



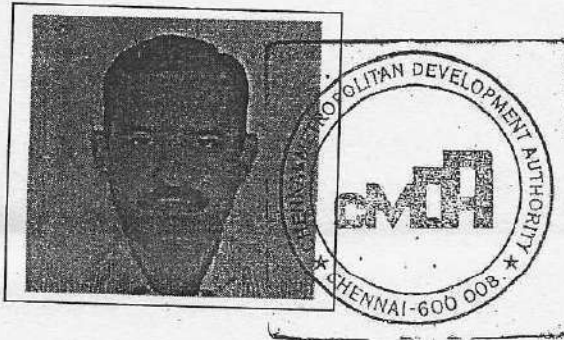
CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
'ThalamuthuNatarajan Building', No.1, Gandhi Irwin Road,
Egmore, Chennai-600 008.

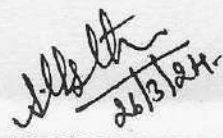
PROFESSIONAL REGISTRATION CERTIFICATE

This is to certify that the **Thiru. N. KANAGAVEL** has enrolled as **Registered Structural Engineer Grade-I (SE)** with Chennai Metropolitan Development Authority (CMDA) who has the qualification of **M.E.,(Structural Engg.)** and experience in the relevant field for **11 years**.

He has been given the Registration No.**SE/GR-I/2019/03/049** Renewed on **26.03.2024**. He shall be required to comply with the duties and responsibilities prescribed by the Government of Tamil Nadu in Part-V, "Registration of Professionals", Tamil Nadu Combined Development and Building Rules, 2019 approved vide G.O.(Ms) No.18 MAWS (MA1) Dept. dated 04.02.2019.

This Registration is valid upto **25.03.2029**.




(A. MEGANATHAN)
Superintendent

N. KANAGAVEL M.E., M.B.A., MIE., FIV
Chartered Engineer, Structural Consultant and Approved Valuer

CA- 12, Tarangini Complex
Ambattur Industrial Estate, Chennai – 600 058

Mobile : 94440 61295
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15.09.2025

STABILITY CERTIFICATE

1. The detailed engineering and structure design of the proposed building comprising of stilt + five floors “NEST FASCINO” at Adhanur Road, Varadharajapuram village, Kundrathur taluk, Kancheepuram district – 600 044, comprised in S.No: 44/2A2, has been done by me/us based on the report of geotechnical investigation (soil test) done by Nagadi Consultants (P) Ltd., Report No. G(C)10037 dated 17.04.2025 and considering the functional requirement of the building.
2. It is certified that among other factors, the proposed building has been designed to resist earthquake. I/We have checked various parameters and found that the proposed building would be safe.
3. I/We further certify that:
 - (i) The minimum grade of concrete is M30
 - (ii) The design and analysis has been done using the code of practice for plain and reinforced concrete as per IS 456:2000, design loads as per IS Codes No.IS 875-1987 and design of earthquake resistant structure as per IS Code No. IS 1893(part 1):2016
4. The building will be safe and sound when used for the purpose for which it is designed.


N. KANAGAVEL M.E, M.B.A., MIE., FIV
Registered Structural Engineer Grade-I
CMDA Reg.No. SE/GR-1/19/03/049
GCC Reg.No.RSE100022019
CA-12, Tarangani Complex,
Ambattur Industrial Estate
Mogappair West, Chennai-600 058

Stamp and Signature

Encl.: Structural Design Calculation

Design Specifications:

The proposed structure are to be designed for stilt + five floors and to be of framed structure to resist the seismic effect of zone III as per IS 1893 – 2016. The usage of the building is for residential purpose.

Soil:

As per Nagadi Consultants (P) Ltd., geo technical report G(C) 10037 dated 17.04.2025, the foundation recommendations are:

(i) type of foundation	= Isolated / combined
(ii) Depth of foundation	= 3.00 m
(ii) SBC @ 3.00 m depth	= 250kn/m ²

Floor Heights Considered:

Foundation depth	= 3.00m
Car parking level	= 0.60m
Stilt and typical floors height	= 3.00m

Analysis and Design:

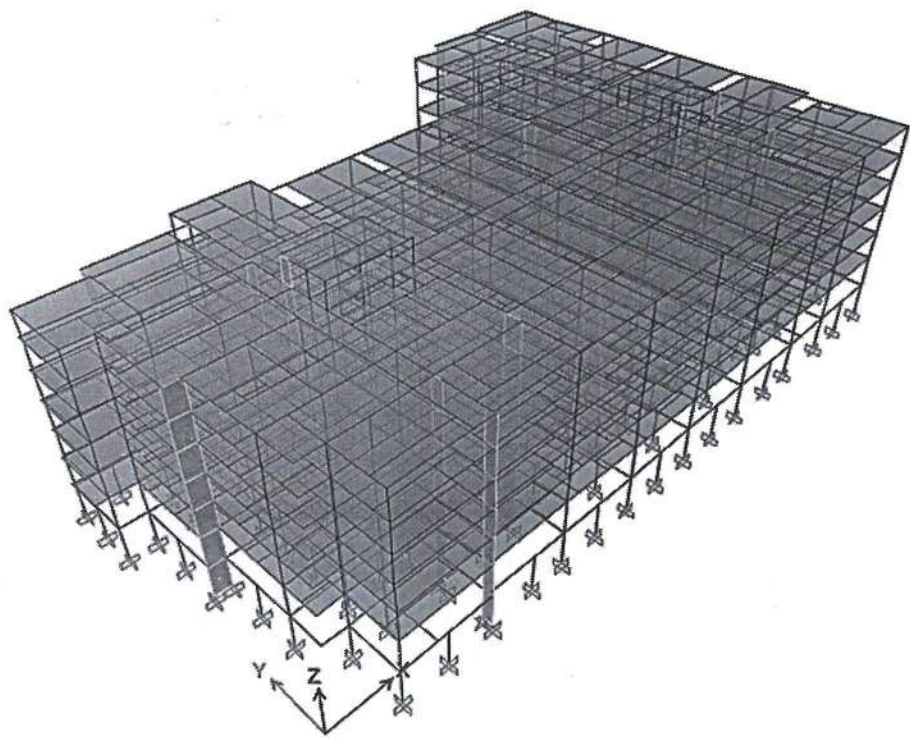
Analysis part is done using ETAB software and the designing part by manual calculations in accordance with IS 456 – 2000, IS 1893 - 2016 and SP – 16.

Materials:

The following recommendations of materials are to be used

- (i) Grade of concrete : M30 grade for all RCC members
- (ii) Grade of steel : Fe 550 for all diameter
- (iii) Potable quality of water to be used for all construction activities including curing.

ETABS[®]



User Report

Model File: stilt+5 floors, Revision 0
14-Sep-25

1 Structure Data

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

1.1 Story Data

Table 1.1 - Story Definitions

Tower	Name	Height m	Master Story	Similar To	Splice Story	Color
T1	headroom	2.5	No	None	No	Red
T1	roof	3	No	story 1	No	Magenta
T1	story 5	3	No	story 1	No	Yellow
T1	story 4	3	No	story 1	No	Gray8Dark
T1	story 3	3	No	story 1	No	Blue
T1	story 2	3	No	story 1	No	Green
T1	story 1	3.6	Yes	None	No	Cyan
T1	plinth beam	3.5	No	None	No	Red

2 Properties

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

2.1 Materials

Table 2.1 - Material Properties - General

Material	Type	SymType	Grade	Color	Notes
HYSD500	Rebar	Uniaxial	HYSD Grade 500	Red	
HYSD550	Rebar	Uniaxial	HYSD Grade 550	Magenta	
M30	Concrete	Isotropic	M30	Cyan	

2.2 Frame Sections

Table 2.2 - Frame Section Property Definitions - Summary (Part 1 of 3)

Name	Material	Shape	Color	Area mm ²	J mm ⁴	I33 mm ⁴	I22 mm ⁴	As2 mm ²	As3 mm ²	S33Pos mm ³	S33Neg mm ³
B230x125	M30	Concrete Rectangular	Cyan	28750	98842792.8	37434895.8	126739583.3	23958.3	23958.3	598958.3	598958.3
B230x380	M30	Concrete Rectangular	Red	87400	960059669.1	1051713333.3	385288333.3	72833.3	72833.3	5535333.3	5535333.3
B230x450	M30	Concrete Rectangular	Magenta	103500	124072593.2.6	1746562500	456262500	86250	86250	7762500	7762500
B230x525	M30	Concrete Rectangular	16744448	120750	154336284.6	2773476562.5	532306250	100625	100625	10565625	10565625
B230x600	M30	Concrete Rectangular	Green	138000	184679134.0	4140000000	608350000	115000	115000	13800000	13800000
B230x675	M30	Concrete Rectangular	Red	155250	215056905.4.6	5894648437.5	684393750	129375	129375	17465625	17465625
B230x750	M30	Concrete Rectangular	Red	172500	245451702.7.4	8085937500	760437500	143750	143750	21562500	21562500
C230x300	M30	Concrete Rectangular	Gray8Dark	69000	645952940	517500000	304175000	57500	57500	3450000	3450000
C230x450	M30	Concrete Rectangular	Magenta	103500	124072593.2.6	1746562500	456262500	86250	86250	7762500	7762500
C230x525	M30	Concrete Rectangular	10317879	120750	154336284.6	2773476562.5	532306250	100625	100625	10565625	10565625
C230x600	M30	Concrete Rectangular	Cyan	138000	184679134.0	4140000000	608350000	115000	115000	13800000	13800000
C230x675	M30	Concrete Rectangular	Gray8Dark	155250	215056905.4.6	5894648437.5	684393750	129375	129375	17465625	17465625

Name	Material	Shape	Color	Area mm ²	J mm ⁴	I33 mm ⁴	I22 mm ⁴	As2 mm ²	As3 mm ²	S33Pos mm ³	S33Neg mm ³
C300x525	M30	Concrete Rectangular	16744448	157500	303911370 2.6	3617578125	118125000 0	131250	131250	13781250	13781250
C300x600	M30	Concrete Rectangular	Green	180000	370785937 5	5400000000	135000000 0	150000	150000	18000000	18000000
C300X675	M30	Concrete Rectangular	Magenta	202500	437953086 4.2	7688671875	151875000 0	168750	168750	22781250	22781250
C300x750	M30	Concrete Rectangular	16744576	225000	505262880 0	1054687500	168750000 0	187500	187500	28125000	28125000
C300x900	M30	Concrete Rectangular	Cyan	270000	640075000 0	1822500000	202500000 0	225000	225000	40500000	40500000
C380x750	M30	Concrete Rectangular	Red	285000	936326144 7.9	1335937500	342950000 0	237500	237500	35625000	35625000
ConcBm	M30	Concrete Rectangular	Green	187500	474572896 9.6	3906250000	219726562 5	156250	156250	15625000	15625000
ConcCol	M30	Concrete Rectangular	Blue	140625	278503417 9.7	1647949218	164794921 8.8	117187.5	117187.5	8789062.5	8789062.5
D230x230	M30	Concrete Rectangular	Red	52900	394109408 3	233200833	233200833 3	44083.3	44083.3	2027833.3	2027833.3

2.3 Shell Sections

Table 2.3 - Area Section Property Definitions - Summary

Name	Type	Element Type	Material	Total Thickness mm	Deck Material	Deck Depth mm
Slab1	Slab	Shell-Thin	M30	125		
Wall1	Wall	Shell-Thin	M30	230		
Wall2	Wall	Shell-Thin	M30	230		
Wall3	Wall	Shell-Thin	M30	230		
Wall4	Wall	Shell-Thin	M30	230		

3 Loads

This chapter provides loading information as applied to the model.

3.1 Auto Seismic Loading

IS 1893:2016 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern seismic - X according to IS 1893:2016, as calculated by ETABS.

Direction and Eccentricity

Direction = X

Structural Period

Period Calculation Method = User Specified

User Period

$$T = 0.2 \text{ sec}$$

Factors and Coefficients

Seismic Zone Factor, Z [IS Table 3]

$$Z = 0.16$$

$$R = 5$$

Table 9]

$$I = 1.2$$

Seismic Response

Spectral Acceleration Coefficient, $S_a \frac{S_a}{g} = 2.5$
/g [IS 6.4.2]

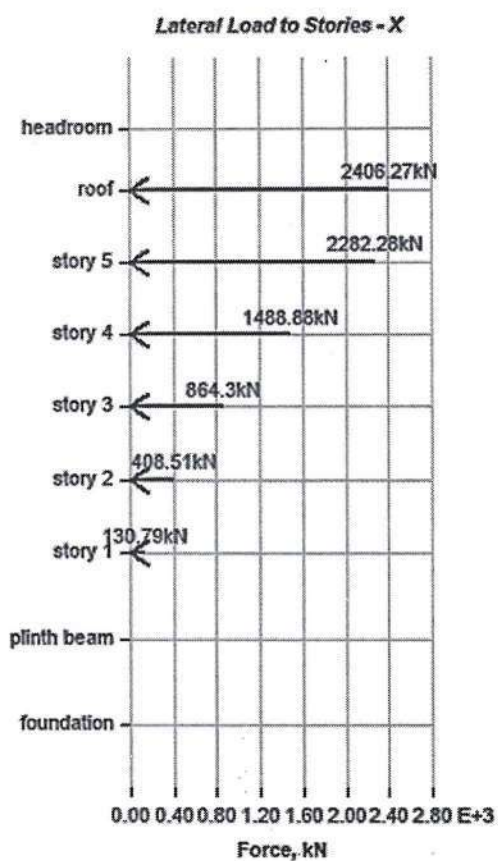
$$\frac{S_a}{g} = 2.5$$

Equivalent Lateral Forces

Seismic Coefficient, A_h [IS 6.4.2] $A_h = \frac{ZI \frac{S_a}{g}}{2R}$

Calculated Base Shear

Direction	Period Used (sec)	W (N)	V _b (kN)
X	0.2	157938049.82	7581026.39

**Applied Story Forces**

Story	Elevation	X-Dir	Y-Dir
	m	kN	kN
headroom	21.1	0	0
roof	18.6	2406.27	0
story 5	15.6	2282.28	0
story 4	12.6	1488.88	0
story 3	9.6	864.3	0
story 2	6.6	408.51	0
story 1	3.6	130.79	0
plinth beam	0	0	0
foundation	-3.5	0	0

IS 1893:2016 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern seismic - Y according to IS 1893:2016, as calculated by ETABS.

