BRIXO Lite

Autoclaved Aerated Concrete (AAC) Blocks

HIGH STRENGTH
LIGHT WEIGHT™

FASTER, **STRONGER** AND
COST EFFECTIVE **SOLUTION FOR WALL**

Sales Inquiry:

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BRIXO | Lite | Eco | Plast | Bond | Grout | Smart

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PRODUCT GUIDE

BRIXO Lite

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BIGGER LIGHTER STRONGER

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Product knowledge is an essential. Understanding products' features allows clients to get maximum benefits. In most construction projects, building products are evaluated and selected based on performance, aesthetics and cost. After "green" environmentally favourable products, these traditional selection parameters are expanded to environmental impacts also. We are passionate about our products and eager to share knowledge.

TURN PRODUCT FEATURES INTO BENEFITS

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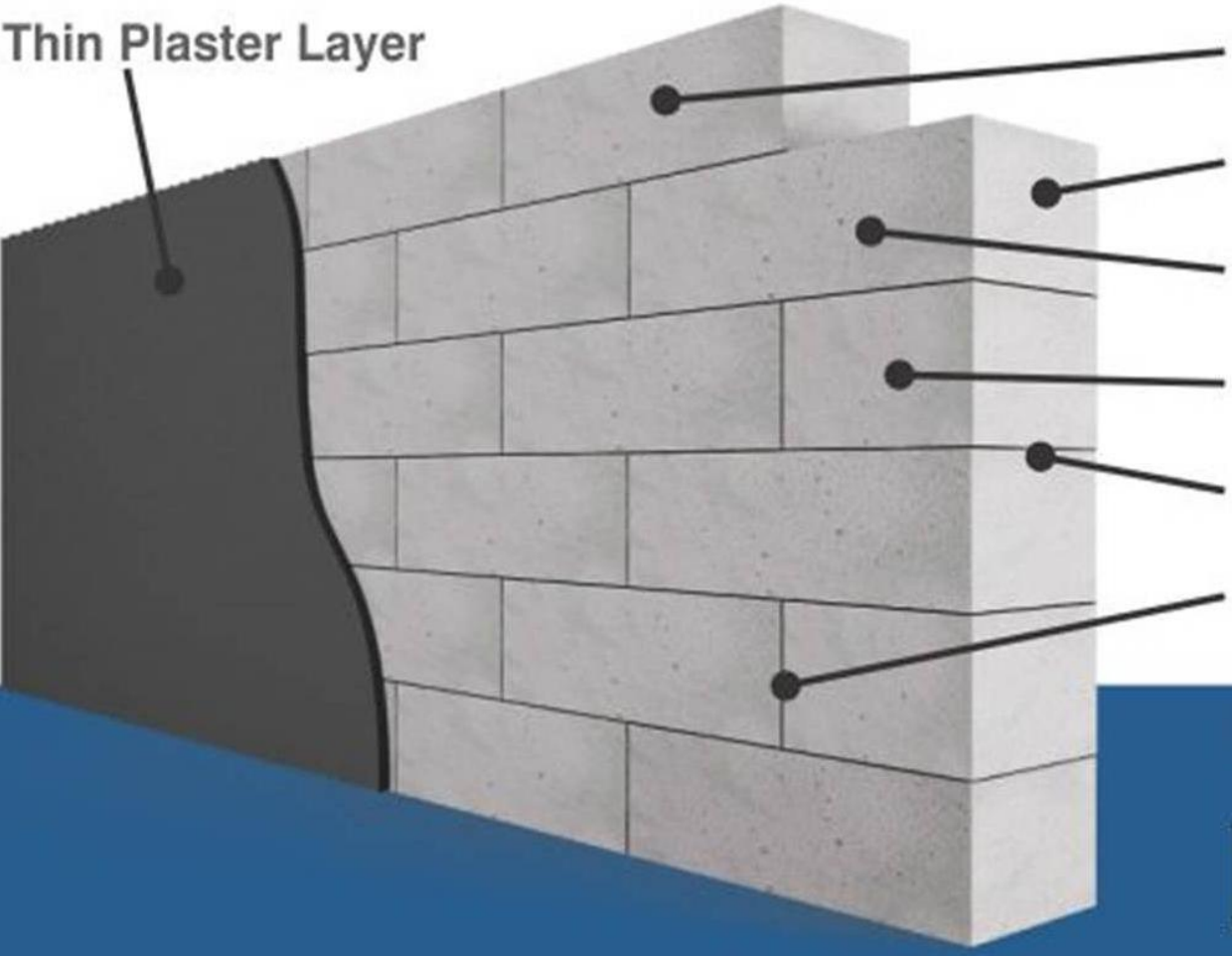
HIGH STRENGTH LIGHT WEIGHT™



