Technical Data Sheet

LATICRETE[®] HYDROBAN Waterproof Membrane



Features / Benefits

- Allow for flood testing in 24 hours at 70°F 21°C) or higher Does not require the use of fabric.
- Bonds directly to metal and PVC plumbing fixtures only Thin; only 0.020–0.030" (0.5–0.8 mm) thick when cured.
- Changes in color from a light sage to an olive green when cured.
- Anti-fracture protection of up to 1/8" (3 mm) over Shrinkage and other non-structural cracks.
- Exceeds ANSI A118.10 and A118.12.
- Contains Microban® antimicrobial product protection.
- Rapid drying for a faster time to tile.
- Safe—no solvents and non-flammable.
- Install tile, brick and stone directly onto membrane.

Application

- Interior and exterior
- Shower pans, stalls and tub surrounds.
- Industrial, commercial, residential bathrooms
- Laundries- Residential & Commercial
- Spas and hot tubs.
- Kitchens and food processing areas.
- Terraces and balconies over unoccupied spaces.
- Countertops and facades.
- Steam rooms (when used in conjunction with a vapor barrier).



LATICRETE® Hydro Ban is a single component, self curing liquid rubber polymer that forms a flexible, thin, seamless, load bearing under tile Waterproofing/crack isolation membrane that DOES NOT require the use of fabric in the field, coves or corners.

Substrates

- Concrete & brick masonry
- Cement mortar beds
- Cement plaster
- Gypsum wallboard*
- Exterior glue plywood*
- Ceramic tile & stone**
- Cement terrazzo**
- Cement backer board***
- Poured Gypsum Underlayment †
- * Interior applications only.
- ** If skim coated with a LATICRETE Latex Thin-Set Mortar.
- ***Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.
- † Interior use only. Follow TCNA Guidelines/ Methods: F200, RH111, RH122, F180



TECHNICAL DATA

Performance Properties:

Applicable Standards: ANSI 118.10 & ANSI 118.12 & EN 14891

	ANSI DATA	
7 Day		
Hydrostatic Test - ANSI 118.10	No moisture Penetration	Pass
Clause (4.5)		
7 Day Breaking Strength - ANSI 118.10 Clause (4.3)	≥ 170 psi	250-300 psi
7 Day Shear Bond Strength - ANSI 118.10 Clause (5.3)	≥ 50 psi	175-225 psi
7 Day Water Immersion Bond Strength - ANSI 118.10 Clause (5.4)	≥ 50 psi	95-120 psi
28 Day Shear Bond Strength - ANSI 118.10 Clause (5.5)	≥ 50 psi	250-300 psi
System Crack Resistance Test - A118.12 Clause (5.4)	3.2 mm	Pass (High performance)
Water Vapor Transmission - ASTM E 96– 00E1 Procedure B	NA	0.515 grains/h .ft2 (0.3602 g/h . m2)
Water Vapor Permeance - ASTM E 96– 00E1 Procedure B	NA	1.247 perms 71.21 (ng/Pa. s .m2)
System Performance -	Heavy (1-12	cycles 1–14 "Extra Heavy"
ANSI 118.10; ASTM C627; TCA	Cycles)	
Rating	Extra Heavy (1-14	
Elongation - ASTM D 751	Cycles) NA	> 400%

HYDROBAN conforms to ANSI 118.10 & ANSI 118.12

EN Data				
Property: Test Method	Requirement	Typical Values		
Water Impermeability (1.5 bar for 7 days of Positive pressure) - EN 14891 A.7	No Penetration	Pass		
Crack bridging ability in Standard conditions (23º C) - EN 14891 A 8.2	≥ 0.75 mm	> 3.3 mm		
Crack bridging ability at low temperature (-18º C)- EN 14891 A 8.3	≥ 0.75 mm	2.2-2.6 mm		
Initial Adhesion Strength - EN 14891 A 6.2	≥ 0.5 N/mm ²	1.4 N/mm ²		
Adhesion Strength after Water Immersion - EN 14891 A 6.3	≥ 0.5 N/mm ²	1.0 N/mm ²		
Adhesion Strength after Heat Ageing - EN 14891 A 6.5	≥ 0.5 N/mm ²	1.7 N/mm ²		
Adhesion Strength after Freeze-Thaw Cycles - EN 14891 A 6.6	≥ 0.5 N/mm ²	1.1 N/mm²		
Adhesion Strength after contact with Chlorinated water - EN 14891 A 6.8	≥ 0.5 N/mm ²	0.9 N/mm ²		
Adhesion Strength after contact with Alkaline (Lime)water - EN 14891 A6.9	≥ 0.5 N/mm ²	1.0 N/mm ²		

HYDRO BAN conforms to the requirements of **EN** 14891 with a Classification of **DM P**.

Time to Tile:

Substrate	Time to Tile (min.)*
Concrete	50
Cement Board	30
Fiber Cement	15
Underlayment	

*After second coat is applied at 70°F (21°C) and 50% RH. The time to tile will vary depending on substrate, temperature and relative humidity.

Packaging:

20 Ltrs pail.

Colour:

Light olive green

Coverage: 250 Square Feet per 20 Litre pail when applied in 2 coats

• Note: Hydro Ban liquid is applied in 2 coats for a total wet thickness of 0.8-1.2 mm. Coverage varies based on substrate texture & porosity, and application technique.

Working Properties at 70° F (21° C)

LATICRETE Hydro Ban can be applied using a paint brush, roller or trowel. All areas must have two coats to ensure waterproofing capabilities. When using a paint roller, substrate will not show through LATICRETE Hydro Ban if coated with 0.020–0.030" (0.5–0.8 mm) of dried membrane. Color changes from a light sage to olive green **when fully cured**.

