
BLOCK FIX - WITHOUT SAND HW303

TECHNICAL DATA SHEET

Product Description

Hard Worker Block Fix - Without Sand HW303 is a high-performance, polymer-modified cementitious mortar formulated with performance-enhancing additives to provide excellent workability and finish when combined with quality sand at site. It is designed for all types of brick and block laying applications except AAC blocks. The product ensures consistent bonding, good compressive strength, improved cohesion, and faster construction progress. When mixed with clean water and sand as recommended, it delivers a durable, self-curing masonry solution.

Features

- Self-curing - no external water curing required
- Excellent workability for faster masonry works
- Enables faster subsequent plastering (after 24 hours)
- Compatible with red bricks, fly ash bricks, solid and laterite blocks
- Improved cohesion and reduced segregation
- Consistent bonding performance

Application Areas

Recommended for:

- Laying red bricks, fly ash bricks, concrete blocks, solid and laterite blocks
- Residential and commercial masonry walls
- Standard bed thickness of minimum 8 mm (maximum as per site requirement)

Not suitable for AAC block applications.

Surface Preparation

All masonry units and substrates shall be clean and free from dust, loose particles, oil, or contaminants that may affect bond. Bricks and blocks shall be pre-wetted prior to application to minimize rapid water absorption from the mortar and to ensure proper hydration and bond development. Surfaces shall not be excessively wet or waterlogged at the time of application

Mixing Instructions

Block Fix - Without Sand HW303 shall be mixed with quality sand (M-sand or river sand). The mixing ratio shall be maintained at 1:4, 1:5, or 1:6 (by volume) depending on the application requirements.

Add clean water gradually and mix thoroughly for a maximum of 5 minutes until a smooth, homogeneous mortar is achieved. Water addition shall be controlled within the recommended demand (16% - 18%). Do not remix hardened material. Do not add external admixtures, accelerators, cement, or any modifiers other than recommended.

Application Instructions

Apply the prepared mortar evenly using a trowel and maintain a minimum bed thickness of 8 mm. Ensure blocks or bricks are properly aligned using string lines and regularly check plumb and level during construction.

Vertical joints shall be completely filled to ensure structural integrity and proper bonding. The mixed mortar shall be used within 60 minutes of preparation. Excess material shall be cleaned and joints finished neatly.

Allow masonry to set for 24 hours before commencing plastering works.

Curing

Block Fix - Without Sand HW303 is a self-curing plaster formulated with special chemical additives that retain moisture within the matrix to ensure proper hydration. No external water curing is required after application.

Physical Parameters

Property	Typical Result
Colour	Grey
Mix	The mixing ratio shall be maintained at 1:4, 1:5, or 1:6 (by volume) depending on the application requirements
Water Powder Ratio	16–18%

Coverage

Substrate	Coverage (sq.ft. / 25 kg)	Thickness	Mix Ratio
Red Brick	25–26	10 mm	1:5
Fly Ash Brick	25–26	10 mm	1:5
Solid Block - 4 inch	92–94	10 mm	1:5
Solid Block - 6 inch	79–80	10 mm	1:5
Solid Block - 8 inch	70–72	10 mm	1:5
Laterite Block - 6 inch	78–79	10 mm	1:5

All values tested under standard laboratory conditions.

Package

Block Fix - Without Sand HW303 is available in 40 kg.

Storage

The product has a shelf life of 6 months from the date of manufacture when stored in sealed condition in a dry area protected from moisture. Bags shall be stacked

Technical Specification

Parameter	Value
Compressive Strength @ 28 Days	5–6 MPa
SPLIT TENSILE STRENGTH	
At 28 Days - Fly Ash Block	0.18–0.20 MPa
At 28 Days - Solid Block	0.25–0.30 MPa
At 28 Days - Red Brick	0.20–0.25 MPa
At 28 Days - Laterite Block	0.25–0.30 MPa

All values tested under standard laboratory conditions.

off the ground and shielded from damp conditions and direct exposure to water.

Precautions

Do not add cement, sand proportions beyond recommended limits, or any external chemicals or accelerators other than specified. Do not use hardened

or partially set material. Ensure proper surface preparation and maintain recommended mixing ratios for optimum performance. Follow standard masonry practices during application.

Health and Safety

The product is non-hazardous; however, as it is cementitious, protective gloves, eyewear, and masks are recommended during handling and mixing. Avoid contact with eyes and prolonged skin exposure. In case of contact with eyes, rinse immediately with clean water and seek medical attention if irritation persists.

Technical Support

All values provided are tested under controlled laboratory conditions; performance may vary depending on site conditions and workmanship. For site-specific recommendations, technical data, or detailed guidance, contact the Hard Worker Technical Services Team at:

Toll-free number 1800 202 5700

Email customercare@ramcocements.co.in

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