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S.NAGESH, M.A.SC., F.I.E.,
CONSULTING ENGINEER & REGD. VALUER

Date : 22-07-26

STABILITY CERTIFICATE

The detailed engineering and structure design of the proposed building comprising of **Basement + Stilt Floor + 14 Floors (104 Dwelling Units– Ht. 46.88m)** at **Plot No. 437,** Survey Nos. **194/1A2, 194/1B, 194/3A2, 195/4A1B, 195/4A2, 195/4B1B & 195/4B2 at Morais City Extension-I, Keelakurichi Village & Panchayat, Thiruverumbur Panchayat Union, Thiruverumbur Taluk, Tiruchirappalli District** has been done by me/us based on the report of geotechnical investigation (soil test) done by **Dr. B.N. KRISHNASWAMI** Report No.**27** Dated **November - 2022** 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 have checked various parameters and found that the proposed building would be safe.

3. I further certify that:

(i) The minimum grade of concrete is M30 for column & M25 for all other structural elements.

(ii) The design and analysis has been done using the code of practice for plain and reinforced concrete as per IS 456, design loads as per IS Codes No IS : 875 (Part – 1) – 1987 & IS : 875 (Part 2) – 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.

Stamp and Signature

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PROPOSED BUILDING COMPRISING OF BASEMENT + STILT FLOOR + 14 FLOORS (104 DWELLING UNITS – Ht. 46.88m) AT PLOT NO. 437, SURVEY NOS. 194/1A2, 194/1B, 194/3A2, 195/4A1B, 195/4A2, 195/4B1B & 195/4B2 AT MORAIS CITY EXTENSION-I, KEELAKURICHI VILLAGE & PANCHAYAT, THIRUVERUMBUR PANCHAYAT UNION, THIRUVERUMBUR TALUK, TIRUCHIRAPPALLI DISTRICT

APARTMENT BUILDING - Structural Design Report

FEBRUARY 2026

STRUCTURAL CONSULTANT

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1 Loads

This chapter provides loading information as applied to the model.

1.1 Load Patterns

Table 1.1 - Load Pattern Definitions

Name	Is Auto Load	Type	Self Weight Multiplier	Auto Load
~LLRF	Yes	Other	0	
BW	No	Dead	0	
Dead	No	Dead	1	
EQX	No	Seismic	0	IS 1893:2016
EQX(1/3)	Yes	Seismic	0	IS 1893:2016
EQX(2/3)	Yes	Seismic	0	IS 1893:2016
EQX(3/3)	Yes	Seismic	0	IS 1893:2016
EQY	No	Seismic	0	IS 1893:2016
EQY(1/3)	Yes	Seismic	0	IS 1893:2016
EQY(2/3)	Yes	Seismic	0	IS 1893:2016
EQY(3/3)	Yes	Seismic	0	IS 1893:2016
Live	No	Live	0	
SDL	No	Dead	0	
Temp	No	Temperature	0	
WINDX	No	Wind	0	Indian IS 875:2015
WINDX(1/2)	Yes	Wind	0	Indian IS 875:2015
WINDX(2/2)	Yes	Wind	0	Indian IS 875:2015
WINDY	No	Wind	0	Indian IS 875:2015

1.2 Auto Wind Loading

Table 1.2 - Load Pattern Definitions - Auto Wind - Indian IS 875 2015 (Part 1 of 3)

Name	Exposure Set	Is Auto Load	Exposure Source	Top Story	Bottom Story	Include Parapet	Parapet Height m	Cp Windward	Cp Leeward	Wind Speed meter/sec
WINDX	1	No	Diaphragms	ROOF	GF	Yes	1.2	0.8	0.5	33
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	1	No								
WINDX	2	No								
WINDX	2	No								
WINDX	2	No								
WINDX	2	No								
WINDX	2	No								
WINDX	2	No								
WINDX	2	No								
WINDX	2	No								
WINDX	2	No								
WINDX	2	No								
WINDX(1/2)	1	Yes	Diaphragms	ROOF	GF	Yes	1.2	0.8	0.5	33

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Name	Exposure Set	Is Auto Load	Exposure Source	Top Story	Bottom Story	Include Parapet	Parapet Height m	Cp Windward	Cp Leeward	Wind Speed meter/sec
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(1/2)	1	Yes								
WINDX(2/2)	1	Yes	Diaphragms	ROOF	GF	Yes	1.2	0.8	0.5	33
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDX(2/2)	1	Yes								
WINDY	1	No	Diaphragms	ROOF	GF	Yes	1.2	0.8	0.5	33
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								
WINDY	1	No								

Table 1.2 - Load Pattern Definitions - Auto Wind - Indian IS 875 2015 (Part 2 of 3)

Name	Exposure Set	Terrain Category	Importance Factor	Risk Coefficient	Topography	Width Type	Direction Angle deg	Story
WINDX	1	2	1.00	1	1	Auto	0	ROOF
WINDX	1							13F
WINDX	1							12F
WINDX	1							11F
WINDX	1							10F
WINDX	1							9F
WINDX	1							8F
WINDX	1							7F
WINDX	1							6F

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Name	Exposure Set	Terrain Category	Importance Factor	Risk Coefficient	Topography	Width Type	Direction Angle deg	Story
WINDX	1							5F
WINDX	1							4F
WINDX	1							3F
WINDX	1							2F
WINDX	1							1F
WINDX	1							GF
WINDX	2					Auto	270	MTY
WINDX	2							ROOF
WINDX	2							13F
WINDX	2							12F
WINDX	2							11F
WINDX	2							10F
WINDX	2							9F
WINDX	2							8F
WINDX	2							7F
WINDX	2							6F
WINDX	2							5F
WINDX(1/2)	1	2	1.00	1	1	Auto	0	ROOF
WINDX(1/2)	1							13F
WINDX(1/2)	1							12F
WINDX(1/2)	1							11F
WINDX(1/2)	1							10F
WINDX(1/2)	1							9F
WINDX(1/2)	1							8F
WINDX(1/2)	1							7F
WINDX(1/2)	1							6F
WINDX(1/2)	1							5F
WINDX(1/2)	1							4F
WINDX(1/2)	1							3F
WINDX(1/2)	1							2F
WINDX(1/2)	1							1F
WINDX(1/2)	1							GF
WINDX(2/2)	1	2	1.00	1	1	Auto	270	ROOF
WINDX(2/2)	1							13F
WINDX(2/2)	1							12F
WINDX(2/2)	1							11F
WINDX(2/2)	1							10F
WINDX(2/2)	1							9F
WINDX(2/2)	1							8F
WINDX(2/2)	1							7F
WINDX(2/2)	1							6F
WINDX(2/2)	1							5F
WINDX(2/2)	1							4F
WINDX(2/2)	1							3F
WINDX(2/2)	1							2F
WINDX(2/2)	1							1F
WINDX(2/2)	1							GF
WINDY	1	2	1.00	1	1	Auto	90270	ROOF
WINDY	1							13F
WINDY	1							12F
WINDY	1							11F
WINDY	1							10F
WINDY	1							9F
WINDY	1							8F
WINDY	1							7F
WINDY	1							6F
WINDY	1							5F
WINDY	1							4F
WINDY	1							3F

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Name	Exposure Set	Terrain Category	Importance Factor	Risk Coefficient	Topography	Width Type	Direction Angle deg	Story
WINDY	1							2F
WINDY	1							1F
WINDY	1							GF

