

## FRACTURE BAN™ SC

DS-544-1021

# Globally Proven Construction Solutions



#### 1. PRODUCT NAME

FRACTURE BAN™ SC

#### 2. MANUFACTURER

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## 3. PRODUCT DESCRIPTION

FRACTURE BAN SC is a thin, load bearing, self-curing liquid rubber polymer that can be easily applied in a single coat to form a flexible seamless anti-fracture membrane. FRACTURE BAN SC can be used on interior and exterior, horizontal applications. FRACTURE BAN SC meets ANSI A118.12 requirements and prevents nonstructural, in-plane floor cracks up to1/8" (3 mm) from transferring through grout, ceramic tile and stone.

Equipped with Microban Anti-Microbial Protection

#### Uses

- Interior and exterior
- Industrial, commercial and residential applications
- Terraces and balconies over unoccupied spaces

### Advantages

• Does not require the use of fabric

- Changes in color from a light blue to darker blue when cured
- Thin; only 0.020–0.030" (0.5–0.8 mm) thick when cured
- Exceeds ANSI A118.12
- 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 (ASTM C627 Robinson Floor Test)
- Equipped with anti-microbial technology to protect the treated article only.
- · Rapid drying for a faster time to tile
- Install tile, brick and stone directly onto membrane
- Single coat application, wet coat thickness 30 40 mils (0.8-1.0 mm)

#### **Suitable Substrates**

- · Cement Backer Board
- Exterior Glue Plywood (Interior Only)
- Cement Mortar
- Cement Terrazzo
- Concrete
- Concrete and Brick Masonry
- Ceramic Tile and Stone
- Cement Plaster
- Poured Gypsum Underlayment
- Self-Leveling and Patching Compounds

#### Packaging

**Commercial Unit:** 3.5 gal (13.3 L) pail liquid (36 full units/pallet)

*Mini Unit*: 4 x 1 gal (3.8 L) pails of liquid packed in a carton (30 cartons/pallet)

**Coverage:** Commercial Unit: 175 ft²  $(16.2 \text{ m}^2)$  - Wet Coat thickness is 30 - 40 mils, 0.03" - 0.04" (0.8 - 1.2 mm) Use wet film gauge to check thickness.

Mini Unit:  $50 \text{ ft}^2$  (4.6 m²) - Wet Coat thickness is 30 - 40 mils, 0.03" - 0.04" (0.8 - 1.2 mm) Use wet film gauge to check thickness.

#### 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 OSB, particle board, interior glue plywood, luan, Masonite® or hardwood surfaces.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use HYDRO BAN<sup>®</sup>.
- Do not use over dynamic expansion joints, structural cracks or cracks with vertical differential movement.
- Do not use over cracks >1/8" (3 mm) in width.
- Do not expose unprotected membrane to sun or weather for more than 30 days.
- Do not expose to negative hydrostatic pressure, excessive vapor transmission, rubber solvents or ketones.
- Must be covered with ceramic tile, stone, brick, terrazzo or other traffic-bearing finish. Use protection board for temporary cover.
- Do not install directly over single layer wood floors, plywood tubs/showers/fountains or similar constructs.
- Not for use beneath cement or other plaster finishes.
   Consult with plaster manufacturer for their recommendations when crack isolation membrane is required under plaster finishes.
- Not for use under self-leveling underlayments or decorative wear surfaces.
- Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, 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 horizontal use only.

## Cautions

- · Consult SDS for safety information.
- Maximum amount of moisture in the concrete/mortar bed substrate should not exceed 5 lbs/1,000 ft<sup>2</sup> (283 µg/s m<sup>2</sup>)/24 hrs per ASTM F-1869 or 75% relative humidity as measured with moisture probes.
- During cold weather, protect finished work from traffic until fully cured.
- For white and light-colored marbles, use a white polymer fortified Portland Cement Thin Set Mortar.
- For green and moisture sensitive marble, agglomerates and resin backed tile and stone use LATAPOXY® 300 Adhesive (refer to DS 633.0).
- Wet coat thickness is 30 40 mils (0.8-1.0 mm). Use a wet film thickness gauge to check thickness.
- Allow wet mortars to cure for 72 hours at 70°F (21°C) prior to installing FRACTURE BAN SC.
- Protect from exposure to traffic or water until fully cured.
- FRACTURE BAN SC will go from a light blue to a darker blue when fully cured.

