	0.1589	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B948	Story4	VCA	End-J	0.1112	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B949	Story4	VCA	End-I	0.57	Comb4-2	0.00036	0	Comb3-5	0	0	Comb3-5	0
B949	Story4	VCA	Middle	0.5441	Comb4-2	0.00034	0	Comb3-5	0	0	Comb3-5	0
B949	Story4	VCA	End-J	0.442	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B950	Story4	VCA	End-I	0.5146	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B950	Story4	VCA	Middle	0.4843	Comb4-2	0.00031	0	Comb3-5	0	0	Comb3-5	0
B950	Story4	VCA	End-J	0.4243	Comb4-2	0.00027	0	Comb3-5	0	0	Comb3-5	0
B951	Story4	VCA	End-I	0.4716	Comb4-2	0.0003	0	Comb3-5	0	0	Comb3-5	0
B951	Story4	VCA	Middle	0.5198	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B951	Story4	VCA	End-J	0.5542	Comb4-2	0.00035	0	Comb3-5	0	0	Comb3-5	0
B952	Story4	VCA	End-I	0.1481	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B952	Story4	VCA	Middle	0.2024	Comb3-5	0	6.088E-07	Comb3-5	0	6.088E-07	Comb3-5	0
B952	Story4	VCA	End-J	0.2482	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B953	Story4	VCA	End-I	0.4762	Comb4-2	0.0003	0	Comb3-5	0	0	Comb3-5	0
B953	Story4	VCA	Middle	0.5038	Comb4-2	0.00032	0	Comb3-5	0	0	Comb3-5	0
B953	Story4	VCA	End-J	0.5195	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B954	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B954	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B954	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B955	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B955	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B955	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B956	Story4	VCA	End-I	0.1611	Comb3-5	0	5.045E-07	Comb3-5	0	5.045E-07	Comb3-5	0
B956	Story4	VCA	Middle	0.1311	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B956	Story4	VCA	End-J	0.1482	Comb3-5	0	5.054E-07	Comb3-5	0	5.054E-07	Comb3-5	0
B957	Story4	VCA	End-I	0.1658	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B957	Story4	VCA	Middle	0.1342	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B957	Story4	VCA	End-J	0.1665	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B958	Story4	VCA	End-I	0.0837	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B958	Story4	VCA	Middle	0.0561	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B958	Story4	VCA	End-J	1.0461	Comb4-2	0.00037	6.073E-06	Comb3-5	0	6.073E-06	Comb3-5	0
B959	Story4	VCA	End-I	1.4327	Comb4-2	0.00091	0	Comb3-5	0	0	Comb3-5	0
B959	Story4	VCA	Middle	1.4312	Comb4-2	0.0009	0	Comb3-5	0	0	Comb3-5	0
B959	Story4	VCA	End-J	1.4297	Comb4-2	0.0009	0	Comb3-5	0	0	Comb3-5	0
B960	Story4	VCA	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B960	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B960	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B961	Story4	VCA	End-I	0	Comb3-5	0	6.581E-07	Comb3-5	0	6.581E-07	Comb3-5	0
B961	Story4	VCA	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B961	Story4	VCA	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B962	Story4	VCA	End-I	0.1228	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B962	Story4	VCA	Middle	0.1008	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B962	Story4	VCA	End-J	0.1506	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B963	Story4	VCA	End-I	0.378	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B963	Story4	VCA	Middle	0.8029	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B963	Story4	VCA	End-J	0.8176	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B964	Story4	VCA	End-I	0.3265	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B964	Story4	VCA	Middle	0.2474	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B964	Story4	VCA	End-J	0.268	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B965	Story4	VCA	End-I	0.1607	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B965	Story4	VCA	Middle	0.2225	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B965	Story4	VCA	End-J	0.3231	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B966	Story4	VCA	End-I	0.3004	Comb3-5	0.00019	0	Comb3-5	0	0	Comb3-5	0
B966	Story4	VCA	Middle	0.2386	Comb3-5	0.00015	0	Comb3-5	0	0	Comb3-5	0
B966	Story4	VCA	End-J	0.1743	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B967	Story4	VCA	End-I	0.4307	Comb4-2	0.00027	0	Comb3-5	0	0	Comb3-5	0
B967	Story4	VCA	Middle	0.4571	Comb4-2	0.00029	0	Comb3-5	0	0	Comb3-5	0
B967	Story4	VCA	End-J	0.4781	Comb4-2	0.0003	0	Comb3-5	0	0	Comb3-5	0
B968	Story4	VCA	End-I	0.2013	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B968	Story4	VCA	Middle	0.1115	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B968	Story4	VCA	End-J	0.1724	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B969	Story4	VCA	End-I	0.2428	Comb3-5	0.00015	0	Comb3-5	0	0	Comb3-5	0
B969	Story4	VCA	Middle	0.2865	Comb3-5	0.00018	0	Comb3-5	0	0	Comb3-5	0
B969	Story4	VCA	End-J	0.3629	Comb3-5	0.00023	0	Comb3-5	0	0	Comb3-5	0
B970	Story4	VCA	End-I	0.2199	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B970	Story4	VCA	Middle	0.2137	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B970	Story4	VCA	End-J	0.138	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B971	Story4	VCA	End-I	0.4295	Comb4-2	0.00027	0	Comb3-5	0	0	Comb3-5	0
B971	Story4	VCA	Middle	0.4483	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B971	Story4	VCA	End-J	0.555	Comb4-2	0.00035	0	Comb3-5	0	0	Comb3-5	0
B972	Story4	VCA	End-I	0.409	Comb4-2	0.00026	0	Comb3-5	0	0	Comb3-5	0
B972	Story4	VCA	Middle	0.4278	Comb4-2	0.00027	0	Comb3-5	0	0	Comb3-5	0
B972	Story4	VCA	End-J	0.4466	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B973	Story4	VCA	End-I	0.0549	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B973	Story4	VCA	Middle	0.0552	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B973	Story4	VCA	End-J	0.0998	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B974	Story4	VCA	End-I	0.0481	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B974	Story4	VCA	Middle	0.0632	Comb3-5	4E-05	0	Comb3-5	0	0	Comb3-5	0
B974	Story4	VCA	End-J	0.0804	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B975	Story4	VCA	End-I	0.1279	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B975	Story4	VCA	Middle	0.0726	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B975	Story4	VCA	End-J	0.0913	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B976	Story4	VCA	End-I	0.0573	Comb3-5	4E-05	0	Comb3-5	0	0	Comb3-5	0
B976	Story4	VCA	Middle	0.0798	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B976	Story4	VCA	End-J	0.0656	Comb3-5	4E-05	0	Comb3-5	0	0	Comb3-5	0
B977	Story4	VCA	End-I	0.2085	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B977	Story4	VCA	Middle	0.2089	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B977	Story4	VCA	End-J	0.2115	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B978	Story4	VCA	End-I	0.1839	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B978	Story4	VCA	Middle	0.1722	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B978	Story4	VCA	End-J	0.1518	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B979	Story4	VCA	End-I	0.0392	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B979	Story4	VCA	Middle	0.046	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B979	Story4	VCA	End-J	0.1048	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B980	Story4	VCA	End-I	0.2933	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B980	Story4	VCA	Middle	0.1966	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B980	Story4	VCA	End-J	0.2129	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B981	Story4	VCA	End-I	0.3113	Comb3-5	0.0002	0	Comb3-5	0	0	Comb3-5	0
B981	Story4	VCA	Middle	0.2004	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B981	Story4	VCA	End-J	0.2179	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B982	Story4	VCA	End-I	0.2901	Comb3-5	0.00018	7.782E-07	Comb3-5	0	7.782E-07	Comb3-5	0
B982	Story4	VCA	Middle	0.2473	Comb3-5	0.00016	8.173E-07	Comb3-5	0	8.173E-07	Comb3-5	0
B982	Story4	VCA	End-J	0.2758	Comb3-5	0.00017	0	Comb3-5	0	0	Comb3-5	0
B983	Story4	VCA	End-I	0.1719	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B983	Story4	VCA	Middle	0.2187	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B983	Story4	VCA	End-J	0.3042	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B984	Story4	VCA	End-I	0.5928	Comb4-2	0.00037	0	Comb3-5	0	0	Comb3-5	0
B984	Story4	VCA	Middle	0.5793	Comb4-2	0.00037	0	Comb3-5	0	0	Comb3-5	0
B984	Story4	VCA	End-J	0.5658	Comb4-2	0.00036	0	Comb3-5	0	0	Comb3-5	0
B985	Story4	VCA	End-I	0.2207	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B985	Story4	VCA	Middle	0.2184	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B985	Story4	VCA	End-J	0.1543	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B986	Story4	VCA	End-I		O/S		0	Comb3-5	0	0	Comb3-5	0
B986	Story4	VCA	Middle		O/S		0	Comb3-5	0	0	Comb3-5	0
B986	Story4	VCA	End-J		O/S		0	Comb3-5	0	0	Comb3-5	0
B987	Story4	VCA	End-I	0.1711	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B987	Story4	VCA	Middle	0.1208	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B987	Story4	VCA	End-J	0.1848	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B988	Story4	VCA	End-I	0.1061	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B988	Story4	VCA	Middle	0.1319	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B988	Story4	VCA	End-J	0.1749	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B989	Story4	VCA	End-I	0.1768	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B989	Story4	VCA	Middle	0.1301	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B989	Story4	VCA	End-J	0.0804	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B990	Story4	VCA	End-I	0.5252	Comb4-2	0.00033	6.363E-07	Comb3-5	0	6.363E-07	Comb3-5	0
B990	Story4	VCA	Middle	0.5196	Comb4-2	0.00033	6.371E-07	Comb3-5	0	6.371E-07	Comb3-5	0
B990	Story4	VCA	End-J	0.6773	Comb4-2	0.00043	7.488E-07	Comb3-5	0	7.488E-07	Comb3-5	0
B991	Story4	VCA	End-I	0.0993	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B991	Story4	VCA	Middle	0.1324	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B991	Story4	VCA	End-J	0.2027	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B992	Story4	VCA	End-I	0.2005	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B992	Story4	VCA	Middle	0.2057	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B992	Story4	VCA	End-J	0.1189	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B993	Story4	VCA	End-I	1.6385	Comb4-2	0.00104	0	Comb3-5	0	0	Comb3-5	0
B993	Story4	VCA	Middle	1.6362	Comb4-2	0.00103	0	Comb3-5	0	0	Comb3-5	0
B993	Story4	VCA	End-J	1.634	Comb3-5	0.00103	0	Comb3-5	0	0	Comb3-5	0
B994	Story4	VCA	End-I	1.1526	Comb4-2	0.00073	0	Comb3-5	0	0	Comb3-5	0
B994	Story4	VCA	Middle	1.2006	Comb4-2	0.00076	0	Comb3-5	0	0	Comb3-5	0
B994	Story4	VCA	End-J	1.3065	Comb4-2	0.00083	7.851E-07	Comb3-5	0	7.851E-07	Comb3-5	0
B995	Story4	VC	End-I	0.1701	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B995	Story4	VC	Middle	0.1515	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B995	Story4	VC	End-J	0.1181	Comb3-5	2E-05	0	Comb3-5	0	0	Comb3-5	0
B996	Story4	VC	End-I	0.2578	Comb3-5	0	1.61E-06	Comb3-5	0	1.61E-06	Comb3-5	0
B996	Story4	VC	Middle	0.2138	Comb3-5	0	1.557E-06	Comb3-5	0	1.557E-06	Comb3-5	0
B996	Story4	VC	End-J	0.1615	Comb3-5	0	1.863E-06	Comb3-5	0	1.863E-06	Comb3-5	0
B1005	Story4	VCUM	End-I	0.2866	Comb3-5	0	7.275E-07	Comb3-5	0	7.275E-07	Comb3-5	0
B1005	Story4	VCUM	Middle	0.5269	Comb3-5	0	8.817E-07	Comb3-5	0	8.817E-07	Comb3-5	0
B1005	Story4	VCUM	End-J	0.5522	Comb3-5	0	8.817E-07	Comb3-5	0	8.817E-07	Comb3-5	0
B1006	Story4	VCUM	End-I	0.3651	Comb3-5	0	8.898E-07	Comb3-5	0	8.898E-07	Comb3-5	0
B1006	Story4	VCUM	Middle	0.4067	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1006	Story4	VCUM	End-J	0.4418	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1007	Story4	VCUM	End-I	0.6508	Comb3-5	0.00041	0	Comb3-5	0	0	Comb3-5	0
B1007	Story4	VCUM	Middle	1.0263	Comb4-2	0.00065	7.448E-07	Comb3-5	0	7.448E-07	Comb3-5	0
B1007	Story4	VCUM	End-J	1.0979	Comb4-2	0.00069	7.448E-07	Comb3-5	0	7.448E-07	Comb3-5	0
B1008	Story4	VCUM	End-I	0.9985	Comb4-2	0.00063	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1008	Story4	VCUM	Middle	0.9429	Comb4-2	0.0006	0	Comb3-5	0	0	Comb3-5	0
B1008	Story4	VCUM	End-J	0.8874	Comb4-2	0.00056	0	Comb3-5	0	0	Comb3-5	0
B1039	Story4	VCUM	End-I	0.1327	Comb3-5	0	6.558E-07	Comb3-5	0	6.558E-07	Comb3-5	0
B1039	Story4	VCUM	Middle	0.1323	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1039	Story4	VCUM	End-J	1.174	Comb4-2	0.00042	0	Comb3-5	0	0	Comb3-5	0
B1040	Story4	VCUM	End-I	0.0338	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1040	Story4	VCUM	Middle	0.0961	Comb3-5	0	9.135E-07	Comb3-5	0	9.135E-07	Comb3-5	0
B1040	Story4	VCUM	End-J	0.0511	Comb3-5	0	7.97E-07	Comb3-5	0	7.97E-07	Comb3-5	0
B1041	Story4	VCUM	End-I	0.1203	Comb3-5	0	7.998E-07	Comb3-5	0	7.998E-07	Comb3-5	0
B1041	Story4	VCUM	Middle	0.2306	Comb3-5	0	7.491E-07	Comb3-5	0	7.491E-07	Comb3-5	0
B1041	Story4	VCUM	End-J	0.1525	Comb3-5	0.00012	7.167E-07	Comb3-5	0	7.167E-07	Comb3-5	0
B1042	Story4	VCUM	End-I	0.1903	Comb3-5	0	6.101E-07	Comb3-5	0	6.101E-07	Comb3-5	0
B1042	Story4	VCUM	Middle	0.3125	Comb3-5	0	5.343E-07	Comb3-5	0	5.343E-07	Comb3-5	0
B1042	Story4	VCUM	End-J	0.4292	Comb3-5	0	5.343E-07	Comb3-5	0	5.343E-07	Comb3-5	0
B1043	Story4	VCUM	End-I	0.2994	Comb4-2	0.00019	7.336E-07	Comb3-5	0	7.336E-07	Comb3-5	0
B1043	Story4	VCUM	Middle	0		-1	0		-1	0		-1
B1043	Story4	VCUM	End-J	0.2937	Comb4-2	0.00019	7.336E-07	Comb3-5	0	7.336E-07	Comb3-5	0
B1054	Story4	VCUM	End-I	0.284	Comb3-5	0	7.262E-07	Comb3-5	0	7.262E-07	Comb3-5	0
B1054	Story4	VCUM	Middle	0.2479	Comb3-5	0	7.262E-07	Comb3-5	0	7.262E-07	Comb3-5	0
B1054	Story4	VCUM	End-J	0.2117	Comb3-5	0	7.262E-07	Comb3-5	0	7.262E-07	Comb3-5	0
B1055	Story4	VCUM	End-I	0.1572	Comb3-5	0	9.016E-07	Comb3-5	0	9.016E-07	Comb3-5	0
B1055	Story4	VCUM	Middle	0.2749	Comb3-5	0	5.471E-07	Comb3-5	0	5.471E-07	Comb3-5	0
B1055	Story4	VCUM	End-J	0.436	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1056	Story4	VCUM	End-I	0.6817	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1056	Story4	VCUM	Middle	0.1503	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1056	Story4	VCUM	End-J	0.1236	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1057	Story4	VCUM	End-I	0.0572	Comb3-5	0	1.644E-06	Comb3-5	0	1.644E-06	Comb3-5	0
B1057	Story4	VCUM	Middle	0.0364	Comb3-5	0	1.693E-06	Comb3-5	0	1.693E-06	Comb3-5	0
B1057	Story4	VCUM	End-J	0.0967	Comb3-5	0	1.693E-06	Comb3-5	0	1.693E-06	Comb3-5	0
B1058	Story4	VCUM	End-I	0.0695	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1058	Story4	VCUM	Middle	0.0296	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1058	Story4	VCUM	End-J	0.085	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1059	Story4	VCUM	End-I	1.519	Comb4-2	0.00042	7.546E-07	Comb3-5	0	7.546E-07	Comb3-5	0
B1059	Story4	VCUM	Middle	0.1422	Comb3-5	0	9.153E-07	Comb3-5	0	9.153E-07	Comb3-5	0
B1059	Story4	VCUM	End-J	0.2238	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1060	Story4	VCUM	End-I	0.0892	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1060	Story4	VCUM	Middle	0.1174	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1060	Story4	VCUM	End-J	0.0284	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1062	Story4	VCUM	End-I	0.1883	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1062	Story4	VCUM	Middle	0.1536	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1062	Story4	VCUM	End-J	0.1384	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B840	Story4	VCUM	End-I	0.2091	Comb3-5	0	1.041E-06	Comb3-5	0	1.041E-06	Comb3-5	0
B840	Story4	VCUM	Middle	0.1609	Comb3-5	0	7.54E-07	Comb3-5	0	7.54E-07	Comb3-5	0
B840	Story4	VCUM	End-J	0.1382	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1061	Story4	VCB	End-I	0.2485	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1061	Story4	VCB	Middle	0.2655	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B1061	Story4	VCB	End-J	0.2813	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B1071	Story4	VCB	End-I	0.1258	Comb3-5	0	6.706E-07	Comb3-5	0	6.706E-07	Comb3-5	0
B1071	Story4	VCB	Middle	0.1238	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1071	Story4	VCB	End-J	0.1409	Comb3-5	0	1.227E-06	Comb3-5	0	1.227E-06	Comb3-5	0
B1072	Story4	VCB	End-I	0.2409	Comb3-5	0.00015	1.228E-06	Comb3-5	0	1.228E-06	Comb3-5	0
B1072	Story4	VCB	Middle	0.2031	Comb3-5	0.00013	9.16E-07	Comb3-5	0	9.16E-07	Comb3-5	0
B1072	Story4	VCB	End-J	0.1512	Comb3-5	0.0001	9.16E-07	Comb3-5	0	9.16E-07	Comb3-5	0
B1073	Story4	VCB	End-I	0.0547	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1073	Story4	VCB	Middle	0.0658	Comb3-5	0	7.11E-07	Comb3-5	0	7.11E-07	Comb3-5	0
B1073	Story4	VCB	End-J	0.1494	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1074	Story4	VCB	End-I	0.1067	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1074	Story4	VCB	Middle	0.1019	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B1074	Story4	VCB	End-J	0.0926	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B1075	Story4	VCB	End-I	0.0973	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B1075	Story4	VCB	Middle	0.0899	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B1075	Story4	VCB	End-J	0.1131	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1076	Story4	VCB	End-I	0.1605	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1076	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1076	Story4	VCB	End-J	0.1252	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1077	Story4	VCB	End-I	0.0354	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1077	Story4	VCB	Middle	0.0312	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1077	Story4	VCB	End-J	0.0362	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1078	Story4	VCB	End-I	0.1372	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1078	Story4	VCB	Middle	0.1047	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1078	Story4	VCB	End-J	0.1085	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1079	Story4	VCB	End-I	0.198	Comb3-5	0.00013	5.453E-07	Comb3-5	0	5.453E-07	Comb3-5	0
B1079	Story4	VCB	Middle	0.1756	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1079	Story4	VCB	End-J	0.114	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1080	Story4	VCB	End-I	0.0681	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1080	Story4	VCB	Middle	0.0778	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1080	Story4	VCB	End-J	0.0774	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1081	Story4	VCB	End-I	0.7918	Comb4-2	0.0005	0	Comb3-5	0	0	Comb3-5	0
B1081	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1081	Story4	VCB	End-J	0.7689	Comb4-2	0.00049	0	Comb3-5	0	0	Comb3-5	0
B1082	Story4	VCB	End-I	0.3399	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B1082	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1082	Story4	VCB	End-J	0.3047	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B1083	Story4	VCB	End-I	0.3854	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B1083	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1083	Story4	VCB	End-J	0.3696	Comb4-2	0.00023	0	Comb3-5	0	0	Comb3-5	0
B1084	Story4	VCB	End-I	0.1351	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1084	Story4	VCB	Middle	0.1418	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1084	Story4	VCB	End-J	0.2035	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B1085	Story4	VCB	End-I	0.1871	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1085	Story4	VCB	Middle	0.1685	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1085	Story4	VCB	End-J	0.1499	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1086	Story4	VCB	End-I	0.0502	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1086	Story4	VCB	Middle	0.0343	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1086	Story4	VCB	End-J	0.0434	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1087	Story4	VCB	End-I	0.0459	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1087	Story4	VCB	Middle	0.0587	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1087	Story4	VCB	End-J	0.0853	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1088	Story4	VCB	End-I	0.2549	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B1088	Story4	VCB	Middle	0.2306	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B1088	Story4	VCB	End-J	0.1821	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1089	Story4	VCB	End-I	0.1193	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1089	Story4	VCB	Middle	0.1555	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1089	Story4	VCB	End-J	0.1655	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1090	Story4	VCB	End-I	0.0472	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1090	Story4	VCB	Middle	0.0334	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1090	Story4	VCB	End-J	0.04	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1091	Story4	VCB	End-I	0.0808	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1091	Story4	VCB	Middle	0.0823	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1091	Story4	VCB	End-J	0.1055	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1092	Story4	VCB	End-I	0.213	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B1092	Story4	VCB	Middle	0.2908	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B1092	Story4	VCB	End-J	0.2739	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B1093	Story4	VCB	End-I	0.0995	Comb3-5	0	5.264E-07	Comb3-5	0	5.264E-07	Comb3-5	0
B1093	Story4	VCB	Middle	0.0976	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1093	Story4	VCB	End-J	0.0693	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1094	Story4	VCB	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1094	Story4	VCB	Middle	0	Comb3-5	0	5.087E-07	Comb3-5	0	5.087E-07	Comb3-5	0
B1094	Story4	VCB	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1095	Story4	VCB	End-I	0.0811	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1095	Story4	VCB	Middle	0.0995	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1095	Story4	VCB	End-J	0.1091	Comb3-5	0	5.406E-07	Comb3-5	0	5.406E-07	Comb3-5	0
B1096	Story4	VCB	End-I	0.3674	Comb4-2	0.00023	5.379E-07	Comb3-5	0	5.379E-07	Comb3-5	0
B1096	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1096	Story4	VCB	End-J	0.4033	Comb4-2	0.00025	5.379E-07	Comb3-5	0	5.379E-07	Comb3-5	0
B1097	Story4	VCB	End-I	0.1363	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1097	Story4	VCB	Middle	0.1131	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1097	Story4	VCB	End-J	0.1084	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1098	Story4	VCB	End-I	0.1137	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1098	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1098	Story4	VCB	End-J	0.0865	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1099	Story4	VCB	End-I	0.1138	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1099	Story4	VCB	Middle	0.0869	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1099	Story4	VCB	End-J	0.0644	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1100	Story4	VCB	End-I	0.0553	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1100	Story4	VCB	Middle	0.0574	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1100	Story4	VCB	End-J	0.0381	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1101	Story4	VCB	End-I	0.1323	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1101	Story4	VCB	Middle	0.1184	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1101	Story4	VCB	End-J	0.1253	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1102	Story4	VCB	End-I	0.1788	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1102	Story4	VCB	Middle	0.2081	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B1102	Story4	VCB	End-J	0.159	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1103	Story4	VCB	End-I	0.0852	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1103	Story4	VCB	Middle	0.1336	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1103	Story4	VCB	End-J	0.0976	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B1104	Story4	VCB	End-I	0.0959	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1104	Story4	VCB	Middle	0.043	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B1104	Story4	VCB	End-J	0.1623	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1105	Story4	VCB	End-I	0.4922	Comb4-2	0.00031	0	Comb3-5	0	0	Comb3-5	0
B1105	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1105	Story4	VCB	End-J	0.4696	Comb4-2	0.0003	0	Comb3-5	0	0	Comb3-5	0
B1106	Story4	VCB	End-I	0.7082	Comb4-2	0.00045	0	Comb3-5	0	0	Comb3-5	0
B1106	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1106	Story4	VCB	End-J	0.6804	Comb4-2	0.00043	0	Comb3-5	0	0	Comb3-5	0
B1107	Story4	VCB	End-I		O/S		0	Comb3-5	0	0	Comb3-5	0
B1107	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1107	Story4	VCB	End-J		O/S		0	Comb3-5	0	0	Comb3-5	0
B1108	Story4	VCB	End-I	0.057	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1108	Story4	VCB	Middle	0.0441	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1108	Story4	VCB	End-J	0.0399	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1109	Story4	VCB	End-I	0.0907	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1109	Story4	VCB	Middle	0.0599	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1109	Story4	VCB	End-J	0.0952	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1110	Story4	VCB	End-I	0.128	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1110	Story4	VCB	Middle	0.1608	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1110	Story4	VCB	End-J	0.1796	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1111	Story4	VCB	End-I	0.1938	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1111	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1111	Story4	VCB	End-J	0.1663	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1112	Story4	VCB	End-I	0.3728	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B1112	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1112	Story4	VCB	End-J	0.3916	Comb4-2	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1113	Story4	VCB	End-I	0.501	Comb4-2	0.00032	0	Comb3-5	0	0	Comb3-5	0
B1113	Story4	VCB	Middle	0.5913	Comb4-2	0.00037	6.735E-07	Comb3-5	0	6.735E-07	Comb3-5	0
B1113	Story4	VCB	End-J	0.5809	Comb4-2	0.00037	6.735E-07	Comb3-5	0	6.735E-07	Comb3-5	0
B1114	Story4	VCB	End-I	0.8091	Comb4-2	0.00051	6.771E-07	Comb3-5	0	6.771E-07	Comb3-5	0
B1114	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1114	Story4	VCB	End-J	0.7818	Comb4-2	0.00049	6.771E-07	Comb3-5	0	6.771E-07	Comb3-5	0
B1115	Story4	VCB	End-I	0.0384	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1115	Story4	VCB	Middle	0.0845	Comb3-5	0	8.09E-07	Comb3-5	0	8.09E-07	Comb3-5	0
B1115	Story4	VCB	End-J	0.0329	Comb3-5	0	1.093E-06	Comb3-5	0	1.093E-06	Comb3-5	0
B1116	Story4	VCB	End-I	0.1121	Comb3-5	0	1.094E-06	Comb3-5	0	1.094E-06	Comb3-5	0
B1116	Story4	VCB	Middle	0.15	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1116	Story4	VCB	End-J	0.1262	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1117	Story4	VCB	End-I	0.062	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1117	Story4	VCB	Middle	0.0921	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1117	Story4	VCB	End-J	0.0977	Comb3-5	0	5.46E-07	Comb3-5	0	5.46E-07	Comb3-5	0
B1118	Story4	VCB	End-I	0.0682	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1118	Story4	VCB	Middle	0.1099	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1118	Story4	VCB	End-J	0.1737	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1119	Story4	VCB	End-I	0.3865	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B1119	Story4	VCB	Middle	0.3551	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B1119	Story4	VCB	End-J	0.348	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B1120	Story4	VCB	End-I	0.2344	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B1120	Story4	VCB	Middle	0.2305	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B1120	Story4	VCB	End-J	0.1585	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1121	Story4	VCB	End-I	0.1553	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1121	Story4	VCB	Middle	0.1962	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1121	Story4	VCB	End-J	0.1538	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1122	Story4	VCB	End-I	0.1311	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1122	Story4	VCB	Middle	0.0599	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1122	Story4	VCB	End-J	0.1063	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1123	Story4	VCB	End-I	0.2	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B1123	Story4	VCB	Middle	0.131	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1123	Story4	VCB	End-J	0.1811	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1124	Story4	VCB	End-I	0.5993	Comb4-2	0.00038	0	Comb3-5	0	0	Comb3-5	0
B1124	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1124	Story4	VCB	End-J	0.5834	Comb4-2	0.00037	0	Comb3-5	0	0	Comb3-5	0
B1125	Story4	VCB	End-I	0.249	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B1125	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1125	Story4	VCB	End-J	0.2841	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B1126	Story4	VCB	End-I	0.6313	Comb4-2	0.0004	0	Comb3-5	0	0	Comb3-5	0
B1126	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1126	Story4	VCB	End-J	0.6542	Comb4-2	0.00041	0	Comb3-5	0	0	Comb3-5	0
B1127	Story4	VCB	End-I	0.1125	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1127	Story4	VCB	Middle	0.1383	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1127	Story4	VCB	End-J	0.1373	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1128	Story4	VCB	End-I	0.0539	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1128	Story4	VCB	Middle	0.1285	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1128	Story4	VCB	End-J	0.0754	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1129	Story4	VCB	End-I	0.1731	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1129	Story4	VCB	Middle	0.143	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1129	Story4	VCB	End-J	0.174	Comb3-5	0.00011	7.235E-07	Comb3-5	0	7.235E-07	Comb3-5	0
B1130	Story4	VCB	End-I	0.1625	Comb3-5	0.0001	6.028E-07	Comb3-5	0	6.028E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1130	Story4	VCB	Middle	0.1228	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1130	Story4	VCB	End-J	0.0991	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B1131	Story4	VCB	End-I	0.0811	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1131	Story4	VCB	Middle	0.0987	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0
B1131	Story4	VCB	End-J	0.0827	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1132	Story4	VCB	End-I	0.0995	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1132	Story4	VCB	Middle	0.0738	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1132	Story4	VCB	End-J	0.203	Comb3-5	0	7.637E-07	Comb3-5	0	7.637E-07	Comb3-5	0
B1133	Story4	VCB	End-I		O/S		7.442E-07	Comb3-5	0	7.442E-07	Comb3-5	0
B1133	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1133	Story4	VCB	End-J		O/S		7.442E-07	Comb3-5	0	7.442E-07	Comb3-5	0
B1134	Story4	VCB	End-I	0.1451	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1134	Story4	VCB	Middle	0.1863	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1134	Story4	VCB	End-J	0.1662	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1135	Story4	VCB	End-I	0.1783	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1135	Story4	VCB	Middle	0.0995	Comb4-2	6E-05	0	Comb3-5	0	0	Comb3-5	0
B1135	Story4	VCB	End-J	0.1717	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1136	Story4	VCB	End-I	0.1642	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1136	Story4	VCB	Middle	0.1492	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1136	Story4	VCB	End-J	0.1629	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1137	Story4	VCB	End-I	0.2215	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1137	Story4	VCB	Middle	0.247	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B1137	Story4	VCB	End-J	0.2725	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B1138	Story4	VCB	End-I		O/S		0	Comb3-5	0	0	Comb3-5	0
B1138	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1138	Story4	VCB	End-J		O/S		0	Comb3-5	0	0	Comb3-5	0
B1139	Story4	VCB	End-I	0.0908	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1139	Story4	VCB	Middle	0.0332	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1139	Story4	VCB	End-J	0.0988	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1140	Story4	VCB	End-I	0.0692	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1140	Story4	VCB	Middle	0.0734	Comb3-5	0	7.164E-07	Comb3-5	0	7.164E-07	Comb3-5	0
B1140	Story4	VCB	End-J	0.1087	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1141	Story4	VCB	End-I	0.5258	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B1141	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1141	Story4	VCB	End-J	0.5591	Comb4-2	0.00035	0	Comb3-5	0	0	Comb3-5	0
B1142	Story4	VCB	End-I	0.2797	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B1142	Story4	VCB	Middle	0.2482	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B1142	Story4	VCB	End-J	0.2271	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1143	Story4	VCB	End-I	0.1234	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1143	Story4	VCB	Middle	0.1383	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1143	Story4	VCB	End-J	0.1177	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1144	Story4	VCB	End-I	0.1612	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1144	Story4	VCB	Middle	0.0655	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1144	Story4	VCB	End-J	0.1217	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1145	Story4	VCB	End-I	0.0917	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1145	Story4	VCB	Middle	0.1365	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1145	Story4	VCB	End-J	0.0762	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1146	Story4	VCB	End-I	0.2942	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B1146	Story4	VCB	Middle	0.264	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B1146	Story4	VCB	End-J	0.2297	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B1147	Story4	VCB	End-I	0.9745	Comb4-2	0.00062	0	Comb3-5	0	0	Comb3-5	0
