# LATICRETE

# For the Builders of a Better World™

# HYDRO BAN®

HYDRO BAN® is a thin, load bearing waterproofing/crack isolation membrane. A single component self curing liquid rubber polymer that forms a flexible, seamless waterproofing membrane. HYDRO BAN bonds directly to a wide variety of substrates.



# FEATURES/BENEFITS

- Allows for flood testing in 24 hours\*.
- Bonds directly to stainless steel and PVC for plumbing flashing fixtures only.
- Designed to be applied thinly, 0.5mm 0.9mm when cured.
- Changes in color from a light sage green to an olive green when cured.
- Anti-fracture protection of up to 3mm over shrinkage and other non-structural cracks.
- "Extra Heavy Service" rating per ASTM C627 "Robinson Floor Test".
- Exceeds ANSI A118.10 and A118.12.
- IAPMO approved containing antimicrobial product protection.
- Equipped with anti-microbial technology.
- Safe—no solvents and non-flammable.
- Install tile, brick and stone directly onto membrane.
- $^{\star}$  Will cure at 24°C or higher at 50% RH, lower temperature at higher RH will require longer curing time.

# MANUFACTURER/DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd

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Telephone: +65 6515 3028 Fax: +65 6515 3037

Website: se.laticrete.com



# **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 in conjunction with a vapor barrier)

# STANDARDS/CERTIFICATIONS

- ASTM D412
- ANSI 118.10
- ASTM D4541
- ANSI A118.12.5.4
- ASTM C836
- DIN 1048
- ASTM D2240
- ASTM D3618



This product has been certified green by the UL GREENGUARD Certification Program and Singapore Green Building Council.

### **Suitable Substrates**

- Concrete
- Concrete & brick masonry
- Cement mortar beds
- Cement plaster
- Self levelling underlayment
- Ceramic tile & stone\*
- Cement terrazzo\*
- Drywall board\*\*

\* This type of substrate should be laid with Laticrete Latex Thin-Set Mortar prior to application
\*\*Consult cement backer board manufacturer and LATICRETE Technical Department for specific
installation recommendations and to verify acceptability for exterior use

### **Packaging**

Commercial Unit: 25kg pail liquid (24 commercial units / pallet)

# Approximate Coverage

25kg of HYDRO BAN yields approximately 24 m<sup>2</sup> per 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  $>0^{\circ}$ C and  $<35^{\circ}$ C.

### Limitations

- DO NOT bond to particle board, luan, Masonite or hardwood surfaces.
- DO NOT use over dynamic expansion joints, structural cracks or cracks with vertical differential movement
- DO NOT use over cracks >3mm in width.
- DO NOT use as a vapor barrier (especially in steam rooms).
- DO NOT expose to negative hydrostatic pressure, excessive vapor transmission, rubber solvents or ketones.
- DO NOT expose unprotected membrane to sun or weather for more than 30 days
- Must be covered with ceramic tile, stone, brick, concrete, screeds, terrazzo or other traffic-bearing finish. Use protection board for temporary cover.
- Consult technical service if to be used as a primary waterproofing membrane over occupied space.

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 where L=span length.

### **Cautions**

Consult MSDS for more safety information.

- During wet weather, protect finished work until fully cured.
- May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.

- Allow membrane to cure fully at 24hrs @ 24°C and 50% RH before flood testing; flood test pior to applying tile or stone.
- Do not take internally.
- Keep out of reach of children.

### TECHNICAL DATA

**Physical Properties** 

Test	Test Method	Results
Adhesion to Subrate (3 days)	ASTM D4541	≥2.0N/mm²
Tensile Strength (Before Ageing)	ASTM D412	≥ 2.0N/mm²
Tensile Strength (After Immersion)	ASTM D412	≥ 2.4N/mm²
Tensile Strength (After Heat Aging)	ASTM D412	≥ 3.5N/mm²
Elongation at Break	ASTM D412	≥ 500%
Crack Bridging	ASTM C836	No cracks at 2mm
Resistance to water penetration (mm)	DIN 1048	0
Shore A Hardness	ASTM D2240	≥74
Hydrostatic (7 days)	ANSI 118.10	Pass
System Crack Resistance Test	ANSI A118.12.5.4	Pass (High)
System Performance	ANSI A118.10; ASTM C627; TCA Rating	Cycles 1-14 "Extra Heavy"
Puncture Resistance	ASTM E154:99	≥ 300N
Eco-friendliness	ASTM D3618	SGBC - Waterproofing Product, Non-toxicity, Low VOC, Non- existence of Heavy Metals

<sup>\*</sup>Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on the type of tile/stone/brick used, installation methods and site conditions.

