Verified RealEstate™

RE REGULATORY RECORD

RERA Document

The document as the regulator published it, reproduced in full behind this page.

Published for reference. The authority's own register is the operative record.

Verified RealEstate™
3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai 600 097, India

hello@verified.realestate
+91 9996 12 9996
verified.realestate

DIGITALLY VERIFIED RECORD

NARAYANAN CONSTRUCTION
LICENSED BUILDING SURVEYOR
17/18-B, CONVENT ROAD,
PERIYAPUDUR, (OPP St.John School)
SALEM – 636 016.
Narayanaconstructions555@gmail.com

Er.N.RANJITHKUMAR,B.E.,
Er.V.BHUVANESHWARI, M.E.(Struct)

Ph: 96555 52121, 96555 57679

17.07.2025

STABILITY CERTIFICATE

1. The detailed engineering and structure design of the proposed building comprising of Stilt + Five (5) floors at 10 Dwelling Units S.F.No. 74/1B 33, Ward- D, Block-26, T.S.No-60, Plot No -78, At Alagapuram Village, Salem City Municipal Corporation, Salem Taluk, Salem District has been done by me based on the report of geotechnical investigation (soil test) done by Surya Builders Report No. 2023-2024/06/014 Dated: 14/06/2024 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 M25.

(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 875 and design of earthquake resistant structure as per IS Code No 1893 & 13920 are Carried out.

4. The building will be safe and sound when used for the purpose for which it is designed.

V. Bhuvaneshwari

Er.V.BHUVANESHWARI, M.E.,(Struct)
NARAYANAN CONSTRUCTIONS
LICENSED BUILDING SURVEYOR
DTCP/SALEM/RSE-II/06/2022
No:17/18-B, CONVENT ROAD,
ALAGAPURAM PUDHUR, SALEM-636 016.
Cell: 96555 52121, 96555 57679

Encl.: Structural Design Calculation

LOAD CALCULATIONS

PROPOSED CONSTRUCTION OF METROPOLE – KRISHNA APARTMENT AT NEW FAIRLANDS IN SALEM

V. Bhuvaneshwari

Er.V.BHUVANESHWARI, M.E.,
NARAYANAN CONSTRUCTIONS
LICENSED BUILDING SURVEYOR
DTCP/SALEM/RSE-II/06/2022
No:17/18-B, CONVENT ROAD,
ALAGAPURAM PUDHUR, SALEM-636 016.
Cell: 96555 52121, 96555 57679

1		LOAD CALCULATION REPORT				
Rev.	17.07.25	Description/issued for	Prepared by	Checked by	Approved by	
		Client:	1.Mrs. SUJITHRA VIJAYKUMAR			
		Project:	METROPOLE — KRISHNA APARTMENT AT NEW FAIRLAND IN SALEM TAMILNADU - INDIA.			
		Title:	LOAD CALCULATION REPORT			

Office:	India	Order:		document;		Rev:	0	Sheet:		of: 3

FLOOR LOADS:

I. **FLOOR LOADS:**

Floor finish	0.075x20	=	1.5 kN/m^2
Sand filling (0.2x18)		=	4.14kN/m^2
Sunken		=	5.64 kN/m^2
	Say	=	**5.6 kN/m^2**

II. **TERRACE FLOOR:**

Floor finish & weathering coarse (0.15x20) = 3.0 kN/m^2

III. **LIVE LOADS:**

- Live load = 2.5 kN/m^2
- Terrace = 1.5 kN/m^2
- Corridor = 4 kN/m^2

IV. **WALL LOAD CALCULATIONS:**

GROUND FLOOR:

1. Wall load for plinth beam to stilt beam level:
   (3.15-0.600-0.38 x0.23 x20) = 15.5 kN/m^2

FIRST FLOOR TO FIFTH FLOOR (TYPICAL FLOORS):

2. Wall load for stilt floor Roof level to First Floor Roof Level:
   (3.15-0.38 x0.23 x20) = 12.5 kN/m^2

WATER TANK:

