

Diamond FloorCrete™

Diamond FloorCrete™ is useful for protection against hot and cold temperature, as well as insulation against air-borne and impact sounds. It is predominantly useful in multi-storey buildings, as a leveling screed layer, as void-filling material for trench reinstatements and disused ducts or sewers or any other structures wherever low density filling material is needed.



Benefits:

- **Weight Reduction:** Lower weight of the concrete using Diamond Cellular Concrete $600\text{kg}/\text{m}^3$ or less density in multi-storied buildings undoubtedly does not increase the load significantly.
- **Sound Insulation:** Diamond Cellular Concrete is a perfect impact and air-borne sound absorbing concrete.
- **Energy Savings:** Diamond Cellular Concrete has high thermal insulation property and possesses 5 times superior insulation properties compared to that of conventional concrete. The amplitude-ratio and phase-displacement of a 10cm thick wall or slab with a density of $600\text{kg}/\text{m}^3$ causes the outside temperature of a building to take between 10-12 hours to reach inside. Such a duration, which is much longer than that of conventional concrete layer, results in the foamed concrete being naturally air-conditioning.
- **Improved Fire Protection:** A layer of 10cm thickness and only $600\text{kg}/\text{m}^3$ can withstand a fire for 5 hours, due to the air enclosed in the cellular concrete.
- **Fast Installation:** Our mobile all-in-one automatic mixers produce up to 10m^3 of Cellular Concrete per hour. With a typical thickness of 5cm, this equals an area of 200m^2 per hour
- **Flexibility to choose Strength and Thickness**
- **Low Water Absorption**

Technical Specifications

Dry Density (kg/m ³)	600 or less
Thermal Conductivity in Air Dry condition "K-value" or (W / m.K)	0.16
Heat Transmission Coefficient "U" (W / m ² . K)	2.13
Sound Absorption (Db)	Upto 42
Fire Resistance (For thickness of 10cm)	Upto 5 Hrs
Maximum Water Absorption (Liter/m ³)	200

