

# Fracture Ban™

DS-155.0-1115

# Globally Proven Construction Solutions



#### 1. PRODUCT NAME

Fracture Ban™

## 2. MANUFACTURER

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#### 3. PRODUCT DESCRIPTION

A high performance, pliable, light weight peel and stick membrane designed for use under thin-bed adhesives for ceramic tile, stone and other hard surface installations. This reinforced high strength membrane performs as an anti-fracture and an acoustical underlayment system that eliminates the transmission of stresses from the substrate while dampening the transmission of impact and air borne noise through the floor to the room below. The unique design of this peel and stick membrane allows for usage in both commercial and residential settings where a quick dependable turnaround is required.

#### Uses

- Residential and commercial
- Interior applications only
- Retail, malls and stores
- Offices, hotel/motel, hospitals
- Apartment and condo buildings

#### **Advantages**

- Provides anti-fracture/sound reduction in one convenient easy to install product
- For installation requiring a quick dependable turnaround
- Hot-applied polymer modified asphaltic adhesive coated on a 100% polyester non-woven with a 60# release liner paper
- Has a white non-woven surface for easy chalk line identification
- Provides a water resistive barrier
- Prevents in plane cracks up to 3/8" (9.5 mm)

## Suitable Substrates (Interior Only)

- Concrete Slabs
- Cement Mortar Beds
- Exterior Glue Plywood, OSB
- Precast Floor Panels
- Gypsum Underlayments
- Radiant Heated Floors
- Ceramic Tile, Terrazzo, Stone
- Self-Leveling and Patching Compounds
- Backer Board
- Existing VAT, VCT and Vinyl Floors

#### **Packaging**

One roll of Fracture Ban 40 is 40 mils (1 mm) thick 39.25 in. x 69 ft ( 1 m x 21 m) or 225 ft<sup>2</sup> (21 m<sup>2</sup>). 24 rolls per pallet.

One roll of Fracture Ban 90 is 90 mils thick (2.3 mm) 39.25 in. x 30.6 ft (1 m x 9.33 m) or 100 ft<sup>2</sup> (9.3 m<sup>2</sup>). 24 rolls per pallet.

Fracture Ban Primer

4x1 Gal (4x3.8L) Carton, 48 per pallet 5 Gal (18.9 L) plastic pail, 28 per pallet 245 Gal (927.4 L) heavy-duty intermediate bulk container (IBC)

#### **Approximate Coverage**

- One roll of Fracture Ban 40 covers 225 ft² (20.9 m²)
- One roll of Fracture Ban 90 covers 100 ft² (9.3 m²)

Fracture Ban Primer is a concentrate and must be diluted with clean potable water at a 1:1 (primer:water) ratio. Mix/stir concentrate thoroughly prior to and after diluting.

#### **Shelf Life**

Factory sealed containers of Fracture Ban are guaranteed to be of first quality for one (1) year if stored at temperatures >32°F (0°C) and <110°F (43°C).

Fracture Ban Primer should be stored in original packaging. Use within one (1) year of date of manufacture. Do not allow primer to freeze.

#### Limitations

- Fracture Ban™ 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 install over wet primer
- Do not install moisture-sensitive tile or stone with water based setting materials on top of Fracture Ban peel & stick membranes. Also, dimensionally weak natural stone tile that normally would not be categorized as moisture sensitive; such as travertine, limestone, marble and agglomerates can exhibit doming, cupping or curing when wet-set using medium-bed mortar methods of installation over impervious sheet membranes such as Fracture Ban. For this reason, areas requiring more than 3/8" (10 mm) buildup require the use of a NXT™ self-leveling underlayment's or cured 3701 Fortified Mortar application before installation of Fracture Ban. When installing natural stone, always do a mockup area of the proposed installation and allow materials to reach full cure to ensure achieving the desired effect.
- Not recommended for use on concrete floors where hydrostatic head pressure exists or moisture vapor transmission in excess of 5 lbs. per 100 ft² per 24hrs (283µg/s• m²) as determined by calcium chloride kit test ASTM F1869 is present or 75% RH when tested per ASTM F2170.
- Not recommended for use where horizontal floor movement is greater than 1/4" (6.4 mm). Existing cracks larger than 3/16" (4.8 mm) should be prepared with proper backing material prior to installation of membrane
- Not recommended to cover joints or cracks larger than 3/8" (9.5 mm)
- Not recommended for use where vertical floor movement is present
- For installations over plywood subfloors, please refer to TCNA Method F125A. For expansion joints, reference TCNA Method EJ171
- Must be covered with ceramic tile, stone, or other hard finish.
   Use protection board for temporary cover prior to finishing horizontal surfaces.
- Do not use solvent based sealants or sealers where contact with membrane may occur
- Do not install when surface temperature is below 40°F (4°C), when ambient temperature is expected to be below 50°F (10°C) during placement or before material takes final set or when temperature will be above 90°F (32°C).
- Do not allow Fracture Ban Primer to freeze.
- Do not install Fracture Ban or Fracture Ban Primer over particleboard, chipboard, hardboard (Masonite), Luan panels, asbestos, interior glue plywood, gypsum-based patching materials, asphalt, coal tar, or lightweight insulating concrete or any other dimensionally unstable materials.