B1147	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1147	Story4	VCB	End-J	0.9971	Comb4-2	0.00063	0	Comb3-5	0	0	Comb3-5	0
B1148	Story4	VCB	End-I	0	Comb3-5	0	8.339E-07	Comb3-5	0	8.339E-07	Comb3-5	0
B1148	Story4	VCB	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1148	Story4	VCB	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1149	Story4	VCB	End-I	0.0714	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1149	Story4	VCB	Middle	0.0475	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1149	Story4	VCB	End-J	0.0554	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1150	Story4	VCB	End-I	0.073	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1150	Story4	VCB	Middle	0.1196	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1150	Story4	VCB	End-J	0.0832	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1151	Story4	VCB	End-I	0.1541	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1151	Story4	VCB	Middle	0.1461	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1151	Story4	VCB	End-J	0.1211	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1152	Story4	VCB	End-I	0.0486	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1152	Story4	VCB	Middle	0.0625	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1152	Story4	VCB	End-J	0.0503	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1153	Story4	VCB	End-I	0.112	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1153	Story4	VCB	Middle	0.1479	Comb3-5	0	6.743E-07	Comb3-5	0	6.743E-07	Comb3-5	0
B1153	Story4	VCB	End-J	0.2314	Comb3-5	0	7.343E-07	Comb3-5	0	7.343E-07	Comb3-5	0
B1154	Story4	VCB	End-I	0.1281	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1154	Story4	VCB	Middle	0.152	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1154	Story4	VCB	End-J	0.1651	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1155	Story4	VCB	End-I	0.137	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1155	Story4	VCB	Middle	0.2412	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1155	Story4	VCB	End-J	0.2719	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1156	Story4	VCB	End-I	0.0814	Comb3-5	0	5.964E-07	Comb3-5	0	5.964E-07	Comb3-5	0
B1156	Story4	VCB	Middle	0.1128	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1156	Story4	VCB	End-J	0.1819	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1157	Story4	VCB	End-I	0.287	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B1157	Story4	VCB	Middle	0.2817	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B1157	Story4	VCB	End-J	0.2286	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1158	Story4	VCB	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1158	Story4	VCB	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1158	Story4	VCB	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1159	Story4	VCB	End-I	0.0929	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1159	Story4	VCB	Middle	0.0596	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1159	Story4	VCB	End-J	0.0753	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1160	Story4	VCB	End-I	0.0442	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1160	Story4	VCB	Middle	0.1334	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1160	Story4	VCB	End-J	0.0605	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1161	Story4	VCB	End-I	0.0318	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1161	Story4	VCB	Middle	0.0627	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1161	Story4	VCB	End-J	0.0418	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1162	Story4	VCB	End-I	0.1882	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1162	Story4	VCB	Middle	0.1198	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1162	Story4	VCB	End-J	0.0804	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1163	Story4	VCB	End-I	0.1134	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1163	Story4	VCB	Middle	0.0814	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1163	Story4	VCB	End-J	0.1046	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1164	Story4	VCB	End-I	0.0524	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1164	Story4	VCB	Middle	0.0348	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1164	Story4	VCB	End-J	0.0338	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B1165	Story4	VCB	End-I	0.0734	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1165	Story4	VCB	Middle	0.0998	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1165	Story4	VCB	End-J	0.0685	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1166	Story4	VCB	End-I	0.161	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1166	Story4	VCB	Middle	0.1992	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B1166	Story4	VCB	End-J	0.2354	Comb3-5	0.00015	0	Comb3-5	0	0	Comb3-5	0
B1167	Story4	VCB	End-I	0.1361	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1167	Story4	VCB	Middle	0.1189	Comb3-5	0	6.881E-07	Comb3-5	0	6.881E-07	Comb3-5	0
B1167	Story4	VCB	End-J	0.1686	Comb3-5	0	5.196E-07	Comb3-5	0	5.196E-07	Comb3-5	0
B1168	Story4	VCB	End-I	0.1132	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1168	Story4	VCB	Middle	0.1091	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1168	Story4	VCB	End-J	0.0801	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1169	Story4	VCB	End-I	1.701	Comb4-2	0.00108	0	Comb3-5	0	0	Comb3-5	0
B1169	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1169	Story4	VCB	End-J	1.6971	Comb4-2	0.00107	0	Comb3-5	0	0	Comb3-5	0
B1170	Story4	VCB	End-I	0.0851	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1170	Story4	VCB	Middle	0.0513	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1170	Story4	VCB	End-J	0.0836	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1171	Story4	VCB	End-I	0.1897	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1171	Story4	VCB	Middle	0.1613	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1171	Story4	VCB	End-J	0.1045	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1172	Story4	VCB	End-I	0.1076	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1172	Story4	VCB	Middle	0.1188	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1172	Story4	VCB	End-J	0.1389	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1173	Story4	VCB	End-I	0.1177	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1173	Story4	VCB	Middle	0.0865	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1173	Story4	VCB	End-J	0.0836	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1174	Story4	VCB	End-I	0.1809	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1174	Story4	VCB	Middle	0.1545	Comb4-2	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1174	Story4	VCB	End-J	0.1409	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1175	Story4	VCB	End-I	0.0905	Comb3-5	6E-05	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1175	Story4	VCB	Middle	0.0745	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1175	Story4	VCB	End-J	0.0723	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1176	Story4	VCB	End-I	0.0844	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1176	Story4	VCB	Middle	0.0784	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1176	Story4	VCB	End-J	0.1146	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1177	Story4	VCB	End-I	0.2101	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B1177	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1177	Story4	VCB	End-J	0.1922	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1178	Story4	VCB	End-I	0.0444	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1178	Story4	VCB	Middle	0.0456	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1178	Story4	VCB	End-J	0.0752	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1179	Story4	VCB	End-I	0.0861	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1179	Story4	VCB	Middle	0.0545	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1179	Story4	VCB	End-J	0.0934	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1180	Story4	VCB	End-I	0.1968	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1180	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1180	Story4	VCB	End-J	0.2254	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1181	Story4	VCB	End-I	0.0863	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1181	Story4	VCB	Middle	0.0264	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1181	Story4	VCB	End-J	0.0379	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1182	Story4	VCB	End-I	0.1051	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1182	Story4	VCB	Middle	0.115	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1182	Story4	VCB	End-J	0.1635	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1183	Story4	VCB	End-I	0.2061	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B1183	Story4	VCB	Middle	0.3445	Comb4-2	0.00022	0	Comb3-5	0	0	Comb3-5	0
B1183	Story4	VCB	End-J	0.3136	Comb4-2	0.0002	0	Comb3-5	0	0	Comb3-5	0
B1184	Story4	VCB	End-I	1.6614	Comb3-5	0.00105	0	Comb3-5	0	0	Comb3-5	0
B1184	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1184	Story4	VCB	End-J	1.6624	Comb4-2	0.00105	0	Comb3-5	0	0	Comb3-5	0
B1185	Story4	VCB	End-I	0.1381	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1185	Story4	VCB	Middle	0.0616	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1185	Story4	VCB	End-J	0.1339	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1186	Story4	VCB	End-I	0.1972	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1186	Story4	VCB	Middle	0.2204	Comb3-5	0.00014	7.025E-07	Comb3-5	0	7.025E-07	Comb3-5	0
B1186	Story4	VCB	End-J	0.2233	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1187	Story4	VCB	End-I	0.1594	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1187	Story4	VCB	Middle	0.1089	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1187	Story4	VCB	End-J	0.1081	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1188	Story4	VCB	End-I	0.4276	Comb4-2	0.00027	0	Comb3-5	0	0	Comb3-5	0
B1188	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1188	Story4	VCB	End-J	0.4502	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B1189	Story4	VCB	End-I	0.172	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1189	Story4	VCB	Middle	0.1056	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1189	Story4	VCB	End-J	0.061	Comb3-5	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1190	Story4	VCB	End-I	0.3369	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1190	Story4	VCB	Middle	0.3114	Comb4-2	0.0002	0	Comb3-5	0	0	Comb3-5	0
B1190	Story4	VCB	End-J	0.2859	Comb4-2	0.00018	0	Comb3-5	0	0	Comb3-5	0
B1191	Story4	VCB	End-I	0.5089	Comb4-2	0.00032	0	Comb3-5	0	0	Comb3-5	0
B1191	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1191	Story4	VCB	End-J	0.4793	Comb4-2	0.0003	0	Comb3-5	0	0	Comb3-5	0
B1192	Story4	VCB	End-I	0.0792	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1192	Story4	VCB	Middle	0.0758	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1192	Story4	VCB	End-J	0.0929	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1193	Story4	VCB	End-I	0.1377	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1193	Story4	VCB	Middle	0.1758	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1193	Story4	VCB	End-J	0.2029	Comb3-5	0.00013	5.967E-07	Comb3-5	0	5.967E-07	Comb3-5	0
B1194	Story4	VCB	End-I	0.1363	Comb3-5	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1194	Story4	VCB	Middle	0.1307	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1194	Story4	VCB	End-J	0.1138	Comb3-5	7E-05	0	Comb3-5	0	0	Comb3-5	0
B1195	Story4	VCB	End-I	0.2964	Comb4-2	0.00019	0	Comb3-5	0	0	Comb3-5	0
B1195	Story4	VCB	Middle	0.2709	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B1195	Story4	VCB	End-J	0.2453	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B1196	Story4	VCB	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1196	Story4	VCB	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1196	Story4	VCB	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1197	Story4	VCB	End-I	0.072	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1197	Story4	VCB	Middle	0.0384	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1197	Story4	VCB	End-J	0.1059	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1198	Story4	VCB	End-I	0.0767	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1198	Story4	VCB	Middle	0.0801	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1198	Story4	VCB	End-J	0.0783	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1199	Story4	VCB	End-I	0.1807	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1199	Story4	VCB	Middle	0.2302	Comb3-5	0.00015	1.534E-06	Comb3-5	0	1.534E-06	Comb3-5	0
B1199	Story4	VCB	End-J	0.1522	Comb3-5	0.0001	1.534E-06	Comb3-5	0	1.534E-06	Comb3-5	0
B1200	Story4	VCB	End-I	1.2221	Comb4-2	0.00077	3.947E-06	Comb3-5	0	3.947E-06	Comb3-5	0
B1200	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1200	Story4	VCB	End-J	1.2283	Comb4-2	0.00078	3.947E-06	Comb3-5	0	3.947E-06	Comb3-5	0
B1201	Story4	VCB	End-I	0.34	Comb4-2	0.00021	0	Comb3-5	0	0	Comb3-5	0
B1201	Story4	VCB	Middle	0.3682	Comb4-2	0.00023	0	Comb3-5	0	0	Comb3-5	0
B1201	Story4	VCB	End-J	0.3582	Comb4-2	0.00023	0	Comb3-5	0	0	Comb3-5	0
B1202	Story4	VCB	End-I	0.1351	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1202	Story4	VCB	Middle	0.1199	Comb3-5	0	8.162E-07	Comb3-5	0	8.162E-07	Comb3-5	0
B1202	Story4	VCB	End-J	0.0908	Comb3-5	0	8.162E-07	Comb3-5	0	8.162E-07	Comb3-5	0
B1203	Story4	VCB	End-I	0.0798	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1203	Story4	VCB	Middle	0.0598	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1203	Story4	VCB	End-J	0.0497	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1204	Story4	VCB	End-I	0.196	Comb4-2	0.00012	8.162E-07	Comb3-5	0	8.162E-07	Comb3-5	0
B1204	Story4	VCB	Middle	0		-1	0		-1	0		-1
B1204	Story4	VCB	End-J	0.1754	Comb4-2	0.00011	8.162E-07	Comb3-5	0	8.162E-07	Comb3-5	0
B1265	Story4	VC	End-I	3.1957	Comb4-2	0.00051	1.063E-06	Comb3-5	0	1.063E-06	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1265	Story4	VC	Middle	3.1856	Comb4-2	0.0005	9.623E-07	Comb3-5	0	9.623E-07	Comb3-5	0
B1265	Story4	VC	End-J	3.1845	Comb4-2	0.0005	1.002E-06	Comb3-5	0	1.002E-06	Comb3-5	0
B1267	Story4	VC	End-I	7.9559	Comb4-2	0.00126	0	Comb3-5	0	0	Comb3-5	0
B1267	Story4	VC	Middle	7.9866	Comb4-2	0.00126	0	Comb3-5	0	0	Comb3-5	0
B1267	Story4	VC	End-J	8.0091	Comb4-2	0.00127	0	Comb3-5	0	0	Comb3-5	0
B720	Story4	VC	End-I	0.4015	Comb4-2	6E-05	7.7E-07	Comb3-5	0	7.7E-07	Comb3-5	0
B720	Story4	VC	Middle	0.4617	Comb4-2	7E-05	0	Comb3-5	0	0	Comb3-5	0
B720	Story4	VC	End-J	0.4941	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1285	Story4	VC	End-I	0.0923	Comb3-5	0	7.521E-07	Comb3-5	0	7.521E-07	Comb3-5	0
B1285	Story4	VC	Middle	0.0924	Comb3-5	0	8.962E-07	Comb3-5	0	8.962E-07	Comb3-5	0
B1285	Story4	VC	End-J	0.1648	Comb3-5	0	6.51E-07	Comb3-5	0	6.51E-07	Comb3-5	0
B1286	Story4	VC	End-I	0.2295	Comb3-5	0	6.952E-07	Comb3-5	0	6.952E-07	Comb3-5	0
B1286	Story4	VC	Middle	0.212	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1286	Story4	VC	End-J	0.1395	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1287	Story4	VC	End-I	0.1471	Comb3-5	2E-05	8.256E-07	Comb3-5	0	8.256E-07	Comb3-5	0
B1287	Story4	VC	Middle	0.1735	Comb3-5	3E-05	6.931E-07	Comb3-5	0	6.931E-07	Comb3-5	0
B1287	Story4	VC	End-J	0.2214	Comb3-5	3E-05	7.323E-07	Comb3-5	0	7.323E-07	Comb3-5	0
B1288	Story4	VC	End-I	0.1873	Comb3-5	0	6.637E-07	Comb3-5	0	6.637E-07	Comb3-5	0
B1288	Story4	VC	Middle	0.1905	Comb3-5	0	6.695E-07	Comb3-5	0	6.695E-07	Comb3-5	0
B1288	Story4	VC	End-J	0.1407	Comb3-5	0	6.695E-07	Comb3-5	0	6.695E-07	Comb3-5	0
B997	Story3	VLIM	End-I	0.2074	Comb4-2	0.00013	0	Comb3-5	0	0	Comb3-5	0
B997	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B997	Story3	VLIM	End-J	0.1414	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B998	Story3	VLIM	End-I	0.1011	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B998	Story3	VLIM	Middle	0.0772	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B998	Story3	VLIM	End-J	0.1175	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B999	Story3	VLIM	End-I	0.3874	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B999	Story3	VLIM	Middle	0.3839	Comb4-2	0.00024	0	Comb3-5	0	0	Comb3-5	0
B999	Story3	VLIM	End-J	0.432	Comb4-2	0.00027	0	Comb3-5	0	0	Comb3-5	0
B1000	Story3	VLIM	End-I	0.1555	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1000	Story3	VLIM	Middle	0.0599	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1000	Story3	VLIM	End-J	0.0077	Comb3-5	1E-05	0	Comb3-5	0	0	Comb3-5	0
B1001	Story3	VLIM	End-I	1.9574	Comb4-2	0.00124	0	Comb3-5	0	0	Comb3-5	0
B1001	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1001	Story3	VLIM	End-J	1.7635	Comb3-5	0.00111	0	Comb3-5	0	0	Comb3-5	0
B1002	Story3	VLIM	End-I	1.1505	Comb4-2	0.00073	0	Comb3-5	0	0	Comb3-5	0
B1002	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1002	Story3	VLIM	End-J	1.1767	Comb4-2	0.00074	0	Comb3-5	0	0	Comb3-5	0
B1003	Story3	VLIM	End-I	0.4946	Comb4-2	0.00031	0	Comb3-5	0	0	Comb3-5	0
B1003	Story3	VLIM	Middle	0.7033	Comb4-2	0.00044	0	Comb3-5	0	0	Comb3-5	0
B1003	Story3	VLIM	End-J	0.665	Comb4-2	0.00042	0	Comb3-5	0	0	Comb3-5	0
B1004	Story3	VC	End-I	0.3253	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1004	Story3	VC	Middle	0		-1	0		-1	0		-1
B1004	Story3	VC	End-J	0.3415	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1009	Story3	VLIM	End-I	0.6202	Comb4-2	0.00039	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1009	Story3	VLIM	Middle	0.6863	Comb4-2	0.00043	0	Comb3-5	0	0	Comb3-5	0
B1009	Story3	VLIM	End-J	0.7185	Comb4-2	0.00045	0	Comb3-5	0	0	Comb3-5	0
B1010	Story3	VLIM	End-I	0.1266	Comb3-5	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1010	Story3	VLIM	Middle	0.1743	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1010	Story3	VLIM	End-J	0.1533	Comb3-5	0.0001	0	Comb3-5	0	0	Comb3-5	0
B1011	Story3	VLIM	End-I	0.4355	Comb3-5	0.00028	0	Comb3-5	0	0	Comb3-5	0
B1011	Story3	VLIM	Middle	0.2688	Comb3-5	0.00017	0	Comb3-5	0	0	Comb3-5	0
B1011	Story3	VLIM	End-J	0.4094	Comb3-5	0.00026	0	Comb3-5	0	0	Comb3-5	0
B1012	Story3	VLIM	End-I		O/S		0	Comb3-5	0	0	Comb3-5	0
B1012	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1012	Story3	VLIM	End-J		O/S		0	Comb3-5	0	0	Comb3-5	0
B1013	Story3	VLIM	End-I	0.9585	Comb4-2	0.00061	0	Comb3-5	0	0	Comb3-5	0
B1013	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1013	Story3	VLIM	End-J	1.0284	Comb4-2	0.00065	0	Comb3-5	0	0	Comb3-5	0
B1014	Story3	VLIM	End-I	0.2686	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1014	Story3	VLIM	Middle	0.1043	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1014	Story3	VLIM	End-J	0.1509	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1015	Story3	VLIM	End-I	0.0209	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1015	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1015	Story3	VLIM	End-J	0.338	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1016	Story3	VLIM	End-I	0.2907	Comb3-5	0.00023	0	Comb3-5	0	0	Comb3-5	0
B1016	Story3	VLIM	Middle	0.2068	Comb4-2	0.00016	0	Comb3-5	0	0	Comb3-5	0
B1016	Story3	VLIM	End-J	0.1889	Comb3-5	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1017	Story3	VLIM	End-I	0.0106	Comb3-5	1E-05	0	Comb3-5	0	0	Comb3-5	0
B1017	Story3	VLIM	Middle	0.0402	Comb3-5	3E-05	0	Comb3-5	0	0	Comb3-5	0
B1017	Story3	VLIM	End-J	0.5508	Comb3-5	0.00044	0	Comb3-5	0	0	Comb3-5	0
B1018	Story3	VLIM	End-I	0.4739	Comb3-5	0.0003	0	Comb3-5	0	0	Comb3-5	0
B1018	Story3	VLIM	Middle	0.3342	Comb3-5	0.00021	0	Comb3-5	0	0	Comb3-5	0
B1018	Story3	VLIM	End-J	0.3126	Comb3-5	0.0002	5.152E-07	Comb3-5	0	5.152E-07	Comb3-5	0
B1019	Story3	VLIM	End-I	0.7072	Comb3-5	0.00056	5.181E-07	Comb3-5	0	5.181E-07	Comb3-5	0
B1019	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1019	Story3	VLIM	End-J	0.6953	Comb3-5	0.00055	5.181E-07	Comb3-5	0	5.181E-07	Comb3-5	0
B1020	Story3	VLIM	End-I	0.3602	Comb3-5	0.00023	0	Comb3-5	0	0	Comb3-5	0
B1020	Story3	VLIM	Middle	0.349	Comb3-5	0.00022	0	Comb3-5	0	0	Comb3-5	0
B1020	Story3	VLIM	End-J	0.3983	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1021	Story3	VLIM	End-I	0.0847	Comb4-2	5E-05	0	Comb3-5	0	0	Comb3-5	0
B1021	Story3	VLIM	Middle	0.1092	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1021	Story3	VLIM	End-J	0.0951	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1022	Story3	VLIM	End-I	0.2265	Comb3-5	0	1.248E-06	Comb3-5	0	1.248E-06	Comb3-5	0
B1022	Story3	VLIM	Middle	0.1172	Comb3-5	0	8.501E-07	Comb3-5	0	8.501E-07	Comb3-5	0
B1022	Story3	VLIM	End-J	0.1737	Comb3-5	0	6.838E-07	Comb3-5	0	6.838E-07	Comb3-5	0
B1023	Story3	VLIM	End-I	0.1104	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1023	Story3	VLIM	Middle	0.0803	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1023	Story3	VLIM	End-J	0.0822	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1024	Story3	VLIM	End-I	0.1169	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1024	Story3	VLIM	Middle	0.2929	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1024	Story3	VLIM	End-J	0.2581	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1025	Story3	VLIM	End-I	0.0579	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1025	Story3	VLIM	Middle	0.0982	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1025	Story3	VLIM	End-J	0.0392	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1026	Story3	VLIM	End-I	0.2176	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1026	Story3	VLIM	Middle	0.3172	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1026	Story3	VLIM	End-J	0.5156	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1027	Story3	VLIM	End-I	0	Comb3-5	0	8.023E-07	Comb3-5	0	8.023E-07	Comb3-5	0
B1027	Story3	VLIM	Middle	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1027	Story3	VLIM	End-J	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1028	Story3	VLIM	End-I	0.0607	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1028	Story3	VLIM	Middle	0.0889	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1028	Story3	VLIM	End-J	0.0537	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1029	Story3	VLIM	End-I	0.218	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1029	Story3	VLIM	Middle	0.2206	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1029	Story3	VLIM	End-J	0.2662	Comb3-5	0.00017	0	Comb3-5	0	0	Comb3-5	0
B1030	Story3	VLIM	End-I	1.0805	Comb4-2	0.00068	0	Comb3-5	0	0	Comb3-5	0
B1030	Story3	VLIM	Middle	1.1182	Comb4-2	0.00071	0	Comb3-5	0	0	Comb3-5	0
B1030	Story3	VLIM	End-J	1.1558	Comb4-2	0.00073	0	Comb3-5	0	0	Comb3-5	0
B1031	Story3	VLIM	End-I	0.1304	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1031	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1031	Story3	VLIM	End-J	0.1575	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1032	Story3	VLIM	End-I	0.149	Comb3-5	0	6.889E-07	Comb3-5	0	6.889E-07	Comb3-5	0
B1032	Story3	VLIM	Middle	0.1744	Comb3-5	0	1.113E-06	Comb3-5	0	1.113E-06	Comb3-5	0
B1032	Story3	VLIM	End-J	0.2677	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1033	Story3	VLIM	End-I	0.6332	Comb4-2	0.0004	0	Comb3-5	0	0	Comb3-5	0
B1033	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1033	Story3	VLIM	End-J	0.6375	Comb4-2	0.0004	0	Comb3-5	0	0	Comb3-5	0
B1034	Story3	VLIM	End-I	2.433	Comb4-2	0.00154	0	Comb3-5	0	0	Comb3-5	0
B1034	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1034	Story3	VLIM	End-J	2.6363	Comb4-2	0.00167	0	Comb3-5	0	0	Comb3-5	0
B1035	Story3	VLIM	End-I	0.2746	Comb4-2	0.00017	0	Comb3-5	0	0	Comb3-5	0
B1035	Story3	VLIM	Middle	0.3666	Comb4-2	0.00023	5.24E-07	Comb3-5	0	5.24E-07	Comb3-5	0
B1035	Story3	VLIM	End-J	0.3769	Comb4-2	0.00024	1.136E-06	Comb3-5	0	1.136E-06	Comb3-5	0
B1036	Story3	VLIM	End-I	0.4811	Comb3-5	0.0003	5.314E-07	Comb3-5	0	5.314E-07	Comb3-5	0
B1036	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1036	Story3	VLIM	End-J	0.4858	Comb3-5	0.00031	5.314E-07	Comb3-5	0	5.314E-07	Comb3-5	0
B1037	Story3	VLIM	End-I	0.484	Comb4-2	0.00031	0	Comb3-5	0	0	Comb3-5	0
B1037	Story3	VLIM	Middle	0.4149	Comb4-2	0.00026	0	Comb3-5	0	0	Comb3-5	0
B1037	Story3	VLIM	End-J	0.3608	Comb4-2	0.00023	0	Comb3-5	0	0	Comb3-5	0
B1038	Story3	VLIM	End-I	0.3672	Comb3-5	0.00023	0	Comb3-5	0	0	Comb3-5	0
B1038	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1038	Story3	VLIM	End-J	0.3966	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1044	Story3	VLIM	End-I	0.209	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1044	Story3	VLIM	Middle	0.1262	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1044	Story3	VLIM	End-J	0.1463	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1045	Story3	VLIM	End-I	0.1678	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1045	Story3	VLIM	Middle	0.1345	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1045	Story3	VLIM	End-J	0.172	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1046	Story3	VLIM	End-I	0.6431	Comb4-2	0.00041	0	Comb3-5	0	0	Comb3-5	0
B1046	Story3	VLIM	Middle	0.6037	Comb4-2	0.00038	0	Comb3-5	0	0	Comb3-5	0
B1046	Story3	VLIM	End-J	0.5089	Comb4-2	0.00032	0	Comb3-5	0	0	Comb3-5	0
B1047	Story3	VLIM	End-I	0.1813	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1047	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1047	Story3	VLIM	End-J	0.1732	Comb4-2	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1048	Story3	VLIM	End-I	0.2251	Comb4-2	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1048	Story3	VLIM	Middle	0.1875	Comb4-2	0.00012	0	Comb3-5	0	0	Comb3-5	0
B1048	Story3	VLIM	End-J	0.2339	Comb4-2	0.00015	0	Comb3-5	0	0	Comb3-5	0
B1049	Story3	VLIM	End-I	0.2002	Comb3-5	0.00013	0	Comb3-5	0	0	Comb3-5	0
B1049	Story3	VLIM	Middle	0.1814	Comb3-5	0.00011	0	Comb3-5	0	0	Comb3-5	0
B1049	Story3	VLIM	End-J	0.2164	Comb3-5	0.00014	0	Comb3-5	0	0	Comb3-5	0
B1050	Story3	VLIM	End-I	0.1323	Comb4-2	8E-05	0	Comb3-5	0	0	Comb3-5	0
B1050	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1050	Story3	VLIM	End-J	0.1424	Comb4-2	9E-05	0	Comb3-5	0	0	Comb3-5	0
B1051	Story3	VLIM	End-I	0.0362	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1051	Story3	VLIM	Middle	0		-1	0		-1	0		-1
B1051	Story3	VLIM	End-J	0.0302	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1052	Story3	VLIM	End-I	0	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1052	Story3	VLIM	Middle	0	Comb3-5	0	5.433E-07	Comb3-5	0	5.433E-07	Comb3-5	0
B1052	Story3	VLIM	End-J	0	Comb3-5	0	1.351E-06	Comb3-5	0	1.351E-06	Comb3-5	0
B1053	Story3	VLIM	End-I	0.033	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1053	Story3	VLIM	Middle	0.4904	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1053	Story3	VLIM	End-J	0.5002	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1063	Story3	VLIM	End-I	3.3784	Comb4-2	0.00214	1.343E-06	Comb3-5	0	1.343E-06	Comb3-5	0
B1063	Story3	VLIM	Middle	3.352	Comb4-2	0.00212	1.487E-06	Comb3-5	0	1.487E-06	Comb3-5	0
B1063	Story3	VLIM	End-J	3.1079	Comb4-2	0.00196	1.487E-06	Comb3-5	0	1.487E-06	Comb3-5	0
B1064	Story3	VLIM	End-I	0	Comb3-5	0	1.704E-06	Comb3-5	0	1.704E-06	Comb3-5	0
B1064	Story3	VLIM	Middle	0	Comb3-5	0	1.704E-06	Comb3-5	0	1.704E-06	Comb3-5	0
B1064	Story3	VLIM	End-J	0	Comb3-5	0	1.703E-06	Comb3-5	0	1.703E-06	Comb3-5	0
B1065	Story3	VLIM	End-I	0.064	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1065	Story3	VLIM	Middle	0.0867	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1065	Story3	VLIM	End-J	0.3455	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1066	Story3	VLIM	End-I	0.0674	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1066	Story3	VLIM	Middle	0.2316	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1066	Story3	VLIM	End-J	0.2195	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1067	Story3	VLIM	End-I	1.3332	Comb4-2	0.00042	5.236E-07	Comb3-5	0	5.236E-07	Comb3-5	0
B1067	Story3	VLIM	Middle	1.2872	Comb4-2	0.00042	0	Comb3-5	0	0	Comb3-5	0
B1067	Story3	VLIM	End-J	0.1631	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1068	Story3	VLIM	End-I	0.0422	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B1068	Story3	VLIM	Middle	0.0482	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1068	Story3	VLIM	End-J	0.0613	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1069	Story3	VLIM	End-I	0.5495	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1069	Story3	VLIM	Middle	0.3006	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1069	Story3	VLIM	End-J	0.2525	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1070	Story3	VLIM	End-I	0.2081	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1070	Story3	VLIM	Middle	0.161	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1070	Story3	VLIM	End-J	0.3497	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1	Base	VB	End-I	0.6651	Comb3-5	0.00025	1.589E-06	Comb3-5	0	1.589E-06	Comb3-5	0
B1	Base	VB	Middle	0.7461	Comb3-5	0.00025	3.171E-06	Comb3-5	0	3.171E-06	Comb3-5	0
B1	Base	VB	End-J	0.9579	Comb3-5	0.00025	3.156E-06	Comb3-5	0	3.156E-06	Comb3-5	0
B2	Base	VB	End-I	0.6618	Comb3-5	0.00025	4.427E-06	Comb3-5	0	4.427E-06	Comb3-5	0
B2	Base	VB	Middle	0.66	Comb3-5	0.00025	9.586E-07	Comb3-5	0	9.586E-07	Comb3-5	0
B2	Base	VB	End-J	0.6661	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B17	Base	VB	End-I	0.1322	Comb3-5	0	8.93E-06	Comb3-5	0	8.93E-06	Comb3-5	0
B17	Base	VB	Middle	0.1488	Comb3-5	0.00025	1.159E-06	Comb3-5	0	1.159E-06	Comb3-5	0
B17	Base	VB	End-J	0.0808	Comb3-5	0.00025	7.476E-07	Comb3-5	0	7.476E-07	Comb3-5	0
B18	Base	VB	End-I	0.9462	Comb3-5	0.00025	1.175E-06	Comb3-5	0	1.175E-06	Comb3-5	0
B18	Base	VB	Middle	0.8588	Comb3-5	0.00025	1.476E-06	Comb3-5	0	1.476E-06	Comb3-5	0
B18	Base	VB	End-J	0.8588	Comb3-5	0.00025	1.476E-06	Comb3-5	0	1.476E-06	Comb3-5	0
B19	Base	VB	End-I	2.052	Comb3-5	0.00025	5.195E-06	Comb3-5	0	5.195E-06	Comb3-5	0
B19	Base	VB	Middle	2.5745	Comb3-5	0.00025	2.011E-06	Comb3-5	0	2.011E-06	Comb3-5	0
B19	Base	VB	End-J	2.1665	Comb3-5	0.00025	1.879E-06	Comb3-5	0	1.879E-06	Comb3-5	0
B20	Base	VB	End-I	1.6498	Comb3-5	0.00025	2.71E-06	Comb3-5	0	2.71E-06	Comb3-5	0
B20	Base	VB	Middle	2.3441	Comb3-5	0.00025	2.16E-06	Comb3-5	0	2.16E-06	Comb3-5	0
B20	Base	VB	End-J	2.3441	Comb3-5	0.00025	2.16E-06	Comb3-5	0	2.16E-06	Comb3-5	0
B41	Base	VB	End-I	0.6533	Comb3-5	0.00025	5.686E-07	Comb3-5	0	5.686E-07	Comb3-5	0
B41	Base	VB	Middle	0		-1	0		-1	0		-1
B41	Base	VB	End-J	0.6533	Comb3-5	0.00025	5.686E-07	Comb3-5	0	5.686E-07	Comb3-5	0
B42	Base	VB	End-I	1.0252	Comb3-5	0.00025	1.276E-06	Comb3-5	0	1.276E-06	Comb3-5	0
B42	Base	VB	Middle	1.1942	Comb3-5	0.00025	3.884E-06	Comb3-5	0	3.884E-06	Comb3-5	0
B42	Base	VB	End-J	1.1071	Comb3-5	0.00025	3.853E-06	Comb3-5	0	3.853E-06	Comb3-5	0
B43	Base	VB	End-I	0.6543	Comb3-5	0.00025	4.882E-06	Comb3-5	0	4.882E-06	Comb3-5	0
B43	Base	VB	Middle	0.6396	Comb3-5	0.00025	8.146E-07	Comb3-5	0	8.146E-07	Comb3-5	0
B43	Base	VB	End-J	0.5584	Comb3-5	0.00025	1.23E-06	Comb3-5	0	1.23E-06	Comb3-5	0
B44	Base	VB	End-I	1.2011	Comb3-5	0.00025	8.427E-07	Comb3-5	0	8.427E-07	Comb3-5	0
B44	Base	VB	Middle	1.4483	Comb3-5	0.00025	8.226E-07	Comb3-5	0	8.226E-07	Comb3-5	0
B44	Base	VB	End-J	1.4483	Comb3-5	0.00025	8.226E-07	Comb3-5	0	8.226E-07	Comb3-5	0
B61	Base	VB	End-I	4.4661	Comb3-5	0.00025	1.468E-05	Comb3-5	0	1.468E-05	Comb3-5	0
B61	Base	VB	Middle	4.4119	Comb3-5	0.00025	4.01E-06	Comb3-5	0	4.01E-06	Comb3-5	0
B61	Base	VB	End-J	4.4119	Comb3-5	0.00025	4.01E-06	Comb3-5	0	4.01E-06	Comb3-5	0
B62	Base	VB	End-I	3.6068	Comb3-5	0.00025	2.509E-06	Comb3-5	0	2.509E-06	Comb3-5	0
B62	Base	VB	Middle	3.4381	Comb3-5	0.00025	2.543E-06	Comb3-5	0	2.543E-06	Comb3-5	0
B62	Base	VB	End-J	3.5181	Comb3-5	0.00025	2.849E-06	Comb3-5	0	2.849E-06	Comb3-5	0
B63	Base	VB	End-I	0.8596	Comb3-5	0.00025	2.093E-06	Comb3-5	0	2.093E-06	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B63	Base	VB	Middle	0.8676	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B63	Base	VB	End-J	1.1584	Comb3-5	0.00025	2.328E-06	Comb3-5	0	2.328E-06	Comb3-5	0
B64	Base	VB	End-I	4.495	Comb3-5	0.00025	5.057E-06	Comb3-5	0	5.057E-06	Comb3-5	0
B64	Base	VB	Middle	4.4303	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B64	Base	VB	End-J	4.4303	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B65	Base	VB	End-I	5.256	Comb4-2	0.00026	2.133E-06	Comb3-5	0	2.133E-06	Comb3-5	0
B65	Base	VB	Middle	5.256	Comb4-2	0.00026	3.13E-06	Comb3-5	0	3.13E-06	Comb3-5	0
B65	Base	VB	End-J	4.6994	Comb3-5	0.00025	3.47E-06	Comb3-5	0	3.47E-06	Comb3-5	0
B66	Base	VB	End-I	1.826	Comb3-5	0.00025	9.813E-06	Comb3-5	0	9.813E-06	Comb3-5	0
B66	Base	VB	Middle	1.5963	Comb3-5	0.00025	9.168E-06	Comb3-5	0	9.168E-06	Comb3-5	0
B66	Base	VB	End-J	1.5963	Comb3-5	0.00025	9.168E-06	Comb3-5	0	9.168E-06	Comb3-5	0
B67	Base	VB	End-I	2.5113	Comb3-5	0.00025	1.782E-06	Comb3-5	0	1.782E-06	Comb3-5	0
B67	Base	VB	Middle	2.6145	Comb3-5	0.00025	1.36E-06	Comb3-5	0	1.36E-06	Comb3-5	0
B67	Base	VB	End-J	2.6145	Comb3-5	0.00025	1.36E-06	Comb3-5	0	1.36E-06	Comb3-5	0
B68	Base	VB	End-I	9.147	Comb4-2	0.00044	2.289E-06	Comb3-5	0	2.289E-06	Comb3-5	0
B68	Base	VB	Middle	9.2332	Comb4-2	0.00045	2.173E-06	Comb3-5	0	2.173E-06	Comb3-5	0
B68	Base	VB	End-J	9.2332	Comb4-2	0.00045	2.173E-06	Comb3-5	0	2.173E-06	Comb3-5	0
B69	Base	VB	End-I	3.0849	Comb3-5	0.00025	7.81E-06	Comb3-5	0	7.81E-06	Comb3-5	0
B69	Base	VB	Middle	3.3647	Comb3-5	0.00025	6.323E-06	Comb3-5	0	6.323E-06	Comb3-5	0
B69	Base	VB	End-J	3.8788	Comb3-5	0.00025	4.339E-06	Comb3-5	0	4.339E-06	Comb3-5	0
B70	Base	VB	End-I	3.4445	Comb3-5	0.00025	4.516E-06	Comb3-5	0	4.516E-06	Comb3-5	0
B70	Base	VB	Middle	3.3569	Comb3-5	0.00025	7.105E-07	Comb3-5	0	7.105E-07	Comb3-5	0
B70	Base	VB	End-J	3.4352	Comb3-5	0.00025	6.843E-07	Comb3-5	0	6.843E-07	Comb3-5	0
B71	Base	VB	End-I	2.8866	Comb3-5	0.00025	4.145E-06	Comb3-5	0	4.145E-06	Comb3-5	0
B71	Base	VB	Middle	2.6904	Comb3-5	0.00025	1.313E-06	Comb3-5	0	1.313E-06	Comb3-5	0
B71	Base	VB	End-J	2.5618	Comb3-5	0.00025	1.302E-06	Comb3-5	0	1.302E-06	Comb3-5	0
B72	Base	VB	End-I	1.8793	Comb3-5	0	3.561E-06	Comb3-5	0	3.561E-06	Comb3-5	0
B72	Base	VB	Middle	1.8852	Comb3-5	0	1.577E-06	Comb3-5	0	1.577E-06	Comb3-5	0
