



MVIS™ Air & Water Barrier

DS-661.0-0817

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

MVIS™ Air & Water Barrier

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: www.laticrete.com

3. PRODUCT DESCRIPTION

MVIS Air & Water Barrier is single component, load bearing, fluid applied, waterproofing, crack isolation, air barrier membrane. MVIS Air & Water Barrier produces a seamless, monolithic elastomeric coating and bonds directly to a wide variety of substrates. MVIS Air & Water Barrier is a low VOC, self-curing, water – based formula containing antimicrobial technology used in construction where air & water barriers are required to improve building efficiencies & durability. MVIS Air & Water Barrier is designed to enhance building longevity, save energy and increase building comfort.

Uses

- Designed for use as an air and water barrier behind exterior wall claddings.
- Performs as a waterproofing and crack isolation membrane in an MVIS system when placed under exterior veneer finishes (ceramic tile, stone, manufactured stone veneer) and directly over cement backer board.)
- Performs as a component of a building air barrier system when placed over exterior rated sheathing. OSB, EGP.
- Performs as a component of air barrier assembly when used with other wall components within the building envelope.
- Bridges up to 1/4" (6mm) gaps on sheathing board joints with Waterproofing/Anti-Fracture Fabric.
- Creates an air and weather barrier coating for applications to glass mat gypsum exterior sheathing panels, exterior glue plywood, OSB, cement board sheathing and other approved

substrates.

- Consult LATICRETE Technical Services Department for further options.

Advantages

- Meets ASTM E2357 Air Leakage of Building Assemblies.
- Adhered Exterior veneers may be installed to membrane using Polymer Fortified Veneer Mortars over concrete, brick, cement plaster and cement backer board.
- Excellent bond strength.
- Contribute to overall building energy efficiency.
- Equipped with anti-microbial technology.
- Works together with MVIS Transition Tape and MVIS Flexible Sealing Tape to help provide complete protection of the building envelope.
- Meets ASTM D 1970 Nail Sealability requirements.
- Lighter color for ease of inspection.
- Safe—no solvents and non-flammable.
- MVIS Air & Water Barrier is an Air Barrier Association of America (ABAA) Evaluated Material and is part of an ABAA Evaluated Assembly.
- Exceeds ANSI A118.10 and A118.12

MVIS Suitable Substrates

- Concrete & Brick Masonry †
- Cement Render †
- MVIS Premium Mortar Bed
- Cement Backer Board

Air Barrier Suitable Substrates

- Oriented Strand Board (OSB) *
- Exterior Glue Plywood *
- Cement Backer Board * †
- Glass Mat Gypsum Exterior Sheathing Panels *

†Suitable as a load bearing substrate for installation of direct adhered masonry veneers.

*Consult panel manufacturer for specific installation recommendations and to verify acceptability for intended use.

Packaging

Commercial Unit

5 gal (18.9 L) pail liquid (36 commercial units/pallet)

Approximate Coverage

Commercial Unit: 250 ft² (23.2 m²)

Each wet coat thickness is 15 – 22 mils, 0.015" – 0.022" (0.4 – 0.6mm); use wet film gauge to check thickness; consumption/coat is approximately 0.01 gal/ft² (0.4 L/m²); coverage/coat is approximately 100 ft²/gal (2.5 m²/L). Applied in two coats for a total dry coat thickness of 20-30 mils, 0.02-0.03" (0.5-0.8mm); for a total of 250 ft² per 5 gallons/23.2m² per (18.9 L) pail.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years* if stored at temperatures >32°F (0°C) and <110°F (43°C).

