AAC BLOCKS MANUFACTURER
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SSB BRICKS PORTFOLIO

SSB Bricks: A Leading AAC Blocks Manufacturer in Hyderabad

At **SSB Bricks**, we pride ourselves on being a trusted name in the construction industry, specializing in the manufacturing of high-quality AAC (Autoclaved Aerated Concrete) Blocks. With **a state-of-the-art manufacturing plant** that boasts a daily production **capacity of 128 cubic meters**, we cater to the growing demands of modern construction with excellence and reliability.

Operating with **an annual turnover of approximately ₹12-₹14 crore**, we have established ourselves as a preferred supplier for a wide range of projects across Hyderabad and beyond. Our unwavering commitment to delivering consistent quality and superior service has earned us long-standing partnerships with several esteemed clients, including **Viana Homes, RSR Infra, Mitra Constructions, DNB Constructions, Shanthasriram, Vijaya Bheri Arcade,** and many others. Our clients appreciate our commitment to **consistent quality**, which has become the hallmark of our products and services.

Our AAC blocks are known for their **lightweight, eco-friendly, and durable properties**, making them the ideal choice for sustainable construction. Clients value our products for their **thermal insulation, soundproofing, and fire resistance,** ensuring high-performance and cost-efficiency in every project.

At **SSB Bricks**, we continually strive to exceed expectations by maintaining the highest standards in both product quality and customer satisfaction. Our dedication to innovation and excellence has made us a reliable partner for the construction industry's leading players.

Our Products:

- **Block Size: 600mm x 200mm x 100mm**
- **Block Size: 600mm x 200mm x 150mm**
- **Block Size: 600mm x 200mm x 200mm**
- **Block Size: 600mm x 200mm x 225mm**
- **Block Jointing Mortar (40Kg per bag)**
- **Ready Mix Plaster (40Kg per bag)**

For detailed product specifications, please refer to the **Technical Data Sheet** attached below.

“Choose SSB Bricks – Where Quality Meets Commitment”

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Autoclaved Aerated Concrete Blocks (AAC)

Product introduction

AAC (Autoclaved Aerated Concrete) is a technology developed during the mid-1920s in Sweden.

The aeration is achieved by a combination of materials like fly-ash, quicklime, cement, gypsum, aluminium powder and performance additives blended with water in a high speed mixer.

AAC Blocks consist up to 80 % air and this aerated material is then autoclaved -- which entails steam curing under high pressure. The resultant product has a cellular structure and is known as AAC. With lower density, AAC is porous and has millions of tiny air bubbles distributed through it. This material is completely inorganic and is not combustible.

AAC material for construction can be classified into blocks/ wall / floor/ roof panels and lintels. AAC Blocks are used as a substitute for conventional building masonry. They have been widely accepted globally because of their beneficial properties such as light weight, thermal and sound insulation, fire resistance, low capillary water absorption, ease of cutting and other benefits. These precast building elements are environment friendly as AAC processing causes minimal pollution and also boast the consumption of fly-ash, which is a waste material. AAC elements are being used throughout the world for industrial, commercial and residential structures and have different applications such as external and internal walls, roofs, other partitions and divisions. They have been used in India for over 25 years.

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Quality requirement of good building materials

With the development of building construction technology, requirement of good quality building elements has increased and standards for these have been developed and reviewed.

The raw materials used in the manufacture of a building product should pass the relevant specifications and all parameters should be within the given range. In conventional clay brick, there is no control on the quality of raw material. But in AAC, all the raw materials have proper quality standards and these are tested before processing.

Building elements should have sufficient compressive strength when tested by a given method. Their dry density should be in a certain range. Shrinkage on drying must be checked and should not be more than the maximum permissible limit. Accuracy in size and shape is important. The element should be fire and termite resistant. It should be free of any visible cracks. All batches must be consistent in quality. To make the building thermally efficient and to lower electricity costs, we must choose such building materials that have adequate thermal insulating properties with least thermal conductivity value (K value).

Conventional materials and method of wall construction

In the conventional method, red clay bricks are used for wall construction. But as the manufacturing process of clay bricks imposes a growing threat to our environment, the government is discouraging its use. Red clay brick needs a higher quantity of mortar to join and does not provide thermal insulation. The quality of red clay bricks is difficult to confirm. There is no known red clay brick in India which has BIS Certification.

