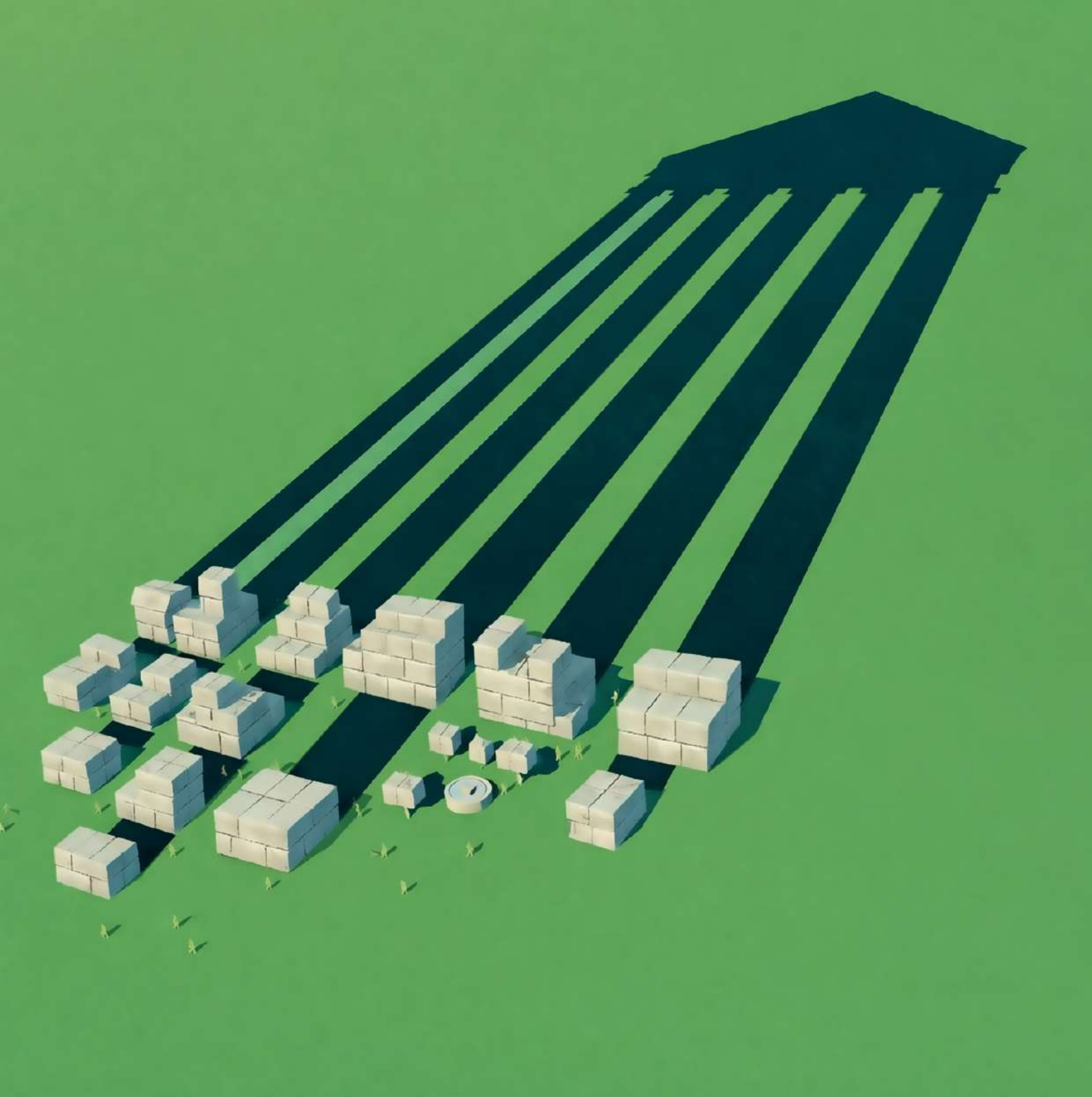




FORTIFY Your Structure



Meet Real Site Timelines Without Compromise.

Backed by 40+ years of experience in construction and building materials.

45 AAC Blocks supports high-volume supply across Maharashtra with dependable capacity and dispatch readiness.



SERVICE COVERAGE
Across Maharashtra



PRODUCTION CAPACITY
1000 m³ | 30,000 m³ | Daily | Monthly



LOGISTICS SUPPORT
Transport Inclusive



DISPATCH
Immediate Availability

Why Choose 45 AAC Blocks?

Consistency you can see in every block.

Quality you can trust on every site.

Reliability to deliver on time.



Walling Material Comparison



Parameter	Red Clay Bricks	Solid Concrete Blocks	AAC Blocks
Composition	Top Soil	Cement, sand, and coarse aggregates	Fly ash , cement, lime, gypsum, aluminum powder
Dry Density	1,600 – 2,000 kg/m³	1,800 – 2,400 kg/m³	550 – 650 kg/m³ (Ultra-lightweight)
Fire Resistance (thickness dependent)	~2 hours	3 hours	4 hours
Wastage	~5 – 10% (Due to breakage in transport/handling)	~3 – 5%	1 – 6% (Precise factory molding reduces on-site breakage)
Energy Saving	Low (Heat retention increases cooling loads)	Moderate	High (Reduces energy bills by 25-30%)
Construction Speed	Slowest (Small units; manual alignment)	Moderate (Larger than bricks)	Fastest (Up to 3x faster; 1 block = 8-10 bricks)
Weight	Very Heavy (~2.5-3kg per brick)	Heavy	Ultra-Lightweight (1/3 weight of brick)
Insulation	Poor (Heats up quickly)	Moderate	Excellent (Reduces AC bills 25-30%)
Eco-Impact	High (Uses top soil)	Moderate	Low (Uses fly ash waste)

*Depending on thickness, wall system and actual site conditions.



