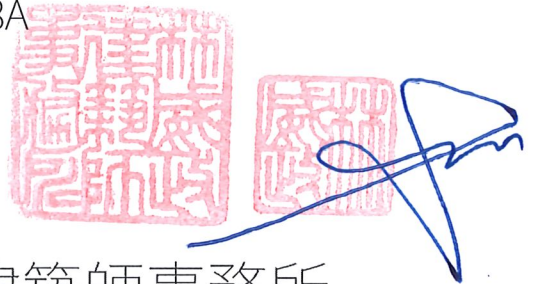


新竹縣原住民族地區建築標準圖說
8-SC-3-1

結構計算書

Job No. 2208A

2021/1



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附錄	參考結構圖說
	ETABS 輸入檔
	ETABS 輸出檔
	SAFE 輸入檔
	SAFE 輸出檔



建築結構設計基本資料表

一、構造種類

- 鋼筋混凝土構造
- 鋼骨構造
- 鋼骨鋼筋混凝土構造
- 其他

二、結構系統之規劃及分析

- 韌性抗彎矩構架系統
- 二元系統
- 其他
具對角斜撐之輕型構架

三、結構材料

1. 混凝土
 $f_c' = 280 \text{ kgf/cm}^2$
2. 鋼筋
#4(D13)以上： $f_y = 4200 \text{ kgf/cm}^2$
(CNS 560 A2006 SD420W)
#3(D10)以下： $f_y = 2800 \text{ kgf/cm}^2$
(CNS 560 A2006 SD280W)
3. 鋼結構
SGC440 3400 kgf/cm^2

活載重

LL		kgf/m ²
1F	住宅	200
2F	住宅	200
3F	住宅	200
PRF	屋頂	60

四、水平側向力、風力檢核分析

(一) 地震力

1. 新竹縣五峰鄉
2. $S_S^D = 0.7$, $S_1^D = 0.4$
 $S_S^M = 0.9$, $S_1^M = 0.5$
3. $I = 1.10$
4. $R_x = 3$, $R_y = 3$
5. $\alpha_y = 1.0$
6. 建築物基本震動週期 $T_x = 0.05 h_n^{3/4}$
 $T_y = 0.05 h_n^{3/4}$
7. $V_x / W = 0.300$
 $V_y / W = 0.300$

(二) 風力

基本設計風速每秒 32.5 公尺區

$I = 1.1$, 地況: **B**

五、層間最大變位與層間變位角

(X-Dir.)

1. 最大層間變位角 = 0.629‰
2. 最大位移 = 0.808cm

(Y-Dir.)

1. 最大層間變位角 = 0.457‰
2. 最大位移 = 0.601cm

七、結構設計

- ASD
- USD
- LRFD

八、基礎設計

- 獨立基腳或聯合基腳
- 筏式基礎
- 樁基礎
- 其他
版式基礎



九、基礎開挖擋土支保措施

- 斜坡明挖
- 預壘排樁
- 地下連續壁
- 其他



1.0 建築概要

本案為標準圖說，工程可能位於新竹縣五峰鄉/尖石鄉/關西鎮，為地上 3 樓之輕型鋼構造，樓高約 10.894 公尺。

建築基地：新竹縣五峰鄉/尖石鄉/關西鎮

建築規模：地上 3 層

開挖深度：0.4m



2.0 結構系統說明

地震力分析：法規靜力分析

基本資料：

建築種類：鋼筋混凝土構造(RC)\鋼骨構造(SS)

結構系統：其他\具對角斜撐之輕型構架

樓層概述：

樓層	高度(cm)	用途
1F	350	住宅
2F	320	住宅
3F	419.4	住宅

樓版厚度：

基礎版 40cm RC 版

PRF 彩浪鋼版

開挖方式：

斜坡明挖

分析程式： ETABS V9.5



3.0 結構材料

3.1 混凝土

材料特性:

波松比	0.2
彈性模數(楊式係數)	$15000 \sqrt{fc'}$ kgf/cm ²
線性熱膨脹係數	1.2×10^{-5} 1/ °C
混凝土規定抗壓強度 fc'	同建築結構設計基本資料表
單位重	2400 kgf/m ³

3.2 鋼筋

彈性模數(楊式係數)	2.04×10^6 kgf/cm ²
鋼筋規定降伏強度 fy	同建築結構設計基本資料表
點焊鋼線網	ASTM A706, $F_y=5000$ kgf/cm ²

3.3 結構鋼

材料特性:

波松比	0.3
彈性模數(楊式係數)	2.04×10^6 kgf/cm ²
線性熱膨脹係數	1.2×10^{-5} 1/ °C
標稱降伏應力 fy	同建築結構設計基本資料表
單位重	7850 kgf/m ³

螺栓及焊材

高拉力螺栓	F10T
錨定螺栓	ASTM A307, ASTM A325
焊材	E80xx



4.0 設計載重

4.1 靜載重及活載重

靜載重

PRF

載重種類	數量	單位重	總重
設備管線	1 式	40 kgf/m ²	40 kgf/m ²

外加靜載重(SDL) 40 kgf/m²

2F, 3F 室內

載重種類	數量	單位重	總重
鋪面裝修	1 式	40 kgf/m ²	40 kgf/m ²

外加靜載重(SDL) 40 kgf/m²

活載重 (kgf/m²)

同建築結構設計基本資料表

樓層載重資料

樓層	面積(m ²)	重量(tf)	單位重(tf/m ²)
PRF	46.92	2.34	0.050
3F	46.92	5.88	0.125
2F	67.39	5.93	0.088



4.2 設計地震力及分析結果

依據「建築物耐震設計規範及解說，內政部」，設計地震力為：

$$V = \frac{I}{1.4\alpha_y} \left(\frac{S_{aD}}{F_u} \right)_m W$$

式中

$$\left(\frac{S_{aD}}{F_u} \right)_m = \begin{cases} \frac{S_{aD}}{F_u} & \frac{S_{aD}}{F_u} \leq 0.3 \\ 0.52 \frac{S_{aD}}{F_u} + 0.144 & 0.3 < \frac{S_{aD}}{F_u} < 0.8 \\ 0.70 \frac{S_{aD}}{F_u} & \frac{S_{aD}}{F_u} \geq 0.8 \end{cases}$$

S_{aD} 工址設計水平譜加速度係數，為工址水平加速度與重力加速度 g 之比值。

W 建築物全部靜載重。活動隔間應計入 75kg/m^2 之重量；一般倉庫、書庫應計入至少四分之一活載重；水箱、水池等容器，應計入全部內容物之重量。

I 用途係數。

α_y 起始降伏地震力放大倍數，依耐震設計規範第一章第 9 節規定，鋼結構採容許應力法設計可取 1.2，採極限設計法取 1.0。就鋼筋混凝土結構而言，以極限強度設計法可採 1.0。

F_u 結構系統地震力折減係數，依耐震設計規範第二章第 9 節規定。

※本案為一般建築物，由於本案為泛用之標準圖說，設立之位置較廣，考量其變異性用途係數保守採用 1.1。

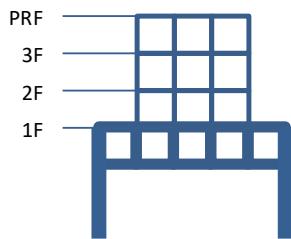


地震力計算詳下表

基地基本資料					斷層資料	
縣市	鄉鎮市區	里	震區種類	地盤種類	附近斷層	距離斷層
新竹縣	五峰鄉	所有里	一般震區	第一類地盤(自行決定地盤種類)	獅潭與神卓山(一般情況)	10(km)

譜加速度係數		近斷層因子		工址放大因子		修正譜加速度係數		分界週期	
S_S^D	0.7	設計	N_a	1	F_a	1	$S_{DS}=F_a \times N_a \times S_S^D$	0.7	$T_0^D=S_{D1}/S_{DS}$
S_1^D	0.4		N_v	1	F_v	1	$S_{D1}=F_v \times N_v \times S_1^D$	0.4	
S_S^M	0.9	最大	N_a	1	F_a	1	$S_{MS}=F_a \times N_a \times S_S^M$	0.9	$T_0^M=S_{M1}/S_{MS}$
S_1^M	0.5		N_v	1	F_v	1	$S_{M1}=F_v \times N_v \times S_1^M$	0.5	

建築基本資料							
屋頂層數	樓層數	地下層數	1F抬高	屋頂高度	建築高度	地下高度	h_n (基面至屋頂)
0 F	3 F	0 F	0(m)	0(m)	10.894(m)	0(m)	10.894(m)



	建築結構系統	
	X方向	Y方向
結構阻尼比	0.02	
結構系統	其他構造	其他構造
T_{code} (法規週期)	$0.05 \times h_n^{3/4} = 0.300(s)$	$0.05 \times h_n^{3/4} = 0.300(s)$
T_{max} (上限週期)	$1.4 \times T_{code} = 0.420(s)$	$1.4 \times T_{code} = 0.420(s)$
I(用途係數)	1.1	
設計規範	鋼構(LRFD)	
α_y	1	

各方向地震力計算		X方向	Y方向
1. 建築結構系統 相關資料	T_{dyna} (動力週期)	0.217(s)	0.184(s)
	T_{design} (設計週期)	0.217(s)	0.184(s)
	R(結構系統韌性容量)	3	3
	R_a (結構系統容許韌性容量)	2.333	2.333



各方向地震力計算		X方向	Y方向
2. 最小設計水平總橫力	S_{aD} (工址設計水平譜加速度)	0.875	0.875
	F_u (系統折減係數)	1.915	1.915
	$(S_{aD}/F_u)_m$	0.382	0.382
	V (最小設計水平總橫力)	0.300	0.300
3. 避免最大考量地震崩塌之設計地震力	S_{aM} (工址最大水平譜加速度)	0.900	0.900
	F_{uM} (系統最大折減係數)	2.236	2.236
	$(S_{aM}/F_{uM})_m$	0.353	0.353
	V_M (最大考量地震水平總橫力)	0.278	0.278
4. 避免中小度地震降伏之設計地震力	V^* (中小度地震水平總橫力)	0.191	0.191
5. 層間相對位移地震力	V_{drift} (層間相對位移地震力)	0.174	0.174

各方向地震力計算		Z方向
6. 垂直地震力	D_{DL+SDL} (垂直自重變位)	0.014(cm)
	T_{ver} (垂直週期) $=2\pi(D_{DL+SDL}/g)^{0.5}$	0.024(s)
	$S_{aD,v}$ (垂直設計譜加速度係數)	0.202
	F_{uv} (垂直地震系統折減係數)	1.189
	$(S_{aD,v}/F_{uv})_m$	0.160
	V_{ZD} (垂直設計地震力)	0.126
	$S_{aM,v}$ (垂直最大加速度係數)	0.237
	$F_{uv,M}$ (垂直最大地震系統折減係數)	1.263
	V_{ZM} (避免最大考量垂直地震崩塌)	0.133
	V_{Z^*} (避免中小度垂直地震降伏)	0.050

地震力統整		X方向	Y方向
1. 水平地震力	$V_{design} = \max(V, V_M, V^*)$	0.300	0.300
2. 層間位移地震力	V_{drift}	0.174	0.174
地震力統整		Z方向	
3. 垂直地震力	$V_{z,Design} = \max(V_{ZD}, V_{ZM}, V_{Z^*})$	0.133	



意外扭矩放大係數

Floor	Load Case	δ_{max} (cm)	δ_{avg} (cm)	$A_x = (\delta_{max}/1.2 \delta_{avg})^2$	備註
PRF	EXP	0.799(節點 115)	0.771	0.746	
PRF	EYP	0.602(節點 16)	0.562	0.798	
PRF	EXN	0.809(節點 16)	0.770	0.766	
PRF	EYN	0.591(節點 115)	0.562	0.765	
3F	EXP	0.552(節點 115)	0.532	0.748	
3F	EYP	0.452(節點 16)	0.423	0.794	
3F	EXN	0.560(節點 16)	0.531	0.773	
3F	EYN	0.445(節點 115)	0.424	0.765	
2F	EXP	0.222(節點 121)	0.211	0.766	
2F	EYP	0.209(節點 5)	0.194	0.805	
2F	EXN	0.232(節點 5)	0.216	0.803	X 最大值
2F	EYN	0.209(節點 1)	0.193	0.819	Y 最大值

X 向最大意外扭矩放大係數 A_x 小於 1，故質心偏移比例取 $E_{cc}=0.05$ 進行分析

Y 向最大意外扭矩放大係數 A_x 小於 1，故質心偏移比例取 $E_{cc}=0.05$ 進行分析



樓層地震力

(單位 tf)

	EXP	EXP	EYP	EYP	EXN	EXN	EYN	EYN
	VX	VY	VX	VY	VX	VY	VX	VY
PRF	-1.26	0.00	0.00	-1.26	-1.26	0.00	0.00	-1.26
3F	-1.95	0.00	0.00	-1.95	-1.95	0.00	0.00	-1.95
2F	-1.03	0.00	0.00	-1.03	-1.03	0.00	0.00	-1.03
SUM	-4.24	0.00	0.00	-4.24	-4.24	0.00	0.00	-4.24

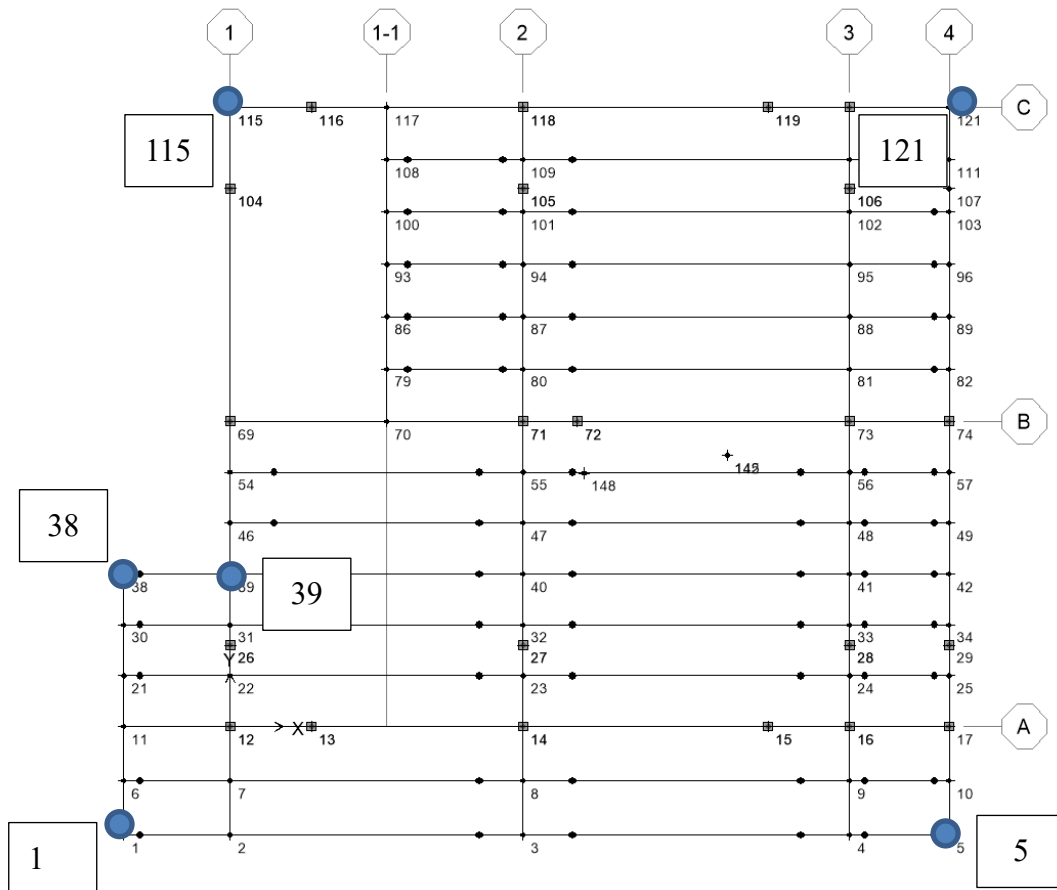
樓層層間變位角

	U _x		U _y	
	EXP	EXN	EYP	EYN
PRF	0.569‰(D51)	0.581‰(D20)	0.358‰(D11)	0.344‰(D38)
3F	0.614‰(D46)	0.629‰(D15)	0.450‰(D9)	0.439‰(D35)
2F	0.507‰(D48)	0.516‰(D23)	0.457‰(D8)	0.456‰(D5)



碰撞距離檢討

依建築物耐震設計規範，為避免地震時所引起的變形造成鄰棟建築物間的相互碰撞，建築物應自留設設計地震力作用下產生位移乘以 $0.6 \times 1.4 \times \alpha_y \times R_a$ 倍之距離。



	節點 1		節點 5		節點 121		節點 115	
	X 向	Y 向	X 向	Y 向	X 向	Y 向	X 向	Y 向
475 年地震 側向位移 (cm)	0.231	0.209	0.231	0.208	0.222	0.208	0.799	0.590
安全 碰撞距離 (cm)	0.453	0.409	0.453	0.408	0.435	0.408	1.566	1.156



	節點 39		節點 38					
	X 向	Y 向	X 向	Y 向				
475 年地震 側向位移 (cm)	0.545	0.444	0.220	0.209				
安全 碰撞距離 (cm)	1.069	0.870	0.430	0.409				

備註：位移放大倍數 X 向為 1.960，Y 向為 1.960



4.3 設計風力

依據”建築物耐風設計規範及解說”，本建築基本設計風速為
每秒 37.5 公尺

封閉式建築主抗風系統屋頂風壓計算							
Enclosed Building Main Wind Force Resistance System Design Roof Pressure (TBC2006)							
Job:				Job No.			
				Made by: JWLI		Date: 2004/12/13	
1.1 Input data		尺寸					
Exp=	C	V10=	37.5	m/sec	I=	1.1	
Z=	10.895	m	θ =	17	Degree		
T=	0.1	sec	Beta=	0.02	B=	6.85	m
L=	7.95	m					
2.1 Basic Constant							
Exposure=	C	α =	0.15	Zg=	300.00	m	
Design wind speed=	37.50	m/sec	Building width=	6.85	Ave. roof height=	10.90	m
Do=	0.005	Damping ratio=	0.020				
2.2 Wind pressure							
$K(h)=2.774(Z/Zg)^{2\alpha}$	$h>5m$	Average level	=	1.0260			
$K(h)=2.774(5/Zg)^{2\alpha}$	$h<5m$		=	0.0000			
$q(h)=0.06*K(z)*(IV_{10}(c))^2$			=	104.75	kg/m ²		
2.3 Roof design wind pressure							
Direction	Width	Length	G(h)	Wind ward		Leeward	
				Cp	q(h)G(h)Cp	Cp	q(h)G(h)Cp
Wx	6.85	7.95	1.889	-0.88	-175	-0.7	-138
Wy	7.95	6.85	1.886	-0.70	-138	-0.7	-138
2.4 Positive pressure under ROOF OVERHANG for main wind force resistance system							
Direction	G(h)	Wind ward		Leeward			
		Cp	q(h)G(h)Cp	Cp	q(h)G(h)Cp		
Wx	1.889	0.8	158	0.5	99		
Wy	1.886	0.8	158	0.5	99		

	WX	WX	WY	WY
	VX	VY	VX	VY
PRF	-4.07	0.00	0.00	-4.73
3F	-7.03	0.00	0.00	-8.16
2F	-6.20	0.00	0.00	-7.19
SUM	-17.30	0.00	0.00	-20.08

X 向設計風力為 17.3tf，大於 X 向設計地震力 4.24tf
Y 向設計風力為 20.8tf，大於 Y 向設計地震力 4.24tf



4.4 載重組合

DL=Dead load (include member self weight)

LL=Live load

EXP,EXN=Code static seismic load x-direction (± 0.05 offset)

EYP,EYN=Code static seismic load y-direction (± 0.05 offset)

Ez=Code static vertical seismic load

$E_x = EXP \cdot EXN$

$E_y = EYP \cdot EYN$

W=Wind load

設計

1.4DL

1.2DL+1.6LL

1.2DL+1.0LL \pm 1.0Ex \pm 0.3Ez

1.2DL+1.0LL \pm 1.0Ey \pm 0.3Ez

1.2DL+1.0LL \pm 1.0Ez \pm 0.3Ex

1.2DL+1.0LL \pm 1.0Ez \pm 0.3Ey

0.9DL \pm 1.0Ex \pm 0.3Ez

0.9DL \pm 1.0Ey \pm 0.3Ez

0.9DL \pm 1.0Ez \pm 0.3Ex

0.9DL \pm 1.0Ez \pm 0.3Ey

1.2DL+1.0LL \pm 1.6W

0.9DL \pm 1.6W



	DL	SDL	LL	EXP	EYP	EXN	EYN	EZ	WX	WY
02RC01	1.400	1.400								
02RC02	1.200	1.200	1.600							
02RC03	1.200	1.200	1.000	1.000				0.300		
02RC04	1.200	1.200	1.000	1.000				-0.300		
02RC05	1.200	1.200	1.000		1.000			0.300		
02RC06	1.200	1.200	1.000		1.000			-0.300		
02RC07	1.200	1.200	1.000			1.000		0.300		
02RC08	1.200	1.200	1.000			1.000		-0.300		
02RC09	1.200	1.200	1.000				1.000	0.300		
02RC10	1.200	1.200	1.000				1.000	-0.300		
02RC11	1.200	1.200	1.000	-1.000				0.300		
02RC12	1.200	1.200	1.000	-1.000				-0.300		
02RC13	1.200	1.200	1.000		-1.000			0.300		
02RC14	1.200	1.200	1.000		-1.000			-0.300		
02RC15	1.200	1.200	1.000			-1.000		0.300		
02RC16	1.200	1.200	1.000			-1.000		-0.300		
02RC17	1.200	1.200	1.000				-1.000	0.300		
02RC18	1.200	1.200	1.000				-1.000	-0.300		
02RC19	1.200	1.200	1.000	0.300				1.000		
02RC20	1.200	1.200	1.000	0.300				-1.000		
02RC21	1.200	1.200	1.000		0.300			1.000		
02RC22	1.200	1.200	1.000		0.300			-1.000		
02RC23	1.200	1.200	1.000			0.300		1.000		
02RC24	1.200	1.200	1.000			0.300		-1.000		
02RC25	1.200	1.200	1.000				0.300	1.000		
02RC26	1.200	1.200	1.000				0.300	-1.000		
02RC27	1.200	1.200	1.000	-0.300				1.000		
02RC28	1.200	1.200	1.000	-0.300				-1.000		
02RC29	1.200	1.200	1.000		-0.300			1.000		
02RC30	1.200	1.200	1.000		-0.300			-1.000		
02RC31	1.200	1.200	1.000			-0.300		1.000		
02RC32	1.200	1.200	1.000			-0.300		-1.000		
02RC33	1.200	1.200	1.000				-0.300	1.000		
02RC34	1.200	1.200	1.000				-0.300	-1.000		
02RC35	0.900	0.900		1.000				0.300		
02RC36	0.900	0.900		1.000				-0.300		
02RC37	0.900	0.900			1.000			0.300		
02RC38	0.900	0.900			1.000			-0.300		
02RC39	0.900	0.900				1.000		0.300		
02RC40	0.900	0.900				1.000		-0.300		



02RC41	0.900	0.900					1.000	0.300		
02RC42	0.900	0.900					1.000	-0.300		
02RC43	0.900	0.900		-1.000				0.300		
02RC44	0.900	0.900		-1.000				-0.300		
02RC45	0.900	0.900			-1.000			0.300		
02RC46	0.900	0.900			-1.000			-0.300		
02RC47	0.900	0.900				-1.000		0.300		
02RC48	0.900	0.900				-1.000		-0.300		
02RC49	0.900	0.900					-1.000	0.300		
02RC50	0.900	0.900					-1.000	-0.300		
02RC51	0.900	0.900		0.300				1.000		
02RC52	0.900	0.900		0.300				-1.000		
02RC53	0.900	0.900			0.300			1.000		
02RC54	0.900	0.900			0.300			-1.000		
02RC55	0.900	0.900				0.300		1.000		
02RC56	0.900	0.900				0.300		-1.000		
02RC57	0.900	0.900					0.300	1.000		
02RC58	0.900	0.900					0.300	-1.000		
02RC59	0.900	0.900		-0.300				1.000		
02RC60	0.900	0.900		-0.300				-1.000		
02RC61	0.900	0.900			-0.300			1.000		
02RC62	0.900	0.900			-0.300			-1.000		
02RC63	0.900	0.900				-0.300		1.000		
02RC64	0.900	0.900				-0.300		-1.000		
02RC65	0.900	0.900					-0.300	1.000		
02RC66	0.900	0.900					-0.300	-1.000		
02RC67	1.200	1.200	1.000						1.600	
02RC68	1.200	1.200	1.000							1.600
02RC69	1.200	1.200	1.000						-1.600	
02RC70	1.200	1.200	1.000							-1.600
02RC71	0.900	0.900							1.600	
02RC72	0.900	0.900								1.600
02RC73	0.900	0.900							-1.600	
02RC74	0.900	0.900								-1.600



5.0 工作載重結構行為限制

A. 梁變形限制

靜載重加活載重 L/240

活載重 L/360

B. 地震力側向變形角限制

最大變形角 5/1000

C. 結構受風力側向加速度限制

最大加速度 0.005g (0.05 m/sec²)

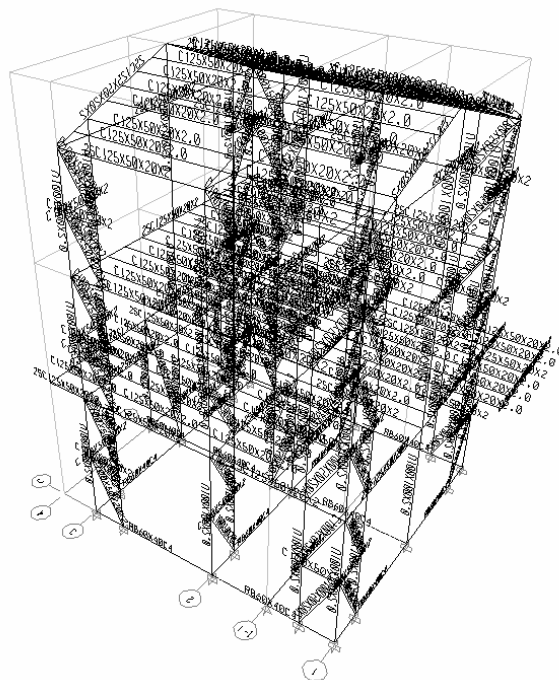
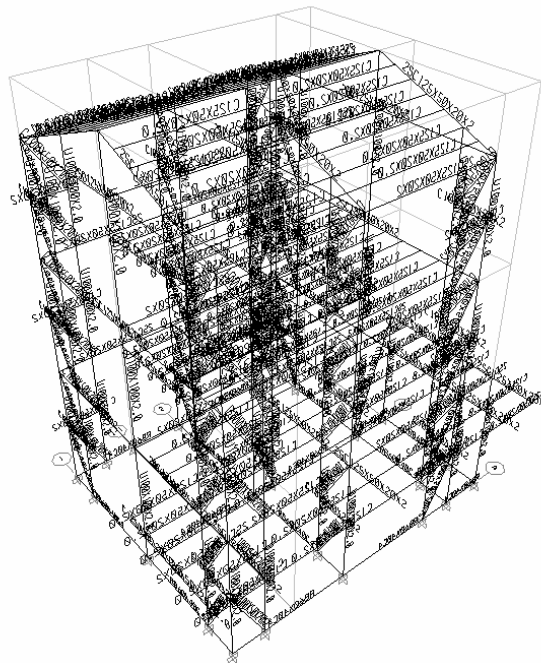
6.0 設計規範

- (1) 建築技術規則, 內政部, 最新版。
- (2) 建築物耐震設計規範及解說, 內政部, 2011/07。
- (3) 建築物基礎構造設計規範, 內政部, 2001/10。
- (4) 混凝土結構設計規範, 內政部, 2011/07。
- (5) 建築物耐風設計規範及解說, 內政部, 2017/01。
- (6) 冷軋型鋼構造建築物結構設計規範及解說, 內政部, 2015/10
- (7) ACI 318-05。

