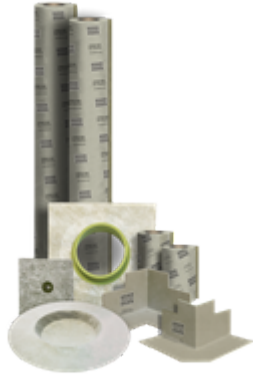




HYDRO BAN[®] SHEET MEMBRANE

DS-410-1121

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

HYDRO BAN[®] SHEET MEMBRANE

2. MANUFACTURER

LATICRETE Europe S.r.l. a socio unico
Via Paletti, snc, 41051

Castelnuovo Rangone MO, Italy

Telephone: +39 059 535540

Email: info@laticreteurope.com

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3. PRODUCT DESCRIPTION

HYDRO BAN[®] SHEET MEMBRANE and the preformed corners and collars are installed using a substrate appropriate LATICRETE[®] thin-set. Due to their polymeric construction, these preformed sheet membrane components can also be used as a vapour barrier / waterproofing membrane for steam room and steam shower applications.

Available in rolls, tapes, corners and collars, HYDRO BAN SHEET MEMBRANE allows for a quick, easy waterproofing installation, which will retain its integrity for the life of the installation.

Uses

- Interior applications
- Showers or tub surrounds
- Steam rooms, steam showers and Turkish baths
- Bathrooms
- Commercial and residential kitchens
- Backsplashes

- Walls and floors
- Wet areas

Advantages

- Low perm rating – approved for steam showers and steam rooms as a single membrane (ASTM E96/E96M Procedure E-0.06 Perms)
- Pliable – conforms easily to substrate
- Complete line of accessories – single source supply for convenience
- Allows for installation over green mortar beds
- Installs with modified or unmodified thin-set adhesives* (C1 or C2)
- Compatible with HYDRO BAN products**
- Various sizes and preformed components available (rolls, corners and collars)
- Meets or exceeds requirements of ANSI A118.10 and EN 14891
- IAPMO approved

* Refer to requirements for specific substrate to which the HYDRO BAN[®] SHEET MEMBRANE will be bonded.

**When using HYDRO BAN liquid applied waterproofing membrane in conjunction with HYDRO BAN SHEET MEMBRANE be sure to overlap the HYDRO BAN liquid onto the HYDRO BAN SHEET MEMBRANE by 50mm. Apply HYDRO BAN liquid in two coats insuring the first coat dries to a uniform olive green color before the second coat is applied.

Suitable Substrates

- Concrete
- Concrete Masonry
- Brick Masonry
- Cement Mortar Bed
- Cement Plaster
- Gypsum Plaster
- Gypsum Wallboard
- Cement Backer Board
- Exterior Glue Plywood (Interior Only)
- Ceramic Tile and Stone
- Cement Terrazzo
- Poured Gypsum Underlayment

Packaging

HYDRO BAN® SHEET MEMBRANE	
1m x 10m = 10m ² per roll; 75 rolls per pallet	
1m x 30m = 30m ² per roll; 36 rolls per pallet	
HYDRO BAN SHEET MEMBRANE CORNERS	
Inside Corners (IC)	25 pcs/box
Outside Corners (OC)	25 pcs/box
HYDRO BAN SHEET MEMBRANE COLLARS	
250x250 collar (64 mm diameter)	25 pcs/box
120x120 collar (7 mm diameter)	25 pcs/box

Limitations

- DO NOT bond to particle board, luan, OSB, interior glue plywood, Masonite® or hardwood surfaces.
- DO NOT use as a primary roofing membrane over occupied space. For more information on installation of tile over wood decks, or, over occupied or finished spaces please refer to *TDS 157 "Exterior Installation of Tile and Stone Over Occupied Space."*
- DO NOT use over dynamic expansion joints, structural cracks or cracks with vertical differential movement.
- HYDRO BAN® Sheet Membrane is not recommended for submerged applications. For these applications, use HYDRO BAN waterproofing membrane.
- DO NOT use over existing cracks.
- DO NOT expose to negative hydrostatic pressure, rubber solvents or ketones.
- Must be covered with ceramic tile, stone, brick, screeds, 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 waterproofing 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

Cautions

- Protect finished work from traffic until fully cured.
- For white and light-colored marbles, use a white LATICRETE® Latex Portland Cement Thin Set Mortar.
- Use care not to damage HYDRO BAN SHEET MEMBRANE prior to installation of tile or stone finishes. Cover with protection board to protect from foot traffic and other trades when installing on horizontal surfaces.
- Wait a minimum of 24 hours after the installation before flood testing in order to allow the thin-set to fully cure and insure the integrity of all seams.