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.

#### Cautions

Consult SDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- Read and understand the Product Data Sheet and Safety Data Sheet.
- Perform a mock-up to ensure product will perform as required.
- Check www.laticrete.com for any technical bulletins or updated information about the product and its application.
- Fracture Ban Primer is water based and is non-hazardous under normal conditions of use. In case of skin contact, wash immediately with water.
- Wear gloves and protective goggles.
- When spraying Fracture Ban Primer, avoid breathing the fine mist and use a NIOSH approved respirator.
- Contact LATICRETE Technical Services for more information or to answer questions regarding installation.
- Not for submerged applications.
- Keep Fracture Ban Primer out of reach of children.

#### 4. TECHNICAL DATA

# **Applicable Standard**

ANSI A118.12, ANSI A118.13, ASTM C627, ASTM E2179, ASTM E492, ASTM E90

# **Physical Properties**

Standard	Description	Requirement	Test Result	
			40 mil	90 mil
ASTM C627	Robinson Floor Test	Cycles 1 - 14	Extra Heavy	Heavy
ASTM E2179	IIC Rating	Calculate	42	45
ASTM E2179	ΔΙΙC	>10	14	17
ASTM E90	Airborne Sound	Calculate	54	53

# **Working Properties**

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**

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 underlayment. Do not level with 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. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" (refer to section 10, FILING SYSTEMS).

#### For concrete floor construction:

To remove any bond-inhibiting materials, clean the surface by mechanically grinding to obtain an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) #2. If the concrete requires further grinding to clean the surface causing a higher CSP, smooth the surface using a slurry bond coat of 254 Platinum or a NXT™ patching or self leveling underlayment.

#### For wood floor construction:

- 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 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 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 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 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 joists 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.

#### **Application**

- Install Fracture Ban<sup>™</sup> to a clean properly prepared and primed floor as described in the Fracture Ban Primer Data Sheet.
- 2. Measure the area and cut membrane length 6" to 8" (152-203 mm) longer than needed to allow for a trimmed fit.
- Lay the pre-cut membrane directly on subfloor with release liner side down.
- Pull release paper off membrane while hand-smoothing ridges and air pockets to ensure a good bond with 100% contact with subfloor. Once release paper is pulled from membrane an immediate bond will form. It may be extremely difficult to pull membrane from floor once bonded.
- Trim excess material as needed at walls, corners or termination areas
- 6. Apply the next roll in the same fashion as the first roll insuring that the each roll buts up to the previous roll without any gaps.
- 7. Do not overlap the edges in order to provide a flat surface for subsequent wear surface installation.
- 8. To ensure a good bond between the Fracture Ban and the primed floor, roll the surface with a 75-100 lb. (34-45 kg) floor roller after each section of Fracture Ban is installed.
- Install tile using the appropriate LATICRETE® polymer fortified thin-set.

#### Perimeter Isolation Strip

When using Fracture Ban as an acoustical underlayment it is essential that all walls and building elements are isolated from the floor. The use of acoustical ceiling panels in the space below would provide additional sound control.

Note: It is recommended to install a perimeter isolation strip before placing and trimming Fracture Ban Membrane. Attach the perimeter isolation strip to the perimeter wall of the entire subfloor, as well as around the perimeter of any protrusions, in order to isolate or break the vibration transmission path between the floor and the wall. Temporarily fasten perimeter isolation strip in place with masking, duct, or carpet tape. The perimeter isolation strip can then be removed after the tiles have set firm. The joints can then be filled with an appropriate acoustical sealant.

All surfaces must be primed prior to the installation of Fracture Ban. Fracture Ban Primer is a concentrate and must be diluted with clean potable water prior to application. Always stir or shake Fracture Ban Primer concentrate prior to diluting. Water must always be carefully measured in order to ensure proper dilution is achieved. Use a mixing paddle to thoroughly combine primer and water. Fracture Ban Primer can be broom, roller, mop, or spray applied. Substrate temperature must be a minimum 40°F (4°C) during primer application and throughout drying time. Additionally, air temperature must be maintained between 50–90°F (10–32°C) during primer application and throughout drying time. The primed surface must also be protected from weather, water and direct sunlight.

#### Cleaning

All tools and equipment should be cleaned promptly with water.

#### 6. AVAILABILITY AND COST

# **Availability**

LATICRETE® and LATAPOXY® 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

www.laticrete.com

#### Cost

Contact a LATICRETE Distributor in your area.

# 7. WARRANTY

See 10. FILING SYSTEM:

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DS 230.13: LATICRETE Product Warranty

A component of

DS 025.00: LATICRETE 25 Year System Warranty DS 230.10: LATICRETE 10 Year System Warranty DS 230.05: LATICRETE 5 Year System 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. 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

A component of:

DS 025.00: LATICRETE 25 Year System Warranty DS 230.10: LATICRETE 10 Year System Warranty DS 230.05: LATICRETE 5 Year System Warranty

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

Floors

DS 156.0: Fracture Ban™ Primer

DS663.0: HYDRO BAN®

DS 236.0: 9235 Waterproofing Membrane

DS 155.0: 3701 Fortified Mortar