Moreover, a red clay brick is heavy in weight as its dry density is high -- about 1800 Kg/m3. Heavy weight building material is not recommended when considering the protection of buildings from earthquakes.

Fly-ash bricks also consume a lot of thermal power in manufacture. They have good compressive strength but are heavy in weight and do not provide thermal benefits to the building. Also there is no control in raw material and their processing and manufacture is in the hands of unskilled labour.

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Features and benefits of AAC

Cost Saving

- AAC Blocks are approximately 9 times bigger than red clay bricks and reduce the need for mortar joints by over 66 %.
- Lightweight properties lead to lighter dead load on the building structure. Costs of steel, cement and excavation can be reduced.
- Due to good surface accuracy and finishing, there is less need for plaster on AAC Blocks.
- High insulation properties result in saving of energy costs.

Energy Efficiency

Thermal insulation is one of the greatest benefits of using AAC Blocks, as AAC walls help maintain distinct internal and external temperatures, saving energy cost.

Fire Resistance

AAC material is completely inorganic and not combustible.

AAC Blocks are suitable for use in areas where fire safety is recommended as these blocks are fire resistant for about 2-6 hours depending on thickness of the wall.

Pest Resistant

The pest resistant properties (as the blocks are made of inorganic materials) of AAC keeps termites away, avoiding damage and losses.

Minimum Wastage

Breakage of AAC Blocks is negligible -- less than 5 % -- which increases the utilization of the blocks.

Sound Insulation

Having a commendable STC (Sound Transmission Class), AAC elements are appropriate material for wall construction.

Earthquake Resistance

The manufacturing process gives the blocks considerable strength, this along with their light weight impart steadiness to a building, making it earthquake resistant.

Water Saver

There is no need to water AAC Blocks for curing. Only the mortar joints need to be cured with water in case of a conventional mortar mix, reducing water consumption.

Minimum Storage

Supplies are available in all seasons so that buyers do not need to maintain large storage areas for AAC Blocks.

Time Saving

Time consumed in building walls decreases due to light weight of the product and its size advantage over conventional clay bricks. This decreases lead time as well as installation time.

Easy Application

Being light in weight and larger in size, AAC Blocks are easy to apply and facilitate the efficiency of the mason, particularly in high-rise work.

Ssb Bricks AAC Blocks Coverage

Size (mm) L x H x W	Quantity of Blocks 1 M^3
600 x 200 x 50	168
600 x 200 x 75	112
600 x 200 x 100	84
600 x 200 x 150	56
600 x 200 x 200	42
600 x 200 x 225	38
300 x 200 x 100	168
300 x 200 x 150	112
300 x 200 x 200	84
300 x 200 x 225	76

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Technical specifications

Particulars	Units	Values	Requirement as per IS-2185 Part-3
Size (Length x Height)	mm	600x200	NA
Size (Width)	mm	50/75/100/150/200/225	NA
Size Tolerance (Maximum)	mm	±1 (Height & width) ±3 (Length)	L= ±5 mm, H& W= ±3 mm
Compressive Strength	N/mm2	>3.5	>3 (density range 551-650 Grade-2)
Oven Dry Density	Kg/m3	560 -640	551-650
Fire Resistance	Hrs.	4 (for 200 mm thick plastered wall)	Min 2 hrs. is desirable
Thermal Conductivity (K value)	W/mK	0.16-0.21	0.24 Max
Sound Reduction	Db	37-42	NA
Modulus of Elasticity	Mpa	2040	NA
Thermal Resistance (R value)	m^2K/W	0.95 (200 mm width) @ 0.21 W/mK	Max Value is desirable
Thermal Conductance (U value)	W/m^2K	1.05 (200 mm width) @ 0.21 W/mK	Minimum Value is desirable
Drying Shrinkage (Maximum)	%	0.04 Maximum	0.1 for gr-2 & 0.05 for Gr-1 Maximum
Sound Transmission Class Rating	Db	44	NA
Capillary Water Absorption	gm/dm^2	180	< 210@24 hours (as per NFP 14306)

Note: *The values obtained are from our laboratory testing conditions. Tests conducted on site conditions may show a slight variation due to methods of testing/ applications.*

