

Central Building Research Institute

Roorkee

Flooring Tiles from Waste Gypsum



Application/Uses: For flooring as a replacement to ceramic and cement tiles.

Salient Technical Features: Tiles are cast by vibration moulding of moist mixture containing gypsum anhydrite

plaster, pigments, polymers, fibres etc. Tiles are of high strength, low water absorption

and wear resistance as per IS:1237-1980.

Environmental Aspects: Waste gypsum is used for useful purpose.

Level/Scale of: Developed on laboratory scale. Pilot plant of capacity 40 sq.m. per day could be

Development set up with the help of industry.

Status of Commercialisation: Know-how available for commercialisation.

Major Components/: Anhydrite plaster from Phosphogypsum, natural or marine gypsum or fluoroanhydrite, pigments, polymers, glass fibres,fly ash/red mud.

Major Plant Equipment: Moulds, mixers vibrating tables, curing chamber, drying chamber, rotary kiln, ball mill, and Machinery grinding and polishing machine and demoulding plates.

Techno-Economics: Investment for a plant for producing 40 sq.m. tiles per day in 3 shifts is approximately

Rs.26.0 lakhs. The production cost of one tile (Size 300 x 300 x 20 mm) comes to

Rs. 25/- per sq. ft.

Technology Package: Process know-how, Process demonstration etc.

For further details please contact:

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