B72	Base	VB	End-J	2.9046	Comb3-5	0	8.707E-06	Comb3-5	0	8.707E-06	Comb3-5	0
B73	Base	VB	End-I	3.0778	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B73	Base	VB	Middle	3.3633	Comb3-5	0.00025	1.033E-06	Comb3-5	0	1.033E-06	Comb3-5	0
B73	Base	VB	End-J	3.3633	Comb3-5	0.00025	1.033E-06	Comb3-5	0	1.033E-06	Comb3-5	0
B78	Base	VB	End-I	2.5825	Comb3-5	0.00025	2.096E-06	Comb3-5	0	2.096E-06	Comb3-5	0
B78	Base	VB	Middle	2.4653	Comb3-5	0.00025	3.146E-06	Comb3-5	0	3.146E-06	Comb3-5	0
B78	Base	VB	End-J	2.6852	Comb3-5	0.00025	3.701E-06	Comb3-5	0	3.701E-06	Comb3-5	0
B79	Base	VB	End-I	5.5087	Comb4-2	0.00027	2.352E-06	Comb3-5	0	2.352E-06	Comb3-5	0
B79	Base	VB	Middle	5.5528	Comb4-2	0.00027	3.99E-06	Comb3-5	0	3.99E-06	Comb3-5	0
B79	Base	VB	End-J	5.5528	Comb4-2	0.00027	3.99E-06	Comb3-5	0	3.99E-06	Comb3-5	0
B80	Base	VB	End-I	1.3505	Comb3-5	0.00025	7.138E-07	Comb3-5	0	7.138E-07	Comb3-5	0
B80	Base	VB	Middle	1.5912	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B80	Base	VB	End-J	1.5912	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B81	Base	VB	End-I	1.1643	Comb3-5	0.00025	4.104E-06	Comb3-5	0	4.104E-06	Comb3-5	0
B81	Base	VB	Middle	1.2645	Comb3-5	0.00025	3.371E-06	Comb3-5	0	3.371E-06	Comb3-5	0
B81	Base	VB	End-J	1.1057	Comb3-5	0.00025	3.322E-06	Comb3-5	0	3.322E-06	Comb3-5	0
B82	Base	VB	End-I	1.6951	Comb3-5	0.00025	4.175E-06	Comb3-5	0	4.175E-06	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B82	Base	VB	Middle	1.7238	Comb3-5	0.00025	4.248E-06	Comb3-5	0	4.248E-06	Comb3-5	0
B82	Base	VB	End-J	1.7238	Comb3-5	0.00025	4.248E-06	Comb3-5	0	4.248E-06	Comb3-5	0
B83	Base	VB	End-I	2.7418	Comb3-5	0.00025	8.279E-07	Comb3-5	0	8.279E-07	Comb3-5	0
B83	Base	VB	Middle	3.1649	Comb3-5	0.00025	7.536E-06	Comb3-5	0	7.536E-06	Comb3-5	0
B83	Base	VB	End-J	3.1649	Comb3-5	0.00025	7.536E-06	Comb3-5	0	7.536E-06	Comb3-5	0
B84	Base	VB	End-I	2.0336	Comb3-5	0.00025	2.301E-06	Comb3-5	0	2.301E-06	Comb3-5	0
B84	Base	VB	Middle	2.1177	Comb3-5	0.00025	2E-06	Comb3-5	0	2E-06	Comb3-5	0
B84	Base	VB	End-J	2.1177	Comb3-5	0.00025	2E-06	Comb3-5	0	2E-06	Comb3-5	0
B85	Base	VB	End-I	1.6829	Comb3-5	0.00025	8.366E-07	Comb3-5	0	8.366E-07	Comb3-5	0
B85	Base	VB	Middle	1.7401	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B85	Base	VB	End-J	1.7401	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B86	Base	VB	End-I	1.4148	Comb3-5	0.00025	4.499E-06	Comb3-5	0	4.499E-06	Comb3-5	0
B86	Base	VB	Middle	1.1734	Comb3-5	0.00025	2.193E-06	Comb3-5	0	2.193E-06	Comb3-5	0
B86	Base	VB	End-J	1.1955	Comb3-5	0.00025	1.511E-06	Comb3-5	0	1.511E-06	Comb3-5	0
B87	Base	VB	End-I	2.9609	Comb3-5	0.00025	4.203E-06	Comb3-5	0	4.203E-06	Comb3-5	0
B87	Base	VB	Middle	0		-1	0		-1	0		-1
B87	Base	VB	End-J	2.9609	Comb3-5	0.00025	4.203E-06	Comb3-5	0	4.203E-06	Comb3-5	0
B98	Base	VB	End-I	1.2742	Comb3-5	0.00025	3.223E-06	Comb3-5	0	3.223E-06	Comb3-5	0
B98	Base	VB	Middle	1.9927	Comb3-5	0.00025	1.53E-06	Comb3-5	0	1.53E-06	Comb3-5	0
B98	Base	VB	End-J	1.9927	Comb3-5	0.00025	1.53E-06	Comb3-5	0	1.53E-06	Comb3-5	0
B99	Base	VB	End-I	1.2803	Comb3-5	0.00025	4.739E-06	Comb3-5	0	4.739E-06	Comb3-5	0
B99	Base	VB	Middle	1.8656	Comb3-5	0.00025	3.709E-06	Comb3-5	0	3.709E-06	Comb3-5	0
B99	Base	VB	End-J	1.8656	Comb3-5	0.00025	3.709E-06	Comb3-5	0	3.709E-06	Comb3-5	0
B103	Base	VB	End-I	5.7919	Comb4-2	0.00028	2.317E-06	Comb3-5	0	2.317E-06	Comb3-5	0
B103	Base	VB	Middle	0		-1	0		-1	0		-1
B103	Base	VB	End-J	5.7919	Comb4-2	0.00028	2.317E-06	Comb3-5	0	2.317E-06	Comb3-5	0
B104	Base	VB	End-I	0.8326	Comb3-5	0.00025	1.568E-06	Comb3-5	0	1.568E-06	Comb3-5	0
B104	Base	VB	Middle	0.8526	Comb3-5	0.00025	2.566E-06	Comb3-5	0	2.566E-06	Comb3-5	0
B104	Base	VB	End-J	0.907	Comb3-5	0.00025	2.964E-06	Comb3-5	0	2.964E-06	Comb3-5	0
B105	Base	VB	End-I	6.1433	Comb4-2	0.0003	4.737E-06	Comb3-5	0	4.737E-06	Comb3-5	0
B105	Base	VB	Middle	0		-1	0		-1	0		-1
B105	Base	VB	End-J	6.1433	Comb4-2	0.0003	4.737E-06	Comb3-5	0	4.737E-06	Comb3-5	0
B106	Base	VB	End-I	6.8177	Comb4-2	0.00033	7.31E-06	Comb3-5	0	7.31E-06	Comb3-5	0
B106	Base	VB	Middle	0		-1	0		-1	0		-1
B106	Base	VB	End-J	6.8177	Comb4-2	0.00033	7.31E-06	Comb3-5	0	7.31E-06	Comb3-5	0
B119	Base	VB	End-I	1.6096	Comb3-5	0.00025	5.814E-07	Comb3-5	0	5.814E-07	Comb3-5	0
B119	Base	VB	Middle	1.9709	Comb3-5	0.00025	3.226E-06	Comb3-5	0	3.226E-06	Comb3-5	0
B119	Base	VB	End-J	1.9709	Comb3-5	0.00025	3.226E-06	Comb3-5	0	3.226E-06	Comb3-5	0
B169	Base	VB	End-I	7.8946	Comb4-2	0.00038	1.761E-06	Comb3-5	0	1.761E-06	Comb3-5	0
B169	Base	VB	Middle	0		-1	0		-1	0		-1
B169	Base	VB	End-J	7.8946	Comb4-2	0.00038	1.761E-06	Comb3-5	0	1.761E-06	Comb3-5	0
B193	Base	VB	End-I	1.7971	Comb3-5	0.00025	4.465E-06	Comb3-5	0	4.465E-06	Comb3-5	0
B193	Base	VB	Middle	1.9487	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B193	Base	VB	End-J	1.9487	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B194	Base	VB	End-I	2.6418	Comb3-5	0.00025	8.339E-07	Comb3-5	0	8.339E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B194	Base	VB	Middle	0		-1	0		-1	0		-1
B194	Base	VB	End-J	2.6418	Comb3-5	0.00025	8.339E-07	Comb3-5	0	8.339E-07	Comb3-5	0
B195	Base	VB	End-I	2.2628	Comb3-5	0.00025	5.492E-06	Comb3-5	0	5.492E-06	Comb3-5	0
B195	Base	VB	Middle	1.9256	Comb3-5	0.00025	4.888E-06	Comb3-5	0	4.888E-06	Comb3-5	0
B195	Base	VB	End-J	1.9256	Comb3-5	0.00025	4.888E-06	Comb3-5	0	4.888E-06	Comb3-5	0
B196	Base	VB	End-I	1.0634	Comb3-5	0.00025	3.804E-06	Comb3-5	0	3.804E-06	Comb3-5	0
B196	Base	VB	Middle	1.0707	Comb3-5	0.00025	3.623E-06	Comb3-5	0	3.623E-06	Comb3-5	0
B196	Base	VB	End-J	1.1415	Comb3-5	0.00025	1.575E-06	Comb3-5	0	1.575E-06	Comb3-5	0
B197	Base	VB	End-I	2.2483	Comb3-5	0.00025	2.03E-06	Comb3-5	0	2.03E-06	Comb3-5	0
B197	Base	VB	Middle	2.5156	Comb3-5	0.00025	8.541E-07	Comb3-5	0	8.541E-07	Comb3-5	0
B197	Base	VB	End-J	2.223	Comb3-5	0.00025	8.086E-07	Comb3-5	0	8.086E-07	Comb3-5	0
B198	Base	VB	End-I	10.7147	Comb4-2	0.00052	1.732E-06	Comb3-5	0	1.732E-06	Comb3-5	0
B198	Base	VB	Middle	0		-1	0		-1	0		-1
B198	Base	VB	End-J	10.7147	Comb4-2	0.00052	1.732E-06	Comb3-5	0	1.732E-06	Comb3-5	0
B199	Base	VB	End-I	3.5497	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B199	Base	VB	Middle	3.5137	Comb3-5	0.00025	3.734E-06	Comb3-5	0	3.734E-06	Comb3-5	0
B199	Base	VB	End-J	3.5243	Comb3-5	0.00025	4.761E-06	Comb3-5	0	4.761E-06	Comb3-5	0
B200	Base	VB	End-I	3.1546	Comb3-5	0.00025	3.421E-06	Comb3-5	0	3.421E-06	Comb3-5	0
B200	Base	VB	Middle	3.0282	Comb3-5	0.00025	8.261E-06	Comb3-5	0	8.261E-06	Comb3-5	0
B200	Base	VB	End-J	3.4655	Comb3-5	0.00025	9.946E-06	Comb3-5	0	9.946E-06	Comb3-5	0
B201	Base	VB	End-I	8.0044	Comb4-2	0.00039	1.578E-06	Comb3-5	0	1.578E-06	Comb3-5	0
B201	Base	VB	Middle	8.0044	Comb4-2	0.00039	1.717E-06	Comb3-5	0	1.717E-06	Comb3-5	0
B201	Base	VB	End-J	7.9185	Comb4-2	0.00039	1.717E-06	Comb3-5	0	1.717E-06	Comb3-5	0
B202	Base	VB	End-I	1.0165	Comb3-5	0.00025	1.408E-06	Comb3-5	0	1.408E-06	Comb3-5	0
B202	Base	VB	Middle	1.0224	Comb3-5	0.00025	8.616E-06	Comb3-5	0	8.616E-06	Comb3-5	0
B202	Base	VB	End-J	1.199	Comb3-5	0.00025	8.52E-06	Comb3-5	0	8.52E-06	Comb3-5	0
B203	Base	VB	End-I	3.3432	Comb3-5	0.00025	2.107E-06	Comb3-5	0	2.107E-06	Comb3-5	0
B203	Base	VB	Middle	3.5393	Comb3-5	0.00025	3.19E-06	Comb3-5	0	3.19E-06	Comb3-5	0
B203	Base	VB	End-J	3.6325	Comb3-5	0.00025	3.653E-06	Comb3-5	0	3.653E-06	Comb3-5	0
B204	Base	VB	End-I	4.8426	Comb3-5	0.00025	3.698E-06	Comb3-5	0	3.698E-06	Comb3-5	0
B204	Base	VB	Middle	5.7938	Comb4-2	0.00028	1.079E-05	Comb3-5	0	1.079E-05	Comb3-5	0
B204	Base	VB	End-J	5.7938	Comb4-2	0.00028	1.079E-05	Comb3-5	0	1.079E-05	Comb3-5	0
B205	Base	VB	End-I	0.9005	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B205	Base	VB	Middle	0.907	Comb3-5	0.00025	1.238E-06	Comb3-5	0	1.238E-06	Comb3-5	0
B205	Base	VB	End-J	1.0707	Comb3-5	0.00025	1.776E-06	Comb3-5	0	1.776E-06	Comb3-5	0
B206	Base	VB	End-I	4.1212	Comb3-5	0.00025	1.236E-06	Comb3-5	0	1.236E-06	Comb3-5	0
B206	Base	VB	Middle	4.1152	Comb3-5	0.00025	1.695E-06	Comb3-5	0	1.695E-06	Comb3-5	0
B206	Base	VB	End-J	4.0745	Comb3-5	0.00025	2.007E-06	Comb3-5	0	2.007E-06	Comb3-5	0
B207	Base	VB	End-I	4.6406	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B207	Base	VB	Middle	5.2728	Comb4-2	0.00026	1.355E-05	Comb3-5	0	1.355E-05	Comb3-5	0
B207	Base	VB	End-J	5.6192	Comb4-2	0.00027	1.368E-05	Comb3-5	0	1.368E-05	Comb3-5	0
B208	Base	VB	End-I	13.617	Comb4-2	0.00066	1.937E-06	Comb3-5	0	1.937E-06	Comb3-5	0
B208	Base	VB	Middle	0		-1	0		-1	0		-1
B208	Base	VB	End-J	13.617	Comb4-2	0.00066	1.937E-06	Comb3-5	0	1.937E-06	Comb3-5	0
B209	Base	VB	End-I	4.517	Comb3-5	0.00025	3.058E-06	Comb3-5	0	3.058E-06	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B209	Base	VB	Middle	5.1782	Comb4-2	0.00025	9.712E-06	Comb3-5	0	9.712E-06	Comb3-5	0
B209	Base	VB	End-J	5.1782	Comb4-2	0.00025	9.712E-06	Comb3-5	0	9.712E-06	Comb3-5	0
B225	Base	VB	End-I	4.1919	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B225	Base	VB	Middle	4.1391	Comb3-5	0.00025	3.344E-06	Comb3-5	0	3.344E-06	Comb3-5	0
B225	Base	VB	End-J	4.1391	Comb3-5	0.00025	3.344E-06	Comb3-5	0	3.344E-06	Comb3-5	0
B226	Base	VB	End-I	4.2695	Comb3-5	0.00025	1.574E-06	Comb3-5	0	1.574E-06	Comb3-5	0
B226	Base	VB	Middle	4.2773	Comb3-5	0.00025	6.903E-07	Comb3-5	0	6.903E-07	Comb3-5	0
B226	Base	VB	End-J	4.2773	Comb3-5	0.00025	6.903E-07	Comb3-5	0	6.903E-07	Comb3-5	0
B228	Base	VB	End-I	2.296	Comb3-5	0.00025	2.14E-06	Comb3-5	0	2.14E-06	Comb3-5	0
B228	Base	VB	Middle	2.1223	Comb3-5	0.00025	2.781E-06	Comb3-5	0	2.781E-06	Comb3-5	0
B228	Base	VB	End-J	2.1223	Comb3-5	0.00025	2.781E-06	Comb3-5	0	2.781E-06	Comb3-5	0
B229	Base	VB	End-I	1.3248	Comb3-5	0.00025	3.33E-06	Comb3-5	0	3.33E-06	Comb3-5	0
B229	Base	VB	Middle	0.9733	Comb3-5	0.00025	3.261E-06	Comb3-5	0	3.261E-06	Comb3-5	0
B229	Base	VB	End-J	0.9733	Comb3-5	0.00025	3.261E-06	Comb3-5	0	3.261E-06	Comb3-5	0
B230	Base	VB	End-I	1.7215	Comb3-5	0	1.146E-06	Comb3-5	0	1.146E-06	Comb3-5	0
B230	Base	VB	Middle	1.9107	Comb3-5	0	3.719E-06	Comb3-5	0	3.719E-06	Comb3-5	0
B230	Base	VB	End-J	2.6373	Comb3-5	0	1.377E-05	Comb3-5	0	1.377E-05	Comb3-5	0
B231	Base	VB	End-I	2.6928	Comb3-5	0.00025	7.559E-07	Comb3-5	0	7.559E-07	Comb3-5	0
B231	Base	VB	Middle	2.7784	Comb3-5	0.00025	1.61E-06	Comb3-5	0	1.61E-06	Comb3-5	0
B231	Base	VB	End-J	2.7784	Comb3-5	0.00025	1.61E-06	Comb3-5	0	1.61E-06	Comb3-5	0
B232	Base	VB	End-I	2.2752	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B232	Base	VB	Middle	2.2382	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B232	Base	VB	End-J	2.2382	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B233	Base	VB	End-I	1.7757	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B233	Base	VB	Middle	1.3714	Comb3-5	0.00025	1.554E-06	Comb3-5	0	1.554E-06	Comb3-5	0
B233	Base	VB	End-J	1.3714	Comb3-5	0.00025	1.554E-06	Comb3-5	0	1.554E-06	Comb3-5	0
B234	Base	VB	End-I	1.205	Comb3-5	0.00025	1.137E-06	Comb3-5	0	1.137E-06	Comb3-5	0
B234	Base	VB	Middle	1.3255	Comb3-5	0.00025	4.46E-06	Comb3-5	0	4.46E-06	Comb3-5	0
B234	Base	VB	End-J	1.3255	Comb3-5	0.00025	4.46E-06	Comb3-5	0	4.46E-06	Comb3-5	0
B235	Base	VB	End-I	2.4358	Comb3-5	0.00025	5.636E-06	Comb3-5	0	5.636E-06	Comb3-5	0
B235	Base	VB	Middle	0		-1	0		-1	0		-1
B235	Base	VB	End-J	2.4358	Comb3-5	0.00025	5.636E-06	Comb3-5	0	5.636E-06	Comb3-5	0
B248	Base	VB	End-I	4.6823	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B248	Base	VB	Middle	4.6849	Comb3-5	0.00025	3.085E-06	Comb3-5	0	3.085E-06	Comb3-5	0
B248	Base	VB	End-J	4.5112	Comb3-5	0.00025	2.313E-06	Comb3-5	0	2.313E-06	Comb3-5	0
B249	Base	VB	End-I	8.8489	Comb4-2	0.00043	5.717E-07	Comb3-5	0	5.717E-07	Comb3-5	0
B249	Base	VB	Middle	0		-1	0		-1	0		-1
B249	Base	VB	End-J	8.8489	Comb4-2	0.00043	5.717E-07	Comb3-5	0	5.717E-07	Comb3-5	0
B250	Base	VB	End-I	4.6959	Comb3-5	0.00025	2.608E-06	Comb3-5	0	2.608E-06	Comb3-5	0
B250	Base	VB	Middle	4.8385	Comb3-5	0.00025	1.584E-06	Comb3-5	0	1.584E-06	Comb3-5	0
B250	Base	VB	End-J	4.6424	Comb3-5	0.00025	7.707E-07	Comb3-5	0	7.707E-07	Comb3-5	0
B251	Base	VB	End-I	6.7043	Comb4-2	0.00033	1.887E-06	Comb3-5	0	1.887E-06	Comb3-5	0
B251	Base	VB	Middle	0		-1	0		-1	0		-1
B251	Base	VB	End-J	6.7043	Comb4-2	0.00033	1.887E-06	Comb3-5	0	1.887E-06	Comb3-5	0
B252	Base	VB	End-I	7.0281	Comb4-2	0.00034	2.847E-06	Comb3-5	0	2.847E-06	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B252	Base	VB	Middle	7.0281	Comb4-2	0.00034	2.427E-06	Comb3-5	0	2.427E-06	Comb3-5	0
B252	Base	VB	End-J	6.9916	Comb4-2	0.00034	0	Comb3-5	0	0	Comb3-5	0
B253	Base	VB	End-I	3.2774	Comb3-5	0.00025	1.2E-06	Comb3-5	0	1.2E-06	Comb3-5	0
B253	Base	VB	Middle	3.1332	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B253	Base	VB	End-J	3.2101	Comb3-5	0.00025	1.466E-06	Comb3-5	0	1.466E-06	Comb3-5	0
B254	Base	VB	End-I	4.6493	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B254	Base	VB	Middle	4.6897	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B254	Base	VB	End-J	4.6897	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B255	Base	VB	End-I	6.8811	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B255	Base	VB	Middle	0		-1	0		-1	0		-1
B255	Base	VB	End-J	6.8811	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B256	Base	VB	End-I	0.865	Comb3-5	0.00025	1.57E-06	Comb3-5	0	1.57E-06	Comb3-5	0
B256	Base	VB	Middle	0.9193	Comb3-5	0.00025	5.698E-07	Comb3-5	0	5.698E-07	Comb3-5	0
B256	Base	VB	End-J	0.8516	Comb3-5	0.00025	5.381E-07	Comb3-5	0	5.381E-07	Comb3-5	0
B257	Base	VB	End-I	0.5865	Comb3-5	0.00025	1.188E-06	Comb3-5	0	1.188E-06	Comb3-5	0
B257	Base	VB	Middle	0.4087	Comb3-5	0.00025	3.82E-06	Comb3-5	0	3.82E-06	Comb3-5	0
B257	Base	VB	End-J	0.461	Comb3-5	0.00025	4.308E-06	Comb3-5	0	4.308E-06	Comb3-5	0
B258	Base	VB	End-I	5.3749	Comb4-2	0.00026	1.36E-05	Comb3-5	0	1.36E-05	Comb3-5	0
B258	Base	VB	Middle	5.3749	Comb4-2	0.00026	3.392E-06	Comb3-5	0	3.392E-06	Comb3-5	0
B258	Base	VB	End-J	5.0082	Comb3-5	0.00025	3.392E-06	Comb3-5	0	3.392E-06	Comb3-5	0
B259	Base	VB	End-I	3.062	Comb3-5	0.00025	4.669E-06	Comb3-5	0	4.669E-06	Comb3-5	0
B259	Base	VB	Middle	2.7365	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B259	Base	VB	End-J	2.8412	Comb3-5	0.00025	1.192E-06	Comb3-5	0	1.192E-06	Comb3-5	0
B260	Base	VB	End-I	1.5212	Comb3-5	0.00025	1.137E-06	Comb3-5	0	1.137E-06	Comb3-5	0
B260	Base	VB	Middle	1.4887	Comb3-5	0.00025	1.836E-06	Comb3-5	0	1.836E-06	Comb3-5	0
B260	Base	VB	End-J	1.4887	Comb3-5	0.00025	1.836E-06	Comb3-5	0	1.836E-06	Comb3-5	0
B261	Base	VB	End-I	2.6906	Comb3-5	0.00025	4.255E-06	Comb3-5	0	4.255E-06	Comb3-5	0
B261	Base	VB	Middle	2.3202	Comb3-5	0.00025	5.332E-07	Comb3-5	0	5.332E-07	Comb3-5	0
B261	Base	VB	End-J	2.5249	Comb3-5	0.00025	1.695E-06	Comb3-5	0	1.695E-06	Comb3-5	0
B262	Base	VB	End-I	2.0513	Comb3-5	0.00025	4.117E-06	Comb3-5	0	4.117E-06	Comb3-5	0
B262	Base	VB	Middle	1.9295	Comb3-5	0.00025	4.252E-06	Comb3-5	0	4.252E-06	Comb3-5	0
B262	Base	VB	End-J	1.9295	Comb3-5	0.00025	4.252E-06	Comb3-5	0	4.252E-06	Comb3-5	0
B263	Base	VB	End-I	3.8381	Comb3-5	0.00025	3.529E-06	Comb3-5	0	3.529E-06	Comb3-5	0
B263	Base	VB	Middle	3.614	Comb3-5	0.00025	1.273E-06	Comb3-5	0	1.273E-06	Comb3-5	0
B263	Base	VB	End-J	4.0683	Comb3-5	0.00025	4.03E-06	Comb3-5	0	4.03E-06	Comb3-5	0
B264	Base	VB	End-I	7.6338	Comb4-2	0.00037	7.354E-07	Comb3-5	0	7.354E-07	Comb3-5	0
B264	Base	VB	Middle	8.0666	Comb4-2	0.00039	1.853E-06	Comb3-5	0	1.853E-06	Comb3-5	0
B264	Base	VB	End-J	7.4875	Comb4-2	0.00036	1.853E-06	Comb3-5	0	1.853E-06	Comb3-5	0
B265	Base	VB	End-I	7.9917	Comb4-2	0.00039	2.506E-06	Comb3-5	0	2.506E-06	Comb3-5	0
B265	Base	VB	Middle	8.3698	Comb4-2	0.00041	3.924E-06	Comb3-5	0	3.924E-06	Comb3-5	0
B265	Base	VB	End-J	7.791	Comb4-2	0.00038	3.924E-06	Comb3-5	0	3.924E-06	Comb3-5	0
B266	Base	VB	End-I	5.3713	Comb4-2	0.00026	1.346E-06	Comb3-5	0	1.346E-06	Comb3-5	0
B266	Base	VB	Middle	3.7223	Comb3-5	0.00025	6.55E-07	Comb3-5	0	6.55E-07	Comb3-5	0
B266	Base	VB	End-J	4.1667	Comb3-5	0.00025	1.768E-06	Comb3-5	0	1.768E-06	Comb3-5	0
B267	Base	VB	End-I	4.5215	Comb3-5	0.00025	6.793E-07	Comb3-5	0	6.793E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B267	Base	VB	Middle	4.3952	Comb3-5	0.00025	1.107E-06	Comb3-5	0	1.107E-06	Comb3-5	0
B267	Base	VB	End-J	4.3952	Comb3-5	0.00025	1.107E-06	Comb3-5	0	1.107E-06	Comb3-5	0
B268	Base	VB	End-I	3.6591	Comb3-5	0.00025	1.073E-06	Comb3-5	0	1.073E-06	Comb3-5	0
B268	Base	VB	Middle	4.2229	Comb3-5	0.00025	1.121E-06	Comb3-5	0	1.121E-06	Comb3-5	0
B268	Base	VB	End-J	4.2229	Comb3-5	0.00025	1.121E-06	Comb3-5	0	1.121E-06	Comb3-5	0
B269	Base	VB	End-I	3.5083	Comb3-5	0.00025	4.264E-06	Comb3-5	0	4.264E-06	Comb3-5	0
B269	Base	VB	Middle	3.5624	Comb3-5	0.00025	1.454E-06	Comb3-5	0	1.454E-06	Comb3-5	0
B269	Base	VB	End-J	3.6855	Comb3-5	0.00025	1.722E-06	Comb3-5	0	1.722E-06	Comb3-5	0
B270	Base	VB	End-I	0.5556	Comb3-5	0.00025	1.214E-06	Comb3-5	0	1.214E-06	Comb3-5	0
B270	Base	VB	Middle	0.8683	Comb3-5	0.00025	1.242E-06	Comb3-5	0	1.242E-06	Comb3-5	0
B270	Base	VB	End-J	0.8683	Comb3-5	0.00025	1.242E-06	Comb3-5	0	1.242E-06	Comb3-5	0
B271	Base	VB	End-I	0.6747	Comb3-5	0.00025	5.154E-07	Comb3-5	0	5.154E-07	Comb3-5	0
B271	Base	VB	Middle	0.7889	Comb3-5	0.00025	8.591E-07	Comb3-5	0	8.591E-07	Comb3-5	0
B271	Base	VB	End-J	0.7889	Comb3-5	0.00025	8.591E-07	Comb3-5	0	8.591E-07	Comb3-5	0
B274	Base	VB	End-I	1.4137	Comb3-5	0.00025	4.993E-06	Comb3-5	0	4.993E-06	Comb3-5	0
B274	Base	VB	Middle	1.5804	Comb3-5	0.00025	4.151E-06	Comb3-5	0	4.151E-06	Comb3-5	0
B274	Base	VB	End-J	1.8948	Comb3-5	0.00025	8.687E-07	Comb3-5	0	8.687E-07	Comb3-5	0
B294	Base	VB	End-I	1.6249	Comb3-5	0	3.708E-06	Comb3-5	0	3.708E-06	Comb3-5	0
B294	Base	VB	Middle	0.3211	Comb3-5	0.00025	1.544E-06	Comb3-5	0	1.544E-06	Comb3-5	0
B294	Base	VB	End-J	0.792	Comb3-5	0.00025	5.992E-06	Comb3-5	0	5.992E-06	Comb3-5	0
B585	Base	VB	End-I	2.2242	Comb3-5	0.00025	8.908E-06	Comb3-5	0	8.908E-06	Comb3-5	0
B585	Base	VB	Middle	2.1704	Comb3-5	0.00025	1.3E-06	Comb3-5	0	1.3E-06	Comb3-5	0
B585	Base	VB	End-J	2.767	Comb3-5	0.00025	6.342E-06	Comb3-5	0	6.342E-06	Comb3-5	0
B590	Base	VB2	End-I	1.7071	Comb3-5	0.00025	2.708E-06	Comb3-5	0	2.708E-06	Comb3-5	0
B590	Base	VB2	Middle	1.1956	Comb3-5	0.00025	3.527E-06	Comb3-5	0	3.527E-06	Comb3-5	0
B590	Base	VB2	End-J	1.3372	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B591	Base	VB2	End-I	3.7351	Comb4-2	0.00026	1.252E-05	Comb3-5	0	1.252E-05	Comb3-5	0
B591	Base	VB2	Middle	2.1976	Comb3-5	0.00025	6.57E-06	Comb3-5	0	6.57E-06	Comb3-5	0
B591	Base	VB2	End-J	2.1032	Comb3-5	0.00025	8.012E-07	Comb3-5	0	8.012E-07	Comb3-5	0
B592	Base	VB2	End-I	1.7806	Comb3-5	0.00025	1.213E-06	Comb3-5	0	1.213E-06	Comb3-5	0
B592	Base	VB2	Middle	1.5961	Comb3-5	0.00025	6.487E-06	Comb3-5	0	6.487E-06	Comb3-5	0
B592	Base	VB2	End-J	1.3747	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B605	Base	VB2	End-I	0.9831	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B605	Base	VB2	Middle	1.2609	Comb3-5	0	1.319E-06	Comb3-5	0	1.319E-06	Comb3-5	0
B605	Base	VB2	End-J	1.6506	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B606	Base	VB2	End-I	4.8547	Comb4-2	0.00034	1.304E-06	Comb3-5	0	1.304E-06	Comb3-5	0
B606	Base	VB2	Middle	4.9838	Comb4-2	0.00035	0	Comb3-5	0	0	Comb3-5	0
B606	Base	VB2	End-J	4.9838	Comb4-2	0.00035	0	Comb3-5	0	0	Comb3-5	0
B608	Base	VB2	End-I	0.698	Comb3-5	0.00025	2.582E-06	Comb3-5	0	2.582E-06	Comb3-5	0
B608	Base	VB2	Middle	0.7287	Comb3-5	0.00025	1.84E-06	Comb3-5	0	1.84E-06	Comb3-5	0
B608	Base	VB2	End-J	0.812	Comb3-5	0.00025	2.62E-06	Comb3-5	0	2.62E-06	Comb3-5	0
B609	Base	VB2	End-I	1.7417	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B609	Base	VB2	Middle	2.2854	Comb3-5	0	7.64E-07	Comb3-5	0	7.64E-07	Comb3-5	0
B609	Base	VB2	End-J	2.6995	Comb3-5	0	5.407E-07	Comb3-5	0	5.407E-07	Comb3-5	0
B610	Base	VB2	End-I	1.9032	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B610	Base	VB2	Middle	1.6312	Comb3-5	0	1.115E-06	Comb3-5	0	1.115E-06	Comb3-5	0
B610	Base	VB2	End-J	1.973	Comb3-5	0	8.959E-07	Comb3-5	0	8.959E-07	Comb3-5	0
B611	Base	VB2	End-I	1.3904	Comb3-5	0.00025	8.808E-07	Comb3-5	0	8.808E-07	Comb3-5	0
B611	Base	VB2	Middle	0.9649	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B611	Base	VB2	End-J	1.0558	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B612	Base	VB2	End-I	0.7153	Comb3-5	0	3.089E-06	Comb3-5	0	3.089E-06	Comb3-5	0
B612	Base	VB2	Middle	0.9559	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B612	Base	VB2	End-J	1.2176	Comb3-5	0	1.083E-06	Comb3-5	0	1.083E-06	Comb3-5	0
B613	Base	VB2	End-I	1.4854	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B613	Base	VB2	Middle	0.9586	Comb3-5	0.00025	2.232E-06	Comb3-5	0	2.232E-06	Comb3-5	0
B613	Base	VB2	End-J	1.0026	Comb3-5	0.00025	1.531E-06	Comb3-5	0	1.531E-06	Comb3-5	0
B615	Base	VB2	End-I	1.5286	Comb3-5	0.00025	9.052E-07	Comb3-5	0	9.052E-07	Comb3-5	0
B615	Base	VB2	Middle	1.2315	Comb3-5	0.00025	1.404E-06	Comb3-5	0	1.404E-06	Comb3-5	0
B615	Base	VB2	End-J	1.149	Comb3-5	0.00025	1.177E-06	Comb3-5	0	1.177E-06	Comb3-5	0
B616	Base	VB2	End-I	2.3014	Comb3-5	0.00025	1.009E-06	Comb3-5	0	1.009E-06	Comb3-5	0
B616	Base	VB2	Middle	2.566	Comb3-5	0.00025	5.259E-07	Comb3-5	0	5.259E-07	Comb3-5	0
B616	Base	VB2	End-J	2.532	Comb3-5	0.00025	1.942E-06	Comb3-5	0	1.942E-06	Comb3-5	0
B619	Base	VB2	End-I	0.3757	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B619	Base	VB2	Middle	0.9198	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B619	Base	VB2	End-J	1.3977	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B621	Base	VB2	End-I	2.0107	Comb3-5	0.00025	1.386E-06	Comb3-5	0	1.386E-06	Comb3-5	0
B621	Base	VB2	Middle	2.5201	Comb3-5	0.00025	1.302E-06	Comb3-5	0	1.302E-06	Comb3-5	0
B621	Base	VB2	End-J	2.8396	Comb3-5	0.00025	7.116E-07	Comb3-5	0	7.116E-07	Comb3-5	0
B622	Base	VB2	End-I	2.3066	Comb3-5	0.00025	9.588E-07	Comb3-5	0	9.588E-07	Comb3-5	0
B622	Base	VB2	Middle	1.7185	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B622	Base	VB2	End-J	1.6457	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B628	Base	VB2	End-I	1.2253	Comb3-5	0.00025	6.933E-07	Comb3-5	0	6.933E-07	Comb3-5	0
B628	Base	VB2	Middle	1.8318	Comb3-5	0.00025	5.639E-07	Comb3-5	0	5.639E-07	Comb3-5	0
B628	Base	VB2	End-J	1.9835	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B629	Base	VB2	End-I	3.0172	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B629	Base	VB2	Middle	4.7775	Comb4-2	0.00034	0	Comb3-5	0	0	Comb3-5	0
B629	Base	VB2	End-J	5.2306	Comb4-2	0.00037	0	Comb3-5	0	0	Comb3-5	0
B630	Base	VB2	End-I	0.9516	Comb3-5	0.00025	8.935E-07	Comb3-5	0	8.935E-07	Comb3-5	0
B630	Base	VB2	Middle	1.4829	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B630	Base	VB2	End-J	1.6586	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B631	Base	VB2	End-I	0.1541	Comb3-5	0	8.308E-07	Comb3-5	0	8.308E-07	Comb3-5	0
B631	Base	VB2	Middle	0.2042	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B631	Base	VB2	End-J	0.9413	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B632	Base	VB2	End-I	0.2665	Comb3-5	0	1.442E-06	Comb3-5	0	1.442E-06	Comb3-5	0
B632	Base	VB2	Middle	0.2718	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B632	Base	VB2	End-J	0.2878	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B633	Base	VB2	End-I	0.6641	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B633	Base	VB2	Middle	0.5848	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B633	Base	VB2	End-J	0.5907	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B634	Base	VB2	End-I	0.7631	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B634	Base	VB2	Middle	0.5617	Comb3-5	0	7.869E-07	Comb3-5	0	7.869E-07	Comb3-5	0
B634	Base	VB2	End-J	0.5869	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B635	Base	VB2	End-I	0.1933	Comb3-5	0.00025	3.011E-06	Comb3-5	0	3.011E-06	Comb3-5	0
B635	Base	VB2	Middle	1.2774	Comb3-5	0	3.442E-06	Comb3-5	0	3.442E-06	Comb3-5	0
B635	Base	VB2	End-J	1.6606	Comb3-5	0	2.994E-06	Comb3-5	0	2.994E-06	Comb3-5	0
B636	Base	VB2	End-I	2.0821	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B636	Base	VB2	Middle	3.0752	Comb3-5	0.00025	7.826E-07	Comb3-5	0	7.826E-07	Comb3-5	0
B636	Base	VB2	End-J	3.5699	Comb3-5	0.00025	0.0001	Comb3-5	0	0.0001	Comb3-5	0
B637	Base	VB2	End-I	3.0012	Comb3-5	0.00025	1.547E-05	Comb3-5	0	1.547E-05	Comb3-5	0
B637	Base	VB2	Middle	2.1327	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B637	Base	VB2	End-J	2.1327	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B638	Base	VB2	End-I	1.1291	Comb3-5	0.00025	1.466E-06	Comb3-5	0	1.466E-06	Comb3-5	0
B638	Base	VB2	Middle	1.5494	Comb3-5	0.00025	1.72E-06	Comb3-5	0	1.72E-06	Comb3-5	0
B638	Base	VB2	End-J	2.1022	Comb3-5	0.00025	3.605E-06	Comb3-5	0	3.605E-06	Comb3-5	0
B639	Base	VB2	End-I	4.1983	Comb3-5	0.00029	1.669E-05	Comb3-5	0	1.669E-05	Comb3-5	0
B639	Base	VB2	Middle	4.1983	Comb3-5	0.00029	4.404E-06	Comb3-5	0	4.404E-06	Comb3-5	0
B639	Base	VB2	End-J	3.8879	Comb3-5	0.00027	4.404E-06	Comb3-5	0	4.404E-06	Comb3-5	0
B640	Base	VB2	End-I	0.6635	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B640	Base	VB2	Middle	0.4538	Comb3-5	0.00025	2.525E-06	Comb3-5	0	2.525E-06	Comb3-5	0
B640	Base	VB2	End-J	0.4276	Comb3-5	0.00025	3.848E-06	Comb3-5	0	3.848E-06	Comb3-5	0
B641	Base	VB2	End-I	0.5737	Comb3-5	0.00025	2.964E-06	Comb3-5	0	2.964E-06	Comb3-5	0
B641	Base	VB2	Middle	0.7777	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B641	Base	VB2	End-J	0.8526	Comb3-5	0.00025	1.492E-06	Comb3-5	0	1.492E-06	Comb3-5	0
B642	Base	VB2	End-I	1.2389	Comb3-5	0.00025	9.38E-07	Comb3-5	0	9.38E-07	Comb3-5	0
B642	Base	VB2	Middle	1.2358	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B642	Base	VB2	End-J	1.2358	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B643	Base	VB2	End-I	0.5867	Comb3-5	0.00025	2.324E-06	Comb3-5	0	2.324E-06	Comb3-5	0
B643	Base	VB2	Middle	0		-1	0		-1	0		-1
B643	Base	VB2	End-J	0.5867	Comb3-5	0.00025	2.324E-06	Comb3-5	0	2.324E-06	Comb3-5	0
B644	Base	VB2	End-I	2.2395	Comb3-5	0.00025	1.804E-06	Comb3-5	0	1.804E-06	Comb3-5	0
B644	Base	VB2	Middle	0		-1	0		-1	0		-1
B644	Base	VB2	End-J	2.1935	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B646	Base	VB2	End-I	1.5598	Comb3-5	0.00025	1.012E-06	Comb3-5	0	1.012E-06	Comb3-5	0
B646	Base	VB2	Middle	1.3339	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B646	Base	VB2	End-J	1.2784	Comb3-5	0.00025	7.459E-07	Comb3-5	0	7.459E-07	Comb3-5	0
B647	Base	VB2	End-I	0.803	Comb3-5	0	2.287E-06	Comb3-5	0	2.287E-06	Comb3-5	0
B647	Base	VB2	Middle	0.8824	Comb3-5	0	4.035E-06	Comb3-5	0	4.035E-06	Comb3-5	0
B647	Base	VB2	End-J	0.8786	Comb3-5	0	2.752E-06	Comb3-5	0	2.752E-06	Comb3-5	0
B648	Base	VB2	End-I	0.4201	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B648	Base	VB2	Middle	0.6835	Comb3-5	0.00025	4.144E-06	Comb3-5	0	4.144E-06	Comb3-5	0
B648	Base	VB2	End-J	0.4877	Comb3-5	0.00025	2.364E-06	Comb3-5	0	2.364E-06	Comb3-5	0
B649	Base	VB2	End-I	0.8265	Comb3-5	0.00025	9.314E-07	Comb3-5	0	9.314E-07	Comb3-5	0
B649	Base	VB2	Middle	0.6605	Comb3-5	0.00025	2.105E-06	Comb3-5	0	2.105E-06	Comb3-5	0
B649	Base	VB2	End-J	0.6254	Comb3-5	0.00025	3.655E-06	Comb3-5	0	3.655E-06	Comb3-5	0
B652	Base	VB2	End-I	1.3557	Comb3-5	0	7.518E-07	Comb3-5	0	7.518E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B652	Base	VB2	Middle	0.8618	Comb3-5	0	6.703E-07	Comb3-5	0	6.703E-07	Comb3-5	0
B652	Base	VB2	End-J	0.7716	Comb3-5	0	0.0001	Comb3-5	0	0.0001	Comb3-5	0
B653	Base	VB2	End-I	1.9309	Comb3-5	0.00025	5.733E-07	Comb3-5	0	5.733E-07	Comb3-5	0
B653	Base	VB2	Middle	1.8009	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B653	Base	VB2	End-J	2.0781	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B659	Base	VB2	End-I	1.5365	Comb3-5	0	2.617E-06	Comb3-5	0	2.617E-06	Comb3-5	0
B659	Base	VB2	Middle	1.4134	Comb3-5	0	2.081E-06	Comb3-5	0	2.081E-06	Comb3-5	0
B659	Base	VB2	End-J	1.8597	Comb3-5	0	1.535E-06	Comb3-5	0	1.535E-06	Comb3-5	0
B660	Base	VB2	End-I	3.9588	Comb4-2	0.00025	5.666E-07	Comb3-5	0	5.666E-07	Comb3-5	0
B660	Base	VB2	Middle	1.7106	Comb3-5	0	8.971E-06	Comb3-5	0	8.971E-06	Comb3-5	0
B660	Base	VB2	End-J	2.0263	Comb3-5	0	6.425E-06	Comb3-5	0	6.425E-06	Comb3-5	0
B661	Base	VB2	End-I	2.5172	Comb3-5	0.00025	9.324E-06	Comb3-5	0	9.324E-06	Comb3-5	0
B661	Base	VB2	Middle	3.5786	Comb3-5	0.00025	6.351E-06	Comb3-5	0	6.351E-06	Comb3-5	0
B661	Base	VB2	End-J	3.9381	Comb3-5	0.00028	1.102E-05	Comb3-5	0	1.102E-05	Comb3-5	0
B662	Base	VB2	End-I	5.7175	Comb4-2	0.0004	2.359E-05	Comb3-5	0	2.359E-05	Comb3-5	0
B662	Base	VB2	Middle	0		-1	0		-1	0		-1
B662	Base	VB2	End-J	5.7175	Comb4-2	0.0004	2.359E-05	Comb3-5	0	2.359E-05	Comb3-5	0
B665	Base	VB2	End-I	5.2724	Comb4-2	0.00037	6.878E-06	Comb3-5	0	6.878E-06	Comb3-5	0
B665	Base	VB2	Middle	6.9626	Comb4-2	0.00049	5.115E-07	Comb3-5	0	5.115E-07	Comb3-5	0
B665	Base	VB2	End-J	8.1051	Comb4-2	0.00057	4.188E-06	Comb3-5	0	4.188E-06	Comb3-5	0
B666	Base	VB2	End-I	3.6253	Comb3-5	0.00025	3.568E-06	Comb3-5	0	3.568E-06	Comb3-5	0
B666	Base	VB2	Middle	2.1182	Comb3-5	0.00025	2.305E-06	Comb3-5	0	2.305E-06	Comb3-5	0
B666	Base	VB2	End-J	1.9936	Comb3-5	0.00025	2.404E-06	Comb3-5	0	2.404E-06	Comb3-5	0
B667	Base	VB2	End-I	1.606	Comb3-5	0.00025	2.979E-05	Comb3-5	0	2.979E-05	Comb3-5	0
B667	Base	VB2	Middle	0		-1	0		-1	0		-1
B667	Base	VB2	End-J	1.606	Comb3-5	0.00025	2.979E-05	Comb3-5	0	2.979E-05	Comb3-5	0
B670	Base	VB2	End-I	2.7112	Comb3-5	0.00025	1.617E-06	Comb3-5	0	1.617E-06	Comb3-5	0
B670	Base	VB2	Middle	4.1012	Comb3-5	0.00029	0	Comb3-5	0	0	Comb3-5	0
B670	Base	VB2	End-J	4.9147	Comb3-5	0.00035	1.05E-06	Comb3-5	0	1.05E-06	Comb3-5	0
B672	Base	VB2	End-I	13.1418	Comb4-2	0.00092	8.269E-06	Comb3-5	0	8.269E-06	Comb3-5	0
B672	Base	VB2	Middle	12.5686	Comb4-2	0.00088	2.293E-06	Comb3-5	0	2.293E-06	Comb3-5	0
B672	Base	VB2	End-J	12.0766	Comb4-2	0.00085	2.072E-06	Comb3-5	0	2.072E-06	Comb3-5	0
B673	Base	VB2	End-I	1.853	Comb3-5	0	7.206E-06	Comb3-5	0	7.206E-06	Comb3-5	0
B673	Base	VB2	Middle	2.3997	Comb3-5	0	9.708E-07	Comb3-5	0	9.708E-07	Comb3-5	0
B673	Base	VB2	End-J	5.4247	Comb4-2	0.00025	1.513E-05	Comb3-5	0	1.513E-05	Comb3-5	0
B675	Base	VB2	End-I	1.0981	Comb3-5	0	5.125E-06	Comb3-5	0	5.125E-06	Comb3-5	0
B675	Base	VB2	Middle	1.7724	Comb3-5	0	3.004E-06	Comb3-5	0	3.004E-06	Comb3-5	0
B675	Base	VB2	End-J	2.1693	Comb3-5	0	7.181E-07	Comb3-5	0	7.181E-07	Comb3-5	0
B676	Base	VB2	End-I	9.0617	Comb4-2	0.00064	1.023E-06	Comb3-5	0	1.023E-06	Comb3-5	0
B676	Base	VB2	Middle	11.0352	Comb4-2	0.00078	6.336E-06	Comb3-5	0	6.336E-06	Comb3-5	0
B676	Base	VB2	End-J	11.0352	Comb4-2	0.00078	6.336E-06	Comb3-5	0	6.336E-06	Comb3-5	0
B677	Base	VB2	End-I	1.5847	Comb3-5	0	3.308E-06	Comb3-5	0	3.308E-06	Comb3-5	0
B677	Base	VB2	Middle	2.1047	Comb3-5	0	2.577E-06	Comb3-5	0	2.577E-06	Comb3-5	0
B677	Base	VB2	End-J	4.2041	Comb4-2	0.00025	5.047E-06	Comb3-5	0	5.047E-06	Comb3-5	0
B678	Base	VB2	End-I	8.2532	Comb4-2	0.00058	5.208E-07	Comb3-5	0	5.208E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B678	Base	VB2	Middle	7.2669	Comb4-2	0.00051	8.08E-07	Comb3-5	0	8.08E-07	Comb3-5	0
B678	Base	VB2	End-J	5.718	Comb4-2	0.0004	1.458E-06	Comb3-5	0	1.458E-06	Comb3-5	0
B682	Base	VB	End-I	2.2826	Comb3-5	0	1.879E-06	Comb3-5	0	1.879E-06	Comb3-5	0
B682	Base	VB	Middle	2.2235	Comb3-5	0	2.09E-06	Comb3-5	0	2.09E-06	Comb3-5	0
B682	Base	VB	End-J	3.2023	Comb3-5	0	1.053E-05	Comb3-5	0	1.053E-05	Comb3-5	0
B1283	Base	VB	End-I	0.1518	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1283	Base	VB	Middle	0.1236	Comb3-5	0.00025	9.172E-07	Comb3-5	0	9.172E-07	Comb3-5	0
B1283	Base	VB	End-J	0.1729	Comb3-5	0.00025	1.7E-06	Comb3-5	0	1.7E-06	Comb3-5	0
B1284	Base	VB	End-I	0.8654	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1284	Base	VB	Middle	0.8691	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1284	Base	VB	End-J	0.8691	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1301	Base	VB	End-I	0.4036	Comb3-5	0.00025	1.91E-06	Comb3-5	0	1.91E-06	Comb3-5	0
B1301	Base	VB	Middle	0.3852	Comb3-5	0.00025	4.973E-06	Comb3-5	0	4.973E-06	Comb3-5	0
B1301	Base	VB	End-J	0.4401	Comb3-5	0.00025	4.16E-06	Comb3-5	0	4.16E-06	Comb3-5	0
B1326	Base	VB	End-I	2.4309	Comb3-5	0.00025	1.063E-06	Comb3-5	0	1.063E-06	Comb3-5	0
B1326	Base	VB	Middle	2.4262	Comb3-5	0.00025	9.283E-07	Comb3-5	0	9.283E-07	Comb3-5	0
B1326	Base	VB	End-J	2.4262	Comb3-5	0.00025	9.283E-07	Comb3-5	0	9.283E-07	Comb3-5	0
B284	Base	VB2	End-I	0.747	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B284	Base	VB2	Middle	0.2102	Comb3-5	0	9.734E-07	Comb3-5	0	9.734E-07	Comb3-5	0
B284	Base	VB2	End-J	0.961	Comb3-5	0	1.137E-06	Comb3-5	0	1.137E-06	Comb3-5	0
B285	Base	VB2	End-I	6.2467	Comb4-2	0.00044	6.038E-07	Comb3-5	0	6.038E-07	Comb3-5	0
B285	Base	VB2	Middle	5.7466	Comb4-2	0.0004	5.265E-07	Comb3-5	0	5.265E-07	Comb3-5	0
B285	Base	VB2	End-J	4.8159	Comb4-2	0.00034	0	Comb3-5	0	0	Comb3-5	0
B286	Base	VB2	End-I	1.8147	Comb3-5	0.00025	9.855E-07	Comb3-5	0	9.855E-07	Comb3-5	0
B286	Base	VB2	Middle	2.2679	Comb3-5	0.00025	1.397E-06	Comb3-5	0	1.397E-06	Comb3-5	0
B286	Base	VB2	End-J	2.6412	Comb3-5	0.00025	1.042E-06	Comb3-5	0	1.042E-06	Comb3-5	0
B310	Base	VB2	End-I	0.5537	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B310	Base	VB2	Middle	0.6122	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B310	Base	VB2	End-J	1.4781	Comb3-5	0	1.615E-06	Comb3-5	0	1.615E-06	Comb3-5	0
B323	Base	VB2	End-I	0.4767	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B323	Base	VB2	Middle	1.4569	Comb3-5	0	2.384E-06	Comb3-5	0	2.384E-06	Comb3-5	0
B323	Base	VB2	End-J	2.2592	Comb3-5	0	1.919E-06	Comb3-5	0	1.919E-06	Comb3-5	0
B325	Base	VB2	End-I	2.7483	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B325	Base	VB2	Middle	2.0349	Comb3-5	0.00025	2.238E-06	Comb3-5	0	2.238E-06	Comb3-5	0
B325	Base	VB2	End-J	2.0349	Comb3-5	0.00025	2.238E-06	Comb3-5	0	2.238E-06	Comb3-5	0
B326	Base	VB2	End-I	2.5179	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B326	Base	VB2	Middle	1.8216	Comb3-5	0.00025	1.574E-06	Comb3-5	0	1.574E-06	Comb3-5	0
B326	Base	VB2	End-J	1.8216	Comb3-5	0.00025	1.574E-06	Comb3-5	0	1.574E-06	Comb3-5	0
B345	Base	VB2	End-I	0.4904	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B345	Base	VB2	Middle	0.4574	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B345	Base	VB2	End-J	0.9613	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B353	Base	VB2	End-I	6.8079	Comb4-2	0.00048	0	Comb3-5	0	0	Comb3-5	0
B353	Base	VB2	Middle	0		-1	0		-1	0		-1
B353	Base	VB2	End-J	6.8079	Comb4-2	0.00048	0	Comb3-5	0	0	Comb3-5	0
B354	Base	VB2	End-I	0.5672	Comb3-5	0	7.763E-07	Comb3-5	0	7.763E-07	Comb3-5	0

Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B354	Base	VB2	Middle	0.5616	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B354	Base	VB2	End-J	1.2936	Comb3-5	0	6.421E-07	Comb3-5	0	6.421E-07	Comb3-5	0
B358	Base	VB2	End-I	4.3849	Comb4-2	0.00031	0	Comb3-5	0	0	Comb3-5	0
B358	Base	VB2	Middle	4.09	Comb4-2	0.00029	1.548E-06	Comb3-5	0	1.548E-06	Comb3-5	0
B358	Base	VB2	End-J	4.09	Comb4-2	0.00029	1.548E-06	Comb3-5	0	1.548E-06	Comb3-5	0
B359	Base	VB2	End-I	5.2738	Comb4-2	0.00037	3.48E-06	Comb3-5	0	3.48E-06	Comb3-5	0
B359	Base	VB2	Middle	4.7612	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B359	Base	VB2	End-J	3.9588	Comb4-2	0.00028	0	Comb3-5	0	0	Comb3-5	0
B360	Base	VB2	End-I	5.2273	Comb4-2	0.00037	0	Comb3-5	0	0	Comb3-5	0
B360	Base	VB2	Middle	4.6965	Comb4-2	0.00033	5.853E-06	Comb3-5	0	5.853E-06	Comb3-5	0
B360	Base	VB2	End-J	3.8206	Comb4-2	0.00027	5.853E-06	Comb3-5	0	5.853E-06	Comb3-5	0
B366	Base	VB2	End-I	0.4752	Comb3-5	0.00025	1.073E-06	Comb3-5	0	1.073E-06	Comb3-5	0
B366	Base	VB2	Middle	1.2403	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B366	Base	VB2	End-J	1.8556	Comb3-5	0	5.328E-07	Comb3-5	0	5.328E-07	Comb3-5	0
B367	Base	VB2	End-I	0.6933	Comb3-5	0.00025	2.863E-06	Comb3-5	0	2.863E-06	Comb3-5	0
B367	Base	VB2	Middle	1.1405	Comb3-5	0	6.764E-07	Comb3-5	0	6.764E-07	Comb3-5	0
B367	Base	VB2	End-J	0.638	Comb3-5	0.00025	1.257E-06	Comb3-5	0	1.257E-06	Comb3-5	0
B370	Base	VB2	End-I	1.6538	Comb3-5	0.00025	9.532E-07	Comb3-5	0	9.532E-07	Comb3-5	0
B370	Base	VB2	Middle	2.3354	Comb3-5	0.00025	7.318E-07	Comb3-5	0	7.318E-07	Comb3-5	0
B370	Base	VB2	End-J	2.3354	Comb3-5	0.00025	7.318E-07	Comb3-5	0	7.318E-07	Comb3-5	0
B371	Base	VB2	End-I	1.422	Comb3-5	0.00025	2.023E-06	Comb3-5	0	2.023E-06	Comb3-5	0
B371	Base	VB2	Middle	2.1193	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B371	Base	VB2	End-J	2.1193	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B372	Base	VB2	End-I	3.2587	Comb3-5	0.00025	1.516E-06	Comb3-5	0	1.516E-06	Comb3-5	0
B372	Base	VB2	Middle	4.0656	Comb4-2	0.00029	6.768E-07	Comb3-5	0	6.768E-07	Comb3-5	0
B372	Base	VB2	End-J	4.586	Comb4-2	0.00032	6.007E-07	Comb3-5	0	6.007E-07	Comb3-5	0
B373	Base	VB2	End-I	0.5342	Comb3-5	0.00025	6.402E-07	Comb3-5	0	6.402E-07	Comb3-5	0
B373	Base	VB2	Middle	0.4533	Comb3-5	0.00025	1.095E-06	Comb3-5	0	1.095E-06	Comb3-5	0
B373	Base	VB2	End-J	0.5353	Comb3-5	0.00025	1.33E-06	Comb3-5	0	1.33E-06	Comb3-5	0
B375	Base	VB2	End-I	0.0807	Comb3-5	0.00025	9.954E-07	Comb3-5	0	9.954E-07	Comb3-5	0
B375	Base	VB2	Middle	0.0616	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B375	Base	VB2	End-J	0.0447	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B378	Base	VB2	End-I	5.6023	Comb4-2	0.00039	0	Comb3-5	0	0	Comb3-5	0
B378	Base	VB2	Middle	4.896	Comb4-2	0.00034	1.054E-06	Comb3-5	0	1.054E-06	Comb3-5	0
B378	Base	VB2	End-J	3.8839	Comb4-2	0.00027	1.753E-06	Comb3-5	0	1.753E-06	Comb3-5	0
B379	Base	VB2	End-I	4.0519	Comb4-2	0.00028	5.669E-07	Comb3-5	0	5.669E-07	Comb3-5	0
B379	Base	VB2	Middle	2.8389	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B379	Base	VB2	End-J	2.8148	Comb3-5	0.00025	8.852E-07	Comb3-5	0	8.852E-07	Comb3-5	0
B380	Base	VB2	End-I	0.5756	Comb3-5	0.00025	1.884E-06	Comb3-5	0	1.884E-06	Comb3-5	0
B380	Base	VB2	Middle	0.552	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B380	Base	VB2	End-J	0.5281	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B381	Base	VB2	End-I	0.2264	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B381	Base	VB2	Middle	0.2398	Comb3-5	0	1.988E-06	Comb3-5	0	1.988E-06	Comb3-5	0
B381	Base	VB2	End-J	0.414	Comb3-5	0	1.488E-06	Comb3-5	0	1.488E-06	Comb3-5	0
B383	Base	VB2	End-I	3.515	Comb3-5	0.00025	5.835E-07	Comb3-5	0	5.835E-07	Comb3-5	0