Table 1.2 - Load Pattern Definitions - Auto Wind - Indian IS 875 2015 (Part 3 of 3)

Name	Exposure Set	Diaphragm	Width m	Depth m	X m	Y m
WINDX	1	D15	25.165	39.92	19.96	12.5825
WINDX	1	D14	25.165	39.92	19.96	12.5825
WINDX	1	D13	25.165	39.92	19.96	12.5825
WINDX	1	D12	25.165	39.92	19.96	12.5825
WINDX	1	D11	25.165	39.92	19.96	12.5825
WINDX	1	D10	25.165	39.92	19.96	12.5825
WINDX	1	D9	25.165	39.92	19.96	12.5825
WINDX	1	D8	25.165	39.92	19.96	12.5825
WINDX	1	D7	25.165	39.92	19.96	12.5825
WINDX	1	D6	25.165	39.92	19.96	12.5825
WINDX	1	D5	25.165	39.92	19.96	12.5825
WINDX	1	D4	25.165	39.92	19.96	12.5825
WINDX	1	D3	25.165	39.92	19.96	12.5825
WINDX	1	D2	25.165	39.92	19.96	12.5825
WINDX	1	D1	37.4	51.995	21.2225	14.2
WINDX	2	D11	7.5	4.3424	3.75	12.4388
WINDX	2	D10	29.65	14.61	14.825	7.305
WINDX	2	D9	29.65	14.61	14.825	7.305
WINDX	2	D8	29.65	14.61	14.825	7.305
WINDX	2	D7	29.65	14.61	14.825	7.305
WINDX	2	D6	29.65	14.61	14.825	7.305
WINDX	2	D5	29.65	14.61	14.825	7.305
WINDX	2	D4	29.65	14.61	14.825	7.305
WINDX	2	D3	29.65	14.61	14.825	7.305
WINDX	2	D2	29.65	14.61	14.825	7.305
WINDX	2	D1	22.2	8.71	11.1	10.255
WINDX(1/2)	1	D15	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D14	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D13	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D12	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D11	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D10	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D9	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D8	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D7	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D6	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D5	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D4	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D3	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D2	25.165	39.92	19.96	12.5825
WINDX(1/2)	1	D1	37.4	51.995	21.2225	14.2
WINDX(2/2)	1	D15	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D14	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D13	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D12	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D11	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D10	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D9	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D8	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D7	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D6	39.92	25.165	19.96	12.5825

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Name	Exposure Set	Diaphragm	Width m	Depth m	X m	Y m
WINDX(2/2)	1	D5	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D4	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D3	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D2	39.92	25.165	19.96	12.5825
WINDX(2/2)	1	D1	51.995	37.4	21.2225	14.2
WINDY	1	D15	39.92	25.165	19.96	12.5825
WINDY	1	D14	39.92	25.165	19.96	12.5825
WINDY	1	D13	39.92	25.165	19.96	12.5825
WINDY	1	D12	39.92	25.165	19.96	12.5825
WINDY	1	D11	39.92	25.165	19.96	12.5825
WINDY	1	D10	39.92	25.165	19.96	12.5825
WINDY	1	D9	39.92	25.165	19.96	12.5825
WINDY	1	D8	39.92	25.165	19.96	12.5825
WINDY	1	D7	39.92	25.165	19.96	12.5825
WINDY	1	D6	39.92	25.165	19.96	12.5825
WINDY	1	D5	39.92	25.165	19.96	12.5825
WINDY	1	D4	39.92	25.165	19.96	12.5825
WINDY	1	D3	39.92	25.165	19.96	12.5825
WINDY	1	D2	39.92	25.165	19.96	12.5825
WINDY	1	D1	51.995	37.4	21.2225	14.2

1.3 Auto Seismic Loading

Table 1.3 - Load Pattern Definitions - Auto Seismic - IS 1893 2016 (Part 1 of 3)

Name	Period Used sec	Coeff Used	Weight Used tonf	Base Shear tonf	Is Auto Load	X Dir?	X Dir Plus Ecc?	X Dir Minus Ecc?	Y Dir?	Y Dir Plus Ecc?	Y Dir Minus Ecc?
EQX					No	Yes	Yes	Yes	No	No	No
EQX(1/3)	7.518	0.007	14024.60878	98.1723	Yes	Yes	No	No	No	No	No
EQX(2/3)	7.518	0.007	14024.60878	98.1723	Yes	No	Yes	No	No	No	No
EQX(3/3)	7.518	0.007	14024.60878	98.1723	Yes	No	No	Yes	No	No	No
EQY					No	No	No	No	Yes	Yes	Yes
EQY(1/3)	2.302	0.007	14024.60878	98.1723	Yes	No	No	No	Yes	No	No
EQY(2/3)	2.302	0.007	14024.60878	98.1723	Yes	No	No	No	No	Yes	No
EQY(3/3)	2.302	0.007	14024.60878	98.1723	Yes	No	No	No	No	No	Yes

Table 1.3 - Load Pattern Definitions - Auto Seismic - IS 1893 2016 (Part 2 of 3)

Name	Period Used sec	Coeff Used	Weight Used tonf	Base Shear tonf	Ecc Ratio	Top Story	Bottom Story	Period Type	Z	Site Type
EQX					0.05	ROOF	1F	Program Calculated	0.1	I
EQX(1/3)	7.518	0.007	14024.60878	98.1723	0.05	ROOF	1F	Program Calculated	0.1	I
EQX(2/3)	7.518	0.007	14024.60878	98.1723	0.05	ROOF	1F	Program Calculated	0.1	I
EQX(3/3)	7.518	0.007	14024.60878	98.1723	0.05	ROOF	1F	Program Calculated	0.1	I
EQY					0.05	ROOF	1F	Program Calculated	0.1	I
EQY(1/3)	2.302	0.007	14024.60878	98.1723	0.05	ROOF	1F	Program Calculated	0.1	I
EQY(2/3)	2.302	0.007	14024.60878	98.1723	0.05	ROOF	1F	Program Calculated	0.1	I
EQY(3/3)	2.302	0.007	14024.60878	98.1723	0.05	ROOF	1F	Program Calculated	0.1	I

Table 1.3 - Load Pattern Definitions - Auto Seismic - IS 1893 2016 (Part 3 of 3)

Name	Period Used sec	Coeff Used	Weight Used tonf	Base Shear tonf	I	
EQX					1.2	
EQX(1/3)	7.518	0.007	14024.60878	98.1723	1.2	4
EQX(2/3)	7.518	0.007	14024.60878	98.1723	1.2	
EQX(3/3)	7.518	0.007	14024.60878	98.1723	1.2	4
EQY					1.2	4

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Name	Period Used sec	Coeff Used	Weight Used tonf	Base Shear tonf	I	R
EQY(1/3)	2.302	0.007	14024.60878	98.1723	1.2	4
EQY(2/3)	2.302	0.007	14024.60878	98.1723	1.2	4
EQY(3/3)	2.302	0.007	14024.60878	98.1723	1.2	4

IS 1893:2016 Auto Seismic Load Calculation

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

Direction and Eccentricity

Direction = Multiple

Eccentricity Ratio = 5% for all diaphragms

Structural Period

Period Calculation Method = Program Calculated

Factors and Coefficients

Seismic Zone Factor, Z [IS Table 3]