3. Wall load for Water tank bottom level:
   (1.52-0.38x0.23x25) = 6.55 kN/m^2

1		LOAD CALCULATION REPORT				
Rev.	17.07.25	Description/issued for	Prepared by	Checked by	Approved by	
	Client:	1.Mrs. SUJITHRA VIJAYKUMAR				
	Project:	METROPOLE — KRISHNA APARTMENT AT NEW FAIRLAND IN SALEM TAMILNADU - INDIA.				
	Title:	LOAD CALCULATION REPORT				

Office:	India	Order:		document;		Rev:	0	Sheet:		of:	3

PARAPET:

4. Wall load for Parapet level:

0.9x0.23x20 = 4.14 kN/m^2

HEAD ROOM:

5. Wall load for terrace level to Head Room Roof top level:

(3.15x0.23x20) = 14.49 kN/m^2

V. STAIRCASE LOAD CALCULATION:

Self-weight	(0.20x1x25)	=	5.00 kN/m^2
Floor Finish		=	1.00 kN/m^2
R.C.C Steps	(0.15/2)x22	=	1.65 kN/m^2
Live Loads		=	4.00 kN/m^2
		=	11.65 kN/m^2
		=	12.00 kN/m^2
Total Load	(12x4.88)	=	58.56 kN/m^2
Load on One beam	(58.56/2)	=	29.28 kN/m^2
		Say =	30 kN/m^2
Plinth Beam full wall load		=	15.5 kN/m^2
Plinth beam Mid Landing Load (15.5/2+30)		=	37.75 kN/m^2
Stilt beam full wall load		=	12.5 kN/m^2
Stilt beam Mid landing load	**(12.5+30)**	=	**42.5 kN/m^2**

DESIGN BASIS REPORT

PROPOSED CONSTRUCTION OF METROPOLE – KRISHNA APARTMENT AT NEW FAIRLANDS IN SALEM

V.Bhuvaneshwari

Er.V.BHUVANESHWARI, M.E.,(Struct)
NARAYANAN CONSTRUCTIONS
LICENSED BUILDING SURVEYOR
DTCP/SALEM/RSE-II/06/2022
No:17/18-B, CONVENT ROAD,
ALAGAPURAM PUDHUR, SALEM-636 016.
98555 52121, 96555 57679

1		DESIGN BASIS REPORT / PROOF CHECKING				
Rev.	17.07.25	Description/issued for	Prepared by	Checked by	Approved by	
		Client:	1.Mrs. SUJITHRA VIJAYKUMAR			
		Project:	METROPOLE — KRISHNA APARTMENT AT NEW FAIRLAND IN SALEM TAMILNADU - INDIA.			
		Title:	DESIGN BASIS REPORT			

Office:	India	Order:		document;		Rev:	0	Sheet:		of:	8

SL.NO	TABLE OF CONTENT	PAGE No
1.	INTRODUCTION	3
2.	SITE CONDITIONS	3
3.	REFERENCES, CODES AND STANDARDS	4
4.	LOAD DEFINITIONS	
	4.1 Dead Loads (DL)	5
	4.2 Live Loads (LL)	6
	4.3 Wind Loads (WL)	6
	4.4 Earthquake Load (EL)	6
	4.5 Loading Combinations	7
5.	REINFORCED CONCRETE WORKS	
	5.1 General	9
	5.2 Cement and Aggregates	9
	5.3 Concrete Grades	9
	5.4 Reinforcing Steel	9
	5.5 Description of structural arrangement	9
	5.6 Properties for design purpose	10
	5.7 Development Length of bars	10
	5.8 Cover to Concrete	10
6.	SOIL PROPERTIES & FOUNDATION	10
	6.1 Bearing Capacity of Soil	
	6.2 Analysis and design methodology	10

3. REFERENCES, CODES AND STANDARDS: The following codes and standards have been referred.

4. LOAD DEFINITIONS:

4.1 Dead Loads (DL) :

Dead Load shall be the total weight of the materials forming the permanent part of structure. The Unit weights of materials and components shall be as per the code defined.

