

LIGHT | **STRONG** | *ADVANCED*
AAC Blocks

AAC or Autoclaved Aerated Concrete was developed in Sweden in 1920s with the need of combining the qualities of two of the most versatile and most used building materials, **Wood and Concrete**. The material hence formed has surpassed all expectations and has been widely accepted and used as a major building material across Europe, Russia, Middle East, Japan, China, Australia, New Zealand etc.

AAC Blocks have been recently introduced in India and in a short span of time have become the preferred choice of construction material among builders and architects.

AAC is a Green Building material and with its myriad benefits like High Strength to Weight Ratio, High Thermal and Sound Insulation, Easy Workability, Low Carbon Footprint during application and manufacturing etc is said to revolutionize the construction industry in India.

AEROTUFF AAC Blocks: Specifications

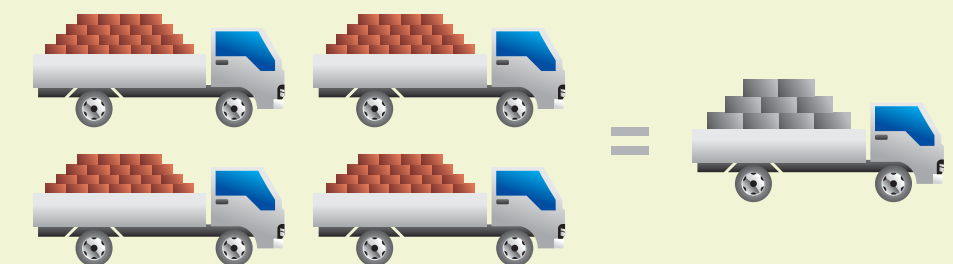
Parameter	Unit	Values
Applicable Standard		IS:2185 (Part 3) 1984
Length	Mm	625
Height	Mm	200/250
Thickness	Mm	75, 100, 150, 200, 250, 300
Dry Density	Kg/m ³	550 - 650
Nominal Compressive Strength	kg/cm ²	40
Fire Resistance	Hours	4 – 6 (Depending on Thickness)
Nominal Thermal Conductivity (k Value)	W/m-k	0.21
Drying Shrinkage	%	Max. 0.10
Sound Absorption	Db	43 for 150mm Wall
Water Absorption Coefficient	Kg/m ² x h 0.5	4-6



“A Sustainable future is only possible with recognition of the means of sustainable development”

When it comes to reducing the environmental impacts, AEROTUFF AAC Blocks stand way ahead of its competitors.

- Among various building materials available like Clay Bricks, Concrete Blocks etc, AEROTUFF AAC Blocks consume the least amount of energy during Manufacturing as well as Application. This helps save the fast depleting natural resources
- AEROTUFF AAC Blocks utilizes industrial wastes such as Fly Ash as Raw Material in comparison to Clay Bricks which consumes the precious fertile top soil as major raw material
- Light weight of AEROTUFF AAC Blocks helps reduce the consumption of fuel and hence the CO2 emissions during transportation



4 Trucks of Bricks = 1 Truck of AEROTUFF Block

- High Thermal Insulation of an AAC Wall helps reduce the heating and air conditioning requirements, thereby reducing energy consumption and green house gas emissions



AAC Blocks are a recognized Green Building Material and can help a builder gain additional green rating points under the LEEDS/GRIHA Green Building Rating System for Green Building Certification.

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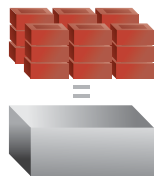
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Fast & Easy Construction

Energy Efficiency & Comfortable Living

Safe Living



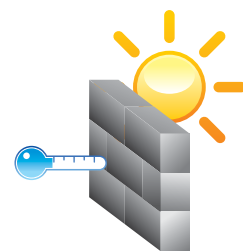
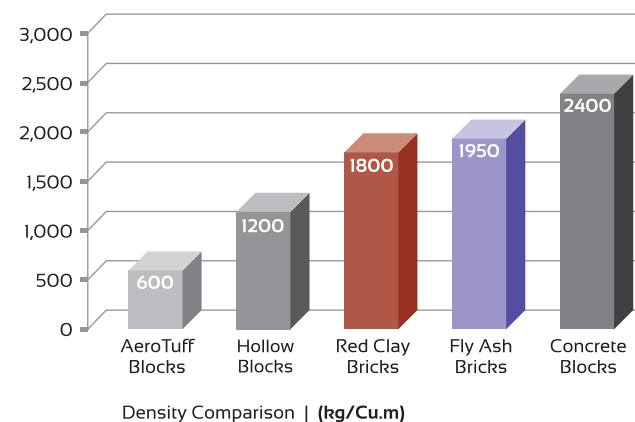
Big & Accurate Size