Comparison of AAC Blocks and conventional red clay bricks

Particulars	AAC Block	Clay Brick
Size (LxBxH) mm	600 x 200 x 75 - 300	230 x 75 x 100
Precision in Size (mm)	± 1 (thickness and height)	±5 (length)
Dry Density	550-650 kg/m^3 (Oven dry)	1800 kg/m^3
Sound Reduction Index (dB)	45 for 200 mm thick wall	50 for 230 mm thick wall
Thermal Conductivity (W/mK)	0.16	0.81
Mortar Consumption M3 with 1:6	0.5 bag of cement	1.35 bag of cement
Construction Time per Mason	30 sqm.	20 sqm.
Chemical Composition	Fly-ash used around 65% which reacts with binders to form AAC	Soil is used which contains inorganic impurities resulting in efflorescence
Finishing	Can be directly cut or shaped/ sculptured as required	Not possible
Cost Benefit Factor	Up to 24% in structural cost (Subject to project design)	No cost benefit
Energy Saving	Up to 30 % of Air-conditioning load reduction	No energy saving
Capillary Water Absorption	Less (due to low density)	More (due to high density)

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Application guidelines (Stepwise)

Stacking and handling of blocks at site

- Stacking of blocks should be done on dry and properly levelled surface.
- Blocks should be protected from direct rain.
- Height of stack should not be more than 1.5 meters.
- Preferably use a pallet to store the blocks.
- Keep the blocks in a systematic array to avoid point loading and for ease of counting.
- Avoid multiple handling. Do not throw the blocks in handling.
- There should not be any foreign material between two blocks, as blocks may crack or get damaged while stacking, due to point loading.
- Keep different consignment materials separately so that their counting and quality verification can be done easily after unloading.

Pre-construction inspection and hacking of column and beam

The column should be straight enough and have sufficient strength. Straightness between a column and other columns must be accurate.

A structural beam should be given proper time to settle and cure. It should not deflect after construction of the wall. Deflection of the beam may impose line load on wall and that may result in a crack.

Hacking of the column provides positive key for jointing mortar. Hacking should be done just after construction of the column, as later it becomes difficult -- the column gains complete strength. Hacking can be done using heavy, pointed hacking tools, or use chisel and hammer. There are certain chemicals available in the market which can be applied on beam and column to avoid manual hacking.

Wall Thickness

The minimum thickness of non-load bearing internal walls should be 100 mm. The minimum thickness of external walls in framed construction should not be less than 200 mm – however, depending upon the local conditions and desired effect of thermal transmission and sound reduction, 150 mm thick block walls may be used. The minimum thickness of external and internal load bearing walls should be 200 mm and 150 mm respectively. For parapet walls, unless adequately braced at intervals not exceeding 3 meters, the height of the wall should be limited to five times its thickness.

Masonry

As per IS-6041 (Clause 3.9.2), a 1:2:9 cement: lime: sand mortar may generally be used, but where the intensity of load is high or the wall is exposed to severe conditions, a 1:1:6 mortar should be used. 1:6 cement and sand mortar may also be used.

Thickness of joints

Thickness of joints should be kept at 10-12 mm in case of traditional mortar or 2-3 mm in case of thin bed jointing mortar.

Method of wetting blocks before use

Surface wetting of blocks is required just before use. For wetting, you can dip the blocks in a water bucket for a few seconds. You can use other methods depending upon site condition and convenience. For each method, we need to understand the purpose of wetting. All high porosity building elements including AAC suck water from mortar at the time of application. Due to lack of water, the mix may shrink or crack due to the excessive heat of hydration and the required adhesion and compressive strength of the mix is reduced. So it is necessary to pre-wet the blocks just before use.

Laying of first course of AAC Blocks

The first course of an AAC Block masonry wall should be laid with great care, making sure that it is properly aligned, levelled and plumbed, as this will assist the mason in laying succeeding courses to obtain a straight and truly vertical wall. The first layer of AAC Blocks masonry on plinth should preferably have a groove/ offset outside so that rain water coming down the wall falls out.

Before laying the first course, the alignment of the wall should be marked on the damp-proof course. The blocks for the course should first be laid dry -- without mortar -- along a string stretched between properly located corners of the wall in order to determine the correct position of the blocks, including those of the cross walls jointing it and also to adjust their spacing. When the blocks are set in proper position, the two corner blocks should be removed, a mortar bed spread and these blocks laid back in place truly level and plumb.