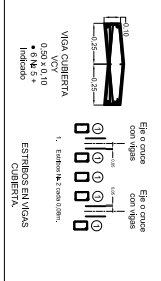
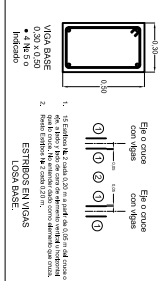
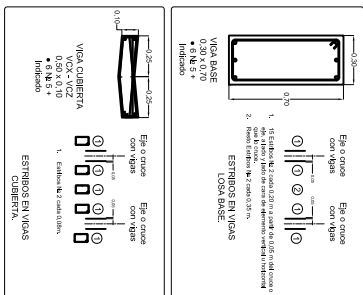
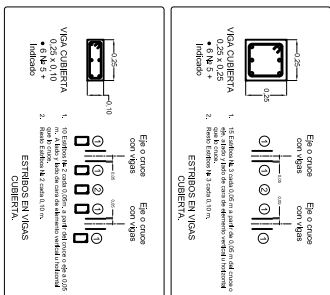
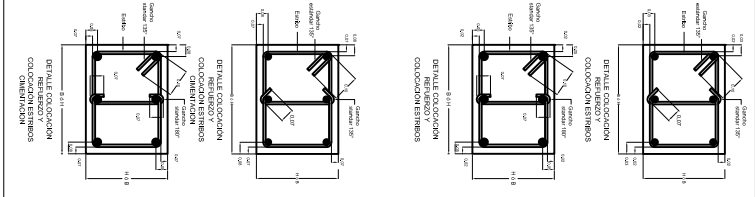
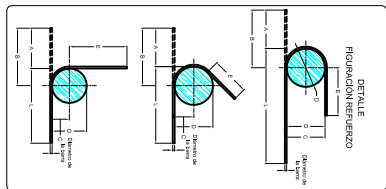
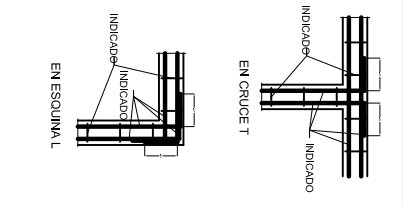
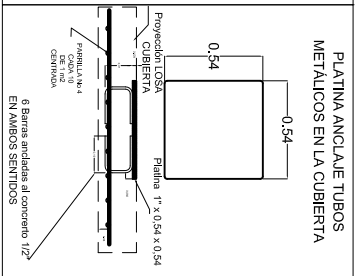
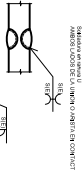
Table 1.3 - Concrete Beam Shear Envelope (continued)

