

# **INFRA BLOCK**

**INDUSTRIES PVT LTD** 

WE BUILD YOUR NEST





## Delivering high quality product for your NEST.



We, Infra Block Industries, is diversified business group, entering in the world of construction products. Infra Block Industries Pvt Ltd is manufacturer of high quality AAC Block in Surat, Gujarat. Company has been built up with the vision of manufacturing and providing high quality construction material in the market.

Infra Block Industries Pvt Ltd is the diversified business. The group is deeply engaged in manufacturing in different sectors like textile, chemical, green energy, agricultural products, exports, infrastructure developments etc. since last 4 decades.ive price to our customers.

We are manufacturing and supplying different types of AAC Blocks for various types of use like Outer Wall, Inner Wall, Compound Wall in different types of construction like High rise building, Tenements, commercial buildings etc.

We have built up our base on core principles Quality, Accuracy & Consistency in the market within the short time of period. We always try to satisfy our customers with our quality products.

AAC blocks weigh almost around 80% less as compared to the conventional red bricks, ultimately resulting in a great reduction of deadweight. Further, lightweight saves cost and energy in transportation, labour expenses and increases chances of survival during seismic activity. Also due to less weight, the blocks can be handled easily.

As the AAC blocks are very easy to handle, manipulate and use, ordinary tools for cutting the wood such as the drill, band saws, etc. can be easily used to cut and align them. Moreover, the AAC blocks come in larger sizes and with fewer joints. This results in faster construction as the installation time is significantly reduced due to fewer amounts of blocks and the masonry amount involved is also lowered resulting into reduced time-to-finish.

Produces at least 30% less solid waste than traditional concrete. There is also a decrease of 50% of greenhouse gas emissions.

Depending upon the thickness of the AAC blocks, they offer fire resistance between 2 to 6 hours. These blocks are highly suitable for areas where fire safety is of great priority. The material is very airy and allows diffusion of water. This reduces the humidity inside the building. AAC will absorb moisture and release humidity. This helps to prevent condensation and other problems that are related to mildew.

There are no toxic gases or other toxic substances in Autoclaved Aerated Concrete. It neither attracts rodents or other pests, nor can it be damaged by such.

AAC blocks are highly superior in terms of the strength, thus it gives higher stability to the structure of the building. Also, the porous structure of the AAC blocks result in enhanced sound absorption, making it sound resistant. So, AAC blocks are the most ideal material for the construction of walls in auditoriums, hotels, hospitals, studios, etc.



#### APPLICATIONS

Residential properties | Commercial properties | Institutional properties | Hospitals and hotels | Multi-storey buildings | Industrial properties

## **TECHNICAL ASPECTS**

No.	PARAMETER	AAC BLOCK	CLAY BRICK
1	Size (LxHxT)	625x240x(75 to 225) mm	230 x 75 x 115 mm
2	precision in Size	1.5 mm (±)	05 to 15 mm (±)
3	Compressive Strength	3.5 N/mm <sup>2</sup> & above (as per IS-2185)	2.5 to 3.5 N/mm <sup>2</sup> & above (as per IS-1077)
4	Dry Density	550-650 Kg/Cum (oven dry)	1950 Kg/Cum
5	Fire Resistance	02 to 06 hours (depending upon thickness)	02 hours
6	Sound Insulation Index	45db for 200 mm thick wall	50 db for 230 mm thick wall
7	Thermal Conductivity	0.24 (w / k-m)	0.81 (w / k-m)

#### **GENERAL ASPECTS**

No.	PARAMETER	AAC BLOCK	CLAY BRICK
1	Structural Cost	Steel Saving up to 15%	No such saving
2	Cement Mortar for	Requires less due to flat, even surface	Requires more due to irregular
	Plaster & Masonry	& less number of joints	surface & more number of joints
3	Braking & Utilization	Negligible Breakage almost 100%	Average 10 to 12% breakage, so
		utilization is possible	100% utilization is not possible
4	Construction Speed	Speedy construction due to it's big size,	Comparatively slow
		Light weight & ease to cut in any size or shape	
5	Labour output	Approximately double if conventional brick	Comparatively low
6	Quality	Uniform & Consistent	Normally varies
7	Efflorescence	No such change, which improves the durability	Most chances are there
		of wall along with plaster & paint in a long run	
8	Fitting & Chasing	All kind of fitting & chasing possible	All kind of fitting / chasing possible
		(as per IS:1905)	
9	Carpet Area	More due to less thickness of walling material	Comparatively low
10	Storage	Readily available at any time & any season in	Particularly in monsoon. stock at
		a short notice so no storage required	site compulsory which block large
			working space
11	Water Required	Requires less in wetting & curing, hence saving	Need more curing resulted to higher
		in electricity bill & labour cost	amount of electricity bill & labour cost
12	Energy Saving	Approximately 30% reduction in air-conditioned	No such saving
		load for both heating & cooling	
13	Maintenance	Less due to its superior properties	Comparatively high

#### **TECHNICAL SPECIFICATIONS**

Property	Units	Sizes
Size	mm	600 X 240 (with 200/250 option) X thickness
		625 x 240 (with 200/250 option) X thickness
Thickness	mm	50(2"), 75(3"), 100(4"), 115(4.6"), 125(5"),
		150(6"), 200(8"), 225(9"), 300(12")
Compressive Strength	N/mm	2 > 3 - 4.5 (IS 2185)
Oven Dry Density	Kg/m3	551 - 650
Sound Absorption	De	Up to 42
Fire Resistance	Hrs.	4 (depending upon the thickness)
Thermal Conductivity	"K"	$W/(m-K) \le 0.21$
Thermal Resistance	K-m2/W	0.95 (for wall of 200mm thickness)
Heat Transmission Coefficient 'U'	W/(m2K)	2.17
Drying Shrinkage	%	0.04% (Size of Block)

### OUR S E R V I C E S

Site survey & on-site expert assistance Estimate of quantity Construction guidance to builders and masons Cost analysis



### INFRA BLOCK INDUSTRIES PVT LTD

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