Direction and Eccentricity

Direction = Y

Structural Period

Period Calculation Method = User Specified

User Period

$$T = 0.25 \text{ sec}$$

Factors and Coefficients

Seismic Zone Factor, Z [IS Table 3]

$$Z = 0.16$$

$$R = 5$$

$$I = 1.2$$

Seismic Response

Spectral Acceleration Coefficient, $S_a \frac{S_a}{g} = 2.5$
/g [IS 6.4.2]

$$\frac{S_a}{g} = 2.5$$

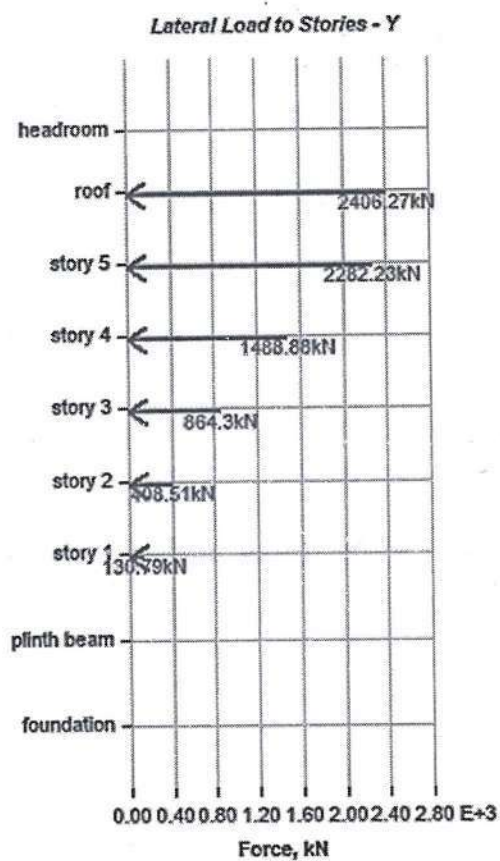
Equivalent Lateral Forces

Seismic Coefficient, A_h [IS 6.4.2] $A_h = \frac{ZI \frac{S_a}{g}}{2R}$

Calculated Base Shear

Direction	Period Used (sec)	W (N)	V _b (kN)
Y	0.25	157938049.82	7581026.39

Applied Story Forces



Story	Elevation	X-Dir	Y-Dir
	m	kN	kN
headroom	21.1	0	0
roof	18.6	0	2406.27
story 5	15.6	0	2282.28
story 4	12.6	0	1488.88
story 3	9.6	0	864.3
story 2	6.6	0	408.51
story 1	3.6	0	130.79
plinth beam	0	0	0
foundation	-3.5	0	0

3.2 Functions

3.2.1 Response Spectrum Functions

Table 3.3 - Functions - Response Spectrum - IS1893 2016

Name	Period sec	Value	Seismic Zone	I	Soil Type	R	Damping Ratio
RS	0	0.0192	III	1.2	II	5	0.05
RS	0.1	0.048					
RS	0.55	0.048					
RS	0.8	0.03264					
RS	1	0.026112					
RS	1.2	0.02176					
RS	1.4	0.018651					
RS	1.6	0.01632					
RS	1.8	0.014507					
RS	2	0.013056					
RS	2.5	0.010445					
RS	3	0.008704					
RS	3.5	0.007461					
RS	4	0.006528					
RS	4.5	0.006528					
RS	5	0.006528					
RS	5.5	0.006528					
RS	6	0.006528					
RS	6.5	0.006528					
RS	7	0.006528					
RS	7.5	0.006528					
RS	8	0.006528					
RS	8.5	0.006528					
RS	9	0.006528					
RS	9.5	0.006528					
RS	10	0.006528					

4 Analysis Results

This chapter provides analysis results.

4.1 Story Results

Table 4.1 - Story Drifts

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
headroom	Dead	LinStatic		X	0.000545	66	46.06	24.44	21.1
headroom	Dead	LinStatic		Y	0.000144	58	59.06	16.95	21.1
headroom	Live	LinStatic		X	3.2E-05	120	14.48	23.22	21.1
headroom	Live	LinStatic		Y	2.8E-05	58	59.06	16.95	21.1
headroom	Floor finish	LinStatic		X	0.000333	66	46.06	24.44	21.1
headroom	Floor finish	LinStatic		Y	7.9E-05	58	59.06	16.95	21.1
headroom	sunken filling	LinStatic		X	1.8E-05	68	21.83	23.83	21.1
headroom	sunken filling	LinStatic		Y	1.2E-05	136	14.48	-0.12	21.1
headroom	wall load	LinStatic		X	0.000284	120	14.48	23.22	21.1
headroom	wall load	LinStatic		Y	9.1E-05	14	54.33	16.95	21.1
headroom	seismic - X	LinStatic		X	0.000878	94	59.06	13.95	21.1
headroom	seismic - Y	LinStatic		Y	0.000796	596	61	45.01	21.1
headroom	RSX	LinRespSpec	Max	X	0.000712	94	59.06	13.95	21.1
headroom	RSX	LinRespSpec	Max	Y	7.3E-05	94	59.06	13.95	21.1

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
headroom	RXY	LinRespSpec	Max	X	0.000127	10	14.48	0.89	21.1
headroom	RXY	LinRespSpec	Max	Y	0.000689	10	14.48	0.89	21.1
headroom	roof live	LinStatic		X	0.000276	66	46.06	24.44	21.1
headroom	(DL+LL)	Combination		X	0.0011	120	14.48	23.22	21.1
headroom	(DL+LL)	Combination		Y	0.000432	58	59.06	16.95	21.1
headroom	09DL+1.5EQX	Combination		X	0.00124	94	59.06	13.95	21.1
headroom	09DL+1.5EQX	Combination		Y	0.00045	58	59.06	16.95	21.1
headroom	09DL-1.5EQX	Combination		X	0.001395	94	59.06	13.95	21.1
headroom	0.9DL+1.5RSX	Combination	Max	X	0.000991	94	59.06	13.95	21.1
headroom	0.9DL+1.5RSX	Combination	Max	Y	0.000367	58	59.06	16.95	21.1
headroom	0.9DL+1.5RSX	Combination	Min	X	0.001145	94	59.06	13.95	21.1
headroom	0.9DL-1.5RSX	Combination	Max	X	0.000991	94	59.06	13.95	21.1
headroom	0.9DL-1.5RSX	Combination	Max	Y	0.000367	58	59.06	16.95	21.1
headroom	0.9DL-1.5RSX	Combination	Min	X	0.001145	94	59.06	13.95	21.1
headroom	09DL-1.5EQY	Combination		X	0.000935	120	14.48	23.22	21.1
headroom	09DL-1.5EQY	Combination		Y	0.001286	596	61	45.01	21.1
headroom	09DL+1.5EQY	Combination		X	0.000806	66	46.06	24.44	21.1
headroom	09DL+1.5EQY	Combination		Y	0.00122	66	46.06	24.44	21.1
headroom	0.9DL+1.5RSY	Combination	Max	Y	0.001199	136	14.48	-0.12	21.1
headroom	0.9DL+1.5RSY	Combination	Min	X	0.000974	120	14.48	23.22	21.1
headroom	0.9DL+1.5RSY	Combination	Min	Y	0.001082	596	61	45.01	21.1
headroom	0.9DL-1.5RSY	Combination	Max	Y	0.001199	136	14.48	-0.12	21.1
headroom	0.9DL-1.5RSY	Combination	Min	X	0.000974	120	14.48	23.22	21.1
headroom	0.9DL-1.5RSY	Combination	Min	Y	0.001082	596	61	45.01	21.1
headroom	1.2(DL+LL+EQX)	Combination		X	0.00131	21	14.48	5.34	21.1
headroom	1.2(DL+LL+EQX)	Combination		Y	0.000661	58	59.06	16.95	21.1
headroom	1.2(DL+LL+EQX)	Combination		X	0.001521	120	14.48	23.22	21.1
headroom	1.2(DL+LL+EQX)	Combination		Y	0.000455	14	54.33	16.95	21.1
headroom	1.2(DL+LL+RSX)	Combination	Max	X	0.001317	21	14.48	5.34	21.1
headroom	1.2(DL+LL+RSX)	Combination	Max	Y	0.000595	58	59.06	16.95	21.1
headroom	1.2(DL+LL+RSX)	Combination	Min	X	0.001536	120	14.48	23.22	21.1
headroom	1.2(DL+LL+RSX)	Combination	Min	Y	0.000442	58	59.06	16.95	21.1
headroom	1.2(DL+LL+RSX)	Combination	Max	X	0.001317	21	14.48	5.34	21.1
headroom	1.2(DL+LL+RSX)	Combination	Max	Y	0.000595	58	59.06	16.95	21.1
headroom	1.2(DL+LL+RSX)	Combination	Min	X	0.001536	120	14.48	23.22	21.1
headroom	1.2(DL+LL+RSX)	Combination	Min	Y	0.000442	58	59.06	16.95	21.1
headroom	1.2(DL+LL+EQY)	Combination		X	0.001357	66	46.06	24.44	21.1
headroom	1.2(DL+LL+EQY)	Combination		Y	0.001102	136	14.48	-0.12	21.1
headroom	1.2(DL+LL+EQY)	Combination		X	0.001372	120	14.48	23.22	21.1
headroom	1.2(DL+LL+EQY)	Combination		Y	0.001112	596	61	45.01	21.1
headroom	1.2(DL+LL+RSY)	Combination	Max	Y	0.001144	58	59.06	16.95	21.1
headroom	1.2(DL+LL+RSY)	Combination	Min	X	0.001403	120	14.48	23.22	21.1
headroom	1.2(DL+LL+RSY)	Combination	Min	Y	0.000949	596	61	45.01	21.1
headroom	1.2(DL+LL+RSY)	Combination	Max	Y	0.001144	58	59.06	16.95	21.1
headroom	1.2(DL+LL+RSY)	Combination	Min	X	0.001403	120	14.48	23.22	21.1
headroom	1.2(DL+LL+RSY)	Combination	Min	Y	0.000949	596	61	45.01	21.1
headroom	1.5(DL+EQX)	Combination		X	0.00136	121	14.48	4.34	21.1
headroom	1.5(DL+EQX)	Combination		Y	0.000631	58	59.06	16.95	21.1
headroom	1.5(DL+EQY)	Combination		X	0.001385	120	14.48	23.22	21.1
headroom	1.5(DL+EQY)	Combination		Y	0.001324	68	21.83	23.83	21.1
headroom	1.5(DL+RSX)	Combination	Max	X	0.001364	21	14.48	5.34	21.1
headroom	1.5(DL+RSX)	Combination	Max	Y	0.000548	58	59.06	16.95	21.1
headroom	1.5(DL+RSX)	Combination	Min	X	0.001721	120	14.48	23.22	21.1
headroom	1.5(DL+RSX)	Combination	Min	Y	0.000357	58	59.06	16.95	21.1
headroom	1.5(DL+RSY)	Combination	Max	X	0.001346	120	14.48	23.22	21.1

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
headroom	1.5(DL+RSY)	Combination	Max	Y	0.001309	136	14.48	-0.12	21.1
headroom	1.5(DL+RSY)	Combination	Min	X	0.001554	120	14.48	23.22	21.1
headroom	1.5(DL+RSY)	Combination	Min	Y	0.001143	48	61	45.91	21.1
headroom	1.5(DL-EQX)	Combination		X	0.001701	120	14.48	23.22	21.1
headroom	1.5(DL-EQX)	Combination		Y	0.000438	14	54.33	16.95	21.1
headroom	1.5(DL-EQY)	Combination		X	0.001516	120	14.48	23.22	21.1
headroom	1.5(DL-EQY)	Combination		Y	0.001347	596	61	45.01	21.1
headroom	1.5(DL-RSX)	Combination	Max	X	0.001364	21	14.48	5.34	21.1
headroom	1.5(DL-RSX)	Combination	Max	Y	0.000548	58	59.06	16.95	21.1
headroom	1.5(DL-RSX)	Combination	Min	X	0.001721	120	14.48	23.22	21.1
headroom	1.5(DL-RSX)	Combination	Min	Y	0.000357	58	59.06	16.95	21.1
headroom	1.5(DL-RSY)	Combination	Max	X	0.001346	120	14.48	23.22	21.1
headroom	1.5(DL-RSY)	Combination	Max	Y	0.001309	136	14.48	-0.12	21.1
headroom	1.5(DL-RSY)	Combination	Min	X	0.001554	120	14.48	23.22	21.1
headroom	1.5(DL-RSY)	Combination	Min	Y	0.001143	48	61	45.91	21.1
headroom	DL+0.8LL+0.8EQX	Combination		X	0.001011	21	14.48	5.34	21.1
headroom	DL+0.8LL+0.8EQX	Combination		Y	0.000501	58	59.06	16.95	21.1
headroom	DL+0.8LL+0.8EQY	Combination		X	0.001071	66	46.06	24.44	21.1
headroom	DL+0.8LL+0.8EQY	Combination		Y	0.000774	68	21.83	23.83	21.1
headroom	DL+0.8LL+0.8RSX	Combination		X	0.001071	66	46.06	24.44	21.1
headroom	DL+0.8LL+0.8RSX	Combination		Y	0.000774	68	21.83	23.83	21.1
headroom	DL+0.8LL+0.8EQX	Combination		X	0.001207	120	14.48	23.22	21.1
headroom	DL+0.8LL+0.8EQX	Combination		Y	0.000348	14	54.33	16.95	21.1
headroom	DL+0.8LL+0.8EQY	Combination		X	0.001108	120	14.48	23.22	21.1
headroom	DL+0.8LL+0.8EQY	Combination		Y	0.000762	48	61	45.91	21.1
headroom	DL+0.8LL+0.8RSX	Combination	Max	X	0.001015	21	14.48	5.34	21.1
headroom	DL+0.8LL+0.8RSX	Combination	Max	Y	0.000457	58	59.06	16.95	21.1
headroom	DL+0.8LL+0.8RSX	Combination	Min	X	0.001218	120	14.48	23.22	21.1
headroom	DL+0.8LL+0.8RSX	Combination	Min	Y	0.000355	58	59.06	16.95	21.1
headroom	DL+0.8LL+0.8RSY	Combination	Max	X	0.001018	120	14.48	23.22	21.1
headroom	DL+0.8LL+0.8RSY	Combination	Max	Y	0.000823	58	59.06	16.95	21.1
headroom	DL+0.8LL+0.8RSY	Combination	Min	X	0.001129	120	14.48	23.22	21.1
headroom	DL+0.8LL+0.8RSY	Combination	Min	Y	0.000653	48	61	45.91	21.1
headroom	DL+0.8LL+0.8RSY	Combination	Min	Y	0.000653	48	61	45.91	21.1
headroom	DL+EQX	Combination		X	0.000907	121	14.48	4.34	21.1
headroom	DL+EQX	Combination		Y	0.00042	58	59.06	16.95	21.1
headroom	DL+EQY	Combination		X	0.000923	120	14.48	23.22	21.1
headroom	DL+EQY	Combination		Y	0.000883	68	21.83	23.83	21.1
headroom	DL+RSX	Combination	Max	X	0.000909	21	14.48	5.34	21.1
headroom	DL+RSX	Combination	Max	Y	0.000365	58	59.06	16.95	21.1
headroom	DL+RSX	Combination	Min	X	0.001147	120	14.48	23.22	21.1
headroom	DL+RSX	Combination	Min	Y	0.000238	58	59.06	16.95	21.1
headroom	DL+RSY	Combination	Max	X	0.000897	120	14.48	23.22	21.1
headroom	DL+RSY	Combination	Max	Y	0.000873	136	14.48	-0.12	21.1
headroom	DL+RSY	Combination	Min	X	0.001036	120	14.48	23.22	21.1
headroom	DL+RSY	Combination	Min	Y	0.000762	48	61	45.91	21.1
headroom	DL-EQX	Combination		X	0.001134	120	14.48	23.22	21.1
headroom	DL-EQX	Combination		Y	0.000292	14	54.33	16.95	21.1
headroom	DL-EQY	Combination		X	0.00101	120	14.48	23.22	21.1
headroom	DL-EQY	Combination		Y	0.000898	596	61	45.01	21.1
headroom	DL-RSX	Combination	Max	X	0.000909	21	14.48	5.34	21.1
headroom	DL-RSX	Combination	Max	Y	0.000365	58	59.06	16.95	21.1

