1. PRODUCT NAME
9235 Waterproofing Membrane

2. MANUFACTURER
LATICRETE International, Inc.
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Bethany, CT 06524-3423 USA
Telephone: +1.203.393.0010, ext. 1235
Toll Free: 1.800.243.4788, ext. 1235
Fax: +1.203.393.1684
Website: [laticrete.com](https://laticrete.com)

3. PRODUCT DESCRIPTION
9235 Waterproofing Membrane is an easy to install, thin, load-bearing waterproofing membrane designed specifically for the special requirements of ceramic tile, stone and brick installations. It’s a perfect solution for wet areas and continuous water submersion applications. 9235 Waterproofing Membrane is a thin (.02" [.5mm]), load bearing, flexible, liquid applied waterproofing membrane system consisting of a liquid rubber polymer that is cold applied with an integral reinforcing fabric to provide a seamless waterproof membrane. It’s quickly applied with a paint brush or long nap paint roller to form a flexible, seamless waterproofing membrane that bonds to a wide variety of substrates (including both common and less ordinary commercial substrates). 9235 Waterproofing Membrane also contains antimicrobial protection to inhibit the growth of mold and mildew. Equipped with Microban Anti-Microbial Protection.

**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)

**Advantages**
- Equipped with anti-microbial technology - Inhibits the growth of stain-causing bacteria on the waterproofing membrane.
- 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.
- “Extra Heavy Service” rating per TCNA performance levels (RE: ASTM C627 Robinson Floor Test).
- IAPMO and ICC Approval.
- Applies quickly with a paint brush 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.
- UL GREENGUARD GOLD certified.
- Easy cleanup—just use water while fresh.
- Protects concrete & reinforcing steel from corrosion.

**Suitable Substrates**
- Concrete
- Cement Mortar Bed
- Cement Plaster
- Concrete and Brick Masonry
- Exterior Glue Plywood (Interior Only)
- Gypsum Wallboard
- Ceramic Tile and Stone
- Cement Terrazzo
- Cement Backer Board
**Packaging**
- 6GAL (23L) PAIL
- 2GAL (7.6L) CARTON

**Approximate Coverage**
- Full Unit: 300 ft² (27.8 m²)
- Mini Unit: 75 ft² (7 m²)

**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) and off the ground in a dry area.

**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.”
- Allow wet mortars to cure for 7 days at 70°F (21°C) prior to installing 9235 Waterproofing Membrane.
- 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 >1/8” (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 weather 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 (non-submerged applications), 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 safety information.

- Surface temperature must be >45°F (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 @ 70°F/21°C) before flood testing; flood test prior to applying tile or stone
- Cold weather will require a longer cure time

**4. TECHNICAL DATA**

**Applicable Standard**
- ANSI A118.10
- ANSI A118.12
- Germany Tile Association (ZDB) 02–1988
- FHA4900.1 Section 615.5
- Federal Specification TT-C–00555
## Physical Properties

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Test Method</th>
<th>9235 Waterproofing Membrane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fungus Resistance</td>
<td>ANSI A118.10 (4.1)</td>
<td>Pass</td>
</tr>
<tr>
<td>Seam Strength</td>
<td>ANSI A118.10 (4.2)</td>
<td>&gt;95 lbs/inch width (&gt;166.4 N/cm width)</td>
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<tr>
<td>Breaking Strength</td>
<td>ANSI A118.10 (4.3)</td>
<td>2400 lbs/in² (16.5 MPa)</td>
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<tr>
<td>Dimensional Stability</td>
<td>ANSI A118.10 (4.4)</td>
<td>No Change</td>
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<tr>
<td>Waterproofness</td>
<td>ANSI A118.10 (4.5)</td>
<td>Pass</td>
</tr>
<tr>
<td>Shear Strength</td>
<td>ANSI A118.10 (5.6)</td>
<td>280 psi (1.9 MPa)</td>
</tr>
<tr>
<td>System Performance</td>
<td>ANSI A118.10 (6); ASTM C627; TCA Rating^</td>
<td>Cycles 1–14 &quot;EXTRA HEAVY&quot;</td>
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<tr>
<td>Water Permeance</td>
<td>Fed. Spec. TT-C–00555 (Mod.)</td>
<td>Excellent (E)</td>
</tr>
<tr>
<td>Water Vapor Transmission</td>
<td>ASTM E96–80 (Inverted Water Method)</td>
<td>2.4 grains/h•ft² (1.6 g/h•m²)</td>
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<tr>
<td>Water Vapor Permeance</td>
<td>ASTM E96–80 (Inverted Water Method)</td>
<td>2.9perms (165.5 ng/Pa•s•m²)</td>
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<tr>
<td>Elongation</td>
<td>ASTM D751–89</td>
<td>20–30%</td>
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<tr>
<td>Thickness (+/-)</td>
<td>LIL 1013–92</td>
<td>0.02&quot; (0.5 mm)</td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>Full Immersion 90 day</td>
<td>Brine Solution NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sugar Solution NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Milk NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10% Citric Acid NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.5% HCl Acid NA</td>
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<tr>
<td></td>
<td></td>
<td>5% Acetic Acid NA</td>
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<tr>
<td></td>
<td></td>
<td>1 %Alkali NA</td>
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### Crack Suppression

- ANSI A118.12.5.4
- Pass 1/8" (3 mm)

### Service Temperature

- LIL 1016–92
- -20°–280°F (-29°–138°C)

### Crack Suppression

- ANSI A118.12.5.4
- Pass 1/8" (3 mm)

^ Tile Council of North America Service Rating Categories

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.

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

### 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

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

### Surface Preparation

Surface temperature must be 45 – 90°F (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 1/16" in 1 ft (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•m²) 24 hrs. per
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 L/240 for stone installations. Do not exceed 1/2" deflection at center of span under loads as per ASME A112.6.3. Cut a square of Waterproofing/Anti-Fracture Fabric approximately 38" x 38" (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 6" (150 mm) wide Waterproofing/Anti-Fracture Fabric into 9235 Waterproofing Membrane Liquid. Cover with a second coat of 9235 Waterproofing Membrane Liquid.

Crack Suppression (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 2” (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 @ 70°F (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 @ 70°F (21°C) and 50% RH.

**Flood Testing**

Allow membrane to cure fully before flood testing, typically 7 days @ 70°F (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.com](http://www.laticrete.com)

**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 70°F (21°C) and 50% RH before covering with, 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 1/4” (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, 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.

6. AVAILABILITY AND COST

**Availability**

LATICRETE 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 [laticrete.com](http://laticrete.com)

**Cost**

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

- DS 025.0: 25 Year System Warranty
- DS 230.10: 10 Year System Warranty
- DS 230.13: 1 Year Product Warranty
- DS 230.15APD: LATICRETE 15 Year Tile & Stone System Warranty
- DS 230.99: LATICRETE Lifetime System Warranty (United States and Canada)

8. MAINTENANCE

LATICRETE and LATAPOXY grouts 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. 1235
- Telephone: +1.203.393.0010, ext. 1235
- Fax: +1.203.393.1948
Technical and Safety Literature
To acquire technical and safety literature, please visit our website at laticrete.com.

10. FILING SYSTEM
Additional product information is available on our website at laticrete.com. The following is a list of related documents:
- DS 230.13: LATICRETE Product Warranty
- DS 230.15: LATICRETE 15 Year System Warranty (United States and Canada)
- DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)
- DS 230.99: LATICRETE Lifetime System Warranty (United States and Canada)