Response Reduction Factor, R [IS Table 9]

Z=0.1

Importance Factor, I [IS Table 8]

Site Type [IS Table 1] = I

Seismic Response

Spectral Acceleration Coefficient, S_a/g [IS 6.4.2] $<S_{a>/<g>=0.25}$ $<S_{a>/<g>=0.25}$

Equivalent Lateral Forces

Seismic Coefficient, A_h [IS 6.4.2] $Ah=<Z<I><<S_{a>/<g>>>/<2<R>>}$

Calculated Base Shear

Direction	Period Used (sec)	W (tonf)	V_b (tonf)
X	7.518	14024.60878	98.17226
X + Ecc. Y	7.518	14024.60878	98.17226
X - Ecc. Y	7.518	14024.60878	98.17226

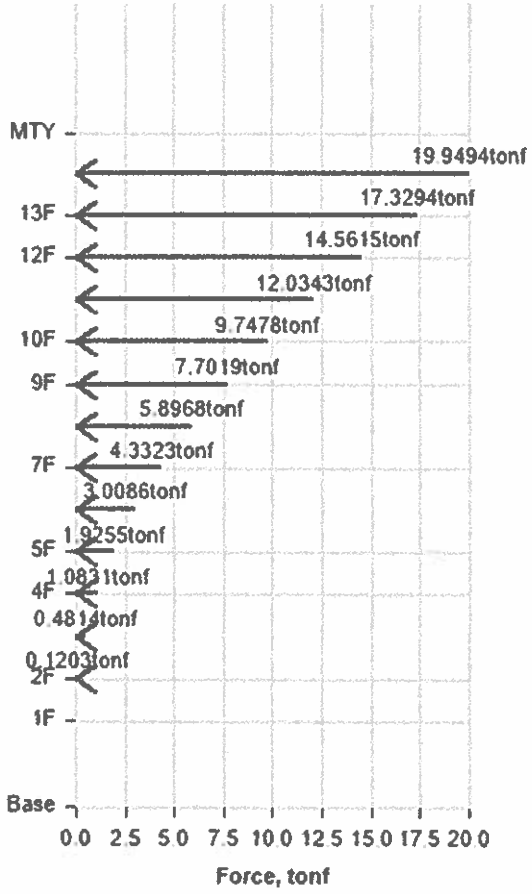
Applied Story Forces

Story	Elevation	X-Dir	Y-Dir
	m	tonf	tonf
MTY	50.37	0	0
ROOF	47.37	19.9494	0
13F	44.22	17.3294	0
12F	41.07	14.5615	0
11F	37.92	12.0343	0

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Story	Elevation	X-Dir	Y-Dir
	m	tonf	tonf
10F	34.77	9.7478	0
9F	31.62	7.7019	0
8F	28.47	5.8968	0
7F	25.32	4.3323	0
6F	22.17	3.0086	0
5F	19.02	1.9255	0
4F	15.87	1.0831	0
3F	12.72	0.4814	0
2F	9.57	0.1203	0
1F	6.42	0	0
GF	3.52	0	0
Base	0	0	0

Lateral Load to Stories - X



Set 1

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IS 1893:2016 Auto Seismic Load Calculation

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

Direction and Eccentricity

Direction = Multiple

Eccentricity Ratio = 5% for all diaphragms

Structural Period

Period Calculation Method = Program Calculated

Factors and Coefficients

Seismic Zone Factor, Z [IS Table 3] Z=0.1

Response Reduction Factor, R [IS Table 9]

Importance Factor, I [IS Table 8]

Site Type [IS Table 1] = I

Seismic Response

Spectral Acceleration Coefficient, S_a/g [IS 6.4.2] <Sa>/<g>=<1>/<T> <Sa>/<g>=0.434421

Equivalent Lateral Forces

Seismic Coefficient, A_h [IS 6.4.2] Ah=<Z<I><<Sa>/<g>>>/<2<R>>

Calculated Base Shear

Direction	Period Used (sec)	W (tonf)	V_b (tonf)
Y	2.302	14024.60878	98.17226
Y + Ecc. X	2.302	14024.60878	98.17226
Y - Ecc. X	2.302	14024.60878	98.17226

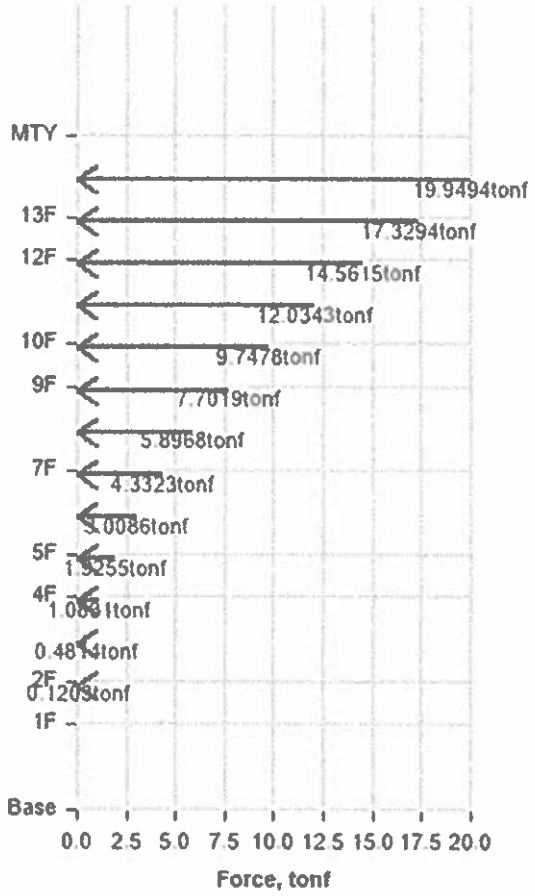
Applied Story Forces

Story	Elevation	X-Dir	Y-Dir
	m	tonf	tonf
MTY	50.37	0	0
ROOF	47.37	0	19.9494
13F	44.22	0	17.3294
12F	41.07	0	14.5615
11F	37.92	0	12.0343
10F	34.77	0	9.7478
9F	31.62	0	7.7019
8F	28.47	0	5.8968
7F	25.32	0	4.3323
6F	22.17	0	3.0086
5F	19.02	0	1.9255
4F	15.87	0	1.0831
3F	12.72	0	0.4814

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Story	Elevation	X-Dir	Y-Dir
	m	tonf	tonf
2F	9.57	0	0.1203
1F	6.42	0	0
GF	3.52	0	0
Base	0	0	0

Lateral Load to Stories - Y



Set 1

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1.4 Functions

1.4.1 Response Spectrum Functions

Table 1.4 - Functions - Response Spectrum - IS1893 2016

Name	Period sec	Value	Seismic Zone	I	Soil Type	R	Damping Ratio
Func1	0	0.015	II	1.2	I	4	0.05
Func1	0.1	0.0375					
Func1	0.4	0.0375					
Func1	0.6	0.025					
Func1	0.8	0.01875					
Func1	1	0.015					
Func1	1.2	0.0125					
Func1	1.4	0.010714					
Func1	1.6	0.009375					
Func1	1.8	0.008333					
Func1	2	0.0075					
Func1	2.5	0.006					
Func1	3	0.005					
Func1	3.5	0.004286					
Func1	4	0.00375					
Func1	4.5	0.00375					
Func1	5	0.00375					
Func1	5.5	0.00375					
Func1	6	0.00375					
Func1	6.5	0.00375					
Func1	7	0.00375					
Func1	7.5	0.00375					
Func1	8	0.00375					
Func1	8.5	0.00375					
Func1	9	0.00375					
Func1	9.5	0.00375					
Func1	10	0.00375					