Label	Story	Section	Location	V tonf	V Combo	At m ² /m	T for At tonf-m	T Combo At	At Torsion m ² /m	T for As tonf-m	T Combo As	As Torsion m ²
B383	Base	VB2	Middle	4.6293	Comb4-2	0.00033	0	Comb3-5	0	0	Comb3-5	0
B383	Base	VB2	End-J	5.31	Comb4-2	0.00037	5.05E-06	Comb3-5	0	5.05E-06	Comb3-5	0
B1352	Base	VB2	End-I	1.7922	Comb3-5	0.00025	1.179E-06	Comb3-5	0	1.179E-06	Comb3-5	0
B1352	Base	VB2	Middle	1.183	Comb3-5	0.00025	2.312E-06	Comb3-5	0	2.312E-06	Comb3-5	0
B1352	Base	VB2	End-J	1.5001	Comb3-5	0.00025	8.604E-07	Comb3-5	0	8.604E-07	Comb3-5	0
B1353	Base	VB2	End-I	5.3585	Comb4-2	0.00038	0	Comb3-5	0	0	Comb3-5	0
B1353	Base	VB2	Middle	5.2217	Comb4-2	0.00037	0	Comb3-5	0	0	Comb3-5	0
B1353	Base	VB2	End-J	3.6645	Comb4-2	0.00026	1.104E-06	Comb3-5	0	1.104E-06	Comb3-5	0
B1354	Base	VB2	End-I	2.1151	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1354	Base	VB2	Middle	1.4522	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1354	Base	VB2	End-J	1.8472	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1355	Base	VB2	End-I	1.6113	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1355	Base	VB2	Middle	2.0252	Comb3-5	0.00025	2.186E-06	Comb3-5	0	2.186E-06	Comb3-5	0
B1355	Base	VB2	End-J	2.276	Comb3-5	0.00025	2.689E-06	Comb3-5	0	2.689E-06	Comb3-5	0
B374	Base	VB2	End-I	0.7904	Comb3-5	0	9.181E-07	Comb3-5	0	9.181E-07	Comb3-5	0
B374	Base	VB2	Middle	0.778	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B374	Base	VB2	End-J	0.7183	Comb3-5	0.00025	1.213E-06	Comb3-5	0	1.213E-06	Comb3-5	0
B382	Base	VB2	End-I	0.7088	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B382	Base	VB2	Middle	0.6598	Comb3-5	0	1.127E-06	Comb3-5	0	1.127E-06	Comb3-5	0
B382	Base	VB2	End-J	1.4979	Comb3-5	0	2.52E-06	Comb3-5	0	2.52E-06	Comb3-5	0
B722	Base	VB2	End-I	0.6673	Comb3-5	0	1.211E-06	Comb3-5	0	1.211E-06	Comb3-5	0
B722	Base	VB2	Middle	0.4812	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B722	Base	VB2	End-J	1.2506	Comb3-5	0	5.6E-07	Comb3-5	0	5.6E-07	Comb3-5	0
B1278	Base	VB2	End-I	0.6168	Comb3-5	0	1.154E-06	Comb3-5	0	1.154E-06	Comb3-5	0
B1278	Base	VB2	Middle	0.4624	Comb3-5	0	9.942E-07	Comb3-5	0	9.942E-07	Comb3-5	0
B1278	Base	VB2	End-J	1.2603	Comb3-5	0	1.178E-06	Comb3-5	0	1.178E-06	Comb3-5	0
B1358	Base	VB2	End-I	2.454	Comb3-5	0.00025	6.557E-07	Comb3-5	0	6.557E-07	Comb3-5	0
B1358	Base	VB2	Middle	2.6293	Comb3-5	0.00025	1.046E-06	Comb3-5	0	1.046E-06	Comb3-5	0
B1358	Base	VB2	End-J	2.6293	Comb3-5	0.00025	1.046E-06	Comb3-5	0	1.046E-06	Comb3-5	0
B1359	Base	VB2	End-I	1.0174	Comb3-5	0.00025	1.142E-06	Comb3-5	0	1.142E-06	Comb3-5	0
B1359	Base	VB2	Middle	1.2654	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1359	Base	VB2	End-J	1.2654	Comb3-5	0.00025	0	Comb3-5	0	0	Comb3-5	0
B1367	Base	VB2	End-I	1.1009	Comb3-5	0	1.306E-06	Comb3-5	0	1.306E-06	Comb3-5	0
B1367	Base	VB2	Middle	1.2252	Comb3-5	0	0	Comb3-5	0	0	Comb3-5	0
B1367	Base	VB2	End-J	1.9634	Comb3-5	0	2.549E-06	Comb3-5	0	2.549E-06	Comb3-5	0

