



BIRLA
AEROCON
AAC BLOCKS

**A TRUE LEADER
IN AAC BLOCKS INDUSTRY**

Birla Aerocon AAC Blocks

Birla Aerocon 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 Chennai, Surat, Jhajjar & Thimmapur. Construction using Birla Aerocon 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

Birla Aerocon Benefits



Resource Efficiency



Indoor Air Quality



Energy Efficiency



Material Efficiency



Water Conservation

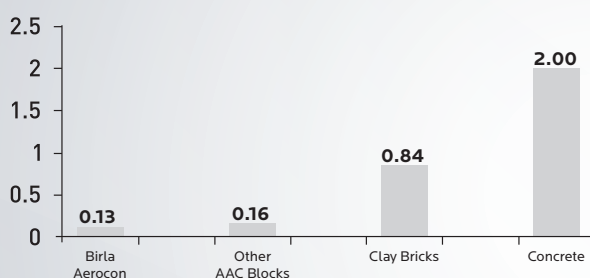


Affordable

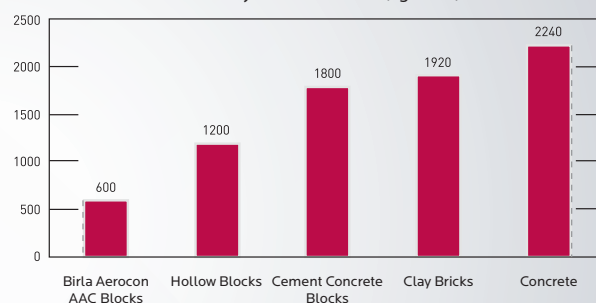
Why use Birla Aerocon AAC Blocks?

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

Thermal Conductivity K value(W/M⁰K)



Density of wall material (kg/cu.m)



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

Birla Aerocon Blocks – Jumbo Size



From (L-R) Birla Aerocon AAC Block, Concrete Block, Hollow Block & Clay Brick

» A Comparative Analysis

| PARAMETER | AUTOCLAVED AERATED CONCRETE | CELLULAR LIGHT-WEIGHT CONCRETE |
|---|-----------------------------|--------------------------------|
| Density (kg/cm) | ✓ 551-650 Kg/m ³ | x 800-1000 |
| Compressive Strength (N/mm ²) | ✓ 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 | BIRLA AEROCON BLOCKS | CLAY BRICKS | CONCRETE BLOCKS |
|------|-----------------------|------|-------------------------------------|-------------------------------------|-----------------|
| 1. | Face Size | mm | 600 mm x 200 mm | 230 x 75 | 400 x 200 |
| 2. | Thickness | mm | 75- 230 | 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 | No | |

●●● Application Areas:



Technical Specifications[@]

| Property | Unit | Value | | | | | | |
|--|-------------------|-----------|-----|------|------|-----|-------|--|
| Face Size## | mm | 600 x 200 | | | | | | |
| Thickness* | mm | 75 | 100 | 125 | 150 | 200 | 230 | |
| Dry Weight | Kg | 5.25 | 7 | 8.75 | 10.5 | 14 | 16.10 | |
| Compressive Strength** (min) | N/mm ² | 3 | | | | | | |
| Normal Dry Density | Kg/m ³ | 551-600 | | | | | | |
| Thermal Conductivity | W/m-k | 0.15 | | | | | | |
| Sound Reduction*** | db | 37-42 | | | | | | |
| Fire Resistance-load Bearing (200mm Thickness) | Hrs | 4 | | | | | | |
| Non Load Bearing (100mm thickness) | Hrs | 4# | | | | | | |

© Conditions apply

*Other thickness can be given on request. **Confirming to IS 2185 (Part 3), 1995, Compressive Strength of 4 N/mm² is available at Jhajjar and Chennai plants.

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

Face Size 600X250 is available at Jhajjar plant ## Face size of 600X240 is available at Golan Plant, ***depends on the thickness.

» The Birla Aerocon 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

HIL, a leading name in the Indian Building Material Solutions Industry, is a part of the renowned C.K Birla Group, which is a \$2.4 billion business conglomerate. HIL's Green Building Brand-Birla Aerocon, comprises 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.



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