HYDRO BAN® Cementitious Waterproofing Membrane

1. PRODUCT NAME
HYDRO BAN® Cementitious Waterproofing Membrane

2. MANUFACTURER
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3. PRODUCT DESCRIPTION
HYDRO BAN Cementitious Waterproofing Membrane is a one component, polymer fortified, cement based waterproofing material that mixes with water. This product can be used on walls and floors in wet areas; bathrooms, kitchens, swimming pools, fountains and fountains, terraces and balconies over unoccupied spaces.

HYDRO BAN Cementitious Waterproofing Membrane handles negative & positive hydrostatic pressure up to 2 BARS (29 PSI) when applied at 40 Mils (1mm) thick. Flood test within 2 hours. Passes ANSI A118.10 Waterproofing and ANSI A118.12 Crack Isolation (with mesh/fabric up to 1/8" (3mm)).

- Anti-fracture protection of up to 1/8" (3 mm) over shrinkage and other non-structural cracks 1/8" with the use of mesh or fabric
- “Extra Heavy Service” rating per TCNA performance levels (RE: ASTM C627 Robinson Floor Test)
- Exceeds ANSI A118.10 and A118.12 (with mesh) EN 14891 Class: CM OP.
- Rapid drying for a faster time to tile
- Install tile, brick and stone directly onto membrane
- GREENGUARD certified, LEED compliant
- For gaps 1/8" (3 mm) or more see DS 628.5 for complete instructions
- Refer to cautions section for more information on curing

Suitable Substrates
- Concrete
- Concrete and Brick Masonry
- Cement Mortar Bed
- Cement Plaster
- Gypsum Wallboard
- Ceramic Tile and Stone
- Cement Terrazzo
- Cement Backer Board

Packaging
30 lb./13.6KG Bag

Approximate Coverage
At 40mil (1mm) Thick - 120 ft² (11.2 m²)

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.
- Do not use over dynamic expansion joints, structural cracks or cracks with vertical differential movement.
- Do not use in steam rooms.
- Install membrane without voids or interruptions
- Do not use over cracks >1/8" (3 mm) in width.
- Do not leave unprotected membrane exposed to sun or weather for more than 30 days.
- Do not expose to rubber solvents or ketones.
- 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 and L/600 for all exterior veneer applications where L=span length.

Cautions
Consult SDS for safety information.
- Allow membrane to cure fully (typically 24 hours at 50°F – 69°F (10°C – 21°C) and 70% RH and 2 hours at 70°F (21°C) or higher and 50%; flood test prior to applying tile or stone
- During cold weather, protect finished work from traffic until fully cured.
- For green and moisture sensitive marble, agglomerates and resin backed tile and stone use LATAPOXY® 300 Adhesive (refer to DS 633.0).
- Use a wet film thickness gauge to check thickness.
- Allow wet mortars to cure for 24 hours at 70°F (21°C) prior to installing HYDRO BAN® Cementitious Waterproofing Membrane.
- Allow HYDRO BAN Cementitious Waterproofing Membrane a minimum 2 hours cure at 70°F (21°C) prior to flood testing in these conditions.
- Protect from exposure to traffic or water until fully cured.
- Application can be made on damp substrates. Sweep away any standing water prior to application.
- Allow new concrete substrates to cure a minimum of 28 days at 70°F (21°C) and 50% RH before application.

4. TECHNICAL DATA
Applicable Standard
ANSI A118.10 and A118.12 (with mesh/fabric)
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.