The string should then be stretched tightly along the faces of two corner blocks and the faces of the intermediate ones adjusted to coincide with the line. Thereafter each block should be removed and re-laid over a bed of mortar. After every three or four blocks have been laid, their correct alignment, level and verticality should be carefully checked. It is recommended that a drying time of 24 hours be given for first course and then subsequent courses should be started.

Gap filling between column and AAC Blocks

At least 10 mm gap must be provided between a concrete column and an AAC wall and the gap must be filled using lean mortar. Use a suitable wall tie after every 3rd course of AAC Blocks between the beam and the wall.

Gap filling between beam and AAC Blocks

The gap should be planned at the time of design planning between beam and AAC Blocks. The beam may have a tendency to deflect due to its own weight or weight of upper storey construction. Deflection of the beam imposes a point load or line load on the wall, which may result in a crack. Moreover, the beam may shrink or expand after setting. For this purpose, a suitable gap is provided between the beam and the wall so that deflection of beam may not impose any load on the wall. It is recommended

that 15-20 mm space be provided in between the beam and uppermost course. Fill this gap using suitable flexible backing rods and lean mortar/ resilient material paste. The backing rods should be installed leaving 10 mm gaps on both sides so the lean mortar/ resilient material paste can be applied within those gaps.

Provision of control joint (refer IS-6041, 4.6.6)

All types of building materials have the tendency to expand or contract, including clay bricks. To control possible cracking in the wall due to shrinkage or expansion, it is recommended that you provide a control joint. Control joints are vertical separations in the wall. Movement and flexibility are required in all building elements and movement joints should be considered during wall construction for this purpose. It is suggested that a space of 10 mm be left after every 3 meters in length for long walls from the corners. On longer walls, a vertical movement joint must be given after every 6 meters maximum. For filling the gap, use the foam backing rod. A backing rod is resilient in nature and compresses easily. It is a small foam rod that is used to fill the joints between building materials. Fill the gap with suitable resilient material or lean mortar. In case of acoustic separating walls, expansion joint should not be used. A movement control mesh may also be used after every 2-3 courses as per requirement. In case of using thin bed jointing mortar, a flexible control mesh is well suited for horizontal movement control and it also does not affect the thickness of the thin bed joint mortar.

Provision of nominal bond beam in the wall

A horizontal reinforced bond beam must be provided for adequate stability, stiffness and strength to all types of walls including AAC, so its slenderness ratio can be maintained.

It also serves as a means of crack control. Nominal bond beam must be constructed just like the structural bond beam using 8 mm mild steel bars or 6 mm deformed steel bars. In a wall without openings, bond beams should be spaced at heights of 1200 mm apart and may be of any length up to 18 meters. The nominal bond beam should be discontinuous at the control joint. Dummy joints should be formed when the bond beam is continuous at control joints.

Bond beam specifications

Parameter	For 100-150 mm thick blocks wall	Above 150 mm thick blocks wall
Number of rods	Two	Four
Thickness of bond beam	3”	4”
Concrete mix	1:4	1:4
Steel diameter	8 mm mild steel bars or 6 mm deformed steel bars	8 mm mild steel bars or 6 mm deformed steel bars
Steel dia for ring tie	6-8 mm steel bars	6-8 mm steel bars
Gap between two rings	6”-9”	6”-9”
Concrete cover	15-20 mm	15-20 mm
Depth of steel in column	5-6 times of steel dia	5-6 times of steel dia

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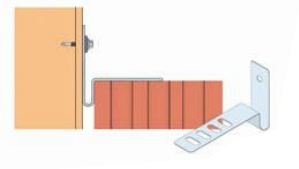
Use of movement tie

A suitable stainless steel movement tie may be used in the case of thin bed joint mortar and applied between the joint of two blocks as in the given picture while providing a control joint.

Across the bed face, there should be one tie per 100 mm thickness of block. Therefore on a 200 mm thickness of blocks, two ties must be used. A movement tie should be used after every third course. In the 'U' gap of the movement tie, no mortar should be filled, as this gap is intentionally left for wall contraction.

Movement tie for fixing back to steel work and existing masonry



This type of tie is flexible at the joint and needs to be screwed to the base. It has proved to be very effective in controlling movements of dissimilar materials.

Intersecting wall

When two walls meet or intersect and the courses are to be laid at the same time, a true masonry bond between at least 50 % of the units at the intersection is necessary.