Self-weights of the slabs are inbuilt with ETABS software at the time of application.

(i) Concrete unit weight is taken as 25 kN/m3

(ii) Brick unit weight is taken as 20 kN/m^3

(iii) Water unit weight is taken as 10 kN/m^3

(iv) Sand (Toilet sunken) unit weight is taken as 18 kN/m^3

4.2 Live Loads (LL) :

Live Loads are all movable super imposed loads such as movable partitions, occupants and movable equipment, but not including wind or equipment dynamic loads. Live Loads shall be as specified in IS 875 Part 2 - 1987 Table 1.

I. EARTHQUAKE LOAD CALCULATIUON (EL):

Seismic loads are considered for Zone II as per IS 1893 (Part-I) : 2016.

Zone Factor = 0.16

Importance Factor = 1

Response reduction Factor (Special Moment Resisting Frames) = 5

Damping = 5%

Soil Type = II

Time Period:

Time period are considered as per IS 1893(PART- 1): 2016 Clause No. 7.6.2(C)

$0.075*(18.9)^{0.75}$ =0.67

4.5 Loading Combinations:

SERVICEABILITY COMBINATION

1) 1.0 D.L + 1.0 L.L
2) 1.0 D.L+ 1.0 W.L- (+X DIRECTION)
3) 1.0 D.L + 1.0 W.L- (-X DIRECTION)
4) 1.0 D.L + 1.0 W.L - (+Y DIRECTION) 5) 1.0 D.L+ 1.0 W.L- (-Y DIRECTION)
6) 1.0 D.L + 1.0 E.L - (+X DIRECTION)
7) 1.0 D.L + 1.0 EL - (-X DIRECTION)
8) 1.0 D.L+ 1.0 E.L-(+Y DIRECTION)
9) 1.0 D.L+ 1.0 E.L-(-Y DIRECTION)
10) 1.0 D.L + 0.8 L.L + 0.8 w.L DIRECTION)
11) 1.0 D.L + 0.8 L.L+ 0.8 w.L (-X DIRECTION)
12) 1.0 D.L + 0.8 L.L + 0.8 w.L (+Y DIRECTION)

13) 1.0 D.L + 0.8 L.L + 0.8 w.L (-Y DIRECTION)

14) 1.0 D.L + 0.8 L.L + 0.8 E.L (+X DIRECTION)

15) 1.0 D.L + 0.8 L.L + 0.8 E.L (-X DIRECTION)

16) 1.0 D.L + 0.8 L.L + 0.8 E.L (+Y DIRECTION)

17) 1.0 D.L + 0.8 L.L + 0.8 E.L (-Y DIRECTION)

ULTIMATE COMBINATION

18) 1.5 D.L + 1.5 L.L

19) 1.5 D.L + 1.5 W.L (+X DIRECTION)

20) 1.5 D.L + 1.5 w.L (-X DIRECTION)

21) 1.5 D.L + 1.5 W.L (+Y DIRECTION)

22) 1.5 D.L + 1.5 W.L (-Y DIRECTION)

23) 1.5 D.L + 1.5 E.L DIRECTION)

24) 1.5 D.L+ 1.5 E.L (-X DIRECTION)

25) 1.5 D.L + 1.5 E.L (+Y DIRECTION)

26) 1.5 D.L + 1.5 E.L (-Y DIRECTION)

27) 0.9 D.L+ 1.5 W.L (+X DIRECTION)

28) 0.9 D.L + 1.5 W.L (-X DIRECTION)

29) 0.9 D.L + 1.5 W.L (+Y DIRECTION)

30) 0.9 D.L + 1.5 W.L (-Y DIRECTION)

31) 31) 0.9 D.L + 1.5 E.L (+X DIRECTION)

32) 0.9 D.L + 1.5 E.L (-X DIRECTION)

33) 0.9 D.L+ 1.5 E.L (+Y DIRECTION)

34) 0.9 D.L + 1.5 E.L (-Y DIRECTION)

35) 1.2 D.L+ 1.2L.L+1.2W.L DIRECTION)