- Precise in Dimension
- High Compressive Strength
- Less Density - Self Weight
- Flexibility in Size
- Thin Mortar Joints
- Less Numbers of Joints

A Product of BRIXO™

ABOUT AAC BLOCKS

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- It’s often shortened to 'AAC‘, is effectively concrete with lots of closed air pockets in it. It is lightweight and energy efficient, and is produced by adding a foaming agent to concrete in a mould, then wire cutting blocks from the resulting 'cake', and 'cooking' (curing) it with steam (autoclaving).
- AAC is well known as an environmentally friendly construction material. It is manufactured from common and abundant natural raw materials and the finished product is up to twice the volume of the raw materials used, making it extremely resource-efficient and environmentally friendly.
- The energy consumed in the production process is lower. The manufacturing process emits no pollutants and creates no by-products or toxic waste products. AAC is a load-bearing block, which also provides thermal and sound insulation as well as fire protection, thereby eliminating the need for many different layers of materials.
- The workability of AAC helps to eliminate waste on the job site. The use of AAC can reduce indoor air pollutants. AAC is completely inert and does not emit toxic gases, even when exposed to fire.

STACKING AND STORAGE

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- ✓ The blocks shall be stored on the site on a level ground and to be protected against rain fall.
- ✓ Dry and even surface protects from the damages and breaking of blocks.
- ✓ Storage material should always be stored away from other construction activities on a flat-grade area that is not susceptible to standing water, erosion or settling.
- ✓ In case of long-time storage in the open air required, than it will be protected from excessive moisture content. So packaging is required in such cases.
- ✓ Unloading of blocks at the construction site is carried out with proper supervision. If required use the aid of motorized materials handling equipment. Avoid overloading or throwing in manual unloading.
- ✓ Proper stacking and storage of blocks also makes handling easy and fast.
- ✓ Chips and spalls can be repaired. All damaged surface areas may be repaired using a compatible AAC patching compound.

MORTAR FOR MASONRY

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- ✓ Use a brush to clean the block surface before mortar application
- ✓ Use of strong mortar with AAC blocks is not advisable because of drying shrinkage, for best result use of compatible mortar is advisable.
- ✓ Lean mortars distribute and accommodate more readily the strains arising from thermal, moisture and chemical changes.
- ✓ AAC blocks shall be embedded with a mortar and the strength of which is relatively lower than that of mix used in making of blocks.
- ✓ In conventional mortar cement sand mortar 1 : 6 or 1 : 1 : 5 (1 Cement : 1 Flyash : 5 Sand) shall be preferable for laying of blocks.
- ✓ Mortar thickness should be between maximum 10 to 12 mm for laying of bocks in conventional cement and sand mortar.
- ✓ For the best benefits we advice to use BRIXOBond thin-bed mortar with a special tools through the thickness of the wall, applied to the surface of the blocks 3-5 mm thick and uniformly distributed over the surface.

LAYING OF BLOCKS

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- ✓ Dip in the water and lift immediately before use. Please keep in mind it does not required soaking of blocks in water completely.
- ✓ Proper mortar should be applied as a levelling before laying of first raw of blocks.
- ✓ First lay a mock-up of the first course. Then, start with setting corner blocks, and lay the first course over thick layer of mortar levelling bed.
- ✓ At a time of laying the second row can be start after setting cement-sand mortar on the first row.
- ✓ Laying begins with corners of the building, subsequent rows placed with proper arrangement of vertical and joints of the blocks, ie offset.
- ✓ Blocks should be lay by cutting directly on the construction site by hand or mechanical saws. Use hand saw to cut blocks to specific lengths (adjustment pieces). A large square or framing square is useful in marking blocks for straight cuts.
- ✓ It is advisable that vertical joints should be staggered with maintaining minimum 100 mm bearing distance.

