

## Questionnaire

- a) The building shall be designed for 2 floor provision considering Earth Quake Zone-III
- b) SBC assumed shall be 50T/sq.m
- c) The design shall be done for 3 alternate structural system & evaluate the costing.
  - 1. Beam Slab System
  - 2. Flat Slab System
  - 3. Steel Structure system
- d) The loading considered shall be as follows.

## Loading Parameters

### 1. Vertical Loads

#### 1.1 Dead Loads

##### Self Weights

Self weight of the structural members will be considered on the basis of the following criteria.

Density of reinforced concrete	25 kN/cu.m
Density of soil	21 kN/cu.m
Density of steel	80 kN/cu.m
Density of plain concrete	24 kN/cu.m
Density of finishes / Plaster	20 kN/cu.m
Density of Granite	28 kN/cu.m
Density of Cinder for filling	8 kN/cu.m
Density of Block work with Plaster	22 kN/cu.m
Density of Glass	28 kN/cu.m

##### Dead Loads

Floor Finishes	1.50 kN/sq. m
Partition considered is light weight	1.0 kN/sq.m
Suspended Services	0.85 kN/sq.m

##### 200 thick Wall Loads

(Floor to floor is 3.75M (3.75-0.75)) :13.2 kN/ m

Terrace :3 kN/sq.m (inclusive of water proofing of 150mm thick average).

## 1.2 Imposed Loads

Restaurants, Shops,	4.00 kN/sq.m.
Super markets	6.00 kN/sq.m.
Corridors, Balconies	4.0 kN/sq.m
Staircases	4.0 kN/sq.m
Terrace	4.0 kN/sq.m
Lift Machine Room floor (Including Dynamic effect)	10.0 kN/sq.m

## 2 Lateral loads

### 2.1 Wind Load

#### Wind loads on Building

Wind loads will be calculated in accordance with IS 875: Part 3 corresponding to basic wind velocity of bangalore is 33 m/sec.