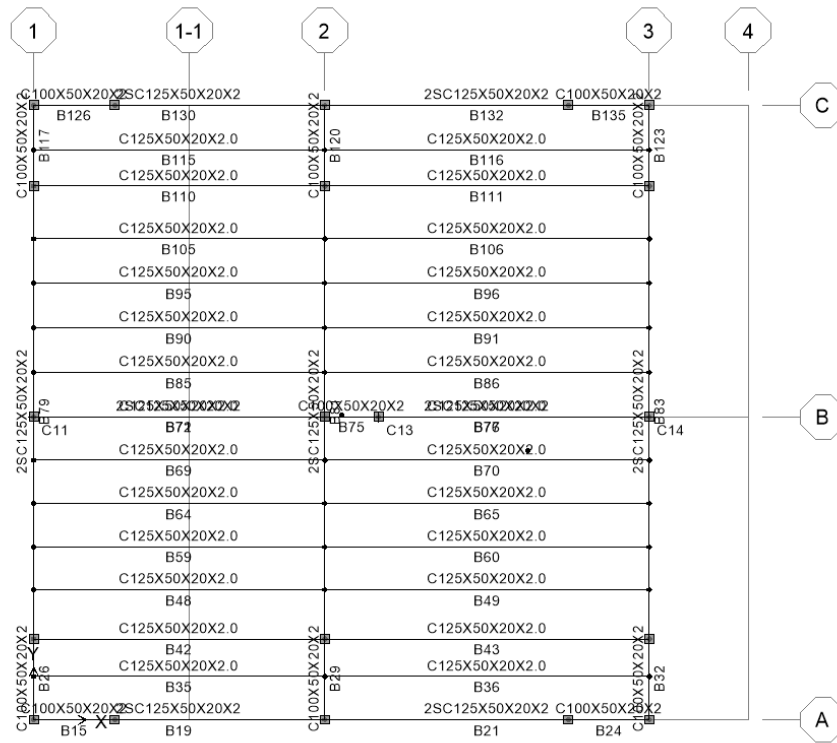


7.0 結構分析程序

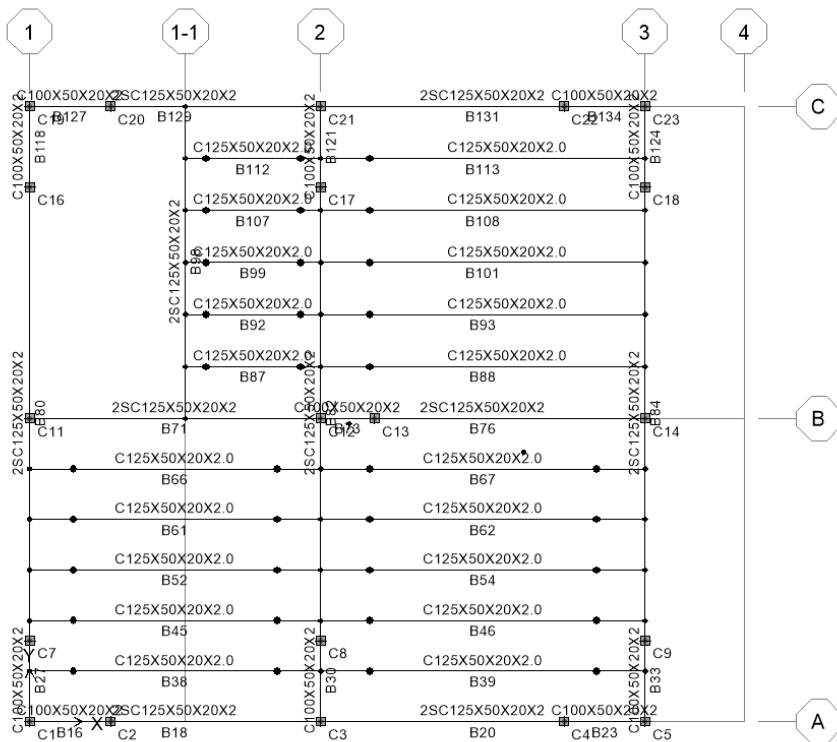
7.1 結構模型



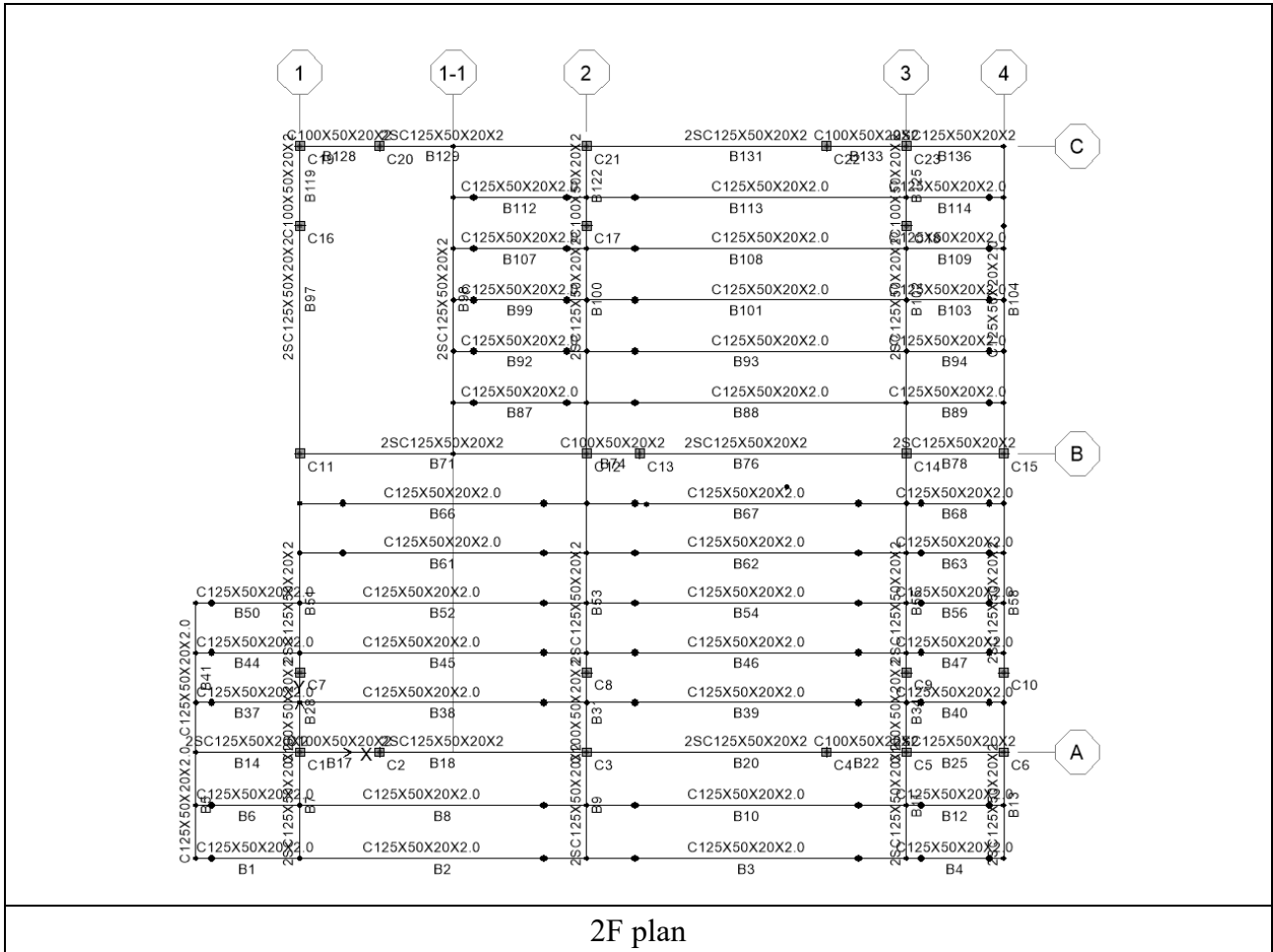
3D view

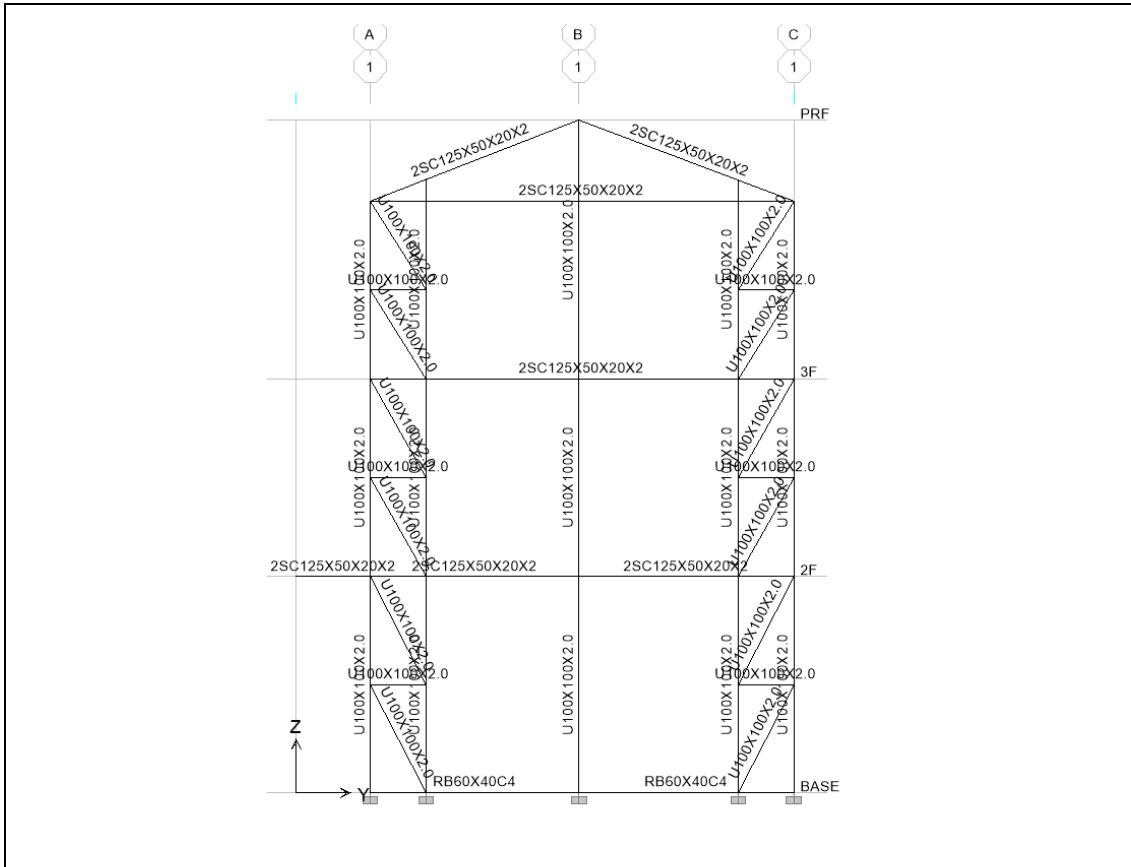


PRF plan

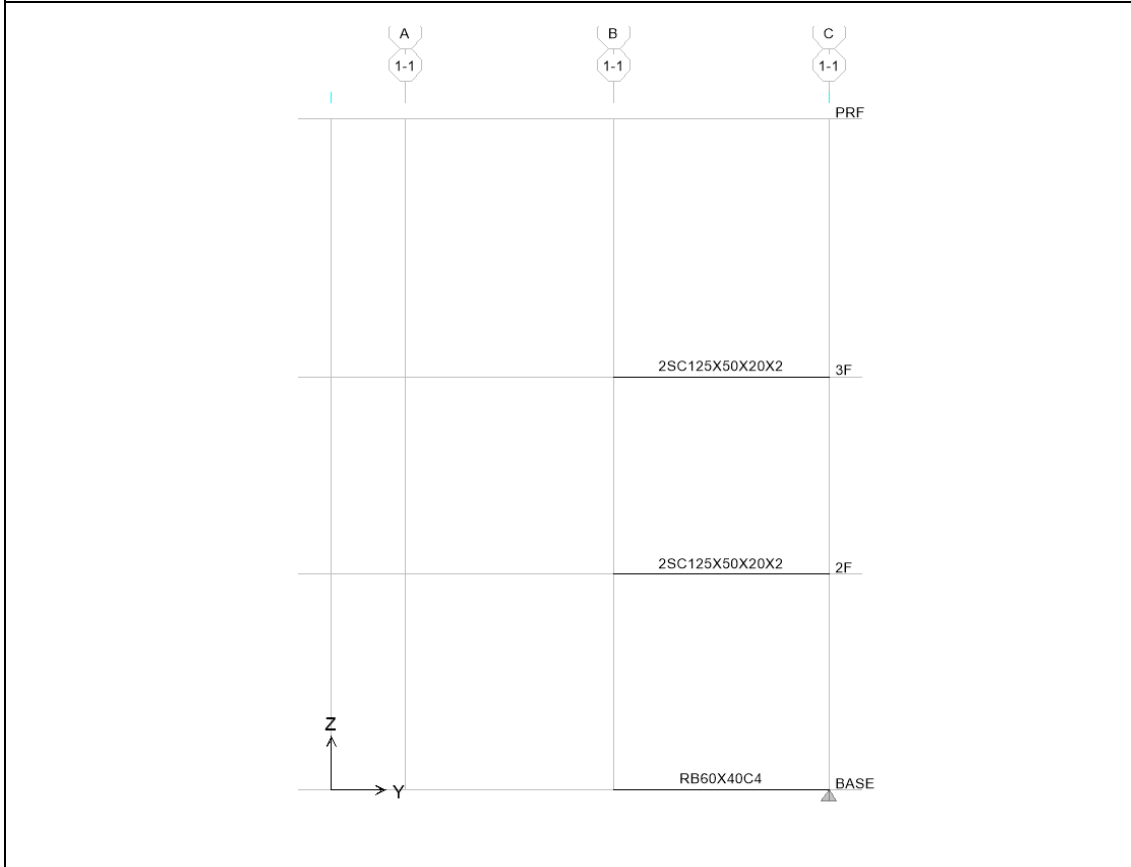


3F plan

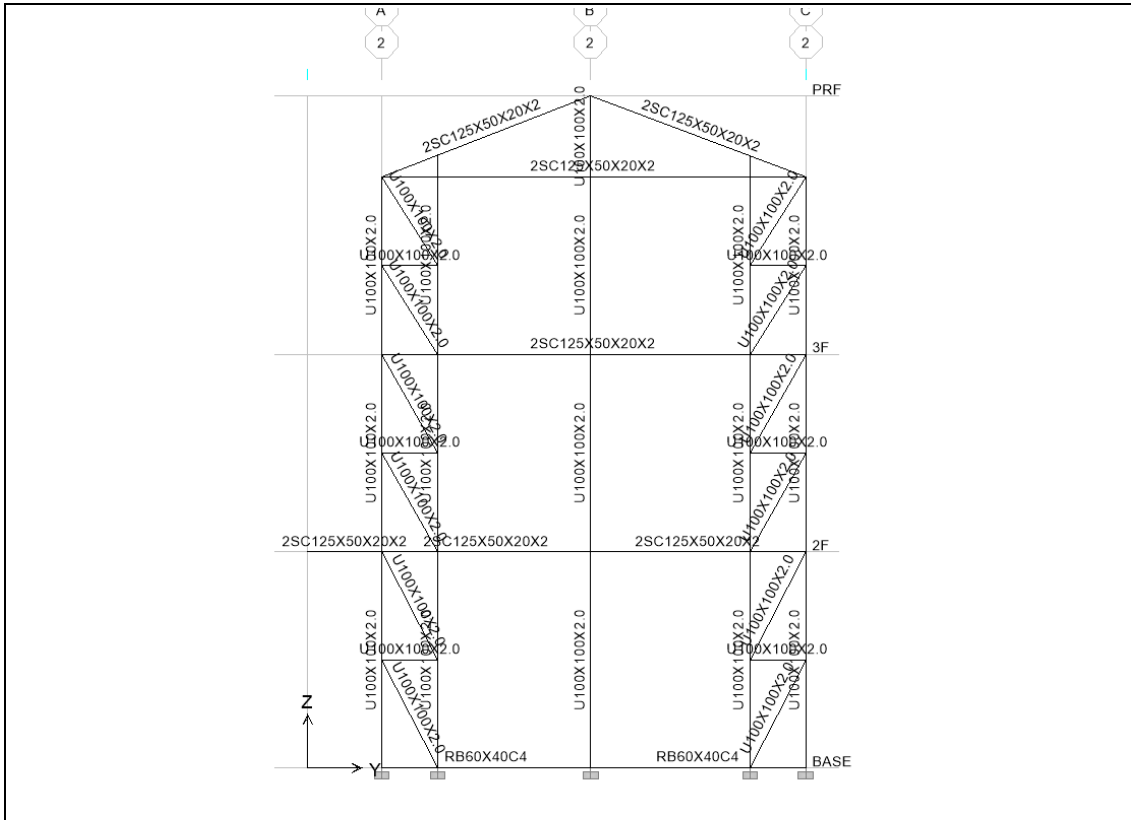




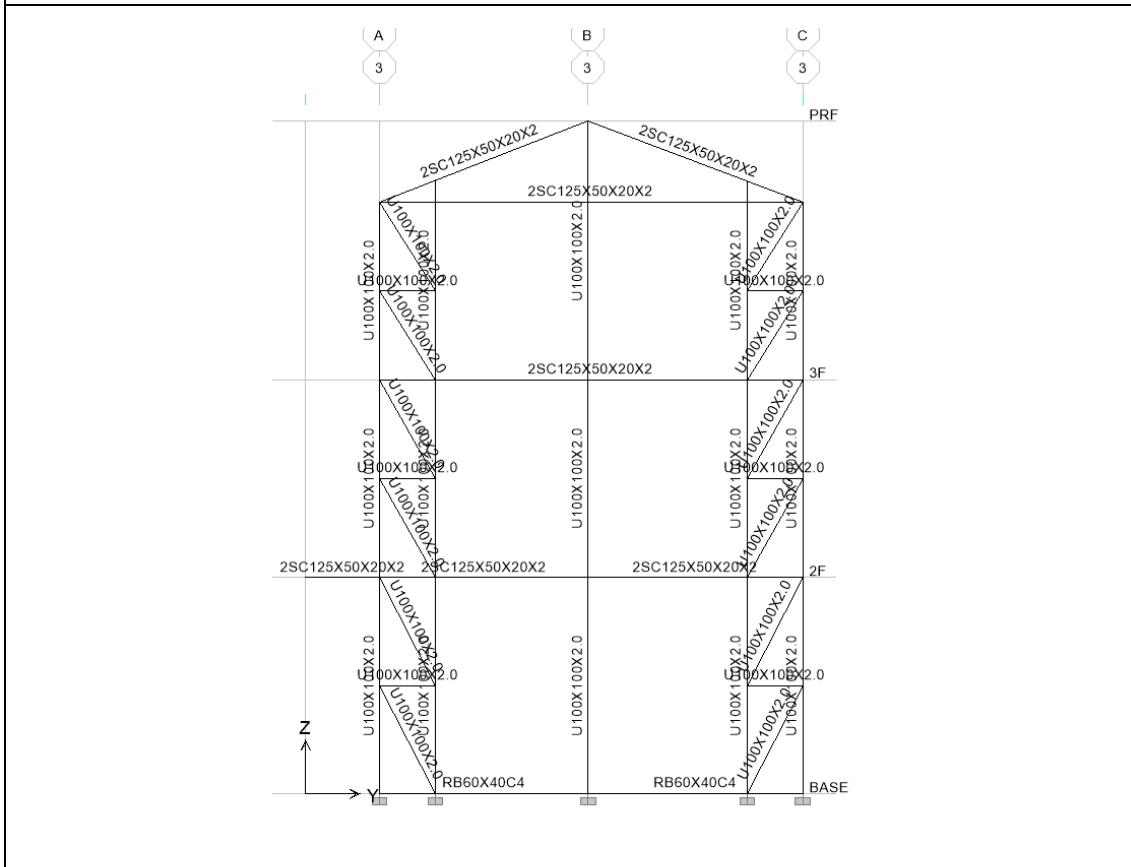
EL Line-1



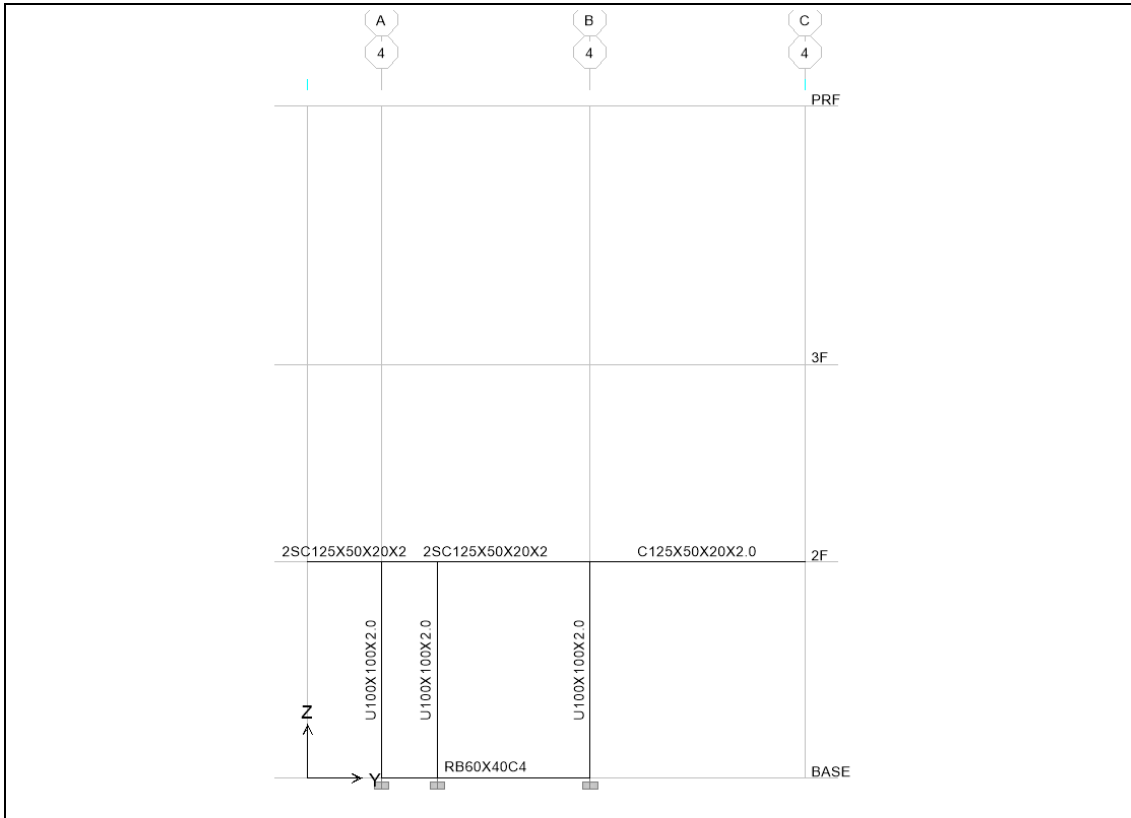
EL Line-1-1



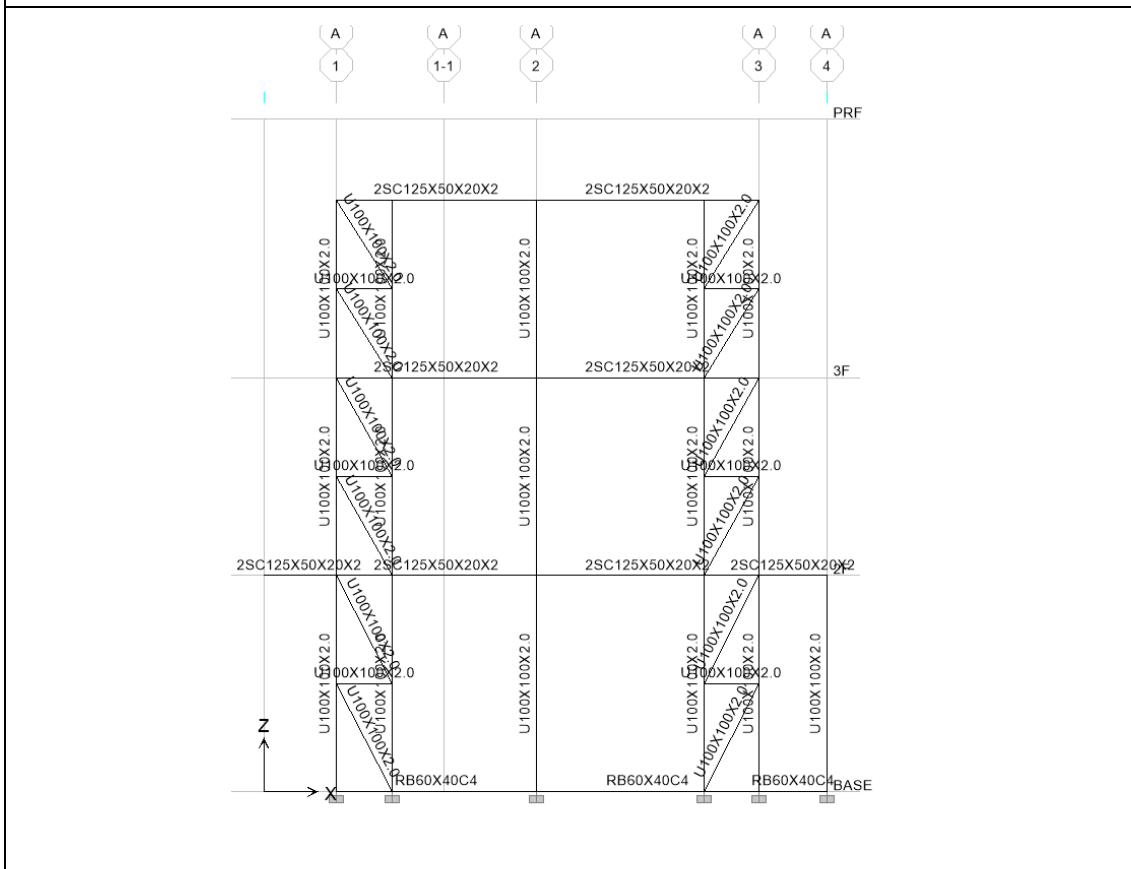
EL Line-2



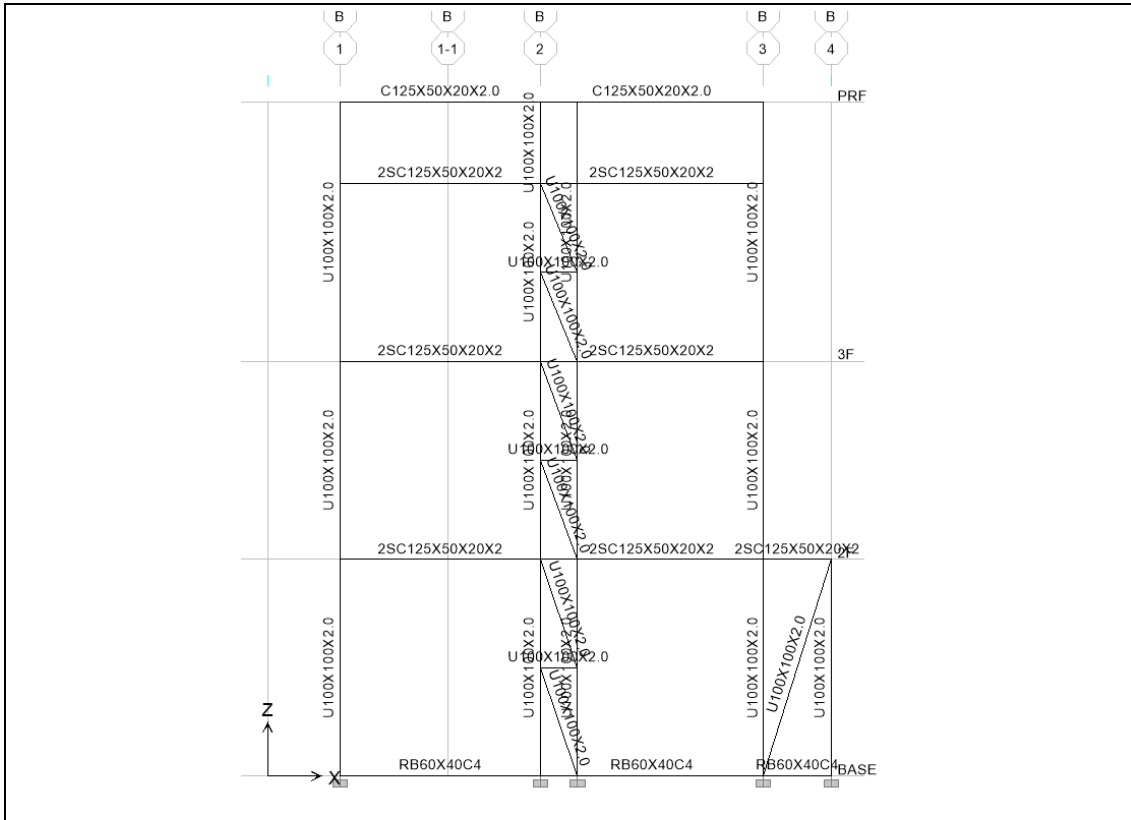
EL Line-3



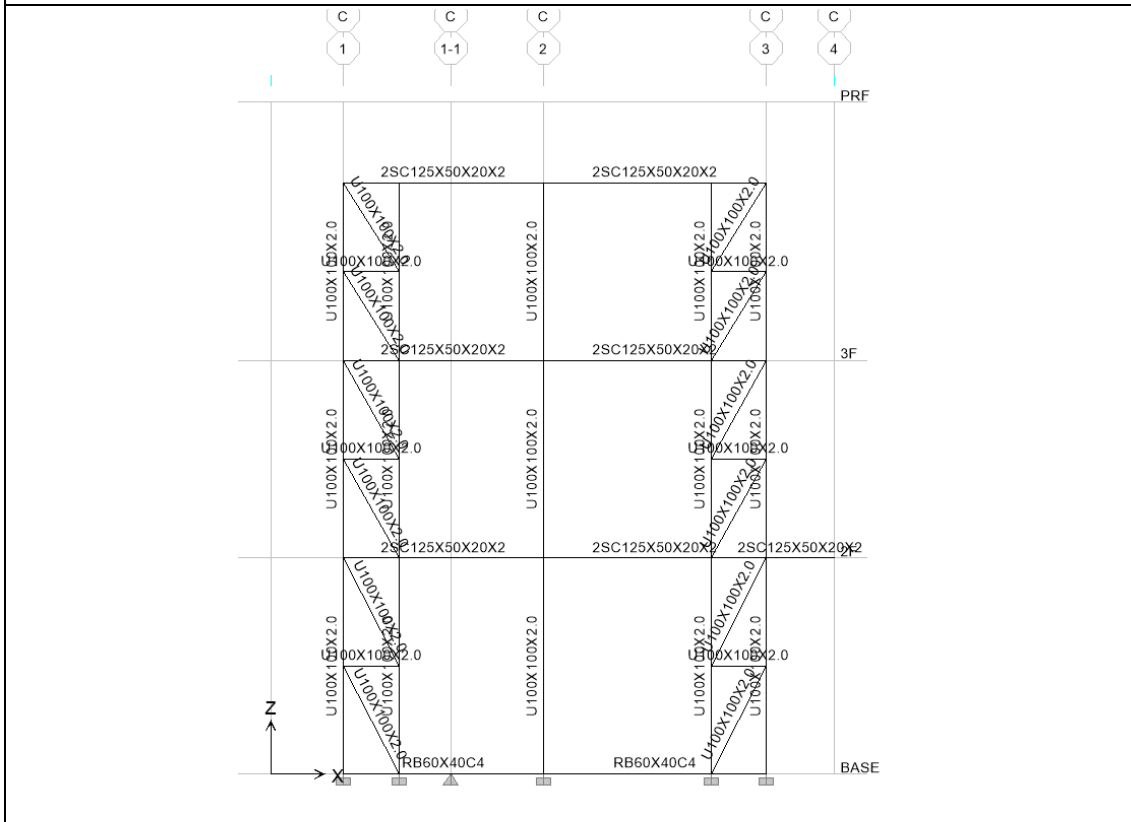
EL Line-4



EL Line-A



EL Line-B

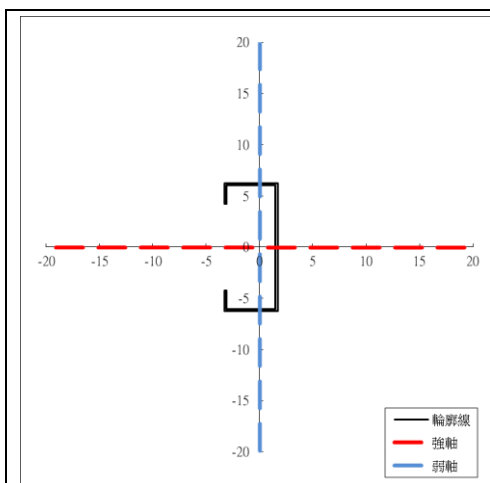


EL Line-C



斷面性質

C125x50x20x2.0



斷面積： $A= 5.140 \text{ (cm}^2\text{)}$

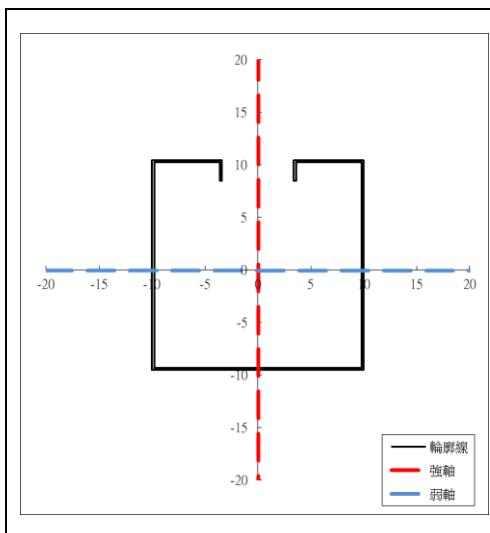
慣性矩： $I_x= 124.468 \text{ (cm}^4\text{)}$