Limitations

- Do not bond to particle board, interior glue plywood, luan, Masonite® or hardwood surfaces.
- When used as a component of an air barrier system, MIVS™ Air & Water Barrier is not functioning as a waterproofing/anti-fracture membrane.
- When used in an MVIS system, MVIS Air & Water Barrier may not necessarily be recommended outboard of the insulation in some Climate Zones. Always consult with design professional for membrane position in an assembly.
- OSB is not suitable as a veneer substrate.
- Do not install over structural cracks, cracks with vertical movement or cracks with >1/8" (3 mm) horizontal movement.
- Do not use as a primary roofing membrane over occupied space.
- Based on information provided in the Technical Data Table – Section 4 of this document. The design professional / specifier should detail and specify vapor barrier layer material type and location within the installation assembly and in accord with local building codes and to determine suitability of MVIS™ Air & Water Barrier within the installation assembly.
- Do not expose to negative hydrostatic pressure, rubber solvents or ketones.
- Do not expose membrane directly to sun or weather for more than 90 days for direct adhered masonry veneer or cavity wall air and water barrier installations.
- Do not use below grade.
- MVIS Air & Water Barrier is a secondary weather barrier. The outer façade finish is the primary weather barrier and must be installed and maintained per manufacturer's guidelines in order to ensure the proper performance of MVIS Air & Water Barrier.
- Do not install if surface or air temperature is below 50°F (10°C) or above 90°F (32°C).
- Not for use beneath directly applied cement or other plaster finishes. Consult with plaster manufacturer for their recommendations when waterproofing membrane is required under plaster finishes.

Cautions

Consult SDS for more safety information.

- Review local building codes and obtain any required approvals before using MVIS Air & Water Barrier. Placement of MVIS Air & Water Barrier in a wall assembly to be determined by project design professional.
- It is the responsibility of the project design professionals to ensure that the air barrier, vapor barrier, insulation, and waterproofing membrane are all properly placed to prevent the movement of air and moisture into and out of the building to ensure maximum performance.
- Allow wet mortars/renders to cure for a minimum of 72 hours at 70°F (21°C) / 50% R.H. prior to installing MVIS Air & Water Barrier.
- Mechanical anchors, brick ties, furring strips, finish cladding supports or other penetrations through MVIS Air & Water Barrier should be sealed and made air and watertight.
- For all finishes: The successful performance and installation of exterior finishes is dependent upon the proper design and construction of the finish, adjacent building materials and

systems of the assembly. Follow all applicable industry guidelines and building codes for the respective utilized finish.

- When MVIS Air & Water Barrier is installed in conjunction with other building materials; it must be properly integrated so that water is diverted to the exterior of the wall system.
- Use of certain additives, coatings or cleansers on or in the façade system may impact the performance of MVIS Air & Water Barrier. It is the user's responsibility to determine the proper construction materials needed.
- For adhered veneer applications, substrates must be structurally sound, stable and rigid enough to support the intended finish. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/600 where L=span length.
- Placement of MVIS Air & Water Barrier in a wall assembly to be determined by project design professional.

4. TECHNICAL DATA

Applicable Standard

ASTM E 2357: Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.

ICC – ES AC212: Acceptance Criteria for Resistive Coatings us as Water Resistive Barrier over Exterior Sheathing.

ICC – ED AC38: Acceptance Criteria for Water-Resistive Barriers

Total VOC content pounds/gallon (grams/liter) of product in unused form is 0.02lb/gal (2.39 g/l).

ANSI 118.10 and ANSI 118.12



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.

Physical Properties

Physical Property	Test Method	Specifications	Results
Fastener Sealability	ASTM D1970	No Leakage	Pass
Flatwise Tensile Strength to Aluminum	ASTM C297	15 psi (0.34 MPa)	546 psi (3.8 MPa)
Flatwise Tensile Strength to Copper	ASTM C297	15 psi (0.34 MPa)	216 psi (1.5 MPa)
CAN/ULC – S742-11	Proposal Number 12-006-04895	<0.05 L/s-m ² at 75 pa	A1 Rating
Air Leakage	ASTM E2357	<0.3 L/s-m ²	0.00168 L/s-m ²
Flatwise Tensile Strength to Galvanized Steel	ASTM C297	15 psi (0.34 MPa)	530 psi (3.7 MPa)
Flatwise Tensile Strength to Polyvinyl Chloride (PVC)	ASTM C297	15 psi (0.34 MPa)	273 psi (1.9 MPa)
Tensile Strength Painted Aluminum	ASTM C297	15 psi (0.34 MPa)	368 psi (2.5 MPa)
Freeze Thaw Glass Mat Gypsum Exterior Sheathing Panels	AC212 Sec. 4.2	No deterioration	Pass 10 Cycles
Freeze Thaw Cement Board	AC212 Sec. 4.2	No deterioration	Pass 10 Cycles
Water Resistance Test Glass Mat Exterior Gypsum Sheathing Panels	ASTM D2247	No deterioration	Passed 14 Day Exposure