Rendering

Rendering should not be applied to walls when they are wet or during the monsoon. The walls should be dry before rendering. The surface of the wall should be cleaned of any dust for proper adhesion. Moisten the wall with water just prior to apply the rendering to prevent absorption of water from it. The sand used for the plaster finish should be graded from 3 mm downwards. The rendering should be done in two coats with a total thickness of 18-20 mm. The first coat should be a rough coat of 8-12 mm and the second coat (finish coat) should be applied after at least 24 hours with water curing. In the first coat, rough grooves must be created to provide positive key for second coat, to improve adhesion. Apply thin cement slurry before first coat to improve adhesion to an AAC Block wall. Ascolite AAC Blocks have a rough texture created on the plastering surface.

The mix for rendering should either be 1:6 cement: sand mortar or 1:1:6 cement: lime: sand mortar. Second coat (finishing coat) should be of 5-10 mm thickness of 1:1:6 to 1:2:9 cement: lime: sand mortar or 1:6 cement: sand mortar depending upon extent of rainfall.

It is recommended that Ascolite Ready Mix Plaster be used for better results as the product has dry graded sand with strict control on quality during manufacture. It is available in 40 Kg bags.

Door and window frame

All types of door and window frames can be used in construction. Leave appropriate spaces for door and window frames while constructing the wall. Door and window frames should be attached to the surrounding masonry either by the conventional method or with 200 mm flooring nails with screwed ends fixed directly into the blocks after the frame has been wedged into the opening at every nailing positon. The number of nails to give adequate stability will depend on the dimensions of the frames. The nails should be spaced at a maximum of 400 mm and the first nail should not be farther than 200 mm from a corner. Frames may be attached to the masonry by holdfasts anchored in the vertical reinforced concrete studs provided to the frames. Use a coping beam above door and window frames -- it should stretch 6"-9" beyond the width of the frame on both sides. Cast coping beam separately using two rods of size 8 mm of thickness 3" with a concrete cover of 15-20 mm.

Nails in AAC walls and wall chasing for conduit pipe

It is not suitable to use normal plane nails in AAC walls. Use plastic or metal fasteners.

Proper chasing is required for electrical and water conduit pipes. For this purpose, it is recommended that you use a motorized wall chaser or wall groove cutter. It can make a deep groove in all walls. AAC wall chasing depth must not be more than 1/3rd of its thickness.

A special purpose chasing machine is recommended, as it is more accurate. Time and labour cost is also saved. While doing chasing, first make the chase of the required depth. Then clean it with a brush and wash with water. Then insert the conduit pipe and fix it in place with nails from the side.

After fixing the pipe, fill the gap with some non-shrinkable grout using a wire mesh and leave it for at least 24 hours water curing.

Reasons and prevention of cracks

A building component develops cracks whenever stresses in the component exceed its strength. Cracks in building can be broadly classified into structural and non-structural cracks.

Structural cracks are thick, endanger the safety of building and are of a serious nature. Faulty design of the building or settlement of a portion of the building due to soil settlement is also a common reason. Extensive cracking in an RCC beam is an example of a structural crack.

Non-structural cracks are thin cracks that do not endanger the safety of the building and they develop due to internally induced stresses in a building component, such as wall.

Reasons for cracks

There may be non-structural type cracks due to the following reasons:

- Moisture change
- Thermal movement
- Creep
- Elastic deformation

- Chemical reaction
- Foundation movement
- Settlement of soil

Prevention of cracks

Masonry work in a structure should be carried out at uniform levels in all parts of the structure to prevent differential settlement of the foundation due to differential loading. The difference in the height of masonry in different parts of a building should normally not exceed 1 meter at any time during construction.

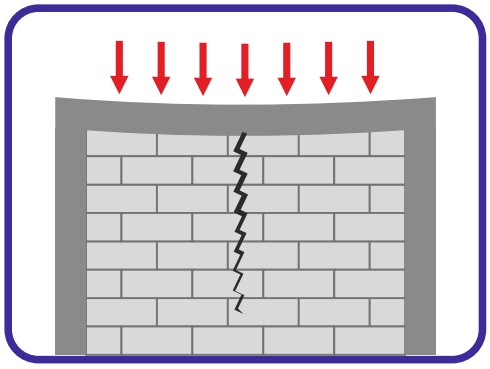
Masonry work should be properly cured for a minimum period of 7-10 days.