LONGITUDES EST REFUERZO PRINCIPAL

.....

1. CHARACTERISTICS OF A GOOD LEADER

[illegible]

ESPECIFICACIONES MAPOSTERIA:

QUESTION	ANSWER
1. ¿Qué es el síndrome de Klinefelter?	La presencia de un cromosoma X adicional en un hombre (47,XXY).
2. ¿Cuáles son las características clínicas principales del síndrome de Klinefelter?	- Testículos pequeños y firmes. - Disminución de la testosterona. - Infertilidad. - Alargamiento de los miembros. - Desarrollo de características secundarias femeninas (ginecomastia).
3. ¿Cómo se diagnostica el síndrome de Klinefelter?	Mediante análisis de cariotipo y niveles de testosterona.
4. ¿Qué tratamiento se recomienda para el síndrome de Klinefelter?	Terapia de reposición de testosterona.
5. ¿Qué complicaciones puede presentar el síndrome de Klinefelter?	- Diabetes mellitus. - Enfermedades cardíacas. - Neoplasias.
6. ¿Qué es el síndrome de Turner?	La ausencia de un cromosoma X en una mujer (45,X).
7. ¿Cuáles son las características clínicas principales del síndrome de Turner?	- Estatura baja. - Neck web (pelo en la nuca). - Displasia de la tercera y cuarta dedos. - Infertilidad.
8. ¿Cómo se diagnostica el síndrome de Turner?	Mediante análisis de cariotipo.
9. ¿Qué tratamiento se recomienda para el síndrome de Turner?	Terapia de reposición de estrógenos.
10. ¿Qué complicaciones puede presentar el síndrome de Turner?	- Enfermedades cardíacas. - Diabetes mellitus. - Neoplasias.

ESPECIFICACIONES GENERALES

[illegible]

según norma sismorresistente NSR - 10 y recomendaciones del estudio de suelos

Estructura:
Muerta:
Carga Muerta Estructura = 0.85 T/m²
Carga Muerta Cubierta = 0.25 T/m²

Viva:
Carga Viva Cubierta = 0,05 T/m²
Carga Viva Cubierta emposamento =
Carga Viva granizo = 0,10 T/m²

Carga Viva Cubierta Tanques = 0,00 T/m²

acción en el umbral de daño: $Aa=0,06$
 dad Píco Efectiva $Av=0,20$
 diente del Suelo: $Fa=1,05$, $Fv=2,9$ Perfil Suelo tipo F
 lante de Importancia: $I=1,25$, Grupo 3.

la longitud de la varilla incluye la longitud del Gancho. Excepto en aquellos casos donde se indique lo contrario, los ganchos serán de: Ø 1/2" 0,25, Ø 5/8" 0,30, Ø 3/4" 0,40. El gancho debe tener mínimo 10 cm y quedar totalmente empotrado en el elemento que lo recibe mínimo 10 cm.

El tiempo de reacción del Terreno a Nivel de Climatización en placa es $t_{\text{reac}} = 1763 \text{ Tm/s}$ y el tiempo de reacción del Terreno a Nivel de Climatización en vigas es $t_{\text{reac}} = 530 \text{ Tm/s}$.

EL CAMBIO EN LA ESTRUCTURA OBRERA SERÁ APROXIMADO POR EL SIGUIENTE:

DE EMPALMAMIENTO CONSIDERADA ES DE 5 CENTÍMETROS, LAS ALTURAS Y NIVELES DEL TERRENO SE RESIGNAN POR LOS PLANOS ARQUITECTÓNICOS, LAS DISTANCIAS Y LOS BORDES ARQUITECTÓNICOS PREDOMINAN SOBRE LAS ESTRUCTURALES Y LAS ESTRUCTURALES NO DEBEN SER USADOS PARA UBICAR O DEFINIR LA

DES DE INICIAR LA CONSTRUCCIÓN VERIFIQUE QUE TIENE LOS PLANOS DE LA OBRA ACTUALIZADOS Y QUE SE TIENE LA ULTIMA VERSION DE LOS PLANOS DE LA OBRA.

[illegible]



JARDIN INFANTIL FONTANA GRANDE
PORTAL DE OLMARCA
LOC 11 SUBA
CARRERA 1668 NO 151C-92
1168L

PROYECTO
ESTRUCTURAL

BILLY ANDRÉS HUERTADO GARCÍA
TEL: 9128.294204
CONFIRMAO DE CONSULTA N.º 37562015

INFO ALL'ASSEMBLEA GENERALE
NAPOLI, 18.05.2024

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MARIA VICTORIA ANGULO

ADRIANA MARIA GONZALEZ
SERVICIO NACIONAL DE ACCESO Y PARTICIPACION

**DIRECTOR DE CONSTRUCCIÓN Y
CONSERVACIÓN DE EDIFICACIONES
ESCOLARES**

JOHN E. EDWARD PATELLA, M.P.E.

REVISIÓN Y APROBACIÓN TÉCNICA

CONTRATO

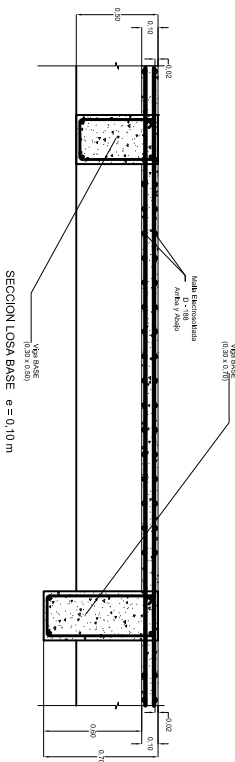
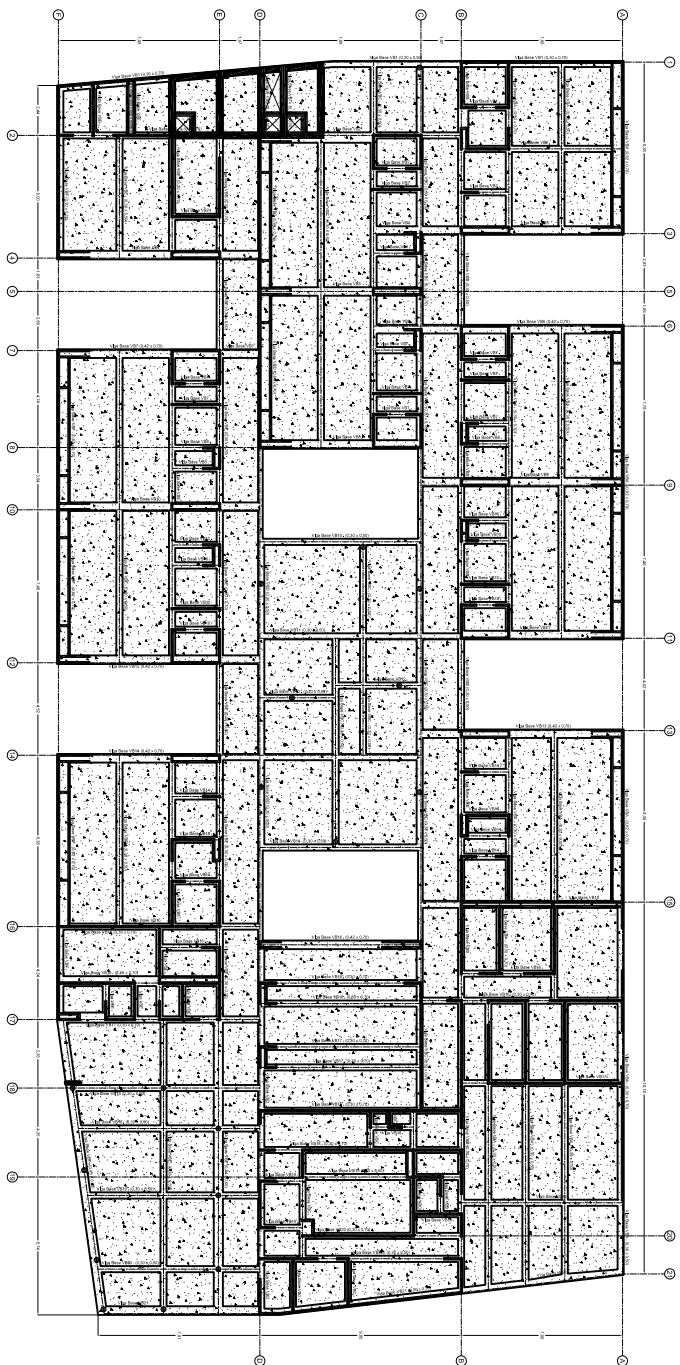
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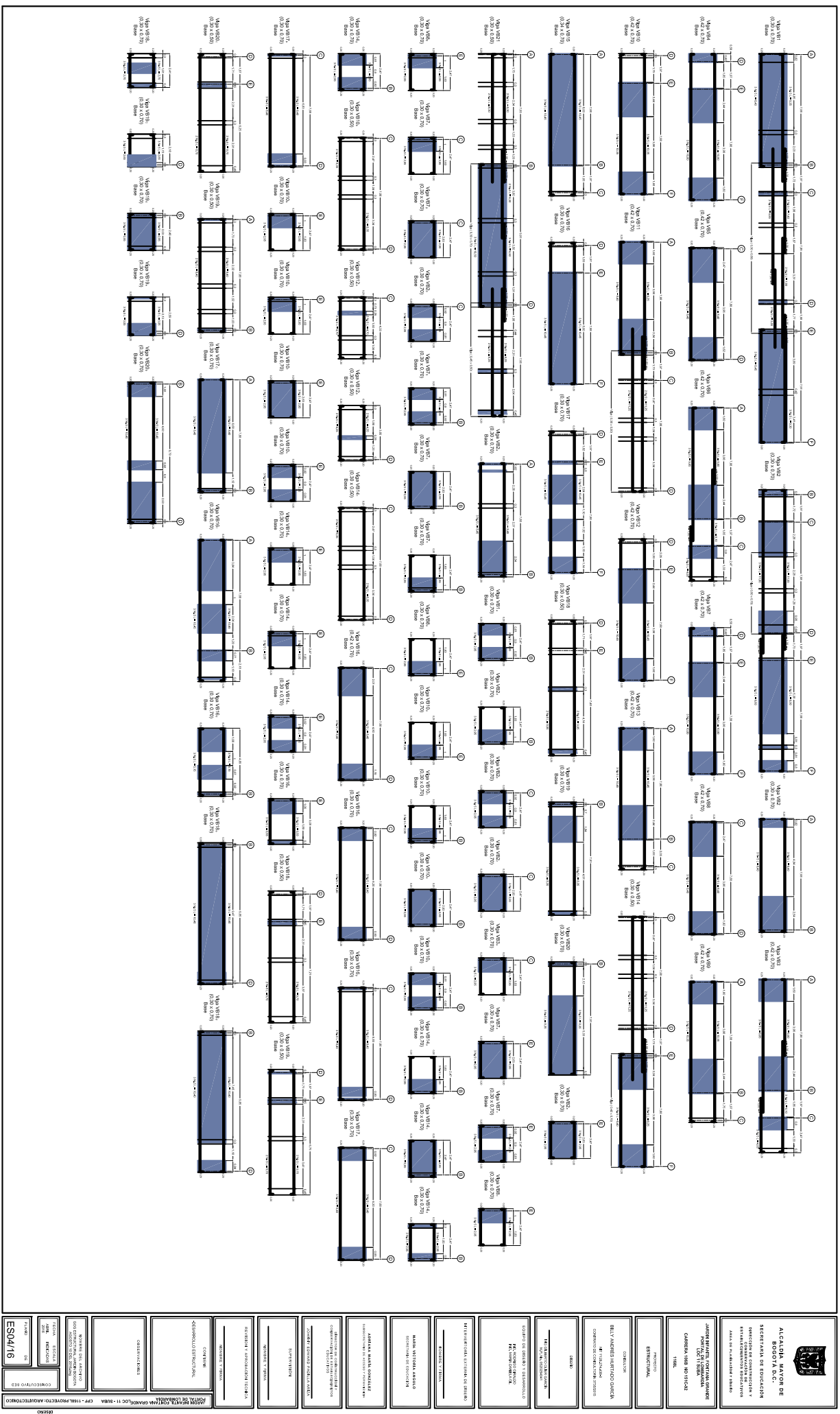
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ADJ.	INDICADOR
2016	
PLANEO	DE

ES02/16

«PLANTA LOSA BASE»





ALCAZAR MAYOR DE
BOBOTT & C.
SECRETARÍA DE EDUCACIÓN
INFORMACIÓN DE CONSTRUCCIÓN
ARQUITECTURA Y DISEÑO
AREA DE PLANEACIÓN Y DISEÑO

JOSÉ PEDRAZ CORTÉS GONZÁLEZ
PROYECTO DE CONSTRUCCIÓN
CALLE 198 NO 710-42
1988

PROYECTO
ESTRUTURAL

CONSTRUCCIÓN
BILLY Y ANIBAL MARTÍNEZ GARCÍA
CORPORACIÓN DE CONSTRUCCIÓN
CALLE 198 NO 710-42

SEAL
NO SE DEBE BORRAR
CORPORACIÓN DE CONSTRUCCIÓN
CALLE 198 NO 710-42

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CORPORACIÓN DE CONSTRUCCIÓN
CALLE 198 NO 710-42

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CALLE 198 NO 710-42

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CORPORACIÓN DE CONSTRUCCIÓN
CALLE 198 NO 710-42

SS04/16
CONSTRUCTIVO RED



ALCANTARA, MAYOR DE
BOGOTÁ S.C.
SECRETARÍA DE EDUCACIÓN
UNIVERSIDAD DE COLOMBIA
FACULTAD DE INGENIERÍA Y
ARQUITECTURA
CARRERA DE INGENIERÍA DE
EDIFICACIONES

JOSÉ ROBERTO CORTAÑA GOMEZ
PROF. DEPT. DE INGENIERÍA
CARRERA 1988 NO 191-26
1988

PROYECTO
ESTRUCTURAL

COORDINADOR
BILLY ANDRÉS MARTÍNEZ GARCÍA
INGENIERO DE INGENIERÍA DE
EDIFICACIONES

ELABORADOR
INGENIERO DE INGENIERÍA DE
EDIFICACIONES

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EDIFICACIONES

ELABORADOR
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EDIFICACIONES

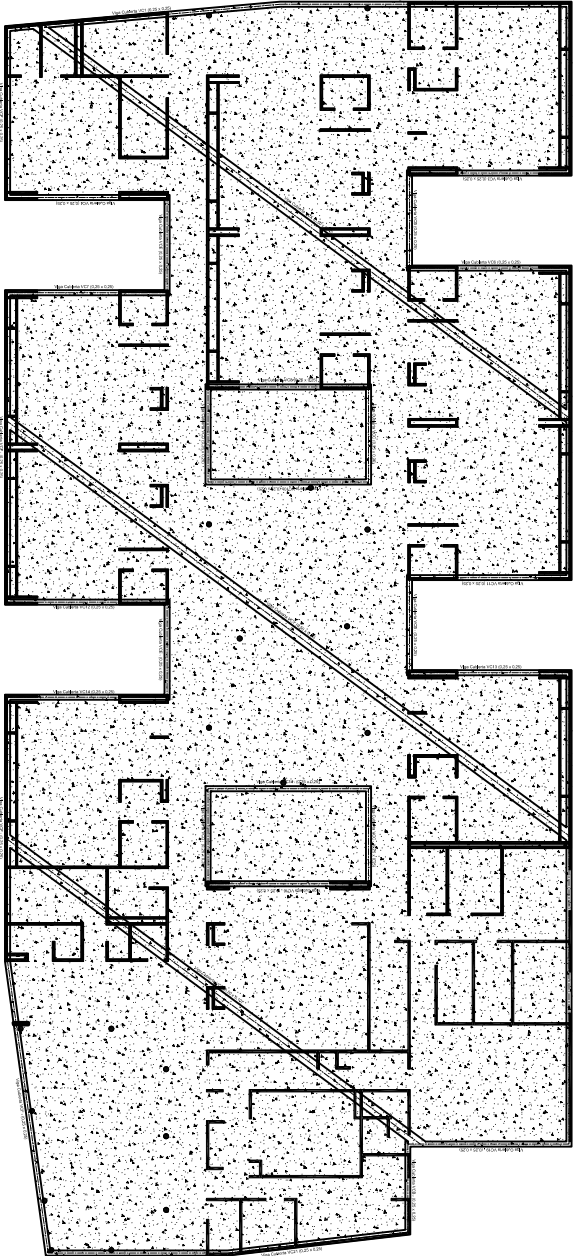
ELABORADOR
INGENIERO DE INGENIERÍA DE
EDIFICACIONES

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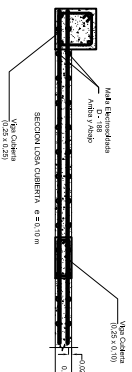
ELABORADOR
INGENIERO DE INGENIERÍA DE
EDIFICACIONES