4. TECHNICAL DATA



Applicable Standard

- ASTM E96/E96M
- ANSI A118.10

Physical Properties

Resistance to Temperature:	From -30°C to +90°C	
Total Thickness (approximate):	20-30 mils (0.5-0.7 mm)	
	Value	Test Method
Burst Pressure (maximum):	> 3 bar	Internal
Longitudinal Breaking Load:	375 N / 50 mm	DIN EN ISO 527-3
Lateral Breaking Load:	251 N / 50 mm	DIN EN ISO 527-3
Longitudinal Break Extension:	86 %	DIN EN ISO 527-3
Lateral Break Extension:	116 %	DIN EN ISO 527-3
Longitudinal Resistance to Tearing:	102 N	DIN EN 12310-2
Lateral Resistance to Tearing:	142 N	DIN EN 12310-2
Resistance to Water Pressure:	> 1,5 bar	DIN EN 1928 (Version B)
UV-Resistance (minimum):	> 450 h	DIN EN ISO 4892-3
Bond Strength:	> 0,5 N / mm ² *	DIN EN 1348

*dependent on adhesive used

	Value	Test Method
Seam Strength:	0.6 kg/mm	ASTM D 751
Breaking Strength Transverse:	9.0 MPa	ASTM D 751 Procedure B
Breaking Strength Longitudinal:	12.9 MPa	ASTM D 751 Procedure B
Waterproofness:	Pass	ASTM D 4068
7-Day Dry Shear Strength:	1.2 MPa	ASTM C482
7-Day Water Immersion Shear Strength:	0.7 MPa	ASTM C482
4-Week Shear Strength:	0.7 MPa	ASTM C482
12-Week Shear Strength:	0.7 MPa	ASTM C482
100-Day Water Immersion Shear Strength:	0.8 MPa	ASTM C482
Permeance:	0.06 Perm (inch-lb)	ASTM E96 Procedure E
Water Vapor Transmission:	0.104 grain/hr-ft ²	ASTM E96 Procedure E
Service Requirement:	Rated Extra Heavy (TCNA)	ASTM C627

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 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 suitable LATICRETE underlayment. 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, thick 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.

Treat Cracks & Joints

Fill all substrate cracks, cold joints, and control joints to a smooth finish using a LATICRETE® polymer fortified thin-set.

Application

Measure and cut all of the HYDRO BAN® SHEET MEMBRANE sections and WPM TAPE strips to the proper size before mixing the substrate appropriate LATICRETE thin-set.

Mix the LATICRETE thin-set to a fairly wet consistency but still able to hold a notch. Dampen excessively dry porous surfaces in order to prevent premature drying and skinning of the thin-set. If skinning does occur remove thin-set and reapply using fresh mortar.

To create the watertight system, the installation process will rely on the layering of components; start with the corners. Apply thin-set mortar with a 6 mm x 5 mm V-notched trowel. Press the HYDRO BAN SHEET MEMBRANE CORNERS firmly into the thin-set. Remove any trapped air and guarantee full adhesion to the material by spreading the thin-set from the inside of the corner out using a trowel or straightedge with rounded corners.

Continue with thin-set along the floor-to-wall transition from the corner outward for the first strip of WPM TAPE. Overlap the corners by 2” (50 mm). Lay the tape and remove all air pockets and excess material as with the corner piece. For any sections where two strips of WPM TAPE will be joined, be certain to overlap the material by 2” (50 mm). Continue with these steps around the perimeter of the installation.

Treat the vertical corners with the WPM TAPE next in the same manner as the floor-to-wall transitions were installed. Overlap the corners by 2” (50 mm).

Treat pipe penetrations and mixing valves by applying thin-set mortar with a 6 mm x 5 mm V-notched trowel. Slide the appropriate HYDRO BAN SHEET MEMBRANE COLLAR over the pipe or mixing valve and press firmly into the thin-set. The urethane rubber will seal around the pipe or mixing valve. Remove any trapped air and guarantee full adhesion to the material by spreading the thin-set from the inside out using a trowel or straightedge with rounded corners.