1.5 Load Combinations

Table 1.5 - Load Combination Definitions

Name	Type	Is Auto	Load Name	SF	Notes
Comb1	Linear Add	No	Live	1	
Comb1			SDL	1	
Comb1			Dead	1	
Comb1			BW	1	
Comb1			TEMP	1	
DWalS1	Linear Add	Yes	Dead	1.5	Dead [Strength]
DWalS1			SDL	1.5	
DWalS1			BW	1.5	
DWalS2	Linear Add	Yes	Dead	1.5	Dead + Live [Strength]
DWalS2			Live	1.5	
DWalS2			SDL	1.5	
DWalS2			BW	1.5	
DWalS3	Linear Add	Yes	Dead	1.2	Dead + Live + Wind + Snow [Strength]
DWalS3			Live	1.2	
DWalS3			SDL	1.2	
DWalS3			BW	1.2	
DWalS3			WX	1.2	
DWalS4	Linear Add	Yes	Dead	1.2	Dead + Live - Wind + Snow [Strength]
DWalS4			Live	1.2	
DWalS4			SDL	1.2	
DWalS4			BW	1.2	
DWalS4			WX	-1.2	

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Name	Type	Is Auto	Load Name	SF	Notes
DWalS5	Linear Add	Yes	Dead	1.2	Dead + Live + Wind + Snow [Strength]
DWalS5			Live	1.2	
DWalS5			SDL	1.2	
DWalS5			BW	1.2	
DWalS5			WY	1.2	
DWalS6	Linear Add	Yes	Dead	1.2	Dead + Live - Wind + Snow [Strength]
DWalS6			Live	1.2	
DWalS6			SDL	1.2	
DWalS6			BW	1.2	
DWalS6			WY	-1.2	
DWalS7	Linear Add	Yes	Dead	1.5	Dead + Wind [Strength]
DWalS7			SDL	1.5	
DWalS7			BW	1.5	
DWalS7			WX	1.5	
DWalS8	Linear Add	Yes	Dead	1.5	Dead - Wind [Strength]
DWalS8			SDL	1.5	
DWalS8			BW	1.5	
DWalS8			WX	-1.5	
DWalS9	Linear Add	Yes	Dead	1.5	Dead + Wind [Strength]
DWalS9			SDL	1.5	
DWalS9			BW	1.5	
DWalS9			WY	1.5	
DWalS10	Linear Add	Yes	Dead	1.5	Dead - Wind [Strength]
DWalS10			SDL	1.5	
DWalS10			BW	1.5	
DWalS10			WY	-1.5	
DWalS11	Linear Add	Yes	Dead	0.9	Dead (min) + Wind [Strength]
DWalS11			SDL	0.9	
DWalS11			BW	0.9	
DWalS11			WX	1.5	
DWalS12	Linear Add	Yes	Dead	0.9	Dead (min) - Wind [Strength]
DWalS12			SDL	0.9	
DWalS12			BW	0.9	
DWalS12			WX	-1.5	
DWalS13	Linear Add	Yes	Dead	0.9	Dead (min) + Wind [Strength]
DWalS13			SDL	0.9	
DWalS13			BW	0.9	
DWalS13			WY	1.5	
DWalS14	Linear Add	Yes	Dead	0.9	Dead (min) - Wind [Strength]
DWalS14			SDL	0.9	
DWalS14			BW	0.9	
DWalS14			WY	-1.5	
DWalS15	Linear Add	Yes	Dead	1.2	Dead + Live + Static Earthquake [Strength]
DWalS15			Live	1.2	
DWalS15			SDL	1.2	
DWalS15			BW	1.2	
DWalS15			EQX	1.2	
DWalS16	Linear Add	Yes	Dead	1.2	Dead + Live - Static Earthquake [Strength]
DWalS16			Live	1.2	
DWalS16			SDL	1.2	
DWalS16			BW	1.2	
DWalS16			EQX	-1.2	
DWalS17	Linear Add	Yes	Dead	1.2	Dead + Live + Static Earthquake [Strength]
DWalS17			Live	1.2	
DWalS17			SDL	1.2	
DWalS17			BW	1.2	
DWalS17			EQY	1.2	
DWalS18	Linear Add	Yes	Dead	1.2	Dead + Live - Static Earthquake [Strength]
DWalS18			Live	1.2	
DWalS18			SDL	1.2	

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Name	Type	Is Auto	Load Name	SF	Notes
DWalS18			BW	1.2	
DWalS18			EQY	-1.2	
DWalS19	Linear Add	Yes	Dead	1.5	Dead + Static Earthquake [Strength]
DWalS19			SDL	1.5	
DWalS19			BW	1.5	
DWalS19			EQX	1.5	
DWalS20	Linear Add	Yes	Dead	1.5	Dead - Static Earthquake [Strength]
DWalS20			SDL	1.5	
DWalS20			BW	1.5	
DWalS20			EQX	-1.5	
DWalS21	Linear Add	Yes	Dead	1.5	Dead + Static Earthquake [Strength]
DWalS21			SDL	1.5	
DWalS21			BW	1.5	
DWalS21			EQY	1.5	
DWalS22	Linear Add	Yes	Dead	1.5	Dead - Static Earthquake [Strength]
DWalS22			SDL	1.5	
DWalS22			BW	1.5	
DWalS22			EQY	-1.5	
DWalS23	Linear Add	Yes	Dead	0.9	Dead (min) + Static Earthquake [Strength]
DWalS23			SDL	0.9	
DWalS23			BW	0.9	
DWalS23			EQX	1.5	
DWalS24	Linear Add	Yes	Dead	0.9	Dead (min) - Static Earthquake [Strength]
DWalS24			SDL	0.9	
DWalS24			BW	0.9	
DWalS24			EQX	-1.5	
DWalS25	Linear Add	Yes	Dead	0.9	Dead (min) + Static Earthquake [Strength]
DWalS25			SDL	0.9	
DWalS25			BW	0.9	
DWalS25			EQY	1.5	
DWalS26	Linear Add	Yes	Dead	0.9	Dead (min) - Static Earthquake [Strength]
DWalS26			SDL	0.9	
DWalS26			BW	0.9	
DWalS26			EQY	-1.5	
DWalS27	Linear Add	Yes	Dead	1.2	Dead + Live + Response Spectrum [Strength]
DWalS27			Live	1.2	
DWalS27			SDL	1.2	
DWalS27			BW	1.2	
DWalS27			RESP-X	1.2	
DWalS28	Linear Add	Yes	Dead	1.2	Dead + Live + Response Spectrum [Strength]
DWalS28			Live	1.2	
DWalS28			SDL	1.2	
DWalS28			BW	1.2	
DWalS28			RESP-Y	1.2	
DWalS29	Linear Add	Yes	Dead	1.2	Dead + Live + Response Spectrum [Strength]
DWalS29			Live	1.2	
DWalS29			SDL	1.2	
DWalS29			BW	1.2	
DWalS30	Linear Add	Yes	Dead	1.5	Dead + Response Spectrum [Strength]
DWalS30			SDL	1.5	
DWalS30			BW	1.5	
DWalS30			RESP-X	1.5	
DWalS31	Linear Add	Yes	Dead	1.5	Dead + Response Spectrum [Strength]
DWalS31			SDL	1.5	
DWalS31			BW	1.5	
DWalS31			RESP-Y	1.5	
DWalS32	Linear Add	Yes	Dead	1.5	Dead + Response Spectrum [Strength]
DWalS32			SDL	1.5	
DWalS32			BW	1.5	
DWalS33	Linear Add	Yes	Dead	0.9	Dead (min) + Response Spectrum [Strength]