Water Resistance Test Cement Board	ASTM D2247	No deterioration	Passed 14 Day Exposure
Pull-Off Strength CMU	ASTM D4541-02	15.95 PSI	223 PSI
Pull-Off Strength Glass Mat Gypsum Exterior Sheathing Panels	ASTM D4541-02	15.95 PSI	47 PSI
Water Vapor Transmission Rate	ASTM E96-00e1 (Procedure A) Desiccant Method	N/A	1.081 gm/24 hr.m2
Water Vapor Permeance	ASTM E96-00e1* † (Procedure A) Desiccant Method	N/A	0.157 (grains/hr.in.Hg.ft2) (Perms)
Water Vapor Transmission Rate	ASTM E96-00e1 (Procedure B) Water Method	N/A	6.8 gm/24 hr.m2
Water Vapor Permeance	ASTM E96-00e1 (Procedure B) Water Method	N/A	1.002 (grains/hr.in.Hg.ft2) (Perms)
Water Penetration Test	ASTM E331	No Water Penetration	Pass
Transverse Load (Structural) Test	ASTM E1233	No Cracking	Pass
Racking Shear Test	ASTM E72	No Cracking	Pass
Restrained Environmental Conditioning	AC212 Sec. 4.7.3	No Cracking	Pass
Weathering Test	AC212 SEC. 4.8	No Sign Of Failure	Pass
Ultraviolet Exposure	AC212	No Sign Of Failure	Pass
Accelerated Aging	AC212	No Sign Of Failure	Pass
Hydrostatic Pressure Test	AATCC 127	No Leakage	Pass
Air Permeance Test	ASTM E 2178	0.00052 L (s.m ²) @ 75 Pa (0.000104 cfm/ft ² @ 1.56 psf)	Pass
7-day Hydrostatic Test	ANSI A118.10	N/A	Pass
7-day Breaking Strength	ANSI A118.10	N/A	265–300 psi (1.8–2.1 MPa)
7-day Water Immersion	ANSI A118.10	N/A	95–120 psi (0.7–0.8 MPa)
7-day Shear Bond	ANSI A118.10	N/A	200–275 psi (1.4–1.9 MPa)
28-day Shear Strength	ANSI A118.10	N/A	214–343 psi (1.5–2.3 MPa)
System Crack Resistance Test	ANSI A118.12.5.4	N/A	Pass (High)

The data in the above table shall be used by the Project Design Professional to determine suitability, placement, building code conformance and over-all construct appropriateness of a given installation assembly.

* † Method used by the IBC/IRC to classify vapor retarders.

5. INSTALLATION

See MVIS™ Air & Water Barrier How to Install Instructions DS 661.5 for complete installation instructions.

MVIS Air & Water Barrier can be applied using airless spray equipment or paint roller. All areas must have two coats to ensure proper coverage. Substrate will not show through MVIS Air & Water Barrier if coated with 0.020–0.030" (0.5–0.8 mm) of dried membrane. Color changes from a light sage to olive green when fully cured. Refer to LATICRETE® TDS 410M for more information on the spray application of MVIS Air & Water Barrier.

Cleaning

While wet, MVIS Air & Water Barrier can be washed from 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, ext. 235

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

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:

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 070.0: LATAPOXY Waterproof Flashing Mortar
- DS 237.0: Waterproofing/Anti-Fracture Fabric
- DS 661.5: How to install instructions – MVIS Air & Water
Barrier
- DS 658.0: MVIS Transition Tape
- DS 659.0: MVIS Flexible Sealing Tape
- TDS 410M: Spraying MVIS Air & Water Barrier

LATICRETE International, Inc.
One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4786 • +1.203.393.0010 • www.laticrete.com
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