



Blue 92 Anti-Fracture Membrane

DS-647-0624

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

Blue 92 Anti-Fracture Membrane

2. MANUFACTURER

LATICRETE International, Inc.

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3. PRODUCT DESCRIPTION

Blue 92 Anti-Fracture Membrane is a two-part system consisting of a liquid rubber and reinforcing fabric. When cured, it forms a highly flexible membrane. While the thin bed method of tile installation provides many advantages, this method can be affected by problems with shrinkage cracking in concrete and other types of substrates. Cracks can telegraph through the tile and/or grout joints. To reduce or eliminate cracks in tile work, a flexible membrane should be applied to the cracked substrate prior to the installations of ceramic tile, marble and stone. Equipped with Microban Anti-Microbial Protection

Uses

- For interior or exterior use on floors and walls whenever hairline cracking or “spiderwebbing” occurs in the substrate.
- For use over shrinkage and other non-structural cracks up to 1/8" (3 mm).

- Typical applications are over concrete slabs (suspended or on grade) in malls, lobbies and residential applications under ceramic tile, marble and stone.
- Use to cover joints in plywood underlayments, cement backer boards, and concrete masonry on floors and walls.
- Also use over concrete floors and underlayments with radiant heating systems.

Advantages

- Reduces crack transmission in ceramic tile, thin brick, marble and stone installed using thin-set method. Also ideal for use under cement based or resin Terrazzo.
- Equipped with anti-microbial technology.
- Thin—adds no appreciable thickness to floor construction; install tile with Polymer Fortified Thin-Set Mortar directly to cured membrane.
- “Extra Heavy Service” rating per TCNA performance levels (RE: ASTM C627 Robinson Floor Test).
- Easy to Apply—goes on quickly with paint brush or roller; no mixing or special equipment required.
- Safe—no solvents or harsh fumes, non-flammable.
- Fast Cure—dries in a few hours to receive finished surfacing.
- Easy Cleanup—cleans with water while fresh.

Suitable Substrates

- Exterior Glue Plywood (Interior Only)
- Concrete
- Mortar Bed
- Renders
- Cement Backer Board
- Cement Terrazzo
- Ceramic Tile and Stone
- Ceramic Tile and Stone
- Concrete and Masonry Surfaces

Packaging

Full Unit consists of:

5 US gal. (19 L) pail liquid

1-roll reinforcing fabric: 38" (97 cm) wide, 95 ft (29 m) long

1-roll reinforcing fabric: 6" (15 cm) wide, 75 ft (23 m) long

Crack Suppression Kit (1/4 Unit) contains:

2 gal. (7.66 L) jug of liquid, 15" (37.5 cm) wide roll

Approximate Coverage

Approximately 300 ft² (28 m²) at 20 mil (0.5 mm) thickness per full unit.

Approximately 75 linear ft (23 linear meters) per crack suppression kit.

Limitations

- Blue 92 Anti-Fracture Membrane is not intended for use as a waterproofing membrane. When a waterproofing membrane is required, use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- DO NOT use over expansion joints, structural cracks or areas with differential vertical movement.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes.
- Apply to surfaces above 45°F (7°C). Maintain a constant temperature greater than 45°F (7°C) for 24 hours after installation.
- Not intended as a wearing surface. Must be covered with tile, or other traffic bearing material.
- DO NOT bond to particle board, luan, Masonite® or hardwood surfaces.
- Not for use beneath cement or other plaster finishes. Consult with plaster manufacturer for their recommendations when waterproofing membrane is required under plaster finishes.
- Not for use under self-leveling underlayments or decorative wear surfaces.

Cautions

- During cold weather, protect finished work from traffic until fully cured.
- For white and light-colored marbles use a white Mortar.
- For green resin backed agglomerates and moisture sensitive marbles, use LATAPOXY® 300 Adhesive. Refer to Data Sheet 633.0.
- Protect freshly installed membrane from water exposure.

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 in unused form is 0.02 lb/gal (2.39 g/?).

Applicable Standard

- ANSI A118.12

Physical Properties

Physical Properties	Test Method	Blue 92 Anti-Fracture Membrane	ANSI A118.12
System Crack Resistance	ANSI A118.12 5.4	Pass at 1/8 inch (3 mm)	Pass at 1/8 inch (3 mm)
Elongation	ASTM D751-89; 17.1	20-30%	N/A
Breaking Strength (Cut Strip Method)	ASTM D751-89; 16.1	1700-1900 psi (11.72-13.10 MPa)	N/A
Nominal Dry Thickness	LIL 1013-92	0.020 inch (0.51 mm)	N/A
28 day Quarry/Concrete Shear Strength	ANSI A118.12 5.1.5	125-175 psi (0.86-1.6 MPa)	50 psi (0.34 MPa)
Point Load	ANSI A118.12 5.2	3200-3700 lbf (14-16 kN)	1000 lbf (4.4 kN)

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

- The following overview provides basic installation information. Refer to Data Sheet WPAF.5 for complete instructions or visit www.laticrete.com.

Preparation

Identify the type of crack in the substrate. DO NOT use Blue 92 Anti-Fracture Membrane over structural cracks or other areas with differential vertical movement.

Shrinkage Cracks: Occur during the curing process of the concrete. Typically the movement is horizontal (open and close).