Masonry work on RCC elements such as RCC beam should not be started till a minimum of two weeks after striking off the shuttering. In reinforced concrete members such as cantilever beams and slabs which are liable to deflect appreciably under load, removal of centering and imposition of load should be deferred for at least one month so that concrete gains sufficient strength before it bears the load.

Curing of any concrete member should be done for a minimum period of 7-10 days and terminated gradually so as to avoid quick drying.

Concrete work in very hot or windy climates should be avoided, and in case it is not avoidable then precautions should be taken to keep the temperature of fresh concrete down and prevent its quick drying. Aggregate and mixing water should be shaded from the direct sun. Part of the mixing water may be replaced by crushed ice.

Only moisture controlled AAC blocks should be used. As manufacture of AAC is followed by steam curing at high temperature, there is a reduction in moisture with the passage of time. It is advisable to use the blocks after 10-12 days after arrival on site. In case of red clay brick, fresh bricks must not be used.



Do's and don'ts

- While laying the blocks for construction, keep the blocks in height direction upward.
- Do not use the blocks in foundation, drainage pit, water tank and where excessive dampness is likely.
- The first course of the block work should be laid on a conventional 10-15 mm, 1:6 cement: sand mortar.
- For first course of block work, allow it to stand for 24 hours for drying -- and it should be perfectly level.
- Do not use dry blocks as they absorb water from mortar and plaster very fast and poor adhesion may result. Do proper wetting of the blocks just before use.
- For long, stretched walls, provide suitable expansion joints and wall ties.
- Do plastering in two coats for external walls. First a rough coat and then a finish coat -- otherwise deboning of plaster is likely. Do the second coat 24 hours after the first coat and do water curing for at least 7 days.
- Use proper tools for all types of masonry work.

Ingredients and curing method

Ingredients of AAC are fly-ash, OPC 53 grade cement, quick lime, foaming agents and performance additives.

Curing method used in manufacture is steam curing.

Packaging and delivery

Material is supplied in blocks of m3 in open body or closed body trucks. Material packing is done through tightening using plastic strips and thermocol.

Shelf life, condition of application storage

AAC has been widely used in Europe since 1920, i.e. for the last 96 years. In India, AAC Blocks have been used for more than 25 years. AAC is long lasting. The life of this material is extended because it is not affected by harsh climates or extreme changes in weather conditions. It will not degrade under normal climate changes either. Before use it should be protected from direct rain only and must not be used at very low temperature or under continuous fall of snow. It should not be used as fire brick. It also must not be used in foundations and damp course conditions.

AAC blocks should be protected from direct rain while in storage.

Markings on AAC Blocks

- SSB BRICKS AAC Blocks have the brand name SSB
- Blocks have a rough texture on plastering and jointing surfaces.
- BIS stamp side is the non- rising side of the SSB BRICKS AAC Blocks.

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Troubleshooting

Problem	Probable Reason	Recommended Prior Care
Excessive breakage of blocks received after delivery if any	1. May be due to negligence of truck driver in driving while transit 2. Improper packing of material 3. Improper handling of blocks at site by labour	For 1 & 2, In such event, inform to our customer care/ sales person for verification For 3, Educate labour and site supervisor to follow safe unloading guidelines
Testing parameters are not meeting the requirement	Error in testing at site as testing of product needs thorough understanding and special skills	In such event, inform to our customer care/ sales person for joint testing
Cracks developed in wall	Maybe guidelines of application not followed	Refer reason and prevention of cracks
Material received at site is short in quantity	Maybe some mistake while dispatch	Ask our technical support executive for assistance
Plaster is not adhering to blocks	Plastering not done as per recommendation	Refer to the plastering guidelines

Relevant standard codes for AAC

Indian Standards

- IS-2185 part-3- 1984 (reaffirmed 2005): specification of concrete masonry units, autoclaved cellular (aerated) concrete blocks.
- IS-6041 - 1985 (reaffirmed 2005): code of practice for construction of cellular concrete block masonry.
- NFP 14306: capillary water absorption of AAC.
- IS-6441 part-1, 1972 (reaffirmed 2001): methods of test for autoclaved cellular concrete products. determination of unit weight for bulk density and moisture content.
- IS-6441 part-2, 1972 (reaffirmed 2001): methods of test for autoclaved cellular concrete products. determination of drying shrinkage.
- IS-6441 part-5, 1972 (reaffirmed 2001): methods of test for autoclaved cellular concrete products. determination of compressive strength.
- IS-3346, 1980 (reaffirmed 2005): method for the determination of thermal conductivity of thermal insulating materials (two slab guarded hot plate method).

