

## **MVIS™ Veneer Mortar**

DS-060.0-0717

# Globally Proven Construction Solutions



#### 1. PRODUCT NAME

MVIS™ Veneer Mortar

#### 2. MANUFACTURER

LATICRETE International, Inc. 1 LATICRETE Park North Bethany, CT 06524-3423 USA

> Telephone: +1.203.393.0010, ext. 235 Toll Free: 1.800.243.4788, ext. 235 Fax: +1.203.393.1684

Internet: +1.203.393.1064

www.laticrete.com

#### 3. PRODUCT DESCRIPTION

MVIS Veneer Mortar is a patented, versatile polymer fortified mortar designed specifically for the installation of adhered masonry veneer, natural manufactured stone and thin brick. A high performance mix provides maximum non-sag performance for vertical installations and also obtains maximum bond strength to the substrate and selected veneers. Reinforced with Kevlar® for added strength, MVIS Veneer Mortar offers exceptional workability and is backed by an available LATICRETE® 25 Year System Warranty (United States and Canada) (see DS 025.0).

#### Uses

- For vertical, horizontal and overhead installation of manufactured stone and thin brick veneers on exterior and interior installations.
- Ideal for both commercial and residential installations

#### Advantages

- Incredible non-sag performance faster, easier installations
- Revolutionary patented formula provides maximum bond strength to veneers and substrate
- 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
- Mixes only with water no admix needed
- Reinforced with Kevlar
- Lightweight mortar very smooth and easy to apply

- UL GREENGUARD GOLD certified for low VOCs
- Inhibits the growth of stain-causing mold and mildew with antimicrobial technology

#### **Suitable Substrates**

- Cement Mortar
- Concrete
- Concrete Block
- Cement Backer Board\*\*
- Masonry And Brick

#### **Packaging**

40 lb (18 kg) bag

#### Colors

Grev

#### Approximate Coverage

40 lb (18 kg) bag

#### **Trowel Size**

Vertical Applications	ft²	m²
1/4" x 3/8" (6 mm x 9 mm) Notched Trowel	55 - 65	5.1 - 6.0
1/2" x 1/2" (12 mm x 12 mm) Notched Trowel	42 - 50	3.9 - 4.6
Adhered Masonry Veneer Application Method	28 - 33	2.6 - 3.1

#### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years^ 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 thin brick, masonry veneer, stone, pavers and thin brick are not replacements for waterproofing membranes or air and water barriers. When a waterproofing membrane or air and water barriers is required, MVIS Air & Water Barrier (see Section 10 FILING SYSTEM).
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Not for use in submerged or steam room applications. For these applications use MVIS Hi-Bond Veneer Mortar.
- Use LATAPOXY® 300 Adhesive for installing green marble, Resin backed, or moisture sensitive tile, stone and agglomerates (refer to DS 633.0 for more information)

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

Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. 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 (except where local building codes specify more stringent deflection requirements).

#### Cautions

Consult SDS for more safety information.

- Some marbles and other stone have low flexural strength and might not be suitable for exterior installations, check with veneer manufacturer for suitability.
- During cold weather, protect finished work from traffic 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.
- DO NOT take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- For white and light-colored stone, 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 UL Environment.



Total VOC Content pounds/gallon (grams/liter) of product is 0.00 lb/gal (0.00 g/L).

#### **Applicable Standard**

ASTM C270, ANSI A118.4, ANSI A118.11, ASTM C482
This product has a cradle-to-gate (with options) Product-Specific
(Type III) Environmental Product Declaration. The PCR review, life
cycle assessment and declaration were independently verified by UL
Environment in accordance with ISO 14025, ISO 14040 and ISO
14044.

