

2.6 Load Combinations

Load Combinations to be applied for Analysis and Design of structure as per recommendation of IS 456 & IS 800 for Buildings & Steel Structure.

The various loads shall be combined in accordance with the stipulations in IS: 875 (Part 5) – 1987. Whichever combination produces the most unfavourable effect in the building, foundation or structural member concerned shall be adopted. Values of Partial Safety Factor for Loads

Load Combination	Limit state of Collapse			Limit state of Serviceability		
	DL	LL	WL/EL	DL	LL	WL/EL
DL + LL	1.5	1.5	--	1.0	1.0	--
DL +/- WL	1.5 or 0.9\$	--	1.5	1.0	--	1.0
DL + LL +/- WL	1.2	1.2	1.2	1.0	0.8	0.8
DL +/- EL	1.5 or 0.9\$	--	1.5	1.0	--	1.0
DL + LL +/- EL	1.2	1.2	1.2	1.0	0.8	0.8

\$ - This value is to be considered only when stability against overturning or stress reversal is critical. Wind load and earthquake load shall be considered for both x & y directions.

DL – Dead load
LL – Live load
WL – Wind load
EL – Earthquake load

Whenever imposed load is combined with earthquake load the appropriate part of imposed load as specified in IS: 1893 – 2016 will be used both for evaluating earthquake effect and for combined load effects used in such combination.

On behalf of DICP HRB Panel, the detailed structural design calculations are reviewed and found in order.

M/s Sree Daksha Infrastructure Private Limited


DIRECTOR


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5. RECOMMENDATION

For the site, "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF BLOCK-A BASEMENT 1 & 2 WITH G + 7 FLOORS AND BLOCK - B WITH GROUND FLOOR TOTAL AREA 32,693.16 SQ. M., @ OLD SF. NO. : 294/1 PART & 294/2, NEW TS. NO. : 18/4 & 18/5, BLOCK-2, WARD-Y VILLANKURUCHI VILLAGE, COIMBATORE NORTH TALUK, COIMBATORE CORPORATION EAST ZONE, COIMBATORE DISTRICT - 641035." the borehole investigation was conducted and SBC was determined.

- In this site, up to 20.00m, SOFT ROCK is obtained.
- The **ISOLATED (or) RAFT FOUNDATION** is recommended for this site.
- **Rest the Foundation below 6.00m as per Basement floor Level.**
- The **SBC at 6.00m is 38.95 Ton/m²** is determined in All Borehole Locations @ Foundation Level.

Note : As watertable is encountered.

- Use Sulphate (So₃) resistant cement for P.C.C, FOOTING, PLINTH BEAM, GRADE BEAM & COLUMN UPTO GROUND LEVEL.
- Use Dewatering method such as Sump Pumping, Well Point Systems, Siphon Draining, Deep Well Systems, Ejector Systems at the time of Earthwork and Footing Concrete.
- The detailed SBC is mentioned in Page No's - 12 to 15.

on behalf of Deep H2B Panel, the detailed Soil investigation report is verified and found in order

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Soil Exploration Report For M/s. SREE DAKSHA INFRASTRUCTURE PRIVATE LIMITED, VILLANKURUCHI VILLAGE, COIMBATORE DISTRICT - 641035.

M/s Sree Daksha Infrastructure Private Limited



[Signature]

DIRECTOR