

Flooring- Wall Tiles, Bricks & Paver Blocks using Marble Stone Waste

Technology in Brief

The utilization of marble waste to develop cost-effective sustainable building products has been carried out by studying the engineering and chemical properties of stone waste. Replacement of stone waste was done with fine aggregate, coarse/fine, based on particle size distribution and packing density to achieve more compact-high strength and durable heterogeneous concrete mass to develop various building products. CSIR-CBRI has developed a process know-how based on the pilot scale manufacturing trials and implementation.

Salient Features/Advantages

- High performance factor.
- Lightweight and strong.
- Excellent thermal and sound insulation.
- Sustainability, cost-effective and durable.
- Waste reduction & saving natural resources.
- Affordable & sustainable building materials.
- Reduced energy consumption.
- Saving of natural resources (sustainable construction, green materials).



Mosaic Tiles



Paver Blocks



Bricks

Properties & Standards	Meeting the specifications of IS:1237, IS:16720:2018, IS:15658, IS:2185 and IS:6598.
End Product(s)	1) Floor Tiles - Light Traffic Loads & Heavy Traffic Conditions 2) Paver Blocks - Non Traffic to Heavy Traffic Conditions 3) Light weight Blocks - Infill Material & Brick Replacement
License/Commercialization	M/s Marble Plaza, New Delhi
TRL	8
Environmental Impact	a) Employment generation through setting up of industry b) Minimization in environmental pollution

Linkedin Video Link	https://www.linkedin.com/posts/csircbri_csir-cbri-wastetowealth-activity-7412674334374326272-Dh9X?utm_source=share&utm_medium=member_desktop&rcm=ACoAAE1ijyABshTzQUwK7Dj8mksi4yko5dgW6LA
Youtube Video Link	https://www.youtube.com/watch?v=VByHJIO-eBQ