



Globally Proven
Construction Solutions

9235 Waterproofing Membrane

9235 Waterproofing Membrane is a thin, load bearing waterproofing designed specifically for the special requirements of ceramic tile, stone and brick installations. A self-curing liquid rubber polymer and a reinforcing fabric are quickly applied to form a flexible, seamless waterproofing membrane that bonds to a wide variety of substrates.



FEATURES/BENEFITS

- Inhibits stain causing mold and mildew growth in the substrate.
- Equipped with anti-microbial technology.
- Safe—no solvents and non-flammable.
- Interior and exterior use.
- Vertical and horizontal surfaces (including ceilings).
- Thin—only 0.02" (0.5 mm) thick when cured.
- Anti-fracture protection of up to 1/8" (3 mm) over shrinkage and other non-structural cracks.
- Applies quickly with a paintbrush or roller—no special mixing or application equipment needed.
- Fast cure—normally ready in hours for finishes.
- Install tile, brick, and stone directly onto membrane.
- Easy cleanup—just use water while fresh.
- Protects concrete & reinforcing steel from corrosion.

MANUFACTURER

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USES

- Swimming pools, fountains & water features
- Shower pans, stalls and tub surrounds
- Bathrooms & laundries (industrial, commercial & residential)
- Spas and hot tubs
- Kitchens & Food Processing Areas
- Terraces & balconies over unoccupied spaces
- Countertops
- Facades
- Steam rooms (when used in conjunction with a vapor barrier)

STANDARDS

GREENGUARD CERTIFIED

DCLD CERTIFIED



Applicable Standards

- ANSI A118.10
- ANSI A118.12
- Germany Tile Association (ZDB) 02-1988
- FHA4900.1 Section 615.5
- Federal Specification TT-C-00555

Packaging:

Full Unit: (36 Full Units/pallet) consisting of:
 1 x 20 L pail liquid
 (Net weight: 23Kg, Gross weight: 24.4 Kg)
 1 carton waterproofing/ Anti fracture fabric packed separately:
 1 x 300 ft² (28 m²) roll fabric - 965 mm wide
 1 x 75 ft (23 m) long roll fabric - 150 mm wide
 Color: Black

Suitable Substrates

- Concrete
- Cement Mortar Beds
- Cement Plaster
- Concrete and Brick Masonry
- Exterior Glue Plywood*
- Gypsum Wallboard*
- Ceramic Tile and Stone**
- Cement Terrazzo**
- Cement Backer Board***

* Interior Applications Only.

** If skim coated with a Latex Thin Set Mortar.

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

Approximate Coverage

Full Unit: 300 ft² (27.9 m²)

Shelf Life

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

Limitations

- Do not use as a primary roofing membrane over occupied space. For more information in installation of tile over wood decks, or, over occupied or finished spaces please refer to TDS
- 157 "Exterior Installation of Tile and Stone Over Occupied Space."
- Use LATAPOXY® 300 Adhesive for installing green marble or water sensitive stone, resin-backed stone or tile and agglomerates.
- Do not use over expansion joints, structural cracks or cracks with vertical differential movement.
- Do not use over cracks >3 mm in width.
- Do not use as a vapor barrier (especially in steam rooms)
- Not for use directly over particle board, luan, Masonite® or hardwood floors.
- Use white mortar for white or light-colored marble or stone.
- Do not expose unprotected membrane to sun or w

eather for >30 days.

- Do not expose to negative hydrostatic pressure, excessive vapor transmission, rubber solvents or ketones.
- Must be covered with ceramic tile, stone, brick, dry pack thick bed mortars, terrazzo or other traffic-bearing course.
- Use protection board for temporary cover.
- Obtain approval by local building code authority before using product in shower pan applications.
- Do not install directly over single layer wood floors, plywood tubs/showers/ fountains or similar constructs
- Not for use under self-leveling underlayments or decorative wear surfaces
- Not for use beneath cement or other plaster finishes. Consult with the plaster manufacturer for their recommendations when a waterproof membrane is required under plaster finishes.

Cautions

- Consult SDS for more safety information.
- Surface temperature must be >7°C during installation and for 24 hours thereafter
- Protect from traffic or water until fully cured
- Allow membrane to cure fully (typically 7 days @ 21°C) before flood testing; flood test prior to applying tile or stone
- Cold weather will require a longer cure time

TECHNICAL DATA**GREENGUARD:**

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 of product in unused form is 0.00 g/L

∴ 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.