Important, there should not be excessive overlapping. For example, at the corner, the WPM TAPE should overlap the HYDRO BAN SHEET MEMBRANE CORNER but not the adjacent WPM TAPE.

Continue the same method to install the first HYDRO BAN SHEET MEMBRANE Sheet Membrane section on the wall. Start in the completed corner and work your way out from the corner to the edge of the installation. Apply the thinset to the surface of the wall with the 6 mm x 5 mm V-notched trowel. If the surface is uneven, use a square-notched trowel with a wider tooth up to 9 mm. Be sure to comb all of the thin-set in the same direction.

Install the first length of sheet membrane. It may be easiest to unroll it up the wall or in the direction that you combed the thin-set. Remember to overlap the membrane by a minimum of 5 cm. Be certain to leave at least 6mm of space from the floor. Smooth the section of HYDRO BAN SHEET MEMBRANE with a flat trowel or roller from the middle towards the outside edges to

assure that no air is trapped underneath. Follow the direction that the thin-set was combed onto the substrate.

Use short, firm strokes to press out all of the excess thin-set and trapped air. Carefully remove or spread the excess thin-set over the seams. Apply the thin-set for the next length of HYDRO BAN SHEET MEMBRANE section. Roll the next length upwards; smoothing it as it is pressed into the thin-set. o If a bulge or crease appears during the unrolling, it is OK. Simply peel the section carefully away from the wall and reapply it so that it is flat. The sections should always be well pressed; the use of a roller is recommended but this can also be accomplished with a flat trowel. o Squeeze out any extra thin-set at the seams; remove the excess or spread it uniformly down the seam.

The remaining lengths can now be installed in this same manner. Best practice: sections of HYDRO BAN SHEET MEMBRANE should be butt-jointed and the seam between the HYDRO BAN SHEET MEMBRANE sections should be covered with WPM TAPE installed with the appropriate thin-set. Make sure that the WPM TAPE overlaps each HYDRO BAN SHEET MEMBRANE section by a minimum of 50 mm.

The floor should be the last section installed. NOTE: Sections of HYDRO BAN® SHEET MEMBRANE may also be shingled (overlapped) during installation without the need for WPM TAPE. The top section must overlap a minimum of 5cm onto the bottom section of HYDRO BAN SHEET MEMBRANE.

If the HYDRO BAN Sheet Membrane is damaged after installation apply a patch of HYDRO BAN SHEET MEMBRANE installed with the appropriate thin-set. The patch must overlap the damaged area by a minimum of 50 mm.

Tiling can begin immediately after installation when a flood test is not required.

Clamping Ring Drains

When installing HYDRO BAN SHEET MEMBRANE with a clamping ring type drains with weepers as per ASME A112.6.3, lay the HYDRO BAN Sheet Membrane over the top of the drain and cut an x where each bolt will penetrate the membrane. Cut a hole in the membrane to allow the drain grate to be threaded into the clamping ring. (Use of a fabric circle cutter is recommended). o Install the HYDRO BAN SHEET MEMBRANE, making sure to align the previously cut holes for the bolts and drain throat. Ensure that the weep holes are not blocked.

Apply bead of LATASIL™ silicone sealant to the clamping body just outside of the bolts, place clamping ring into position and tighten bolts. Check to make sure that weep holes are not plugged by any material.

Flood Testing

Allow adhesive to cure fully before flood testing, a minimum of 24 hours after final cure at 21°C and 50% RH. Cold and/or wet conditions will require a longer curing time.

Control Joints

Ceramic tile, stone and brick installations must include sealant filled joints between the ceramic tile, stone or brick which is 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. Use LATASIL silicone sealant.

Movement Joints

Ceramic tile, stone and thin brick installations must include expansion joints 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 as required by local regulation or project specifications, such as UNI 11493-1: 2016, ANSI Specification AN 3.8 "Requirements for expansion joints", or TCNA Installation Method EJ171. Use LATASIL™ and backer rod.

Cleaning

Clean tools and tile work with water while mortar is fresh.

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@laticreteeuropa.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:

- DS 230.13EU: 1 Year Product Warranty
- DS 230.10EU: 10 Year 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@laticreteeurope.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 230.10EU: 10 Year System Warranty
- DS 6630 HYDRO BAN Product Data Sheet
- DS 663.5 Installation Instructions for HYDRO BAN