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Test Method</th>
<th>HYDRO BAN® Cementitious Waterproofing Membrane</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-day Hydrostatic Test</td>
<td>ANSI A118.10</td>
<td>Pass</td>
</tr>
<tr>
<td>7-day Breaking Strength</td>
<td>ANSI A118.10</td>
<td>450 - 500 PSI (3.10 - 3.45 MPa)</td>
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<tr>
<td>7-day Water Immersion</td>
<td>ANSI A118.10</td>
<td>120 - 150 PSI (0.83 - 1.03 MPa)</td>
</tr>
<tr>
<td>7-day Shear Bond</td>
<td>ANSI A118.10</td>
<td>320 - 400 PSI (2.21 - 2.76 MPa)</td>
</tr>
<tr>
<td>28-day Shear Bond</td>
<td>ANSI A118.10</td>
<td>370 - 450 PSI (2.55 - 3.10 MPa)</td>
</tr>
<tr>
<td>System Crack Resistance Test</td>
<td>ANSI A118.12.5.4</td>
<td>Pass (High)</td>
</tr>
<tr>
<td>Water Vapor Transmission</td>
<td>ASTM E 96–00E1 Procedure B</td>
<td>1.6-1.7 grains/h • ft² (1.1-1.2 g/h • m²)</td>
</tr>
<tr>
<td>Water Vapor Permeance</td>
<td>ASTM E 96–00E1 Procedure B</td>
<td>3.9-4 perms 225-235 (ng/Pa • s • m²)</td>
</tr>
<tr>
<td>System Performance</td>
<td>ANSI A118.10; ASTM C627; TCA Rating</td>
<td>cycles 1–14 &quot;Extra Heavy&quot;</td>
</tr>
<tr>
<td>Tensile Strength for Elongation</td>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>Thickness (Dried)</td>
<td></td>
<td>40 mils (1.02 mm)</td>
</tr>
</tbody>
</table>

The data in the above table shall be used by the Project Design Professional to determine suitability, placement, building code conformance and over-all construct appropriateness of a given installation assembly.

Working Properties
HYDRO BAN Cementitious Waterproofing Membrane can be applied using a paint brush, roller or trowel. All areas must have 40 mils (1.02 mm) to ensure waterproofing capabilities.

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 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. Dampen hot, dry surfaces and sweep off excess water—installation may be made on a damp surface.

1. Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin 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.

Mixing:
Place clean, potable water into a clean pail. Use approximately 3.7-4 quarts (3.5-3.8L) per 30 pound bag. Add HYDRO BAN Cementitious Waterproofing Membrane from bag. Mix with drill and paddle at a medium speed for 90 seconds, no slaking needed.

Main Application
For best results, use a ¼”-1/2” nap roller to apply. A brush or v-notch trowel can also be used as well. Apply generously to achieve 40 mils. Pre-treat any drains or penetrations with a liberal coat of HYDRO BAN Cementitious Waterproofing Membrane.Allow any pre-treated areas to dry to the touch. Apply a liberal coat** of HYDRO BAN Cementitious Waterproofing Membrane with brush or roller over substrate including pre-treated areas. Once dry to the touch, apply another liberal coat**. 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. Use additional HYDRO BAN Cementitious Waterproofing Membrane to seal defects.

Movement Joints
See HYDRO BAN Cementitious Waterproofing Membrane Installation Instructions DS 628.5. 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 LATASIL and backer rod.

Note: Apply a liberal coat** of HYDRO BAN Cementitious Waterproofing Membrane, 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 a second coat**.

Protection
Provide protection for newly installed membrane 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 HYDRO BAN Cementitious Waterproofing Membrane has dried to the touch, ceramic tile, stone or brick may be installed by the thin bed method with a Latex Thin-Set Mortar. Allow HYDRO BAN Cementitious Waterproofing Membrane to cure 2 hours at 70°F (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.

^Wet coat thickness is 20 mils (0.5 mm) consumption per coat is -0.01/gal/ft² (-0.4 l/m²); coverage per coat is – 120 ft²/gal (-2.5m²/l). Use wet film gauge to check thickness.

Drains & Penetrations
Use LATASIL 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.

Cleaning
While wet, HYDRO BAN Cementitious Waterproofing Membrane 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:

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

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 laticrete.com. The following is a list of related documents:
  • DS 230.13: LATICRETE Product Warranty
  • DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)
  • DS 633.0: LATAPoxy 300 Adhesive
  • DS 628.5: HYDRO BAN Cementitious Waterproofing Membrane Installation Instructions
  • DS 6200.1: LATASIL™
  • TDS 157: “Exterior Installation of Tile and Stone Over Occupied Space.”