

PROPOSED OF RESIDENTIAL BUILDING WITH 18 DWELLING UNITS AVAILING PREMIUM FSI (STILT+5 UPPER FLOORS) AT OLD PLOT NO: 17, ANNAMALAI AVENUE, NOLAMBUR VILLAGE ,AMBATTUR TALUK,CHENNAI. 600095, COMPRISED IN SURVEY NO 109/1A2,109/7 ,OF NOLAMBUR VILLAGE WITHIN THE LIMITS OF GREATER CHENNAI CORPORATION ZONE:11 DIVISION:143

GENERAL NOTE ON STRUCTURAL DESIGN

1.0 GENERAL

1.1 DESIGN BASIS

The proposed residential building consists of Stilt plus five upper floors.

The design of this building is carried out based on frame analysis using STAAD CONNECT.

1.2 CODES AND STANDARDS

All structural design is carried out conforming to the provisions of National Building Code of India and other relevant Indian Codes and Standards.

1. I.S. 456 - 2000
2. I.S. 875 - Part I to III
3. I.S.1893 - 2016

2.0 BASIC CIVIL DESIGN LOADS

2.1 DEAD LOADS & LIVE LOADS

Typical slab dead load is calculated as follows

Self weight of slab	=	5.0kN/m ²
Floor finish	=	2.0kN/m ²
Live load	=	2.0kN/m ²

9.0kN/m²


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3.0 SOIL DETAILS

Based on soil test report Isolated footing is adopted.

DESIGN METHODS

General design and detailing of concrete members/elements are done conforming to the provisions of I.S: 456 and other relevant I.S codes. Limit State method is followed for the design.

Seismic Zone III load is taken into account for the analysis. The predominant direction of vibration is horizontal. Relevant combination of forces has been taken into account.

4.1

Load Combination	Ultimate Limit Load	Serviceability Limit State
DL+LL+WL Or DL+LL+EL	1.2DL+1.2LL+1.2WL Or 1.2DL+1.2LL+1.2EL	DL+LL+WL or DL+LL+EL

4.3 MINIMUM COVER

Slab	15 mm
Beam	25 mm
Columns	40 mm
Foundations	50 mm

The Structure is safe and sound when used for the purpose for which it is designed.


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