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
headroom	DL-RSX	Combination	Min	X	0.001147	120	14.48	23.22	21.1
headroom	DL-RSX	Combination	Min	Y	0.000238	58	59.06	16.95	21.1
headroom	DL-RSY	Combination	Max	X	0.000897	120	14.48	23.22	21.1
headroom	DL-RSY	Combination	Max	Y	0.000873	136	14.48	-0.12	21.1
headroom	DL-RSY	Combination	Min	X	0.001036	120	14.48	23.22	21.1
headroom	DL-RSY	Combination	Min	Y	0.000762	48	61	45.91	21.1
headroom	1.5(DL+LL)	Combination		X	0.00165	120	14.48	23.22	21.1
headroom	1.5(DL+LL)	Combination		Y	0.000648	58	59.06	16.95	21.1
headroom	ultimate envelope	Combination	Max	X	0.001364	21	14.48	5.34	21.1
headroom	ultimate envelope	Combination	Max	Y	0.001324	68	21.83	23.83	21.1
headroom	ultimate envelope	Combination	Min	X	0.001721	120	14.48	23.22	21.1
headroom	ultimate envelope	Combination	Min	Y	0.001347	596	61	45.01	21.1
headroom	seismic weight	Combination		X	0.000959	120	14.48	23.22	21.1
headroom	seismic weight	Combination		Y	0.000309	58	59.06	16.95	21.1
roof	Dead	LinStatic		X	6.6E-05	108	46.06	6.4	18.6
roof	Dead	LinStatic		Y	0.000117	114	22.32	4.97	18.6
roof	Live	LinStatic		Y	2.1E-05	136	14.48	-0.12	18.6
roof	Floor finish	LinStatic		X	3.9E-05	108	46.06	6.4	18.6
roof	Floor finish	LinStatic		Y	5.3E-05	114	22.32	4.97	18.6
roof	sunken filling	LinStatic		X	1.1E-05	1	69.27	45.8	18.6
roof	wall load	LinStatic		X	2.2E-05	122	21.83	31.43	18.6
roof	wall load	LinStatic		Y	4.3E-05	114	22.32	4.97	18.6
roof	seismic - X	LinStatic		X	0.0011	77	2.29	15.77	18.6
roof	seismic - Y	LinStatic		Y	0.001072	16	54.18	45.45	18.6
roof	RSX	LinRespSpec	Max	X	0.00082	77	2.29	15.77	18.6
roof	RXY	LinRespSpec	Max	X	0.000462	48	61	45.91	18.6
roof	RXY	LinRespSpec	Max	Y	0.001021	41	5.71	31.55	18.6
roof	roof live	LinStatic		X	3.4E-05	108	46.06	6.4	18.6
roof	(DL+LL)	Combination		X	0.000143	108	46.06	6.4	18.6
roof	(DL+LL)	Combination		Y	0.000246	114	22.32	4.97	18.6
roof	0.9DL+1.5EQX	Combination		X	0.001703	77	2.29	15.77	18.6
roof	0.9DL+1.5EQX	Combination		X	0.001692	87	69.38	13.95	18.6
roof	0.9DL+1.5RSX	Combination	Max	X	0.001284	77	2.29	15.77	18.6
roof	0.9DL+1.5RSX	Combination	Max	Y	0.000272	114	22.32	4.97	18.6
roof	0.9DL+1.5RSX	Combination	Min	X	0.001285	87	69.38	13.95	18.6
roof	0.9DL+1.5RSX	Combination	Max	X	0.001284	77	2.29	15.77	18.6
roof	0.9DL+1.5RSX	Combination	Max	Y	0.000272	114	22.32	4.97	18.6
roof	0.9DL+1.5RSX	Combination	Min	X	0.001285	87	69.38	13.95	18.6
roof	0.9DL+1.5EQY	Combination		Y	0.0016	16	54.18	45.45	18.6
roof	0.9DL+1.5EQY	Combination		Y	0.001617	16	54.18	45.45	18.6
roof	0.9DL+1.5RSY	Combination	Max	X	0.000691	16	54.18	45.45	18.6
roof	0.9DL+1.5RSY	Combination	Max	Y	0.001552	321	-1.1	26.74	18.6
roof	0.9DL+1.5RSY	Combination	Min	X	0.000707	1	69.27	45.8	18.6
roof	0.9DL+1.5RSY	Combination	Min	Y	0.00152	41	5.71	31.55	18.6
roof	0.9DL+1.5RSY	Combination	Max	X	0.000691	16	54.18	45.45	18.6
roof	0.9DL+1.5RSY	Combination	Max	Y	0.001552	321	-1.1	26.74	18.6
roof	0.9DL+1.5RSY	Combination	Min	X	0.000707	1	69.27	45.8	18.6
roof	0.9DL+1.5RSY	Combination	Min	Y	0.00152	41	5.71	31.55	18.6
roof	1.2(DL+LL+EQX)	Combination		X	0.001393	77	2.29	15.77	18.6
roof	1.2(DL+LL+EQX)	Combination		X	0.001421	87	69.38	13.95	18.6
roof	1.2(DL+LL+EQX)	Combination		Y	0.000327	114	22.32	4.97	18.6
roof	1.2(DL+LL+RSX)	Combination	Max	X	0.001058	77	2.29	15.77	18.6
roof	1.2(DL+LL+RSX)	Combination	Max	Y	0.000359	114	22.32	4.97	18.6
roof	1.2(DL+LL+RSX)	Combination	Min	X	0.001095	87	69.38	13.95	18.6
roof	1.2(DL+LL+RSX)	Combination	Max	X	0.001058	77	2.29	15.77	18.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
roof	1.2(DL+LL-RSX)	Combination	Max	Y	0.000359	114	22.32	4.97	18.6
roof	1.2(DL+LL-RSX)	Combination	Min	X	0.001095	87	69.38	13.95	18.6
roof	1.2(DL+LL-EQY)	Combination		Y	0.001387	114	22.32	4.97	18.6
roof	1.2(DL+LL-EQY)	Combination		Y	0.001275	16	54.18	45.45	18.6
roof	1.2(DL+LL-RSY)	Combination	Max	X	0.000543	16	54.18	45.45	18.6
roof	1.2(DL+LL-RSY)	Combination	Max	Y	0.001307	40	8.57	18.94	18.6
roof	1.2(DL+LL-RSY)	Combination	Min	X	0.000594	1	69.27	45.8	18.6
roof	1.2(DL+LL-RSY)	Combination	Min	Y	0.001232	41	5.71	31.55	18.6
roof	1.2(DL+LL-RSY)	Combination	Max	X	0.000543	16	54.18	45.45	18.6
roof	1.2(DL+LL-RSY)	Combination	Max	Y	0.001307	40	8.57	18.94	18.6
roof	1.2(DL+LL-RSY)	Combination	Min	X	0.000594	1	69.27	45.8	18.6
roof	1.2(DL+LL-RSY)	Combination	Min	Y	0.001232	41	5.71	31.55	18.6
roof	1.5(DL+EQX)	Combination		X	0.001739	77	2.29	15.77	18.6
roof	1.5(DL+EQY)	Combination		Y	0.001686	114	22.32	4.97	18.6
roof	1.5(DL+RSX)	Combination	Max	X	0.00132	77	2.29	15.77	18.6
roof	1.5(DL+RSX)	Combination	Max	Y	0.000401	114	22.32	4.97	18.6
roof	1.5(DL+RSX)	Combination	Min	X	0.001324	87	69.38	13.95	18.6
roof	1.5(DL+RSY)	Combination	Max	X	0.000698	16	54.18	45.45	18.6
roof	1.5(DL+RSY)	Combination	Max	Y	0.001609	107	3.77	8.46	18.6
roof	1.5(DL+RSY)	Combination	Min	X	0.000717	1	69.27	45.8	18.6
roof	1.5(DL+RSY)	Combination	Min	Y	0.001511	41	5.71	31.55	18.6
roof	1.5(DL-EQX)	Combination		X	0.001731	87	69.38	13.95	18.6
roof	1.5(DL-EQY)	Combination		Y	0.001594	16	54.18	45.45	18.6
roof	1.5(DL-RSX)	Combination	Max	X	0.00132	77	2.29	15.77	18.6
roof	1.5(DL-RSX)	Combination	Max	Y	0.000401	114	22.32	4.97	18.6
roof	1.5(DL-RSX)	Combination	Min	X	0.001324	87	69.38	13.95	18.6
roof	1.5(DL-RSY)	Combination	Max	X	0.000698	16	54.18	45.45	18.6
roof	1.5(DL-RSY)	Combination	Max	Y	0.001609	107	3.77	8.46	18.6
roof	1.5(DL-RSY)	Combination	Min	X	0.000717	1	69.27	45.8	18.6
roof	1.5(DL-RSY)	Combination	Min	Y	0.001511	41	5.71	31.55	18.6
roof	DL+0.8LL+0.3EQX	Combination		X	0.000941	77	2.29	15.77	18.6
roof	DL+0.8LL+0.8EQX	Combination		Y	0.000218	114	22.32	4.97	18.6
roof	DL+0.8LL+0.8EQY	Combination		Y	0.000967	114	22.32	4.97	18.6
roof	DL+0.8LL+0.8RSX	Combination		Y	0.000967	114	22.32	4.97	18.6
roof	DL+0.8LL+0.8EQX	Combination		X	0.00096	87	69.38	13.95	18.6
roof	DL+0.8LL+0.8EQX	Combination		Y	0.00026	114	22.32	4.97	18.6
roof	DL+0.8LL+0.8EQY	Combination		Y	0.000848	16	54.18	45.45	18.6
roof	DL+0.8LL+0.8RSX	Combination	Max	X	0.000717	77	2.29	15.77	18.6
roof	DL+0.8LL+0.8RSX	Combination	Max	Y	0.000282	114	22.32	4.97	18.6
roof	DL+0.8LL+0.8RSX	Combination	Min	X	0.000743	87	69.38	13.95	18.6
roof	DL+0.8LL+0.8RSY	Combination	Max	X	0.000364	16	54.18	45.45	18.6
roof	DL+0.8LL+0.8RSY	Combination	Max	Y	0.000908	40	8.57	18.94	18.6
roof	DL+0.8LL+0.8RSY	Combination	Min	X	0.0004	1	69.27	45.8	18.6
roof	DL+0.8LL+0.8RSY	Combination	Min	Y	0.000819	41	5.71	31.55	18.6
roof	DL+0.8LL+0.8RSY	Combination	Max	X	0.000364	16	54.18	45.45	18.6
roof	DL+0.8LL+0.8RSY	Combination	Max	Y	0.000908	40	8.57	18.94	18.6
roof	DL+0.8LL+0.8RSY	Combination	Min	X	0.0004	1	69.27	45.8	18.6
roof	DL+0.8LL+0.8RSY	Combination	Min	Y	0.000819	41	5.71	31.55	18.6
roof	DL+EQX	Combination		X	0.001159	77	2.29	15.77	18.6
roof	DL+EQY	Combination		Y	0.001124	114	22.32	4.97	18.6
roof	DL+RSX	Combination	Max	X	0.00088	77	2.29	15.77	18.6
roof	DL+RSX	Combination	Max	Y	0.000267	114	22.32	4.97	18.6
roof	DL+RSX	Combination	Min	X	0.000883	87	69.38	13.95	18.6
roof	DL+RSY	Combination	Max	X	0.000466	16	54.18	45.45	18.6
roof	DL+RSY	Combination	Max	Y	0.001073	107	3.77	8.46	18.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
roof	DL+RSY	Combination	Min	X	0.000478	1	69.27	45.8	18.6
roof	DL+RSY	Combination	Min	Y	0.001007	41	5.71	31.55	18.6
roof	DL-EQX	Combination		X	0.001154	87	69.38	13.95	18.6
roof	DL-EQY	Combination		Y	0.001063	16	54.18	45.45	18.6
roof	DL-RSX	Combination	Max	X	0.00088	77	2.29	15.77	18.6
roof	DL-RSX	Combination	Max	Y	0.000267	114	22.32	4.97	18.6
roof	DL-RSX	Combination	Min	X	0.000883	87	69.38	13.95	18.6
roof	DL-RSY	Combination	Max	X	0.000466	16	54.18	45.45	18.6
roof	DL-RSY	Combination	Max	Y	0.001073	107	3.77	8.46	18.6
roof	DL-RSY	Combination	Min	X	0.000478	1	69.27	45.8	18.6
roof	DL-RSY	Combination	Min	Y	0.001007	41	5.71	31.55	18.6
roof	1.5(DL+LL)	Combination		X	0.000215	108	46.06	6.4	18.6
roof	1.5(DL+LL)	Combination		Y	0.000369	114	22.32	4.97	18.6
roof	ultimate envelope	Combination	Max	X	0.001739	77	2.29	15.77	18.6
roof	ultimate envelope	Combination	Max	Y	0.001686	114	22.32	4.97	18.6
roof	ultimate envelope	Combination	Min	X	0.001731	87	69.38	13.95	18.6
roof	ultimate envelope	Combination	Min	Y	0.0016	16	54.18	45.45	18.6
roof	seismic weight	Combination		X	0.000107	108	46.06	6.4	18.6
roof	seismic weight	Combination		Y	0.000218	114	22.32	4.97	18.6
story 5	Dead	LinStatic		X	2.3E-05	102	60.2	8.69	15.6
story 5	Dead	LinStatic		Y	7.3E-05	136	14.48	-0.12	15.6
story 5	Live	LinStatic		X	1.3E-05	108	46.06	6.4	15.6
story 5	Live	LinStatic		Y	2.5E-05	40	8.57	18.94	15.6
story 5	Floor finish	LinStatic		X	1.3E-05	102	60.2	8.69	15.6
story 5	Floor finish	LinStatic		Y	3.2E-05	121	14.48	4.34	15.6
story 5	sunken filling	LinStatic		X	6E-06	16	54.18	45.45	15.6
story 5	wall load	LinStatic		Y	3.3E-05	136	14.48	-0.12	15.6
story 5	seismic - X	LinStatic		X	0.00161	136	14.48	-0.12	15.6
story 5	seismic - Y	LinStatic		Y	0.001494	87	69.38	13.95	15.6
story 5	R SX	LinRespSpec	Max	X	0.001218	136	14.48	-0.12	15.6
story 5	R XY	LinRespSpec	Max	X	0.000824	48	61	45.91	15.6
story 5	R XY	LinRespSpec	Max	Y	0.001536	321	-1.1	26.74	15.6
story 5	roof live	LinStatic		X	1.3E-05	103	58.82	8.69	15.6
story 5	roof live	LinStatic		Y	1.6E-05	40	8.57	18.94	15.6
story 5	(DL+LL)	Combination		X	5.4E-05	102	60.2	8.69	15.6
story 5	(DL+LL)	Combination		Y	0.000157	136	14.48	-0.12	15.6
story 5	0.9DL+1.5EQX	Combination		X	0.002412	136	14.48	-0.12	15.6
story 5	0.9DL+1.5EQX	Combination		X	0.002428	143	60.08	0.23	15.6
story 5	0.9DL+1.5RSX	Combination	Max	X	0.001824	136	14.48	-0.12	15.6
story 5	0.9DL+1.5RSX	Combination	Max	Y	0.0003	46	0	30.02	15.6
story 5	0.9DL+1.5RSX	Combination	Min	X	0.00185	143	60.08	0.23	15.6
story 5	0.9DL+1.5RSX	Combination	Max	X	0.001824	136	14.48	-0.12	15.6
story 5	0.9DL+1.5RSX	Combination	Max	Y	0.0003	46	0	30.02	15.6
story 5	0.9DL+1.5RSX	Combination	Min	X	0.00185	143	60.08	0.23	15.6
story 5	0.9DL+1.5EQY	Combination		Y	0.002214	87	69.38	13.95	15.6
story 5	0.9DL+1.5EQY	Combination		Y	0.002268	87	69.38	13.95	15.6
story 5	0.9DL+1.5RSY	Combination	Max	X	0.001252	48	61	45.91	15.6
story 5	0.9DL+1.5RSY	Combination	Max	Y	0.002406	321	-1.1	26.74	15.6
story 5	0.9DL+1.5RSY	Combination	Min	X	0.00122	48	61	45.91	15.6
story 5	0.9DL+1.5RSY	Combination	Min	Y	0.002202	321	-1.1	26.74	15.6
story 5	0.9DL+1.5RSY	Combination	Max	X	0.001252	48	61	45.91	15.6
story 5	0.9DL+1.5RSY	Combination	Max	Y	0.002406	321	-1.1	26.74	15.6
story 5	0.9DL+1.5RSY	Combination	Min	X	0.00122	48	61	45.91	15.6
story 5	0.9DL+1.5RSY	Combination	Min	Y	0.002202	321	-1.1	26.74	15.6
story 5	1.2(DL+LL+EQX)	Combination		X	0.001918	136	14.48	-0.12	15.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 5	1.2(DL+LL-EQX)	Combination		X	0.001973	143	60.08	0.23	15.6
story 5	1.2(DL+LL-RSX)	Combination	Max	X	0.001447	136	14.48	-0.12	15.6
story 5	1.2(DL+LL-RSX)	Combination	Max	Y	0.000314	107	3.77	8.46	15.6
story 5	1.2(DL+LL-RSX)	Combination	Min	X	0.001511	143	60.08	0.23	15.6
story 5	1.2(DL+LL-RSX)	Combination	Max	X	0.001447	136	14.48	-0.12	15.6
story 5	1.2(DL+LL-RSX)	Combination	Max	Y	0.000314	107	3.77	8.46	15.6
story 5	1.2(DL+LL-RSX)	Combination	Min	X	0.001511	143	60.08	0.23	15.6
story 5	1.2(DL+LL-EQY)	Combination		Y	0.001838	87	69.38	13.95	15.6
story 5	1.2(DL+LL-EQY)	Combination		Y	0.001747	87	69.38	13.95	15.6
story 5	1.2(DL+LL-RSY)	Combination	Max	X	0.000996	48	61	45.91	15.6
story 5	1.2(DL+LL-RSY)	Combination	Max	Y	0.001988	321	-1.1	26.74	15.6
story 5	1.2(DL+LL-RSY)	Combination	Min	X	0.000982	48	61	45.91	15.6
story 5	1.2(DL+LL-RSY)	Combination	Min	Y	0.001699	321	-1.1	26.74	15.6
story 5	1.2(DL+LL-RSY)	Combination	Max	X	0.000996	48	61	45.91	15.6
story 5	1.2(DL+LL-RSY)	Combination	Max	Y	0.001988	321	-1.1	26.74	15.6
story 5	1.2(DL+LL-RSY)	Combination	Min	X	0.000982	48	61	45.91	15.6
story 5	1.2(DL+LL-RSY)	Combination	Min	Y	0.001699	321	-1.1	26.74	15.6
story 5	1.5(DL+EQX)	Combination		X	0.00241	136	14.48	-0.12	15.6
story 5	1.5(DL+EQY)	Combination		Y	0.002286	87	69.38	13.95	15.6
story 5	1.5(DL+RSX)	Combination	Max	X	0.001821	136	14.48	-0.12	15.6
story 5	1.5(DL+RSX)	Combination	Max	Y	0.000377	107	3.77	8.46	15.6
story 5	1.5(DL+RSX)	Combination	Min	X	0.00187	143	60.08	0.23	15.6
story 5	1.5(DL+RSY)	Combination	Max	X	0.001263	48	61	45.91	15.6
story 5	1.5(DL+RSY)	Combination	Max	Y	0.002474	321	-1.1	26.74	15.6
story 5	1.5(DL+RSY)	Combination	Min	X	0.00121	48	61	45.91	15.6
story 5	1.5(DL+RSY)	Combination	Min	Y	0.002134	321	-1.1	26.74	15.6
story 5	1.5(DL-EQX)	Combination		X	0.002447	143	60.08	0.23	15.6
story 5	1.5(DL-EQY)	Combination		Y	0.002196	87	69.38	13.95	15.6
story 5	1.5(DL-RSX)	Combination	Max	X	0.001821	136	14.48	-0.12	15.6
story 5	1.5(DL-RSX)	Combination	Max	Y	0.000377	107	3.77	8.46	15.6
story 5	1.5(DL-RSX)	Combination	Min	X	0.00187	143	60.08	0.23	15.6
story 5	1.5(DL-RSY)	Combination	Max	X	0.001263	48	61	45.91	15.6
story 5	1.5(DL-RSY)	Combination	Max	Y	0.002474	321	-1.1	26.74	15.6
story 5	1.5(DL-RSY)	Combination	Min	X	0.00121	48	61	45.91	15.6
story 5	1.5(DL-RSY)	Combination	Min	Y	0.002134	321	-1.1	26.74	15.6
story 5	DL+0.8LL+0.8EQX	Combination		X	0.001278	136	14.48	-0.12	15.6
story 5	DL+0.8LL+0.8EQY	Combination		Y	0.001231	87	69.38	13.95	15.6
story 5	DL+0.8LL+0.8RSX	Combination		Y	0.001231	87	69.38	13.95	15.6
story 5	DL+0.8LL-0.8EQX	Combination		X	0.001322	143	60.08	0.23	15.6
story 5	DL+0.8LL-0.8EQY	Combination		Y	0.001159	43	69.27	16.95	15.6
story 5	DL+0.8LL-0.8RSX	Combination	Max	X	0.000964	136	14.48	-0.12	15.6
story 5	DL+0.8LL-0.8RSX	Combination	Max	Y	0.000235	107	3.77	8.46	15.6
story 5	DL+0.8LL-0.8RSX	Combination	Min	X	0.001014	143	60.08	0.23	15.6
story 5	DL+0.8LL+0.8RSY	Combination	Max	X	0.000668	48	61	45.91	15.6
story 5	DL+0.8LL+0.8RSY	Combination	Max	Y	0.001348	321	-1.1	26.74	15.6
story 5	DL+0.8LL+0.8RSY	Combination	Min	X	0.000651	48	61	45.91	15.6
story 5	DL+0.8LL+0.8RSY	Combination	Min	Y	0.00111	321	-1.1	26.74	15.6
story 5	DL+0.8LL-0.8RSY	Combination	Max	X	0.000668	48	61	45.91	15.6
story 5	DL+0.8LL-0.8RSY	Combination	Max	Y	0.001348	321	-1.1	26.74	15.6
story 5	DL+0.8LL-0.8RSY	Combination	Min	X	0.000651	48	61	45.91	15.6
story 5	DL+0.8LL-0.8RSY	Combination	Min	Y	0.00111	321	-1.1	26.74	15.6
story 5	DL+EQX	Combination		X	0.001606	136	14.48	-0.12	15.6
story 5	DL+EQY	Combination		Y	0.001524	87	69.38	13.95	15.6
story 5	DL+RSX	Combination	Max	X	0.001214	136	14.48	-0.12	15.6
story 5	DL+RSX	Combination	Max	Y	0.000251	107	3.77	8.46	15.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 5	DL+RSX	Combination	Min	X	0.001247	143	60.08	0.23	15.6
story 5	DL+RSY	Combination	Max	X	0.000842	48	61	45.91	15.6
story 5	DL+RSY	Combination	Max	Y	0.001649	321	-1.1	26.74	15.6
story 5	DL+RSY	Combination	Min	X	0.000806	48	61	45.91	15.6
story 5	DL+RSY	Combination	Min	Y	0.001423	321	-1.1	26.74	15.6
story 5	DL-EQX	Combination		X	0.001631	143	60.08	0.23	15.6
story 5	DL-EQY	Combination		Y	0.001464	87	69.38	13.95	15.6
story 5	DL-RSX	Combination	Max	X	0.001214	136	14.48	-0.12	15.6
story 5	DL-RSX	Combination	Max	Y	0.000251	107	3.77	8.46	15.6
story 5	DL-RSX	Combination	Min	X	0.001247	143	60.08	0.23	15.6
story 5	DL-RSY	Combination	Max	X	0.000842	48	61	45.91	15.6
story 5	DL-RSY	Combination	Max	Y	0.001649	321	-1.1	26.74	15.6
story 5	DL-RSY	Combination	Min	X	0.000806	48	61	45.91	15.6
story 5	DL-RSY	Combination	Min	Y	0.001423	321	-1.1	26.74	15.6
story 5	1.5(DL+LL)	Combination		X	8.1E-05	102	60.2	8.69	15.6
story 5	1.5(DL+LL)	Combination		Y	0.000236	136	14.48	-0.12	15.6
story 5	ultimate envelope	Combination	Max	X	0.002412	136	14.48	-0.12	15.6
story 5	ultimate envelope	Combination	Max	Y	0.002474	321	-1.1	26.74	15.6
story 5	ultimate envelope	Combination	Min	X	0.002447	143	60.08	0.23	15.6
story 5	ultimate envelope	Combination	Min	Y	0.002214	87	69.38	13.95	15.6
story 5	seismic weight	Combination		X	3.8E-05	102	60.2	8.69	15.6
story 5	seismic weight	Combination		Y	0.000149	136	14.48	-0.12	15.6
story 4	Dead	LinStatic		Y	7.7E-05	321	-1.1	26.74	12.6
story 4	Live	LinStatic		X	8E-06	143	60.08	0.23	12.6
story 4	Live	LinStatic		Y	2.1E-05	107	3.77	8.46	12.6
story 4	Floor finish	LinStatic		X	1.1E-05	142	68.31	0.23	12.6
story 4	Floor finish	LinStatic		Y	3.5E-05	321	-1.1	26.74	12.6
story 4	sunken filling	LinStatic		X	5E-06	1	69.27	45.6	12.6
story 4	wall load	LinStatic		X	7E-06	77	2.29	15.77	12.6
story 4	wall load	LinStatic		Y	2.9E-05	35	14.48	18.83	12.6
story 4	seismic - X	LinStatic		X	0.002075	131	6.06	0	12.6
story 4	seismic - Y	LinStatic		Y	0.00193	87	69.38	13.95	12.6
story 4	RSX	LinRespSpec	Max	X	0.001629	131	6.06	0	12.6
story 4	RXY	LinRespSpec	Max	X	0.001105	48	61	45.91	12.6
story 4	RXY	LinRespSpec	Max	Y	0.002026	321	-1.1	26.74	12.6
story 4	roof live	LinStatic		X	8E-06	3	69.27	41.34	12.6
story 4	roof live	LinStatic		Y	8E-06	121	14.48	4.34	12.6
story 4	(DL+LL)	Combination		X	4.4E-05	142	68.31	0.23	12.6
story 4	(DL+LL)	Combination		Y	0.000158	321	-1.1	26.74	12.6
story 4	0.9DL+1.5EQX	Combination		X	0.00309	131	6.06	0	12.6
story 4	0.9DL+1.5EQX	Combination		X	0.003134	136	14.48	-0.12	12.6
story 4	0.9DL+1.5RSX	Combination	Max	X	0.002421	131	6.06	0	12.6
story 4	0.9DL+1.5RSX	Combination	Max	Y	0.00038	321	-1.1	26.74	12.6
story 4	0.9DL+1.5RSX	Combination	Min	X	0.002465	136	14.48	-0.12	12.6
story 4	0.9DL+1.5RSX	Combination	Max	X	0.002421	131	6.06	0	12.6
story 4	0.9DL+1.5RSX	Combination	Max	Y	0.00038	321	-1.1	26.74	12.6
story 4	0.9DL+1.5RSX	Combination	Min	X	0.002465	136	14.48	-0.12	12.6
story 4	0.9DL+1.5EQY	Combination		Y	0.002868	87	69.38	13.95	12.6
story 4	0.9DL+1.5EQY	Combination		Y	0.002921	87	69.38	13.95	12.6
story 4	0.9DL+1.5RSY	Combination	Max	X	0.001679	48	61	45.91	12.6
story 4	0.9DL+1.5RSY	Combination	Max	Y	0.003167	321	-1.1	26.74	12.6
story 4	0.9DL+1.5RSY	Combination	Min	X	0.001635	48	61	45.91	12.6
story 4	0.9DL+1.5RSY	Combination	Min	Y	0.00291	321	-1.1	26.74	12.6
story 4	0.9DL+1.5RSY	Combination	Max	X	0.001679	48	61	45.91	12.6
story 4	0.9DL+1.5RSY	Combination	Max	Y	0.003167	321	-1.1	26.74	12.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 4	0.9DL-1.5RSY	Combination	Min	X	0.001635	48	61	45.91	12.6
story 4	0.9DL-1.5RSY	Combination	Min	Y	0.00291	321	-1.1	26.74	12.6
story 4	1.2(DL+LL+EQX)	Combination		X	0.002448	131	6.06	0	12.6
story 4	1.2(DL+LL+EQX)	Combination		X	0.002532	136	14.48	-0.12	12.6
story 4	1.2(DL+LL+RSX)	Combination	Max	X	0.001912	131	6.06	0	12.6
story 4	1.2(DL+LL+RSX)	Combination	Max	Y	0.000391	321	-1.1	26.74	12.6
story 4	1.2(DL+LL+RSX)	Combination	Min	X	0.001997	136	14.48	-0.12	12.6
story 4	1.2(DL+LL+RSX)	Combination	Max	X	0.001912	131	6.06	0	12.6
story 4	1.2(DL+LL+RSX)	Combination	Max	Y	0.000391	321	-1.1	26.74	12.6
story 4	1.2(DL+LL+RSX)	Combination	Min	X	0.001997	136	14.48	-0.12	12.6
story 4	1.2(DL+LL+EQY)	Combination		Y	0.00236	87	69.38	13.95	12.6
story 4	1.2(DL+LL+EQY)	Combination		Y	0.002272	142	68.31	0.23	12.6
story 4	1.2(DL+LL+RSY)	Combination	Max	X	0.001344	48	61	45.91	12.6
story 4	1.2(DL+LL+RSY)	Combination	Max	Y	0.002621	321	-1.1	26.74	12.6
story 4	1.2(DL+LL+RSY)	Combination	Min	X	0.001308	48	61	45.91	12.6
story 4	1.2(DL+LL+RSY)	Combination	Min	Y	0.002241	321	-1.1	26.74	12.6
story 4	1.2(DL+LL+RSY)	Combination	Max	X	0.001344	48	61	45.91	12.6
story 4	1.2(DL+LL+RSY)	Combination	Max	Y	0.002621	321	-1.1	26.74	12.6
story 4	1.2(DL+LL+RSY)	Combination	Min	X	0.001308	48	61	45.91	12.6
story 4	1.2(DL+LL+RSY)	Combination	Min	Y	0.002241	321	-1.1	26.74	12.6
story 4	1.5(DL+EQX)	Combination		X	0.003075	131	6.06	0	12.6
story 4	1.5(DL+EQY)	Combination		Y	0.002939	87	69.38	13.95	12.6
story 4	1.5(DL+RSX)	Combination	Max	X	0.002406	131	6.06	0	12.6
story 4	1.5(DL+RSX)	Combination	Max	Y	0.000466	321	-1.1	26.74	12.6
story 4	1.5(DL+RSX)	Combination	Min	X	0.002481	136	14.48	-0.12	12.6
story 4	1.5(DL+RSY)	Combination	Max	X	0.001694	48	61	45.91	12.6
story 4	1.5(DL+RSY)	Combination	Max	Y	0.003253	321	-1.1	26.74	12.6
story 4	1.5(DL+RSY)	Combination	Min	X	0.001621	48	61	45.91	12.6
story 4	1.5(DL+RSY)	Combination	Min	Y	0.002825	321	-1.1	26.74	12.6
story 4	1.5(DL+EQX)	Combination		X	0.00315	136	14.48	-0.12	12.6
story 4	1.5(DL+EQY)	Combination		Y	0.002851	87	69.38	13.95	12.6
story 4	1.5(DL+RSX)	Combination	Max	X	0.002406	131	6.06	0	12.6
story 4	1.5(DL+RSX)	Combination	Max	Y	0.000466	321	-1.1	26.74	12.6
story 4	1.5(DL+RSX)	Combination	Min	X	0.002481	136	14.48	-0.12	12.6
story 4	1.5(DL+RSY)	Combination	Max	X	0.001694	48	61	45.91	12.6
story 4	1.5(DL+RSY)	Combination	Max	Y	0.003253	321	-1.1	26.74	12.6
story 4	1.5(DL+RSY)	Combination	Min	X	0.001621	48	61	45.91	12.6
story 4	1.5(DL+RSY)	Combination	Min	Y	0.002825	321	-1.1	26.74	12.6
story 4	DL+0.8LL+0.8EQX	Combination		X	0.001627	131	6.06	0	12.6
story 4	DL+0.8LL+0.8EQY	Combination		Y	0.00158	87	69.38	13.95	12.6
story 4	DL+0.8LL+0.8RSX	Combination		Y	0.00158	87	69.38	13.95	12.6
story 4	DL+0.8LL-0.8EQX	Combination		X	0.001693	136	14.48	-0.12	12.6
story 4	DL+0.8LL-0.8EQY	Combination		Y	0.001509	142	68.31	0.23	12.6
story 4	DL+0.8LL-0.8RSX	Combination	Max	X	0.00127	131	6.06	0	12.6
story 4	DL+0.8LL-0.8RSX	Combination	Max	Y	0.000289	321	-1.1	26.74	12.6
story 4	DL+0.8LL-0.8RSX	Combination	Min	X	0.001337	136	14.48	-0.12	12.6
story 4	DL+0.8LL+0.8RSY	Combination	Max	X	0.000901	48	61	45.91	12.6
story 4	DL+0.8LL+0.8RSY	Combination	Max	Y	0.001776	321	-1.1	26.74	12.6
story 4	DL+0.8LL+0.8RSY	Combination	Min	X	0.000867	48	61	45.91	12.6
story 4	DL+0.8LL+0.8RSY	Combination	Min	Y	0.001466	321	-1.1	26.74	12.6
story 4	DL+0.8LL-0.8RSY	Combination	Max	X	0.000901	48	61	45.91	12.6
story 4	DL+0.8LL-0.8RSY	Combination	Max	Y	0.001776	321	-1.1	26.74	12.6
story 4	DL+0.8LL-0.8RSY	Combination	Min	X	0.000867	48	61	45.91	12.6
story 4	DL+0.8LL-0.8RSY	Combination	Min	Y	0.001466	321	-1.1	26.74	12.6
