



MVIS™ Hi-Bond Masonry Veneer Mortar

254-0818

Globally Proven
Construction Solutions



1. PRODUCT NAME

MVIS™ Hi-Bond Masonry Veneer Mortar

2. MANUFACTURER

LATICRETE UK

Speke Hall Industrial Estate

Speke, Liverpool, Merseyside, L24 1YA

United Kingdom

Tel: 0151 486 6101; Fax: 0151 448 1982

e-mail: sales@laticrete.co.uk

www.laticrete.co.uk

3. PRODUCT DESCRIPTION

The ultimate, polymer fortified, thin-set mortar for interior and exterior installation of masonry veneer, stone, ceramic tile, quarry tile, pavers and thin brick. Hi-Bond Masonry Veneer Mortar, designed to mix just with water, has a long open time with unsurpassed adhesion and workability.

Uses

For interior, exterior and submerged applications, as well as providing superior bond to exterior glue / WBP plywood (interior only) and concrete. This is the ultimate thin-set adhesive for masonry veneer installation.

Advantages

- Ultimate adhesion for masonry veneer
- Incredible bond to exterior glue plywood* and concrete
- Excellent shear bond strength
- High performing, smooth and creamy formula
- Contains anti-fungal protection to inhibit the growth of stain causing mold and mildew in the substrate
- Exceeds ANSI A118.4 & ANSI A118.11 Shear Bond Strength Requirements
- Exceeds ASTM C270 compressive strength requirements for masonry veneer installations
- Passes IBC and IRC shear bond strength code requirements for adhered masonry veneer when tested in accordance with ASTM C482
- Conforms to EN 12004 with a classification of C2TE

* Interior Only on plywood.

Suitable Substrates

- Exterior glue plywood*
- Cement terrazzo
- Concrete
- Cement backer boards**
- Gypsum wallboard*
- Cement mortar (Scratch & brown coat)
- Existing ceramic tile and stone
- Gypsum plaster*

* Interior use only.

** Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

Packaging

20kg x 56 bags per pallet

Colour

Grey

Approximate Coverage

Vertical Applications	m ²
(6 mm x 9 mm) notched trowel	4.9-5.7
(12 mm x 12 mm) notched trowel	3.3-3.8
Adhered Masonry Veneer Application Method	1.9-2.4

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.

* High humidity will reduce the shelf life of bagged product.

Limitations

- Mastics, adhesive mortars and pointing mortars for masonry veneer, stone, ceramic tile, pavers and thin brick are not replacements for waterproofing membranes or air and water barriers. When a waterproofing membrane or air and water barrier is required, use Air & Water Barrier (see Section 10 FILING SYSTEMS).
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Not for use directly over particle board, luan, Masonite® or hardwood floors.
- Use LATAPOXY® 300 Adhesive for installing green marble, resin backed, or water sensitive tile, stone and agglomerates (refer to DS 633.0 for more information).

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 tile/brick installations or L/480 for thin bed stone installations where L=span length. For exterior vertical installations over framed construction, the substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/600 where L=span length

Cautions

Consult MSDS for more safety information.

- Some stone have low flexural strength and may not be suitable for all installations.
- Cold Weather Note: The setting of portland cement mortars and grouts are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather.
- Hot Weather Note: The evaporation of moisture in portland cement mortars is accelerated by hot, dry conditions. Apply mortar to dampened surfaces and protect freshly spread mortar and finished work in temperatures over 90°F (32°C)
- During cold weather, protect finished work from traffic until 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.
- DO NOT take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator.
- For white and light-colored stones, conduct test area to ensure no shadowing or staining is observed.
- Keep out of reach of children.

4. TECHNICAL DATA

VOC/LEED Product Information



This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program For Chemical Emissions For Building Materials, Finishes and Furnishings (UL 2818 Standard) by

Total VOC Content form is 0.00 lb/gal (0.00 g/l).

Applicable Standards

ASTM C270, ANSI A118.4, ANSI 118.11, ISO 13007-1, EN 12004 C2 TE

Physical Properties

Test	Test Method	Specification	Results
28 day Cure Vitreous Tile Shear Strength	ANSI A118.4 5.2.4	>200 psi (1.4 MPa)	450–520 psi (3.1–3.6 MPa)
Shear Bond Vitreous Tile Water Immersion	ANSI A118.4 5.2.3	>150 psi (1.0 MPa)	300 psi (2.1 MPa)
28 day Cure Quarry Tile to Plywood Shear Bond	ANSI A118.11 4.1.2	>150 psi (1.0 MPa)	265 psi (1.8 MPa)
28 day cure Bond Strength to calcium silicate	ASTM C482	N/A	350–370 psi (2.4–2.6 MPa)
28 day cure 20 cycle freeze/thaw Bond Strength to calcium silicate	ASTM C482	N/A	230–260 psi (1.6–1.8 MPa)
28 day Compressive Strength	ASTM C270	2000 psi (13.8 MPa)	2400–2450 psi (16.5-16.9 MPa)

Test	Test Method	En 12004 C2 Specification	Results
28 day cure tensile adhesive strength	EN 12004	> 1.0 N/mm ²	2.3 – 2.6 N/mm ²
7 day cure 21 day water immersion tensile adhesive strength	EN 12004	> 1.0 N/mm ²	1.3–1.5 N/mm ²
14 day cure 14 day heat age tensile adhesive strength	EN 12004	> 1.0 N/mm ²	2.4–3.0 N/mm ²
7 day cure 21 day water immersion 25 freeze/thaw cycle tensile adhesive strength	EN 12004	> 1.0 N/mm ²	1.2–1.4 N/mm ²
Open time after 30 minutes	EN 12004	> 0.5 N/mm ²	1.7–1.9 N/mm ²
Slip	EN 12008	< 0.5 mm	< 0.5 mm
Transverse deformation	EN12002	> 2.5 mm and < 5 mm	3.2-3.6 mm

Working Properties

Open Time	40 minutes
Pot Life	2 hours
Time to Heavy Traffic	24 hours
Wet Density	1.65 Kg / litre

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 Masonry Veneer Mortar. Use approximately 4.8 – 5.2 l 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.

Note: For use as a slurry bond coat; mix (6.0 l) water to a 20 kg bag of MVIS Hi-Bond Masonry Veneer Mortar.

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 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 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 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 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 and stone work with water while mortar is fresh.

6. AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY® materials are available worldwide. For on-line 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 guidelines.

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.

LATICRETE International, Inc.

One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • www.laticrete.com

©2013 LATICRETE International, Inc.

All trademarks shown are the intellectual properties of their respective owners.