ELABORADOR
INGENIERO DE INGENIERÍA DE
EDIFICACIONES

ELABORADOR
INGENIERO DE INGENIERÍA DE
EDIFICACIONES



PLANTA LOSA CUBIERTA
Vigas (0,25 X 0,25)
Vigas (0,50 X 0,10)





JARDIN INFANTIL FONTANA GRAND
PORTAL DE LOMBARCIA
LOC 11 SUBA
CARRERA 1068 NO 151C-02
11560L

CONSEJERO
BILLY ANDRÉS HURTADO GARCÍA
TEL: 7128.2744200
COORDINADOR DE CONSULTORÍA: 37552015

1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-1999, 2000-2001, 2002-2003, 2004-2005, 2006-2007, 2008-2009, 2010-2011, 2012-2013, 2014-2015, 2016-2017, 2018-2019, 2020-2021, 2022-2023, 2024-2025, 2026-2027, 2028-2029, 2030-2031, 2032-2033, 2034-2035, 2036-2037, 2038-2039, 2040-2041, 2042-2043, 2044-2045, 2046-2047, 2048-2049, 2050-2051, 2052-2053, 2054-2055, 2056-2057, 2058-2059, 2060-2061, 2062-2063, 2064-2065, 2066-2067, 2068-2069, 2070-2071, 2072-2073, 2074-2075, 2076-2077, 2078-2079, 2080-2081, 2082-2083, 2084-2085, 2086-2087, 2088-2089, 2090-2091, 2092-2093, 2094-2095, 2096-2097, 2098-2099, 2100-2101, 2102-2103, 2104-2105, 2106-2107, 2108-2109, 2110-2111, 2112-2113, 2114-2115, 2116-2117, 2118-2119, 2120-2121, 2122-2123, 2124-2125, 2126-2127, 2128-2129, 2130-2131, 2132-2133, 2134-2135, 2136-2137, 2138-2139, 2140-2141, 2142-2143, 2144-2145, 2146-2147, 2148-2149, 2150-2151, 2152-2153, 2154-2155, 2156-2157, 2158-2159, 2160-2161, 2162-2163, 2164-2165, 2166-2167, 2168-2169, 2170-2171, 2172-2173, 2174-2175, 2176-2177, 2178-2179, 2180-2181, 2182-2183, 2184-2185, 2186-2187, 2188-2189, 2190-2191, 2192-2193, 2194-2195, 2196-2197, 2198-2199, 2200-2201, 2202-2203, 2204-2205, 2206-2207, 2208-2209, 2210-2211, 2212-2213, 2214-2215, 2216-2217, 2218-2219, 2220-2221, 2222-2223, 2224-2225, 2226-2227, 2228-2229, 2230-2231, 2232-2233, 2234-2235, 2236-2237, 2238-2239, 2240-2241, 2242-2243, 2244-2245, 2246-2247, 2248-2249, 2250-2251, 2252-2253, 2254-2255, 2256-2257, 2258-2259, 2260-2261, 2262-2263, 2264-2265, 2266-2267, 2268-2269, 2270-2271, 2272-2273, 2274-2275, 2276-2277, 2278-2279, 2280-2281, 2282-2283, 2284-2285, 2286-2287, 2288-2289, 2290-2291, 2292-2293, 2294-2295, 2296-2297, 2298-2299, 2300-2301, 2302-2303, 2304-2305, 2306-2307, 2308-2309, 2310-2311, 2312-2313, 2314-2315, 2316-2317, 2318-2319, 2320-2321, 2322-2323, 2324-2325, 2326-2327, 2328-2329, 2330-2331, 2332-2333, 2334-2335, 2336-2337, 2338-2339, 2340-2341, 2342-2343, 2344-2345, 2346-2347, 2348-2349, 2350-2351, 2352-2353, 2354-2355, 2356-2357, 2358-2359, 2360-2361, 2362-2363, 2364-2365, 2366-2367, 2368-2369, 2370-2371, 2372-2373, 2374-2375, 2376-2377, 2378-2379, 2380-2381, 2382-2383, 2384-2385, 2386-2387, 2388-2389, 2390-2391, 2392-2393, 2394-2395, 2396-2397, 2398-2399, 2400-2401, 2402-2403, 2404-2405, 2406-2407, 2408-2409, 2410-2411, 2412-2413, 2414-2415, 2416-2417, 2418-2419, 2420-2421, 2422-2423, 2424-2425, 2426-2427, 2428-2429, 2430-2431, 2432-2433, 2434-2435, 2436-2437, 2438-2439, 2440-2441, 2442-2443, 2444-2445, 2446-2447, 2448-2449, 2450-2451, 2452-2453, 2454-2455, 2456-2457, 2458-2459, 2460-2461, 2462-2463, 2464-2465, 2466-2467, 2468-2469, 2470-2471, 2472-2473, 2474-2475, 2476-2477, 2478-2479, 2480-2481, 2482-2483, 2484-2485, 2486-2487, 2488-2489, 2490-2491, 2492-2493, 2494-2495, 2496-2497, 2498-2499, 2500-2501, 2502-2503, 2504-2505, 2506-2507, 2508-2509, 2510-2511, 2512-2513, 2514-2515, 2516-2517, 2518-2519, 2520-2521, 2522-2523, 2524-2525, 2526-2527, 2528-2529, 2530-2531, 2532-2533, 2534-2535, 2536-2537, 2538-2539, 2540-2541, 2542-2543, 2544-2545, 2546-2547, 2548-2549, 2550-2551, 2552-2553, 2554-2555, 2556-2557, 2558-2559, 2560-2561, 2562-2563, 2564-2565, 2566-2567, 2568-2569, 2570-2571, 2572-2573, 2574-2575, 2576-2577, 2578-2579, 2580-2581, 2582-2583, 2584-2585, 2586-2587, 2588-2589, 2590-2591, 2592-2593, 2594-2595, 2596-2597, 2598-2599, 2600-2601, 2602-2603, 2604-2605, 2606-2607, 2608-2609, 2610-2611, 2612-2613, 2614-2615, 2616-2617, 2618-2619, 2620-2621, 2622-2623, 2624-2625, 2626-2627, 2628-2629, 2630-2631, 2632-2633, 2634-2635, 2636-2637, 2638-2639, 2640-2641, 2642-2643, 2644-2645, 2646-2647, 2648-2649, 2650-2651, 2652-2653, 2654-2655, 2656-2657, 2658-2659, 2660-2661, 2662-2663, 2664-2665, 2666-2667, 2668-2669, 2670-2671, 2672-2673, 2674-2675, 2676-2677, 2678-2679, 2680-2681, 2682-2683, 2684-2685, 2686-2687, 2688-2689, 2690-2691, 2692-2693, 2694-2695, 2696-2697, 2698-2699, 2700-2701, 2702-2703, 2704-2705, 2706-2707, 2708-2709, 2710-2711, 2712-2713, 2714-2715, 2716-2717, 2718-2719, 2720-2721, 2722-2723, 2724-2725, 2726-2727, 2728-2729, 2730-2731, 2732-2733,

INVENTION SUMMARY

MARIA VICTORIA ANGULO
INSTITUTO DE EDUCACIÓN

[illegible]

DIRECTOR DE CONTINUIDAD Y
CONSERVACIÓN DE ESTABLECIMIENTOS
EDUCATIVOS

JOHNNY EDWARD PATILLA ARIZA

REVISIÓN Y APROBACIÓN TÉCNICA

POUR LES AUTEURS

DESMAROLLO ESTRUCTURAL

OBSERVATIONS

NOME DEL SOCIETÀ
GOS ESTIMOTRADING S.p.A.

FECHA	ESCALA	CON
ADJ.	INDICADOR	
2016		

PLAYED OF TWO BE

— 100 —



VIGA CUBIERTA
VCX - VCZ
0,50 x 0,10
• 6 N^o 5 +
Indicado



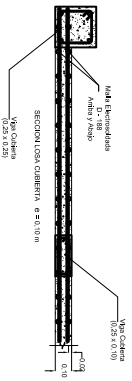
VIGA CUBIERIA
VCY
0,50 x 0,10
● 6 N₂ 5 +
Indicado

PLANTA LOSA CUBIERTA

Vigas (0,25 X 0,25)

Vigas (0,50 X 0,10)

Vigas (0,25 X 0,10)





ALCALDÍA MAYOR DE
BOGOTÁ D.C.
SECRETARÍA DE EDUCACIÓN
DIRECCIÓN DE CONSTRUCCIÓN Y
ASISTENCIA TÉCNICA
ÁREA DE PLANEACIÓN Y DISEÑO

JOSÉ RAFAEL CORTAÑA GOMEZ
PROF. DISEÑO GRÁFICO
CARRERA 198 NO 110-25
1986

PROYECTO
ESTRUCTURAL

COORDINADOR
BILLY ANDRÉS MARTÍNEZ GARCÍA
M. INGENIERO
CORREO: bmartinez@bogota.gov.co

ESTADO
DISEÑO

NO SE DEBE USAR PARA
OTRAS FINALIDADES
SIN AUTORIZACIÓN
DE LA SECRETARÍA

COPIA DE DISEÑO Y COORDINACIÓN
DE LA SECRETARÍA

REVISIÓN Y APROBACIÓN DEL DISEÑO

REVISIÓN Y APROBACIÓN

BATA WILSON ANDRÉS
COORDINADOR DE PROYECTOS

ARMANDO ANDRÉS GONZÁLEZ
INGENIERO DE CONSTRUCCIÓN Y
ASISTENTE TÉCNICO

ARMANDO ANDRÉS GONZÁLEZ
INGENIERO DE CONSTRUCCIÓN Y
ASISTENTE TÉCNICO

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INGENIERO DE CONSTRUCCIÓN Y
ASISTENTE TÉCNICO

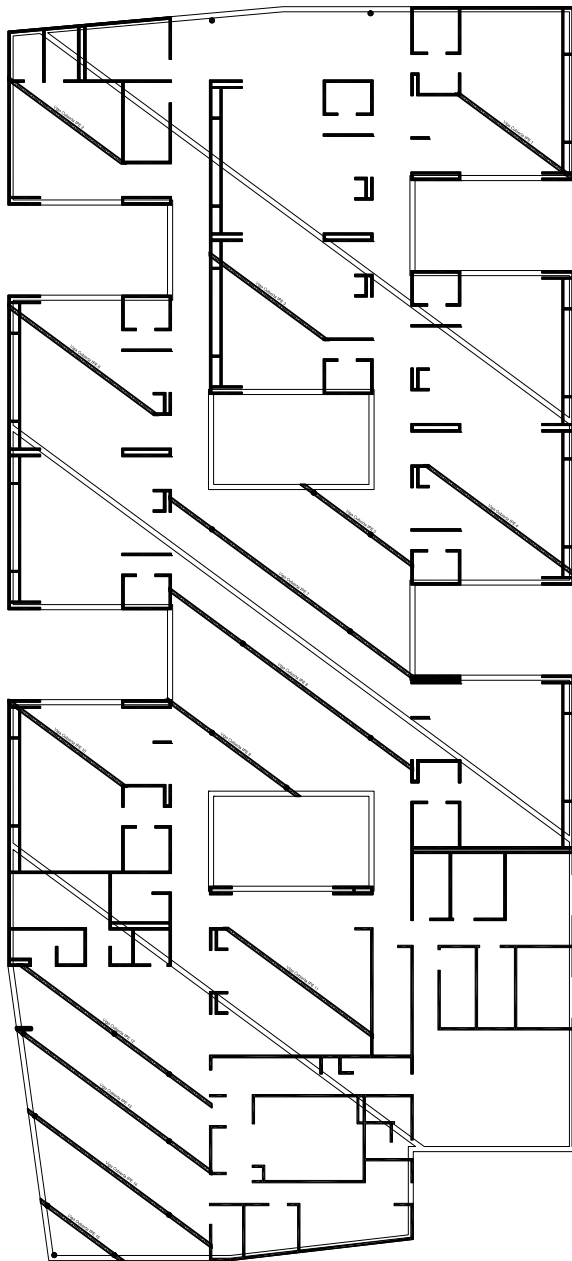
INGENIERO DE CONSTRUCCIÓN Y
ASISTENTE TÉCNICO

INGENIERO DE CONSTRUCCIÓN Y
ASISTENTE TÉCNICO

INGENIERO DE CONSTRUCCIÓN Y
ASISTENTE TÉCNICO

INGENIERO DE CONSTRUCCIÓN Y
ASISTENTE TÉCNICO

PLANTA CUBIERTA
VIGAS IPE 300



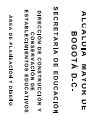
PROYECTO
ESTRUCTURAL

ESTADO
DISEÑO

NO SE DEBE USAR PARA
OTRAS FINALIDADES
SIN AUTORIZACIÓN
DE LA SECRETARÍA

COPIA DE DISEÑO Y COORDINACIÓN
DE LA SECRETARÍA

REVISIÓN Y APROBACIÓN DEL DISEÑO



JARDIN INFANTIL FONTANA GRANDE
PORTAL DE LOMBACIA
LOC 11 SUBA
CARRERA 1068 NO 151C-02

PROYECTO
ESTRUCTURAL

BILLY ANDRÉS HUERTA GARCIA
 NET 7126.274.4304
 CONFIDENTIAL DE CONSULTORÍA 37792015

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F&B, INCORPORATED
F&B, INCORPORATED

INTERVENTIONS WITHIN OR OUTSIDE

SECRETARIA DE EDUCACION

DIRECTOR DE GOBIERNO Y
 GOBIERNO DE LAS INSTITUCIONES
 EDUCATIVAS

GROUP 1: 1990-1994

GROUP 2: 1995-1999

CONFIDENTIAL

11

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100%
 AUGUSTO 14 DEL 2016
 FERIA ESCALA
 ASES. INDOCAS
 2016
 CONSECUTIVO

ES09/16

The figure displays a series of architectural drawings for a project titled 'CASA DE LA FAMILIA'. The drawings are organized into a grid, showing 13 floor plans (Plano 1 to Plano 13) and a section (Corte). Each drawing includes dimensions and labels for various rooms and structural elements. The plans are arranged in a grid, with each plan showing room layouts, dimensions, and structural elements. The plans are labeled with their respective floor numbers and titles. The section drawing shows the vertical profile of the building, including the roof and foundation.



JARDIN INFANTIL FONTANA GRANDE
PORTAL DE OLMARCA
LOC 11 SUBA
CARRERA 1668 NO 151C-92
1168L

CONFILUTION
BILLY ANDRÉS HUERTADO GARCÍA
TEL: 9128-294204
CONFILUTION DE CONSULTORIA 3755215

1105 GILBERT BLVD
SUITE 100
CHICAGO, IL 60643

F.R. MCCOMB (CHICAGO)
F.R. MORGENTHAU (CHICAGO)

INTERVENTORI ESTERNA DI CRISTO

MARIA VICTORIA ANGULO
SECRETARÍA DE EDUCACIÓN

ADRIANA MARIA GONZALEZ
SABIDOCHILKARD DE AGUIRRE Y PUGHMONTENES

JOHNIV EDWARD PAGELLA ARIZA

POUR L'ÉVALUATION

REVISIÓN Y APROBACIÓN TÉCNICA

CONFETTI
DEBAPOLLO ESTRUCTURAL

Observations

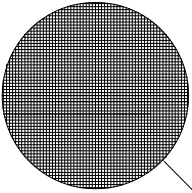
1111

Q05 ESTRUTURAL JACON BOGOTA
ABRIL 11 DE 2016

PLANO DE OF
ES11/14

PLANTA MUROS ESTRUCTURALES
 ESPESOR 0,12 m
 Y COLUMNAS METÁLICAS
 TUBO 25 cm de diámetro
 espesor lámina 12.7 cm

Malla Electrosoldada
D - 158
EN CENTRO DEL
ALMA DE TODOS
LOS MUROS





ALCALDIA MAYOR DE
BOGOTÁ D.C.

SECRETARIA DE EDUCACION

DIRECCION DE CONSTRUCCION Y
CONSERVACION DE
ESTABLECIMIENTOS EDUCATIVOS

AREA DE PLANEACION Y DISEÑO

JARDIN INFANTIL FONTANA GRAND
PORTAL DE LOMBARCIA
LOC 11 SUBA
CARRERA 1068 NO 151C-02
11560L

PROYECTO
ESTRUCTURAL

BILLY ANDRÉS HUERTADO GARCÍA
 INE 8125-2743804
 COORDINADOR DE CONSULTORÍA 37592015

1435 OLA RIBEIRO-OLIVEIRA
M.P., M., 052629401

EQUIPO DE CIERRE Y DESARROLLO
FEA, RECUPERACIÓN GENERAL
FEA, SERVICIO ESPECIAL.

INTERVENTIONS EXTENDING OR CHANGING

MARIA VICTORIA ANGULO
DE CORTAÑEA DE CONCACIOY
ADRIANA MARIA GONZALEZ

SECTION ON CONFIDENTIALITY
 CONFIRMATION OF SUBSCRIPTION
 EBOOKS

COLLEGEVIEW
WILLIAM A. BENDER

REVISIÓN Y APROBACIÓN TÉCNICA

MAQUINARI Y FERRAS

COPIES

1000 JOURNAL

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FECHA	ESCALA
ANÁL. INDICIOS	
2016	

ES12/16

ALZADO MUROS



JARDIN INFANTIL FONTANA GRANDI
PORTAL DE LOMBARCA
LOC 11 SUBA
CARRERA 1068 NO 151C-92
11068.

PROYECTO
ESTRUCTURAL

BILLY ANDRÉS HURTADO GARCÍA
TEL: 9126-274430-1
COORDINADO DE CONSULTORÍA: 9126-275221-5

1115 **OLIGOMERIZATION OF 2,2,4,4-TETRAHYDRO-3H-PYRAN-3-ONE**
H. P. H. STROOBANDT

MARIA VICTORIA ANGULO
SECRETARIA DE CONVOCACION

ADRIANA MARTA GONZÁLEZ
9186608174900 DE ACCESO Y REGISTRO

JOHN IV. EDWARD PASCELLA ARZUA

COPIE INVIATA

NUMERO Y FECHA

REVISIONE E APPROVAZIONE DELL'OPERA

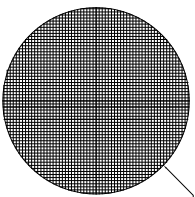
DEBATELO ESTRUCTURAL

Observations

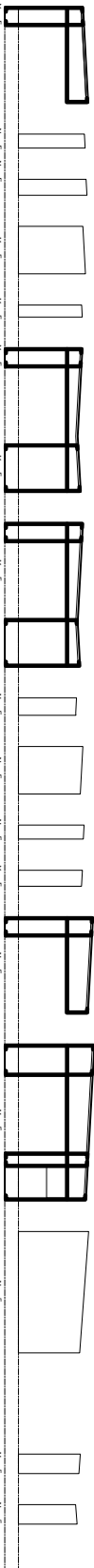
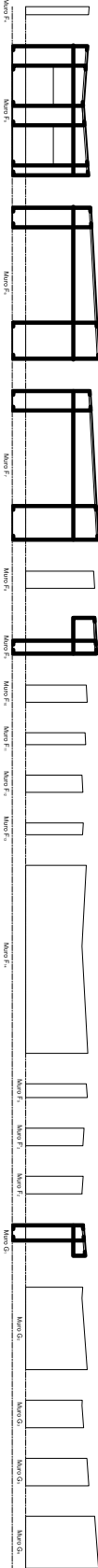
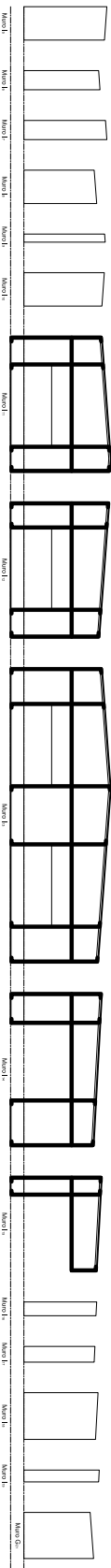
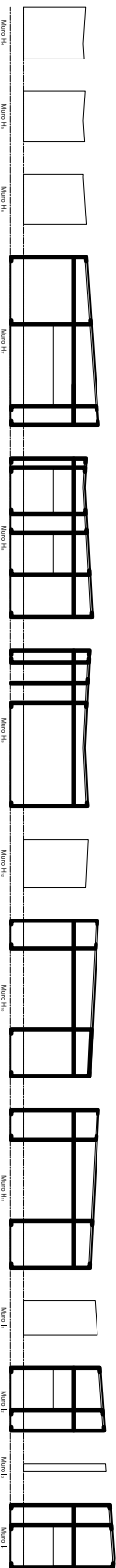
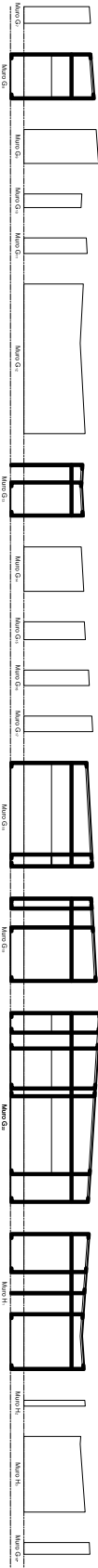
NOTRE DEL ARCTO
DOO ESTRUCTURAL, ANCHOR BODOTA
ADOSTO 18 DEL 2016/2017

PLANO DE
ES13/16

ALZADO MUROS



Malla Electrosoldada
D - 158
EN CENTRO DEL
ALMA DE TODOS
LOS MUROS

[illegible][illegible][illegible]