International Standards

British Standard, BS EN 771-4:2003 Specification for masonry units, Autoclaved Aerated Concrete masonry units.

American Standard, ASTM C 1386-98, Standard Specification for precast AAC wall construction units.

Safety items and guidelines

Use safety shoes, gloves, goggles, nose mask and safety jacket while truck loading, unloading and during construction.

SSB BRICKS AAC Blocks in their natural state do not release airborne dust, but dust is produced during cutting, drilling, grinding, chases and other related activity.

Swallowing the dust must be avoided – it may result in abdominal discomfort. The dust may also irritate the nose, throat and lungs. A nose mask must be used and eyes must also be protected with goggles as the dust may cause irritation.

While handling, the block may fall on a leg or foot, so safety shoes are a must. Handling AAC Blocks may result in a rash developing on the palm, so gloves are recommended.

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List of masonry tools

Technical Name of Tool in English		Use
Hand Saw (Heavy Duty)		Cutting AAC Blocks into various sizes
Motorized Cutting Machine		For speedy and accurate cutting of AAC Blocks
Band Saw Machine		For cutting AAC Blocks in a big project
Spirit Level 2 Feet		For levelling AAC Blocks while jointing
Spirit Level 2 meter		For levelling of complete course of AAC Blocks and wall perpendicularity
Rubber Mallet		For tapping AAC Block joints
Metal Hammer		For hammering in hacking process
Chisel		For hacking process
Electrical Operated Hand Mortar Mixer		For mixing mortar or tile adhesives etc
Mason Trowel		General purpose trowel
Trowel for Plastering		Long trowel

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Square Trowel		For finishing coat of plaster – it is made of metal
Trowel		For rough coat of plaster – it is made of wood
Notched Trowel		For applying thin bed mortar and grooving
Notched Scoop Trowel		For applying thin bed mortar on AAC blocks
Mason Levelling Cord		For checking level of wall
Plumb Bob		For checking level of wall
Right Angle 600 mm		For checking right angle of wall
Measuring Tape 3 met		For measurement
Iron Pitcher		For mixing mortar
Water Drum filled with Fresh Water		For wetting of AAC Blocks
Bucket 20 Litre		For keeping water
Plastic Mug		For pouring water