$I_y= 19.025 \text{ (cm}^4\text{)}$

斷面模數： $S_x= 19.915 \text{ (cm}^3\text{)}$

$S_y= 5.776 \text{ (cm}^3\text{)}$

U100x100x2.0



斷面積： $A= 15.200 \text{ (cm}^2\text{)}$

慣性矩： $I_x= 955.743 \text{ (cm}^4\text{)}$

$I_y= 1038.673 \text{ (cm}^4\text{)}$

斷面模數： $S_x= 91.334 \text{ (cm}^3\text{)}$

$S_y= 103.867 \text{ (cm}^3\text{)}$

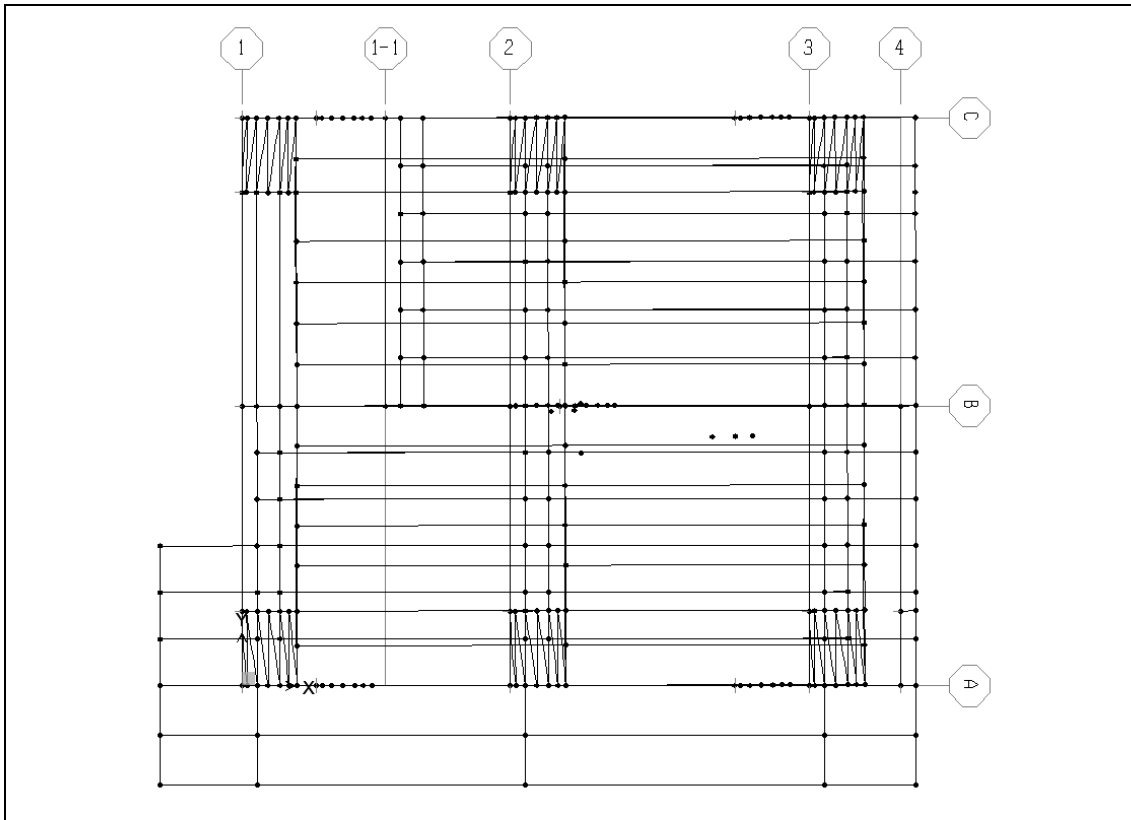


2-C125x50x20x2.0

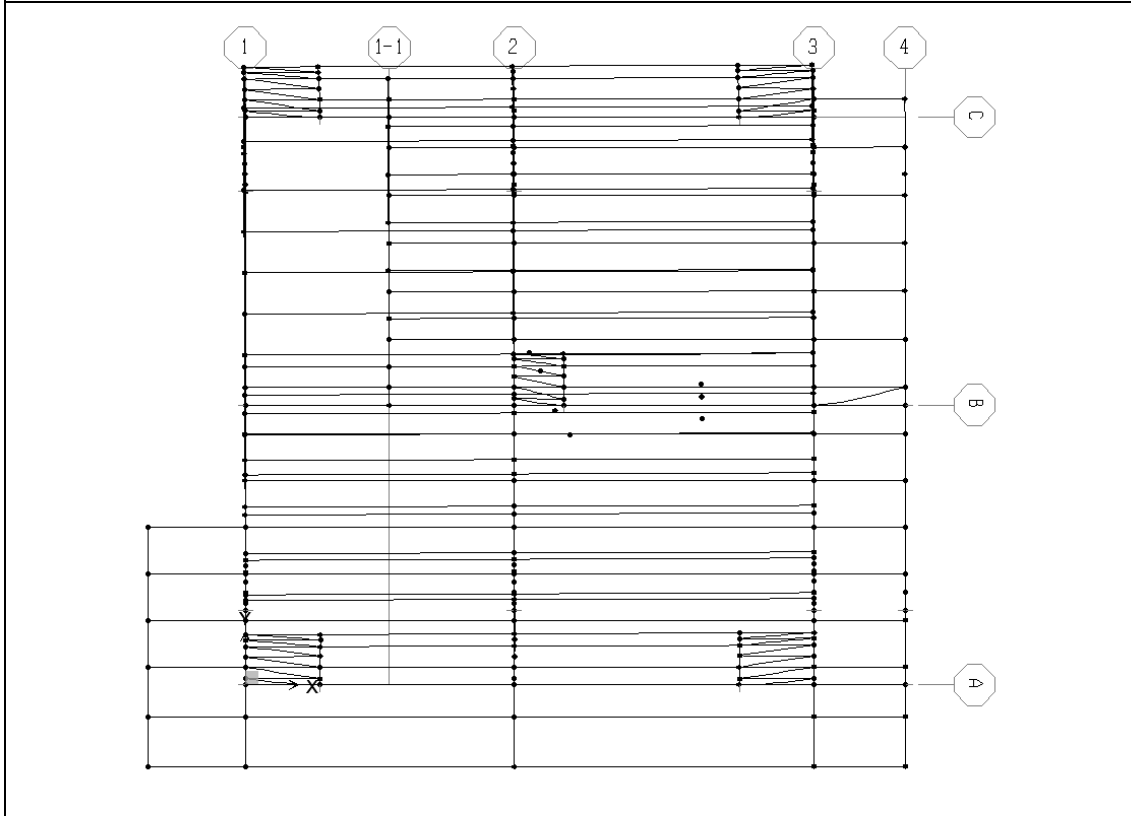
	<p>彈性係數：</p> $E = 2100000 \quad (\text{kgf/cm}^2)$ <p>斷面積：</p> $A = \frac{\Sigma E \cdot A}{E} = 10.280 \quad (\text{cm}^2)$ <p>慣性矩：</p> $I_x = \frac{\Sigma E \cdot I_x}{E} = 248.937 \quad (\text{cm}^4)$ $I_y = \frac{\Sigma E \cdot I_y}{E} = 38.050 \quad (\text{cm}^4)$ <p>斷面模數：</p> $S_x = \frac{\Sigma E \cdot I_x}{E_i \cdot y_i} = 39.830 \quad (\text{cm}^3)$ $S_y = \frac{\Sigma E \cdot I_y}{E_i \cdot x_i} = 11.552 \quad (\text{cm}^3)$
--	--



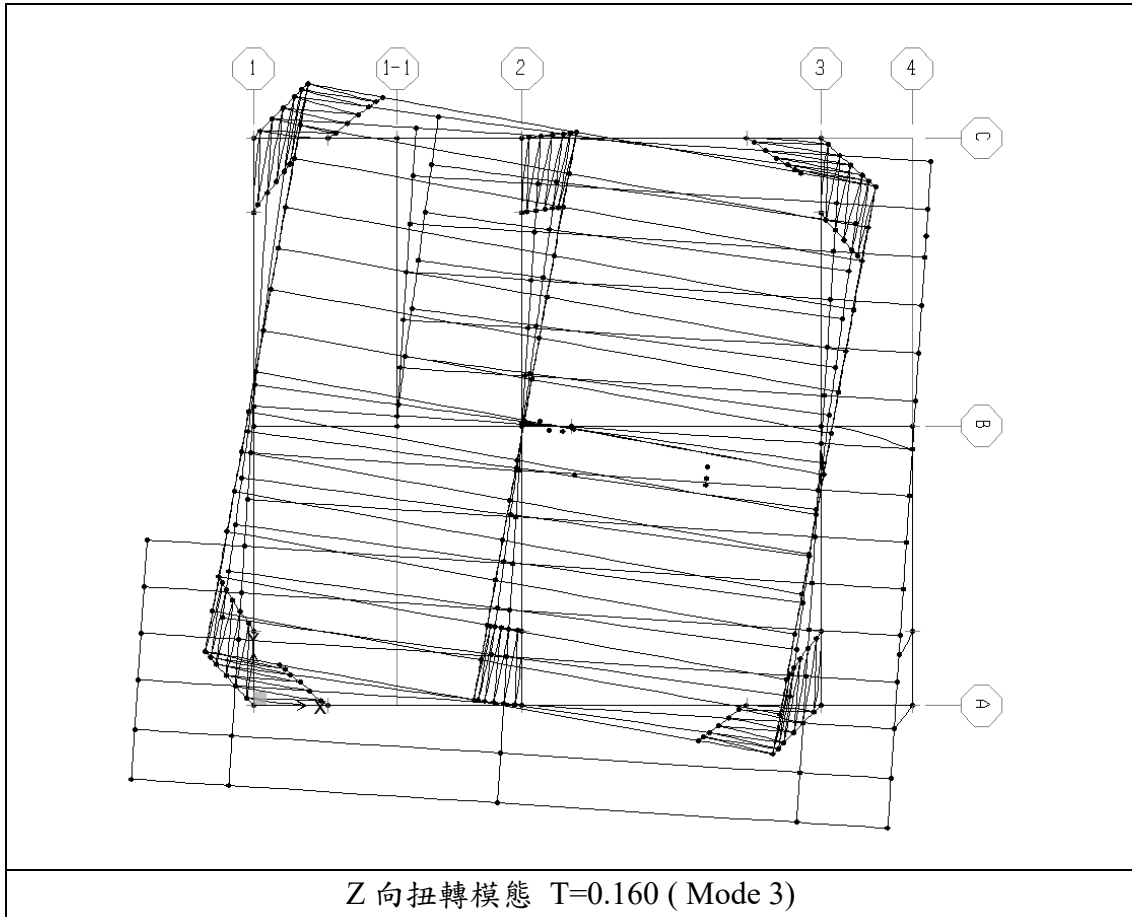
7.2 模態分析



X 向位移模態 $T=0.245$ (Mode 1)



Y 向位移模態 $T=0.216$ (Mode 2)



有效累積振態質量

Mode	Period	UX	UY	RZ	SumUX	SumUY	SumRZ	Remark
1	0.245	81.417	0.015	0.053	81.417	0.015	0.053	X-Dir
2	0.216	0.013	86.134	0.022	81.429	86.149	0.075	Y-Dir
3	0.160	0.032	0.001	86.490	81.461	86.149	86.566	Z-Tor
4	0.074	17.105	0.025	0.466	98.566	86.174	87.032	
5	0.065	0.072	12.681	0.670	98.638	98.855	87.702	
6	0.054	0.091	0.483	11.845	98.728	99.339	99.547	
7	0.043	1.264	0.000	0.186	99.993	99.339	99.732	
8	0.038	0.000	0.651	0.021	99.993	99.990	99.753	
9	0.031	0.007	0.010	0.247	100.000	100.000	100.000	



7.2 鋼結構設計：

根據鋼構造建築物鋼結構設計技術規範，鋼結構極限設計法之相關規定，對稱構材承受彎矩及軸力交互作用時，須滿足公式(8.2-1a)或(8.2-1b)之規定。

當 $\frac{P_u}{\phi P_n} \geq 0.2$ 時

$$\frac{P_u}{\phi P_n} + \frac{8}{9} \left[\frac{M_{ux}}{\phi_b M_{nx}} + \frac{M_{uy}}{\phi_b M_{ny}} \right] \leq 1.0 \quad (8.2-1a)$$

當 $\frac{P_u}{\phi P_n} < 0.2$ 時

$$\frac{P_u}{2\phi P_n} + \left[\frac{M_{ux}}{\phi_b M_{nx}} + \frac{M_{uy}}{\phi_b M_{ny}} \right] \leq 1.0 \quad (8.2-1b)$$

其中

P_u = 所需之軸拉力或軸壓力強度

P_n = 標稱抗拉強度或標稱抗壓強度

M_u = 所需之撓曲強度

M_n = 標稱之撓曲強度

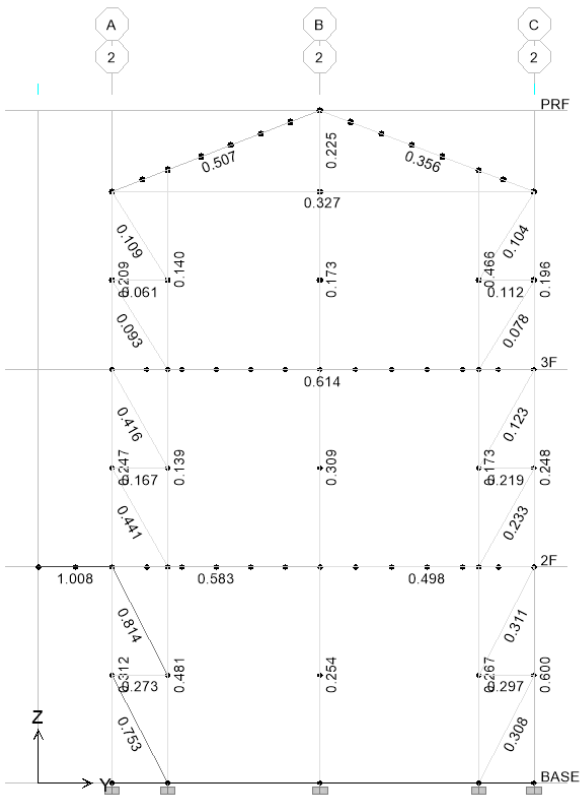
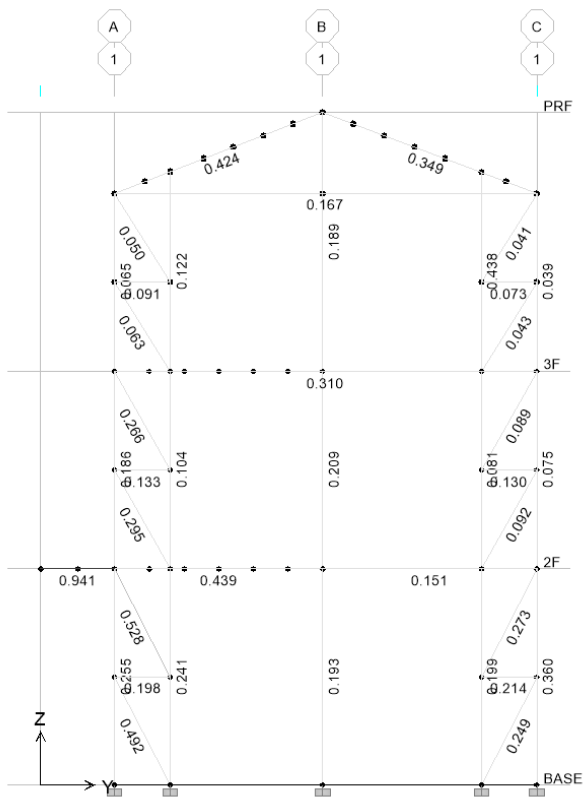
x = 強軸

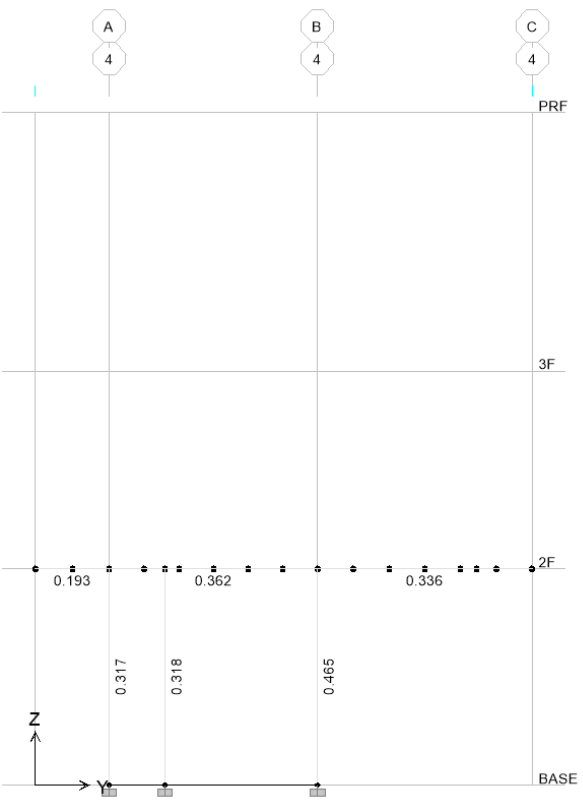
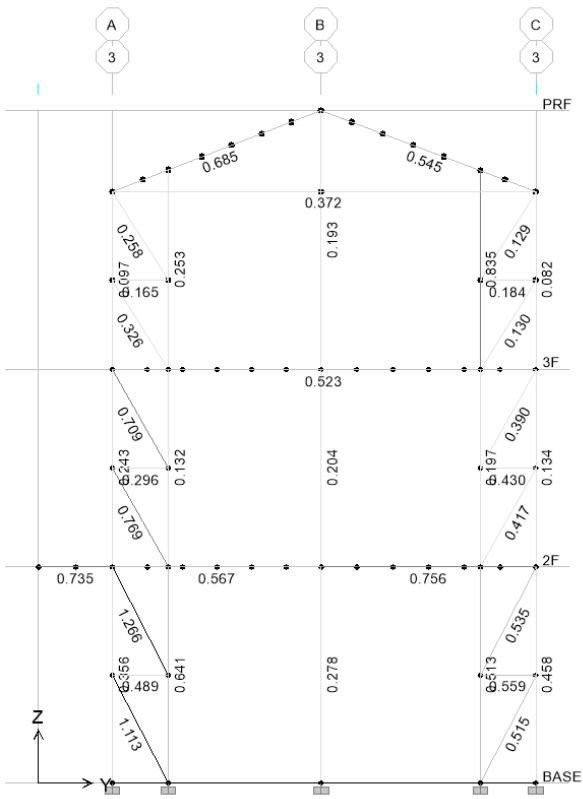
y = 弱軸

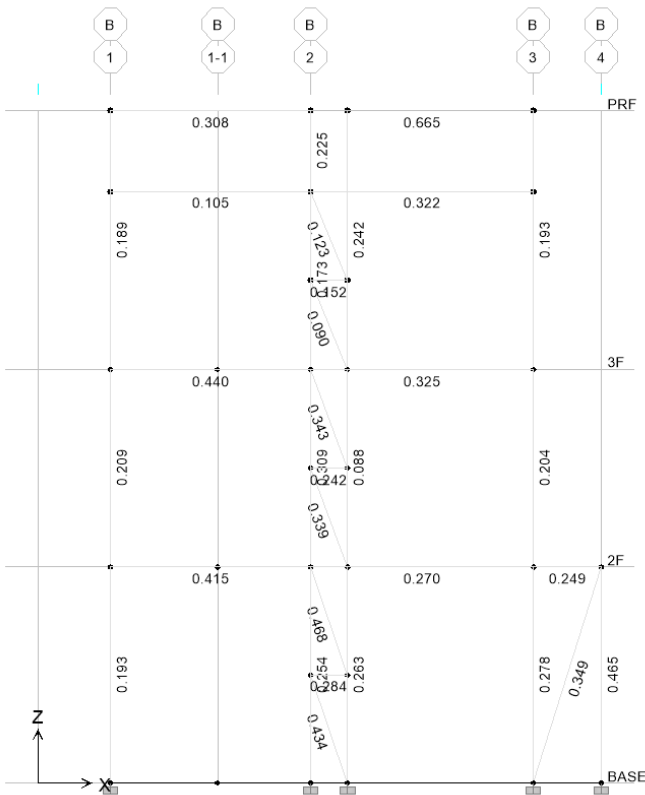
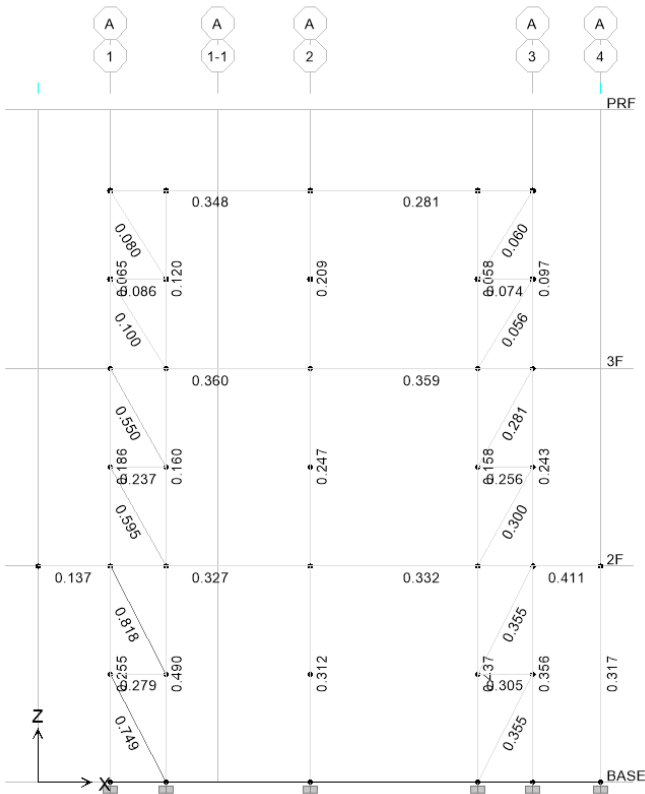
ϕ = 軸力載重下之強度折減係數

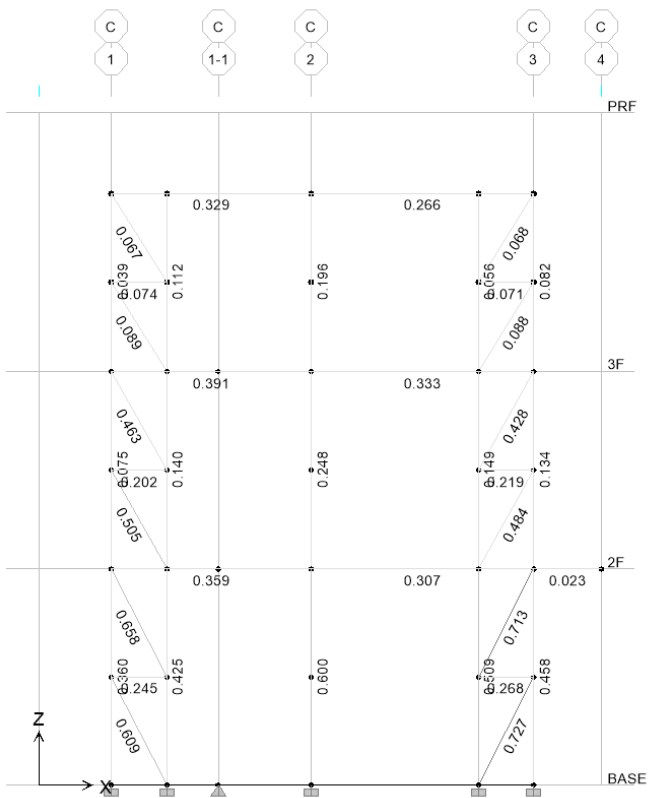
ϕ_b = 撓曲載重下之強度折減係數

分析模型各桿件的應力比皆小於1.....OK!











9.0 基礎設計 / Foundation Design

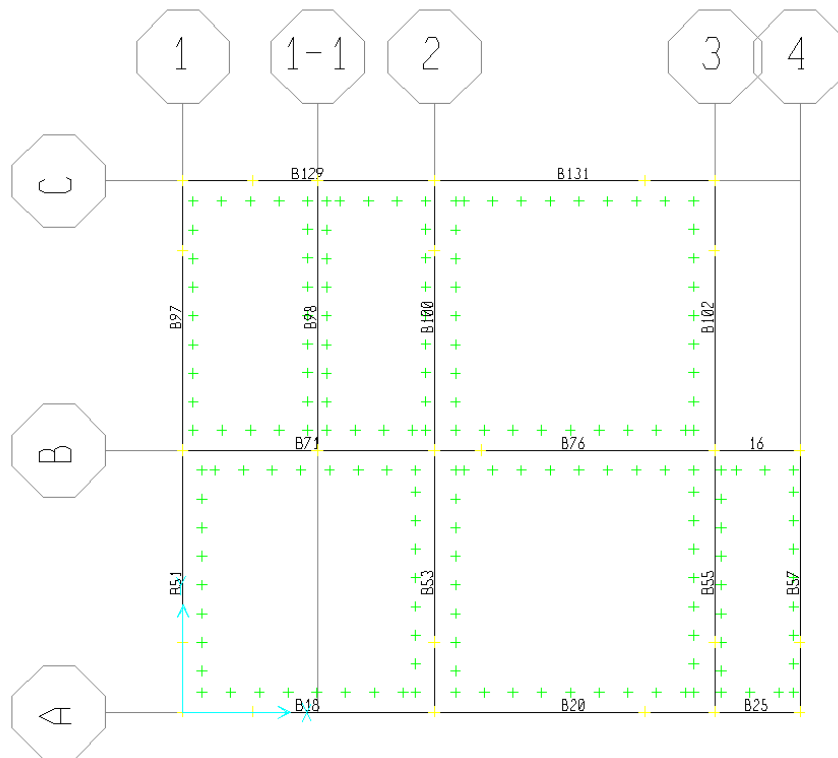
9.1 基礎設計說明

本案基礎設計採 CSI 公司之 2-D 分析軟體”SAFE V8.01”，分析元素包含基礎版、及地梁，版元素下方承受地下水壓上舉水浮力，版元素上方則於柱位置處承受結構傳遞之垂直載重，包含靜載重、活載重及地震力等。將基礎為一柔性體，應用土壤彈簧（Soil Spring）之觀念，將土壤模擬成無受拉彈簧，同時合併基礎地梁、版之勁度進行分析並設計。

9.1.1 分析基本資料

依據鄰近地質鑽探報告，各設計數據如下：

地盤垂直反力係數	$K_v = 1000(\text{tf}/\text{m}^3)$
常時水位(WAN)	GL -10m
高水位(WAH)	GL -7m
土壤容許乘載力	$q_a > 10 (\text{tf}/\text{m}^2)$



基礎結構平面圖



9.1.2 基礎設計載重組合

地震力分析採用法規靜力地震力，將上部結構桿件力傳至基礎。配筋設計採用設計地震力之 $1.4\alpha y$ 倍作為設計載重。分析及配筋設計之載重組合如下：

DL：靜載重(包含自重)

LL：活載重

E：法規地震載重 (EXP、EXN、EYP、EYN)

EXP、EXN：X 向法規靜力地震載重(含正負 5% 質心偏移，P 為正，N 為負)

EYP、EYN：Y 向法規靜力地震載重(含正負 5% 質心偏移，P 為正，N 為負)

WA：水浮力 (WAH、WAN)

WAH：高水位時之水浮力

WAN：常時水位之水浮力

檢核(乘載力檢核)

$$1.0DL+1.0WA$$

$$1.0DL+1.0LL+1.0WA$$

$$1.0DL+1.0LL\pm 1.0E+1.0WA$$

設計

$$1.4DL+1.4WA$$

$$1.2DL+1.6LL+1.2WA$$

$$1.2DL+1.0LL\pm 1.4E$$

$$0.9DL\pm 1.4E$$



	DL	SDL	LL	EXP	EYP	EXN	EYN	WAH	WAN	備註
BASE01	1.000	1.000						1.000		檢核(乘載力檢核)
BASE02	1.000	1.000							1.000	
BASE03	1.000	1.000	1.000					1.000		
BASE04	1.000	1.000	1.000						1.000	
BASE05	1.000	1.000	1.000	1.000				1.000		
BASE06	1.000	1.000	1.000	1.000					1.000	
BASE07	1.000	1.000	1.000		1.000			1.000		
BASE08	1.000	1.000	1.000		1.000				1.000	
BASE09	1.000	1.000	1.000			1.000		1.000		
BASE10	1.000	1.000	1.000			1.000			1.000	
BASE11	1.000	1.000	1.000				1.000	1.000		
BASE12	1.000	1.000	1.000				1.000		1.000	
BASE13	1.000	1.000	1.000	-1.000				1.000		
BASE14	1.000	1.000	1.000	-1.000					1.000	
BASE15	1.000	1.000	1.000		-1.000			1.000		
BASE16	1.000	1.000	1.000		-1.000				1.000	
BASE17	1.000	1.000	1.000			-1.000		1.000		
BASE18	1.000	1.000	1.000			-1.000			1.000	
BASE19	1.000	1.000	1.000				-1.000	1.000		
BASE20	1.000	1.000	1.000				-1.000		1.000	
BASE21	1.400	1.400						1.400		設計
BASE22	1.400	1.400							1.400	
BASE23	1.200	1.200	1.600					1.200		
BASE24	1.200	1.200	1.600						1.200	
BASE25	1.200	1.200	1.000	1.400						
BASE26	1.200	1.200	1.000		1.400					
BASE27	1.200	1.200	1.000			1.400				
BASE28	1.200	1.200	1.000				1.400			
BASE29	1.200	1.200	1.000	-1.400						
BASE30	1.200	1.200	1.000		-1.400					
BASE31	1.200	1.200	1.000			-1.400				
BASE32	1.200	1.200	1.000				-1.400			
BASE33	0.900	0.900		1.400						
BASE34	0.900	0.900			1.400					
BASE35	0.900	0.900				1.400				
BASE36	0.900	0.900					1.400			



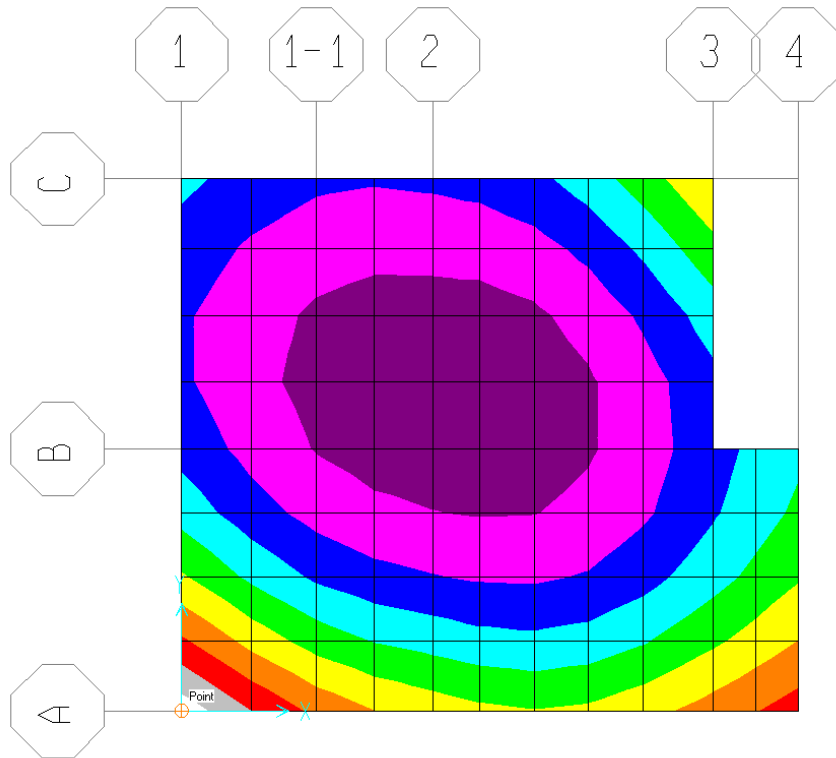
BASE37	0.900	0.900		-1.400					
BASE38	0.900	0.900			-1.400				
BASE39	0.900	0.900				-1.400			
BASE40	0.900	0.900					-1.400		

