



A Sustainable Alternative
Autoclaved Aerated Concrete Block

A Quality Product by
Shreeji Blocks Pvt. Ltd.



ENGINEERED FOR NEW-AGE CONSTRUCTIONS

SHREEJI BLOCKS PVT.LTD. is a Company Founded by a very young set of promoters and is driven by the passion to offer next generation solution, which also contributes positively to the environment.

SHREEJI BLOCKS PVT.LTD. has set-up a state-of-art plant to manufacture AAC Blocks, with fully Automatic German Technology.

DURALITE AAC BLOCK promises to contribute in changing the future of Industrial, Commercial, Residential development with its determination and skills. With our commitment to research and development, we have helped to transform this unique and versatile product into the modern building systems we have today.

We at **SHREEJI BLOCKS** believe in a single -minded mission to deliver the best & finest quality of ACC Blocks with total consistency throughout the entire year.



BUILDING BLOCKS FOR STRONGER TOMORROW

AAC Blocks - A legacy

Autoclave Aerated Concrete Masonry Units (AAC) is a popular building material used in Europe for over 75 years. AAC is largely new to India introduced in the past two decades and has been used in all climatic conditions.

Autoclave Aerated Concrete Blocks are ultra lightweight blocks with a unique cellular structure.

The basic raw materials used in the manufacturing of AAC are Pulverized Fly Ash (PFA), Ordinary Portland Cement (OPC), Lime, Water and Aluminum powder. Entrained air bubbles are created by a chemical reaction between the hydration products and aluminum powder, which gives its form of compressive strength and density consisting of 80% air which in turn provides superior energy efficiency, fire resistance and acoustical properties. The aerated material is then cured under pressure in autoclaves for 8 to 12 hours, which transforms the material into hard calcium silicate.





TOWARDS GREENER TOMORROW

AAC Blocks - A Green Building Component

Autoclaved aerated concrete (AAC) Block is well known as an environmentally friendly construction material. The energy consumed in the production process is only a fraction compared to the production of other materials. The manufacturing process emits no pollutants and creates no by-products or toxic waste products.

AAC blocks are manufactured from abundantly available natural raw materials. The finished product is twice the volume of the raw materials used, making it extremely resource-efficient and environmentally friendly.

Duralite lets you build a tomorrow that encourages the environmental pursuits.



THINK SMART CHOOSE SMART BUILD SMART

Duralite AAC Block is the first choice among architect, developers and builders. But the decision to use Duralite is not dependent on one particular argument, because it unites so many advantages in one product. Duralite AAC Block acts as an image booster for builders, architects, contractors thus better brand equity. So better to Think Smart ...Choose Smart...and Build Smart by opting for Duralite AAC Blocks.

BENEFITS

- Designed for consumers who are environmentally conscious.
- Time and labour saver.
- Available consistently throughout the year.
- Faster construction and easy workability.
- Precision and undulation free partitions.
- Better strength at 1/3rd density.
- Energy saving and better temperature control.
- Highly recommended for alteration and renovation purpose.
- Advance German cutting technology ensures precise sizes.
- Fire resistance structure.
- Better accoustics.
- No curing required, neat & clean site.
- Cost saving throughout the life.
- Lower structural and handling cost.



DIMENSIONS OF DURALITE AAC BLOCKS



TECHNICAL ASPECTS AND COMPARISON WITH CLAY BRICKS

Sr. No.	Properties	AAC Blocks	Clay Brick
1	Size (L x H x W)	600 mm x 200 mm x 100 to 300 mm	230 mm x 75 mm x 100 mm
2	Precision in size	Variation 2 mm (+/-)	Variation 5 mm (+/-)
3	Compressive strength	Above 4-5 N/mm ²	1.5-2.5 N/mm ²
4	Dry density	550 - 650 kg/m ³ (oven dry)	1950 Kg/m ³
5	Fire resistance	2- 6 hours depending upon thickness	2 Hours
6	Sound reduction index (DB)	45 dB for 200 mm thick wall	50 dB for 220 mm thick wall
7	Thermal conductivity	0.16(k) w/m deg. C	0.81 w/mk
8	Mortar consumption	Thin bed jointing mortar required	Cement required
9	Plaster thickness	8 mm to 12 mm max for interior and 12 mm to 16 mm max for exterior	15 mm to 20 mm
10	Energy saving	Upto 15% of Air conditioning cost. Both heating and cooling cost will come down	No saving

FEATURES OF DURALITE AAC BLOCKS



Fire Resistance

Duralite AAC Blocks has one of the highest hourly fire-resistance ratings per inch of any building material. AAC is non-combustible – it will not burn. AAC is not only versatile structurally but its fire resistance properties are outstanding. Duralite AAC Blocks offers excellent fire protection for fire-rated walls.



Long Lasting

Duralite AAC Blocks does not rot or deteriorate over time. Structures built with AAC products have a long life and retain good finish even after decades. Although actual life of AAC products depends on various factors, as per various standards institutes.



Pest Resistant

Duralite AAC Blocks are made up of inorganic materials, which does not get disintegrated, it is not susceptible to external influences and keeps termites away avoiding damages and losses.



Energy Efficient

Duralite AAC Blocks give superior thermal insulation because of low thermal conductivity and low air infiltration. Moreover, lesser joints and better compacted jointing mortar add to the sound and thermal efficiency.



Acoustically Absorbent

Duralite AAC Blocks provide excellent sound absorption with a Sound Transmission Class rating of 44. It is a cellular structure which provides superior sound insulation.



Easy to Use

Duralite AAC Blocks can be easily cut, drilled and grooved with manual or power tools. This provides higher productivity in electrical and plumbing installations.



Water & Earthquake Resistant

The impact of earthquake forced on a structure is proportional to the weight of the structure. Hence, Duralite AAC Blocks provides excellent resistance to earthquake forces.



Environment Friendly

Ash disposal is a major problem for coal based power plant. Fly ash generated from such plants is used for manufacturing Duralite AAC Blocks. Moreover AAC manufacturing process require less energy, has very low emission and does not generate any waste products.



Versatile

Duralite AAC Blocks have an attractive appearance and is readily adaptable to any style of architecture. Almost any type of design can be achieved with AAC.

Application of Duralite Blocks :

**Residential | Hotel, Motels, and Restaurant | Retail and Warehouse, Cold Storage | Industrial | Office / Commercial Buildings
Educational Institution | Medical Clinics and Hospital | Bungalows | Fire walls and Sound walls**

Commercial Complex



Retail Spaces



Bungalows



Hotels



Offices



4" Trowel & 6" Trowel
Model No : DL 11 & DL12



Block Cutter
Model No : DL 13



Rubber Hammer
Model No : DL 14



Groove Cutter
Model No : DL 15



Rasp
Model No : DL 16



Right Angle
Model No : DL 17

Tools used for Application of Duralite Blocks



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