The 45 Advantage



LIGHTWEIGHT

1/3rd

the weight of conventional clay bricks.
Up to 55% reduction in overall building load.

- Enables efficient structural design.
- Helps save up to 20% on structural cost.

THERMAL INSULATION

25–30%

lower air-conditioning costs.

- Improves indoor thermal comfort.
- Supports energy-efficient buildings.



FIRE RESISTANT

Up to **4**
hours fire resistance.

- Strong protection during fire exposure.

ACOUSTIC INSULATION

Sound reduction up to

37–45 dB.

Ideal for residential and commercial buildings.



FASTER CONSTRUCTION

1 AAC block = **8–12** bricks.

- Faster wall completion.
- Fewer joints and mortar usage.
- Save on labour.



DIMENSIONAL ACCURACY

Precision cut for perfect

alignment.

- Ensures straighter walls.
- Delivers a smoother final surface.



SUSTAINABLE CHOICE

Made using

fly ash.

- Helps reduce industrial waste.
- Supports energy-efficient construction.

Products

Standard Block Sizes

625 × 240 × Thickness

600 × 200 × Thickness

Available Thickness Options

75 mm | 100 mm | 150 mm | 200 mm | 225 mm

250 mm | 300 mm

SAVES
30%
ON STEEL
CONCRETE | LABOUR



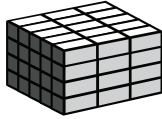
*The AAC blocks represented are for illustration purposes only.

Technical Specifications of AAC Blocks

Compressive Strength	≥ 4 N/mm ² (MPa) (Grade I)
Dry Density	551 – 650 kg/m ³ (Grade I)
Fire Resistance	4
Thermal Conductivity (K value)	0.16 – 0.21 W/mK
Thermal Resistance (R Value)	0.46 – 1.25 m ² ·K/W (for 75mm to 200mm thickness)
Thermal Conductance (U Value)	0.55 – 0.75 W/m ² ·K (finished wall)
Sound Reduction	37 to 45 dB
Sound Transmission Class (STC)	40 to 44 Rating
Modulus of Elasticity	1,500 – 2,500 N/mm ²
Drying Shrinkage (Maximum)	0.05% (0.5 mm/m)
Capillary Water Absorption	≤ 10% (by weight after 24 hours)
Color	Light Grey
Melting Point	Approx. 1,200°C

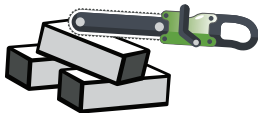
*Depending on thickness, wall system and actual site conditions.

Your Guide to Prepare & Apply



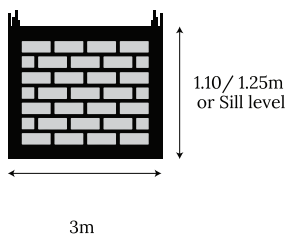
1. STORAGE & STACKING

Store blocks on a dry, level surface to prevent damage and avoid contact with moisture.



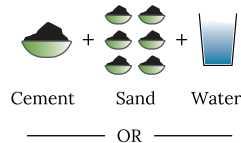
4. BLOCK CUTTING

Cut using appropriate tools such as a hacksaw or a rotary cutter for precise sizing.



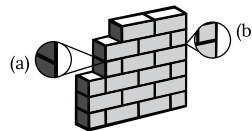
7. COPING BEAM

Use 2 of 8 mm bars to provide a coping beam with reinforcement.



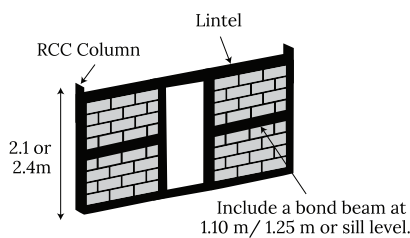
2. MORTAR PREPARATION

Premixed thin-bed adhesive (as per ASTM standards)



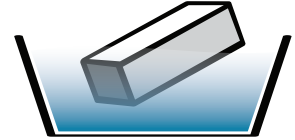
5. MORTAR THICKNESS

- a. Medium Bed Mortar (Pre-Mix): 5-6 mm
- b. Thin Bed Mortar (Pre-Mix) 2-3 mm



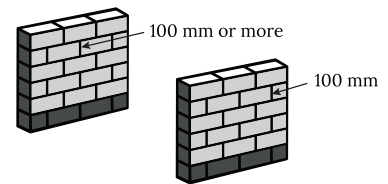
8. LINTEL SUPPORT

Provide a lintel support on full blocks.



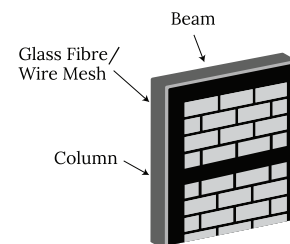
3. PRE-WETTING OF BLOCKS

Lightly dip blocks in water before use and remove immediately. Do not oversoak.



6. BOND PATTERN

Ensure proper staggered bonding with a minimum overlap.



9. BEAM & COLUMN JUNCTIONS

Minimum 150 mm (6") overlap on both sides on internal and external surfaces.



REACH US



BY



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