

TOILET UNIT USING THIN PRECAST CONCRETE SEGMENTAL PANELS

A novel idea to construct low cost toilet unit with thin precast concrete segmental panels

CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai has developed a novel technology to construct cost-effective, durable and ecologically safe toilets using thin precast concrete segmental panels. The panels can be joined one above the other with perfect bonding and through connecting rods. The septic tank can also be built using thin precast panels. Assembling of panels and erection of toilet can be completed in three hours time without any special equipments. This technology is also suitable for mass production through industrialisation.

FEATURES / HIGHLIGHTS

- Construction using thin precast concrete segmental panels
- Easy to handle, transport, assemble and erect
- Sustainable construction using industrial wastes
- Cost-effective, light-weight and durable
- Suitable for all climatic conditions and for remote areas
- Mass production through industrialization



TECHNICAL DETAILS

- Size of toilet unit - 4ft (l) x 3ft (w) x 6ft (h); Size of septic tank – 6ft (l) x 3ft (w) x 4ft (d)
- Cost of toilet unit including septic tank: ₹ 12000/-

APPLICATIONS

- Meets the Swachh Bharat Gramin (SBG) requirements
- Holds great potential to improve the level of sanitation for the economically weaker sections (EWS) in rural and urban areas.

TECHNOLOGY TRANSFER

Technology transferred to M/s. Lakshmi Srinivas Engineers, Hyderabad; M/s. Fractal Enterprise, Vishakhapatnam; M/s. Natural Waste Management Technologies Pvt. Ltd., Krishna District, AP, on non-exclusive basis. Technology is available for transfer to other interested players in the industry.



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