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Name	Type	Is Auto	Load Name	SF	Notes
DWalS33			SDL	0.9	
DWalS33			BW	0.9	
DWalS33			RESP-X	1.5	
DWalS34	Linear Add	Yes	Dead	0.9	Dead (min) + Response Spectrum [Strength]
DWalS34			SDL	0.9	
DWalS34			BW	0.9	
DWalS34			RESP-Y	1.5	
DWalS35	Linear Add	Yes	Dead	0.9	Dead (min) + Response Spectrum [Strength]
DWalS35			SDL	0.9	
DWalS35			BW	0.9	
EQ-1	Linear Add	No	Dead	1.2	
EQ-1			SDL	1.2	
EQ-1			BW	1.2	
EQ-1			Live	1.2	
EQ-1			RESP-X	1.2	
EQ-1			RESP-Y	0.36	
EQ-2	Linear Add	No	Dead	1.2	
EQ-2			SDL	1.2	
EQ-2			BW	1.2	
EQ-2			Live	1.2	
EQ-2			RESP-X	0.36	
EQ-2			RESP-Y	1.2	
EQ-3	Linear Add	No	Dead	1.5	
EQ-3			SDL	1.5	
EQ-3			BW	1.5	
EQ-3			Live	1.5	
EQ-3			RESP-X	1.5	
EQ-3			RESP-Y	0.45	
EQ-4	Linear Add	No	Dead	1.5	
EQ-4			SDL	1.5	
EQ-4			BW	1.5	
EQ-4			Live	1.5	
EQ-4			RESP-X	0.45	
EQ-4			RESP-Y	1.5	
EQ-5	Linear Add	No	Dead	0.9	
EQ-5			BW	0.9	
EQ-5			RESP-X	1.5	
EQ-5			RESP-Y	0.45	
EQ-5			SDL	0.9	
EQ-6	Linear Add	No	Dead	0.9	
EQ-6			BW	0.9	
EQ-6			RESP-X	0.45	
EQ-6			RESP-Y	1.5	
EQ-6			SDL	0.9	
UDConS1	Linear Add	No	Dead	1.5	Dead [Strength]
UDConS1			SDL	1.5	
UDConS1			BW	1.5	
UDConS2	Linear Add	No	Dead	1.5	Dead + Live [Strength]
UDConS2			Live	1.5	
UDConS2			SDL	1.5	
UDConS2			BW	1.5	
UDConS3	Linear Add	No	Dead	1.2	Dead + Live + Wind + Snow [Strength]
UDConS3			Live	1.2	
UDConS3			SDL	1.2	
UDConS3			BW	1.2	
UDConS3			WX	1.2	
UDConS4	Linear Add	No	Dead	1.2	Dead + Live - Wind + Snow [Strength]
UDConS4			Live	1.2	
UDConS4			SDL	1.2	
UDConS4			BW	1.2	

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Name	Type	Is Auto	Load Name	SF	Notes
UDConS4			WX	-1.2	
UDConS5	Linear Add	No	Dead	1.2	Dead + Live + Wind + Snow [Strength]
UDConS5			Live	1.2	
UDConS5			SDL	1.2	
UDConS5			BW	1.2	
UDConS5			WY	1.2	
UDConS6	Linear Add	No	Dead	1.2	Dead + Live - Wind + Snow [Strength]
UDConS6			Live	1.2	
UDConS6			SDL	1.2	
UDConS6			BW	1.2	
UDConS6			WY	-1.2	
UDConS7	Linear Add	No	Dead	1.5	Dead + Wind [Strength]
UDConS7			SDL	1.5	
UDConS7			BW	1.5	
UDConS7			WX	1.5	
UDConS8	Linear Add	No	Dead	1.5	Dead - Wind [Strength]
UDConS8			SDL	1.5	
UDConS8			BW	1.5	
UDConS8			WX	-1.5	
UDConS9	Linear Add	No	Dead	1.5	Dead + Wind [Strength]
UDConS9			SDL	1.5	
UDConS9			BW	1.5	
UDConS9			WY	1.5	
UDConS10	Linear Add	No	Dead	1.5	Dead - Wind [Strength]
UDConS10			SDL	1.5	
UDConS10			BW	1.5	
UDConS10			WY	-1.5	
UDConS11	Linear Add	No	Dead	0.9	Dead (min) + Wind [Strength]
UDConS11			SDL	0.9	
UDConS11			BW	0.9	
UDConS11			WX	1.5	
UDConS12	Linear Add	No	Dead	0.9	Dead (min) - Wind [Strength]
UDConS12			SDL	0.9	
UDConS12			BW	0.9	
UDConS12			WX	-1.5	
UDConS13	Linear Add	No	Dead	0.9	Dead (min) + Wind [Strength]
UDConS13			SDL	0.9	
UDConS13			BW	0.9	
UDConS13			WY	1.5	
UDConS14	Linear Add	No	Dead	0.9	Dead (min) - Wind [Strength]
UDConS14			SDL	0.9	
UDConS14			BW	0.9	
UDConS14			WY	-1.5	
UDConS15	Linear Add	No	Dead	1.2	Dead + Live + Static Earthquake [Strength]
UDConS15			Live	1.2	
UDConS15			SDL	1.2	
UDConS15			BW	1.2	
UDConS15			EQX	1.2	
UDConS16	Linear Add	No	Dead	1.2	Dead + Live - Static Earthquake [Strength]
UDConS16			Live	1.2	
UDConS16			SDL	1.2	
UDConS16			BW	1.2	
UDConS16			EQX	-1.2	
UDConS17	Linear Add	No	Dead	1.2	Dead + Live + Static Earthquake [Strength]
UDConS17			Live	1.2	
UDConS17			SDL	1.2	
UDConS17			BW	1.2	
UDConS17			EQY	1.2	
UDConS18	Linear Add	No	Dead	1.2	Dead + Live - Static Earthquake [Strength]
UDConS18			Live	1.2	

