



HYDRO BAN®

DS-6630-1023

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

HYDRO BAN®

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

HYDRO BAN is a thin, load bearing waterproofing and crack isolation membrane that does not require the use of fabric in the field, coves or corners and bonds directly to a wide variety of substrates. It is a single component self-curing liquid rubber polymer equipped with Microban® antimicrobial technology that forms a flexible, seamless waterproofing membrane.

Uses

- Interior and exterior
- Swimming pools, fountains, and water features
- Shower pans, stalls, and tub surrounds
- Industrial, commercial, and residential bathrooms and laundries
- Spas and hot tubs
- Kitchens and food processing areas
- Terraces and balconies over unoccupied spaces
- Countertops and facades
- Steam rooms (when used with a vapour barrier)

Advantages

- Install tile, thin brick, and stone directly onto HYDRO BAN membrane
- Single component and ready to use — easy and quick to apply using a brush or roller
- Thin; only 0.5–0.8 mm thick when cured
- Anti-fracture up to 3 mm over shrinkage and other non-structural cracks
- No fabric required (for gaps or cracks with up to 3 mm horizontal movement)
- Bonds directly to metal and PVC plumbing fixtures
- Rapid drying — allows for flood test in approximately 2 hours after final cure (at 21°C/50% RH)
- Changes in colour from a light sage to an olive green when cured — lighter colour allows for ease of inspection
- Safe — no solvents and non-flammable
- Equipped with Microban® antimicrobial technology to protect the treated article
- Conforms to EN 14891 DM OP
- Exceeds ANSI A118.10 and A118.12
- IAPMO approved
- “Extra Heavy Service” rating per TCNA performance levels (RE: ASTM C627 Robinson Floor Test)

Suitable Substrates

- Concrete
- Cement Mortar
- Cement Plaster
- CMU
- Brick
- Gypsum Wallboard
- Exterior Glue Plywood (Interior Only)
- Cement fiber board
- Ceramic Tile and Stone
- Ceramic Tile and Stone
- Cement Terrazzo

Packaging

- 5 kg pail; 80 pails per pallet
- 10 kg pail; 40 pails per pallet
- 20 kg pail; 27 pails per pallet

Approximate Coverage / Consumption

~0,95 kg/m² (with two coats)

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored off the ground in a dry area. *** High humidity will reduce the shelf life of bagged product.

Limitations

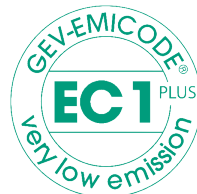
- DO NOT bond to OSB, particle board, interior glue plywood, luan, Masonite® or hardwood surfaces.
- DO NOT use over dynamic expansion joints, structural cracks or cracks with vertical differential movement (See HYDRO BAN Installation Instructions, DS 663.5 for complete instructions).
- The installation of Waterproofing Membranes in submerged applications must be installed in a manner that creates a continuous "waterproof pan effect" without voids or interruptions. Therefore, applying waterproofing membranes in limited areas (e.g. solely at the waterline) in submerged applications is not recommended.
- DO NOT install over structural cracks, cracks with vertical movement or cracks with >3 mm horizontal movement
- DO NOT use as a vapour barrier (especially in steam rooms).
- DO NOT expose unprotected membrane to sun or weather for more than 30 days.
- DO NOT expose to negative hydrostatic pressure, excessive vapour transmission, rubber solvents or ketones.
- Must be covered with ceramic tile, stone, brick, dry pack thick bed mortar beds (non-submerged applications), terrazzo or other traffic-bearing finish. 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 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-levelling 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.

Cautions

- Consult SDS for more safety information.
- Conduct a small test with product before applying to entire area.
- Allow membrane to cure fully (typically 24 hours at 10°C – 21°C and 70% RH; flood test prior to applying tile or stone (typically 2 hours at 21°C or higher and 50% RH before flood testing).
- Maximum amount of moisture in the concrete substrate should not exceed 3%

- During cold weather, protect finished work from traffic until fully cured.
- Wet coat thickness is 0.4 to 0.6 mm per coat. Use a wet film thickness gauge to check thickness.
- Allow wet mortars to cure for 72 hours at 21°C prior to installing HYDRO BAN. Allow HYDRO BAN a minimum 2 hours cure at 21°C prior to flood testing in these conditions.
- Protect from exposure to traffic or water until fully cured.
- HYDRO BAN will go from a light sage green to a darker olive green when fully cured. The second coat should not be applied until the first coat is fully cured. All flood test times should be after the second coat is fully cured with no light sage areas showing.
- After second coat is applied at 21°C and 50% RH, the time to tile will vary depending on substrate, temperature and relative humidity.
- On very absorbent substrates, substrate may need to be pre-treated with PRIMER PLUS, PRIMER SUPERIOR, or a primer coat of HYDRO BAN consisting of 1-part HYDRO BAN and 4-parts clean water.
- HYDRO BAN does not have any hazard classification according to directive 99/45 / CE
- Keep out of reach of children.
- In case of contact with eyes and skin, wash abundantly with water.

