

# 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<br>2) Paver Blocks - Non Traffic to Heavy Traffic Conditions<br>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<br>b) Minimization in environmental pollution  |