story 4	DL+EQX	Combination		X	0.00205	131	6.06	0	12.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 4	DL+EQY	Combination		Y	0.001959	87	69.38	13.95	12.6
story 4	DL+RSX	Combination	Max	X	0.001604	131	6.06	0	12.6
story 4	DL+RSX	Combination	Max	Y	0.00031	321	-1.1	26.74	12.6
story 4	DL+RSX	Combination	Min	X	0.001654	136	14.48	-0.12	12.6
story 4	DL+RSY	Combination	Max	X	0.001129	48	61	45.91	12.6
story 4	DL+RSY	Combination	Max	Y	0.002168	321	-1.1	26.74	12.6
story 4	DL+RSY	Combination	Min	X	0.00108	48	61	45.91	12.6
story 4	DL+RSY	Combination	Min	Y	0.001883	321	-1.1	26.74	12.6
story 4	DL-EQX	Combination		X	0.0021	136	14.48	-0.12	12.6
story 4	DL-EQY	Combination		Y	0.001901	87	69.38	13.95	12.6
story 4	DL-RSX	Combination	Max	X	0.001604	131	6.06	0	12.6
story 4	DL-RSX	Combination	Max	Y	0.00031	321	-1.1	26.74	12.6
story 4	DL-RSX	Combination	Min	X	0.001654	136	14.48	-0.12	12.6
story 4	DL-RSY	Combination	Max	X	0.001129	48	61	45.91	12.6
story 4	DL-RSY	Combination	Max	Y	0.002168	321	-1.1	26.74	12.6
story 4	DL-RSY	Combination	Min	X	0.00108	48	61	45.91	12.6
story 4	DL-RSY	Combination	Min	Y	0.001883	321	-1.1	26.74	12.6
story 4	1.5(DL+LL)	Combination		X	6.6E-05	142	68.31	0.23	12.6
story 4	1.5(DL+LL)	Combination		Y	0.000237	321	-1.1	26.74	12.6
story 4	ultimate envelope	Combination	Max	X	0.00309	131	6.06	0	12.6
story 4	ultimate envelope	Combination	Max	Y	0.003253	321	-1.1	26.74	12.6
story 4	ultimate envelope	Combination	Min	X	0.00315	136	14.48	-0.12	12.6
story 4	ultimate envelope	Combination	Min	Y	0.00291	321	-1.1	26.74	12.6
story 4	seismic weight	Combination		Y	0.000148	321	-1.1	26.74	12.6
story 3	Dead	LinStatic		Y	7.1E-05	321	-1.1	26.74	9.6
story 3	Live	LinStatic		X	9E-06	144	54.33	0.23	9.6
story 3	Live	LinStatic		Y	2.1E-05	78	3.89	15.77	9.6
story 3	Floor finish	LinStatic		X	1.1E-05	146	38.14	0.23	9.6
story 3	Floor finish	LinStatic		Y	3.2E-05	321	-1.1	26.74	9.6
story 3	sunker, filling	LinStatic		X	4E-06	1	69.27	45.8	9.6
story 3	sunken filling	LinStatic		Y	6E-06	40	8.57	18.94	9.6
story 3	wall load	LinStatic		X	8E-06	77	2.29	15.77	9.6
story 3	wall load	LinStatic		Y	3.1E-05	40	8.57	18.94	9.6
story 3	seismic - X	LinStatic		X	0.002416	136	14.48	-0.12	9.6
story 3	seismic - Y	LinStatic		Y	0.002231	87	69.38	13.95	9.6
story 3	RSX	LinRespSpec	Max	X	0.002017	136	14.48	-0.12	9.6
story 3	RXY	LinRespSpec	Max	X	0.001307	48	61	45.91	9.6
story 3	RXY	LinRespSpec	Max	Y	0.002544	321	-1.1	26.74	9.6
story 3	roof live	LinStatic		X	6E-06	1	69.27	45.8	9.6
story 3	roof live	LinStatic		Y	5E-06	107	3.77	8.46	9.6
story 3	(DL+LL)	Combination		Y	0.000151	46	0	30.02	9.6
story 3	0.9DL+1.5EQX	Combination		X	0.003604	136	14.48	-0.12	9.6
story 3	0.9DL+1.5EQX	Combination		X	0.003647	144	54.33	0.23	9.6
story 3	0.9DL+1.5RSX	Combination	Max	X	0.003004	136	14.48	-0.12	9.6
story 3	0.9DL+1.5RSX	Combination	Max	Y	0.00045	321	-1.1	26.74	9.6
story 3	0.9DL+1.5RSX	Combination	Min	X	0.003047	144	54.33	0.23	9.6
story 3	0.9DL+1.5RSX	Combination	Max	X	0.003004	136	14.48	-0.12	9.6
story 3	0.9DL+1.5RSX	Combination	Max	Y	0.00045	321	-1.1	26.74	9.6
story 3	0.9DL+1.5RSX	Combination	Min	X	0.003047	144	54.33	0.23	9.6
story 3	0.9DL+1.5EQY	Combination		Y	0.003319	87	69.38	13.95	9.6
story 3	0.9DL+1.5EQY	Combination		Y	0.003374	87	69.38	13.95	9.6
story 3	0.9DL+1.5RSY	Combination	Max	X	0.001985	48	61	45.91	9.6
story 3	0.9DL+1.5RSY	Combination	Max	Y	0.003938	321	-1.1	26.74	9.6
story 3	0.9DL+1.5RSY	Combination	Min	X	0.001936	48	61	45.91	9.6
story 3	0.9DL+1.5RSY	Combination	Min	Y	0.003695	321	-1.1	26.74	9.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 3	0.9DL-1.5RSY	Combination	Max	X	0.001985	48	61	45.91	9.6
story 3	0.9DL-1.5RSY	Combination	Max	Y	0.003938	321	-1.1	26.74	9.6
story 3	0.9DL-1.5RSY	Combination	Min	X	0.001936	48	61	45.91	9.6
story 3	0.9DL-1.5RSY	Combination	Min	Y	0.003695	321	-1.1	26.74	9.6
story 3	1.2(DL+LL+EQX)	Combination		X	0.002861	136	14.48	-0.12	9.6
story 3	1.2(DL+LL+EQX)	Combination		X	0.002943	144	54.33	0.23	9.6
story 3	1.2(DL+LL+RSX)	Combination	Max	X	0.002381	136	14.48	-0.12	9.6
story 3	1.2(DL+LL+RSX)	Combination	Max	Y	0.000443	321	-1.1	26.74	9.6
story 3	1.2(DL+LL+RSX)	Combination	Min	X	0.002464	144	54.33	0.23	9.6
story 3	1.2(DL+LL+RSX)	Combination	Max	X	0.002381	136	14.48	-0.12	9.6
story 3	1.2(DL+LL+RSX)	Combination	Max	Y	0.000443	321	-1.1	26.74	9.6
story 3	1.2(DL+LL+RSX)	Combination	Min	X	0.002464	144	54.33	0.23	9.6
story 3	1.2(DL+LL+EQY)	Combination		Y	0.002723	87	69.38	13.95	9.6
story 3	1.2(DL+LL+EQY)	Combination		Y	0.002631	87	69.38	13.95	9.6
story 3	1.2(DL+LL+RSY)	Combination	Max	X	0.001593	48	61	45.91	9.6
story 3	1.2(DL+LL+RSY)	Combination	Max	Y	0.003233	321	-1.1	26.74	9.6
story 3	1.2(DL+LL+RSY)	Combination	Min	X	0.001543	48	61	45.91	9.6
story 3	1.2(DL+LL+RSY)	Combination	Min	Y	0.002873	321	-1.1	26.74	9.6
story 3	1.2(DL+LL+RSY)	Combination	Max	X	0.001593	48	61	45.91	9.6
story 3	1.2(DL+LL+RSY)	Combination	Max	Y	0.003233	321	-1.1	26.74	9.6
story 3	1.2(DL+LL+RSY)	Combination	Min	X	0.001543	48	61	45.91	9.6
story 3	1.2(DL+LL+RSY)	Combination	Min	Y	0.002873	321	-1.1	26.74	9.6
story 3	1.5(DL+EQX)	Combination		X	0.00359	136	14.48	-0.12	9.6
story 3	1.5(DL+EQY)	Combination		Y	0.003393	87	69.38	13.95	9.6
story 3	1.5(DL+RSX)	Combination	Max	X	0.00299	136	14.48	-0.12	9.6
story 3	1.5(DL+RSX)	Combination	Max	Y	0.000531	321	-1.1	26.74	9.6
story 3	1.5(DL+RSX)	Combination	Min	X	0.003065	144	54.33	0.23	9.6
story 3	1.5(DL+RSY)	Combination	Max	X	0.002001	48	61	45.91	9.6
story 3	1.5(DL+RSY)	Combination	Max	Y	0.004018	321	-1.1	26.74	9.6
story 3	1.5(DL+RSY)	Combination	Min	X	0.00192	48	61	45.91	9.6
story 3	1.5(DL+RSY)	Combination	Min	Y	0.003614	321	-1.1	26.74	9.6
story 3	1.5(DL+EQX)	Combination		X	0.003664	144	54.33	0.23	9.6
story 3	1.5(DL+EQY)	Combination		Y	0.003301	87	69.38	13.95	9.6
story 3	1.5(DL+RSX)	Combination	Max	X	0.00299	136	14.48	-0.12	9.6
story 3	1.5(DL+RSX)	Combination	Max	Y	0.000531	321	-1.1	26.74	9.6
story 3	1.5(DL+RSX)	Combination	Min	X	0.003065	144	54.33	0.23	9.6
story 3	1.5(DL+RSY)	Combination	Max	X	0.002001	48	61	45.91	9.6
story 3	1.5(DL+RSY)	Combination	Max	Y	0.004018	321	-1.1	26.74	9.6
story 3	1.5(DL+RSY)	Combination	Min	X	0.00192	48	61	45.91	9.6
story 3	1.5(DL+RSY)	Combination	Min	Y	0.003614	321	-1.1	26.74	9.6
story 3	DL+0.8LL+0.8EQX	Combination		X	0.001903	136	14.48	-0.12	9.6
story 3	DL+0.8LL+0.8EQY	Combination		Y	0.001822	87	69.38	13.95	9.6
story 3	DL+0.8LL+0.8RSX	Combination		Y	0.001822	87	69.38	13.95	9.6
story 3	DL+0.8LL-0.8EQX	Combination		X	0.001968	144	54.33	0.23	9.6
story 3	DL+0.8LL-0.8EQY	Combination		Y	0.001748	87	69.38	13.95	9.6
story 3	DL+0.8LL-0.8RSX	Combination	Max	X	0.001583	136	14.48	-0.12	9.6
story 3	DL+0.8LL-0.8RSX	Combination	Max	Y	0.000323	321	-1.1	26.74	9.6
story 3	DL+0.8LL-0.8RSX	Combination	Min	X	0.001648	144	54.33	0.23	9.6
story 3	DL+0.8LL+0.8RSY	Combination	Max	X	0.001068	48	61	45.91	9.6
story 3	DL+0.8LL+0.8RSY	Combination	Max	Y	0.002182	321	-1.1	26.74	9.6
story 3	DL+0.8LL+0.8RSY	Combination	Min	X	0.001023	48	61	45.91	9.6
story 3	DL+0.8LL+0.8RSY	Combination	Min	Y	0.001888	321	-1.1	26.74	9.6
story 3	DL+0.8LL-0.8RSY	Combination	Max	X	0.001068	48	61	45.91	9.6
story 3	DL+0.8LL-0.8RSY	Combination	Max	Y	0.002182	321	-1.1	26.74	9.6
story 3	DL+0.8LL-0.8RSY	Combination	Min	X	0.001023	48	61	45.91	9.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 3	DL+0.8LL-0.8RSY	Combination	Min	Y	0.001888	321	-1.1	26.74	9.6
story 3	DL+EQX	Combination		X	0.002393	136	14.48	-0.12	9.6
story 3	DL+EQY	Combination		Y	0.002262	87	69.38	13.95	9.6
story 3	DL+RSX	Combination	Max	X	0.001993	136	14.48	-0.12	9.6
story 3	DL+RSX	Combination	Max	Y	0.000354	321	-1.1	26.74	9.6
story 3	DL+RSX	Combination	Min	X	0.002043	144	54.33	0.23	9.6
story 3	DL+RSY	Combination	Max	X	0.001334	48	61	45.91	9.6
story 3	DL+RSY	Combination	Max	Y	0.002679	321	-1.1	26.74	9.6
story 3	DL+RSY	Combination	Min	X	0.00128	48	61	45.91	9.6
story 3	DL+RSY	Combination	Min	Y	0.002409	321	-1.1	26.74	9.6
story 3	DL-EQX	Combination		X	0.002443	144	54.33	0.23	9.6
story 3	DL-EQY	Combination		Y	0.0022	87	69.38	13.95	9.6
story 3	DL-RSX	Combination	Max	X	0.001993	136	14.48	-0.12	9.6
story 3	DL-RSX	Combination	Max	Y	0.000354	321	-1.1	26.74	9.6
story 3	DL-RSX	Combination	Min	X	0.002043	144	54.33	0.23	9.6
story 3	DL-RSY	Combination	Max	X	0.001334	48	61	45.91	9.6
story 3	DL-RSY	Combination	Max	Y	0.002679	321	-1.1	26.74	9.6
story 3	DL-RSY	Combination	Min	X	0.00128	48	61	45.91	9.6
story 3	DL-RSY	Combination	Min	Y	0.002409	321	-1.1	26.74	9.6
story 3	1.5(DL+LL)	Combination		Y	0.000226	46	0	30.02	9.6
story 3	ultimate envelope	Combination	Max	X	0.003604	136	14.48	-0.12	9.6
story 3	ultimate envelope	Combination	Max	Y	0.004018	321	-1.1	26.74	9.6
story 3	ultimate envelope	Combination	Min	X	0.003664	144	54.33	0.23	9.6
story 3	ultimate envelope	Combination	Min	Y	0.003695	321	-1.1	26.74	9.6
story 3	seismic weight	Combination		Y	0.00014	46	0	30.02	9.6
story 2	Dead	LinStatic		Y	6.5E-05	114	22.32	4.97	6.6
story 2	Live	LinStatic		X	9E-06	108	46.06	6.4	6.6
story 2	Live	LinStatic		Y	2.3E-05	114	22.32	4.97	6.6
story 2	Floor finish	LinStatic		X	1.2E-05	108	46.06	6.4	6.6
story 2	Floor finish	LinStatic		Y	2.9E-05	106	8.57	8.46	6.6
story 2	sunken filling	LinStatic		X	4E-06	31	14.48	33.91	6.6
story 2	sunken filling	LinStatic		Y	6E-06	321	-1.1	26.74	6.6
story 2	wall load	LinStatic		X	1.3E-05	131	6.06	0	6.6
story 2	wall load	LinStatic		Y	3.2E-05	114	22.32	4.97	6.6
story 2	seismic - X	LinStatic		X	0.002905	77	2.29	15.77	6.6
story 2	seismic - Y	LinStatic		Y	0.002674	16	54.18	45.45	6.6
story 2	RSX	LinRespSpec	Max	X	0.002612	77	2.29	15.77	6.6
story 2	RXY	LinRespSpec	Max	X	0.001506	48	61	45.91	6.6
story 2	RXY	LinRespSpec	Max	Y	0.003	321	-1.1	26.74	6.6
story 2	roof live	LinStatic		X	5E-06	48	61	45.91	6.6
story 2	roof live	LinStatic		Y	5E-06	321	-1.1	26.74	6.6
story 2	(DL+LL)	Combination		Y	0.000151	114	22.32	4.97	6.6
story 2	0.9DL+1.5EQX	Combination		X	0.004376	77	2.29	15.77	6.6
story 2	0.9DL-1.5EQX	Combination		X	0.004339	77	2.29	15.77	6.6
story 2	0.9DL+1.5RSX	Combination	Max	X	0.003937	77	2.29	15.77	6.6
story 2	0.9DL+1.5RSX	Combination	Min	X	0.003899	77	2.29	15.77	6.6
story 2	0.9DL-1.5RSX	Combination	Max	X	0.003937	77	2.29	15.77	6.6
story 2	0.9DL-1.5RSX	Combination	Min	X	0.003899	77	2.29	15.77	6.6
story 2	0.9DL+1.5EQY	Combination		Y	0.003975	16	54.18	45.45	6.6
story 2	0.9DL+1.5EQY	Combination		Y	0.004047	16	54.18	45.45	6.6
story 2	0.9DL+1.5RSY	Combination	Max	X	0.002268	48	61	45.91	6.6
story 2	0.9DL+1.5RSY	Combination	Max	Y	0.004585	321	-1.1	26.74	6.6
story 2	0.9DL+1.5RSY	Combination	Min	X	0.002258	1	69.27	45.8	6.6
story 2	0.9DL+1.5RSY	Combination	Min	Y	0.004416	321	-1.1	26.74	6.6
story 2	0.9DL-1.5RSY	Combination	Max	X	0.002268	48	61	45.91	6.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 2	0.9DL-1.5RSY	Combination	Max	Y	0.004585	321	-1.1	26.74	6.6
story 2	0.9DL-1.5RSY	Combination	Min	X	0.002258	1	69.27	45.8	6.6
story 2	0.9DL-1.5RSY	Combination	Min	Y	0.004416	321	-1.1	26.74	6.6
story 2	1.2(DL+LL+EQX)	Combination		X	0.003511	77	2.29	15.77	6.6
story 2	1.2(DL+LL+EQX)	Combination		X	0.003461	77	2.29	15.77	6.6
story 2	1.2(DL+LL+RSX)	Combination	Max	X	0.003159	77	2.29	15.77	6.6
story 2	1.2(DL+LL+RSX)	Combination	Max	Y	0.000451	77	2.29	15.77	6.6
story 2	1.2(DL+LL+RSX)	Combination	Min	X	0.00311	77	2.29	15.77	6.6
story 2	1.2(DL+LL+RSX)	Combination	Max	X	0.003159	77	2.29	15.77	6.6
story 2	1.2(DL+LL+RSX)	Combination	Max	Y	0.000451	77	2.29	15.77	6.6
story 2	1.2(DL+LL+RSX)	Combination	Min	X	0.00311	77	2.29	15.77	6.6
story 2	1.2(DL+LL+EQY)	Combination		Y	0.003264	16	54.18	45.45	6.6
story 2	1.2(DL+LL+EQY)	Combination		Y	0.003154	16	54.18	45.45	6.6
story 2	1.2(DL+LL+RSY)	Combination	Max	X	0.001812	48	61	45.91	6.6
story 2	1.2(DL+LL+RSY)	Combination	Max	Y	0.003724	321	-1.1	26.74	6.6
story 2	1.2(DL+LL+RSY)	Combination	Min	X	0.001816	1	69.27	45.8	6.6
story 2	1.2(DL+LL+RSY)	Combination	Min	Y	0.003477	321	-1.1	26.74	6.6
story 2	1.2(DL+LL+RSY)	Combination	Max	X	0.001812	48	61	45.91	6.6
story 2	1.2(DL+LL+RSY)	Combination	Max	Y	0.003724	321	-1.1	26.74	6.6
story 2	1.2(DL+LL+RSY)	Combination	Min	X	0.001816	1	69.27	45.8	6.6
story 2	1.2(DL+LL+RSY)	Combination	Min	Y	0.003477	321	-1.1	26.74	6.6
story 2	1.5(DL+EQX)	Combination		X	0.004389	77	2.29	15.77	6.6
story 2	1.5(DL+EQY)	Combination		Y	0.004071	16	54.18	45.45	6.6
story 2	1.5(DL+RSX)	Combination	Max	X	0.003949	77	2.29	15.77	6.6
story 2	1.5(DL+RSX)	Combination	Max	Y	0.000545	77	2.29	15.77	6.6
story 2	1.5(DL+RSX)	Combination	Min	X	0.003887	77	2.29	15.77	6.6
story 2	1.5(DL+RSY)	Combination	Max	X	0.002275	48	61	45.91	6.6
story 2	1.5(DL+RSY)	Combination	Max	Y	0.004642	321	-1.1	26.74	6.6
story 2	1.5(DL+RSY)	Combination	Min	X	0.002258	1	69.27	45.8	6.6
story 2	1.5(DL+RSY)	Combination	Min	Y	0.00436	321	-1.1	26.74	6.6
story 2	1.5(DL+EQX)	Combination		X	0.004326	77	2.29	15.77	6.6
story 2	1.5(DL+EQY)	Combination		Y	0.003951	16	54.18	45.45	6.6
story 2	1.5(DL+RSX)	Combination	Max	X	0.003949	77	2.29	15.77	6.6
story 2	1.5(DL+RSX)	Combination	Max	Y	0.000545	77	2.29	15.77	6.6
story 2	1.5(DL+RSX)	Combination	Min	X	0.003887	77	2.29	15.77	6.6
story 2	1.5(DL+RSY)	Combination	Max	X	0.002275	48	61	45.91	6.6
story 2	1.5(DL+RSY)	Combination	Max	Y	0.004642	321	-1.1	26.74	6.6
story 2	1.5(DL+RSY)	Combination	Min	X	0.002258	1	69.27	45.8	6.6
story 2	1.5(DL+RSY)	Combination	Min	Y	0.00436	321	-1.1	26.74	6.6
story 2	DL+0.8LL+0.8EQX	Combination		X	0.002345	77	2.29	15.77	6.6
story 2	DL+0.8LL+0.8EQY	Combination		Y	0.002184	16	54.18	45.45	6.6
story 2	DL+0.8LL+0.8RSX	Combination		Y	0.002184	16	54.18	45.45	6.6
story 2	DL+0.8LL+0.8EQX	Combination		X	0.002303	77	2.29	15.77	6.6
story 2	DL+0.8LL+0.8EQY	Combination		Y	0.002095	16	54.18	45.45	6.6
story 2	DL+0.8LL+0.8RSX	Combination	Max	X	0.00211	77	2.29	15.77	6.6
story 2	DL+0.8LL+0.8RSX	Combination	Max	Y	0.000321	77	2.29	15.77	6.6
story 2	DL+0.8LL+0.8RSX	Combination	Min	X	0.002069	77	2.29	15.77	6.6
story 2	DL+0.8LL+0.8RSY	Combination	Max	X	0.00121	48	61	45.91	6.6
story 2	DL+0.8LL+0.8RSY	Combination	Max	Y	0.002502	321	-1.1	26.74	6.6
story 2	DL+0.8LL+0.8RSY	Combination	Min	X	0.00121	1	69.27	45.8	6.6
story 2	DL+0.8LL+0.8RSY	Combination	Min	Y	0.002299	321	-1.1	26.74	6.6
story 2	DL+0.8LL+0.8RSY	Combination	Max	X	0.00121	48	61	45.91	6.6
story 2	DL+0.8LL+0.8RSY	Combination	Max	Y	0.002502	321	-1.1	26.74	6.6
story 2	DL+0.8LL+0.8RSY	Combination	Min	X	0.00121	1	69.27	45.8	6.6
story 2	DL+0.8LL+0.8RSY	Combination	Min	Y	0.002299	321	-1.1	26.74	6.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 2	DL+EQX	Combination		X	0.002926	77	2.29	15.77	6.6
story 2	DL+EQY	Combination		Y	0.002714	16	54.18	45.45	6.6
story 2	DL+RSX	Combination	Max	X	0.002633	77	2.29	15.77	6.6
story 2	DL+RSX	Combination	Max	Y	0.000364	77	2.29	15.77	6.6
story 2	DL+RSX	Combination	Min	X	0.002591	77	2.29	15.77	6.6
story 2	DL+RSY	Combination	Max	X	0.001516	48	61	45.91	6.6
story 2	DL+RSY	Combination	Max	Y	0.003094	321	-1.1	26.74	6.6
story 2	DL+RSY	Combination	Min	X	0.001505	1	69.27	45.8	6.6
story 2	DL+RSY	Combination	Min	Y	0.002907	321	-1.1	26.74	6.6
story 2	DL-EQX	Combination		X	0.002884	77	2.29	15.77	6.6
story 2	DL-EQY	Combination		Y	0.002634	16	54.18	45.45	6.6
story 2	DL-RSX	Combination	Max	X	0.002633	77	2.29	15.77	6.6
story 2	DL-RSX	Combination	Max	Y	0.000364	77	2.29	15.77	6.6
story 2	DL-RSX	Combination	Min	X	0.002591	77	2.29	15.77	6.6
story 2	DL-RSY	Combination	Max	X	0.001516	48	61	45.91	6.6
story 2	DL-RSY	Combination	Max	Y	0.003094	321	-1.1	26.74	6.6
story 2	DL-RSY	Combination	Min	X	0.001505	1	69.27	45.8	6.6
story 2	DL-RSY	Combination	Min	Y	0.002907	321	-1.1	26.74	6.6
story 2	1.5(DL+LL)	Combination		Y	0.000226	114	22.32	4.97	6.6
story 2	ultimate envelope	Combination	Max	X	0.004389	77	2.29	15.77	6.6
story 2	ultimate envelope	Combination	Max	Y	0.004642	321	-1.1	26.74	6.6
story 2	ultimate envelope	Combination	Min	X	0.004339	77	2.29	15.77	6.6
story 2	ultimate envelope	Combination	Min	Y	0.004416	321	-1.1	26.74	6.6
story 2	seismic weight	Combination		Y	0.000136	114	22.32	4.97	6.6
story 1	Dead	LinStatic		Y	6.2E-05	63	8.57	15.77	3.6
story 1	Live	LinStatic		X	1.3E-05	115	50.87	5.14	3.6
story 1	Live	LinStatic		Y	2.3E-05	40	8.57	18.94	3.6
story 1	Floor finish	LinStatic		Y	2.9E-05	40	8.57	18.94	3.6
story 1	sunken filling	LinStatic		X	8E-06	131	6.06	0	3.6
story 1	sunken filling	LinStatic		Y	6E-06	106	8.57	8.46	3.6
story 1	wall load	LinStatic		Y	3.3E-05	63	8.57	15.77	3.6
story 1	sesmic - X	LinStatic		X	0.003393	63	8.57	15.77	3.6
story 1	sesmic - Y	LinStatic		Y	0.003107	142	68.31	0.23	3.6
story 1	RSX	LinRespSpec	Max	X	0.003273	63	8.57	15.77	3.6
story 1	RXY	LinRespSpec	Max	X	0.002288	48	61	45.91	3.6
story 1	RXY	LinRespSpec	Max	Y	0.003741	1	69.27	45.8	3.6
story 1	roof live	LinStatic		X	4E-06	1	69.27	45.8	3.6
story 1	roof live	LinStatic		Y	6E-06	60	19.01	16.95	3.6
story 1	(DL+LL)	Combination		Y	0.00015	63	8.57	15.77	3.6
story 1	0.9DL+1.5EQX	Combination		X	0.005088	63	8.57	15.77	3.6
story 1	0.9DL+1.5EQX	Combination		X	0.005093	115	50.87	5.14	3.6
story 1	0.9DL+1.5RSX	Combination	Max	X	0.004921	104	56.16	8.69	3.6
story 1	0.9DL+1.5RSX	Combination	Min	X	0.004948	115	50.87	5.14	3.6
story 1	0.9DL+1.5RSX	Combination	Max	X	0.004921	104	56.16	8.69	3.6
story 1	0.9DL+1.5RSX	Combination	Min	X	0.004948	115	50.87	5.14	3.6
story 1	0.9DL+1.5EQY	Combination		Y	0.004635	1	69.27	45.8	3.6
story 1	0.9DL+1.5EQY	Combination		Y	0.004707	142	68.31	0.23	3.6
story 1	0.9DL+1.5RSY	Combination	Max	X	0.003444	48	61	45.91	3.6
story 1	0.9DL+1.5RSY	Combination	Max	Y	0.005627	1	69.27	45.8	3.6
story 1	0.9DL+1.5RSY	Combination	Min	X	0.00342	48	61	45.91	3.6
story 1	0.9DL+1.5RSY	Combination	Min	Y	0.005596	1	69.27	45.8	3.6
story 1	0.9DL+1.5RSY	Combination	Max	X	0.003444	48	61	45.91	3.6
story 1	0.9DL+1.5RSY	Combination	Max	Y	0.005627	1	69.27	45.8	3.6
story 1	0.9DL+1.5RSY	Combination	Min	X	0.00342	48	61	45.91	3.6
story 1	0.9DL+1.5RSY	Combination	Min	Y	0.005596	1	69.27	45.8	3.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 1	1.2(DL+LL+EQX)	Combination		X	0.004085	104	56.16	8.69	3.6
story 1	1.2(DL+LL+EQX)	Combination		X	0.004118	115	50.87	5.14	3.6
story 1	1.2(DL+LL+RSX)	Combination	Max	X	0.003952	104	56.16	8.69	3.6
story 1	1.2(DL+LL+RSX)	Combination	Min	X	0.004002	115	50.87	5.14	3.6
story 1	1.2(DL+LL+RSX)	Combination	Max	X	0.003952	104	56.16	8.69	3.6
story 1	1.2(DL+LL+RSX)	Combination	Min	X	0.004002	115	50.87	5.14	3.6
story 1	1.2(DL+LL+EQY)	Combination		Y	0.003801	142	68.31	0.23	3.6
story 1	1.2(DL+LL+EQY)	Combination		Y	0.003693	1	69.27	45.8	3.6
story 1	1.2(DL+LL+RSY)	Combination	Max	X	0.002761	48	61	45.91	3.6
story 1	1.2(DL+LL+RSY)	Combination	Max	Y	0.004517	142	68.31	0.23	3.6
story 1	1.2(DL+LL+RSY)	Combination	Min	X	0.00273	48	61	45.91	3.6
story 1	1.2(DL+LL+RSY)	Combination	Min	Y	0.004462	1	69.27	45.8	3.6
story 1	1.2(DL+LL+RSY)	Combination	Max	X	0.002761	48	61	45.91	3.6
story 1	1.2(DL+LL+RSY)	Combination	Max	Y	0.004517	142	68.31	0.23	3.6
story 1	1.2(DL+LL+RSY)	Combination	Min	X	0.00273	48	61	45.91	3.6
story 1	1.2(DL+LL+RSY)	Combination	Min	Y	0.004462	1	69.27	45.8	3.6
story 1	1.5(DL+EQX)	Combination		X	0.005101	104	56.16	8.69	3.6
story 1	1.5(DL+EQY)	Combination		Y	0.004738	142	68.31	0.23	3.6
story 1	1.5(DL+RSX)	Combination	Max	X	0.004935	104	56.16	8.69	3.6
story 1	1.5(DL+RSX)	Combination	Min	X	0.004982	115	50.87	5.14	3.6
story 1	1.5(DL+RSY)	Combination	Max	X	0.003451	48	61	45.91	3.6
story 1	1.5(DL+RSY)	Combination	Max	Y	0.005638	1	69.27	45.8	3.6
story 1	1.5(DL+RSY)	Combination	Min	X	0.003412	48	61	45.91	3.6
story 1	1.5(DL+RSY)	Combination	Min	Y	0.005585	1	69.27	45.8	3.6
story 1	1.5(DL+EQX)	Combination		X	0.005127	115	50.87	5.14	3.6
story 1	1.5(DL+EQY)	Combination		Y	0.004624	1	69.27	45.8	3.6
story 1	1.5(DL+RSX)	Combination	Max	X	0.004935	104	56.16	8.69	3.6
story 1	1.5(DL+RSX)	Combination	Min	X	0.004982	115	50.87	5.14	3.6
story 1	1.5(DL+RSY)	Combination	Max	X	0.003451	48	61	45.91	3.6
story 1	1.5(DL+RSY)	Combination	Max	Y	0.005638	1	69.27	45.8	3.6
story 1	1.5(DL+RSY)	Combination	Min	X	0.003412	48	61	45.91	3.6
story 1	1.5(DL+RSY)	Combination	Min	Y	0.005585	1	69.27	45.8	3.6
story 1	DL+0.8LL+0.8EQX	Combination		X	0.002728	104	56.16	8.69	3.6
story 1	DL+0.8LL+0.8EQY	Combination		Y	0.002544	142	68.31	0.23	3.6
story 1	DL+0.8LL+0.8RSX	Combination		Y	0.002544	142	68.31	0.23	3.6
story 1	DL+0.8LL+0.8EQX	Combination		X	0.002757	115	50.87	5.14	3.6
story 1	DL+0.8LL+0.8EQY	Combination		Y	0.002459	1	69.27	45.8	3.6
story 1	DL+0.8LL+0.8RSX	Combination	Max	X	0.002639	104	56.16	8.69	3.6
story 1	DL+0.8LL+0.8RSX	Combination	Min	X	0.00268	115	50.87	5.14	3.6
story 1	DL+0.8LL+0.8RSY	Combination	Max	X	0.001843	48	61	45.91	3.6
story 1	DL+0.8LL+0.8RSY	Combination	Max	Y	0.003022	142	68.31	0.23	3.6
story 1	DL+0.8LL+0.8RSY	Combination	Min	X	0.001817	48	61	45.91	3.6
story 1	DL+0.8LL+0.8RSY	Combination	Min	Y	0.002971	1	69.27	45.8	3.6
story 1	DL+0.8LL+0.8RSY	Combination	Max	X	0.001843	48	61	45.91	3.6
story 1	DL+0.8LL+0.8RSY	Combination	Max	Y	0.003022	142	68.31	0.23	3.6
story 1	DL+0.8LL+0.8RSY	Combination	Min	X	0.001817	48	61	45.91	3.6
story 1	DL+0.8LL+0.8RSY	Combination	Min	Y	0.002971	1	69.27	45.8	3.6
story 1	DL+EQX	Combination		X	0.003401	104	56.16	8.69	3.6
story 1	DL+EQY	Combination		Y	0.003159	142	68.31	0.23	3.6
story 1	DL+RSX	Combination	Max	X	0.00329	104	56.16	8.69	3.6
story 1	DL+RSX	Combination	Min	X	0.003322	115	50.87	5.14	3.6
story 1	DL+RSY	Combination	Max	X	0.002301	48	61	45.91	3.6
story 1	DL+RSY	Combination	Max	Y	0.003759	1	69.27	45.8	3.6
story 1	DL+RSY	Combination	Min	X	0.002275	48	61	45.91	3.6
story 1	DL+RSY	Combination	Min	Y	0.003723	1	69.27	45.8	3.6