Structural Cracks: Occur from improper design or installations of substructure for load conditions. Typical movement is vertical (up and down). Blue 92 Anti-Fracture Membrane is not intended to bridge joints which experience dynamic movement such as expansion joints and structural cracks. Expansion joints must be carried through the entire tile installation.

Surface Preparation

1. Surfaces must be structurally sound, stable and rigid enough to support ceramic tile, stone, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed 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.

2. For thin-bed ceramic tile installations when a cementitious bonding material will be used, including medium bed mortar: maximum allowable variation in the tile substrate – for tiles

with edges shorter than 15" (375mm), maximum allowable variation is 1/4" in 10' (6mm in 3m) from the required plane, with no more than 1/16" variation in 12" (1.5mm variation in 300mm) when measured from the high points in the surface. For tiles with at least one edge 15" (375mm) in length, maximum allowable variation is 1/8" in 10' (3mm in 3m) from the required plane, with no more than 1/16" variation in 24" (1.5mm variation in 600mm) when measured from the high points in the surface. For modular substrate units, such as exterior glue plywood panels or adjacent concrete masonry units, adjacent edges cannot exceed 1/32" (0.8mm) difference in height.

3. Substrate beds shall be wood floated or lightly steel troweled.

4. Maximum amount of moisture in the concrete mortar bed substrate should not exceed 5 lbs/1,000 ft²/24hrs (283µg/s• m²) per ASTM F-1869 or 75% relative humidity as measured with moisture probes. Consult with finish material manufacturer to determine the maximum allowable moisture content for substrates under their finished material.

5. Surfaces should be between 45°F (7°C) and 90°F (32°C).

6. Provide minimum slope to drains of 1/4" per 1' (6 mm per 0.3 m).

7. Concrete and masonry must be free of curing agents, paint, sealers, water repellents or other treatments that prevent membrane bonding.

8. Plywood floors (interiors only) – minimum construction for direct bond:

Subfloor: 5/8" (15 mm) thick, exterior glue, tongue and groove plywood over bridged 2" x 10" (40 mm x 240 mm nominal) joists spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d (65 mm) ring-shank nails or screws; allow 1/8" (3 mm) between sheets; all sheet ends must be supported by a framing member; glue sheets to joists with construction adhesive;

Underlayment: 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d (65 mm) ring-shank nails or screws; allow 1/8" (3 mm) between sheets and 1/4" (6 mm) between floor and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive.

Application

Pre-treat Cracks: Apply a liberal coat[^] of liquid 8" (20 cm) wide over crack. Embed 6" (15 cm) wide Waterproofing/Anti-Fracture Fabric into first coat of liquid. Liberally apply 2nd coat of liquid[^] to seal Waterproofing/Anti-Fracture Fabric.

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 Blue 92 Anti-Fracture Membrane liquid, 8" (200 mm) wide over the using a paint roller or paint brush and immediately apply the 6" (150 mm) wide Waterproofing/Anti-Fracture Fabric into the wet liquid. Press firmly with brush or roller to allow complete "bleed through" of liquid. Immediately apply a second liberal coat^{^^} of Blue 92 Anti-Fracture Membrane liquid over the fabric and allow to dry. Apply a liberal coat^{^^} of Blue 92 Anti-Fracture Membrane 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 Blue 92 Anti-Fracture Membrane liquid over the fabric and allow to dry. Treat closest joint to crack, saw cut, or cold joint with LATASIL™.

[^] Wet coat thickness is 20 mils, 0.02", 0.5 mm; use wet film gauge to check thickness. ^{^^} Wet coat thickness is 20 mils, 0.02" (0.5–0.8mm); 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).

Refer to Detail ES-F125 (available www.laticrete.com/ag) and TCNA Method F125 for more information.

Main Membrane Application (Full Coverage)

Coverage: Once surface of crack pre-treatment has dried to the touch, use a wide brush/paint roller to cover substrate with a liberal coat[^] of Blue 92 Anti-Fracture Membrane liquid. Cover an area slightly wider than the reinforcing fabric width (>38" [97 cm]). Embed Waterproofing/Anti-Fracture Fabric while liquid is still wet. Press firmly with brush or roller to allow complete "bleed through" of liquid. Apply additional liberal coat[^] of Blue 92 Anti-Fracture Membrane liquid to cover/saturate Waterproofing/Anti-Fracture Fabric. Lap Waterproofing/Anti-Fracture Fabric 2" (5 cm) at seams. When final coat of liquid has dried to the touch (2–3 hours), install ceramic tile, brick or stone with a Polymer Fortified Thin-Set Mortar or a LATAPOXY® 300 Adhesive. Treat closest joint to cold or saw cut joint LATASIL.

- TDS 152: Bonding Ceramic Tile, Stone or Brick Over Wood Floors

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

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

- 5 Year System Warranty (US) (English)
- 10 Year System Warranty (US) (English)
- 1 Year Product Warranty (US) (English)

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 230.05: LATICRETE 5 Year System Warranty (United States and Canada)
- DS 236.0: 9235 Waterproofing Membrane
- DS 297.0: 220 Marble & Granite Mortar
- DS 633.0: LATAPOXY® 300 Adhesive
- DS 663.0: HYDRO BAN®
- DS 6200.1: LATASIL™
- DS WPAF.5: Installation of LATICRETE Membranes

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