PROPERTY	TYPICAL VALUES
Specific Gravity	1.330 – 1.360
Surface Temperature Range	10-32 ⁰ C
to apply	
Required Dry film thickness	0.5 mm -0.8 mm

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.

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 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.

 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 and L/600 for all exterior veneer applications where L=span length.
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

Pre-Treat Cracks & Joints

Fill all substrate cracks, cold joints, and control joints to a smooth finish using a LATICRETE Latex Fortified Thin-Set. Alternatively, a liberal coat ^ ^ of LATICRETE Hydro Ban applied with a paint brush or trowel may be used to fill in non-structural joints and cracks. Apply a liberal coat ^ ^ of LATICRETE Hydro Ban approximately 8" (200 mm) wide over substrate cracks, cold joints, and control joints using a paint brush or roller (heavy napped roller cover). LATICRETE 6" (150 mm) LATICRETE Waterproofing/Anti-Fracture Fabric can be used to pretreat cracks, joints, curves, corners, drains and penetrations with LATICRETE Hydro Ban.

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 LATICRETE latex fortified thin-set mortar. Alternatively, a liberal coat ^ ^ of LATICRETE Hydro Ban applied 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 ^ ^ of LATICRETE Hydro Ban approximately 8" (200 mm) wide over substrate coves and floor/wall transitions using a paint brush or roller (heavy napped roller cover).

Pre-Treat Drains

Drains must be of the clamping ring type, with weepers and as per ASME A112.6.3. Apply a liberal coat ^ ^ of LATICRETE Hydro Ban Waterproofing Membrane liquid around and over the bottom half of drain clamping ring. Cover with a second coat ^ ^ of LATICRETE Hydro Ban. When dry, apply a silicone sealant bead where the LATICRETE Hydro Ban meets the drain throat. When dry Install top half of drain clamping ring.

Pre-Treat Penetrations

Allow for a minimum 1/8" (3 mm) space between drains, pipes, lights or other penetrations and surrounding ceramic tile, stone or brick. Pack any gaps around pipes, lights or other penetrations with a LATICRETE Latex fortified thin-set mortar. Apply a liberal coat ^ ^ of LATICRETE Hydro Ban liquid around penetration opening. Cover with a second coat ^ ^ of LATICRETE Hydro Ban. Bring LATICRETE Hydro Ban up to level of tile or stone. When dry, seal flashing with silicone sealant. 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 LATICRETE Hydro Ban to a minimum of three (3) times the width of the tile using a paint roller or paint brush and allow to dry. After the first coat has dried to the touch, install a second liberal coat ^ ^ of LATICRETE Hydro Ban over the first coat. As an alternative; Apply a liberal coat ^ ^ of LATICRETE Hydro Ban 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 LATICRETE 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 ^ ^ of LATICRETER Hydro BanR liquid over the fabric and allow to dry. When the first treatment as dried, apply a liberal coat ^ ^ of LATICRETE Hydro Ban to over the first wide coat, using a paint roller or paint brush, and allow to dry. Treat closest joint to the crack, saw cut, or cold joint in the tile or stone installation with Silicones sealant.

APPLICATION

Allow any pre-treated areas to dry to the touch. Apply a liberal coat ^ ^ of LATICRETE Hydro Ban with brush or roller over substrate including pre-treated areas. Apply another liberal coat ^ ^ of LATICRETE Hydro Ban over the first coat of LATICRETE Hydro Ban. Let topcoat dry to the touch, approximately 1–2 hours at 70°F (21°C) and 50% RH. When last coat has dried to the touch, inspect final surface for pinholes, voids, thin spots or other defects. LATICRETE Hydro Ban will dry to an olive green color when it's dry to touch. Use additional LATICRETE Hydro Ban to seal defects.

Movement Joints

Apply a liberal coat ^ of LATICRETE Hydro Ban, approximately 8" (200 mm) wide over the areas. Then embed and loop the 6" (150 mm) wide LATICRETE Waterproofing/Anti-Fracture Fabric and allow to bleed through. Then top coat with a second coat ^ ^ of LATICRETE Hydro Ban.

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 2 hours at 70°F (21°C) and 50% RH.

Flood Testing

Allow membrane to cure fully before flood testing, typically 2 hours after final cure at 70°F (21°C) and 50% RH. Cold and/or wet conditions will require a longer curing time. For temperatures 50–69°F (10–21°C) allow 24 hours after final cure prior to flood testing.

Installing Finishes

Once LATICRETE Hydro Ban has dried to the touch, ceramic tile, stone or brick may be installed by the thin bed method with a LATICRETE Latex Thin-Set Mortar. Allow LATICRETE Hydro Ban to cure 2 hours at 70°F (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 LATICRETE Hydro Ban.

Drains & Penetrations

Use silicone sealant and foam backer rod to seal space between drain or penetration and finish. 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.

Movement Joints

Ceramic tile, stone and thin 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 silicone sealant and backer rod.

NOTE:

- -Keep the pack of Hydro Ban away from the direct sun light before use.
- -Do not add other aggregates or hydraulic binders to this product.
- -If the material is already hardening while application, do not attempt to restore workability by adding water or any liquids.
- -Apply second coat after First coat is dry to touch across (90° to) the direction of the first coat.

Cleaning

While wet, LATICRETE Hydro Ban can be washed from tools with water.

Warranty:

MYK LATICRETE India Pvt Ltd warrants that LATICRETE® HYDROBAN waterproofing Membrane is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of two (2) years from manufacturing of the product subject to the terms and conditions stated in LATICRETE Product Warranty

CUSTOMER CARE

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