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
story 1	DL-EQX	Combination		X	0.003418	115	50.87	5.14	3.6
story 1	DL-EQY	Combination		Y	0.003083	1	69.27	45.8	3.6
story 1	DL-RSX	Combination	Max	X	0.00329	104	56.16	8.69	3.6
story 1	DL-RSX	Combination	Min	X	0.003322	115	50.87	5.14	3.6
story 1	DL-RSY	Combination	Max	X	0.002301	48	61	45.91	3.6
story 1	DL-RSY	Combination	Max	Y	0.003759	1	69.27	45.8	3.6
story 1	DL-RSY	Combination	Min	X	0.002275	48	61	45.91	3.6
story 1	DL-RSY	Combination	Min	Y	0.003723	1	69.27	45.8	3.6
story 1	1.5(DL+LL)	Combination		Y	0.000226	63	8.57	15.77	3.6
story 1	ultimate envelope	Combination	Max	X	0.005101	104	56.16	8.69	3.6
story 1	ultimate envelope	Combination	Max	Y	0.005638	1	69.27	45.8	3.6
story 1	ultimate envelope	Combination	Min	X	0.005127	115	50.87	5.14	3.6
story 1	ultimate envelope	Combination	Min	Y	0.005596	1	69.27	45.8	3.6
story 1	seismic weight	Combination		Y	0.000136	63	8.57	15.77	3.6
plinth beam	Dead	LinStatic		X	3.9E-05	105	14.48	8.46	0
plinth beam	Dead	LinStatic		Y	3.8E-05	143	60.08	0.23	0
plinth beam	Live	LinStatic		X	1.7E-05	105	14.48	8.46	0
plinth beam	Live	LinStatic		Y	1.7E-05	143	60.08	0.23	0
plinth beam	Floor finish	LinStatic		X	2.3E-05	105	14.48	8.46	0
plinth beam	Floor finish	LinStatic		Y	2.1E-05	143	60.08	0.23	0
plinth beam	sunken filling	LinStatic		X	1.4E-05	131	6.06	0	0
plinth beam	sunken filling	LinStatic		Y	7E-06	142	68.31	0.23	0
plinth beam	wall load	LinStatic		X	1.8E-05	131	6.06	0	0
plinth beam	wall load	LinStatic		Y	2.1E-05	72	2.4	23.58	0
plinth beam	seismic - X	LinStatic		X	0.00227	596	61	45.01	0
plinth beam	seismic - Y	LinStatic		X	0.000432	16	54.18	45.45	0
plinth beam	seismic - Y	LinStatic		Y	0.002037	87	69.38	13.95	0
plinth beam	RSX	LinRespSpec	Max	X	0.002192	596	61	45.01	0
plinth beam	RXY	LinRespSpec	Max	X	0.001661	48	61	45.91	0
plinth beam	RXY	LinRespSpec	Max	Y	0.002522	87	69.38	13.95	0
plinth beam	roof live	LinStatic		X	3E-06	16	54.18	45.45	0
plinth beam	roof live	LinStatic		Y	4E-06	12	19.01	19.81	0
plinth beam	(DL+LL)	Combination		X	9.4E-05	105	14.48	8.46	0
plinth beam	(DL+LL)	Combination		Y	9.2E-05	143	60.08	0.23	0
plinth beam	0.9DL+1.5EQX	Combination		X	0.003441	596	61	45.01	0
plinth beam	0.9DL+1.5EQX	Combination		X	0.003378	17	54.18	43.93	0
plinth beam	0.9DL+1.5RSX	Combination	Max	X	0.003324	596	61	45.01	0
plinth beam	0.9DL+1.5RSX	Combination	Min	X	0.003298	121	14.48	4.34	0
plinth beam	0.9DL+1.5RSX	Combination	Max	X	0.003324	596	61	45.01	0
plinth beam	0.9DL+1.5RSX	Combination	Min	X	0.003298	121	14.48	4.34	0
plinth beam	0.9DL+1.5EQY	Combination		Y	0.003079	90	63.55	16.95	0
plinth beam	0.9DL+1.5EQY	Combination		Y	0.003074	26	65.49	34.71	0
plinth beam	0.9DL+1.5RSY	Combination	Max	X	0.002538	48	61	45.91	0
plinth beam	0.9DL+1.5RSY	Combination	Max	Y	0.003785	34	69.27	32.88	0
plinth beam	0.9DL+1.5RSY	Combination	Min	X	0.002446	48	61	45.91	0
plinth beam	0.9DL+1.5RSY	Combination	Min	Y	0.003787	87	69.38	13.95	0
plinth beam	0.9DL+1.5RSY	Combination	Max	X	0.002538	48	61	45.91	0
plinth beam	0.9DL+1.5RSY	Combination	Max	Y	0.003785	34	69.27	32.88	0
plinth beam	0.9DL+1.5RSY	Combination	Min	X	0.002446	48	61	45.91	0
plinth beam	0.9DL+1.5RSY	Combination	Min	Y	0.003787	87	69.38	13.95	0
plinth beam	1.2(DL+LL+EQX)	Combination		X	0.002782	1	69.27	45.8	0
plinth beam	1.2(DL+LL+EQX)	Combination		X	0.0027	17	54.18	43.93	0
plinth beam	1.2(DL+LL+RSX)	Combination	Max	X	0.002691	3	69.27	41.34	0
plinth beam	1.2(DL+LL+RSX)	Combination	Max	Y	0.000281	72	2.4	23.58	0
plinth beam	1.2(DL+LL+RSX)	Combination	Min	X	0.002663	10	14.48	0.89	0

