

## MVIS™ Hi-Bond Rapid Masonry Veneer Mortar

# Globally Proven Construction Solutions



### 1. PRODUCT NAME

## **MVIS™ Hi-Bond Rapid Masonry Veneer Mortar**

#### 2. MANUFACTURER

LATICRETE UK

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## 3. PRODUCT DESCRIPTION

The ultimate one-step, polymer fortified, fast-setting mortar for interior and exterior installation of ceramic tile, stone, quarry tile, pavers and brick. MVIS Hi-Bond Rapid Masonry Veneer Mortar, is designed to just mix with water, has unsurpassed initial grab, high early strength along with excellent workability.

#### Uses

This ultimate fast setting adhesive is rated excellent for all interior, exterior and underwater tile fixing applications and as well as providing superior bond strength to all commonly encountered building materials including WBP exterior glue plywood, it has been used to fix heavy & large format tile & stone in the most challenging environments.

#### **Advantages**

- Contains Anti-fungal protection to inhibit the growth of stain causing mould and mildew in the substrate.
- Exceeds ANSI A118.4 Shear Bond Strength Requirements & ANSI A118.11.
- Rapid Set Mortar; can be grouted in 2–4 hours.
- Ultimate adhesion for porcelain tiles.
- Incredible bond to exterior glue plywood and concrete\*.
- Excellent shear bond strength.
- Superior adhesion for submerged applications.
- High performing smooth creamy formula.
- \* See limitations.

## **Suitable Substrates**

- Exterior glue WBP plywood\*
- Properly prepared vinyl\*
- Concrete/masonry
- Concrete block
- Cement mortar beds
- Non-water soluble cut-back adhesive\*
- Existing ceramic tile
- Gypsum wallboard\*
- Gypsum plaster\*\*\*
- Plastic laminate\*
- Cement terrazzo
- Cement backer boards\*\*

\*Interior use only.

#### **Packaging**

20 kg 54 bags per pallet

#### Colour

Grey

## **Approximate Coverage**

Vertical Applications	m²
(6 mm x 6 mm) notched trowel	6.4-7.8
(6 mm x 9mm) notched trowel	4.3-5.0
Adhered Masonry Veneer Application Method	3.5-4.3

Coverage will vary depending on trowel notch size, type and size of stone and substrate.

## Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year\* if stored off the ground in a dry area.

## Limitations

- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Wait 14 days after the final grouting period before filling water features with water at 70°F (21°C).
- Use LATAPOXY 300 Adhesive for installing green marble, resin backed, or water sensitive tile, stone and agglomerates.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® MVIS Vapour Barrier Waterproofing Membrane

<sup>\*\*</sup>Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

<sup>\*\*\*</sup> Sealed with 2 coats of NXT PRIMER

<sup>\*</sup> High humidity will reduce the shelf life of bagged product.

Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length (except where local building codes specify more stringent deflection requirements)

#### **Cautions**

Consult MSDS for more safety information.

- Some marbles and other stones have low flexural strength and may not be suitable for installation over wood floors.
- During cold weather, protect finished work from traffic until fully cured.
- Use white mortar for white or light-colored stone.
- 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.
- DO NOT take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- For green, resin backed and moisture sensitive stones and agglomerates, use LATAPOXY® 300 Adhesive (refer to Data Sheet 633.0).
- Keep out of reach of children.

#### 4. TECHNICAL DATA

## **Applicable Standard**

ANSI A118.4, ANSI A118.11, EN12004 C2FTE-S1

## **Physical Properties**

Test	Test Method	EN12004 C2 Specification	Results
Early Tensile strength after 6 hours cure time	EN 1348 – 8.2	> 0.5 N/mm2	0.6 N/mm2
28 day cure tensile adhesive strength	EN 1348 – 8.2	> 1.0 N/mm2	2.3 – 2.6 N/mm2
7 day cure 21 day water immersion tensile adhesive strength	EN 1348 – 8.3	> 1.0 N/mm2	1.29-1.53 N/mm2
14 day cure 14 day heat age tensile adhesive strength	EN 1348 – 8.4	> 1.0 N/mm2	2.38-3.02 N/mm2
7 day cure 21 day water immersion 25 freeze/thaw cycle tensile adhesive strength	EN 1348 – 8.5	> 1.0 N/mm2	1.18-1.42 N/mm2
Open time after 30 minutes	EN 1346	> 0.5 N/mm2	1.65-1.95 N/mm2
Slip	EN1308	< 0.5 mm	0.2 mm
Transverse deformation	EN 12008	> 2.5 mm and < 5 mm	3.2-3.6 mm

Test/Test Method	Results	ANSI Specs
Shear Bond, Porcelain Tile, 28 day cure ANSI A118.4–5.2.4	400–450 psi (2.8–3.1 MPa)	200 psi (1.4 MPa)
Shear Bond, Porcelain Tile Water	200–220 psi	150 psi
Immersion ANSI A118.4–5.2.3	(1.4–1.5 MPa)	(1.0 MPa)
Shear Bond, Quarry Tile/Plywood	190–200 psi	150 psi
ANSI A118.11	(1.3–1.4 MPa)	(1.0 MPa)

## **Working Properties**

Open Time	30 minutes		
Pot Life	50 minutes		
Time to Grout	2–4 hours		
Time to Traffic	5 hours		

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

## 5. INSTALLATION

## **Surface Preparation**

All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with Premium Mortar Bed. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. Concrete slabs must be plumb and true to within 6 mm in 3 metres.

