



MVIS™ LIGHTWEIGHT Mortar

DS-060.1-0817

**Globally Proven
Construction Solutions**

1. PRODUCT NAME

MVIS™ LIGHTWEIGHT Mortar

2. MANUFACTURER

LATICRETE International, Inc.
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3. PRODUCT DESCRIPTION

MVIS LIGHTWEIGHT Mortar is a lightweight, high performance multi-use, polymer fortified adhesive mortar. MVIS LIGHTWEIGHT Mortar offers tremendous utility including non-sag wall installations.

Uses

- For wall installations of interior and exterior thin brick, masonry veneer, stone, and tile

Advantages

- Incredible non-sag performance, including large and/or heavy thin brick, stone, masonry veneer, or tile
- Lightweight formula. A 30 lb (13.6 kg) bag provides the same coverage as a 50 lb (22.7 kg) bag of traditional mortar.
- Exceeds ANSI A118.4, 118.11 & 118.15 Requirements
- Bonds to many suitable substrates
- Unique color options are now available in all LATICRETE® grout colors when mixed with PERMACOLOR® Select Color Kits*

*LATICRETE makes no guarantee on color match to our grout color card and color tools. This process/method can be used to create a colored adhesive mortar to facilitate the installation of translucent, transparent, opaque glass mosaics and other finishes where cleaning thin set mortar out of the joints is a challenge. Do not use colored adhesive mortar as a substitute for grout. Always conduct a test area to validate performance and results.

Suitable Substrates

- Cement Mortar
- Masonry And Brick
- Exterior Glue Plywood*
- Concrete

- Concrete Block
- Cement Backer Board**
- Existing Ceramic Tile And Stone

* Interior use only.

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

Packaging

30 lb (13.6 kg) bag

Colors

White

Approximate Coverage

30 lb (13.6 kg) bag

Trowel Size	ft ²	m ²
1/4" x 3/8" (6 mm x 9 mm) notched trowel	60 – 70	5.6 – 6.5
1/2" x 1/2" (12 mm x 12 mm) notched trowel	40 – 47	3.7 – 4.4
Adhered Masonry Veneer Application Method	30 – 35	2.8 – 3.2

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, ceramic tile and pavers, are not replacements for waterproofing membranes or air and water barriers. When a waterproofing membrane or air and water barriers is required, use 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 directly over OSB, particle board, interior glue plywood, luan, Masonite® or hardwood floors.
- Not for use over VAT, VCT, cutback adhesive, vinyl and plastic laminates.
- Not for use in submerged applications. For these applications, use MVIS™ Hi-Bond Veneer Mortar
- Use LATAPOXY® 300 Adhesive for installing green marble, resin backed on water sensitive tile, stone and agglomerates (refer to DS 633.0 for more information)

Cautions

Consult SDS for more safety information.

- Some marbles and other stones have low flexural strength and might not be suitable for installation over wood floors.
- 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 stones, conduct test area to ensure no shadowing or staining is observed.
- Keep out of reach of children.

4. TECHNICAL DATA

Applicable Standard

ANSI A118.4, ANSI A118.15, ANSI A118.11



Physical Properties

Test	ANSI A118.15 Specification	Results
Porcelain Tile Shear Strength ANSI A118.15 7.2.2: 24 hrs	100 psi (0.6 MPa)	220-250 psi (1.5-1.7 MPa)
Porcelain Tile Shear Strength ANSI A118.15 7.2.3: 7 days	300 psi (2.0 MPa)	460-500 psi (3.2-3.4 MPa)
Porcelain Tile Shear Strength ANSI A118.15 7.2.4: 7d Water Immersion	200 psi (1.3 MPa)	270-300 psi (1.9-2.1 MPa)
Porcelain Tile Shear Strength ANSI A118.15 7.2.5: 28 days	400 psi (2.7 MPa)	420-470 psi (2.9-3.2 MPa)
Quarry Tile Shear Strength ANSI A118.15 7.3.2: 28 days	150 psi (1.0 MPa)	320-340 psi (2.2-2.3 MPa)
Wall Tile Shear Strength ANSI A118.15 7.1.2: 7 days	450 psi (3.1 MPa)	480-500 psi (3.3-3.4 MPa)
Wall Tile Shear Strength ANSI A118.15 7.1.3: 7d Water Immersion	250 psi (1.7 MPa)	270-300 psi (1.9-2.1 MPa)
Sag	<0.50 mm	0 mm
Open Time: 20 minutes at 28 days ANSI A118.15 5.3	75 psi (0.5 MPa)	140-180 psi (1 – 1.2 MPa)
Open Time: 30 minutes at 28 days ANSI A118.15 5.3	75 psi (0.5 MPa)	75-85 psi (0.5-0.6 MPa)