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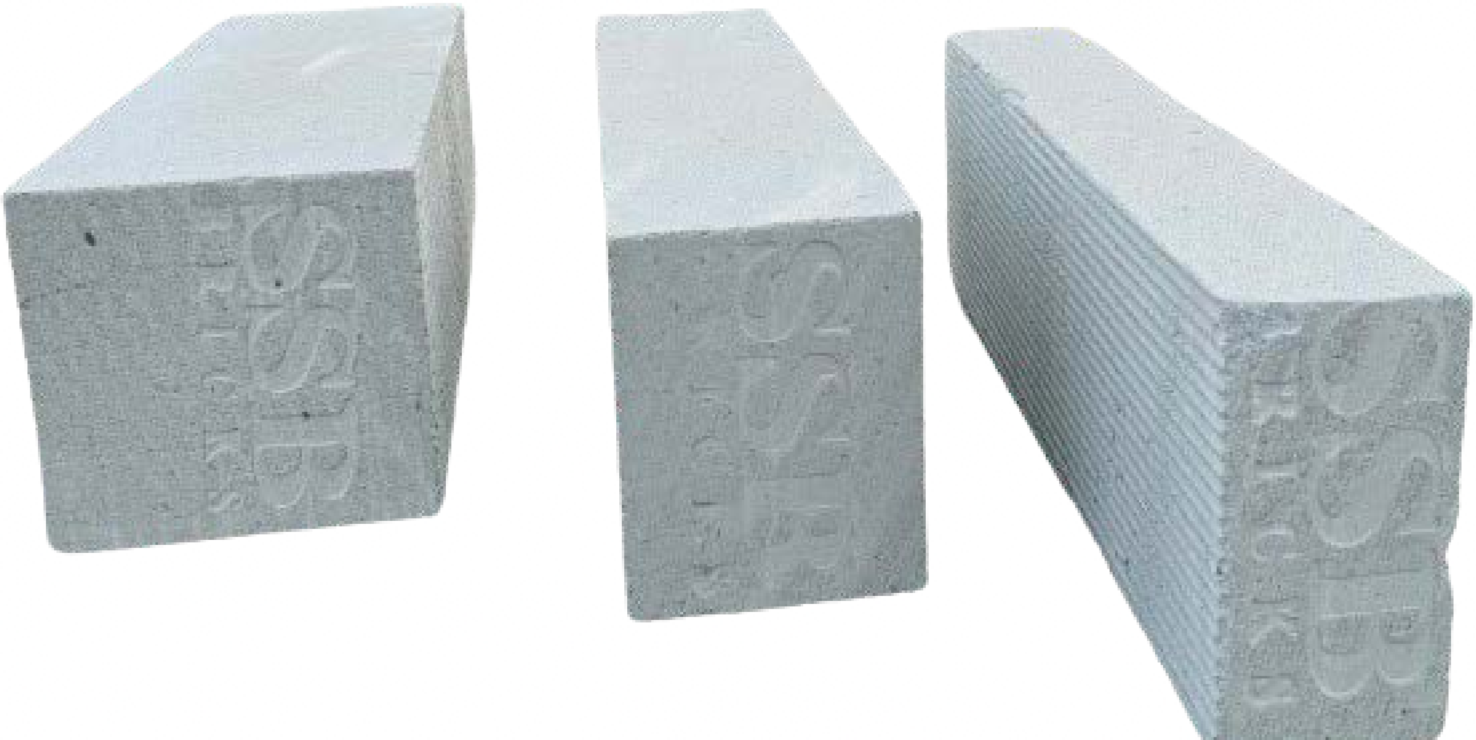
Claw Hammer		For hacking
Wall Groove Cutter		For making grooves for conduiting
Conduit Tool		For making groove for conduting
Fasteners/Rawl Plug for Wall		For nails in wall using special fasteners
Self-Drilling Screws		For special purpose
Electric Drilling Machine with Drill Bit		For fasteners application
Wire Mesh for Laying in Horizontal Course		For crack control
Wire mesh for Column Corners and Conduit Grooves		For crack control
Expansion Tie		For crack control
Movement Tie		For expansion joint
Backing Rod		For control joint
Metal Wire Brush		For wall cleaning

SSB BRICKS Product Datasheet

SSB BRICKS
AAC BLOCKS MANUFACTURER

Normal Hair Wire Brush		For cleaning
Safety Helmet		For safety of head
Safety Gloves		For safety of hands
Safety Goggles		For safety of eyes
Safety Shoes		For safety of feet
Nose & Mouth Safety Mask		For safety from dust
Safety Jacket		To wear during construction

* Above tools are recommended to be used for better work performance.



INDUSTRIAL CONSULTANCY SERVICES
UNIVERSITY COLLEGE OF ENGINEERING, SCIENCE & TECHNOLOGY HYDERABAD
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
KUKATPALLY, HYDERABAD - 500 085, TELANGANA, INDIA
ICS

Sl. No : 301999

To,
M/s SSB Bricks,
H.No.3-3-A/52, Sahebguda,
Mangalpally X Road
Ibrahimpatnam, R.R.Dist.

Lr No: JNTU/CEH/CIVIL/MTL/
9372/2024
Date: 03.08.2024
Receipt. No.20187

Sir,

Sub:- Testing of AAC Blocks – Test Report furnished.

Ref:- Your Lr.No. ---Nil---, dated: 25.07.2024

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With reference to your letter cited above, the test report of 6 Nos AAC Blocks is furnished below.

TABLE (1) COMPRESSIVE STRENGTH TEST RESULTS
Average size of AAC Blocks : 150 X 150 X 150 mm

Sl. No.	Identification	Maximum Compressive Load kN	Compressive Strength N/mm^2	Average Compressive Strength N/mm^2
1.	-	101.9	4.53	
2.	-	96.1	4.27	4.45
3.	-	102.2	4.54	

TABLE (2) WATER ABSORPTION TEST RESULTS (24) Hours Immersion)

Sl.No.	Identification	Percentage Water Absorption
1.	-	15.95
2.	-	14.41
3.	-	14.48

Average weight of the brick: 2.520
Kg Average Dry Density: 647 Kg/m^3

Chief Co- ordinator ICS.

CHIEF CO-ORDINATOR,ICS
JNTUHUCES, HYDERABAD
KUKATPALLY, HYDERABAD-500 085