

MAGIC BONDTM

Block Joining Mortar

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Product Description

MagicBond – Block Joining Mortar (also referred to as Thin Bed AAC Block Jointing Adhesive) is a high strength adhesive for quick and firm laying of AAC blocks with thin joints. It is a factory mixed mortar made up of cement, graded sand and blended with polymers to impart high strength and water retention properties even when in thickness of 2-3 mm layer.

Application Areas

For interior and exterior use, for preparing thin bed mortar for AAC, Light Weight and Cellular Concrete Blocks.

Advantages

- High Bond Strength
- No shrinkage cracks
- High Thermal Insulation
- Flexible, shock & impact resistant
- Improved adhesion between two blocks
- Improved compressive & tensile strength
- Easy to use
- Economical
- Premixed

Suitable Substrates

- Aerated Light weight blocks
- Concrete Blocks
- Cement Mortar Blocks/Bricks
- Concrete hollow blocks
- Cellular concrete blocks
- Fly Ash Bricks

Packaging

30/40 kg bag

Colour

Grey Powder



Coverage

Coverage is based on smoothness and evenness of the substrate, size of blocks used and the thickness of mortar used.

A coverage of 170-180 Sq. Ft. per bag is received when used with AAC Blocks of 600 mm x 200 mm x 100 mm size.

Prepare adhesive by adding Magic Bond – Block Joining Mortar to 25-30% of water and not vice versa.

Shelf Life

Factory packed bags of Magic Bond – Block Joining Mortar carries a shelf life of 6 months, if stored in cool & dry place.

However, as temperature, humidity, water addition & other parameters vary from site to site, the information should be treated as a general guideline.

Technical Data

Applicable Standard:

Conforms to ASTM-C1660 - 09

Performance Properties:

AAC BLOCK MORTAR mixed with water

Test	Results
Compressive strength	>7 MPa
Split Tensile Strength	>0.41 MPa

Working Properties:

AAC BLOCK MORTAR mixed with water (70°F (21°C))

Pot Life	1.5-2 Hours
Open Time	30 Minutes
Time to Plaster	24 hours
Time to full dry hard	14 Days

Installation Method

Surface Preparation:

The application surface/substrate must be free from loose particles or any other foreign material prior to commencement of work/application of any Magicrete products. Pre-wet or dampen surface with good quality fresh water, if necessary.

All slabs must be plumb and true to within ¼" (6mm) in 10 ft (3m). Follow ANSI Specification AN-3.8 "Requirements for Expansion Joints" or TCA Detail EJ171 "Expansion Joints". Do not cover expansion joints with mortar.

Mixing:

Use approx. 40kg of Magic Bond – Block Joining Mortar thin bed mortar with Approx. 10-12 litres of potable water. It is utmost important to add Dry Mix Product to the water and not vice-versa. Mix the material by hand or using a slow speed electrical stirrer in a way that a uniform mixture (free from lumps) is formed. Allow the mixture to rest for 2-3 minutes for polymers to act. Remix the mixture before use.

Application

Thin bed mortar for laying blocks:

Before placing mortar, ensure the block work to be dry and surfaces cleaned properly. Place the mixed mortar on the block work in thin layers of 2 to 3 mm (or as required by engineers at site) using trowel and place the next layer of blocks on the mortar. Keep joints between the blocks as required by the site engineers and fill the joints with the mixed mortar, using a thin bed trowel. Check the plumb of the wall while laying the blocks to keep the walls perfectly vertical to the plumb.

Plaster:

Plumb, square and true concrete block wall can be finished with the applications of Special polymer plaster i.e. Magic Plast – Ready Mix Plaster from Magicrete.

Plasters made with site mix may slump and powder due to water absorption of the block work.

Cleaning:

Clean tools and containers with water while mortar is fresh.

Recommended tools for application



Notch Trowel



Rubber Mallet



Slow Speed Mixer



Wire Brush

Troubleshooting

Problem	Possible Reasons	Recommendations
Mix is not properly adhering to substrate	<ul style="list-style-type: none"> • Water taken is not proper • Mixing with water is not proper • Wetting is not done of substrate • Mix has lost its plasticity and is set before application • MagicBlox is disturbed after early setting • MagicBlox is not pressed after laying 	<ul style="list-style-type: none"> • Use appropriate recommended water content • Mix properly. Use of slow speed stirrer is recommended. • Do proper wetting before application • Use mix within 90-120 Minutes • Do not disturb MagicBlox after laying • Press MagicBlox using rubber hammer
Joint of MagicBlox and columns is loose	<ul style="list-style-type: none"> • No hacking of column • Thin slurry of mortar is not applied on column • Chicken mesh is not used 	<ul style="list-style-type: none"> • Do hacking • Apply slurry on columns • Use mesh
Joint Is Seen as unfilled from other side	<ul style="list-style-type: none"> • Mortar is not applied on whole surface 	<ul style="list-style-type: none"> • Apply mortar on whole surface such that no gap is left. Use of Thin Bed trowel is recommended.
Crack is observed on vertical joints	<ul style="list-style-type: none"> • Improper wetting of substrate • Improper mixing 	<ul style="list-style-type: none"> • Do proper wetting of substrate • Do proper mixing
Crack is observed on substrate material	<ul style="list-style-type: none"> • Improper levelling of MagicBlox • First course level is not perfect/set properly • Reinforced bond beam is not used 	<ul style="list-style-type: none"> • Use spirit level • Do proper levelling of first course of MagicBlox using normal sand cement mortar • Start second course after proper setting of first course • Use bond beam as recommended

Availability

Magiocrete materials are available across India.

For distributor information:

Toll Free: 1800-274-55-55

Limitations

Adhesives/ mortars and grouts for blocks and bricks are not replacements for waterproof membranes. When a waterproof membrane is required, use a different product for the same.

Cautions

- During cold weather, protect finished work from use until fully cured.
- Contains Portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water at least for 15 minutes and seek medical help if burning continues.
- Do not take internally. Silica sand may serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children

Warranty

Magiocrete Building Solutions Pvt Ltd warrants that MAGIC BOND – BLOCK JOINING MORTAR, Thin bed mortar is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of six (6) months from date of manufacture, subject to the terms and conditions stated in MAGICRETE Product Warranty.

Magiocrete Building Solutions Pvt Ltd.

702 B, 22 Business Point, S V Road,

Andheri Station,

Mumbai – 400058

Tel: +91-22-42643932

E-mail: info@magiocrete.in

Website: www.magiocrete.in

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