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
plinth beam	1.2(DL+LL-RSX)	Combination	Max	X	0.002691	3	69.27	41.34	0
plinth beam	1.2(DL+LL-RSX)	Combination	Max	Y	0.000281	72	2.4	23.58	0
plinth beam	1.2(DL+LL-RSX)	Combination	Min	X	0.002663	10	14.48	0.89	0
plinth beam	1.2(DL+LL-EQY)	Combination		Y	0.002472	26	65.49	34.71	0
plinth beam	1.2(DL+LL-EQY)	Combination		Y	0.002487	90	63.55	16.95	0
plinth beam	1.2(DL+LL-RSY)	Combination	Max	X	0.002063	1	69.27	45.8	0
plinth beam	1.2(DL+LL-RSY)	Combination	Max	Y	0.003042	34	69.27	32.88	0
plinth beam	1.2(DL+LL-RSY)	Combination	Min	X	0.001934	16	54.18	45.45	0
plinth beam	1.2(DL+LL-RSY)	Combination	Min	Y	0.003031	87	69.38	13.95	0
plinth beam	1.2(DL+LL-RSY)	Combination	Max	X	0.002063	1	69.27	45.8	0
plinth beam	1.2(DL+LL-RSY)	Combination	Max	Y	0.003042	34	69.27	32.88	0
plinth beam	1.2(DL+LL-RSY)	Combination	Min	X	0.001934	16	54.18	45.45	0
plinth beam	1.2(DL+LL-RSY)	Combination	Min	Y	0.003031	87	69.38	13.95	0
plinth beam	1.5(DL+EQX)	Combination		X	0.00347	1	69.27	45.8	0
plinth beam	1.5(DL+EQY)	Combination		Y	0.003086	26	65.49	34.71	0
plinth beam	1.5(DL+RSX)	Combination	Max	X	0.003353	1	69.27	45.8	0
plinth beam	1.5(DL+RSX)	Combination	Max	Y	0.000336	72	2.4	23.58	0
plinth beam	1.5(DL+RSX)	Combination	Min	X	0.003319	10	14.48	0.89	0
plinth beam	1.5(DL+RSY)	Combination	Max	X	0.002571	1	69.27	45.8	0
plinth beam	1.5(DL+RSY)	Combination	Max	Y	0.003797	34	69.27	32.88	0
plinth beam	1.5(DL+RSY)	Combination	Min	X	0.002422	16	54.18	45.45	0
plinth beam	1.5(DL+RSY)	Combination	Min	Y	0.003789	87	69.38	13.95	0
plinth beam	1.5(DL-EQX)	Combination		X	0.003373	17	54.18	43.93	0
plinth beam	1.5(DL-EQY)	Combination		Y	0.0031	90	63.55	16.95	0
plinth beam	1.5(DL-RSX)	Combination	Max	X	0.003353	1	69.27	45.8	0
plinth beam	1.5(DL-RSX)	Combination	Max	Y	0.000336	72	2.4	23.58	0
plinth beam	1.5(DL-RSX)	Combination	Min	X	0.003319	10	14.48	0.89	0
plinth beam	1.5(DL-RSY)	Combination	Max	X	0.002571	1	69.27	45.8	0
plinth beam	1.5(DL-RSY)	Combination	Max	Y	0.003797	34	69.27	32.88	0
plinth beam	1.5(DL-RSY)	Combination	Min	X	0.002422	16	54.18	45.45	0
plinth beam	1.5(DL-RSY)	Combination	Min	Y	0.003789	87	69.38	13.95	0
plinth beam	DL+0.8LL+0.8EQX	Combination		X	0.001867	1	69.27	45.8	0
plinth beam	DL+0.8LL+0.8EQY	Combination		Y	0.001652	26	65.49	34.71	0
plinth beam	DL+0.8LL+0.8RSX	Combination		Y	0.001652	26	65.49	34.71	0
plinth beam	DL+0.8LL-0.8EQX	Combination		X	0.001799	17	54.18	43.93	0
plinth beam	DL+0.8LL-0.8EQY	Combination		Y	0.001665	90	63.55	16.95	0
plinth beam	DL+0.8LL-0.8RSX	Combination	Max	X	0.001809	3	69.27	41.34	0
plinth beam	DL+0.8LL-0.8RSX	Combination	Max	Y	0.000202	72	2.4	23.58	0
plinth beam	DL+0.8LL-0.8RSX	Combination	Min	X	0.001785	10	14.48	0.89	0
plinth beam	DL+0.8LL+0.8RSY	Combination	Max	X	0.001388	1	69.27	45.8	0
plinth beam	DL+0.8LL+0.8RSY	Combination	Max	Y	0.002032	34	69.27	32.88	0
plinth beam	DL+0.8LL+0.8RSY	Combination	Min	X	0.001282	16	54.18	45.45	0
plinth beam	DL+0.8LL+0.8RSY	Combination	Min	Y	0.002022	87	69.38	13.95	0
plinth beam	DL+0.8LL-0.8RSY	Combination	Max	X	0.001388	1	69.27	45.8	0
plinth beam	DL+0.8LL-0.8RSY	Combination	Max	Y	0.002032	34	69.27	32.88	0
plinth beam	DL+0.8LL-0.8RSY	Combination	Min	X	0.001282	16	54.18	45.45	0
plinth beam	DL+0.8LL-0.8RSY	Combination	Min	Y	0.002022	87	69.38	13.95	0
plinth beam	DL+EQX	Combination		X	0.002314	1	69.27	45.8	0
plinth beam	DL+EQY	Combination		Y	0.002057	26	65.49	34.71	0
plinth beam	DL+RSX	Combination	Max	X	0.002236	1	69.27	45.8	0
plinth beam	DL+RSX	Combination	Max	Y	0.000224	72	2.4	23.58	0
plinth beam	DL+RSX	Combination	Min	X	0.002213	10	14.48	0.89	0
plinth beam	DL+RSY	Combination	Max	X	0.001714	1	69.27	45.8	0
plinth beam	DL+RSY	Combination	Max	Y	0.002532	34	69.27	32.88	0
plinth beam	DL+RSY	Combination	Min	X	0.001614	16	54.18	45.45	0