9.2 基礎分析

9.2.1 分析基本資料

1. 容許承载力檢核：

承载力檢核考慮載重組合為 BASE04



土壤最大反力為 $4.512(\text{tf}/\text{m}^2) < q_a = 10(\text{tf}/\text{m}^2) \dots \text{OK}$



2. 角變量檢核：

載重組合	基礎最大角變量 η	最大角變量桿件	檢核角變量 η
BASE01	1 /11149	B24	$\eta < 1/500 \dots OK$
BASE02	1 /11149	B24	$\eta < 1/500 \dots OK$
BASE03	1 /9626	B24	$\eta < 1/500 \dots OK$
BASE04	1 /9626	B24	$\eta < 1/500 \dots OK$
BASE05	1 /9575	B26	$\eta < 1/333 \dots OK$
BASE06	1 /9575	B26	$\eta < 1/333 \dots OK$
BASE07	1 /10631	B24	$\eta < 1/333 \dots OK$
BASE08	1 /10631	B24	$\eta < 1/333 \dots OK$
BASE09	1 /9310	B26	$\eta < 1/333 \dots OK$
BASE10	1 /9310	B26	$\eta < 1/333 \dots OK$
BASE11	1 /10677	B24	$\eta < 1/333 \dots OK$
BASE12	1 /10677	B24	$\eta < 1/333 \dots OK$
BASE13	1 /7365	B24	$\eta < 1/333 \dots OK$
BASE14	1 /7365	B24	$\eta < 1/333 \dots OK$
BASE15	1 /8795	B24	$\eta < 1/333 \dots OK$
BASE16	1 /8795	B24	$\eta < 1/333 \dots OK$
BASE17	1 /7381	B24	$\eta < 1/333 \dots OK$
BASE18	1 /7381	B24	$\eta < 1/333 \dots OK$
BASE19	1 /8763	B24	$\eta < 1/333 \dots OK$
BASE20	1 /8763	B24	$\eta < 1/333 \dots OK$



3. 基礎最大沉陷量檢核

載重組合	基礎最大沉陷變位 δ (cm)	最大沉陷點	檢核沉陷變位
BASE01	-0.212	194	$\delta < 5.000(\text{cm}) \dots \text{OK}$
BASE02	-0.212	194	$\delta < 5.000(\text{cm}) \dots \text{OK}$
BASE03	-0.239	176	$\delta < 5.000(\text{cm}) \dots \text{OK}$
BASE04	-0.239	176	$\delta < 5.000(\text{cm}) \dots \text{OK}$
BASE05	-0.248	194	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE06	-0.248	194	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE07	-0.253	176	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE08	-0.253	176	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE09	-0.250	194	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE10	-0.250	194	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE11	-0.254	176	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE12	-0.254	176	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE13	-0.258	176	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE14	-0.258	176	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE15	-0.240	27	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE16	-0.240	27	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE17	-0.259	176	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE18	-0.259	176	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE19	-0.242	27	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE20	-0.242	27	$\delta < 7.500(\text{cm}) \dots \text{OK}$



9.3 基礎結構設計

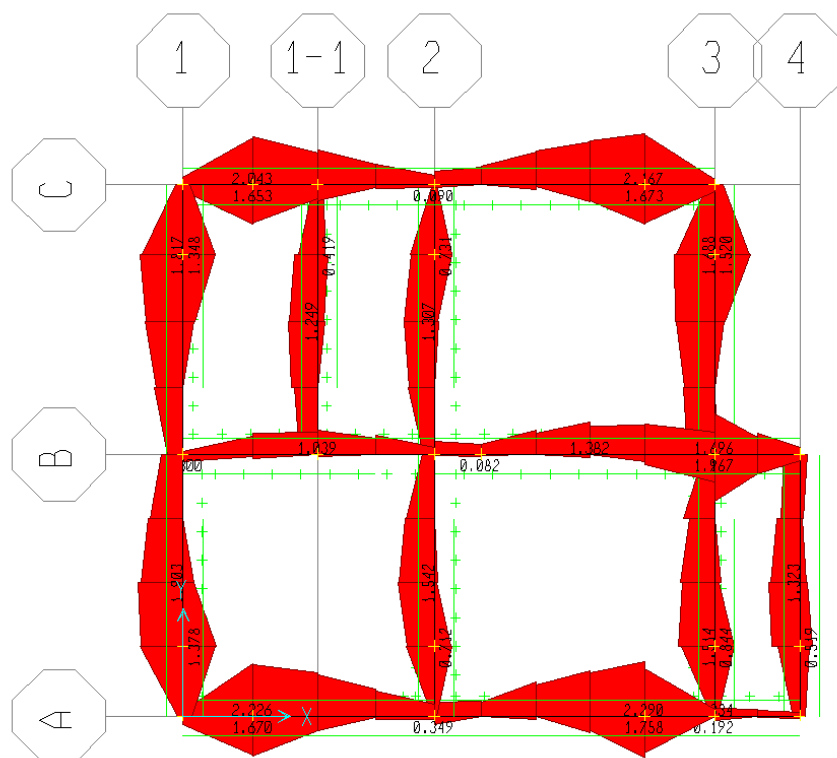
1. 材料強度

混凝土抗壓強度： 280 kgf/cm^2

鋼筋降伏強度： 2800 kgf/cm^2 (#3 及以下)

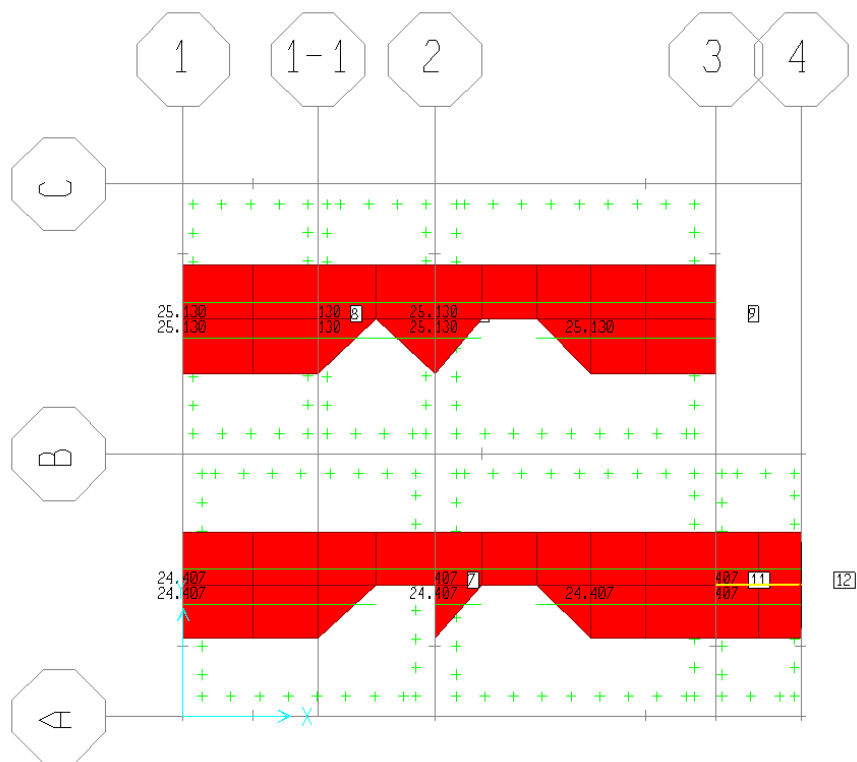
4200 kgf/cm^2 (#4 及以上)

2. 地樑設計



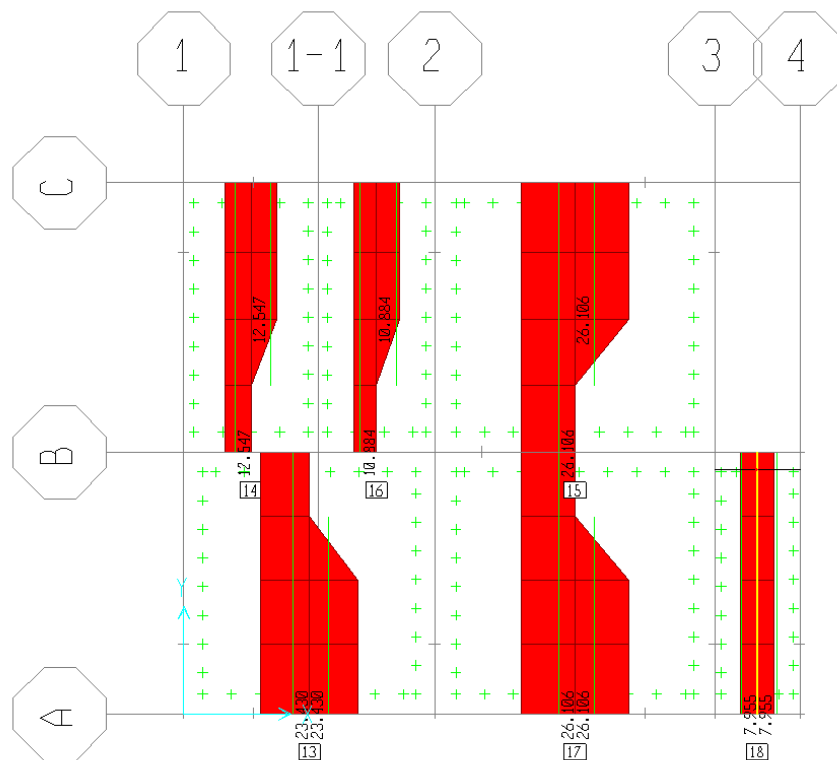


3. 基版 X 向鋼筋需求





4. 基版 Y 向鋼筋需求





附錄

PROGRAM INFORMATION
PROGRAM 'ETABS' VERSION '9.5.0'

S CONTROLS
UNITS 'KGF' 'CM'
TITLE 'Le-Lat Structure Studs'
PREFERENCE MERGETOL 0.1
RLIF METHOD 'TRIBAREAUBC97' USEDEFAULTMIN 'YES'

S STORES - IN SEQUENCE FROM TOP
STORY 'PRF' HEIGHT 419.4 SIMILARTO '2F'
STORY '3F' HEIGHT 320 SIMILARTO '2F'
STORY '2F' HEIGHT 320 MASTERSTORY 'Yes'
STORY 'BASE' ELEV 0

S DIAPHRAGM NAMES
DIAPHRAGM 'D1' TYPE RIGID
DIAPHRAGM 'D2' TYPE RIGID
DIAPHRAGM 'D3' TYPE RIGID

S GRIDS
COORDSYSTEM 'GLOBAL' TYPE 'CARTESIAN' BUBBLELSE 50
GRID 'GLOBAL' LABEL '1' DIR 'X' COORD 0 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL '1.1' DIR 'X' COORD 17.5 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL '2' DIR 'X' COORD 32.4 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL '3' DIR 'X' COORD 68.5 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL '4' DIR 'X' COORD 79.5 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'A' DIR 'Y' COORD 0 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'B' DIR 'Y' COORD 33.5 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'C' DIR 'Y' COORD 68.5 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'

S MATERIAL PROPERTIES
MATERIAL 'STEEL' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 204000 U 0.3 A 1.16999999590917E-05
MATERIAL 'STEEL' DESKINTYPE 'STEEL' FY 2500 FU 4000 PRICE 35
MATERIAL 'CONC' M 2.44801E+06 W 0.0024 TYPE 'ISOTROPIC' E 250998 U 0.2 A 9.89999998542142E-06
MATERIAL 'CONC' DESKINTYPE 'CONCRETE' FY 4200 FC 280 FYS 2800
MATERIAL 'OTHER' M 7.23040E+12 W 2.33E-07 TYPE 'ISOTROPIC' E 2900 U 0.3 A 6.49999992674566E-06
MATERIAL 'OTHER' DESKINTYPE 'OTHER'
MATERIAL 'SGC40F' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 210000 U 0.3 A 1.16999999590917E-05
MATERIAL 'SGC40F' DESKINTYPE 'STEEL' FY 3400 FU 4000 PRICE 45
MATERIAL 'GR50' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 210000 U 0.3 A 1.16999999590917E-05
MATERIAL 'GR50' DESKINTYPE 'STEEL' FY 3500 FU 4000 PRICE 45
MATERIAL '9063TS' M 2.755E+06 W 0.0027 TYPE 'ISOTROPIC' E 730000 U 0.3 A 1.16999999590917E-05
MATERIAL '9063TS' DESKINTYPE 'STEEL' FY 1120 FU 4000 PRICE 45
MATERIAL 'C280' M 2.448E+06 W 0.0024 TYPE 'ISOTROPIC' E 250998 U 0.2 A 9.89999974737875E-06
MATERIAL 'C280' DESKINTYPE 'CONCRETE' FY 4200 FC 280 FYS 2800
MATERIAL 'MAT1' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 210000 U 0.3 A 1.16999999590917E-05
MATERIAL 'MAT1' DESKINTYPE 'STEEL' FY 2400 FU 4000 PRICE 45
MATERIAL 'S45C' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 210000 U 0.3 A 1.16999999590917E-05
MATERIAL 'S45C' DESKINTYPE 'STEEL' FY 3500 FU 4000 PRICE 45

S FRAME SECTIONS
FRAMESECTION '2SC125X50X20X2' MATERIAL 'SGC40F' SHAPE 'General' D 12.5 B 20 AREA 10.28 TORSION 38.0499 I33 248.9366 I22 38.0499 AS2 2.5
FRAMESECTION '1100X100X20' MATERIAL 'SGC40F' SHAPE 'General' D 10 B 10 AREA 15.2 TORSION 955.7432 I33 955.7432 I22 1038.673 AS2 4 AS3 4
FRAMESECTION 'C125X50X20X2' MATERIAL 'SGC40F' SHAPE 'General' D 12.5 B 5 AREA 5.14 TORSION 19.02493 I33 124.683 I22 19.0249 AS2 2.5
FRAMESECTION '1C100X50X15X2' MATERIAL 'SGC40F' SHAPE 'General' D 5 B 10 AREA 4.44 TORSION 15.6865 I33 15.6865 I22 71.8012 AS2 2 AS3 2
FRAMESECTION 'R0D25' MATERIAL 'SGC40F' SHAPE 'Circle' D 2.5
FRAMESECTION 'PL50X20' MATERIAL 'SGC40F' SHAPE 'Rectangular' D 2 B 5
FRAMESECTION 'Z125X50X20X2' MATERIAL 'SGC40F' SHAPE 'General' D 12.5 B 5 AREA 4.999999 TORSION 33.27907 I33 117.7726 I22 33.27907 AS2
FRAMESECTION 'RB60X40C4' MATERIAL 'C280' SHAPE 'Rectangular' D 40 B 40
FRAMESECTION 'C100X50X20X2' MATERIAL 'SGC40F' SHAPE 'General' D 5 B 10 AREA 4.44 TORSION 15.6865 I33 15.6865 I22 71.8012 AS2 2 AS3 2

S REBAR DEFINITIONS
REBARDEFINITION 'R3' AREA 0.7133 DIA 0.953
REBARDEFINITION 'R4' AREA 1.267 DIA 1.29
REBARDEFINITION 'R5' AREA 1.986 DIA 1.59
REBARDEFINITION 'R6' AREA 2.865 DIA 1.91
REBARDEFINITION 'R7' AREA 3.871 DIA 2.22
REBARDEFINITION 'R8' AREA 5.067 DIA 2.54
REBARDEFINITION 'R10' AREA 8.143 DIA 3.22

S CONCRETE SECTIONS
CONCRETESECTION 'RB60X40C4' TYPE 'BEAM' COVERTOP 9 COVERBOTTOM 9 AIT0 ABI0 ATJ0 ABO 0

S WALL/SLAB/DECK PROPERTIES
SHELLPROP 'S15' MATERIAL 'C280' PROPTYPE 'SLAB' TYPE 'MEMBRANE' TM 15 TB 15
SHELLPROP 'S40' MATERIAL 'C280' PROPTYPE 'SLAB' TYPE 'MEMBRANE' TM 40 TB 40

S PIER/SPANDREL NAMES
PIERNAME 'P1'
SPANDRELNAME 'S1'

S POINT COORDINATES
POINT '1' -117.5 -120.00004768372
POINT '2' 0 +120.00004768372
POINT '3' 324 -120.00004768372
POINT '4' 685 -120.00004768372
POINT '5' 795 -120.00004768372
POINT '6' -117.5 -60.000023841858
POINT '7' -60.000023841858
POINT '8' 324 -60.000023841858
POINT '9' 685 -60.000023841858
POINT '10' 795 -60.000023841858
POINT '11' -117.5 0
POINT '12' 0 0
POINT '12.1' 0 0 130.7
POINT '12.2' 0 0 160
POINT '12.3' 0 0 175
POINT '12.4' 0 0 275.05
POINT '13' 90 0
POINT '13.1' 90 0 130.7
POINT '13.2' 90 0 160
POINT '13.3' 90 0 175
POINT '13.4' 90 0 275.05
POINT '14' 324 0
POINT '14.1' 324 0 130.7
POINT '14.2' 324 0 160
POINT '14.3' 324 0 175
POINT '14.4' 324 0 275.05
POINT '15' 595 0
POINT '15.1' 595 0 130.7
POINT '15.2' 595 0 160
POINT '15.3' 595 0 175
POINT '15.4' 595 0 275.05
POINT '16' 685 0
POINT '16.1' 685 0 130.7
POINT '16.2' 685 0 160
POINT '16.3' 685 0 175
POINT '16.4' 685 0 275.05
POINT '17' 795 0
POINT '18' 0 48.2142865657806
POINT '18.1' 0 48.2142865657806 112.0286
POINT '19' 324 48.2142865657806
POINT '19.1' 324 48.2142865657806 112.0286
POINT '20' 685 48.2142865657806
POINT '20.1' 685 48.2142865657806 112.0286
POINT '21' -117.5 56.25
POINT '22' 0 56.25
POINT '23' 324 56.25
POINT '24' 685 56.25
POINT '25' 795 56.25
POINT '26' 0 89.999976158142
POINT '26.1' 0 89.999976158142 95.84666
POINT '26.2' 0 89.999976158142 160
POINT '26.3' 0 89.999976158142 175
POINT '26.4' 0 89.999976158142 275.05
POINT '27' 324 89.999976158142
POINT '27.1' 324 89.999976158142 95.84666
POINT '27.2' 324 89.999976158142 160
POINT '27.3' 324 89.999976158142 175
POINT '27.4' 324 89.999976158142 275.05
POINT '28' 685 89.999976158142
POINT '28.1' 685 89.999976158142 95.84666
POINT '28.2' 685 89.999976158142 160
POINT '28.3' 685 89.999976158142 175
POINT '28.4' 685 89.999976158142 275.05
POINT '29' 795 89.999976158142
POINT '30' -117.5 112.5
POINT '31' 0 112.5
POINT '32' 324 112.5
POINT '33' 685 112.5
POINT '34' 795 112.5
POINT '35' 0 144.642853736877
POINT '35.1' 0 144.642853736877 74.68571

POINT '36' 324 144.642853736877
POINT '36.1' 324 144.642853736877 74.68571
POINT '37' 685 144.642853736877
POINT '37.1' 685 144.642853736877 74.68571
POINT '38' -117.5 168.75
POINT '39' 0 168.75
POINT '40' 324 168.75
POINT '41' 685 168.75
POINT '42' 795 168.75
POINT '43' 0 192.857146263123
POINT '43.1' 0 192.857146263123 56.01429
POINT '44' 324 192.857146263123
POINT '44.1' 324 192.857146263123 56.01429
POINT '45' 685 192.857146263123
POINT '45.1' 685 192.857146263123 56.01429
POINT '46' 0 225
POINT '47' 324 225
POINT '48' 685 225
POINT '49' 795 225
POINT '50' 0 241.071438789368
POINT '50.1' 0 241.071438789368 37.34286
POINT '51' 324 241.071438789368
POINT '51.1' 324 241.071438789368 37.34286
POINT '52' 685 241.071438789368
POINT '52.1' 685 241.071438789368 37.34286
POINT '53' 0 281.25
POINT '53.1' 0 281.25
POINT '54' 324 281.25
POINT '55' 685 281.25
POINT '57' 795 281.25
POINT '58' 0 289.28570473755
POINT '58.1' 0 289.28570473755 18.67143
POINT '59' 324 289.28570473755
POINT '59.1' 324 289.28570473755 18.67143
POINT '60' 685 289.28570473755
POINT '60.1' 685 289.28570473755 18.67143
POINT '69' 0 337.5
POINT '69.1' 0 337.5 130.7
POINT '70' 173.337.5
POINT '71' 324 337.5
POINT '71.1' 324 337.5 130.7
POINT '71.2' 324 337.5 160
POINT '71.3' 324 337.5 175
POINT '71.4' 324 337.5 275.05
POINT '72' 384 337.5
POINT '72.1' 384 337.5 160
POINT '72.2' 384 337.5 175
POINT '72.3' 384 337.5 275.05
POINT '73' 685 337.5
POINT '73.1' 685 337.5 130.7
POINT '73.4' 685 337.5 130.7
POINT '74' 795 337.5
POINT '76' 0 387.142848968506
POINT '76.1' 0 387.142848968506 18.67143
POINT '77' 324 387.142848968506
POINT '77.1' 324 387.142848968506 18.67143
POINT '78' 685 387.142848968506
POINT '78.1' 685 387.142848968506 18.67143
POINT '79' 173.337.5
POINT '80' 324 395.416665077209
POINT '81' 685 395.416665077209
POINT '82' 795 395.416665077209
POINT '83' 0 436.7856979737012
POINT '83.1' 0 436.7856979737012 37.34286
POINT '84' 324 436.7856979737012
POINT '84.1' 324 436.7856979737012 37.34286
POINT '85' 685 436.7856979737012
POINT '85.1' 685 436.7856979737012 37.34286
POINT '86' 173.337.5
POINT '87' 324 453.336668014526
POINT '88' 685 453.336668014526
POINT '89' 795 453.336668014526
POINT '90' 0 486.428594589233
POINT '90.1' 0 486.428594589233 56.01429
POINT '91' 324 486.428594589233
POINT '91.1' 324 486.428594589233 56.01429
POINT '92' 685 486.428594589233
POINT '92.1' 685 486.428594589233 56.01429
POINT '93' 173.337.5
POINT '94' 324 511.256647109985
POINT '95' 685 511.256647109985
POINT '96' 795 511.256647109985
POINT '97' 0 536.071443557739
POINT '97.1' 0 536.071443557739 74.68571
POINT '98' 324 536.071443557739
POINT '98.1' 324 536.071443557739 74.68571
POINT '99' 685 536.071443557739
POINT '99.1' 685 536.071443557739 74.68571
POINT '100' 173.5 569.17667388916
POINT '101' 324 569.17667388916
POINT '102' 685 569.17667388916
POINT '103' 795 569.17667388916
POINT '104' 0 594.99998026514
POINT '104.1' 0 594.99998026514 96.84964
POINT '104.2' 0 594.99998026514 160
POINT '104.3' 0 594.99998026514 175
POINT '104.4' 0 594.99998026514 275.05
POINT '105' 324 594.99998026514
POINT '105.1' 324 594.99998026514 96.84964
POINT '105.2' 324 594.99998026514 160
POINT '105.3' 324 594.99998026514 175
POINT '105.4' 324 594.99998026514 275.05
POINT '106' 685 594.99998026514
POINT '106.1' 685 594.99998026514 96.84964
POINT '106.2' 685 594.99998026514 160
POINT '106.3' 685 594.99998026514 175
POINT '106.4' 685 594.99998026514 275.05
POINT '107' 795 594.99998026514
POINT '108' 173.5 627.096652984619
POINT '109' 324 627.096652984619
POINT '110' 685 627.096652984619
POINT '111' 795 627.096652984619
POINT '112' 0 635.357141494751
POINT '112.1' 0 635.357141494751 112.0286
POINT '113' 324 635.357141494751
POINT '113.1' 324 635.357141494751 112.0286
POINT '114' 685 635.357141494751
POINT '114.1' 685 635.357141494751 112.0286
POINT '115' 0 684.999990463257
POINT '115.1' 0 684.999990463257 130.7
POINT '115.2' 0 684.999990463257 175
POINT '115.4' 0 684.999990463257 275.05
POINT '116' 90 684.999990463257
POINT '116.1' 90 684.999990463257 130.7
POINT '116.2' 90 684.999990463257 175
POINT '116.4' 90 684.999990463257 275.05
POINT '117' 173.5 684.999990463257
POINT '118' 324 684.999990463257
POINT '118.1' 324 684.999990463257 130.7
POINT '118.2' 324 684.999990463257 175
POINT '118.3' 324 684.999990463257 175
POINT '118.4' 324 684.999990463257 275.05
POINT '119' 595 684.999990463257
POINT '119.1' 595 684.999990463257 130.7
POINT '119.2' 595 684.999990463257 175
POINT '119.3' 595 684.999990463257 175
POINT '119.4' 595 684.999990463257 275.05
POINT '120' 685 684.999990463257
POINT '120.1' 685 684.999990463257 130.7
POINT '120.2' 685 684.999990463257 160
POINT '120.3' 685 684.999990463257 175
POINT '120.4' 685 684.999990463257 275.05
POINT '121' 795 684.999990463257

S LINE CONNECTIVITIES
LINE 'C1' COLUMN '12' '12' 1
LINE 'C1.1' COLUMN '12' '12.1' 1
LINE 'C2' COLUMN '13' '13' 1
LINE 'C2.1' COLUMN '13' '13.1' 1
LINE 'C3' COLUMN '14' '14' 1
LINE 'C3.1' COLUMN '14' '14.1' 1
LINE 'C4' COLUMN '15' '15' 1
LINE 'C4.1' COLUMN '15' '15.1' 1
LINE 'C5' COLUMN '16' '16' 1
LINE 'C5.1' COLUMN '16' '16.1' 1
LINE 'C6' COLUMN '17' '17' 1

LINE 'C7' COLUMN '26' '26' 1
LINE 'C7-1' COLUMN '26' '26-1' 1
LINE 'C8' COLUMN '27' '27' 1
LINE 'C8-1' COLUMN '27' '27-1' 1
LINE 'C9' COLUMN '28' '28' 1
LINE 'C9-1' COLUMN '28' '28-1' 1
LINE 'C10' COLUMN '29' '29' 1
LINE 'C11' COLUMN '30' '30' 1
LINE 'C12' COLUMN '71' '71' 1
LINE 'C12-1' COLUMN '71-1' '71-1' 0
LINE 'C13' COLUMN '72' '72' 1
LINE 'C14' COLUMN '73' '73' 1
LINE 'C15' COLUMN '74' '74' 1
LINE 'C16' COLUMN '104' '104' 1
LINE 'C16-1' COLUMN '104' '104-1' 1
LINE 'C17' COLUMN '105' '105' 1
LINE 'C17-1' COLUMN '105' '105-1' 1
LINE 'C18' COLUMN '106' '106' 1
LINE 'C18-1' COLUMN '106' '106-1' 1
LINE 'C19' COLUMN '115' '115' 1
LINE 'C19-1' COLUMN '115' '115-1' 1
LINE 'C20' COLUMN '116' '116' 1
LINE 'C20-1' COLUMN '116' '116-1' 1
LINE 'C21' COLUMN '118' '118' 1
LINE 'C21-1' COLUMN '118' '118-1' 1
LINE 'C22' COLUMN '119' '119' 1
LINE 'C22-1' COLUMN '119' '119-1' 1
LINE 'C23' COLUMN '120' '120' 1
LINE 'C23-1' COLUMN '120' '120-1' 1
LINE 'B1' BEAM '1' '2' 0
LINE 'B2' BEAM '2' '3' 0
LINE 'B3' BEAM '3' '4' 0
LINE 'B4' BEAM '4' '5' 0
LINE 'B5' BEAM '11' '11' 0
LINE 'B6' BEAM '6' '7' 0
LINE 'B7' BEAM '2' '12' 0
LINE 'B8' BEAM '7' '8' 0
LINE 'B9' BEAM '9' '14' 0
LINE 'B10' BEAM '8' '9' 0
LINE 'B11' BEAM '4' '16' 0
LINE 'B12' BEAM '9' '10' 0
LINE 'B13' BEAM '5' '17' 0
LINE 'B14' BEAM '11' '12' 0
LINE 'B15' BEAM '12-4' '13-4' 0
LINE 'B16' BEAM '12-2' '13-2' 0
LINE 'B17' BEAM '12-3' '13-3' 0
LINE 'B18' BEAM '12' '14' 0
LINE 'B19' BEAM '12-1' '14-1' 0
LINE 'B20' BEAM '14' '16' 0
LINE 'B21' BEAM '14-1' '16-1' 0
LINE 'B22' BEAM '15-3' '16-3' 0
LINE 'B23' BEAM '15-2' '16-2' 0
LINE 'B24' BEAM '15-4' '16-4' 0
LINE 'B25' BEAM '16' '17' 0
LINE 'B26' BEAM '12-4' '26-4' 0
LINE 'B27' BEAM '12-2' '26-2' 0
LINE 'B28' BEAM '12-3' '26-3' 0
LINE 'B29' BEAM '14-4' '27-4' 0
LINE 'B30' BEAM '14-2' '27-2' 0
LINE 'B31' BEAM '14-3' '27-3' 0
LINE 'B32' BEAM '16-4' '28-4' 0
LINE 'B33' BEAM '16-2' '28-2' 0
LINE 'B34' BEAM '16-3' '28-3' 0
LINE 'B35' BEAM '18-1' '19-1' 0
LINE 'B36' BEAM '19-1' '20-1' 0
LINE 'B37' BEAM '21' '22' 0
LINE 'B38' BEAM '22' '23' 0
LINE 'B39' BEAM '23' '24' 0
LINE 'B40' BEAM '24' '25' 0
LINE 'B41' BEAM '11' '30' 0
LINE 'B42' BEAM '26-1' '27-1' 0
LINE 'B43' BEAM '27-1' '28-1' 0
LINE 'B44' BEAM '30' '31' 0
LINE 'B45' BEAM '31' '32' 0
LINE 'B46' BEAM '32' '33' 0
LINE 'B47' BEAM '33' '34' 0
LINE 'B48' BEAM '35-1' '36-1' 0
LINE 'B49' BEAM '36-1' '37-1' 0
LINE 'B50' BEAM '38' '39' 0
LINE 'B51' BEAM '12' '69' 0
LINE 'B52' BEAM '39' '40' 0
LINE 'B53' BEAM '14' '71' 0
LINE 'B54' BEAM '40' '41' 0
LINE 'B55' BEAM '16' '73' 0
LINE 'B56' BEAM '41' '42' 0
LINE 'B57' BEAM '17' '74' 0
LINE 'B58' BEAM '74' '17' 0
LINE 'B59' BEAM '43-1' '44-1' 0
LINE 'B60' BEAM '44-1' '45-1' 0
LINE 'B61' BEAM '46' '47' 0
LINE 'B62' BEAM '47' '48' 0
LINE 'B63' BEAM '48' '49' 0
LINE 'B64' BEAM '50-1' '51-1' 0
LINE 'B65' BEAM '51-1' '52-1' 0
LINE 'B66' BEAM '54' '55' 0
LINE 'B67' BEAM '55' '56' 0
LINE 'B68' BEAM '56' '57' 0
LINE 'B69' BEAM '58-1' '59-1' 0
LINE 'B70' BEAM '59-1' '60-1' 0
LINE 'B71' BEAM '69' '71' 0
LINE 'B72' BEAM '69-1' '71-1' 0
LINE 'B73' BEAM '71-2' '72-1' 0
LINE 'B74' BEAM '71-3' '72-2' 0
LINE 'B75' BEAM '71-4' '72-3' 0
LINE 'B76' BEAM '71' '73' 0
LINE 'B77' BEAM '71-1' '73-1' 0
LINE 'B78' BEAM '73' '74' 0
LINE 'B79' BEAM '12-1' '115-1' 0
LINE 'B80' BEAM '12' '115' 0
LINE 'B81' BEAM '14-1' '118-1' 0
LINE 'B82' BEAM '14' '118' 0
LINE 'B83' BEAM '16-1' '120-1' 0
LINE 'B84' BEAM '16' '120' 0
LINE 'B85' BEAM '16-1' '120-1' 0
LINE 'B86' BEAM '17-1' '121-1' 0
LINE 'B87' BEAM '79' '80' 0
LINE 'B88' BEAM '80' '81' 0
LINE 'B89' BEAM '81' '82' 0
LINE 'B90' BEAM '83-1' '84-1' 0
LINE 'B91' BEAM '84-1' '85-1' 0
LINE 'B92' BEAM '86' '87' 0
LINE 'B93' BEAM '87' '88' 0
LINE 'B94' BEAM '88' '89' 0
LINE 'B95' BEAM '90-1' '91-1' 0
LINE 'B96' BEAM '91-1' '92-1' 0
LINE 'B97' BEAM '69' '115' 0
LINE 'B98' BEAM '70' '117' 0
LINE 'B99' BEAM '93' '94' 0
LINE 'B100' BEAM '71' '118' 0
LINE 'B101' BEAM '94' '95' 0
LINE 'B102' BEAM '73' '120' 0
LINE 'B103' BEAM '95' '96' 0
LINE 'B104' BEAM '121' '74' 0
LINE 'B105' BEAM '97-1' '98-1' 0
LINE 'B106' BEAM '98-1' '99-1' 0
LINE 'B107' BEAM '100' '101' 0
LINE 'B108' BEAM '101' '102' 0
LINE 'B109' BEAM '102' '103' 0
LINE 'B110' BEAM '104-1' '105-1' 0
LINE 'B111' BEAM '105-1' '106-1' 0
LINE 'B112' BEAM '108' '109' 0
LINE 'B113' BEAM '109' '110' 0
LINE 'B114' BEAM '110' '111' 0
LINE 'B115' BEAM '112-1' '113-1' 0
LINE 'B116' BEAM '113-1' '114-1' 0
LINE 'B117' BEAM '104-4' '114-4' 0
LINE 'B118' BEAM '104-2' '114-2' 0
LINE 'B119' BEAM '104-3' '115-3' 0
LINE 'B120' BEAM '105-4' '118-4' 0
LINE 'B121' BEAM '105-2' '118-2' 0
LINE 'B122' BEAM '105-3' '118-3' 0
LINE 'B123' BEAM '106-4' '120-4' 0
LINE 'B124' BEAM '106-2' '120-2' 0
LINE 'B125' BEAM '106-3' '120-3' 0
LINE 'B126' BEAM '115-4' '116-4' 0