LAYING OF BLOCKS

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- ✓ Use a brush to clean the block surface before mortar application. After block installation, remove spilled mortar.
- ✓ Overlapping of blocks should be kept consistent for a running bond.
- ✓ The first course shall be laid with great care ,making sure that it is properly aligned , levelled and plumbed, as this will helpful in laying succeeding courses to obtain a straight and truly vertical wall.
- ✓ Mortar joints should be keep with minimum thickness.
- ✓ The mortar shall not be spread so much ahead of the actual laying of the units that it tends to stiffen and lose its plasticity there by resulting in poor bond.
- ✓ Wet the blocks on all sides by using water and place them one by one and press it firmly to have proper bond.
- ✓ Consistency as per requirement of site must be maintained at the point of laying over mortar bed.

PLASTERING WORK

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- ✓ Plaster thickness should be 12 to 10 mm in conversional cement and sand plaster is used for plastering the external and internal surfaces.
- ✓ More then 12 mm layer takes more time in setting and drying shrinkage cracks can be developed on surfaces
- ✓ Water curing is required for mortar joints only.

WALL HEIGHT & LINTEL

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- ✓ There should be a coping beam to be placed after every 1.2 meter of height of wall with minimum reinforcement of 2 nons of 8 mm bar.
- ✓ It is advisable to perform masonry work of maximum six layers of blocks in a one day.
- ✓ Door and Window Lintel should be rest on full block on the both sides of opening for proper load distribution.
- ✓ Use proper wire mesh and mortar at Beam & Colum Junctions to avoid weak joints.

CHASES & FIXTURES

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- ✓ Avoid chases after plastering is finish also with hammer.
- ✓ The cutting of chases , recesses etc. should be done without damage to the surrounding masonry.
- ✓ It is desirable to use such tools for cutting which depend upon rotary motion not on heavy impact for cutting action.
- ✓ Doors and Windows can be fixed as is being done in brick Masonry.
- ✓ When cutting in chases, do not exceed 1/3 the depth of the block on non loadbearing block and consult your Engineer of Record for depths both vertically and horizontally on load-bearing block.
- ✓ For electrical conduits and piping installation, cut a chase using an electrical router or a chasing tool.
- ✓ A power drill (drill bits) or router can be used to install electrical boxes.
- ✓ Use shallow receptacle boxes and junction boxes when possible. In the event additional depth is required in a load bearing wall, consult the Engineer of Record for acceptance or alternate solution
- ✓ After the work in the chases area is finish cover with wire mesh and proper mortar on the same.

DO & DON'T

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DO	DON'T
Surface of AAC blocks to be joined with mortar is to be wetted with brush / cotton waste or with the help of a tray filled with 25 mm water	Do not soak AAC blocks in water
Use only compatible mortar 1:6 or 1:1:6 mortar (or 1 cement : 1 fly ash : 6 sand)	Do not use rich mortars 1 : 4 or lesser then this will create bonding problem.
AAC masonry should be as per IS code 6041 (1985) and IS code 1905 (1987)	The mortar should not be spread much ahead of the actual laying of blocks.
Chases for services in AAC masonry should be as per IS code 1905 (1987)	Do not deviate from the norms of chase cutting specified in the code IS 1905 (1987)
Use electro mechanical rotary tool for chase cutting	Do not use chisel and hammer for chase cutting
Chases should be filled along with plastering and a layer of chicken mesh is to be embedded in the plaster over the width of the chase with proper over lap	Do not fill the chase up to the top surface of the masonry to have a key while plastering.
While storing AAC blocks, care should be taken to avoid of excess moisture	Do not expose the AAC blocks during rains or snow fall

A product of

BRIXO

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Indian Green Building Council
MEMBER