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Name	Type	Is Auto	Load Name	SF	Notes
UDConS18			SDL	1.2	
UDConS18			BW	1.2	
UDConS18			EQY	-1.2	
UDConS19	Linear Add	No	Dead	1.5	Dead + Static Earthquake [Strength]
UDConS19			SDL	1.5	
UDConS19			BW	1.5	
UDConS19			EQX	1.5	
UDConS20	Linear Add	No	Dead	1.5	Dead - Static Earthquake [Strength]
UDConS20			SDL	1.5	
UDConS20			BW	1.5	
UDConS20			EQX	-1.5	
UDConS21	Linear Add	No	Dead	1.5	Dead + Static Earthquake [Strength]
UDConS21			SDL	1.5	
UDConS21			BW	1.5	
UDConS21			EQY	1.5	
UDConS22	Linear Add	No	Dead	1.5	Dead - Static Earthquake [Strength]
UDConS22			SDL	1.5	
UDConS22			BW	1.5	
UDConS22			EQY	-1.5	
UDConS23	Linear Add	No	Dead	0.9	Dead (min) + Static Earthquake [Strength]
UDConS23			SDL	0.9	
UDConS23			BW	0.9	
UDConS23			EQX	1.5	
UDConS24	Linear Add	No	Dead	0.9	Dead (min) - Static Earthquake [Strength]
UDConS24			SDL	0.9	
UDConS24			BW	0.9	
UDConS24			EQX	-1.5	
UDConS25	Linear Add	No	Dead	0.9	Dead (min) + Static Earthquake [Strength]
UDConS25			SDL	0.9	
UDConS25			BW	0.9	
UDConS25			EQY	1.5	
UDConS26	Linear Add	No	Dead	0.9	Dead (min) - Static Earthquake [Strength]
UDConS26			SDL	0.9	
UDConS26			BW	0.9	
UDConS26			EQY	-1.5	
UDConS27	Linear Add	No	Dead	1.2	Dead + Live + Response Spectrum [Strength]
UDConS27			Live	1.2	
UDConS27			SDL	1.2	
UDConS27			BW	1.2	
UDConS27			RESP-X	1.2	
UDConS28	Linear Add	No	Dead	1.2	Dead + Live + Response Spectrum [Strength]
UDConS28			Live	1.2	
UDConS28			SDL	1.2	
UDConS28			BW	1.2	
UDConS28			RESP-Y	1.2	
UDConS29	Linear Add	No	Dead	1.5	Dead + Response Spectrum [Strength]
UDConS29			SDL	1.5	
UDConS29			BW	1.5	
UDConS29			RESP-X	1.5	
UDConS30	Linear Add	No	Dead	1.5	Dead + Response Spectrum [Strength]
UDConS30			SDL	1.5	
UDConS30			BW	1.5	
UDConS30			RESP-Y	1.5	
UDConS31	Linear Add	No	Dead	0.9	Dead (min) + Response Spectrum [Strength]
UDConS31			SDL	0.9	
UDConS31			BW	0.9	
UDConS31			RESP-X	1.5	
UDConS32	Linear Add	No	Dead	0.9	Dead (min) + Response Spectrum [Strength]
UDConS32			SDL	0.9	
UDConS32			BW	0.9	

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Name	Type	Is Auto	Load Name	SF	Notes
UDConS32			RESP-Y	1.5	

2 Analysis Results

This chapter provides analysis results.

2.1 Structure Results

Table 2.1 - Base Reactions (Part 1 of 2)

Output Case	Case Type	Step Type	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m	X m
Dead	LinStatic		-2.514E-06	0	11075.3243	141756.4769	-226668.2815	-49.0031	0
Live	LinStatic		-8.042E-07	0	3126.5464	39225.8876	-64283.6672	-15.6089	0
SDL	LinStatic		0	0	1749.7452	21938.9186	-35913.443	-8.995	0
BW	LinStatic		-1.043E-06	0	3720.278	46984.7903	-75642.5371	-19.993	0
EQX	LinStatic	Max	-98.1723	0	0	-35.6943	-5797.6798	1328.4114	0
EQX	LinStatic	Min	-98.1723	0	0	-42.7687	-5851.9081	1067.3305	0
EQY	LinStatic	Max	0	-98.1723	0	3995.9163	82.6324	-1753.4943	0
EQY	LinStatic	Min	0	-98.1723	0	3984.694	-3.3917	-2167.6548	0
WX	LinStatic	Max	0	182.6492	0	-32.6906	-55.2436	3641.6456	0
WX	LinStatic	Min	-115.7201	0	0	-5268.2049	-4753.2141	1408.992	0
WY	LinStatic		0	182.6492	0	-5268.2049	-55.2436	3641.6456	0
TEMP	LinStatic		0	0	0	0	0	0	0
RESP-X	LinRespSpec	Max	99.0848	9.9952	0	149.2386	3565.8217	1165.1991	0
RESP-Y	LinRespSpec	Max	6.3996	99.1049	0	2780.7381	112.8315	2297.4283	0
Comb1	Combination		-4.832E-06	0	19671.8939	249906.0735	-402507.9289	-93.6	0
UDConS1	Combination		-6.042E-06	0	24818.0213	316020.2789	-507336.3924	-116.9867	0
UDConS2	Combination		-7.249E-06	0	29507.8409	374859.1103	-603761.8933	-140.4001	0
UDConS3	Combination	Max	-5.956E-06	219.179	23606.2727	299848.0595	-483075.8069	4257.6546	0
UDConS3	Combination	Min	-138.8641	0	23606.2727	293565.4424	-488713.3716	1578.4703	0
UDConS4	Combination	Max	138.8641	0	23606.2727	306209.1341	-477305.6577	-1803.1104	0
UDConS4	Combination	Min	-5.641E-06	-219.179	23606.2727	299926.5169	-482943.2223	-4482.2948	0
UDConS5	Combination		-5.956E-06	219.179	23606.2727	293565.4424	-483075.8069	4257.6546	0
UDConS6	Combination		-5.642E-06	-219.179	23606.2727	306209.1341	-482943.2223	-4482.2948	0
UDConS7	Combination	Max	-6.239E-06	273.9738	24818.0213	315971.243	-507419.2578	5345.4817	0
UDConS7	Combination	Min	-173.5801	0	24818.0213	308117.9715	-514466.2136	1996.5013	0
UDConS8	Combination	Max	173.5801	0	24818.0213	323922.5862	-500206.5713	-2230.4747	0
UDConS8	Combination	Min	-5.846E-06	-273.9738	24818.0213	316069.3148	-507253.5271	-5579.4551	0
UDConS9	Combination		-6.239E-06	273.9738	24818.0213	308117.9715	-507419.2578	5345.4817	0
UDConS10	Combination		-5.846E-06	-273.9738	24818.0213	323922.5862	-507253.5271	-5579.4551	0
UDConS11	Combination	Max	-3.822E-06	273.9738	14890.8128	189563.1314	-304484.7008	5392.2764	0
UDConS11	Combination	Min	-173.5801	0	14890.8128	181709.86	-311531.6566	2043.2959	0
UDConS12	Combination	Max	173.5801	0	14890.8128	197514.4747	-297272.0143	-2183.68	0
UDConS12	Combination	Min	-3.429E-06	-273.9738	14890.8128	189661.2032	-304318.9701	-5532.6604	0
UDConS13	Combination		-3.822E-06	273.9738	14890.8128	181709.86	-304484.7008	5392.2764	0
UDConS14	Combination		-3.429E-06	-273.9738	14890.8128	197514.4747	-304318.9701	-5532.6604	0
UDConS15	Combination	Max	-117.8067	0	23606.2727	299844.455	-489966.7304	1481.7736	0
UDConS15	Combination	Min	-117.8067	0	23606.2727	299835.9658	-490031.8044	1168.4765	0
UDConS16	Combination	Max	117.8067	0	23606.2727	299938.6107	-475987.2249	-1393.1166	0
UDConS16	Combination	Min	117.8067	0	23606.2727	299930.1214	-476052.2989	-1706.4137	0
UDConS17	Combination	Max	-5.769E-06	-117.8067	23606.2727	304682.3878	-482910.3558	-2216.5132	0
UDConS17	Combination	Min	-6.134E-06	-117.8067	23606.2727	304668.921	-483013.5847	-2713.5059	0
UDConS18	Combination	Max	-5.464E-06	117.8067	23606.2727	295105.6554	-483005.4446	2488.8658	0
UDConS18	Combination	Min	-5.828E-06	117.8067	23606.2727	295092.1887	-483108.6735	1991.8731	0
UDConS19	Combination	Max	-147.2584	0	24818.0213	315966.7374	-516032.9121	1875.6304	0
UDConS19	Combination	Min	-147.2584	0	24818.0213	315956.1258	-516114.2547	1484.009	0
UDConS20	Combination	Max	147.2584	0	24818.0213	316084.4319	-498558.5302	-1717.9824	0
UDConS20	Combination	Min	147.2584	0	24818.0213	316073.8203	-498639.8728	-2109.6038	0
UDConS21	Combination	Max	-6.005E-06	-147.2584	24818.0213	316215.1551	-507212.4488	-2247.2282	0