LINE 'B127' BEAM '115-2' '116-2' 0
LINE 'B128' BEAM '115-3' '116-3' 0
LINE 'B129' BEAM '115' '118' 0
LINE 'B130' BEAM '115-1' '118-1' 0
LINE 'B131' BEAM '118' '120' 0
LINE 'B132' BEAM '118-1' '120-1' 0
LINE 'B133' BEAM '119-3' '120-3' 0
LINE 'B134' BEAM '119-2' '120-2' 0
LINE 'B135' BEAM '119-4' '120-4' 0
LINE 'B136' BEAM '120' '121' 0
LINE 'D1' BRACE '13-4' '12-1' 0
LINE 'D2' BRACE '13' '12-4' 1
LINE 'D3' BRACE '13-2' '12' 0
LINE 'D4' BRACE '13' '12-2' 1
LINE 'D5' BRACE '13-3' '12' 0
LINE 'D6' BRACE '13' '12-3' 1
LINE 'D7' BRACE '15' '16-3' 1
LINE 'D8' BRACE '15-3' '16' 0
LINE 'D9' BRACE '15' '16-2' 1
LINE 'D10' BRACE '15-2' '16' 0
LINE 'D11' BRACE '15' '16-4' 1
LINE 'D12' BRACE '15-4' '16-1' 0
LINE 'D13' BRACE '26-4' '12-1' 0
LINE 'D14' BRACE '26' '12-4' 1
LINE 'D15' BRACE '26-2' '12' 0
LINE 'D16' BRACE '26' '12-2' 1
LINE 'D17' BRACE '26-3' '12' 0
LINE 'D18' BRACE '26' '12-3' 1
LINE 'D19' BRACE '27-4' '14-1' 0
LINE 'D20' BRACE '27' '14-4' 1
LINE 'D21' BRACE '27-2' '14' 0
LINE 'D22' BRACE '27' '14-2' 1
LINE 'D23' BRACE '27-3' '14' 0
LINE 'D24' BRACE '27' '14-3' 1
LINE 'D25' BRACE '28-4' '16-1' 0
LINE 'D26' BRACE '28' '16-4' 1
LINE 'D27' BRACE '28-2' '16' 0
LINE 'D28' BRACE '28' '16-2' 1
LINE 'D29' BRACE '28-3' '16' 0
LINE 'D30' BRACE '28' '16-3' 1
LINE 'D31' BRACE '12-1' '69' 0
LINE 'D32' BRACE '14-1' '71' 0
LINE 'D33' BRACE '16-1' '73' 0
LINE 'D34' BRACE '72-1' '71' 0
LINE 'D35' BRACE '72' '71-2' 1
LINE 'D36' BRACE '72-2' '71' 0
LINE 'D37' BRACE '72' '71-3' 1
LINE 'D38' BRACE '72' '71-4' 1
LINE 'D39' BRACE '72-3' '71-1' 0
LINE 'D40' BRACE '73' '74' 1
LINE 'D41' BRACE '115-1' '69' 0
LINE 'D42' BRACE '118-1' '71' 0
LINE 'D43' BRACE '120-1' '73' 0
LINE 'D44' BRACE '104-4' '115-1' 0
LINE 'D45' BRACE '104' '115-4' 1
LINE 'D46' BRACE '104-2' '115' 0
LINE 'D47' BRACE '104' '115-2' 1
LINE 'D48' BRACE '104-3' '115' 0
LINE 'D49' BRACE '104' '115-3' 1
LINE 'D50' BRACE '105-4' '118-1' 0
LINE 'D51' BRACE '105' '118-4' 1
LINE 'D52' BRACE '105-2' '118' 0
LINE 'D53' BRACE '105' '118-2' 1
LINE 'D54' BRACE '105-3' '118' 0
LINE 'D55' BRACE '105' '118-3' 1
LINE 'D56' BRACE '106-4' '120-1' 0
LINE 'D57' BRACE '106' '120-4' 1
LINE 'D58' BRACE '106-2' '120' 0
LINE 'D59' BRACE '106' '120-2' 1
LINE 'D60' BRACE '106-3' '120' 0
LINE 'D61' BRACE '106' '120-3' 1
LINE 'D62' BRACE '116-4' '115-1' 0
LINE 'D63' BRACE '116' '115-4' 1
LINE 'D64' BRACE '116-2' '115' 0
LINE 'D65' BRACE '116' '115-2' 1
LINE 'D66' BRACE '116-3' '115' 0
LINE 'D67' BRACE '116' '115-3' 1
LINE 'D68' BRACE '119' '120-3' 1
LINE 'D69' BRACE '119-3' '120' 0
LINE 'D70' BRACE '119' '120-2' 1
LINE 'D71' BRACE '119-2' '120' 0
LINE 'D72' BRACE '119' '120-4' 1
LINE 'D73' BRACE '119-4' '120-1' 0

\$AREA CONNECTIVITIES

AREA 'F1' FLOOR 4 '69' '72' '14' '71' 0 0 0 0
AREA 'F2' FLOOR 4 '71' '14' '16' '73' 0 0 0 0
AREA 'F3' FLOOR 4 '16' '17' '74' '73' 0 0 0 0
AREA 'F4' FLOOR 4 '115' '69' '70' '117' 0 0 0 0
AREA 'F5' FLOOR 4 '71' '118' '117' '70' 0 0 0 0
AREA 'F6' FLOOR 4 '120' '118' '71' '73' 0 0 0 0

\$POINT ASSIGNS

POINTASSIGN '12' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '69' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '115' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '118' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '120' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '71' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '14' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '73' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '16' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '17' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '74' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '70' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '117' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '12' '2F' 'DIAPH' 'D1'
POINTASSIGN '12' '3F' 'DIAPH' 'D1'
POINTASSIGN '12-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '69' '2F' 'DIAPH' 'D1'
POINTASSIGN '69' '3F' 'DIAPH' 'D1'
POINTASSIGN '69' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '115' '2F' 'DIAPH' 'D1'
POINTASSIGN '115' '3F' 'DIAPH' 'D1'
POINTASSIGN '115-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '26' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '26' '2F' 'DIAPH' 'D1'
POINTASSIGN '26' '3F' 'DIAPH' 'D1'
POINTASSIGN '104' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '104' '2F' 'DIAPH' 'D1'
POINTASSIGN '104' '3F' 'DIAPH' 'D1'
POINTASSIGN '26-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '104-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '12' '2F' 'DIAPH' 'D1'
POINTASSIGN '14' '3F' 'DIAPH' 'D1'
POINTASSIGN '14-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '71' '2F' 'DIAPH' 'D1'
POINTASSIGN '71' '3F' 'DIAPH' 'D1'
POINTASSIGN '71' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '118' '2F' 'DIAPH' 'D1'
POINTASSIGN '118' '3F' 'DIAPH' 'D1'
POINTASSIGN '118-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '27' '2F' 'DIAPH' 'D1'
POINTASSIGN '27' '3F' 'DIAPH' 'D1'
POINTASSIGN '105' '2F' 'DIAPH' 'D1'
POINTASSIGN '105' '3F' 'DIAPH' 'D1'
POINTASSIGN '27-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '105-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '3' '2F' 'DIAPH' 'D1'
POINTASSIGN '27' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '105' 'BASE' 'DIAPH' 'D1'
POINTASSIGN '16' '2F' 'DIAPH' 'D1'
POINTASSIGN '16' '3F' 'DIAPH' 'D1'
POINTASSIGN '16-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '73' '2F' 'DIAPH' 'D1'
POINTASSIGN '73' '3F' 'DIAPH' 'D1'
POINTASSIGN '73' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '120' '2F' 'DIAPH' 'D1'
POINTASSIGN '120' '3F' 'DIAPH' 'D1'
POINTASSIGN '120-1' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '28' '2F' 'DIAPH' 'D1'
POINTASSIGN '28' '3F' 'DIAPH' 'D1'
POINTASSIGN '106' '2F' 'DIAPH' 'D1'
POINTASSIGN '106' '3F' 'DIAPH' 'D1'
POINTASSIGN '106' 'PRF' 'DIAPH' 'D1'
POINTASSIGN '28-1' 'PRF' 'DIAPH' 'D1'

COMBO 'DSTLS12' LOAD 'DL' SF 0.9
COMBO 'DSTLS12' LOAD 'SD' SF 0.9
COMBO 'DSTLS12' LOAD 'WX' SF -1.3
COMBO 'DSTLS13' TYPE 'ADD'
COMBO 'DSTLS13' LOAD 'DL' SF 0.9
COMBO 'DSTLS13' LOAD 'SD' SF 0.9
COMBO 'DSTLS13' LOAD 'WY' SF 1.3
COMBO 'DSTLS14' TYPE 'ADD'
COMBO 'DSTLS14' LOAD 'DL' SF 0.9
COMBO 'DSTLS14' LOAD 'SD' SF 0.9
COMBO 'DSTLS14' LOAD 'WY' SF -1.3
COMBO 'DSTLS15' TYPE 'ADD'
COMBO 'DSTLS15' LOAD 'DL' SF 1.4
COMBO 'DSTLS15' LOAD 'SD' SF 1.4
COMBO 'DSTLS15' LOAD 'LL' SF 0.5
COMBO 'DSTLS15' LOAD 'EXP' SF 1.5
COMBO 'DSTLS16' TYPE 'ADD'
COMBO 'DSTLS16' LOAD 'DL' SF 1.4
COMBO 'DSTLS16' LOAD 'SD' SF 1.4
COMBO 'DSTLS16' LOAD 'LL' SF 0.5
COMBO 'DSTLS16' LOAD 'EXP' SF -1.5
COMBO 'DSTLS17' TYPE 'ADD'
COMBO 'DSTLS17' LOAD 'DL' SF 1.4
COMBO 'DSTLS17' LOAD 'SD' SF 1.4
COMBO 'DSTLS17' LOAD 'LL' SF 0.5
COMBO 'DSTLS17' LOAD 'EXP' SF 1.5
COMBO 'DSTLS18' TYPE 'ADD'
COMBO 'DSTLS18' LOAD 'DL' SF 1.4
COMBO 'DSTLS18' LOAD 'SD' SF 1.4
COMBO 'DSTLS18' LOAD 'LL' SF 0.5
COMBO 'DSTLS18' LOAD 'EXP' SF -1.5
COMBO 'DSTLS19' TYPE 'ADD'
COMBO 'DSTLS19' LOAD 'DL' SF 1.4
COMBO 'DSTLS19' LOAD 'SD' SF 1.4
COMBO 'DSTLS19' LOAD 'LL' SF 0.5
COMBO 'DSTLS19' LOAD 'EXP' SF 1.5
COMBO 'DSTLS20' TYPE 'ADD'
COMBO 'DSTLS20' LOAD 'DL' SF 1.4
COMBO 'DSTLS20' LOAD 'SD' SF 1.4
COMBO 'DSTLS20' LOAD 'LL' SF 0.5
COMBO 'DSTLS20' LOAD 'EXP' SF -1.5
COMBO 'DSTLS21' TYPE 'ADD'
COMBO 'DSTLS21' LOAD 'DL' SF 1.4
COMBO 'DSTLS21' LOAD 'SD' SF 1.4
COMBO 'DSTLS21' LOAD 'LL' SF 0.5
COMBO 'DSTLS21' LOAD 'EXP' SF 1.5
COMBO 'DSTLS22' TYPE 'ADD'
COMBO 'DSTLS22' LOAD 'DL' SF 1.4
COMBO 'DSTLS22' LOAD 'SD' SF 1.4
COMBO 'DSTLS22' LOAD 'LL' SF 0.5
COMBO 'DSTLS22' LOAD 'EXP' SF -1.5
COMBO 'DSTLS23' TYPE 'ADD'
COMBO 'DSTLS23' LOAD 'DL' SF 1.4
COMBO 'DSTLS23' LOAD 'SD' SF 1.4
COMBO 'DSTLS23' LOAD 'EXP' SF 1.5
COMBO 'DSTLS24' TYPE 'ADD'
COMBO 'DSTLS24' LOAD 'DL' SF 1.4
COMBO 'DSTLS24' LOAD 'SD' SF 1.4
COMBO 'DSTLS24' LOAD 'EXP' SF -1.5
COMBO 'DSTLS25' TYPE 'ADD'
COMBO 'DSTLS25' LOAD 'DL' SF 1.4
COMBO 'DSTLS25' LOAD 'SD' SF 1.4
COMBO 'DSTLS25' LOAD 'EXP' SF 1.5
COMBO 'DSTLS26' TYPE 'ADD'
COMBO 'DSTLS26' LOAD 'DL' SF 1.4
COMBO 'DSTLS26' LOAD 'SD' SF 1.4
COMBO 'DSTLS26' LOAD 'EXP' SF -1.5
COMBO 'DSTLS27' TYPE 'ADD'
COMBO 'DSTLS27' LOAD 'DL' SF 1.4
COMBO 'DSTLS27' LOAD 'SD' SF 1.4
COMBO 'DSTLS27' LOAD 'EXP' SF 1.5
COMBO 'DSTLS28' TYPE 'ADD'
COMBO 'DSTLS28' LOAD 'DL' SF 1.4
COMBO 'DSTLS28' LOAD 'SD' SF 1.4
COMBO 'DSTLS28' LOAD 'EXP' SF -1.5
COMBO 'DSTLS29' TYPE 'ADD'
COMBO 'DSTLS29' LOAD 'DL' SF 1.4
COMBO 'DSTLS29' LOAD 'SD' SF 1.4
COMBO 'DSTLS29' LOAD 'EXP' SF 1.5
COMBO 'DSTLS30' TYPE 'ADD'
COMBO 'DSTLS30' LOAD 'DL' SF 1.4
COMBO 'DSTLS30' LOAD 'SD' SF 1.4
COMBO 'DSTLS30' LOAD 'EXP' SF -1.5
COMBO 'DSTLS31' TYPE 'ADD'
COMBO 'DSTLS31' LOAD 'DL' SF 0.7
COMBO 'DSTLS31' LOAD 'SD' SF 0.7
COMBO 'DSTLS31' LOAD 'EXP' SF 1.5
COMBO 'DSTLS32' TYPE 'ADD'
COMBO 'DSTLS32' LOAD 'DL' SF 0.7
COMBO 'DSTLS32' LOAD 'SD' SF 0.7
COMBO 'DSTLS32' LOAD 'EXP' SF -1.5
COMBO 'DSTLS33' TYPE 'ADD'
COMBO 'DSTLS33' LOAD 'DL' SF 0.7
COMBO 'DSTLS33' LOAD 'SD' SF 0.7
COMBO 'DSTLS33' LOAD 'EXP' SF 1.5
COMBO 'DSTLS34' TYPE 'ADD'
COMBO 'DSTLS34' LOAD 'DL' SF 0.7
COMBO 'DSTLS34' LOAD 'SD' SF 0.7
COMBO 'DSTLS34' LOAD 'EXP' SF -1.5
COMBO 'DSTLS35' TYPE 'ADD'
COMBO 'DSTLS35' LOAD 'DL' SF 0.7
COMBO 'DSTLS35' LOAD 'SD' SF 0.7
COMBO 'DSTLS35' LOAD 'EXP' SF 1.5
COMBO 'DSTLS36' TYPE 'ADD'
COMBO 'DSTLS36' LOAD 'DL' SF 0.7
COMBO 'DSTLS36' LOAD 'SD' SF 0.7
COMBO 'DSTLS36' LOAD 'EXP' SF -1.5
COMBO 'DSTLS37' TYPE 'ADD'
COMBO 'DSTLS37' LOAD 'DL' SF 0.7
COMBO 'DSTLS37' LOAD 'SD' SF 0.7
COMBO 'DSTLS37' LOAD 'EXP' SF 1.5
COMBO 'DSTLS38' TYPE 'ADD'
COMBO 'DSTLS38' LOAD 'DL' SF 0.7
COMBO 'DSTLS38' LOAD 'SD' SF 0.7
COMBO 'DSTLS38' LOAD 'EXP' SF -1.5
COMBO 'DCON1' TYPE 'ADD'
COMBO 'DCON1' LOAD 'DL' SF 1.4
COMBO 'DCON1' LOAD 'SD' SF 1.4
COMBO 'DCON2' TYPE 'ADD'
COMBO 'DCON2' LOAD 'DL' SF 1.2
COMBO 'DCON2' LOAD 'SD' SF 1.2
COMBO 'DCON2' LOAD 'LL' SF 1.6
COMBO 'DCON3' TYPE 'ADD'
COMBO 'DCON3' LOAD 'DL' SF 1.2
COMBO 'DCON3' LOAD 'SD' SF 1.2
COMBO 'DCON3' LOAD 'LL' SF 1
COMBO 'DCON3' LOAD 'WX' SF 1.6
COMBO 'DCON4' TYPE 'ADD'
COMBO 'DCON4' LOAD 'DL' SF 1.2
COMBO 'DCON4' LOAD 'SD' SF 1.2
COMBO 'DCON4' LOAD 'LL' SF 1
COMBO 'DCON4' LOAD 'WX' SF -1.6
COMBO 'DCON5' TYPE 'ADD'
COMBO 'DCON5' LOAD 'DL' SF 1.2
COMBO 'DCON5' LOAD 'SD' SF 1.2
COMBO 'DCON5' LOAD 'LL' SF 1
COMBO 'DCON5' LOAD 'WY' SF 1.6
COMBO 'DCON6' TYPE 'ADD'
COMBO 'DCON6' LOAD 'DL' SF 1.2
COMBO 'DCON6' LOAD 'SD' SF 1.2
COMBO 'DCON6' LOAD 'LL' SF 1
COMBO 'DCON6' LOAD 'WY' SF -1.6
COMBO 'DCON7' TYPE 'ADD'
COMBO 'DCON7' LOAD 'DL' SF 1.2
COMBO 'DCON7' LOAD 'SD' SF 1.2
COMBO 'DCON7' LOAD 'LL' SF 1
COMBO 'DCON7' LOAD 'WX' SF 0.8
COMBO 'DCON8' TYPE 'ADD'
COMBO 'DCON8' LOAD 'DL' SF 1.2
COMBO 'DCON8' LOAD 'SD' SF 1.2
COMBO 'DCON8' LOAD 'LL' SF 1
COMBO 'DCON8' LOAD 'WY' SF 0.8
COMBO 'DCON9' TYPE 'ADD'
COMBO 'DCON9' LOAD 'DL' SF 1.2
COMBO 'DCON9' LOAD 'SD' SF 1.2
COMBO 'DCON9' LOAD 'LL' SF 1
COMBO 'DCON9' LOAD 'WY' SF 0.8
COMBO 'DCON10' TYPE 'ADD'
COMBO 'DCON10' LOAD 'DL' SF 1.2

COMBO 'DCON10' LOAD 'SD' SF 1.2
COMBO 'DCON10' LOAD 'WY' SF -0.8
COMBO 'DCON11' TYPE 'ADD'
COMBO 'DCON11' LOAD 'DL' SF 0.9
COMBO 'DCON11' LOAD 'SD' SF 0.9
COMBO 'DCON11' LOAD 'WX' SF 1.6
COMBO 'DCON12' TYPE 'ADD'
COMBO 'DCON12' LOAD 'DL' SF 0.9
COMBO 'DCON12' LOAD 'SD' SF 0.9
COMBO 'DCON12' LOAD 'WX' SF -1.6
COMBO 'DCON13' TYPE 'ADD'
COMBO 'DCON13' LOAD 'DL' SF 0.9
COMBO 'DCON13' LOAD 'SD' SF 0.9
COMBO 'DCON13' LOAD 'WY' SF 1.6
COMBO 'DCON14' TYPE 'ADD'
COMBO 'DCON14' LOAD 'DL' SF 0.9
COMBO 'DCON14' LOAD 'SD' SF 0.9
COMBO 'DCON14' LOAD 'WY' SF -1.6
COMBO 'DCON15' TYPE 'ADD'
COMBO 'DCON15' LOAD 'DL' SF 1.4
COMBO 'DCON15' LOAD 'SD' SF 1.4
COMBO 'DCON15' LOAD 'LL' SF 1
COMBO 'DCON15' LOAD 'EXP' SF 1.5
COMBO 'DCON16' TYPE 'ADD'
COMBO 'DCON16' LOAD 'DL' SF 1.4
COMBO 'DCON16' LOAD 'SD' SF 1.4
COMBO 'DCON16' LOAD 'LL' SF 1
COMBO 'DCON16' LOAD 'EXP' SF -1.5
COMBO 'DCON17' TYPE 'ADD'
COMBO 'DCON17' LOAD 'DL' SF 1.4
COMBO 'DCON17' LOAD 'SD' SF 1.4
COMBO 'DCON17' LOAD 'LL' SF 1
COMBO 'DCON17' LOAD 'EXP' SF 1.5
COMBO 'DCON18' TYPE 'ADD'
COMBO 'DCON18' LOAD 'DL' SF 1.4
COMBO 'DCON18' LOAD 'SD' SF 1.4
COMBO 'DCON18' LOAD 'LL' SF 1
COMBO 'DCON18' LOAD 'EXP' SF -1.5
COMBO 'DCON19' TYPE 'ADD'
COMBO 'DCON19' LOAD 'DL' SF 1.4
COMBO 'DCON19' LOAD 'SD' SF 1.4
COMBO 'DCON19' LOAD 'LL' SF 1
COMBO 'DCON19' LOAD 'EXP' SF 1.5
COMBO 'DCON20' TYPE 'ADD'
COMBO 'DCON20' LOAD 'DL' SF 1.4
COMBO 'DCON20' LOAD 'SD' SF 1.4
COMBO 'DCON20' LOAD 'LL' SF 1
COMBO 'DCON20' LOAD 'EXP' SF -1.5
COMBO 'DCON21' TYPE 'ADD'
COMBO 'DCON21' LOAD 'DL' SF 1.4
COMBO 'DCON21' LOAD 'SD' SF 1.4
COMBO 'DCON21' LOAD 'LL' SF 1
COMBO 'DCON21' LOAD 'EXP' SF 1.5
COMBO 'DCON22' TYPE 'ADD'
COMBO 'DCON22' LOAD 'DL' SF 1.4
COMBO 'DCON22' LOAD 'SD' SF 1.4
COMBO 'DCON22' LOAD 'LL' SF 1
COMBO 'DCON22' LOAD 'EXP' SF -1.5
COMBO 'DCON23' TYPE 'ADD'
COMBO 'DCON23' LOAD 'DL' SF 1.4
COMBO 'DCON23' LOAD 'SD' SF 1.4
COMBO 'DCON23' LOAD 'LL' SF 1
COMBO 'DCON23' LOAD 'EXP' SF 1.5
COMBO 'DCON24' TYPE 'ADD'
COMBO 'DCON24' LOAD 'DL' SF 1.4
COMBO 'DCON24' LOAD 'SD' SF 1.4
COMBO 'DCON24' LOAD 'LL' SF 1
COMBO 'DCON24' LOAD 'EXP' SF -1.5
COMBO 'DCON25' TYPE 'ADD'
COMBO 'DCON25' LOAD 'DL' SF 1.4
COMBO 'DCON25' LOAD 'SD' SF 1.4
COMBO 'DCON25' LOAD 'LL' SF 1
COMBO 'DCON25' LOAD 'EXP' SF 1.5
COMBO 'DCON26' TYPE 'ADD'
COMBO 'DCON26' LOAD 'DL' SF 1.4
COMBO 'DCON26' LOAD 'SD' SF 1.4
COMBO 'DCON26' LOAD 'LL' SF 1
COMBO 'DCON26' LOAD 'EXP' SF -1.5
COMBO 'DCON27' TYPE 'ADD'
COMBO 'DCON27' LOAD 'DL' SF 1.4
COMBO 'DCON27' LOAD 'SD' SF 1.4
COMBO 'DCON27' LOAD 'LL' SF 1
COMBO 'DCON27' LOAD 'EXP' SF 1.5
COMBO 'DCON28' TYPE 'ADD'
COMBO 'DCON28' LOAD 'DL' SF 1.4
COMBO 'DCON28' LOAD 'SD' SF 1.4
COMBO 'DCON28' LOAD 'LL' SF 1
COMBO 'DCON28' LOAD 'EXP' SF -1.5
COMBO 'DCON29' TYPE 'ADD'
COMBO 'DCON29' LOAD 'DL' SF 1.4
COMBO 'DCON29' LOAD 'SD' SF 1.4
COMBO 'DCON29' LOAD 'LL' SF 1
COMBO 'DCON29' LOAD 'EXP' SF 1.5
COMBO 'DCON30' TYPE 'ADD'
COMBO 'DCON30' LOAD 'DL' SF 1.4
COMBO 'DCON30' LOAD 'SD' SF 1.4
COMBO 'DCON30' LOAD 'LL' SF 1
COMBO 'DCON30' LOAD 'EXP' SF -1.5
COMBO 'DCON31' TYPE 'ADD'
COMBO 'DCON31' LOAD 'DL' SF 0.7
COMBO 'DCON31' LOAD 'SD' SF 0.7
COMBO 'DCON31' LOAD 'EXP' SF 1.5
COMBO 'DCON32' TYPE 'ADD'
COMBO 'DCON32' LOAD 'DL' SF 0.7
COMBO 'DCON32' LOAD 'SD' SF 0.7
COMBO 'DCON32' LOAD 'EXP' SF -1.5
COMBO 'DCON33' TYPE 'ADD'
COMBO 'DCON33' LOAD 'DL' SF 0.7
COMBO 'DCON33' LOAD 'SD' SF 0.7
COMBO 'DCON33' LOAD 'EXP' SF 1.5
COMBO 'DCON34' TYPE 'ADD'
COMBO 'DCON34' LOAD 'DL' SF 0.7
COMBO 'DCON34' LOAD 'SD' SF 0.7
COMBO 'DCON34' LOAD 'EXP' SF -1.5
COMBO 'DCON35' TYPE 'ADD'
COMBO 'DCON35' LOAD 'DL' SF 0.7
COMBO 'DCON35' LOAD 'SD' SF 0.7
COMBO 'DCON35' LOAD 'EXP' SF 1.5
COMBO 'DCON36' TYPE 'ADD'
COMBO 'DCON36' LOAD 'DL' SF 0.7
COMBO 'DCON36' LOAD 'SD' SF 0.7
COMBO 'DCON36' LOAD 'EXP' SF -1.5
COMBO 'DCON37' TYPE 'ADD'
COMBO 'DCON37' LOAD 'DL' SF 0.7
COMBO 'DCON37' LOAD 'SD' SF 0.7
COMBO 'DCON37' LOAD 'EXP' SF 1.5
COMBO 'DCON38' TYPE 'ADD'
COMBO 'DCON38' LOAD 'DL' SF 0.7
COMBO 'DCON38' LOAD 'SD' SF 0.7
COMBO 'DCON38' LOAD 'EXP' SF -1.5

§ STEEL DESIGN PREFERENCES

STEELREFERENCE CODE 'ASC-LRFD93' THIDESGN 'EVERYSTYP' FRAMETYPE 'MOMENT FRAME'
STEELREFERENCE PHBLRFD 0.9 PHCLRFD 0.85 PHTLRFD 0.9 PHVLRFD 0.9 PHCANGELRFD 0.9
STEELREFERENCE PHBLRFD 0.9 PHCLRFD 0.85 PHTLRFD 0.9 PHVLRFD 0.9 PHCANGELRFD 0.9
STEELREFERENCE CONSIDERDEFLECTION 'NO' RELATIVEDEFLECTION 'RATIO'
STEELREFERENCE DLDEFLECTIONLIMIT 120 SLDEFLECTIONLIMIT 60 TLDDEFLECTIONLIMIT 240 TLMDEFLECTIONLIMIT
STEELREFERENCE DLDEFLECTIONLIMITABS 2.54 SLDEFLECTIONLIMITABS 2.54 TLDDEFLECTIONLIMITABS 2.54
STEELREFERENCE CALCULATECAMBER 'NO' PERCENTCAMBERWDL 1 CAMBERRELMAXLIMIT 180 CAMBERNORELMIT 1.905
STEELREFERENCE CAMBERABSMAXLIMIT 10.16 CAMBERINTERVAL 0.635 CAMBERUNDDOWN 'YES'
STEELREFERENCE PATTERNLLF 0.75 MAXINTERVAL 1 SRLIMIT 1.05

§ STEEL DESIGN OVERRIDES

STEELDATA "C" "2F" KMAJOR 0.5
STEELDATA "C18" "TRF" KMAJOR 2

§ CONCRETE DESIGN PREFERENCES

CONCRETEREFERENCE CODE 'ACI 318-02' THIDESGN 'EVERYSTYP' CONSIDERINECCENTRICITY 'YES'
CONCRETEREFERENCE NUMINTERCURVES 24 NUMINTERPOINTS 11 PATTERNLLF 0.75 UFLIMIT 1
CONCRETEREFERENCE SDC 'D' PHITENSXONCTRL 0.9 PHCOMPRESSIONCTRLTED 0.65 PHCOMPRESSIONCTRLSPRAL 0.7 PHHSHEARTORSON

§ COMPOSITE DESIGN PREFERENCES

COMPOSITEREFERENCE CODE 'ASC-LRFD93'
COMPOSITEREFERENCE PHB 0.9 PHBCNE 0.9 PHBCPE 0.85 PHBCPF 0.9 PHBCPP 0.85 PHV 0.9
COMPOSITEREFERENCE SHRED 'NO' 'SMIDLERANGE 70 PATTERNLLF 0.75 SRLIMIT 1 SINGLESEGMENT 'NO' STUDNCREASEFACTOR 1
COMPOSITEREFERENCE DLIMIT 0.5 LLIMIT 0.5 TLLIMIT 240 CREPFACTOR 1
COMPOSITEREFERENCE 'DL'CAMBER 100 CAMBERNORE 1.905 CAMBERABSMAX 10.16 CAMBERRELMAX 180 CAMBERINTERVAL 0.635
COMPOSITEREFERENCE '%BILL 25 CONSIDERFREQ 'NO' MINFREQ 8 CONSIDERDAMP 'NO' %INHERENTDAMP 4
COMPOSITEREFERENCE OPTIMIZEPRICE 'NO' CONNECTORPRICE 0 CAMBERPRICE 0

§ WALL DESIGN PREFERENCES

WALLREFERENCE CODE 'UCB97' THIDESGN 'EVERYSTYP'
WALLREFERENCE REBARUNITS "m"2 REBARLENGTHINITS "m"2/8"
WALLREFERENCE PHB 0.9 PHC 0.7 PHVNS 0.85 PHVNS 0.6 PMAAFACTOR 0.8

STEEL CODE PREFERENCES

Steel Design Code : AISC-LRF093
Time History Type : Step-by-Step
Frame Type : Moment Frame
Phi(Bending) : 0.9
Phi(Compression) : 0.85
Phi(Tension) : 0.9
Phi(Shear) : 0.9
Phi(Compression, Angle) : 0.9
Consider Deflection? : No
Deflection Check Type : Ratio
DL Limit, L/ : 360
Super DL+LL Limit, L/ : 120
Live Load Limit, L/ : 360
Total Load Limit, L/ : 240
Total-Camber Limit, L/ : 240
DL Limit, abs : 2.54
Super DL+LL Limit, abs : 2.54
Live Load Limit, abs : 2.54
Total Load Limit, abs : 2.54
Total-Camber Limit, abs : 2.54
Pattern Live Load Factor : 0.75
Stress Ratio Limit : 1.05
Maximum Auto Iteration : 1

COLUMN STEEL STRESS CHECK ELEMENT INFORMATION (AISC-LRF093)

Table with columns: STORY, COLUMN, SECTION, FRAMING, RLFL, RATIO, L, RATIO, K, LEVEL, LINE ID, TYPE, FACTOR, MAJOR, MINOR, MAJOR, MINOR. Contains stress check data for columns C1 through C23 across various levels.