## 4. TECHNICAL DATA







## **Applicable Standard**

ANSI A118.12

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

Surface temperature must be 50-90°F (10-32°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 an 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 waterinstallation may be made on a damp surface. New concrete slabs shall be damp cured and a minimum of 14 days old before application.

- 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:** 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints 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 ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheet ends and 1/4" (6 mm) between

sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints 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 ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) to 1/4" (6 mm) between sheets and 1/4" (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 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" for complete details.

## Bonding to TCNA Compliant Poured Gypsum Underlayment

Poured gypsum-based underlayments must meet TCNA requirements for compressive strength and the performance requirements of ASTM C627 for the anticipated service level designated by the design professional. Poured gypsum underlayment thickness and application varies, consult the manufacturer for specific recommendations. The underlayment must be dry and properly cured following the manufacturer's recommendations to achieve a permanent installation. Surfaces to be covered must be clean, structurally sound and meet the maximum allowable deflection standard of L/360 for ceramic tile and L/480 for stone under total anticipated load. Expansion joints must be installed in accordance with ANSI/TCNA quidelines. Prime all surfaces to receive FRACTURE BAN SC™ with properly applied gypsum manufacturer's sealer.

## Pre-Treat Cracks & Joints

Fill all substrate cracks, cold joints, and control joints to a smooth finish using a polymer fortified thinset. Alternatively, a liberal coat<sup>^^</sup> of FRACTURE BAN SC applied with a paint brush or trowel may be used to fill in nonstructural joints and cracks less than 1/8" (3 mm). When using FRACTURE BAN SC fabric is not required when it is being used as a full field coating for crack isolation or when chasing existing cracks. Any crack above a 1/8" can be filled with thin-set and allowed to cure prior to the application of FRACTURE BAN SC. As an alternative method apply a liberal coat<sup>^^</sup> of FRACTURE BAN SC approximately 8" (200 mm) wide over substrate cracks, cold joints, and control joints using a paint brush or roller (heavy napped roller cover). Apply Waterproofing/Anti-Fracture Membrane Fabric 6" (150 mm) then apply a second coat^^

of FRACTURE BAN SC.

#### Pre-Treat Coves and Floor/Wall Transitions

Fill all substrate coves and floor/wall transitions to a smooth

finish and changes in plane using a polymer fortified thin-set mortar. A liberal coat<sup>^^</sup> of FRACTURE BAN SC with a paint brush or trowel may be used to fill in cove joints and floor/wall transitions <1/8" (3 mm). Apply a liberal coat<sup>^^</sup> of FRACTURE BAN SC approximately 8" (200 mm) wide over substrate coves and floor/wall transitions using a paint brush or roller (heavy napped roller cover) prior to applying FRACTURE BAN SC to the field.

## **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<sup>^^</sup> of FRACTURE BAN SC to a minimum of three (3) times the width of the tile using a paint roller or paint brush and allow to dry.

As an alternative; Apply a liberal coat<sup>^^</sup> of FRACTURE BAN SC liquid, 3 times the width of the tile over the crack using a paint roller or paint brush and immediately apply the 6" (150mm) wide Waterproofing/Anti-Fracture Fabric into the wet liquid over the crack. Press firmly with brush or roller to allow complete "bleed through" of liquid. Immediately apply another liberal coat<sup>^^</sup> of FRACTURE BAN SC liquid over the fabric and allow to dry. Treat closest joint to the crack, saw cut, or cold joint in the tile or stone installation with LATASIL.

