

DEPARTMENT OF CIVIL ENGINEERING

Report on

Technical Talk on “**Rapidwall Construction Technology**”

Department of Civil Engineering organized a technical talk on “**Rapidwall Construction Technology**” on 24th August 2023 for 4th semester students with an objective of creating an awareness on modern techniques and practices in Construction Industry.

Prof. Ar. Acharya S, Acharya Institute for Innovation & Transformation, Mysuru was the resource person for the above said technical talk.

Rapidwall is a single panel walling system that serves as both the internal and external wall and eliminates the need for bricks, blocks, timber and steel wall frames and plasterboard linings. It is the most ecologically sound and technologically advanced building product available in the world today.

In India Rapidwall has been rigorously tested by the University IIT Madras and certified by Structural Engineering Research Centre (SERC) for use in the construction of buildings in earthquake prone areas of up to 10 storey's.

In the development of new low energy, low cost, environmentally and ecologically sound housing solutions for the 21st century, Rapidwall is the ideal product for re-housing and for new housing or industrial construction. A world class building system that is 100% recyclable, earthquake tested, is cyclone, fire, water and rot resistant, is load bearing, termite resistant and sound proof.



Rapidwall is manufactured in a molding process using glass-fibre reinforced, water-resistant gypsum plaster. All panels are 12 metres long, 3 metres high, 123 millimetres thick and cellular in construction.

The formed cells can be used to accommodate building services such as plumbing and electrical conduits and can be filled with insulation for increased thermal performance or concrete for increased structural capacity.

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A Rapidwall manufacturing plant comprises:

- Plaster feed hoppers
- Casting tables
- Core-tables that insert and remove the plugs that form the cells in the Rapidwall panel
- A travelling gantry or crab assembly that mixes and dispenses the plaster as well as the chopped glass-fibre rovings onto the casting tables, over which it passes
- A Rapidcure drying oven used to cure the panels
- A Rapidsaw for process panels to design specifications
- Each Rapidwall plant is individually designed for local conditions.

One twelve metre long by three metre high by 124mm, cellular Rapidwall panel can be manufactured every hour from a single casting table. Manufacturing installations that comprise multiple tables will produce as many Rapidwall panels per hour as there are tables in use. One installation can have up to six casting tables.

Gallery:

