

## Diamond Concrete Blocks

Diamond Concrete Blocks are high quality, lightweight concrete blocks produced, using innovative foaming technology from Germany to ensure highest quality to affordable prices.

### Benefits:

- **Saving in Structural and Masonry Cost:** Reduction in dead weights contributes substantially to savings in reinforcing steels and concrete in columns, beams and foundations. Also, bigger sizes of blocks (our blocks size of 600 x 200 x 200 are about the size of 16 conventional clay bricks), there is tremendous saving in bed mortar and because of uniformity and precision in size the plastering thickness can be reduced up to 60% compared to brick masonry plastering. If needed it can be directly finished POP or putty for internal walls avoiding the plastering.
- **Saving in Manpower:** Due to lightweight and bigger size of blocks, there is a tremendous savings in time and manpower. This leads to faster construction and an increase in productivity of about 150 to 200% by using our blocks.
- **Energy Savings:** Diamond Concrete Blocks have high thermal insulation ability. The amplitude-ratio and phase-displacement of a 10 cm thick wall with a density of 600kg/m<sup>3</sup> 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 clay bricks or a conventional concrete layer, results in the foamed concrete being naturally air-conditioning.
- **Cost Reduction for Transportation and Storage:** Diamond Concrete Blocks can be produced mobile (close to/of construction sites). This avoids transportation and requirement of large factory areas. Even if it is produced in a centralized plant, due to less weight more volume can be transported at a time.
- **Weight Reduction:** Lower weight of walls using Diamond Concrete Blocks of 600kg/m<sup>3</sup> in multi-storey buildings undoubtedly reduce the weight of a structure significantly.





- **Easy to Use and Handle:** Diamond Concrete Blocks are easy to cut shape and chisel with conventional carpenter's tools to achieve the desired wall pattern. Concealed wiring and plumbing can be carried out with ease.
- **Skim Coating:** Our Diamond Concrete Blocks require no plaster and a usual water-repellent paint suffices of external surfaces. However, where desired our foamed concrete can hold plaster very well, offering superb adhesive properties. Nevertheless skim coating is highly recommended with our foamed concrete.
- **Improved Fire Protection:** A wall of 10 cm thickness and only 600kg/m<sup>3</sup> can withstand a fire for 5 hours, due to the air enclosed in the cellular concrete.
- **Sound Insulation:** Diamond Concrete Blocks are a perfect impact and air-borne sound absorbing material, highly suitable for partition walls and floors screeds.
- **Termite-Proof:** Walls using our blocks are termite-proof, being an inorganic product.
- **Environment-Friendly:** Production process incurs lowest energy, compared to any other lightweight concrete production method. In addition, Diamond Concrete Blocks do not require any gas for curing as AAC Blocks need.
- **Precise Size and Shapes of Diamond Concrete Blocks**
- **Low Water Absorption**

## Technical Specifications

Oven Dry Density (kg/ m <sup>3</sup> )*		650 ± 50
Compressive Strength (N/mm <sup>2</sup> ) at 28 days	Grade A	4.0
	Grade B	3.0
Block Dimensions (L x H x B in mm)**		600 x 200 x 100/150/200
Oven Dry weight of block		100 mm thick - 8kg 150 mm thick - 12kg 200 mm thick - 16kg
Thermal Conductivity in Air Dry condition (W/m. K)		0.20
Sound Absorption (Db)		Upto 35
Fire Resistance (For thickness of 10 cm)		Upto 5 Hrs
Maximum Water Absorption (Liter/ m <sup>3</sup> )		150

\* **We can produce any other density upon request**

\*\* **We can made almost any other dimension upon request**