

# HYDRO BAN® Cementitious Waterproofing Membrane

DS-386.2-0222

# Globally Proven Construction Solutions



# 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; swimming pools, water features and fountains, balconies and terraces over unoccupied space.

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.

# Uses

- Interior and exterior
- Swimming pools, fountains and water features
- Spas and hot tubs
- Terraces and balconies over unoccupied spaces

# **Advantages**

- Suitable for use in partially tiled applications such as at waterlines, tiled swimming lanes, tiled swimming targets
- Flood testing in 2 hours at 70°F (21°C) or higher¥

- Does not require the use of fabric^
- Can be used under pool plasters
- Bonds directly to metal, PVC and ABS plumbing fixtures
- "Extra Heavy Service" rating per TCNA performance levels (RE: ASTM C627 Robinson Floor Test)
- Exceeds ANSI A118.10
- · Rapid drying for a faster time to tile
- · Install tile, brick and stone directly onto membrane
- GREENGUARD certified, LEED compliant
- Allow new concrete substrates to cure a minimum of 14 days at 70°F before application
- No RH% (of the concrete) limitation for application over concrete
- ¥ Refer to cautions section for more information on curing

#### **Suitable Substrates**

- Concrete
- Concrete and Brick Masonry
- · Cement Mortar Bed
- Cement Plaster
- · Ceramic Tile and Stone
- Cement Terrazzo
- Cement Backer Board
- Gypsum Wallboard (Interior use only, non-wet areas)

# **Packaging**

30 lb./13.6KG Bag

# **Approximate Coverage**

At 40mil (1mm) Thick - 120 ft<sup>2</sup> (11.2 m<sup>2</sup>) (Waterproofing Only)

- 20mil (.5mm) per coat - 2 Coats

#### **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). Factory sealed containers of this product are guaranteed to be of first quality for eighteen (18) months. Store between 40°F to 75°F (4° to 24°C). Material should be kept in a cool, dry location prior to application.

#### 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 and/or shower floors/pan liners
- Install membrane without voids or interruptions
- · Do not use over cracks
- 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
- Protect finished work from traffic until fully cured.
- 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.
- Application can be made on damp substrates. Sweep away any standing water prior to application.
- Allow new concrete substrates to cure a minimum of 14 days at 70°F before application.

# 4. TECHNICAL DATA





# **Applicable Standard**

ANSI A118.10

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.

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

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  $50-90^{\circ}F$  ( $10-32^{\circ}C$ ) 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, 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.

# 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 \( \frac{1}{4}\) "-1/2" nap roller to apply. A brush or v-notch trowel can also be used as well. Apply two coats at 20 mils generously to achieve a total of 40 mills. 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<sup>^^</sup> of HYDRO BAN Cementitious Waterproofing Membrane at 20 mils with brush or roller over substrate including pre-treated areas. Once dry to the touch, apply another liberal coat^^ of HYDRO BAN Cementitious Waterproofing Membrane at 20 mils over the first 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 for a minimum of 2 hours before flooding testing 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 a minimum of 2 hours 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 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 <a href="Laticrete.com">Laticrete.com</a>

#### 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 <a href="laticrete.com">laticrete.com</a>.

#### **10. FILING SYSTEM**

Additional product information is available on our website at <u>laticrete.com</u>. 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."