Working Properties

Pot Life	4 hours
Time To Traffic	24 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 MVIS 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. New concrete slabs shall be damp cured and 28 days old before application. All slabs must be plumb and true to within 1/4" (6 mm) in 10 ft (3 m). Expansion joints shall be provided through the masonry 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.

1. 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.

When Using PERMACOLOR® Select Color Kits

Mixing with PERMACOLOR Select Color Kits (MVIS LIGHTWEIGHT MORTAR)
Requires two (2) PERMACOLOR Select Color Kits. (Each Color Kit contains two (2) individual color packets, use all four (4) color packets). Place water in a clean mixing container. Remove color packets from the cardboard container as well as the protective plastic sleeve. The internal bag is a water dispersible packet – when using the 30 lbs. (13.6kg) bag of MVIS LIGHTWEIGHT MORTAR, drop all color packs directly in to water in clean mixing container. Mix with a drill mixer until pigment is dispersed evenly in container and the dispersible packet is no longer visible. Add MVIS LIGHTWEIGHT MORTAR and mix as directed above.

Please note that additional water may be necessary when using PERMACOLOR Select color Kits.

For Wall and Large and Heavy Stone Application

Place 4.6 – 4.8 qts (4.4 – 4.5 L) of clean water in a pail and slowly add the entire bag of MVIS LIGHTWEIGHT Mortar. Mix with slow speed mixer for one minute. DO NOT temper with water. Allow to slake for 5 minutes, remix and use.

For Thin Bed Applications

Place 5.0 – 5.2 qts (4.8 – 4.9 L) of clean water in a pail and slowly add the entire bag of MVIS LIGHTWEIGHT 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.

Application

Walls

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 MVIS Premium Mortar Bed for the wall render prior to installing applicable waterproofing membrane or MVIS LIGHTWEIGHT Mortar. If waterproofing is required, install MVIS Air & Water Barrier per instructions (see Data sheet DS 663.0 and DS 663.5) to the substrate prior to installation of MVIS LIGHTWEIGHT Mortar.

For adhered stone, thin brick and manufactured stone masonry veneers installations, use a gauging trowel to key a thin coat of MVIS LIGHTWEIGHT 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 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" (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 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.

For thin brick, tile, calcium silicate unit and stone installations key MVIS™ LIGHTWEIGHT Mortar into the substrate thoroughly. Then, comb on additional mortar with the notched side, use 1/4" x 3/8" (6 mm x 9 mm) or 1/2" x 1/2" (12 mm x 12 mm) loop or notch trowel. Back butter all thin brick, tile and stone veneers 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 veneer. 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 units 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 24 hours curing time at 70°F (21°C). Point with MVIS™ Epoxy Pointing Mortar (conduct test area to determine suitability and acceptability with veneer), MVIS Premium Pointing Mortar mixed with water or MVIS 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:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line Distributor information, visit LATICRETE at

www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE Product Warranty

A component of:

DS 230.15: LATICRETE 15 Year System Warranty –For Steel or Wood Framed Exterior Facades (United States and Canada)

DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)

8. MAINTENANCE

LATICRETE and LATAPOXY grouts and pointing mortars require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY 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:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, 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)
DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)
DS 228.0: MVIS™ Pointing Mortar
DS 274.0: MVIS Premium Pointing Mortar
DS 633.0: LATAPOXY 300 Adhesive
DS 661.0: MVIS Air & Water Barrier
DS 002.8: LATICRETE Masonry Veneer Installation System Brochure

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