4. TECHNICAL DATA



VOC/LEED Product Information

- GEV EMICODE: EC1 Plus
- ÉMISSIONS DANS L'AIR INTÉRIEUR: A+
- UL Greenguard: 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.

Applicable Standard

- EN 14891, DM OP
- ANSI A118.10
- A118.12
- ICC Evaluation Service report ESR-2417
- IAPMO/Uniform Plumbing Code File No.3524
- ISO 9001:2015 Quality Management System

Physical Properties

Classification EN 14891:	DM OP	
Basis:	Self-curing liquid rubber polymer	
Colour:	Light green	
Apparent Density:	1,35 g/cm ³	
Flammability:	No	
Temperature Resistance:	From -30°C to +140°C	
Initial Adhesion:	~ 1,0 N/mm ²	≥ 0.5 N/mm ²
Adhesion after Immersion in Water:	~ 0,8 N/mm ²	≥ 0.5 N/mm ²
Adhesion after Heat Action:	~ 1,3 N/mm ²	≥ 0.5 N/mm ²
Adhesion after Freeze-Thaw Cycles:	~ 0,9 N/mm ²	≥ 0.5 N/mm ²
Adhesion after Immersion in Calcium-Saturated Water:	~ 1,2 N/mm ²	≥ 0.5 N/mm ²
Adhesion after Immersion in Coloured Water:	~ 0,8 N/mm ²	≥ 0.5 N/mm ²
Waterproofing at 1.5 bar for 7 days (standard pressure):	No penetration	No penetration
Crack-bridging Ability (in standard conditions):	~ 5,0 mm	≥ 0,75 mm

Working Properties

Consistency:	Smooth, thick liquid
Wet Density:	1,35 g/cm ³
Mix Ratio:	Ready-to-use
Application Temperature:	+10°C to +30°C
Average Time to Application of Second Coat:	~1-2 hours
Time to Flood Test:	2 hours (after final coat)*
Time to Tile Install:	2 hours (after final coat)*
Maximum Thickness per Coat:	0.4 – 0.6 mm
Maximum Total Thickness (Dried):	0.5 – 0.8 mm

*at 21°C and 50% RH

Substrate	Approximate Drying Time**
Concrete	50 minutes
Cement Board	30 minutes
Fibre Cement Underlayment	15 minutes

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

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

HYDRO BAN® can be applied using a paint brush, roller or trowel. All areas must have two (2) coats to ensure waterproofing capabilities. When using a paint roller, substrate will not show through HYDRO BAN if coated with 0.5 – 0.8 mm of dried membrane. Colour changes from a light sage to olive green when fully cured. Refer to DS 663.5 for complete installation instructions prior to using product.

Surface Preparation

Surface temperature must be between 10 and 30°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 mortar. Do not level with gypsum- or asphalt-based products.

Maximum deviation in plane must not exceed 6 mm in 3 m with no more than 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. See DS 663.5 for information on installation over concrete.

1. Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, think brick and similar finishes. 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.

2. Minimum construction for interior plywood floors.

a) SUBFLOOR: 15 mm thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 400 mm o.c. maximum; fasten plywood 150 mm o.c. along sheet ends and 200 mm o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 3 mm between sheet ends and 6 mm between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.

b) UNDERLAYMENT: 15 mm thick exterior glue plywood fastened 150 mm o.c. along sheet ends and 200 mm o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 3 mm to 6 mm between sheets and 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. Apply a liberal coat** of HYDRO BAN approximately 200 mm wide over substrate cracks, cold joints, and control joints using a paint brush or roller (heavy napped roller cover). 150 mm Waterproofing/Anti-Fracture Fabric can be used to pretreat cracks, joints, curves, corners, drains and penetrations with 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 latex fortified thin-set mortar. Apply a liberal coat** of HYDRO BAN approximately 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 bonding flange or clamping ring type, with weepers and as per ASME A112.6.3. Apply a liberal coat** of HYDRO BAN Waterproofing Membrane liquid around and over the bonding flange or the bottom half of drain clamping ring. Cover with a second coat** of HYDRO BAN. When dry, apply a LATA SIL™ silicone sealant bead where the HYDRO BAN meets the drain throat. Install top half of drain clamping ring.