#### **Physical Properties**

(Mixed with 5.9 qts (5.6 L) of water)

Test	Test Method	Results
Shear Bond, Vitreous Tile, 28 day	ANSI AS118.4 5.2.4	300-330 psi (2.1-2.3 MPa)
7 day Cure, Water Soak Test, Vitreous Tile	ANSI A118.4 5.2.3	200–300 psi (1.4–2.1 MPa)

Sag on Wall	ISO 13007-2 4.2	0 mm No Sag Observed
28 Day Cure Compressive Strength	ASTM C109	2400-2800 psi (16.6-19.3 MPa)

**Working Properties** 

Pot Life	4 Hours
Wet Density	11.1 lbs per Gallon (1.3 gm/cm³)

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 MVIS Premium Mortar Bed. Expansion joints shall be provided through the adhered manufactured stone masonry veneer (AMSMV) from all construction or expansion joints in the substrate. Follow ANSI specification A108.01–3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.

 Installer must verify that deflection under all live, dead and impact loads of substrates does not exceed industry standards of L/600 for AMSMV units or 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.

#### Mixing-40 lb (18 kg) bag

Place approximately 5.9 qts (5.6 L) of clean water in a pail and slowly add the entire bag of MVIS Veneer Mortar. Mix with slow speed mixer for one minute or until a creamy smooth consistency is reached. Allow to slake for 5 minutes, remix and use. Jobsite conditions might vary. Add slightly more water if necessary for proper consistency.

#### Application

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

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

If waterproofing is required, install MVIS Air & Water Barrier per instructions (see DS 661.0) to the substrate prior to installation of MVIS Veneer Mortar.

For adhered masonry veneers use a hand trowel to apply a thin coat of MVIS Veneer Mortar to cover entire back of the veneer unit. Spread additional mortar onto the back of the skim coated veneer unit sufficient to completely fill the space between the veneer unit 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 1" – 1 1/2" (25 - 38 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, helping to achieve 100% coverage to both the substrate and veneer unit, 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.

For adhered masonry veneer using a hand trowel to apply MVIS Veneer Mortar into the substrate thoroughly and then comb on additional mortar (trowel size is determined by substrate flatness and finished material size). Back butter all veneer units 8" x 8" (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 between veneers or 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.

### **Grouting/Pointing**

Point installation after a minimum of 12–24 hours curing time at 70°F (21°C). Cooler temperatures require a longer curing time. Point with MVIS Pointing Mortar, MVIS Epoxy Pointing Mortar, or MVIS Premium Pointing Mortar according to product instructions.

#### Cleaning

Clean tools with water.

#### 6. AVAILABILITY AND COST

#### **Availability**

LATICRETE® and LATAPOXY® materials are available worldwide.

#### For Distributor Information, Call:

1.800.243.4788 Toll Free: +1.203.393.0010 Telephone:

For on-line Distributor Information, visit LATICRETE at

www.laticrete.com.

Contact a LATICRETE Distributor in your area.

#### 7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE Product Warranty (United States

and Canada)

A component of:

DS 230.15: LATICRETE 15 Year System Warranty - For

Steel or Wood Framed Exterior Facades (United

States and Canada)

LATICRETE 25 Year System Warranty - (United DS 025.0:

States and Canada)

#### 8. 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.

#### 9. TECHNICAL SERVICES

#### **Technical Assistance**

Information is available by calling the LATICRETE Technical Service Hotline:

Telephone: +1.203.393.0010, ext. 235 Toll Free: 1.800.243.4788, ext. 235 Fax: +1.203.393.1948

#### **Technical and Safety Literature**

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

#### **10. FILING SYSTEM**

Additional product information is available on our website at www.laticrete.com. The following is a list of related documents:

DS 230.13: **LATICRETE Product Warranty** 

DS 230.15: LATICRETE 15 Year System Warranty - For

Steel or Wood Framed Exterior Facades (United

States and Canada)

LATICRETE 25 Year System Warranty (United DS 025.0:

States and Canada)

DS 228.0: **MVIS Pointing Mortar** MVIS Hi-Bond Veneer Mortar DS 247.0: DS 263.0: MVIS Premium Mortar Bed DS 274.0: MVIS Premium Pointing Mortar

LATAPOXY® 300 Adhesive DS 633.0: DS 661.0: MVIS Air & Water Barrier

DS 002.8: MVIS Masonry Veneer Installation

System Brochure

LATICRETE International, Inc.

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

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