



A TRUE LEADER
IN AAC BLOCKS INDUSTRY

#### **Hitech AAC Blocks**

Hitech is India's leading manufacturer of Autoclaved Aerated Concrete Blocks: an amazingly Innovative and Green Building Material. What makes it superior is its incredible lightweight and insulation properties. About 1/3rd the density of clay brick, can be laid much quicker, saving time and building costs. Being more resilient to damage helps reduce wastage during transportation. These blocks offer effective & practical solutions for the current building regulations and are manufactured using the latest technologies at India's most advanced AAC facilities located in NH 48, Valsad, Gujarat. Construction using Hitech AAC Blocks boosts up the project by ensuring at least 6-7 LEED Green Building Certification Points.

## Key features



Superior Acoustic Insulation



Reduced Structural Cost



100% Termite & Mold-Resistant



Energy Savings up to 15%-20%



State-of-the-art German Technology

## Hitech Benefits



Resource Efficiency



Indoor Air Quality



**Energy Efficiency** 



Material Efficiency



Water Conservation

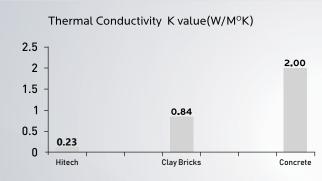


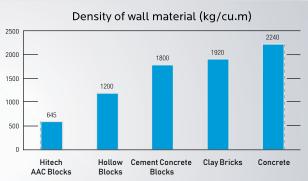
Affordable

# Why use Hitech AAC Blocks?

- 1. Energy saving and eco-friendly; helps reduce carbon foot print.
  - Manufactured from recycled material with zero wastage
  - Quicken up construction by up to 30%
- 2. Dimensionally accurate & easy workability.
  - Factory finished with superb surface finish; easily accepts renders & plasters
  - · Use of standard tools to cut, saw, chisel, drill & shape

- 3. Unmatched Properties.
  - Super Lightweight; 1/3rd the density of clay bricks
  - Non-combustible with superior fire resistance
  - Exceptional Thermal & Acoustic Insulation
  - No cavity construction; eliminates termites, rodents, pests & fungal growth
- 4. Guaranteed Savings\*.
  - Reduces foundation load of the building up to 30%
  - Reduces Power Consumption by 27%
  - Steel & Cement Savings by 18% & 12% respectively





\*This is for a typical building, performance varies with number of floors, Earthquake forces & Earthquake zones etc.



# A Comparative Analysis

PARAMETER	AUTOCLAVED AERATED CONCRETE	CELLULAR LIGHT- WEIGHT CONCRETE	
Density (kg/cm)	√ 551-650 Kg/m³	x 800-1000	
Compressive Strength (N/mm2)	✓ Minimum of 4	x 1.5-2.5	
Dimensional Characteristics	✓ Dimensionally Accurate	x Dimensional Variations	
Curing	✓ Autoclaving (Steam)	x Normal	
Pore Size and Distribution	✓ Small and Distributed	x Large	
Drying Shrinkage	✓ Within IS limits	x No Consistency	

S.No	CRITERIA	UNIT	Hitech ROCON BLOCKS	CLAY BRICKS	CONCRETE BLOCKS
1.	Face Size	mm	600 mm x 200 mm	230 x 75	400 x 200
2.	Thickness	mm	100-300	115 100,	150, 200
3.	Faster Construction		Yes	Slow	
4.	Workability		Easy	Moderate	Difficult
5.	Quality		Highly Consistent – Factory Made	Inconsistent –	Manually Made
6.	Insulation Properties		Superior	Moderate	Average
7.	Fire Rating		Superior	Normal	
8.	Services		Easy	Electric/Plumbing Chasing Difficult	
9.	Environment Friendly		Green Material	N	0

## Application Areas:









Technical Specifications*							
Property	Unit	Value					
Face Size##	mm	625, 600 x 200					
Thickness	mm	50 75 100 125 150 200 230					
Dry Weight	Kg	3.9 5.8 7.8 9.75 11.7 15.6 17.9					
Compressive Strength** (min)	N/mm²	< 4 (4.2 to 4.6)					
Normal Dry Density	Kg/m³	551-650					
Thermal Conductivity	W/m-k	0.24(As per IS codes)					
Sound Reduction***	db	37-42					
Fire Resistance-load Bearing (200mm Thickness)	Hrs	4					
Non Load Bearing (100mm thickness)	Hrs	4#					

<sup>\*\*</sup>Confirming to IS 2185 (Part 3), 1995.

#Based on interpolation - 4 hrs for 150 mm thick - not tested.

##Face Size 600X250 is available at Jhajjar plant

## >> The Hitech advantages\*

- 1. We provide technical support for lightweight walling-based structural design.
- 2. Advise on the handling, storage and efficient use of these products so as to minimise wastage, and thereby costs.
- 3. Advise on the construction of walls:
  - Recommended/Correct Practices
  - Training of Supervisors and Masons
  - Site audit & feedback process on walling work



### **Backed by the Leaders**

hitech, a leading name in the Indian Building Material Solutions Industry, is a part of the renowned hitech group, which is a 1000 cr. business conglomerate. hitech group compromises a portfolio of eco-friendly products that are the result of cutting edge technology aimed at offering customers a wide range of world class products.



<sup>\*\*\*</sup>Depends on the thickness.