Pre-Treat Penetrations

Allow for a minimum 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 Latex fortified thin-set mortar. Apply a liberal coat** of HYDRO BAN liquid around penetration opening. Cover with a second coat** of HYDRO BAN. Bring HYDRO BAN up to level of tile or stone. When dry, seal flashing with LATA SIL silicone sealant. For waterproofing swimming pools, it is essential to use flange accessories.

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. Apply a liberal coat** of 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 HYDRO BAN over the first coat.

As an alternative; Apply a liberal coat** of HYDRO BAN liquid, 3 times the width of the tile over the crack using a paint roller or paint brush and immediately apply the 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** of HYDRO BAN liquid over the fabric and allow to dry. When the first treatment has dried, apply a liberal coat** of 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 LATA SIL silicone sealant.

*** Wet coat thickness is 15 – 22 mils (0.4 – 0.6 mm). Use wet film gauge to check thickness.*

Main Application

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

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 21°C and 50% RH.

Flood Testing

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

Installing Finishes

Once 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 HYDRO BAN to cure 2 hours at 21°C and 50% RH before covering with, thick bed mortar, epoxy adhesives, terrazzo or moisture sensitive resilient or wood flooring. Do not use solvent-based adhesives directly on HYDRO BAN.

Drains & Penetrations

Use LATA SIL 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 penetration. Use LATASIL silicone sealant and backer rod.

Spray Application of HYDRO BAN®

Follow all installation and surface preparation requirements outlined in this document and DS 663.5 and TDS 410. The sprayer being used for the application of HYDRO BAN® should be capable of producing a maximum of 22.8 MPa with a flow rate of 3.6 to 6.0 LPM using a 0.521 or a 0.631 reversible tip. Keep the unit filled with HYDRO BAN to ensure continuous application of liquid. The hose length should not exceed 30 m in length and 9 mm in diameter. Apply a continuous HYDRO BAN film with an overlapping spray**. The wet film has a sage green appearance and dries to a darker olive green color. When the first coat has dried to a uniform olive green color, approximately 45 to 90 minutes at 21°C, visually inspect the coating for any voids or pinholes. Fill any defects with additional material and apply the second coat** at right angles to the first. The wet film thickness should be checked periodically using a wet film gauge. Each wet coat should be 0.4 – 0.6 mm thick. The combined dried coating should be 0.5 – 0.8 mm thick.

Check application thickness with a wet film gauge periodically as the HYDRO BAN 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 HYDRO BAN to cure in accord with the instructions in this document, DS 663.5 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 HYDRO BAN should be taped off and protected from any potential overspray. Expansion and movement joints should be honored and treated as outlined in this document, DS 663.5 and TDS 410.

**** Wet coat thickness is 15 – 22 mils (0.4 – 0.6 mm).
Use wet film gauge to check thickness.**

6. AVAILABILITY AND COST

Availability

LATICRETE® materials are available worldwide. For distributor information, please contact LATICRETE Europe S.r.l. a socio unico:
+39 059 535540
info@laticreteurope.com

For on-line distributor information, visit www.laticrete.eu.

Cost

Contact LATICRETE Europe S.r.l. a socio unico to obtain complete information and cost.

7. WARRANTY

The supplier warrants that the product will not deteriorate under normal conditions and use. The warranty validity of one (1) year. Contact Technical Services for further information. See 10. FILING SYSTEM:

- 1 Year Product Warranty
- 10 Year System Warranty
- 10 Year Pool System Warranty

8. MAINTENANCE

LATICRETE® and LATAPOXY® are products of high quality designed to achieve lasting installations and avoid maintenance, however performance and durability may depend on properly maintaining products, depending of the cleaning products used.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling or emailing the Technical Service Hotline:
+39 059 535540
technicalservices@laticreteurope.com

Technical and Safety Literature

To obtain technical and safety literature, please visit our website at www.laticrete.eu.

Warning

The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE® is unable to directly control the installation methods and conditions of products and does not assume any liability arising from their implementation. Those who want to use LATICRETE® products should conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.

LATICRETE® products are covered by a warranty within the limits of what is established by our general conditions of sale and within the limits of correspondence related to technical specifications and applicable certifications, as

expressly indicated in the product data sheets, documentation, or applicable technical documentation.

10. FILING SYSTEM

Additional product information is available on our website at laticrete.eu. The following is a list of related documents:

- DS 230.13: 1 Year Product Warranty
- DS 025.0: 25 Year System Warranty
- DS 663.5 Installation Instructions for HYDRO BAN
- TDS410 Spraying HYDRO BAN
- TDS 152 “Bonding Ceramic Tile, Stone or Brick Over Wood Floors”