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Output Case	Case Type	Step Type	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m	X m
UDConS21	Combination	Min	-6.461E-06	-147.2584	24818.0213	321997.3199	-507341.48	-3368.469	0
UDConS22	Combination	Max	-5.623E-06	147.2584	24818.0213	310043.2379	-507331.3049	3134.4956	0
UDConS22	Combination	Min	-6.079E-06	147.2584	24818.0213	310026.4044	-507460.341	2513.2548	0
UDConS23	Combination	Max	-147.2584	0	14890.8128	189558.6258	-313098.3551	1922.4251	0
UDConS23	Combination	Min	-147.2584	0	14890.8128	189548.0143	-313179.6977	1530.8037	0
UDConS24	Combination	Max	147.2584	0	14890.8128	189676.3204	-295623.9733	-1671.1878	0
UDConS24	Combination	Min	147.2584	0	14890.8128	189665.7088	-295705.3158	-2062.8091	0
UDConS25	Combination	Max	-3.588E-06	-147.2584	14890.8128	195606.0418	-304277.8869	-2700.4335	0
UDConS25	Combination	Min	-4.044E-06	-147.2584	14890.8128	195589.2083	-304406.9231	-3321.6743	0
UDConS26	Combination	Max	-3.206E-06	147.2584	14890.8128	183635.1263	-304396.7479	3181.2903	0
UDConS26	Combination	Min	-3.662E-06	147.2584	14890.8128	183618.2929	-304525.7841	2560.0495	0
UDConS27	Combination	Max	118.9017	11.9943	23606.2727	300066.3746	-478730.5286	1285.9188	0
UDConS27	Combination	Min	-118.9017	-11.9943	23606.2727	299708.2019	-487288.5007	-1510.5589	0
UDConS28	Combination	Max	7.6795	118.9258	23606.2727	303224.174	-482874.1169	2644.5939	0
UDConS28	Combination	Min	-7.6796	-118.9258	23606.2727	296550.4025	-483144.9124	-2869.234	0
UDConS29	Combination	Max	148.6272	14.9928	24818.0213	316244.1368	-501987.6598	1630.8119	0
UDConS29	Combination	Min	-148.6272	-14.9928	24818.0213	315796.4209	-512685.125	-1864.7853	0
UDConS30	Combination	Max	9.5994	148.6573	24818.0213	320191.3861	-507167.1452	3329.1558	0
UDConS30	Combination	Min	-9.5995	-148.6573	24818.0213	311849.1717	-507505.6397	-3563.1292	0
UDConS31	Combination	Max	148.6272	14.9928	14890.8128	189836.0253	-299053.1029	1677.6066	0
UDConS31	Combination	Min	-148.6272	-14.9928	14890.8128	189388.3094	-309750.5681	-1817.9906	0
UDConS32	Combination	Max	9.5994	148.6573	14890.8128	193783.2745	-304232.5882	3375.9505	0
UDConS32	Combination	Min	-9.5994	-148.6573	14890.8128	185441.0601	-304571.0827	-3516.3345	0
EQ-1	Combination	Max	121.2056	47.672	23606.2727	301067.4403	-478689.9092	2112.993	0
EQ-1	Combination	Min	-121.2056	-47.672	23606.2727	298707.1361	-487329.1201	-2337.6331	0
EQ-2	Combination	Max	43.3501	122.5241	23606.2727	303277.8999	-481590.421	3084.0656	0
EQ-2	Combination	Min	-43.3501	-122.5241	23606.2727	296496.6766	-484428.6083	-3288.7057	0
EQ-3	Combination	Max	151.507	59.59	29507.8409	376334.3004	-598362.3865	2641.2413	0
EQ-3	Combination	Min	-151.507	-59.59	29507.8409	373383.9202	-609161.4001	-2922.0414	0
EQ-4	Combination	Max	54.1876	153.1551	29507.8409	379097.3749	-601988.0263	3830.082	0
EQ-4	Combination	Min	-54.1876	-153.1551	29507.8409	370620.8457	-605535.7603	-4110.8821	0
EQ-5	Combination	Max	151.507	59.59	14890.8128	191087.3574	-299002.3287	2711.4493	0
EQ-5	Combination	Min	-151.507	-59.59	14890.8128	188136.9772	-309801.3422	-2851.8333	0
EQ-6	Combination	Max	54.1876	153.1551	14890.8128	193850.4319	-302627.9684	3900.29	0
EQ-6	Combination	Min	-54.1876	-153.1551	14890.8128	185373.9027	-306175.7025	-4040.6741	0
DWalS1	Combination		-6.042E-06	0	24818.0213	316020.2789	-507336.3924	-116.9867	0
DWalS2	Combination		-7.249E-06	0	29507.8409	374859.1103	-603761.8933	-140.4001	0
DWalS3	Combination	Max	-5.956E-06	219.179	23606.2727	299848.0595	-483075.8069	4257.6546	0
DWalS3	Combination	Min	-138.8641	0	23606.2727	293565.4424	-488713.3716	1578.4703	0
DWalS4	Combination	Max	138.8641	0	23606.2727	306209.1341	-477305.6577	-1803.1104	0
DWalS4	Combination	Min	-5.641E-06	-219.179	23606.2727	299926.5169	-482943.2223	-4482.2948	0
DWalS5	Combination		-5.956E-06	219.179	23606.2727	293565.4424	-483075.8069	4257.6546	0
DWalS6	Combination		-5.642E-06	-219.179	23606.2727	306209.1341	-482943.2223	-4482.2948	0
DWalS7	Combination	Max	-6.239E-06	273.9738	24818.0213	315971.243	-507419.2578	5345.4817	0
DWalS7	Combination	Min	-173.5801	0	24818.0213	308117.9715	-514466.2136	1996.5013	0
DWalS8	Combination	Max	173.5801	0	24818.0213	323922.5862	-500206.5713	-2230.4747	0
DWalS8	Combination	Min	-5.846E-06	-273.9738	24818.0213	316069.3148	-507253.5271	-5579.4551	0
DWalS9	Combination		-6.239E-06	273.9738	24818.0213	308117.9715	-507419.2578	5345.4817	0
DWalS10	Combination		-5.846E-06	-273.9738	24818.0213	323922.5862	-507253.5271	-5579.4551	0
DWalS11	Combination	Max	-3.822E-06	273.9738	14890.8128	189563.1314	-304484.7008	5392.2764	0
DWalS11	Combination	Min	-173.5801	0	14890.8128	181709.86	-311531.6566	2043.2959	0
DWalS12	Combination	Max	173.5801	0	14890.8128	197514.4747	-297272.0143	-2183.68	0
DWalS12	Combination	Min	-3.429E-06	-273.9738	14890.8128	189661.2032	-304318.9701	-5532.6604	0
DWalS13	Combination		-3.822E-06	273.9738	14890.8128	181709.86	-304484.7008	5392.2764	0
DWalS14	Combination		-3.429E-06	-273.9738	14890.8128	197514.4747	-304318.9701	-5532.6604	0
DWalS15	Combination	Max	-117.8067	0	23606.2727	299844.455	-489966.7304	1481.7736	0
DWalS15	Combination	Min	-117.8067	0	23606.2727	299835.9658	-490031.8044	1168.4765	0
DWalS16	Combination	Max	117.8067	0	23606.2727	308493.501	-475827.2249	1503.7166	0
DWalS16	Combination	Min	117.8067	0	23606.2727	308484.9118	-475892.2989	1190.4195	0
DWalS17	Combination	Max	-5.769E-06	-117.8067	23606.2727	308682.3612	-475827.2249	2216.5432	0