#### Main Application

Allow any pre-treated areas to dry to the touch. Apply a liberal coat<sup>^^</sup> of FRACTURE BAN SC with brush or roller over substrate including pre-treated areas. Let the FRACTURE BAN SC dry to the touch, approximately 1-3 hours at 70°F (21°C) and 50% RH. When the FRACTURE BAN SC has dried to the touch, make sure there are not any voids, thin spots or other defects. Recoat these areas if required. FRACTURE BAN SC will dry to darker blue color when fully cured. Use additional FRACTURE BAN SC to seal defects. Note: Apply a liberal coat^ of FRACTURE BAN SC, approximately 8" (200 mm) wide over the areas. Then embed and loop the 6" (150 mm) wide Waterproofing/Anti-Fracture Fabric and allow to bleed through. Then top coat with ^^ FRACTURE BAN SC.

#### 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 24 hours at 70°F (21°C) and 50% RH.

## Installing Finishes

Once LATICRETE FRACTURE BAN SC™ has dried to the touch, ceramic tile, stone or brick may be installed by the thin bed method with a Polymer Fortified Thin-Set Mortar. Allow FRACTURE BAN SC to cure 24 hours at 70°F (21°C) and 50% RH before covering with toppings, coatings, epoxy adhesives, terrazzo or moisture sensitive resilient or wood flooring. Do not use solvent-based adhesives directly on FRACTURE BAN SC.

#### **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.

#### **Movement Joints**

Ceramic tile, stone and brick installations must include expansion 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 the Tile Council of North America, Inc. (TCNA) Handbook Installation Method EJ171. Use LATASIL and backer rod.

## Spray Application of FRACTURE BAN SC™

Follow all installation and surface preparation requirements

outlined in this document and DS 105.5 and TDS 410.
The sprayer being used for the application of

FRACTURE BAN SC should be capable of

producing a maximum of 3300 psi (22.8 MPa) with a flow rate of 0.95 to 1.6 GPM (3.6 to 6.0 LPM) using a 0.521 or a 0.631 reversible tip. Keep the unit filled with FRACTURE BAN SC to ensure continuous application of liquid. The hose length should not exceed 100' (30 m) in length and 3/8" (9 mm) in diameter. Apply a continuous FRACTURE BAN SC film with an overlapping spray. The wet film has a lighter blue appearance and dries to a darker blue color. The wet film thickness should be checked periodically using a wet film gauge. The wet coat should be 0.030–0.040 inches (0.8-1.0 mm) thick. The dried coating should be 0.020–

Check application thickness with a wet film gauge periodically as the FRACTURE BAN SC is being dispensed to ensure that the appropriate thickness and coverage is achieved. Bounce back and overspray will consume more product. To achieve the required film thickness, the coating must be free from pinholes and air bubbles. Do not back roll the spray applied coating. Allow the FRACTURE BAN SC to cure in accord with the instructions in this document, DS 105.5 and TDS 410 prior to the installation of the tile or stone finish.

It is important to note that areas not scheduled to receive the FRACTURE BAN SC should be taped off and protected from any potential overspray. Expansion and movement joints should be honored and treated as outlined in this document, and TDS 410.

#### Cleaning

While wet, FRACTURE BAN SC 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

#### Cost

Contact a LATICRETE Distributor in your area.

#### 7. WARRANTY

See 10. FILING SYSTEM:

• DS 230.05: 5 Year System Warranty

• DS 230.13: 1 Year Product Warranty

#### 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. 1235 Telephone: +1.203.393.0010, ext. 1235

Fax: +1.203.393.1948

0.030 inches (0.5-0.8 mm) thick.

## **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 <u>laticrete.com</u>. 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)
- TDS 152: "Bonding Ceramic Tile, Stone or Brick Over Wood Floors"
- TDS 410: Spraying HYDRO BAN
- DS 6200.1: LATASIL™
- TDS 157 "Exterior Installation of Tile and Stone Over Occupied Space."