BEAM STEEL STRESS CHECK ELEMENT INFORMATION (AISC-LRF093)

Table with columns: STORY, BEAM, SECTION, FRAMING, RLFL, RATIO, L, RATIO, K, LEVEL, BAY ID, TYPE, FACTOR, MAJOR, MINOR, MAJOR, MINOR. Contains stress check data for beams B1 through B41 across various levels.

Table with columns: PRF, BAY, SECTION, FRAMING, RLFL, RATIO, L, RATIO, K, LEVEL, LINE ID, TYPE, FACTOR, MAJOR, MINOR, MAJOR, MINOR. Contains stress check data for beams B42 through B236 across various levels.

BRACE STEEL STRESS CHECK ELEMENT INFORMATION (AISC-LRF093)

Table with columns: STORY, BRACE, SECTION, FRAMING, RLFL, RATIO, L, RATIO, K, LEVEL, BAY ID, TYPE, FACTOR, MAJOR, MINOR, MAJOR, MINOR. Contains stress check data for bracing members D1 through D30 across various levels.

02RC72(T) 0.033 = 0.003 + 0.012 + 0.019

3F B27 U100X100X2.0 02RC72 0.047 02RC67 0.014
02RC67(C) 0.061 = 0.021 + 0.025 + 0.015
02RC72(T) 0.080 = 0.019 + 0.054 + 0.007

2F B28 U100X100X2.0 02RC72 0.079 02RC67 0.007
02RC71(C) 0.078 = 0.039 + 0.033 + 0.006
02RC72(T) 0.140 = 0.033 + 0.102 + 0.005

PRF B29 U100X100X2.0 02RC71 0.024 02RC71 0.014
02RC13(C) 0.027 = 0.003 + 0.023 + 0.001
02RC71(T) 0.054 = 0.002 + 0.027 + 0.025

3F B30 U100X100X2.0 02RC72 0.053 02RC71 0.009
02RC13(C) 0.026 = 0.004 + 0.044 + 0.002
02RC72(T) 0.105 = 0.025 + 0.066 + 0.014

2F B31 U100X100X2.0 02RC72 0.093 02RC71 0.005
02RC13(C) 0.039 = 0.001 + 0.037 + 0.001
02RC72(T) 0.167 = 0.035 + 0.123 + 0.010

PRF B32 U100X100X2.0 02RC72 0.047 02RC68 0.014
02RC13(C) 0.027 = 0.004 + 0.017 + 0.005
02RC72(T) 0.091 = 0.019 + 0.060 + 0.012

3F B33 U100X100X2.0 02RC72 0.093 02RC71 0.015
02RC13(C) 0.047 = 0.008 + 0.037 + 0.002
02RC72(T) 0.185 = 0.048 + 0.119 + 0.019

2F B34 U100X100X2.0 02RC72 0.111 02RC72 0.014
02RC13(C) 0.045 = 0.010 + 0.033 + 0.002
02RC72(T) 0.252 = 0.075 + 0.156 + 0.020

PRF B35 C125X50X20X2.0 02RC71 0.099 02RC72 0.000
02RC71(C) 0.474 = 0.000 + 0.474 + 0.000
02RC68(T) 0.321 = 0.000 + 0.321 + 0.000

PRF B36 C125X50X20X2.0 02RC71 0.107 02RC72 0.000
02RC68(C) 0.344 = 0.000 + 0.344 + 0.000
02RC71(T) 0.510 = 0.000 + 0.510 + 0.000

2F B37 C125X50X20X2.0 02RC02 0.068 02RC72 0.000
02RC02(T) 0.326 = 0.000 + 0.326 + 0.000

3F B38 C125X50X20X2.0 02RC02 0.085 02RC72 0.000
02RC02(T) 0.506 = 0.000 + 0.506 + 0.000

2F B38 C125X50X20X2.0 02RC02 0.101 02RC72 0.000
02RC02(T) 0.398 = 0.000 + 0.398 + 0.000

3F B39 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B39 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B40 C125X50X20X2.0 02RC02 0.029 02RC72 0.000
02RC02(T) 0.053 = 0.000 + 0.053 + 0.000

2F B41 C125X50X20X2.0 02RC71 0.009 02RC72 0.000
02RC67(T) 0.089 = 0.000 + 0.089 + 0.000

PRF B42 C125X50X20X2.0 02RC71 0.094 02RC72 0.000
02RC71(T) 0.449 = 0.000 + 0.449 + 0.000

PRF B43 C125X50X20X2.0 02RC71 0.104 02RC72 0.000
02RC71(T) 0.529 = 0.000 + 0.529 + 0.000

2F B44 C125X50X20X2.0 02RC02 0.063 02RC72 0.000
02RC02(T) 0.284 = 0.000 + 0.284 + 0.000

3F B45 C125X50X20X2.0 02RC02 0.085 02RC72 0.000
02RC02(T) 0.506 = 0.000 + 0.506 + 0.000

2F B45 C125X50X20X2.0 02RC02 0.099 02RC72 0.000
02RC02(T) 0.373 = 0.000 + 0.373 + 0.000

3F B46 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B46 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B47 C125X50X20X2.0 02RC02 0.029 02RC72 0.000
02RC02(T) 0.053 = 0.000 + 0.053 + 0.000

PRF B48 C125X50X20X2.0 02RC71 0.100 02RC72 0.000
02RC71(T) 0.484 = 0.000 + 0.484 + 0.000

PRF B49 C125X50X20X2.0 02RC71 0.107 02RC72 0.000
02RC71(T) 0.508 = 0.000 + 0.508 + 0.000

2F B50 C125X50X20X2.0 02RC02 0.059 02RC72 0.000
02RC02(T) 0.253 = 0.000 + 0.253 + 0.000

2F B51 25C125X50X20X2 02RC02 0.331 02RC72 0.000
02RC02(T) 0.447 = 0.000 + 0.447 + 0.000

3F B52 C125X50X20X2.0 02RC02 0.085 02RC72 0.000
02RC02(T) 0.506 = 0.000 + 0.506 + 0.000

2F B52 C125X50X20X2.0 02RC02 0.096 02RC72 0.000
02RC02(T) 0.383 = 0.000 + 0.383 + 0.000

2F B53 25C125X50X20X2 02RC02 0.388 02RC72 0.000
02RC68(T) 0.666 = 0.000 + 0.666 + 0.000

3F B54 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B54 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B55 25C125X50X20X2 02RC02 0.283 02RC72 0.000
02RC68(T) 0.654 = 0.000 + 0.654 + 0.000

2F B56 C125X50X20X2.0 02RC02 0.029 02RC72 0.000
02RC02(T) 0.053 = 0.000 + 0.053 + 0.000

2F B58 25C125X50X20X2 02RC72 0.232 02RC72 0.000
02RC68(C) 0.367 = 0.000 + 0.367 + 0.000
02RC72(T) 0.372 = 0.000 + 0.372 + 0.000

PRF B59 C125X50X20X2.0 02RC71 0.100 02RC72 0.000
02RC71(T) 0.483 = 0.000 + 0.483 + 0.000

PRF B60 C125X50X20X2.0 02RC71 0.107 02RC72 0.000
02RC71(C) 0.504 = 0.000 + 0.504 + 0.000
02RC45(T) 0.054 = 0.000 + 0.054 + 0.000

3F B61 C125X50X20X2.0 02RC02 0.085 02RC72 0.000
02RC02(T) 0.506 = 0.000 + 0.506 + 0.000

2F B61 C125X50X20X2.0 02RC02 0.085 02RC72 0.000
02RC02(T) 0.506 = 0.000 + 0.506 + 0.000

3F B62 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B62 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B63 C125X50X20X2.0 02RC02 0.029 02RC72 0.000
02RC02(T) 0.053 = 0.000 + 0.053 + 0.000

PRF B64 C125X50X20X2.0 02RC71 0.100 02RC72 0.000
02RC71(C) 0.480 = 0.000 + 0.480 + 0.000
02RC31(T) 0.144 = 0.000 + 0.144 + 0.000

PRF B65 C125X50X20X2.0 02RC71 0.107 02RC72 0.000
02RC71(T) 0.502 = 0.000 + 0.502 + 0.000

3F B66 C125X50X20X2.0 02RC02 0.085 02RC72 0.000
02RC02(T) 0.506 = 0.000 + 0.506 + 0.000

2F B66 C125X50X20X2.0 02RC02 0.085 02RC72 0.000
02RC02(T) 0.506 = 0.000 + 0.506 + 0.000

3F B67 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B67 C125X50X20X2.0 02RC02 0.094 02RC72 0.000
02RC02(T) 0.642 = 0.000 + 0.642 + 0.000

2F B68 C125X50X20X2.0 02RC02 0.029 02RC72 0.000
02RC02(T) 0.053 = 0.000 + 0.053 + 0.000

PRF B69 C125X50X20X2.0 02RC71 0.100 02RC72 0.000
02RC71(C) 0.472 = 0.000 + 0.472 + 0.000
02RC45(T) 0.051 = 0.000 + 0.051 + 0.000

PRF B70 C125X50X20X2.0 02RC71 0.106 02RC72 0.000
02RC71(T) 0.499 = 0.000 + 0.499 + 0.000

PRF B71 C125X50X20X2.0 02RC71 0.084 02RC72 0.000
02RC71(T) 0.303 = 0.000 + 0.303 + 0.000

3F B71 25C125X50X20X2 02RC67 0.159 02RC72 0.000
02RC67(T) 0.566 = 0.000 + 0.566 + 0.000

2F B71 25C125X50X20X2 02RC67 0.146 02RC72 0.000
02RC67(T) 0.495 = 0.000 + 0.495 + 0.000

PRF B72 25C125X50X20X2 02RC71 0.030 02RC72 0.000
02RC71(T) 0.184 = 0.000 + 0.184 + 0.000

3F B73 U100X100X2.0 02RC71 0.102 02RC68 0.011
02RC15(C) 0.034 = 0.000 + 0.032 + 0.002
02RC71(T) 0.099 = 0.013 + 0.085 + 0.001

2F B74 U100X100X2.0 02RC71 0.119 02RC72 0.007
02RC13(C) 0.025 = 0.001 + 0.024 + 0.000
02RC71(T) 0.129 = 0.013 + 0.115 + 0.001

PRF B75 U100X100X2.0 02RC71 0.105 02RC68 0.013
02RC15(C) 0.020 = 0.000 + 0.019 + 0.002
02RC71(T) 0.092 = 0.008 + 0.084 + 0.000

PRF B76 C125X50X20X2.0 02RC71 0.434 02RC72 0.000
02RC71(T) 0.992 = 0.000 + 0.992 + 0.000

3F B76 25C125X50X20X2 02RC67 0.120 02RC72 0.000
02RC67(T) 0.450 = 0.000 + 0.450 + 0.000

2F B76 25C125X50X20X2 02RC67 0.101 02RC72 0.000
02RC67(T) 0.331 = 0.000 + 0.331 + 0.000

PRF B77 25C125X50X20X2 02RC71 0.290 02RC68 0.053
02RC71(C) 0.616 = 0.299 + 0.316 + 0.001
02RC71(T) 0.158 = 0.004 + 0.153 + 0.001

2F B78 25C125X50X20X2 02RC67 0.165 02RC72 0.000
02RC67(T) 0.294 = 0.000 + 0.294 + 0.000

PRF B79 25C125X50X20X2 02RC68 0.035 02RC67 0.027
02RC68(C) 0.351 = 0.234 + 0.085 + 0.031
02RC71(T) 0.129 = 0.001 + 0.007 + 0.121

3F B80 25C125X50X20X2 02RC02 0.199 02RC72 0.000
02RC68(T) 0.377 = 0.000 + 0.377 + 0.000

PRF B81 25C125X50X20X2 02RC68 0.056 02RC67 0.023
02RC68(C) 0.507 = 0.354 + 0.133 + 0.021

02RC72(T) 0.171 = 0.027 + 0.125 + 0.019

3F B82 25C125X50X20X2 02RC02 0.410 02RC72 0.000
02RC68(T) 0.723 = 0.000 + 0.723 + 0.000

PRF B83 25C125X50X20X2 02RC68 0.061 02RC71 0.037
02RC72(C) 0.643 = 0.468 + 0.159 + 0.016
02RC72(T) 0.251 = 0.037 + 0.169 + 0.045

3F B84 25C125X50X20X2 02RC68 0.246 02RC72 0.000
02RC68(T) 0.682 = 0.000 + 0.682 + 0.000

PRF B85 C125X50X20X2.0 02RC71 0.100 02RC72 0.000
02RC23(C) 0.145 = 0.000 + 0.145 + 0.000
02RC71(T) 0.475 = 0.000 + 0.475 + 0.000

PRF B86 C125X50X20X2.0 02RC71 0.107 02RC72 0.000
02RC67(C) 0.407 = 0.000 + 0.407 + 0.000
02RC71(T) 0.501 = 0.000 + 0.501 + 0.000

3F B87 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

2F B87 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

3F B88 C125X50X20X2.0 02RC02 0.098 02RC72 0.000
02RC02(T) 0.588 = 0.000 + 0.588 + 0.000

2F B88 C125X50X20X2.0 02RC02 0.110 02RC72 0.000
02RC02(T) 0.472 = 0.000 + 0.472 + 0.000

2F B89 C125X50X20X2.0 02RC02 0.075 02RC72 0.000
02RC02(T) 0.384 = 0.000 + 0.384 + 0.000

PRF B90 C125X50X20X2.0 02RC71 0.101 02RC72 0.000
02RC25(C) 0.145 = 0.000 + 0.145 + 0.000
02RC71(T) 0.482 = 0.000 + 0.482 + 0.000

PRF B91 C125X50X20X2.0 02RC71 0.107 02RC72 0.000
02RC21(C) 0.154 = 0.000 + 0.154 + 0.000
02RC71(T) 0.505 = 0.000 + 0.505 + 0.000

3F B92 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

2F B92 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

3F B93 C125X50X20X2.0 02RC02 0.095 02RC72 0.000
02RC02(T) 0.629 = 0.000 + 0.629 + 0.000

2F B93 C125X50X20X2.0 02RC02 0.107 02RC72 0.000
02RC02(T) 0.479 = 0.000 + 0.479 + 0.000

2F B94 C125X50X20X2.0 02RC02 0.067 02RC72 0.000
02RC02(T) 0.321 = 0.000 + 0.321 + 0.000

PRF B95 C125X50X20X2.0 02RC71 0.101 02RC72 0.000
02RC67(C) 0.398 = 0.000 + 0.398 + 0.000
02RC71(T) 0.486 = 0.000 + 0.486 + 0.000

PRF B96 C125X50X20X2.0 02RC71 0.107 02RC72 0.000
02RC71(T) 0.507 = 0.000 + 0.507 + 0.000

2F B97 25C125X50X20X2 02RC72 0.044 02RC72 0.000
02RC72(T) 0.218 = 0.000 + 0.218 + 0.000

3F B98 25C125X50X20X2 02RC02 0.104 02RC72 0.000
02RC02(C) 0.191 = 0.000 + 0.191 + 0.000
02RC02(T) 0.356 = 0.000 + 0.356 + 0.000

2F B98 25C125X50X20X2 02RC02 0.104 02RC72 0.000
02RC02(C) 0.180 = 0.000 + 0.180 + 0.000
02RC02(T) 0.355 = 0.000 + 0.355 + 0.000

3F B99 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

2F B99 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

2F B100 25C125X50X20X2 02RC02 0.269 02RC72 0.000
02RC68(T) 0.592 = 0.000 + 0.592 + 0.000

3F B101 C125X50X20X2.0 02RC02 0.096 02RC72 0.000
02RC02(T) 0.623 = 0.000 + 0.623 + 0.000

2F B101 C125X50X20X2.0 02RC02 0.107 02RC72 0.000
02RC02(T) 0.478 = 0.000 + 0.478 + 0.000

2F B102 25C125X50X20X2 02RC02 0.404 02RC72 0.000
02RC68(T) 0.896 = 0.000 + 0.896 + 0.000

2F B103 C125X50X20X2.0 02RC02 0.068 02RC72 0.000
02RC02(T) 0.324 = 0.000 + 0.324 + 0.000

2F B104 C125X50X20X2.0 02RC68 0.051 02RC72 0.000
02RC68(C) 0.150 = 0.000 + 0.150 + 0.000
02RC68(T) 0.376 = 0.000 + 0.376 + 0.000

PRF B105 C125X50X20X2.0 02RC71 0.101 02RC72 0.000
02RC71(T) 0.487 = 0.000 + 0.487 + 0.000

PRF B106 C125X50X20X2.0 02RC71 0.108 02RC72 0.000
02RC71(T) 0.512 = 0.000 + 0.512 + 0.000

3F B107 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

2F B107 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

3F B108 C125X50X20X2.0 02RC02 0.102 02RC72 0.000
02RC02(T) 0.542 = 0.000 + 0.542 + 0.000

2F B108 C125X50X20X2.0 02RC02 0.110 02RC72 0.000
02RC02(T) 0.470 = 0.000 + 0.470 + 0.000

2F B109 C125X50X20X2.0 02RC02 0.069 02RC72 0.000
02RC02(T) 0.335 = 0.000 + 0.335 + 0.000

PRF B110 C125X50X20X2.0 02RC71 0.094 02RC72 0.000
02RC71(T) 0.446 = 0.000 + 0.446 + 0.000

PRF B111 C125X50X20X2.0 02RC71 0.104 02RC72 0.000
02RC71(T) 0.527 = 0.000 + 0.527 + 0.000

3F B112 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

2F B112 C125X50X20X2.0 02RC02 0.039 02RC72 0.000
02RC02(T) 0.112 = 0.000 + 0.112 + 0.000

3F B113 C125X50X20X2.0 02RC02 0.104 02RC72 0.000
02RC02(T) 0.512 = 0.000 + 0.512 + 0.000

2F B113 C125X50X20X2.0 02RC02 0.112 02RC72 0.000
02RC02(T) 0.478 = 0.000 + 0.478 + 0.000

2F B114 C125X50X20X2.0 02RC02 0.073 02RC72 0.000
02RC02(T) 0.369 = 0.000 + 0.369 + 0.000

PRF B115 C125X50X20X2.0 02RC71 0.099 02RC72 0.000
02RC67(C) 0.389 = 0.000 + 0.389 + 0.000
02RC71(T) 0.474 = 0.000 + 0.474 + 0.000

PRF B116 C125X50X20X2.0 02RC71 0.107 02RC72 0.000
02RC71(C) 0.512 = 0.000 + 0.512 + 0.000
02RC68(T) 0.328 = 0.000 + 0.328 + 0.000

PRF B117 U100X100X2.0 02RC68 0.022 02RC71 0.012
02RC68(C) 0.035 = 0.005 + 0.024 + 0.007
02RC71(T) 0.099 = 0.000 + 0.094 + 0.005

3F B118 U100X100X2.0 02RC68 0.059 02RC71 0.012
02RC68(C) 0.095 = 0.019 + 0.068 + 0.008
02RC50(T) 0.021 = 0.006 + 0.014 + 0.001

2F B119 U100X100X2.0 02RC67 0.087 02RC68 0.006
02RC72(C) 0.148 = 0.033 + 0.111 + 0.005
02RC18(T) 0.031 = 0.011 + 0.019 + 0.001

PRF B120 U100X100X2.0 02RC68 0.044 02RC67 0.013
02RC68(C) 0.078 = 0.012 + 0.055 + 0.011
02RC71(T) 0.051 = 0.002 + 0.027 + 0.021

3F B121 U100X100X2.0 02RC68 0.091 02RC67 0.008
02RC68(C) 0.154 = 0.027 + 0.114 + 0.013
02RC29(T) 0.026 = 0.001 + 0.024 + 0.001

2F B122 U100X100X2.0 02RC68 0.121 02RC71 0.004
02RC68(C) 0.195 = 0.029 + 0.155 + 0.010
02RC02(T) 0.030 = 0.006 + 0.024 + 0.000

PRF B123 U100X100X2.0 02RC68 0.063 02RC67 0.005
02RC68(C) 0.115 = 0.022 + 0.080 + 0.013
02RC71(T) 0.040 = 0.005 + 0.018 + 0.017

3F B124 U100X100X2.0 02RC68 0.120 02RC67 0.017
02RC68(C) 0.223 = 0.053 + 0.153 + 0.018
02RC67(T) 0.043 = 0.013 + 0.007 + 0.023

2F B125 U100X100X2.0 02RC68 0.133 02RC68 0.016
02RC68(C) 0.280 = 0.078 + 0.181 + 0.021
02RC67(T) 0.080 = 0.031 + 0.035 + 0.015

PRF B126 U100X100X2.0 02RC71 0.024 02RC71 0.002
02RC68(C) 0.019 = 0.003 + 0.006 + 0.011
02RC71(T) 0.043 = 0.006 + 0.035 + 0.001

3F B127 U100X100X2.0 02RC71 0.069 02RC72 0.010
02RC11(C) 0.042 = 0.008 + 0.032 + 0.001
02RC71(T) 0.126 = 0.032 + 0.091 + 0.003</

02RC67(C) 0.128 = 0.035 + 0.091 + 0.002
 02RC72(T) 0.103 = 0.031 + 0.048 + 0.024
 PRF B135 U100X100X2.0 02RC67 0.012 02RC71 0.006
 02RC67(C) 0.028 = 0.007 + 0.020 + 0.001
 02RC72(T) 0.025 = 0.001 + 0.021 + 0.003
 2F B136 25C125X50X20X2 02RC02 0.032 02RC72 0.000
 02RC67(T) 0.026 = 0.000 + 0.026 + 0.000

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BRACE STEEL STRESS CHECK OUTPUT# (AISC-LRFPD93)

STORY BRACE SECTION /-----MOMENT INTERACTION CHECK-----/-----SHEAR2-----/-----SHEAR3-----/
 LEVEL BAY ID COMBO RATIO = AXL + B33 + B22 COMBO RATIO COMBO RATIO

PRF D1 U100X100X2.0 02RC67 0.005 02RC13 0.001
 02RC68(C) 0.040 = 0.006 + 0.014 + 0.020
 02RC48(T) 0.005 = 0.001 + 0.003 + 0.000
 PRF D2 U100X100X2.0 02RC71 0.016 02RC72 0.002
 02RC71(C) 0.064 = 0.017 + 0.047 + 0.001
 02RC15(T) 0.022 = 0.002 + 0.018 + 0.002
 3F D3 U100X100X2.0 02RC71 0.004 02RC72 0.004
 02RC67(C) 0.100 = 0.081 + 0.012 + 0.006
 02RC72(T) 0.037 = 0.003 + 0.004 + 0.030
 3F D4 U100X100X2.0 02RC71 0.014 02RC72 0.001
 02RC71(C) 0.154 = 0.085 + 0.066 + 0.002
 02RC72(T) 0.046 = 0.005 + 0.027 + 0.015
 2F D5 U100X100X2.0 02RC71 0.007 02RC68 0.021
 02RC67(C) 0.312 = 0.257 + 0.021 + 0.034
 02RC68(T) 0.085 = 0.017 + 0.006 + 0.062
 2F D6 U100X100X2.0 02RC72 0.014 02RC72 0.025
 02RC67(C) 0.363 = 0.257 + 0.099 + 0.007
 02RC72(T) 0.185 = 0.027 + 0.055 + 0.102
 2F D7 U100X100X2.0 02RC72 0.013 02RC72 0.030
 02RC13(C) 0.058 = 0.025 + 0.009 + 0.024
 02RC72(T) 0.400 = 0.250 + 0.014 + 0.136
 2F D8 U100X100X2.0 02RC67 0.020 02RC68 0.022
 02RC02(C) 0.068 = 0.013 + 0.003 + 0.051
 02RC71(T) 0.303 = 0.226 + 0.064 + 0.012
 3F D9 U100X100X2.0 02RC67 0.013 02RC72 0.004
 02RC15(C) 0.032 = 0.020 + 0.008 + 0.004
 02RC67(T) 0.142 = 0.075 + 0.066 + 0.001
 3F D10 U100X100X2.0 02RC68 0.005 02RC72 0.005
 02RC15(C) 0.024 = 0.020 + 0.002 + 0.002
 02RC71(T) 0.094 = 0.075 + 0.013 + 0.005
 PRF D11 U100X100X2.0 02RC67 0.015 02RC68 0.003
 02RC02(C) 0.017 = 0.002 + 0.015 + 0.000
 02RC67(T) 0.062 = 0.013 + 0.045 + 0.004
 PRF D12 U100X100X2.0 02RC67 0.007 02RC71 0.003
 02RC68(C) 0.024 = 0.007 + 0.015 + 0.002
 02RC71(T) 0.031 = 0.011 + 0.015 + 0.005
 PRF D13 U100X100X2.0 02RC68 0.008 02RC03 0.003
 02RC72(C) 0.043 = 0.002 + 0.026 + 0.014
 02RC67(T) 0.020 = 0.013 + 0.000 + 0.007
 PRF D14 U100X100X2.0 02RC02 0.010 02RC71 0.004
 02RC68(C) 0.039 = 0.005 + 0.018 + 0.016
 02RC67(T) 0.049 = 0.013 + 0.021 + 0.015
 3F D15 U100X100X2.0 02RC67 0.003 02RC71 0.006
 02RC72(C) 0.066 = 0.040 + 0.009 + 0.017
 02RC67(T) 0.065 = 0.039 + 0.007 + 0.019
 3F D16 U100X100X2.0 02RC02 0.016 02RC71 0.005
 02RC72(C) 0.081 = 0.044 + 0.017 + 0.020
 02RC67(T) 0.084 = 0.045 + 0.021 + 0.017
 2F D17 U100X100X2.0 02RC02 0.022 02RC67 0.013
 02RC68(C) 0.147 = 0.079 + 0.054 + 0.014
 02RC67(T) 0.161 = 0.077 + 0.029 + 0.056
 2F D18 U100X100X2.0 02RC71 0.016 02RC71 0.024
 02RC72(C) 0.203 = 0.072 + 0.096 + 0.035
 02RC71(T) 0.250 = 0.087 + 0.038 + 0.125
 PRF D19 U100X100X2.0 02RC68 0.010 02RC71 0.041
 02RC71(C) 0.161 = 0.004 + 0.013 + 0.145
 02RC67(T) 0.154 = 0.001 + 0.011 + 0.143
 PRF D20 U100X100X2.0 02RC02 0.018 02RC71 0.001
 02RC68(C) 0.060 = 0.016 + 0.029 + 0.015
 02RC02(T) 0.062 = 0.003 + 0.059 + 0.000
 3F D21 U100X100X2.0 02RC68 0.004 02RC71 0.031
 02RC72(C) 0.077 = 0.054 + 0.014 + 0.009
 02RC71(T) 0.100 = 0.001 + 0.002 + 0.097
 3F D22 U100X100X2.0 02RC02 0.024 02RC71 0.002
 02RC72(C) 0.108 = 0.056 + 0.033 + 0.019
 02RC02(T) 0.076 = 0.004 + 0.071 + 0.001
 2F D23 U100X100X2.0 02RC02 0.028 02RC71 0.027
 02RC68(C) 0.180 = 0.090 + 0.071 + 0.019
 02RC13(T) 0.084 = 0.003 + 0.078 + 0.003
 2F D24 U100X100X2.0 02RC72 0.023 02RC71 0.019
 02RC72(C) 0.249 = 0.079 + 0.138 + 0.031
 02RC71(T) 0.139 = 0.005 + 0.005 + 0.129
 PRF D25 U100X100X2.0 02RC68 0.009 02RC71 0.013
 02RC72(C) 0.086 = 0.029 + 0.044 + 0.013
 02RC13(T) 0.020 = 0.007 + 0.006 + 0.006
 PRF D26 U100X100X2.0 02RC72 0.013 02RC67 0.004
 02RC72(C) 0.090 = 0.037 + 0.039 + 0.014
 02RC02(T) 0.041 = 0.004 + 0.034 + 0.003
 3F D27 U100X100X2.0 02RC68 0.006 02RC67 0.006
 02RC72(C) 0.230 = 0.206 + 0.005 + 0.018
 02RC13(T) 0.020 = 0.015 + 0.003 + 0.002
 3F D28 U100X100X2.0 02RC02 0.016 02RC67 0.003
 02RC72(C) 0.272 = 0.222 + 0.038 + 0.012
 02RC13(T) 0.060 = 0.018 + 0.042 + 0.000
 2F D29 U100X100X2.0 02RC68 0.018 02RC71 0.022
 02RC68(C) 0.446 = 0.356 + 0.064 + 0.025
 02RC02(T) 0.071 = 0.002 + 0.067 + 0.001
 2F D30 U100X100X2.0 02RC67 0.018 02RC67 0.025
 02RC72(C) 0.492 = 0.357 + 0.124 + 0.012
 02RC13(T) 0.043 = 0.015 + 0.026 + 0.002
 PRF D31 25C125X50X20X2 02RC72 0.069 02RC71 0.115
 02RC68(C) 0.537 = 0.445 + 0.009 + 0.133
 02RC68(T) 0.236 = 0.014 + 0.006 + 0.207
 PRF D32 25C125X50X20X2 02RC72 0.097 02RC67 0.032
 02RC68(C) 0.763 = 0.684 + 0.043 + 0.035
 02RC71(T) 0.413 = 0.230 + 0.110 + 0.073
 PRF D33 25C125X50X20X2 02RC72 0.147 02RC71 0.179
 02RC68(C) 1.044 = 0.742 + 0.228 + 0.074
 02RC71(T) 0.557 = 0.064 + 0.015 + 0.479
 3F D34 U100X100X2.0 02RC67 0.026 02RC68 0.026
 02RC68(C) 0.136 = 0.009 + 0.020 + 0.097
 02RC48(T) 0.012 = 0.005 + 0.006 + 0.001
 3F D35 U100X100X2.0 02RC71 0.015 02RC68 0.002
 02RC71(C) 0.104 = 0.036 + 0.066 + 0.002
 02RC47(T) 0.023 = 0.005 + 0.018 + 0.001
 2F D36 U100X100X2.0 02RC67 0.024 02RC68 0.030
 02RC67(C) 0.134 = 0.052 + 0.082 + 0.000
 02RC48(T) 0.017 = 0.003 + 0.014 + 0.000
 2F D37 U100X100X2.0 02RC71 0.027 02RC68 0.024
 02RC67(C) 0.199 = 0.052 + 0.147 + 0.000
 02RC44(T) 0.030 = 0.002 + 0.028 + 0.000
 PRF D38 U100X100X2.0 02RC71 0.017 02RC02 0.001
 02RC71(C) 0.072 = 0.027 + 0.042 + 0.002
 02RC15(T) 0.026 = 0.002 + 0.023 + 0.001
 PRF D39 U100X100X2.0 02RC71 0.053 02RC68 0.038
 02RC67(C) 0.202 = 0.002 + 0.197 + 0.002
 02RC71(T) 0.203 = 0.001 + 0.199 + 0.002
 2F D40 U100X100X2.0 02RC67 0.025 02RC68 0.035
 02RC68(C) 0.218 = 0.005 + 0.006 + 0.207
 02RC67(T) 0.398 = 0.242 + 0.146 + 0.010
 PRF D41 25C125X50X20X2 02RC68 0.083 02RC71 0.111
 02RC71(C) 0.364 = 0.049 + 0.009 + 0.306
 02RC68(T) 0.445 = 0.270 + 0.119 + 0.055
 PRF D42 25C125X50X20X2 02RC68 0.132 02RC67 0.030
 02RC68(C) 0.259 = 0.072 + 0.186 + 0.002
 02RC72(T) 0.598 = 0.413 + 0.179 + 0.006
 PRF D43 25C125X50X20X2 02RC68 0.163 02RC71 0.175
 02RC68(C) 0.560 = 0.214 + 0.227 + 0.120
 02RC68(T) 0.916 = 0.541 + 0.238 + 0.137
 PRF D44 U100X100X2.0 02RC72 0.007 02RC68 0.005
 02RC17(C) 0.011 = 0.002 + 0.007 + 0.002
 02RC72(T) 0.031 = 0.004 + 0.024 + 0.003
 PRF D45 U100X100X2.0 02RC68 0.007 02RC71 0.003
 02RC15(C) 0.009 = 0.001 + 0.003 + 0.006
 02RC68(T) 0.036 = 0.008 + 0.020 + 0.008
 3F D46 U100X100X2.0 02RC68 0.003 02RC71 0.006
 02RC71(C) 0.018 = 0.013 + 0.002 + 0.002
 02RC72(T) 0.061 = 0.036 + 0.009 + 0.016
 3F D47 U100X100X2.0 02RC68 0.008 02RC67 0.004
 02RC18(C) 0.020 = 0.015 + 0.004 + 0.001
 02RC72(T) 0.088 = 0.040 + 0.027 + 0.021