The Big size and Accurate shape & dimensions of AEROTUFF Blocks makes construction with these blocks extremely fast and easy. This also results in considerable savings in Joining Mortar and Plaster.

Light Weight

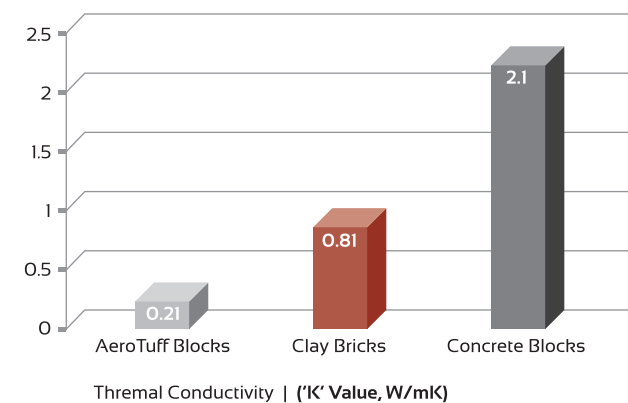
The weight of AEROTUFF AAC Blocks is approximately 1/3rd that of Clay Bricks and 1/4th that of conventional Concrete Blocks.

Light weight of these blocks results in reduction of dead load on the building structure and hence provides considerable savings in the structural cost.



High Thermal Insulation

The unique cellular structure of AEROTUFF AAC Blocks with entrapped air bubbles provides them the lowest thermal conductivity among all building materials.



With escalating energy costs and increased requirement of energy efficiency, a lot of builders are investing in special insulation techniques like Cavity Walls, External PU Claddings, Special Paints etc. The High Thermal Insulation of AEROTUFF AAC Blocks makes the use of such expensive techniques totally unnecessary.

The buildings made with AAC Blocks are minimally affected by outside weather. This also helps in considerable reduction in the air-conditioning and heating loads.



Fire Resistant

"When Safety is an issue AEROTUFF takes the heat"

AEROTUFF AAC Blocks have the best in class fire resistance with a fire rating of 4-6 Hours, depending on the thickness of the blocks.

The blocks are made up of inorganic material and hence they do not catch fire or emit toxic gases and conform to Class 'O' rating for spread of flame.



High Earthquake Resistance

The lightweight of AEROTUFF AAC blocks reduce the mass of a structure, thus decreasing the impact of an earthquake on the building and hence offering enhanced safety against calamities like earthquakes, hurricanes etc as compared to structures built with heavy red clay bricks, fly ash bricks or concrete blocks.



Excellent Workability

AEROTUFF AAC Blocks stand out in terms of flexibility and ease of working at site. The blocks can be CUT, DRILLED, NAILED, CHASED to the desire of the user with simple hand tools.



Good Sound Absorption

AEROTUFF AAC Blocks have very good acoustic properties and significantly reduce the noise entering a building or a room. With a Sound Transmission Class of up-to 45, these blocks show better resistance to sound transmission as compared to Concrete Blocks or Clay Bricks of an equivalent thickness.

Walls with lower thicknesses can be achieved with AEROTUFF Blocks, while retaining similar or improved properties. This benefits builders gain additional Carpet Area in their buildings with the same Built-up Area.



Water Barrier

The non-interconnecting cellular structure of AEROTUFF AAC Blocks prevents the transmission of water through the blocks and provides a strong Water Barrier. This structure of tiny bubbles is strengthened by the process of autoclaving and hence provides a long time resistance against the seepage of water through AAC Walls.



Pest Resistant

The mineral composition and solid structure of AEROTUFF AAC Blocks makes them resistant against all kinds of pests, moulds, insects etc.