Note: Expansion joints shall be provided through the masonry from all construction or expansion joints in the substrate. Do not cover expansion joints with mortar.

## Mixing

Place clean, potable water into a clean pail. Add MVIS Hi-Bond Rapid Masonry Veneer Mortar. Use approximately  $4.8-5.2~\ell$  of water for 20.0 kg of powder. Mix with a slow speed drill bit mixer to a smooth consistency. Allow mortar to stand for 5 minutes. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. DO NOT temper with water.

## **Application**

See applicable LATICRETE details in LATICRETE® Masonry Veneer Installation System Brochure (DS 002.8).

Note: If installing on sheathed wood or steel frame construction with wire lath, use Premium Mortar Bed for the wall render prior to installing applicable waterproofing membrane or Hi-Bond Rapid Masonry Veneer Mortar.

If waterproofing is required, install MVIS Air & Water Barrier as per instructions (see Data sheet DS 663.0 and DS 663.5) to the substrate prior to installation of Hi-Bond Rapid Masonry Veneer Mortar. For adhered stone, thin brick and manufactured stone masonry veneers installations, use a gauging trowel to key a thin coat of Hi-Bond Rapid Masonry Veneer Mortar to cover entire back of the veneer units. Spread additional mortar onto the back of the skim coated veneer sufficient to completely fill the space between the veneer and the substrate when compressed against the substrate.

Press the mortar covered back of the veneer against the substrate at the desired final position. Slide the unit roughly 25 mm diagonally from the desired final position and back into the desired position while maintaining even pressure. This should be done in such a manner as to squeeze the mortar to fill the entire space between the veneer unit and the substrate, allowing excess mortar to extrude on all sides around the veneer unit. Clean excess extruded mortar with trowel and spread onto the next veneer unit to be installed.

Note: Prior to installation, ensure back of veneer units are clean of dust, laitance, loose concrete crumbs and any excess film that could impede bond.

Optional alternate method for thin brick, tile, calcium silicate unit and stone installations: key Hi-Bond Rapid Masonry Veneer Mortar into the substrate thoroughly. Then, comb on additional mortar with the notched side, use 6 mm x 9 mm or 12 mm x 12 mm loop or notch trowel. Back butter all thin brick, veneer units 200 mm x 200 mm or larger to provide full bedding of the veneer. Place veneer into the mortar and adjust to desired position. Clean any excess mortar on sides of stone or tile veneer.

Note: Use proper sized notched trowel to ensure full bedding of the tile. Spread only enough mortar that can be covered with tile within 15-20 minutes. Adjust as necessary. Check mortar for complete coverage by periodically removing veneer unit and inspecting the transfer onto the back of the tile. The size and weight of the veneer will vary. Conduct a small test area for non-sag performance. Due to job site conditions and differences in finish material types; ledger boards, shims, wedges or spacers may be required to maintain finish levels and heights.

## Pointing (if required)

When required, point installation after a minimum of 24 hours curing time at 70°F (21°C). Point with Epoxy Pointing Mortar (conduct test area to determine suitability and acceptability with veneer) Premium Masonry Pointing Mortar mixed with water or Masonry Pointing Mortar mixed with water.

## Cleaning

Clean tools with water.

## 6. AVAILABILITY AND COST

## **Availability**

LATICRETE and LATAPOXY® materials are available worldwide. For Distributor Information, call 0151 486 6101 or visit LATICRETE UK at

www.laticrete.co.uk

#### 7. MAINTENANCE

Non-finish LATICRETE and LATAPOXY installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

#### 8. TECHNICAL SERVICES

#### **Technical Assistance**

Information is available by calling the LATICRETE UK Technical Service Hotline:

Tel: 0151 486 6101 Fax: 0151 448 1982

e-mail: sales@laticrete.co.uk

## **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at www.laticrete.co.uk

## 9. DISCLAIMER

The information contained in this document is given in good faith and to the best of our knowledge is true and accurate.

This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information.

The use of this product is beyond our control and liability is assumed by the user when used incorrectly and not in accordance with LATICRETE quidelines.

The manufacturer is not responsible for any loss or damage arising from incorrect usage of this product.

The specifier or other party responsible for the project must ensure that the details in this data sheet are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this specification.

†United States Invention Patent No.: 6881768 (and other Patents). . AUnited States Invention Patent No.: 6784229 (and other Patents)

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