36) 1.2 D.L+ 1.2L.L+1.2W.L (-X DIRECTION)

37) 1.2 D.L+ 1.2L.L+1.2W.L (+Y DIRECTION)

38) 1.2 D.L+ 1.2L.L+1.2W.L (-Y DIRECTION)

39) 1.2 D.L+ 1.2L.L+1.2E.L (+X DIRECTION)

40) 1.2 D.L+ 1.2L.L+1.2E.L (-X DIRECTION)

41) 1.2 D.L+ 1.2L.L+1.2E.L (+Y DIRECTION)

42) 1.2 D.L+ 1.2L.L+1.2E.L (-Y DIRECTION)

(D.L = Dead load, L.L = Live load, W.L = wind load, E.L = Earthquake load,).

Temperature Load is not considered since the lateral dimension of the building is limited as per Clauses 19.5.1 & 27.20 of IS 456:2000.

5 Reinforced concrete works:

5.1 General:

Design of Structural Concrete works shall be in accordance with IS 456:2000.

Design of Truss steel member works shall be in accordance with IS 800:2007.

5.2 Cement and Aggregates:

Cement to be ordinary Portland cement in accordance with (IS 269).

Aggregates shall be accordance with (IS 383).

5.3 Concrete Grades:

Structural Concrete:

Sub & Super Structure — M25

P.C.C - M7.5

5.4 Reinforcing Steel:

Reinforcing Steel Bars shall be CRS (Corrosion resistant steel) Uncoated High Yield deformed bars Fe 500 D of Minimum Characteristic Yield strength of 500 N/mm^2 having elongation of 16%. Deformed bars confirming to IS 1786:2008.

5.5 Description of structural arrangement:

Super structure:

The buildings will be designed as framed structure with columns and beams are Interconnected with flat R.C.C Roof Slab.

Sub structure:

The foundation will be designed generally as per the soil report recommendations.

5.6 Properties for design purpose:

a. Grade of Concrete fck - 25 N/mm^2

b. Grade of Steel fy - 500 N/mm^2

c. Young's Modulus of Steel Es - 200000 N/mm^2

d. Modulus of Elasticity of Concrete Ec -500 root of fck - 25000 N/mm^2

5.7 Development Length of bars:

For M25:

(Ld) In Tension = 50ø

(Ld) In Compression = 40ø

5.8 Cover to Concrete :

Footing	=	50 mm
Column	=	40 mm
Beam	=	30 mm
Slab	=	25 mm
Shear wall	=	25 mm
R.C.C Retaining Wall	=	25 mm

SOIL PROPERTIES & FOUNDATION DEPTH:

6.1 Safe Bearing Capacity of Soil:

Net Allowable bearing capacity of soil is taken as per soil report = 200 KN/m^2

6.2 Analysis and design methodology:

The Building is analyzed as 3-D space structure using finite element method in ETABS the foundations is designed in 'SAFE' software & XL sheets. Fixed condition is considered at supports for 3-D structure & the steel member designed for the using 'ETABS' software, to carryout analysis for various load combinations as per design basis.

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.

LandLens One
Ask anything about a property and get an answer grounded in live government records, with the sources shown.
/landlens/one

Verify My Land
Every record check run on one property and returned as a single report.
/landlens/verify-my-land

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.
/landlens/deal-room

FREE TOOLS · NO ACCOUNT NEEDED

Twenty-four checks you can run yourself, at no cost.

Records and verification

The registers themselves, read for you.

- Encumbrance Certificate
- 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
- RERA register

Every free tool
/tools

Services we run for you
/services

The LandLens suite
/landlens/one

Verified RealEstate™

Every claim in this document traces back to a government record.

- Legal opinions, due diligence and title verification
- Building plan, layout and sub-division approvals
- Completion and occupancy certificates, regularisation
- Escrow, negotiation and NRI property management
- Land survey, soil testing, architecture and construction

Verified RealEstate
3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai 600 097, India
hello@verified.realestate
+91 9996 12 9996

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.