Approvals

- ICC Evaluation Service Report ESR-1058
- IAPMO/Uniform Plumbing Code File No. 3524 (shower pan liner)
- Michigan State Construction Code Commission Certificate of Acceptability No.1234 P-A
- Oregon Building Codes Agency Ruling No. 92-12P.
- Allegheny County Plumbing Advisory Board Article XV
- Los Angeles Board of Building and Safety Commissioners
- Approval M-980031
- City of Orlando—Certificate of Acceptability

- Singapore Institute of Standards and Industrial Research
- UL GREENGUARD Gold

Physical Properties

Physical Property	Test Method	9235 Waterproofing Membrane	
Fungus Resistance	ANSI A118.10 (M-4.1)	Pass	
Seam Strength	ANSI A118.10 (M-4.2)	>95 lbs./inch width (>166.4 N/cm width)	
Breaking Strength	ANSI A118.10 (M-4.3)	16.5 MPa	
Dimensional Stability	ANSI A118.10 (M-4.4)	No Change	
Waterproofness	ANSI A118.10 (M-4.5)	Pass	
Shear Strength	ANSI A118.10 (M-5.6)	1.9 MPa	
System Performance	ANSI A118.10 (M-6); ASTM C627; TCA Rating [^]	Cycles 1–14 "EXTRA HEAVY"	
Water Permeance	Fed. Spec. TT-C-0055 (Mod.)	Excellent (E)	
Water Vapor Transmission	ASTM E96-80 (Inverted Water Method)	2.4 grains/h•ft ² 1.6 g/h•m ²	
Water Vapor Permeance	ASTM E96-80 (Inverted Water Method)	165.5 ng/Pa•s•m ²	
Elongation	ASTM D751-89	20–30%	
Hydrostatic Resistance	ASTM D751 (Modified)	827.4 kPa	
Thickness (+/-)	LIL 1013-92	0.02" (0.5 mm)	
Chemical Resistance NA=Not Affected	Full Immersion 90 day	Brine Solution Sugar Solution Milk 10% Citric Acid 3.5% HCl Acid 5% Acetic Acid 1 %Alkali Toluol Softens Urine CaCl ₂	NA NA NA NA NA NA NA NA NA NA
Service Temperature	LIL 1016-92	-29°–138°C	
Crack Suppression	ANSI A118.12.5.4	Pass 3 mm	

[^] Tile Council of North America Service Rating Categories
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.

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

INSTALLATION

The following overview provides basic installation information. Refer to Data Sheet WPAF.5 (included in unit) for complete instructions or visit www.me.laticrete.com.

Surface Preparation

Surface temperature must be 7-32°C during application and for 24 hours after installation. All substrates must be

structurally sound, clean and free of dirt, oil, grease, paint, laitance, efflorescence, concrete sealers or curing compounds. Make rough or uneven concrete smooth to a wood float or better finish with a LATICRETE® underlayment. Do not level with gypsum or asphalt-based products. Maximum deviation in plane must not exceed 1/4" in 10 ft (6 mm in 3 m) with no more than 1.5 mm in 0.3 m variation between high spots. Dampen hot, dry surfaces and sweep off excess water—installation may be made on a damp surface. New concrete slabs shall be damp cured and a minimum of 14 days old before application. Maximum amount of moisture in the concrete substrate should not exceed 5 lbs./1000ft² (283 μ/s•m) 24 hrs. per ASTM F1869 or 75% relative humidity as measured with moisture probes per ASTM F-2170.

1. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L=span length.
2. Minimum construction for interior plywood floors: **SUBFLOOR:** 15 mm thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 400 mm o.c. maximum; fasten plywood 150 mm o.c. a long sheet ends and 200 mm o.c. along intermediate supports with 8d ring shank, coated or hot dip galvanized nails (or screws); allow 3 mm between sheet ends and 6 mm between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive;

UNDERLAYMENT: 15 mm thick exterior glue plywood fastened 150 mm o.c. along sheet ends and 200 mm Expansion Joints 0.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 3 mm to 6 mm between sheets and 6 mm between sheet edges and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. Refer to Technical Data Sheet 152 "Requirements for Direct Bonding of Ceramic or Stone Tiles Over Wood Floors" for complete details.