2F D48 U100X100X2.0 02RC68 0.006 02RC71 0.009
 02RC11(C) 0.033 = 0.021 + 0.004 + 0.009
 02RC71(T) 0.125 = 0.063 + 0.015 + 0.047
 2F D49 U100X100X2.0 02RC68 0.017 02RC71 0.023
 02RC11(C) 0.054 = 0.023 + 0.007 + 0.024
 02RC71(T) 0.235 = 0.073 + 0.044 + 0.117
 PRF D50 U100X100X2.0 02RC72 0.006 02RC67 0.038
 02RC71(C) 0.154 = 0.004 + 0.013 + 0.138
 02RC67(T) 0.148 = 0.000 + 0.011 + 0.137
 PRF D51 U100X100X2.0 02RC68 0.021 02RC67 0.002
 02RC13(C) 0.033 = 0.000 + 0.032 + 0.001
 02RC68(T) 0.082 = 0.020 + 0.047 + 0.016
 3F D52 U100X100X2.0 02RC68 0.007 02RC67 0.030
 02RC13(C) 0.013 = 0.008 + 0.002 + 0.003
 02RC67(T) 0.101 = 0.001 + 0.001 + 0.098
 3F D53 U100X100X2.0 02RC68 0.023 02RC67 0.002
 02RC11(C) 0.039 = 0.000 + 0.035 + 0.004
 02RC68(T) 0.148 = 0.050 + 0.079 + 0.018
 2F D54 U100X100X2.0 02RC68 0.009 02RC67 0.026
 02RC67(C) 0.067 = 0.004 + 0.001 + 0.062
 02RC72(T) 0.140 = 0.067 + 0.052 + 0.020
 2F D55 U100X100X2.0 02RC68 0.031 02RC71 0.018
 02RC67(C) 0.124 = 0.002 + 0.002 + 0.120
 02RC72(T) 0.244 = 0.060 + 0.151 + 0.033
 PRF D56 U100X100X2.0 02RC72 0.008 02RC71 0.014
 02RC71(C) 0.044 = 0.011 + 0.004 + 0.030
 02RC68(T) 0.103 = 0.033 + 0.041 + 0.030
 PRF D57 U100X100X2.0 02RC68 0.022 02RC02 0.008
 02RC67(C) 0.047 = 0.011 + 0.024 + 0.012
 02RC68(T) 0.109 = 0.039 + 0.049 + 0.022
 3F D58 U100X100X2.0 02RC68 0.006 02RC71 0.005
 02RC71(C) 0.045 = 0.030 + 0.004 + 0.010
 02RC68(T) 0.129 = 0.099 + 0.017 + 0.014
 3F D59 U100X100X2.0 02RC68 0.026 02RC67 0.007
 02RC67(C) 0.120 = 0.033 + 0.060 + 0.027
 02RC68(T) 0.302 = 0.208 + 0.089 + 0.006
 2F D60 U100X100X2.0 02RC68 0.007 02RC71 0.009
 02RC67(C) 0.131 = 0.074 + 0.011 + 0.046
 02RC72(T) 0.402 = 0.321 + 0.055 + 0.027
 2F D61 U100X100X2.0 02RC68 0.020 02RC67 0.024
 02RC67(C) 0.247 = 0.084 + 0.046 + 0.117
 02RC72(T) 0.456 = 0.317 + 0.129 + 0.011
 PRF D62 U100X100X2.0 02RC67 0.005 02RC68 0.003
 02RC71(C) 0.026 = 0.008 + 0.018 + 0.001
 02RC68(T) 0.039 = 0.005 + 0.005 + 0.030
 PRF D63 U100X100X2.0 02RC71 0.014 02RC72 0.002
 02RC71(C) 0.061 = 0.015 + 0.042 + 0.004
 02RC68(T) 0.066 = 0.003 + 0.037 + 0.026
 3F D64 U100X100X2.0 02RC67 0.003 02RC72 0.004
 02RC71(C) 0.082 = 0.069 + 0.012 + 0.001
 02RC11(T) 0.018 = 0.015 + 0.002 + 0.001
 3F D65 U100X100X2.0 02RC68 0.015 02RC68 0.003
 02RC71(C) 0.141 = 0.074 + 0.060 + 0.007
 02RC11(T) 0.053 = 0.016 + 0.032 + 0.005
 2F D66 U100X100X2.0 02RC68 0.005 02RC72 0.009
 02RC71(C) 0.267 = 0.216 + 0.046 + 0.005
 02RC11(T) 0.032 = 0.019 + 0.010 + 0.003
 2F D67 U100X100X2.0 02RC68 0.017 02RC72 0.026
 02RC71(C) 0.323 = 0.210 + 0.097 + 0.016
 02RC11(T) 0.042 = 0.019 + 0.024 + 0.000
 2F D68 U100X100X2.0 02RC68 0.016 02RC68 0.032
 02RC71(C) 0.455 = 0.296 + 0.019 + 0.139
 02RC71(T) 0.222 = 0.097 + 0.108 + 0.017
 2F D69 U100X100X2.0 02RC68 0.006 02RC68 0.012
 02RC68(C) 0.327 = 0.270 + 0.002 + 0.055
 02RC67(T) 0.157 = 0.096 + 0.053 + 0.007
 3F D70 U100X100X2.0 02RC67 0.014 02RC72 0.004
 02RC68(C) 0.111 = 0.076 + 0.016 + 0.019
 02RC67(T) 0.140 = 0.068 + 0.066 + 0.006
 3F D71 U100X100X2.0 02RC67 0.005 02RC68 0.006
 02RC72(C) 0.096 = 0.067 + 0.005 + 0.024
 02RC67(T) 0.079 = 0.063 + 0.014 + 0.002
 PRF D72 U100X100X2.0 02RC67 0.014 02RC72 0.002
 02RC02(C) 0.019 = 0.003 + 0.014 + 0.002
 02RC71(T) 0.053 = 0.011 + 0.042 + 0.001
 PRF D73 U100X100X2.0 02RC71 0.007 02RC71 0.003
 02RC11(C) 0.009 = 0.003 + 0.004 + 0.002
 02RC71(T) 0.035 = 0.011 + 0.014 + 0.010

SAFE '8.1.0'
UNITS Kgf cm
\$ TITLES
TITLE1 'Lo-Lat Structure Studio'
TITLE2 ''
\$ GRIDS
GRID 'GLOBAL' X '1' 0
GRID 'GLOBAL' X '1-1' 173.5
GRID 'GLOBAL' X '2' 324
GRID 'GLOBAL' X '3' 685
GRID 'GLOBAL' X '4' 795
GRID 'GLOBAL' Y 'A' 0
GRID 'GLOBAL' Y 'B' 337.5
GRID 'GLOBAL' Y 'C' 685
MESH MAX 100
\$ BEAM PROPERTIES
BEAMPROP 'RB60X40C4' E 250998 U 0.2 W 0.0024
BEAMPROP 'RB60X40C4' TYPE R B 60 D 40
BEAMPROP 'RB60X40C4' DSSSEC 0
BEAMPROP 'RB60X40C4' DDESIGN 60 DDESIGN 40
BEAMPROP 'RB60X40C4' CT 8 CB 8
BEAMPROP 'RB60X40C4' FC 280 FY 4200 FYS 4200 FCS 280
\$ SLAB PROPERTIES
SLABPROP 'S40' E 250998 U 0.2 W 0.0024
SLABPROP 'S40' T40 TYPE THICK
SLABPROP 'S40' CT18 CTJ 8 CB18 CB18
SLABPROP 'S40' FC 280 FY 4200
SLABPROP 'Col_Slab' E 250998 U 0.2 W 0.0024
SLABPROP 'Col_Slab' T20 TYPE THICK
SLABPROP 'Col_Slab' DESIGN NO
\$ COLUMN PROPERTIES
\$ WALL PROPERTIES
\$ SOIL PROPERTIES
SOILPROP 'T1' K 1
SOILPROP 'T4' K 1
SOILPROP 'T6' K 1
SOILPROP 'T5' K 1
SOILPROP 'T2' K 1
SOILPROP 'T3' K 1
\$ POINT COORDINATES
POINT '12' 0 0
POINT '99' 0 337.5
POINT '115' 0 685
POINT '118' 324 685
POINT '120' 685 685
POINT '71' 324 337.5
POINT '14' 324 0
POINT '73' 685 337.5
POINT '16' 685 0
POINT '17' 795 0
POINT '74' 795 337.5
POINT '26' 0 90
POINT '104' 0 595
POINT '27' 324 90
POINT '105' 324 595
POINT '28' 685 90
POINT '106' 685 595
POINT '29' 795 90
POINT '13' 90 0
POINT '15' 595 0
POINT '72' 384 337.5
POINT '116' 90 685
POINT '119' 595 685
\$ LINE CONNECTIVITY
LINE 'B51' 0 0 0 337.5
LINE 'B97' 0 337.5 0 685
LINE 'B129' 0 685 324 685
LINE 'B131' 324 685 685 685
LINE 'B71' 0 337.5 324 337.5
LINE 'B100' 324 337.5 324 685
LINE 'B18' 0 0 324 0
LINE 'B53' 324 0 324 337.5
LINE 'B76' 324 337.5 685 337.5
LINE 'B102' 685 337.5 685 685
LINE 'B20' 324 0 685 0
LINE 'B25' 685 0 795 0
LINE 'B57' 795 0 795 337.5
LINE 'B55' 685 0 685 337.5
LINE 'B98' 173.5 337.5 173.5 685
LINE '16' 685 337.5 795 337.5
\$ AREA CONNECTIVITY
AREA 'T1' 40 337.5 0 0 324 0 324 337.5
AREA 'T4' 40 685 0 337.5 173.5 337.5 173.5 685
AREA 'T6' 40 685 685 324 685 324 337.5 685 337.5
AREA 'T5' 4324 337.5 324 685 173.5 685 173.5 337.5
AREA 'T2' 4324 337.5 324 0 685 0 685 337.5
AREA 'T3' 40 685 0 795 0 795 337.5 685 337.5
\$ BEAM ASSIGNS
BEAM 'B51' 'RB60X40C4'
BEAM 'B97' 'RB60X40C4'
BEAM 'B129' 'RB60X40C4'
BEAM 'B131' 'RB60X40C4'
BEAM 'B71' 'RB60X40C4'
BEAM 'B100' 'RB60X40C4'
BEAM 'B18' 'RB60X40C4'
BEAM 'B53' 'RB60X40C4'
BEAM 'B76' 'RB60X40C4'
BEAM 'B102' 'RB60X40C4'
BEAM 'B20' 'RB60X40C4'
BEAM 'B25' 'RB60X40C4'
BEAM 'B57' 'RB60X40C4'
BEAM 'B55' 'RB60X40C4'
BEAM 'B98' 'RB60X40C4'
BEAM '16' 'RB60X40C4'
\$ SLAB ASSIGNS
SLAB 'T1' 'S40'
SLAB 'T4' 'S40'
SLAB 'T6' 'S40'
SLAB 'T5' 'S40'
SLAB 'T2' 'S40'
SLAB 'T3' 'S40'
\$ COLUMN ASSIGNS
\$ WALL ASSIGNS
\$ SOIL ASSIGNS
SOIL 'T1' 'T1'
SOIL 'T4' 'T4'
SOIL 'T6' 'T6'
SOIL 'T5' 'T5'
SOIL 'T2' 'T2'
SOIL 'T3' 'T3'
\$ RELEASE ASSIGNS
\$ LOADS
LOAD 'DL' TYPE DEAD SELFWEIGHT 1 LTFDACTOR 3
POINTLOAD 'DL' '12' F 179.163 MX 177.637 MY -118.231
POINTLOAD 'DL' '99' F 292.949 MX -49.87829 MY -291.6406
POINTLOAD 'DL' '115' F 139.312 MX -65.49663 MY -154.9696
POINTLOAD 'DL' '118' F 288.384 MX 54.96663 MY -46.91297
POINTLOAD 'DL' '120' F 257.0522 MX 47.4665 MY -59.40888
POINTLOAD 'DL' '14' F 241.1018 MX 227.6629 MY 60.0065
POINTLOAD 'DL' '71' F 256.9484 MX 30.99962 MY -140.9846
POINTLOAD 'DL' '118' F 200.2959 MX -117.3978 MY 17.16726
POINTLOAD 'DL' '72' F 357.6171 MX 80.94166 MY -40.2033
POINTLOAD 'DL' '105' F 355.0883 MX 63.16754 MY -12.01133
POINTLOAD 'DL' '116' F 160.8053 MX 203.6152 MY 55.85619
POINTLOAD 'DL' '73' F 374.7548 MX 149.1236 MY 659.8075
POINTLOAD 'DL' '120' F 140.4643 MX -105.0899 MY 80.5742
POINTLOAD 'DL' '28' F 253.4111 MX 112.1139 MY -2.43789
POINTLOAD 'DL' '106' F 299.7836 MX -55.02628 MY 7.448623
POINTLOAD 'DL' '17' F 69.64232 MX -200.4124 MY 30.93708
POINTLOAD 'DL' '74' F 50.43187 MX -12.64427 MY 136.4137
POINTLOAD 'DL' '29' F 58.35267 MX 250.5262 MY -31.58406
POINTLOAD 'DL' '115' F 250.0133 MX 38.09642 MY 64.00416
POINTLOAD 'DL' '15' F 285.5208 MX 61.93008 MY 29.24576
POINTLOAD 'DL' '72' F 391.3072 MX 44.95062 MY -57.74582
POINTLOAD 'DL' '116' F 238.354 MX -1.166822 MY -129.9782
POINTLOAD 'DL' '119' F 253.8051 MX 16.65419 MY 46.61128
LOAD 'SK' TYPE DEAD SELFWEIGHT 0 LTFDACTOR 1
POINTLOAD 'SDL' '12' F 294.1017 MX 565.1904 MY -215.3849
POINTLOAD 'SDL' '99' F 489.3534 MX -707.6676 MY -1125.58
POINTLOAD 'SDL' '115' F 58.3288 MX 197.2936 MY -310.9076
POINTLOAD 'SDL' '118' F 488.8809 MX -23.80857 MY -359.073
POINTLOAD 'SDL' '104' F 210.0516 MX 250.451 MY -167.528
POINTLOAD 'SDL' '14' F 601.7579 MX 844.3869 MY -248.8718
POINTLOAD 'SDL' '71' F 637.4953 MX -44.14424 MY 231.2027
POINTLOAD 'SDL' '118' F 386.0577 MX -247.47 MY 4.055554

POINTLOAD 'SDL' '27' F 922.9929 MX 66.36372 MY -164.1133
POINTLOAD 'SDL' '105' F 820.477 MX 46.88167 MY -72.5156
POINTLOAD 'SDL' '16' F 235.0015 MX 648.6134 MY -51.89134
POINTLOAD 'SDL' '73' F 826.0326 MX 602.2708 MY 611.8454
POINTLOAD 'SDL' '120' F 151.9476 MX -288.4933 MY 63.64505
POINTLOAD 'SDL' '28' F 360.0744 MX 181.9169 MY -67.97814
POINTLOAD 'SDL' '106' F 579.0539 MX 27.88204 MY 166.8995
POINTLOAD 'SDL' '17' F 62.89892 MX -568.4456 MY 5.629386
POINTLOAD 'SDL' '74' F -9.580665 MX -473.9381 MY 174.8028
POINTLOAD 'SDL' '29' F 51.12164 MX 912.1006 MY -130.6343
POINTLOAD 'SDL' '13' F 298.7852 MX 128.2184 MY -78.37311
POINTLOAD 'SDL' '15' F 467.1537 MX 230.584 MY 203.9318
POINTLOAD 'SDL' '72' F 891.2398 MX 108.751 MY 130.5548
POINTLOAD 'SDL' '116' F 188.7024 MX 149.3212 MY -212.1468
POINTLOAD 'SDL' '119' F 335.3122 MX 125.9282 MY -26.38411
AREALOAD 'SDL' 'T1' W 0.03
AREALOAD 'SDL' 'T4' W 0.03
AREALOAD 'SDL' 'T6' W 0.03
AREALOAD 'SDL' 'T5' W 0.03
AREALOAD 'SDL' 'T2' W 0.03
AREALOAD 'SDL' 'T3' W 0.03
LOAD 'TL' TYPE LIVE SELFWEIGHT 0 LTFDACTOR 1
POINTLOAD 'TL' '12' F 1038.706 MX 2057.468 MY -527.2143
POINTLOAD 'TL' '99' F 1384.437 MX -1882.201 MY -3716.296
POINTLOAD 'TL' '115' F 131.2752 MX 1178.863 MY 951.822
POINTLOAD 'TL' '118' F 1409.373 MX -510.8133 MY -1058.849
POINTLOAD 'TL' '104' F 637.7702 MX 1389.822 MY -462.1955
POINTLOAD 'TL' '14' F 1950.621 MX 2860.014 MY -759.0776
POINTLOAD 'TL' '71' F 1812.898 MX 272.2251 MY -484.6182
POINTLOAD 'TL' '118' F 918.8474 MX -188.1178 MY 78.2161
POINTLOAD 'TL' '27' F 2599.838 MX -431.9734 MY -480.6989
POINTLOAD 'TL' '105' F 2320.938 MX 783.0935 MY -178.3044
POINTLOAD 'TL' '16' F 838.7392 MX 2371.469 MY -250.0125
POINTLOAD 'TL' '73' F 2474.863 MX 2088.723 MY 1975.497
POINTLOAD 'TL' '120' F 570.6767 MX -451.6452 MY 198.8255
POINTLOAD 'TL' '28' F 985.8981 MX 341.7383 MY -286.3361
POINTLOAD 'TL' '106' F 1877.051 MX 643.6809 MY 528.9997
POINTLOAD 'TL' '17' F 263.7476 MX -1995.163 MY 110.3246
POINTLOAD 'TL' '74' F -22.21164 MX -1182.259 MY 550.4652
POINTLOAD 'TL' '29' F 143.6636 MX 3677.656 MY -382.3407
POINTLOAD 'TL' '13' F 1024.819 MX 469.434 MY -2.34935
POINTLOAD 'TL' '15' F 1480.648 MX 846.4981 MY -785.8454
POINTLOAD 'TL' '72' F 2453.161 MX 771.8899 MY 627.5375
POINTLOAD 'TL' '116' F 662.5395 MX 908.2073 MY -658.8983
POINTLOAD 'TL' '119' F 880.8725 MX 823.8344 MY -61.08028
AREALOAD 'TL' 'T1' W 0.1
AREALOAD 'TL' 'T4' W 0.1
AREALOAD 'TL' 'T6' W 0.1
AREALOAD 'TL' 'T5' W 0.1
AREALOAD 'TL' 'T2' W 0.1
AREALOAD 'TL' 'T3' W 0.1
LOAD 'EQ' TYPE QUAKE SELFWEIGHT 0 LTFDACTOR 1
POINTLOAD 'EQ' '12' F 2291.414 MX 3838.4514 MY 11870.902
POINTLOAD 'EQ' '99' F -408.8021 MX -654.9182 MY 11396.06
POINTLOAD 'EQ' '115' F -2270.287 MX -483.2197 MY 12895.11
POINTLOAD 'EQ' '118' F -1925.888 MX -223.301 MY 10873.88
POINTLOAD 'EQ' '104' F -2423.079 MX -1259.532 MY 11316.26
POINTLOAD 'EQ' '14' F -55.85086 MX -206.7079 MY 11986.54
POINTLOAD 'EQ' '71' F -2242.05 MX -159.7593 MY 12370.41
POINTLOAD 'EQ' '118' F -14.82971 MX -38.17321 MY 13077.25
POINTLOAD 'EQ' '27' F -66.11663 MX -202.0017 MY 10818.43
POINTLOAD 'EQ' '106' F -106.9562 MX -81.4246 MY 11493.07
POINTLOAD 'EQ' '16' F 2170.236 MX 732.7214 MY 11911.99
POINTLOAD 'EQ' '73' F -2492.078 MX 1295.337 MY 24531.93
POINTLOAD 'EQ' '120' F 2277.056 MX 289.3388 MY 12835.24
POINTLOAD 'EQ' '28' F 1844.552 MX 185.0709 MY 10904.66
POINTLOAD 'EQ' '106' F 2373.878 MX 1044.767 MY 11451.22
POINTLOAD 'EQ' '17' F 249.9955 MX 545.9395 MY 15811.44
POINTLOAD 'EQ' '74' F 2907.664 MX 974.0599 MY 12705.66
POINTLOAD 'EQ' '29' F 17.82386 MX 1038.076 MY 10123.19
POINTLOAD 'EQ' '13' F 6074.769 MX -520.8003 MY 13157.77
POINTLOAD 'EQ' '15' F -4207.336 MX -420.1334 MY 13695.1
POINTLOAD 'EQ' '72' F 2617.612 MX -22.84801 MY 12968.83
POINTLOAD 'EQ' '116' F 4572.819 MX -323.3169 MY 14262.47
POINTLOAD 'EQ' '119' F -4599.756 MX 163.13 MY 14276.01
LOAD 'EQ' TYPE QUAKE SELFWEIGHT 0 LTFDACTOR 1
POINTLOAD 'EQ' '12' F -1952.419 MX -1264.26 MY 820.9556
POINTLOAD 'EQ' '99' F 8.641629 MX -12615.31 MY 49.93957
POINTLOAD 'EQ' '115' F 194.9121 MX -1253.44 MY 765.9531
POINTLOAD 'EQ' '118' F 3804.855 MX -13771.88 MY 545.0183
POINTLOAD 'EQ' '104' F -3019.155 MX -13760.1 MY -488.9479
POINTLOAD 'EQ' '14' F -2744.429 MX -13269.79 MY 769.1577
POINTLOAD 'EQ' '71' F -3.969302 MX -12344.1 MY 37.84568
POINTLOAD 'EQ' '118' F 2742.478 MX -13249.47 MY -309.112
POINTLOAD 'EQ' '27' F 2607.476 MX -14560.75 MY 465.658
POINTLOAD 'EQ' '106' F -2616.193 MX -14556.72 MY -411.2098
POINTLOAD 'EQ' '16' F -1939.252 MX -13873.78 MY 604.7568
POINTLOAD 'EQ' '73' F 25.21521 MX -25748.68 MY 69.8428
POINTLOAD 'EQ' '120' F 1957.528 MX -13873.51 MY -661.5714
POINTLOAD 'EQ' '28' F 3673.143 MX -15513.74 MY 318.5153
POINTLOAD 'EQ' '106' F -3654.376 MX -15503.51 MY -359.7463
POINTLOAD 'EQ' '17' F -225.708 MX -15511.71 MY 1.643275
POINTLOAD 'EQ' '74' F 24.8455 MX -15420.48 MY 36.59537
POINTLOAD 'EQ' '29' F 149.404 MX -17224.02 MY 425.9006
POINTLOAD 'EQ' '13' F -1314.142 MX -11270.07 MY 346.6632
POINTLOAD 'EQ' '15' F -2000.441 MX -12181.61 MY 1231.983
POINTLOAD 'EQ' '72' F 9.309911 MX -12277.03 MY 38.28577
POINTLOAD 'EQ' '116' F 1328.724 MX -11526.28 MY -281.6824
POINTLOAD 'EQ' '119' F 1998.093 MX -12187.52 MY -1322.103
LOAD 'EQ' TYPE QUAKE SELFWEIGHT 0 LTFDACTOR 1
POINTLOAD 'EQ' '12' F -2276.763 MX 750.4957 MY 13227.35
POINTLOAD 'EQ' '99' F -410.8888 MX 983.3791 MY 11376.246
POINTLOAD 'EQ' '115' F -2275.856 MX 1104.059 MY 11457.8
POINTLOAD 'EQ' '118' F -2502.932 MX 1613.744 MY 11744.51
POINTLOAD 'EQ' '104' F -1837.094 MX 573.9255 MY 10381.42
POINTLOAD 'EQ' '14' F -27.25672 MX -464.1564 MY 13390.23
POINTLOAD 'EQ' '71' F -2229.801 MX 2.4927 MY 12349.01
POINTLOAD 'EQ' '118' F -43.02744 MX 122.6031 MY 11931.04
POINTLOAD 'EQ' '27' F -88.00676 MX -26.42518 MY 11693.17
POINTLOAD 'EQ' '106' F -84.51688 MX 96.52772 MY 10540.86
POINTLOAD 'EQ' '16' F 2159.451 MX -495.9152 MY 13272.23
POINTLOAD 'EQ' '73' F 2484.372 MX 1613.6707 MY 24055.34
POINTLOAD 'EQ' '120' F 2269.97 MX -1147.171 MY 11401.83
POINTLOAD 'EQ' '28' F 2392.544 MX -1460.992 MY 11779.68
POINTLOAD 'EQ' '106' F 1810.811 MX -615.8299 MY 11691.12
POINTLOAD 'EQ' '17' F 242.4688 MX -1586.96 MY 17325.05
POINTLOAD 'EQ' '74' F 2906.083 MX 491.8323 MY 12689.08
POINTLOAD 'EQ' '29' F 39.30664 MX -1314.547 MY 10892.19
POINTLOAD 'EQ' '13' F 4663.791 MX 515.1209 MY 14735.24
POINTLOAD 'EQ' '15' F -4798.787 MX -467.6034 MY 15306.28
POINTLOAD 'EQ' '72' F 2615.361 MX -148.539 MY 12946.32
POINTLOAD 'EQ' '116' F 3965.466 MX 720.5668 MY 12603.98
POINTLOAD 'EQ' '119' F -3995.97 MX -729.3761 MY 12620.36
LOAD 'EQ' TYPE QUAKE SELFWEIGHT 0 LTFDACTOR 1
POINTLOAD 'EQ' '12' F 1989.461 MX -14010.9 MY -585.8571
POINTLOAD 'EQ' '99' F 10.65338 MX -14311.05 MY 69.90047
POINTLOAD 'EQ' '115' F 1948.591 MX -13996.39 MY 724.0152
POINTLOAD 'EQ' '118' F 3591.699 MX -15675.39 MY -361.5804
POINTLOAD 'EQ' '104' F -3617.139 MX -15660.16 MY 483.8038
POINTLOAD 'EQ' '14' F -2773.843 MX -13425.32 MY -684.2983
POINTLOAD 'EQ' '71' F -6.198794 MX -12562.69 MY 59.64371
POINTLOAD 'EQ' '118' F 2771.389 MX -13415.5 MY 827.0955
POINTLOAD 'EQ' '27' F 2630.023 MX -14743.16 MY -444.791
POINTLOAD 'EQ' '106' F -2639.279 MX -14739.57 MY 578.5782
POINTLOAD 'EQ' '16' F 1928.356 MX -12392.2 MY -806.0212
POINTLOAD 'EQ' '73' F 17.35034 MX -22743.35 MY 107.2615
POINTLOAD 'EQ' '120' F 1964.946 MX -12386.45 MY 924.6592
POINTLOAD 'EQ' '28' F 3114.252 MX -13886.38 MY -593.2586
POINTLOAD 'EQ' '106' F -3080.071 MX -13781.24 MY 628.6177
POINTLOAD 'EQ' '17' F -217.8273 MX -13318.94 MY -1584.909
POINTLOAD 'EQ' '74' F 25.89947 MX -11456.64 MY 53.59525
POINTLOAD 'EQ' '29' F 127.2782 MX -14799.51 MY -366.6879
POINTLOAD 'EQ' '13' F 1914.745 MX -12325.35 MY -1289.279
POINTLOAD 'EQ' '15' F -1397.541 MX -11256.52 MY -438.3945
POINTLOAD 'EQ' '72' F 11.62434 MX -12146.19 MY 61.21431
POINTLOAD 'EQ' '116' F 1948.13 MX -12386.45 MY 1437.646
POINTLOAD 'EQ' '119' F 1380.525 MX -11257.57 MY 484.325
LOAD 'WX' TYPE WIND SELFWEIGHT 0 LTFDACTOR 1
POINTLOAD 'WX' '12' F -3553.566 MX 407.3309 MY 19469.29
POINTLOAD 'WX' '99' F -1509.927 MX 1012.808 MY 17063.72
POINTLOAD 'WX' '115' F -3543.335 MX 1446.056 MY 17644.33
POINTLOAD 'WX' '118' F -4056.071 MX 1627.997 MY 17679
POINTLOAD 'WX' '104' F -3285.295 MX 578.1247 MY 16216.08
POINTLOAD 'WX' '14' F -1112.475 MX -798.9565 MY 19609.42
POINTLOAD 'WX' '71' F -4354.505 MX 26.8956 MY 19143.52
POINTLOAD 'WX' '118' F -1116.185 MX 831.2186 MY 17727.8