Story	Output Case	Case Type	Step Type	Direction	Drift	Label	X m	Y m	Z m
plinth beam	DL+RSY	Combination	Min	Y	0.002526	87	69.38	13.95	0
plinth beam	DL-EQX	Combination		X	0.002249	17	54.18	43.93	0
plinth beam	DL-EQY	Combination		Y	0.002067	90	63.55	16.95	0
plinth beam	DL-RSX	Combination	Max	X	0.002236	1	69.27	45.8	0
plinth beam	DL-RSX	Combination	Max	Y	0.000224	72	2.4	23.58	0
plinth beam	DL-RSX	Combination	Min	X	0.002213	10	14.48	0.89	0
plinth beam	DL-RSY	Combination	Max	X	0.001714	1	69.27	45.8	0
plinth beam	DL-RSY	Combination	Max	Y	0.002532	34	69.27	32.88	0
plinth beam	DL-RSY	Combination	Min	X	0.001614	16	54.18	45.45	0
plinth beam	DL-RSY	Combination	Min	Y	0.002526	87	69.38	13.95	0
plinth beam	1.5(DL+LL)	Combination		X	0.00014	105	14.48	8.46	0
plinth beam	1.5(DL+LL)	Combination		Y	0.000139	143	60.08	0.23	0
plinth beam	ultimate envelope	Combination	Max	X	0.00347	1	69.27	45.8	0
plinth beam	ultimate envelope	Combination	Max	Y	0.003797	34	69.27	32.88	0
plinth beam	ultimate envelope	Combination	Min	X	0.003378	17	54.18	43.93	0
plinth beam	ultimate envelope	Combination	Min	Y	0.003789	87	69.38	13.95	0
plinth beam	seismic weight	Combination		X	8E-05	105	14.48	8.46	0
plinth beam	seismic weight	Combination		Y	7.9E-05	143	60.08	0.23	0