Pre-Treat Cracks & Joints

Apply a liberal coat^{^^} of 9235 Waterproofing Membrane Liquid approximately 200 mm wide over substrate cracks, cold joints, control joints and board joints using a paint brush or roller (heavy napped roller cover). Place 150 mm wide Waterproofing/Anti-Fracture Fabric into the wet 9235 Waterproofing Membrane Liquid. Press down on Waterproofing/Anti-Fracture Fabric with brush or roller until the 9235 Waterproofing Membrane Liquid "bleeds" through from below. Then apply another liberal coat^{^^} of 9235 Waterproofing Membrane Liquid over the entire surface of the Waterproofing/Anti-Fracture Fabric.

Pre-Treat Coves, Corners & Seams

Apply a liberal coat^{^^} of 9235 Waterproofing Membrane Liquid approximately 200 mm wide over substrate coves, corners, seams, joints, and changes in plane using a paint brush or roller (heavy napped roller cover). Fold 15 cm wide Waterproofing/Anti-Fracture Fabric in half and place it into the coat^{^^} of wet 9235 Waterproofing Membrane Liquid. Flash Waterproofing/Anti-Fracture Fabric 3" (75 mm) up walls and other vertical surfaces. Press down on Waterproofing/Anti-Fracture Fabric with brush or roller until the 9235 Waterproofing Membrane Liquid "bleeds" through from below. Then apply another liberal coat^{^^} of 9235 Waterproofing Membrane Liquid over the entire surface of the Waterproofing/Anti-Fracture Fabric.

Pre-Treat Drains

Drains must be of the clamping ring type, with weepers and as per ASME A112.6.3. Cut a square of Waterproofing/Anti-Fracture Fabric approximately 965 mm x 965 mm. In the center of the Waterproofing/Anti-Fracture Fabric square, cut a hole that matches the diameter of the drain throat as closely as possible. Apply a liberal coat^{^^} of 9235 Waterproofing Membrane Liquid around and over the bottom half of drain clamping ring. Center the circular cutout over the drain throat and imbed the Waterproofing/Anti-Fracture Fabric square into the 9235 Waterproofing Membrane Liquid, encircling the drain throat as closely as possible. Cover with a second coat^{^^} of 9235 Waterproofing Membrane Liquid. When dry, apply a LATASIL™ bead where the Waterproofing/Anti-Fracture Fabric square cutout meets the drain throat. Be sure not to block weep holes on the clamping ring drain with the LATASIL. Install top half of drain clamping ring.

Pre-Treat Penetrations

Pack any gaps around pipes, lights or other penetrations with a compressible backer rod and LATASIL. Apply a liberal coat^{^^} of 9235 Waterproofing Membrane Liquid around penetration opening. Imbed pieces of 150 mm wide Waterproofing/Anti-Fracture Fabric into 9235 Waterproofing Membrane Liquid. Cover with a second coat^{^^} of 9235 Waterproofing Membrane Liquid. When dry, seal flashing with LATASIL.

Joints Pre-treat

Apply a liberal coat^{^^} of 9235 Waterproofing Membrane Liquid around and down into substrate expansion joints. Loop 150 mm wide Waterproofing/Anti-Fracture Fabric down into joint to accommodate all potential movement. Cover with a second layer of 9235 Waterproofing Membrane Liquid^{^^}

Crack Isolation (Partial Coverage)

Crack suppression must be applied a minimum of 3 times the width of the tile or stone being installed. The tile installed over the crack cannot be in contact with the concrete.

Follow TCNA Method F125 for the treatment of hairline cracks, shrinkage cracks, and saw cut or control joints: Apply a liberal coat^{^^} of 9235 Waterproofing Membrane liquid to a minimum of three (3) times the width of the tile and immediately apply the Waterproofing/Anti-Fracture Fabric into the wet liquid. Press firmly with brush or roller to allow complete "bleed through" of liquid. Immediately apply another liberal coat^{^^} of 9235 Waterproofing Membrane liquid over the fabric and allow to dry. If waterproofing is required, in addition to crack suppression, the entire field must be treated and a third coat of 9235 Waterproofing liquid must be applied over the entire treated area after the first coat has dried. Treat closest joint to crack, saw cut, or cold joint with LATASIL™.

