

IS : 2185



CM/L-6700122612



**CUBECRETE**

AAC BLOCKS

**BUILD YOUR  
DREAM HOME  
WITH OUR QUALITY  
AAC BLOCKS**



**Fire  
Retardant**



**Noise  
Reduction**



**Lightweight**



**CUBECRETE**

**AAC PRODUCTS PRIVATE LIMITED**

**Registered Address :**

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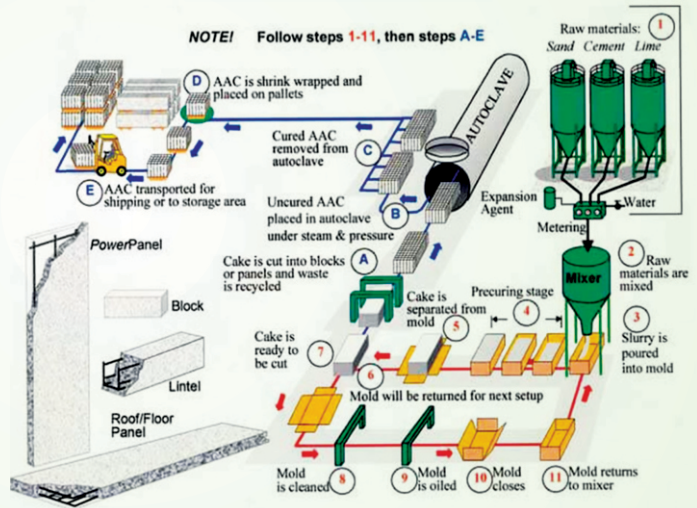
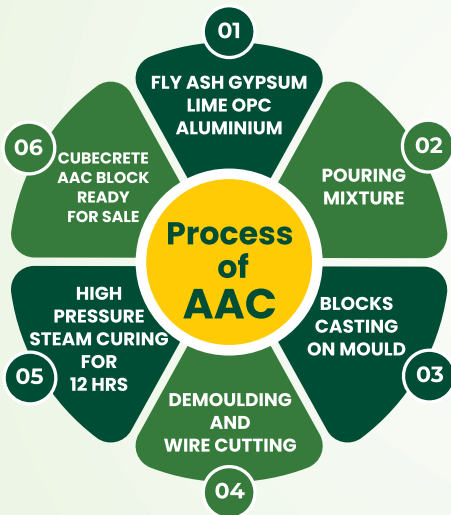


AAC (Autoclaved aerated concrete) block was developed in 1924 by a Swedish architect. AAC blocks are used as an alternate material for building masonry as it is widely accepted globally.

Autoclaved aerated concrete is an eco-friendly building material which is made by natural raw materials such as fly ash, cement, lime, gypsum and aluminum powder.

AAC Blocks has high thermal insulation and durability, its factory finish ensures accurate dimensions and quality finish, hence it is preferred in all types of buildings like residential homes, commercial developments, schools, hospitals, hotels etc.

### Process of AAC



#### Precuring Section



#### Autoclave Section



#### Cutting Section



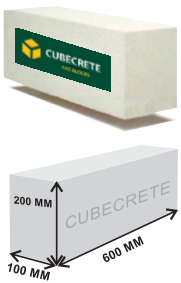
#### Packaging Section





### Cubcrete AAC Block (Autoclaved aerated concrete)

Properties	CUBECRETE AAC Block As per Specifications-IS 2815
General Size(mm)	600 x 200 x (100 -300)
Thickness (mm)	100(4"),150(6"), 200(8"),230(9"),250(10"),300(12")
Compressive Strength(N/mm2)	3-5
Dry density(Kg/m3)	550 to 650
Sound Absorption(db)	Up to 60
Fire Resistance	4-6 Hours
Thermal Conductivity(W/mk)	0.16 to 0.122
Curing	Autoclaves(Steam Curing)



### Cost Comparison – Cubcrete vs Red Clay Bricks

S.No	Parameters	Clay Red Bricks	AAC Blocks
1	The Volume of mortar for plaster	1.8m <sup>3</sup>	1.0m <sup>3</sup>
2	The Volume of mortar by 25% for wastage and frog filling	2.25m <sup>3</sup>	1.25m <sup>3</sup>
3	Quantity of cement	0.45m <sup>3</sup>	0.25m <sup>3</sup>
4	No of bags of cement	13.5	7.5
5	Quantity of Sand	1.8m <sup>3</sup>	1.0m <sup>3</sup>
6	Quantity of Water	236.25 Liters	131.25 Liters

### Technical Comparison – Cubcrete vs Red Clay Bricks

Particulars	CUBECRETE AAC	Red Clay Bricks	Cellular Light Weight Concrete (CLC)
Size ( L x B x H ) mm	600x200x100 or 150	190*90*90	600x200x100
Precision in size	± 1.5mm	5(+/-)mm	3(+/-)mm
Dry Density	550-650 Kg/m <sup>3</sup> (oven dry)	1800 Kg/m <sup>3</sup>	1000 Kg/m <sup>3</sup>
Compressive Strength(Kg/m <sup>3</sup> )	3 to 4 Mpa	2 to 3 Mpa	2 to 2.5 Mpa
Sound Reduction Index (dB)	60 for 200 mm thick wall	50 for 230 mm thick wall	50 for 230 mm thick wall
Thermal Conductivity (W/mk)	0.16	0.81	0.81
Mortar Consumption m <sup>3</sup> with 1:6	0.5 Bag of Cement	1.35 bag of Cement	0.7 bag of Cement
Construction Time per Mason	30 m <sup>2</sup>	20 m <sup>2</sup>	25 m <sup>2</sup>
Chemical Composition	Fly-ash used around 65% which reacts with binders for form AAC	Soil is used which contains inorganic-ic impurities in Efflorescence.	Less than AAC
Finishing	Can be directly cut or shaped/ sculptured as required	Not possible	Not possible
Cost benefit factor	Up to 24% in structural cost (subject to project design)	No Cost benefit.	Soil inorganic impurities
Energy Saving	Up to 30 % of Air- conditioning load	No Energy Saving	15%
Specific Gravity	0.6 to 0.65	2.4	0.85

### Cost Comparison – Cubcrete vs Red Clay Bricks

Parameter	AAC Block	Clay Bricks
Structural Cost	Steel Saving Upto 15%	No Saving
Cement Mortar for Plaster & Masonry	Requires less due to flat, even surfaces & less number of joints	Requires more due to irregular surface and more number of joints.
Breakage	Less than 5%	Average 10 to 12 %
Construction speed	Speedy construction due to its big size, light weight & ease to cut in any size or shape	Comparatively slow
Quality	Uniform & Consistent	Normally varies
Fitting & Chasing	All kind of fitting and chasing possible	All kind of fitting and chasing possible
Carpet Area	More due to less thickness of walling material	Comparatively low
Availability	Anytime	Shortage in monsoon
Energy Saving	Approx. 30% reduction in air-conditioned load	No such saving
Chemical Composition	Sand/Flyash used around 60-70 % which reacts with Lime & Cement to form AAC	Soil is used which contains many inorganic impurities like sulphates etc. resulting in efflorescence

**FAST CONSTRUCTION**

**LIGHT WEIGHT**

**ENERGY EFFICIENT**

**DURABLE**

**STRENGTH**



**Eco Friendly**

**HIGHLY TIME EFFICIENT**

**Low Material Wastage**

**NO CURING REQUIRED**

**Sound Resistant**



**MAJOR CUSTOMERS OF CUBECRETE**



FOUNDATIONS

