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

Er. K. Marimuthu, B.E.,M.I.S.trut.E.,M.I.C.I.,
Consulting Civil Engineer.

101, Basuvaraj Buildings,
Main Road, Thillainagar,
Trichy - 620 018.
✆ 0431 - 2741573
Cell : 94430 59910

Date : .....

Structural Design for Foundation and Column for the Proposed Construction of Residential Apartment Building (Affordable Housing) after Demolishing the existing Building in T.S.No. 49/1, 49/2, Ward - AK , Block - 5 at Crawford colony main road, Crawford colony, K.Abishekapuram Village, Zone - IV, Trichirappalli corporation.

The foundation and column shall be designed for the maximum span of 6m.

Number of floor	:	Stilt +5 Floor
Height of each floor	:	3.00 m
Using concrete mix	:	M20
RTS Bars	:	Fe 500

LOAD:

Live Load	:	300 kg/m^2
Dead Load	:	250 kg/m^2
Total load transfer to beam @	:	550 kg/m^2
Clear Spacing of Beams	:	3.5 m
Load transferred to beam /m	:	3.5 x 1 x 550 = 1925 kg/m
Load transferred to Column / floor	:	1925 x 6 = 11,550 / floor (or) 20000kg
Total load transferred to column	:	20000 x 6 = 120,000 kg (or)120T
Self weight of column as 10% of load		
Total load/ column	:	132T
Assuming Column Area	:	A cm^2
% of Longitudinal reinforcement	:	4 %

Using **Fe 500** steel and **M20** Concrete

Pu	= 0.4 x 200 x Ac + 0.67 x fy x Ast
1, 32,000	= 0.4 x 200 x (Ac-0.04 Ac) + 0.67 x 5000 x 0.04 Ac
Ac	= 626 cm^2
Required column Area	= 626 cm^2

Hence provide column to the size of 23 cm x 45 cm

Area of column 23 x 45 = 1035 cm^2 > 626 cm^2

Hence Safe.

Scanned with OKEN Scanner

Er. K. Marimuthu, B.E.,M.I.S.trut.E.,M.I.C.I.,
Consulting Civil Engineer.

101, Basuvaraj Buildings,
Main Road, Thillainagar,
Trichy - 620 018.
✆ 0431 - 2741573
Cell : 94430 59910

Date : .....

Ast required = 0.04 x 1035 = 41.4 cm^2

Using 25mm ϕ bars

Number of vertical required = 41.4/ 4.91 = **9 Nos**

Hence provide 4 Numbers of 25 mm ϕ bars.+ 8 Numbers of 20 mm ϕ

Area of steel provide (4 x 4.91 cm^2) +(8 x 3.19 cm^2)

19.64 cm^2 + 25.52 cm^2 = 45.16

Total area of steel provided per column = 45.16cm^2

Hence Safe.

Design of Lateral Reinforcement:

Provide 8 mm ϕ RTS bar as lateral reinforcement

Spacing of reinforcement is not least of the following.

1. Least lateral dimension of column i.e . 23 cm.
2. 16 times the diameter of longitudinal Reinforcement 16x 2cm i.e. 32 cm.
3. 30 cm i.e. 30 cm.

Hence provide lateral reinforcement @ 20 cm c/c.

Footing Design:

Total load transferred by a column = 132 Tones.

Safe Bearing capacity of soil = 20 T/ m^2

(as per soil report)

Area of footing = 132 T/22 T = 6 m^2

Hence provide footing size of 2.5 m x 2.5 m = 6.25 m^2

\- > 6.00 m^2

Hence Safe.

Er.K. MARIMUTHU, B.E.,M.I.STRUCT.E.M.I.C.I.,
CONSULTING STRUCTURAL ENGINEER
Corporation BLS No: 086/LS/2021/00012
Registered Engineer
Reg No: RE/GR-I/DTCP/TRICHY/JULY-2024/23 ON 05.07.2024
Registered Structural Engineer
Reg. No: SE.GR -II /DTCP/TRICHY /JULY-2024/24 ON. 05.07.2024
Basuvaraj Building, Thillainagar,
Trichy - 620 018. Cell: 94430 59910