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Output Case	Case Type	Step Type	FX tonf	FY tonf	FZ tonf	MX tonf-m	MY tonf-m	MZ tonf-m	X m
DWalS17	Combination	Min	-6.134E-06	-117.8067	23606.2727	304668.921	-483013.5847	-2713.5059	0
DWalS18	Combination	Max	-5.464E-06	117.8067	23606.2727	295105.6554	-483005.4446	2488.8658	0
DWalS18	Combination	Min	-5.828E-06	117.8067	23606.2727	295092.1887	-483108.6735	1991.8731	0
DWalS19	Combination	Max	-147.2584	0	24818.0213	315966.7374	-516032.9121	1875.6304	0
DWalS19	Combination	Min	-147.2584	0	24818.0213	315956.1258	-516114.2547	1484.009	0
DWalS20	Combination	Max	147.2584	0	24818.0213	316084.4319	-498558.5302	-1717.9824	0
DWalS20	Combination	Min	147.2584	0	24818.0213	316073.8203	-498639.8728	-2109.6038	0
DWalS21	Combination	Max	-6.005E-06	-147.2584	24818.0213	322014.1533	-507212.4438	-2747.2282	0
DWalS21	Combination	Min	-6.461E-06	-147.2584	24818.0213	321997.3199	-507341.48	-3368.469	0
DWalS22	Combination	Max	-5.623E-06	147.2584	24818.0213	310043.2379	-507331.3049	3134.4956	0
DWalS22	Combination	Min	-6.079E-06	147.2584	24818.0213	310026.4044	-507460.341	2513.2548	0
DWalS23	Combination	Max	-147.2584	0	14890.8128	189558.6258	-313098.3551	1922.4251	0
DWalS23	Combination	Min	-147.2584	0	14890.8128	189548.0143	-313179.6977	1530.8037	0
DWalS24	Combination	Max	147.2584	0	14890.8128	189676.3204	-295623.9733	-1671.1878	0
DWalS24	Combination	Min	147.2584	0	14890.8128	189665.7088	-295705.3158	-2062.8091	0
DWalS25	Combination	Max	-3.588E-06	-147.2584	14890.8128	195606.0418	-304277.8869	-2700.4335	0
DWalS25	Combination	Min	-4.044E-06	-147.2584	14890.8128	195589.2083	-304406.9231	-3321.6743	0
DWalS26	Combination	Max	-3.206E-06	147.2584	14890.8128	183635.1263	-304396.7479	3181.2903	0
DWalS26	Combination	Min	-3.662E-06	147.2584	14890.8128	183618.2929	-304525.7841	2560.0495	0
DWalS27	Combination	Max	118.9017	11.9943	23606.2727	300066.3746	-478730.5286	1285.9188	0
DWalS27	Combination	Min	-118.9017	-11.9943	23606.2727	299708.2019	-487288.5007	-1510.5589	0
DWalS28	Combination	Max	7.6795	118.9258	23606.2727	303224.174	-482874.1169	2644.5939	0
DWalS28	Combination	Min	-7.6796	-118.9258	23606.2727	296550.4025	-483144.9124	-2869.234	0
DWalS29	Combination		-5.799E-06	0	23606.2727	299887.2882	-483009.5146	-112.3201	0
DWalS30	Combination	Max	148.6272	14.9928	24818.0213	316244.1368	-501987.6598	1630.8119	0
DWalS30	Combination	Min	-148.6272	-14.9928	24818.0213	315796.4209	-512685.125	-1864.7853	0
DWalS31	Combination	Max	9.5994	148.6573	24818.0213	320191.3861	-507167.1452	3329.1558	0
DWalS31	Combination	Min	-9.5995	-148.6573	24818.0213	311849.1717	-507505.6397	-3563.1292	0
DWalS32	Combination		-6.042E-06	0	24818.0213	316020.2789	-507336.3924	-116.9867	0
DWalS33	Combination	Max	148.6272	14.9928	14890.8128	189836.0253	-299053.1029	1677.6066	0
DWalS33	Combination	Min	-148.6272	-14.9928	14890.8128	189388.3094	-309750.5681	-1817.9906	0
DWalS34	Combination	Max	9.5994	148.6573	14890.8128	193783.2745	-304232.5882	3375.9505	0
DWalS34	Combination	Min	-9.5994	-148.6573	14890.8128	185441.0601	-304571.0827	-3516.3345	0
DWalS35	Combination		-3.625E-06	0	14890.8128	189612.1673	-304401.8355	-70.192	0

0	0

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THE LANDLENS SUITE

Eight ways to know a piece of land before you pay for it.

This report covers one part of the picture. These cover the rest, drawn from the same government records, for any property in Tamil Nadu.

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Ask anything about a property and get an answer grounded in live government records, with the sources shown.
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Verify My Land
Every record check run on one property and returned as a single report.
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Legal Opinion
An advocate's written opinion on the title, built on the records we pull for it.
/landlens

One Map
Every layer on one map: the parcel, its boundary, zoning, water bodies and what sits around it.
/landlens/one/map

PriceMap
What land actually changed hands for around this plot, taken from the registered deeds.
/landlens/pricemap

Build Scope
What you are allowed to build here: floor space, height, coverage and setbacks.
/landlens/build-scope

Property Tracker
Watch a property and hear about it when something new is registered against it.
/landlens/property-tracker

Deal Room
Run the transaction in one place: documents, stamping, signatures and the parties.
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Records and verification

The registers themselves, read for you.

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- Patta and Chitta
- Field Measurement Sketch
- EC Analyzer
- Bank charge check
- Court case search
- Seller background check
- Approval check by survey

Value and duty

What it is worth and what it costs to register.

- Guideline value by street
- Guideline value by survey
- Stamp duty and registration fees
- Capital gains
- Floor space index
- Area unit converter

Zoning and land use

What the plan says can happen on this land.

- Land use zone finder
- CMDA land use check
- Coastal regulation zone
- Master plan check
- Water bodies finder
- Airport height clearance

Registers and directories

Who holds it, and which office keeps the record.

- Find your registering office
- Temple property check
- Waqf property check
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Prepared from the registers named on the page each finding sits on. Where a register could not be read, this document says so in its place rather than leaving the gap to be read as a clean result.