4.2 Modal Results

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

Case	Mode	Period sec	UX	UY	UZ	SumUX	SumUY	SumUZ	RX	RY	RZ	SumRX
Modal	1	1.638	0.9112	0.0005	0	0.9112	0.0005	0	4.051E-05	0.0862	0.0053	4.051E-05
Modal	2	1.509	0.0048	0.4345	0	0.916	0.135	0	0.0422	0.0003	0.4757	0.0423
Modal	3	1.366	0.0013	0.4712	0	0.9173	0.9062	0	0.0564	4.244E-05	0.4306	0.0986
Modal	4	0.481	0.0546	1.78E-05	0	0.9719	0.9063	0	0.0004	0.7799	0.0005	0.099
Modal	5	0.462	0.0002	0.0275	0	0.9721	0.9337	0	0.3671	0.0046	0.028	0.4662
Modal	6	0.402	0.0001	0.0348	0	0.9722	0.9685	0	0.3911	0.0015	0.0288	0.8573
Modal	7	0.341	0	0.0001	0	0.9722	0.9686	0	5.512E-06	4.751E-05	0.0002	0.8573
Modal	8	0.265	0.0004	0.0006	0	0.9726	0.9692	0	0.0053	0.0319	0.0002	0.8626
Modal	9	0.251	0.0099	0.0001	0	0.9825	0.9693	0	0.0002	0.0245	0.0002	0.8628
Modal	10	0.241	0.0001	0.003	0	0.9826	0.9723	0	0.0069	0.0002	0.0061	0.8697
Modal	11	0.236	6.161E-07	0.0009	0	0.9826	0.9732	0	0.0024	7.152E-07	0.0007	0.8721
Modal	12	0.214	4.362E-05	0.0064	0	0.9827	0.9796	0	0.0174	0.0002	0.0032	0.8895

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

SumRY	SumRZ
0.0862	0.0053
0.0865	0.481
0.0865	0.9116
0.8664	0.9121
0.8709	0.94
0.8724	0.9688
0.8725	0.969
0.8744	0.9693
0.8988	0.9694
0.8991	0.9755
0.8991	0.9762
0.8992	0.9794

DESIGN OF ISOLATED SQUARE FOOTING: (C84)

Load in kn (P)	4892	Breadth of pedestal	450
SBC in kn/m ²	250	Length of pedestal	825
Size of the footing required (B)	4.423573	Free end thickness	230
Net upward pressure (q)	249.2752	Size provided in m	4.43
Maximum bending moment @ face of the column (Mu)	3279.821	Size in feet	14.53
Depth required (d)	1170.477	Depth provided (d)	1250
K	3.498476		
Pt	0.956		
Ast in mm ²	7170		
Spacing of 10mm dia	48.526		
Spacing of 12mm dia	69.879		
Spacing of 16mm dia	124.225		

Check for one way shear:

Shear force (V)	1225.761		
Eff. Depth (d')	624.151		
Top width	3100		
Tv	0.633	Tc from table-19	0.646
Pt	0.9		Safe in SHEAR
Ast in mm ²	17413.83		
Spacing of 10mm dia	19.980		
Spacing of 12mm dia	28.772		
Spacing of 16mm dia	51.148		

Check for two way shear:

Punching shear (Vp)	6019.023		
Perimeter of the critical section	7550		
Eff. Depth (d')	957.0496		
Tv	0.832		
Tc	1.369	Punching Ratio	0.61

Check for transfer of load @ the column base:

Permissible bearing stress	27
Actual bearing stress	13.17

Safe in punching

Design of short column with bi axial bending:(C84)

Description	GF
Axial load in Kn	6882
Moment in Knm (Mux)	212
Moment in Knm (Muy)	138
Assumed length of column in mm (D)	750
Assumed breadth of column in mm (B)	380
Assumed % of steel	3.85
Grade of concrete	30
p/fck	0.128
d'/D	0.066
d'/B	0.131
$P_u/(f_{ck} \cdot B \cdot D)$	0.804
Referring to chart in SP-16	chart-48
Value from chart	0.06
Mux1 in Knm	384.75
Referring to chart in SP-16	chart-49
Value from chart	0.05
Muy1 in Knm	162.45
Referring to chart-63 of SP-16	
P_{uz}/A_g	27
Puz in Kn	7695
P_u/P_{uz}	0.894
Mux/Mux1	0.551
Muy/Muy1	0.849
Referring to chart-64 of SP-16	
Permissible Muy/Muy1	0.85
	safe and assumed % of steel is
Check	correct
Ast required	10972.5
Provide steel	
Dia of lateral ties:	
Dia of main rod provided	25
6mm	6mm
1/4 times Dia of main rod	06.25
Dia of lateral ties choosen	8mm
Spacing of lateral ties:	
16 times the dia of main rod	400
Least lateral dimension of column	380
Provide 8mm dia 2 legged lateral ties	
@	175 mm c/c

Design of Floor Slab:

Assume the slab thickness as 150 mm

$$\text{Dead load of slab (} 0.15 \times 25 \text{)} = 3.75 \text{ kn/m}^2$$

$$\text{Live load} = 2.00 \text{ kn/m}^2$$

$$\text{Partition wall load} = 1.00 \text{ kn/m}^2$$

$$\text{Floor finish load} = 1.00 \text{ kn/m}^2$$

$$7.75 \text{ kn/m}^2$$

$$\text{Say } w = 8.0 \text{ kn/m}^2$$

$$\text{Long span } L_y = 4.50 \text{ m}$$

$$\text{Short span } L_x = 3.28 \text{ m}$$

$$L_y / L_x = 1.37 < 2.0$$

To design as two way slab with one short edges as continuous & slab thickness as 125mm

$$\begin{aligned} \text{Positive moment @ mid span} &= 0.087 \times 1.5 \times 8 \times 3.28^2 \\ &= 11.23 \text{ knm} \end{aligned}$$

$$\begin{aligned} \text{Negative moment @ edges} &= 0.057 \times 1.5 \times 8 \times 3.28^2 \\ &= 7.36 \text{ knm} \end{aligned}$$

Referring to the table – 37 of SP – 16 and assuming the slab thickness as 125mm

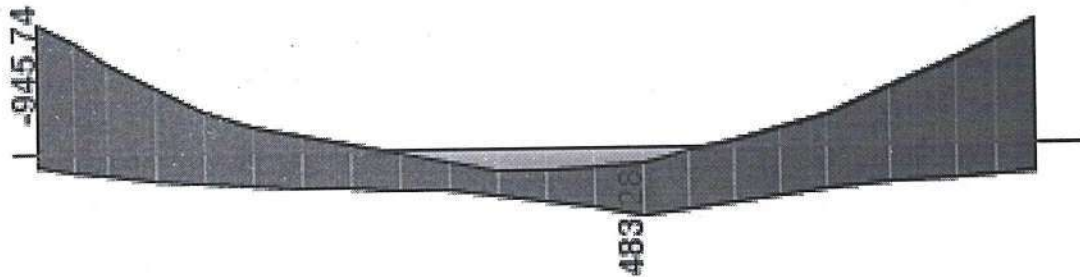
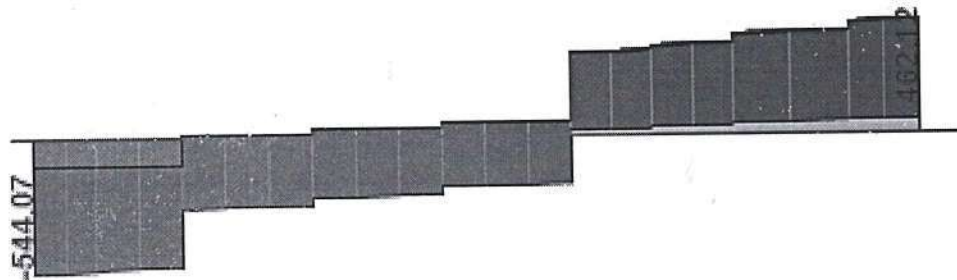
Provide 8mm dia @ 140mm c/c along shorter span and 8mm dia @ 160mm c/c along the longer span with alternate rods cranked @ 0.2 times of respective span.

Check for deflection:

$$\begin{aligned} \text{Permissible span / depth} &= 23.0 \times 1.3 \text{ (referring to chart 23)} \\ &= 29.90 \end{aligned}$$

$$\begin{aligned} \text{Actual deflection} &= 3280 / 110 \\ &= 29.82 < 29.90 \end{aligned}$$

Hence safe

Design of critical floor beam:Critical Bending Moment DiagramCritical Shear Force Diagram

Assume beam size as 230mm x 750mm

Max factored B.M @ top of support = 946kNm

$$K = 7.83, P_t = 2.079, P_c = 1.002$$

$$A_{st} = 3467 \text{ mm}^2 \quad A_{sc} = 1671 \text{ mm}^2$$

Therefore provide 6-25+2-20mm dia @ top of support

Max factored moment @ bottom = 484kNm

$$K = 4.00, P_t = 1.135$$

$$A_{st} = 1892 \text{ mm}^2$$

Therefore provide 3-20+3-20mm dia @ bottom

Factored shear force @ support = 545kN

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$$V_{us} = 545000 - (0.86 \times 230 \times 725)$$

$$V_{us}/d = 5.54 \text{ kn/cm}$$

Referring to Table – 62 of SP-16, provide 8mm dia stirrups @ 70mm c/c

end of report


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