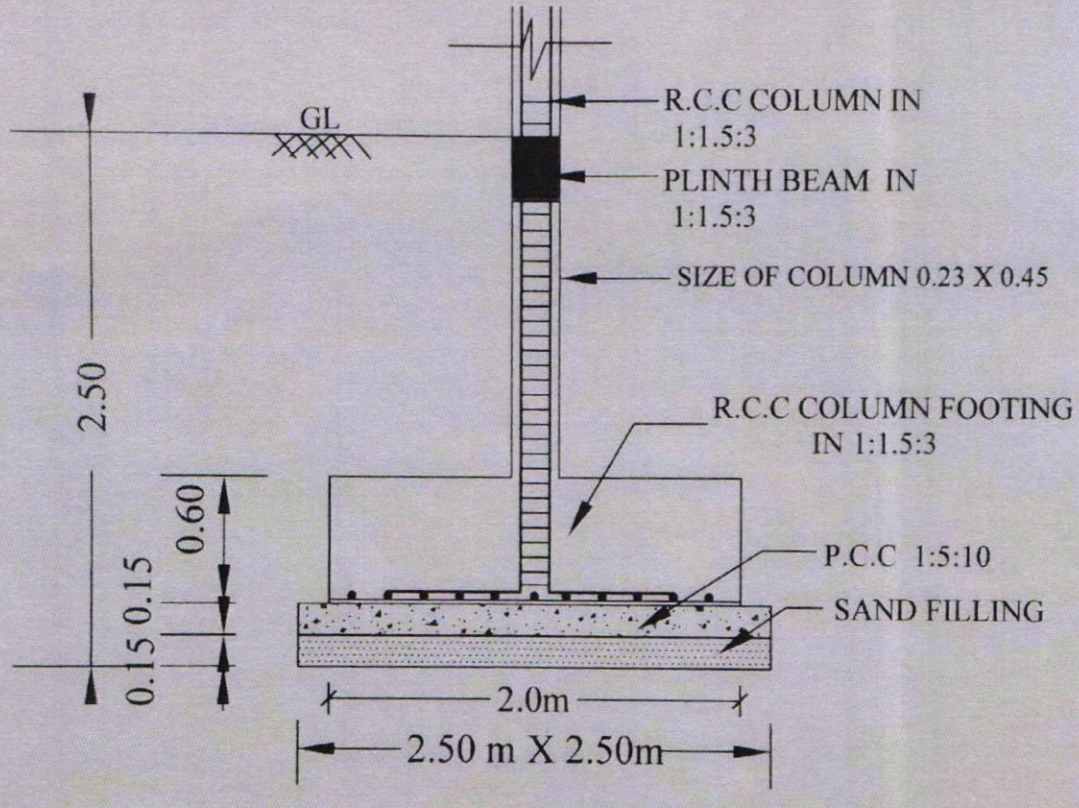
Scanned with OKEN Scanner

Er. K. Marimuthu, B.E.,M.I.S.trut.E.,M.I.C.I.,
Consulting Civil Engineer.

101, Basuvaraj Buildings,
Main Road, Thillainagar,
Trichy - 620 018.
✆ 0431 - 2741573
Cell : 94430 59910

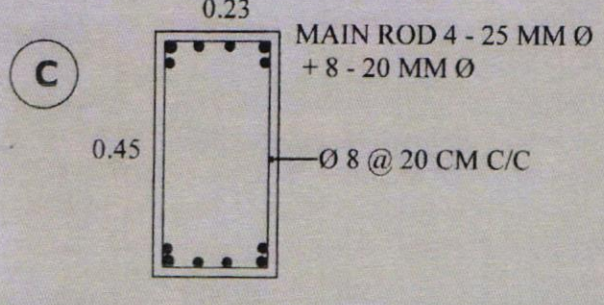
Date :

COLUMN DESIGN FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT BUILDING (AFFORDABLE HOUSING) AFTER DEMOLISHING THE EXISTING BUILDING IN T.S.NO. 49/1, 49/2, WARD - AK , BLOCK - 5 AT CRAWFORD COLONY MAIN ROAD, CRAWFORD COLONY, K.ABISHEKAPURAM VILLAGE, ZONE - IV, TRICHIRAPPALLI CORPORATION.



CROSS SECTION OF COLUMN FOOTING

NOT TO SCALE



CROSS SECTION OF COLUMN

ENGINEER.

Er.K. MARIMUTHU,B.E.,M.I.STRUCT.E.M.I.C.I.,
CONSULTING STRUCTURAL ENGINEER
Corporation BLS No: 086/LS/2021/00012
Registered Engineer
Reg No: RE/GR-I/DTCP/TRICHY/JULY-2024/23 ON 05.07.2024
Registered Structural Engineer
Reg. No: SE.GR -II /DTCP/TRICHY /JULY-2024/24 ON. 05.07.2024
Basuvaraj Building, Thillainagar,
Trichy - 620 018.

Scanned with OKEN Scanner

Er. K. Marimuthu, B.E.,M.I.S Inst.E.,M.I.C.I.,
Consulting Civil Engineer.

101, Basuvaraj Buildings,
Main Road, Thillainagar,
Trichy - 620 018.
✆ 0431 - 2741573
Cell : 94430 59910

Date : 8.6.2026

STABILITY CERTIFICATE
(To be furnished while filing application for registration of building)

1. The detailed engineering and structure design of the proposed building comprising of Stilt + 5 floors (20 dwelling inits) **at T.S.No. 49/1, 49/2, Ward - AK , Block - 5 at Crawford Colony main road, Crawford colony, K.Abishekapuram Village, Zone - IV, Trichirappalli Corporation.** has been done by me/us based on the report of geo technical investigation (soil test) done by Time institute of Material Testing Report No. TIME/17/SOIL TEST/ March 2025 Dated March 2, 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 M 20

(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. 456 and Design of earth quake resistant structure as per IS Code No 456

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

Stamp and Signature

Encl.:Structural Design Calculation

Er.K. MARIMUTHU,B.E.,M.I.STRUCT.E.M.I.C.I.,
CONSULTING STRUCTURAL ENGINEER
Corporation BL.S No: 086/LS/2021/00012
Registered Engineer
Reg No: RE/GR-I/DTCP/TRICHY/JULY-2024/23 ON 05.07.2024
Registered Structural Engineer
Reg. No: SE.GR -II /DTCP/TRICHY /JULY-2024/24 ON. 05.07.202
Basuvaraj Building, Thillainagar,
Trichy - 620 018. Cell: 94430 59910

Scanned with OKEN Scanner

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.