Main Application Waterproofing

Allow any pre-treated areas to dry to the touch. Apply a liberal coat[§] of 9235 Waterproofing Membrane Liquid with brush or roller over substrate including pre-treated areas. Lay Waterproofing/Anti-Fracture Fabric into wet 9235 Waterproofing Membrane Liquid and smooth out any wrinkles. Press Waterproofing/Anti-Fracture Fabric with brush or roller until 9235 Waterproofing Membrane Liquid "bleeds" through to surface. Lap seams approximately 50 mm. Flash 9235 Waterproofing Membrane up over pre-treated coves and corners, so such areas have two layers of Waterproofing/Anti-Fracture Fabric. Apply another liberal coat^{^^} of 9235 Waterproofing Membrane Liquid over Waterproofing/Anti-Fracture Fabric to saturate it. Let topcoat dry to the touch, approximately 1–3 hours @ 21°C and 50% RH. Apply another liberal coat^{^^} of 9235 Waterproofing Membrane Liquid to seal entire surface. When last coat has dried to the touch, inspect final surface for pinholes, voids, thin spots or other defects. Use additional 9235 Waterproofing Membrane Liquid to seal defects.

^{^^} Wet coat thickness is 15 – 22 mils (0.4 – 0.6 mm) consumption per coat is -0.01/gal/ft² (-0.4 L/m²); coverage per coat is – 100 ft²/gal (-2.5m²/L). Use wet film gauge to check thickness

Interior CBU and Gypsum Wallboard

Waterproofing/Anti-Fracture Fabric and the third coat of 9235 Waterproofing Membrane Liquid may be omitted from main applications over interior walls and other vertical surfaces made with cementitious backer units (CBU) or gypsum wallboard. However, coves, corners, seams and board joints must be pre-treated as described above.

Protection

Provide protection for newly installed membrane, even if covered with a thin bed ceramic tile, stone or brick installation, against exposure to rain or other water for a minimum of 5 days @ 21°C and 50% RH.

Flood Testing

Allow membrane to cure fully before flood testing, typically 7 days @ 21°C and 50% RH. Cold and/or wet conditions will require a longer curing time. For more information for flood testing requirements and procedures refer to TDS 169 "Flood Testing Procedures" found at www.laticrete.me

Installing Finishes

Once 9235 Waterproofing Membrane has dried to the touch, ceramic tile, stone or brick may be installed by the thin bed method with a Latex or Polymer Fortified Thin-Set Mortar. Allow 9235 Waterproofing Membrane to cure 7 days at 21°C and 50% RH before covering with concrete, thick bed mortar, screeds, toppings, coatings, epoxy adhesives, terrazzo or moisture sensitive resilient or wood flooring. DO NOT use solvent-based adhesives directly on 9235 Waterproofing Membrane.

Drains & Penetrations

Allow for a minimum 6 mm space between drains, pipes, lights or other penetrations and surrounding ceramic tile, stone or brick.

Use LATASIL and foam backer rod to seal space—do not use a grout or joint filler mortar.

Control Joints

Ceramic tile, stone and brick installations must include sealant filled joints over any control joints in the substrate. However, the sealant filled joints can be offset horizontally, by as much as one tile width from the substrate control joint location, to coincide with the grout joint pattern.

Expansion Joints

Ceramic tile, stone and brick installations must include expansion joints at coves, corners, and other changes in substrate plane and over any expansion joints in the substrate. Expansion joints in ceramic tile, stone or brickwork are also required at perimeters, at restraining surfaces, at penetrations and at the intervals described in Tile Council of North America, Inc. (TCNA) Handbook Installation Method EJ171. Use LATASIL and backer rod.

Cleaning

While wet, 9235 Waterproofing Membrane Liquid can be washed from tools with water.

AVAILABILITY AND COST**Availability**

LATICRETE® materials are available worldwide.

For distributor information,

please contact us by email at: enquiry@laticrete.me or, visit www.laticrete.me

Cost

Contact a LATICRETE® closer distributor to obtain complete information and cost.

WARRANTY

The supplier warrants this product will not deteriorate under normal conditions and use, the warranty validity of one (1) year. The product subject to the terms and conditions stated in the LATICRETE® Product Warranty. Please consult our technical support for further information

TECHNICAL SERVICES**Technical assistance**

For information contact us by email at: enquiry@laticrete.me

Technical and safety literature

To obtain technical and safety literature, please visit our website at: www.laticrete.me

Warning: The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE® unable to directly control the installation conditions and modalities of application of products, do not assume any liability arising from their implementation. Those who want to use the LATICRETE® products must conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.