POINTLOAD "WX" "27" F -2039.421 MX -559.6434 MY 17478.42
POINTLOAD "WX" "105" F -2038.114 MX 575.8409 MY 16304.22
POINTLOAD "WX" "16" F 2768.414 MX -884.9042 MY 19167.16
POINTLOAD "WX" "73" F -4669.831 MX -1656.244 MY 35338.74
POINTLOAD "WX" "120" F 2929.856 MX -1034.953 MY 17208.81
POINTLOAD "WX" "28" F 2606.647 MX -1861.45 MY 17258.78
POINTLOAD "WX" "106" F 1950.338 MX -278.2928 MY 15925.51
POINTLOAD "WX" "17" F 538.9169 MX -1802.872 MY 24601.65
POINTLOAD "WX" "74" F 4214.328 MX -953.0133 MY 18078.68
POINTLOAD "WX" "29" F 51.74232 MX -1355.287 MY 15679.05
POINTLOAD "WX" "13" F 6022.562 MX 421.8503 MY 21611.88
POINTLOAD "WX" "15" F 7347.412 MX -476.3917 MY 22174.09
POINTLOAD "WX" "72" F 1679.138 MX -182.3886 MY 19926.09
POINTLOAD "WX" "116" F 5197.834 MX 793.7652 MY 19384.56
POINTLOAD "WX" "119" F 6375.64 MX -758.9745 MY 19192.83
LOAD "WY" TYPE WIND SELFWEIGHT 0 LTRFACTOR 1
POINTLOAD "WY" "12" F -2897.003 MX -14946.21 MY 6265.247
POINTLOAD "WY" "69" F 331.3147 MX -15234.01 MY -60.72057
POINTLOAD "WY" "115" F 3261.364 MX -15106.67 MY -6741.078
POINTLOAD "WY" "26" F 2983.763 MX -16467.82 MY 4029.48
POINTLOAD "WY" "104" F -2805.584 MX -16588.11 MY -4465.438
POINTLOAD "WY" "14" F -3975.209 MX 21581.84 MY 6389.358
POINTLOAD "WY" "71" F 415.8429 MX -20145.36 MY -327.7595
POINTLOAD "WY" "118" F 4704.307 MX -22026.75 MY -6806.99
POINTLOAD "WY" "27" F 4814.328 MX -23833.42 MY -5967.683
POINTLOAD "WY" "105" F -3589.806 MX -24148.57 MY -4370.985
POINTLOAD "WY" "16" F -3105.465 MX -28624.69 MY 6016.045
POINTLOAD "WY" "73" F 439.6989 MX -53863.29 MY 29.56775
POINTLOAD "WY" "120" F 3251.768 MX -28856.36 MY -6233.697
POINTLOAD "WY" "28" F 8154.531 MX -32241.62 MY 3646.853
POINTLOAD "WY" "106" F -7757.045 MX -32427.75 MY -4157.269
POINTLOAD "WY" "17" F -399.8967 MX -33570.37 MY 5639.154
POINTLOAD "WY" "74" F 17.29677 MX -29237.76 MY 23.68774
POINTLOAD "WY" "29" F 326.2406 MX -37203.88 MY 3452.079
POINTLOAD "WY" "13" F 307.8971 MX -15377.76 MY 635.069
POINTLOAD "WY" "15" F -5108.953 MX -24168.56 MY 7931.579
POINTLOAD "WY" "72" F 686.2924 MX -21431.01 MY -292.6971
POINTLOAD "WY" "116" F 29.26192 MX -15455.8 MY -6759.684
POINTLOAD "WY" "119" F 5653.455 MX -24223.13 MY -8177.035
LOAD "WAH" TYPE OTHER SELFWEIGHT 0 LTRFACTOR 1
LOAD "WAN" TYPE OTHER SELFWEIGHT 0 LTRFACTOR 1

S LOADING COMBINATIONS

COMBO "BASE11"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE12"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "WAN" 1
COMBO "BASE13"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE14"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "WAN" 1
COMBO "BASE15"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE16"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE17"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE18"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE19"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE20"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE21"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE22"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE23"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE24"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE25"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE26"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE27"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE28"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE29"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE30"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE31"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE32"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE33"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE34"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE35"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE36"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE37"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE38"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE39"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1
COMBO "BASE40"
COMBOFACTOR "BASE10" "DL" 1
COMBOFACTOR "BASE10" "SDL" 1
COMBOFACTOR "BASE10" "EXN" 1
COMBOFACTOR "BASE10" "WAI" 1

COMBO "BASE21" TYPE DESIGN
COMBOFACTOR "BASE21" "DL" 1.4
COMBOFACTOR "BASE21" "SDL" 1.4
COMBOFACTOR "BASE21" "WAI" 1.4
COMBO "BASE22" TYPE DESIGN
COMBOFACTOR "BASE22" "DL" 1.4
COMBOFACTOR "BASE22" "SDL" 1.4
COMBOFACTOR "BASE22" "WAN" 1.4
COMBOFACTOR "BASE23" TYPE DESIGN
COMBOFACTOR "BASE23" "DL" 1.2
COMBOFACTOR "BASE23" "SDL" 1.2
COMBOFACTOR "BASE23" "WAI" 1.6
COMBOFACTOR "BASE23" "WAI" 1.2
COMBO "BASE24" TYPE DESIGN
COMBOFACTOR "BASE24" "DL" 1.2
COMBOFACTOR "BASE24" "SDL" 1.2
COMBOFACTOR "BASE24" "WAN" 1.2
COMBO "BASE25" TYPE DESIGN
COMBOFACTOR "BASE25" "DL" 1.2
COMBOFACTOR "BASE25" "SDL" 1.2
COMBOFACTOR "BASE25" "L" 1
COMBOFACTOR "BASE25" "EXP" 1.4
COMBO "BASE26" TYPE DESIGN
COMBOFACTOR "BASE26" "DL" 1.2
COMBOFACTOR "BASE26" "L" 1
COMBOFACTOR "BASE26" "EYP" 1.4
COMBO "BASE27" TYPE DESIGN
COMBOFACTOR "BASE27" "DL" 1.2
COMBOFACTOR "BASE27" "SDL" 1.2
COMBOFACTOR "BASE27" "L" 1
COMBOFACTOR "BASE27" "EXN" 1.4
COMBO "BASE28" TYPE DESIGN
COMBOFACTOR "BASE28" "DL" 1.2
COMBOFACTOR "BASE28" "SDL" 1.2
COMBOFACTOR "BASE28" "EYN" 1.4
COMBO "BASE29" TYPE DESIGN
COMBOFACTOR "BASE29" "DL" 1.2
COMBOFACTOR "BASE29" "SDL" 1.2
COMBOFACTOR "BASE29" "L" 1
COMBOFACTOR "BASE29" "EXP" 1.4
COMBO "BASE30" TYPE DESIGN
COMBOFACTOR "BASE30" "EYP" 1.4
COMBO "BASE31" TYPE DESIGN
COMBOFACTOR "BASE31" "DL" 1.2
COMBOFACTOR "BASE31" "SDL" 1.2
COMBOFACTOR "BASE31" "EXN" 1.4
COMBO "BASE32" TYPE DESIGN
COMBOFACTOR "BASE32" "DL" 1.2
COMBOFACTOR "BASE32" "SDL" 1.2
COMBOFACTOR "BASE32" "L" 1
COMBOFACTOR "BASE32" "EYN" 1.4
COMBO "BASE33" TYPE DESIGN
COMBOFACTOR "BASE33" "DL" 0.9
COMBOFACTOR "BASE33" "SDL" 0.9
COMBOFACTOR "BASE33" "EXP" 1.4
COMBO "BASE34" TYPE DESIGN
COMBOFACTOR "BASE34" "DL" 0.9
COMBOFACTOR "BASE34" "SDL" 0.9
COMBOFACTOR "BASE34" "EYP" 1.4
COMBO "BASE35" TYPE DESIGN
COMBOFACTOR "BASE35" "DL" 0.9
COMBOFACTOR "BASE35" "SDL" 0.9
COMBOFACTOR "BASE35" "EXN" 1.4
COMBO "BASE36" TYPE DESIGN
COMBOFACTOR "BASE36" "DL" 0.9
COMBOFACTOR "BASE36" "SDL" 0.9
COMBOFACTOR "BASE36" "EYN" 1.4
COMBO "BASE37" TYPE DESIGN
COMBOFACTOR "BASE37" "DL" 0.9
COMBOFACTOR "BASE37" "SDL" 0.9
COMBOFACTOR "BASE37" "EXP" 1.4
COMBO "BASE38" TYPE DESIGN
COMBOFACTOR "BASE38" "DL" 0.9
COMBOFACTOR "BASE38" "SDL" 0.9
COMBOFACTOR "BASE38" "EYP" 1.4
COMBO "BASE39" TYPE DESIGN
COMBOFACTOR "BASE39" "DL" 0.9
COMBOFACTOR "BASE39" "SDL" 0.9
COMBOFACTOR "BASE39" "EXN" 1.4
COMBO "BASE40" TYPE DESIGN
COMBOFACTOR "BASE40" "DL" 0.9
COMBOFACTOR "BASE40" "SDL" 0.9
COMBOFACTOR "BASE40" "EYN" 1.4

S STRIP DEFINITIONS

XSTRIP "7" 0 337.5 0 0 324 0 324 337.5
XSTRIP "8" 0 685 0 337.5 173.5 337.5 173.5 685
XSTRIP "9" 685 685 324 685 324 337.5 685 337.5
XSTRIP "10" 324 337.5 324 685 173.5 685 173.5 337.5
XSTRIP "11" 324 337.5 324 0 685 0 685 337.5
XSTRIP "12" 685 0 795 0 795 337.5 685 337.5
XSTRIP "13" 0 337.5 0 0 324 0 324 337.5
YSTRIP "14" 0 685 0 337.5 173.5 337.5 173.5 685
YSTRIP "15" 685 685 324 685 324 337.5 685 337.5
YSTRIP "16" 324 337.5 324 685 173.5 685 173.5 337.5
YSTRIP "17" 324 337.5 324 0 685 0 685 337.5
YSTRIP "18" 685 0 795 0 795 337.5 685 337.5

S GROUPS

END
\$END OF MODEL FILE

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X - STRIP REINFORCING (for whole strip in Sq-cm)

X-STRIP STRIP STATION TOP-REBAR TOP-REBAR BOT-REBAR BOT-REBAR
ID WIDTH X-ORDINATE LEFT OF X RIGHT OF X LEFT OF X RIGHT OF X

9	347.500	324.000	25.130	25.130		
9	347.500	384.000	25.130	25.130		
9	347.500	454.333	25.130	25.130	0.000	0.000
9	347.500	524.667	25.130	25.130	25.130	25.130
9	347.500	595.000	25.130	25.130	25.130	25.130
9	347.500	685.000	25.130	25.130		
8	347.500	0.000	25.130	25.130		
8	347.500	90.000	25.130	25.130	25.130	25.130
8	347.500	173.500	25.130	25.130		
10	347.500	173.500	25.130	25.130		
10	347.500	248.750	25.130	25.130	0.000	0.000
10	347.500	324.000	25.130	25.130		
12	337.500	685.000	24.407	24.407		
12	337.500	740.000	24.407	24.407	24.407	24.407
12	337.500	795.000	24.407	24.407		
11	337.500	324.000	24.407	24.407		
11	337.500	384.000	24.407	24.407	0.000	0.000
11	337.500	454.333	24.407	24.407	0.000	0.000
11	337.500	524.667	24.407	24.407	24.407	24.407
11	337.500	595.000	24.407	24.407	24.407	24.407
11	337.500	685.000	24.407	24.407		
7	337.500	0.000	24.407	24.407		
7	337.500	90.000	24.407	24.407	24.407	24.407
7	337.500	173.500	24.407	24.407	24.407	24.407
7	337.500	248.750	24.407	24.407	0.000	0.000
7	337.500	324.000	24.407	24.407	0.000	0.000

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Y - STRIP REINFORCING (for whole strip in Sq-cm)

Y-STRIP STRIP STATION TOP-REBAR TOP-REBAR BOT-REBAR BOT-REBAR
ID WIDTH Y-ORDINATE LEFT OF Y RIGHT OF Y LEFT OF Y RIGHT OF Y

14	173.500	337.500	12.547	12.547		
14	173.500	423.333	12.547	12.547	0.000	0.000
14	173.500	509.167	12.547	12.547	12.547	12.547
14	173.500	595.000	12.547	12.547	12.547	12.547
14	173.500	685.000	12.547	12.547		
13	324.000	0.000	23.430	23.430		
13	324.000	90.000	23.430	23.430	23.430	23.430
13	324.000	172.500	23.430	23.430	23.430	23.430
13	324.000	255.000	23.430	23.430	0.000	0.000
13	324.000	337.500	23.430	23.430		
16	150.500	337.500	10.884	10.884		
16	150.500	423.333	10.884	10.884	0.000	0.000
16	150.500	509.167	10.884	10.884	10.884	10.884
16	150.500	595.000	10.884	10.884	10.884	10.884
16	150.500	685.000	10.884	10.884		
15	361.000	337.500	26.106	26.106	0.000	0.000
15	361.000	423.333	26.106	26.106	0.000	0.000
15	361.000	509.167	26.106	26.106	26.106	26.106
15	361.000	595.000	26.106	26.106	26.106	26.106
15	361.000	685.000	26.106	26.106		
17	361.000	0.000	26.106	26.106		
17	361.000	90.000	26.106	26.106	26.106	26.106
17	361.000	172.500	26.106	26.106	26.106	26.106
17	361.000	255.000	26.106	26.106	0.000	0.000
17	361.000	337.500	26.106	26.106	0.000	0.000
18	110.000	0.000	7.955	7.955		
18	110.000	90.000	7.955	7.955	7.955	7.955
18	110.000	172.500	7.955	7.955	7.955	7.955
18	110.000	255.000	7.955	7.955	7.955	7.955
18	110.000	337.500	7.955	7.955		

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BEAM REINFORCING (flexural in Sq-cm and shear in Sq-cm/meter)

LINE STATION(S) STATION(S) TOP-REBAR TOP-REBAR BOT-REBAR BOT-REBAR SHEAR-REBAR SHEAR-REBAR
ID X-ORDINATE Y-ORDINATE LEFT OF S RIGHT OF S LEFT OF S RIGHT OF S LEFT OF S RIGHT OF S

16	685.000	337.500	1.696	1.967	0.000	0.000
16	740.000	337.500	0.731	0.884	0.831	0.000
16	795.000	337.500	0.311	0.243	0.000	0.000
B18	0.000	0.000	0.217	0.362	0.000	0.000
B18	90.000	0.000	2.226	2.161	1.656	1.670
B18	173.500	0.000	1.840	1.741	1.077	0.627
B18	248.750	0.000	1.131	1.079	0.064	0.159
B18	324.000	0.000	0.501	0.157	0.000	0.000
B20	324.000	0.000	0.577	0.349	0.000	0.000
B20	384.000	0.000	0.637	0.599	0.000	0.000
B20	454.333	0.000	1.430	1.317	0.133	0.000
B20	524.667	0.000	1.922	1.816	0.681	0.595
B20	595.000	0.000	2.290	2.022	1.758	1.548
B20	685.000	0.000	0.302	0.000	0.000	0.000
B25	685.000	0.000	0.334	0.192	0.000	0.000
B25	740.000	0.000	0.296	0.235	0.000	0.000
B25	795.000	0.000	0.163	0.078	0.000	0.000
B51	0.000	0.000	0.251	0.373	0.000	0.000
B51	0.000	90.000	1.833	1.790	1.354	1.378
B51	0.000	172.500	1.903	1.798	0.468	0.454
B51	0.000	255.000	1.495	1.405	0.000	0.000
B51	0.000	337.500	0.929	0.000	0.000	0.000
B53	324.000	0.000	0.074	0.095	0.000	0.000
B53	324.000	90.000	1.217	1.170	0.712	0.685
B53	324.000	172.500	1.542	1.519	0.076	0.135
B53	324.000	255.000	1.251	1.216	0.000	0.000
B53	324.000	337.500	0.532	0.000	0.000	0.000
B55	685.000	0.000	0.138	0.138	0.000	0.000
B55	685.000	90.000	1.411	1.514	0.809	0.844
B55	685.000	172.500	1.383	1.463	0.178	0.252
B55	685.000	255.000	1.042	1.310	0.000	0.000
B55	685.000	337.500	0.454	0.000	0.000	0.000
B57	795.000	0.000	0.291	0.217	0.000	0.000
B57	795.000	90.000	0.929	1.200	0.396	0.519
B57	795.000	172.500	1.323	1.250	0.321	0.278
B57	795.000	255.000	0.988	0.821	0.077	0.150
B57	795.000	337.500	0.659	0.316	0.000	0.000
B71	0.000	337.500	0.136	0.300	0.000	0.000
B71	90.000	337.500	0.780	0.884	0.081	0.174
B71	173.500	337.500	0.924	1.039	0.000	0.110
B71	248.750	337.500	0.700	0.808	0.000	0.000
B71	324.000	337.500	0.290	0.000	0.000	0.000
B76	324.000	337.500	0.554	0.064	0.000	0.000

B76	384.000	337.500	0.446	0.419	0.082	0.053
B76	454.333	337.500	1.020	0.902	0.000	0.000
B76	524.667	337.500	1.382	1.216	0.112	0.000
B76	595.000	337.500	1.250	1.301	0.307	0.425
B76	685.000	337.500	0.952	1.144	0.000	0.000

B97	0.000	337.500	0.678	0.000	0.000	0.000
B97	0.000	423.333	1.208	1.148	0.000	0.000
B97	0.000	509.167	1.592	1.549	0.449	0.493
B97	0.000	595.000	1.817	1.740	1.334	1.348
B97	0.000	685.000	0.339	0.283	0.000	0.000

B98	173.500	337.500	0.774	0.000	0.000	0.000
B98	173.500	423.333	1.003	1.108	0.000	0.000
B98	173.500	509.167	1.249	1.230	0.298	0.269
B98	173.500	595.000	0.991	0.818	0.419	0.297
B98	173.500	685.000	0.173	0.245	0.000	0.000

B100	324.000	337.500	0.490	0.000	0.000	0.000
B100	324.000	423.333	1.094	1.059	0.000	0.000
B100	324.000	509.167	1.307	1.305	0.176	0.114
B100	324.000	595.000	1.005	1.032	0.712	0.731
B100	324.000	685.000	0.089	0.109	0.000	0.000

B102	685.000	337.500	1.134	1.085	0.000	0.000
B102	685.000	423.333	1.340	1.278	0.000	0.000
B102	685.000	509.167	1.630	1.679	0.419	0.448
B102	685.000	595.000	1.688	1.642	1.520	1.475
B102	685.000	685.000	0.303	0.352	0.000	0.000

B129	0.000	685.000	0.305	0.238	0.000	0.000
B129	90.000	685.000	1.999	2.043	1.653	1.603
B129	173.500	685.000	1.373	1.484	0.601	0.653
B129	248.750	685.000	0.871	0.864	0.128	0.139
B129	324.000	685.000	0.427	0.098	0.000	0.000

B131	324.000	685.000	0.568	0.090	0.000	0.000
B131	384.000	685.000	0.730	0.781	0.000	0.000
B131	454.333	685.000	1.395	1.417	0.196	0.077
B131	524.667	685.000	1.830	1.865	0.691	0.653
B131	595.000	685.000	2.167	2.122	1.673	1.613
B131	685.000	685.000	0.224	0.269	0.000	0.000

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X - STRIP DESIGN MOMENTS

X-STRIP STRIP STATION TOP-MOMENT TOP-MOMENT BOT-MOMENT BOT-MOMENT
ID WIDTH X-ORDINATE LEFT OF X RIGHT OF X LEFT OF X RIGHT OF X

9	347.500	324.000	-209021.686	35409.939		
			BASE26	BASE30		
9	347.500	384.000	-363965.297	-368110.374		
			BASE25	BASE28		
9	347.500	454.333	-677531.433	-702925.181	13149.352	21882.655
			BASE25	BASE25	BASE37	BASE37
9	347.500	524.667	-847645.644	-873631.309	122966.386	135575.737
			BASE25	BASE25	BASE37	BASE37
9	347.500	595.000	-806531.000	-800951.076	281642.805	264319.911
			BASE25	BASE25	BASE37	BASE37
9	347.500	685.000	-189753.304	-233122.520		
			BASE35	BASE31		
8	347.500	0.000	-157133.505	103816.020		
			BASE28	BASE25		
8	347.500	90.000	-658939.612	-692779.619	26618.717	261687.923
			BASE29	BASE29	BASE33	BASE33
8	347.500	173.500	-6341			

	BASE29	BASE29		
15	361.000	337.500	-423972.545	23452.549
			BASE23	BASE39
15	361.000	423.333	-700576.946	-706583.732
			BASE26	BASE26
			BASE26	BASE26
15	361.000	509.167	-849193.406	-858116.931
			BASE26	BASE26
			BASE26	BASE26
15	361.000	595.000	-698588.613	-691302.714
			BASE26	BASE26
			BASE26	BASE26
15	361.000	685.000	-142833.366	206404.850
			BASE33	BASE29
17	361.000	0.000	-235583.545	203085.682
			BASE27	BASE39
17	361.000	90.000	-714653.367	-742100.471
			BASE30	BASE30
			BASE30	BASE34
17	361.000	172.500	-869415.992	-882356.679
			BASE30	BASE30
			BASE30	BASE34
17	361.000	255.000	-705136.102	-731553.233
			BASE30	BASE30
17	361.000	337.500	-356544.930	12523.307
			BASE23	BASE35
18	110.000	0.000	-40285.595	22804.529
			BASE30	BASE34
18	110.000	90.000	-196772.924	-228034.639
			BASE30	BASE30
			BASE30	BASE34
18	110.000	172.500	-231541.306	-235647.309
			BASE30	BASE30
			BASE30	BASE34
18	110.000	255.000	-175304.435	-159748.231
			BASE30	BASE30
			BASE30	BASE37
18	110.000	337.500	-117370.054	62864.032
			BASE31	BASE31

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BEAM DESIGN MOMENTS & SHEARS

LINE STATION(S)	STATION(S)	TOP MOMENT	TOP MOMENT	BOT MOMENT	BOT MOMENT	SHEAR	SHEAR	
ID	X-ORDINATE	Y-ORDINATE	LEFT OF S	RIGHT OF S	LEFT OF S	RIGHT OF S	LEFT OF S	RIGHT OF S
16	685.000	337.500	-152988.636	177261.770	1900.18			
16	740.000	337.500	66137.779	-79653.698	72751.820	75186.837	1900.18	
16	795.000	337.500	-28198.078	21997.686	1866.42			
B18	0.000	0.000	-19627.852	32822.517	2494.55			
B18	90.000	0.000	-200403.643	-194546.270	149330.598	159591.993	2494.55	
B18	173.500	0.000	-165894.759	-156993.222	54973.978	56801.820	1531.37	
B18	248.750	0.000	-102245.235	-97549.248	5777.635	14443.392	727.55	
B18	324.000	0.000	-45372.087	14192.888	1160.62			
B20	324.000	0.000	-52275.902	31668.003	1421.24			
B20	384.000	0.000	-57630.408	-54218.125	0.000	0.000	1421.24	
B20	454.333	0.000	-129079.151	-118946.576	12081.487	0.000	1075.12	
B20	524.667	0.000	-173165.691	-163729.501	61653.441	53830.481	934.93	
B20	595.000	0.000	-204512.797	-182192.624	158502.629	139687.862	1907.15	
B20	685.000	0.000	-27408.651	0.000	1895.07			
B25	685.000	0.000	-30293.182	17410.056	803.71			
B25	740.000	0.000	-24794.055	-21262.217	2990.643	5439.173	803.71	
B25	795.000	0.000	-14739.472	7075.259	245.17			
B51	0.000	0.000	-22782.464	33779.490	2029.06			
B51	0.000	90.000	-162773.988	-161406.648	122291.434	124411.190	2029.06	
B51	0.000	172.500	-114749.571	-102306.329	42397.356	41133.395	1558.16	
B51	0.000	255.000	-134939.086	-126851.165	0.000	0.000	728.77	
B51	0.000	337.500	-84002.692	0.000	796.98			
B53	324.000	0.000	-4734.807	8590.458	1301.29			
B53	324.000	90.000	-109962.046	-105690.277	64413.536	61954.892	1301.29	
B53	324.000	172.500	-139162.076	-137058.508	6937.569	12203.269	1192.61	
B53	324.000	255.000	-112997.866	-109855.282	0.000	0.000	347.72	
B53	324.000	337.500	-48154.712	0.000	893.82			
B55	685.000	0.000	-12512.903	12502.931	1448.42			
B55	685.000	90.000	-127411.807	-136626.470	73172.647	76371.825	1448.42	
B55	685.000	172.500	-124839.664	-132029.355	16101.383	22866.172	984.64	
B55	685.000	255.000	-94199.955	-118276.465	0.000	3709.271	458.54	
B55	685.000	337.500	-41135.949	0.000	967.89			
B57	795.000	0.000	-26369.607	19637.336	640.00			
B57	795.000	90.000	-83969.212	-108434.510	35831.958	46985.850	640.00	
B57	795.000	172.500	-119505.382	-112948.096	29124.013	35202.049	358.07	
B57	795.000	255.000	-89330.953	-74274.081	7007.598	13581.209	286.27	
B57	795.000	337.500	-59628.665	28596.413	1075.99			
B71	0.000	337.500	-12358.995	27167.711	753.96			
B71	90.000	337.500	-70541.489	-79930.508	7352.737	15808.548	753.96	
B71	173.500	337.500	-83600.938	-83955.654	3860.994	10000.409	204.48	
B71	248.750	337.500	-63329.381	-73136.270	0.000	0.000	407.87	
B71	324.000	337.500	-26279.208	1206.582	987.43			
B76	324.000	337.500	-50155.985	5805.831	959.13			
B76	384.000	337.500	-40394.831	-37954.006	7464.150	4817.902	959.13	
B76	454.333	337.500	-92181.706	-81607.878	0.000	0.000	1377.73	
B76	524.667	337.500	-124763.310	-109828.174	101303.227	1176.331	617.65	
B76	595.000	337.500	-112938.833	-117539.632	27813.286	38523.778	472.64	
B76	685.000	337.500	-86113.954	103415.668	925.98			
B97	0.000	337.500	-61324.328	0.000	814.91			
B97	0.000	423.333	-109140.515	-103738.046	0.000	0.000	814.91	
B97	0.000	509.167	-143618.202	-139799.607	40632.048	44625.220	551.23	
B97	0.000	595.000	-163807.213	-156943.250	120487.463	121680.474	1129.69	
B97	0.000	685.000	-30717.933	25669.312	1790.63			
B98	173.500	337.500	-70072.681	0.000	358.54			
B98	173.500	423.333	-90661.573	-100119.042	3938.006	3990.396	358.54	
B98	173.500	509.167	-112839.997	-110248.077	27029.166	24392.079	329.19	
B98	173.500	595.000	-89579.284	-73985.523	37994.280	26920.882	378.79	
B98	173.500	685.000	-15654.598	22061.568	658.62			
B100	324.000	337.500	-44410.905	0.000	774.83			
B100	324.000	423.333	-98856.330	-95706.207	0.000	0.000	774.83	
B100	324.000	509.167	-118056.512	-117815.578	15995.495	10668.735	387.12	
B100	324.000	595.000	-90825.328	-93318.474	64454.204	66148.704	1084.34	
B100	324.000	685.000	-8054.281	9841.743	1124.00			
B102	685.000	337.500	-102442.133	7715.964	918.40			
B102	685.000	423.333	-121015.598	-115426.326	0.000	0.000	918.40	
B102	685.000	509.167	-147016.060	-151403.010	37979.051	40607.008	797.65	
B102	685.000	595.000	-152282.536	-148105.812	137214.959	133087.194	1593.40	
B102	685.000	685.000	-27441.099	31854.570	1714.36			
B129	0.000	685.000	-27636.442	21535.321	2093.62			
B129	90.000	685.000	-180084.205	-184060.299	149140.584	144664.741	2093.62	
B129	173.500	685.000	-123938.131	-133899.128	54365.933	59091.300	1194.30	
B129	248.750	685.000	-78794.020	-78167.415	11615.731	12646.076	732.29	
B129	324.000	685.000	-38636.526	8895.891	950.77			
B131	324.000	685.000	-51415.688	8177.003	1093.20			
B131	384.000	685.000	-66018.426	-70655.072	0.000	0.000	1093.20	
B131	454.333	685.000	-125991.701	-127924.478	17363.899	6959.640	787.38	
B131	524.667	685.000	-164967.990	-168106.437	62583.202	59145.057	925.61	
B131	595.000	685.000	-195112.169	-191111.147	150910.401	145225.646	1733.03	
B131	685.000	685.000	-20332.262	24391.197	2309.94			