### **Working Properties**

HYDRO BAN can be applied using a paint brush, roller, airless sprayer or trowel. All areas must have two coats to ensure waterproofing capabilities.

### INSTALLATION

# Surface Preparation

The recommended surface temperature range during application is typically between 10°C to 32°C. This range ensures optimal curing and adhesion of Hydroban. 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. Pre wet hot or dry

surfaces and sweep off excess water. New concrete slabs shall be damp cured and a minimum of 14 days old before application.

Pre-Treat Cracks, Joints, Coves/ Corners & Backer Board Joints
Fill all substrate cracks, cold joints, coves/ corners & Backer Board
Joints with a liberal coat of HYDRO BAN approximately 200mm wide
using a paint brush or roller (heavy napped roller cover). Fold 15cm
wide LATICRETE Waterproofing/ Reinforcing Fabric in half. Lay it into
the coat of wet HYDRO BAN and smooth out any wrinkles. Flash
LATICRETE Waterproofing/ Reinforcing Fabric 75mm up walls and other
vertical surfaces. Press down on LATICRETE Waterproofing/ Reinforcing
Fabric with brush or roller until liquid "bleeds" through from below.
When the first coat has dried to a uniform olive green color, apply
second liberal coat of liquid membrane to seal reinforcing LATICRETE

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 where L=span length.

### **Pre-Treat Penetrations**

Waterproofing / Reinforcing Fabric.

Allow for a minimum 3mm 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 HYDRO BAN liquid around penetration opening. Imbed 150 mm LATICRETE Waterproofing/ Reinforcing Fabric and then apply a second coat of HYDRO BAN. Bring HYDRO BAN up to level of tile or stone. When dry, seal flashing with Latasil.

### 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 24 hours at 24°C and 50% RH.

### Mixina

Use direct from pail.

### Application

Allow any pre-treated areas to dry to the touch. Apply a liberal coat of HYDRO BAN with paint brush or roller over substrate including pre-treated areas. Once the first coat dry to touch , approximately 30 minutes to 2 hours depending on site temperature, internal or exterior application.

Apply another liberal coat of HYDRO BAN over the first coat. When last coat has dried to the touch, inspect final surface for pinholes, voids, thin spots or other defects. Use additional HYDRO BAN to seal defects. HYDRO BAN will dry to an olive green color when fully cured. A minimum of two coats required to form a continuous film of 0.6-1mm

### **Installing Finishes**

Allow HYDRO BAN to dry for 24 hours before 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 24 hours at 24°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 HYDRO BAN.

# **Expansion Joints**

Ceramic tile, stone and 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 (TCNA) Handbook Installation Method EJ171. Use Latasil 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 22.8MPa with a flow rate of 0.95 to 1.6 GPM (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 30m min 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 24°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 0.3—0.5mm thick. The combined dried coating should be 0.5—0.9mm.

### Cleanina

While wet, HYDRO BAN can be washed from tools with water.

### **AVAILABILITY AND COST**

### **Availability**

LATICRETE and LATAPOXY materials are available worldwide. For distributor information, call:

**Telephone**: (65) 6515-3028 **Fax**: (65) 6515-3037

For on-line distributor information, visit LATICRETE at <a href="mailto:see.laticrete.com">see.laticrete.com</a>

<sup>\*</sup>The curing time will greatly vary depending on substrate, temperature, and relative humidity.

### Cost

Contact a LATICRETE Distributor in your area.

### **WARRANTY**

LATICRETE South East Asia Pte Ltd warrants that HYDRO BAN is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of one (1) year from date of purchase subject to the terms and conditions stated in Data Sheet.

# **MAINTENANCE**

LATICRETE® and LATAPOXY® grouts require routine cleaning with a neutral pH cleaner (e.g STONETECH® Stone & Tile Cleaner) and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

# TECHNICAL SERVICES / CONTACT

# **Technical Assistance**

Information is available by calling:

LATICRETE South East Asia Pte Ltd No. 38 Sungei Kadut, Street 2 (Level 2, A3) Singapore 729245 Telephone: (65) 6515-3028

Fax: (65) 6515-3037 Email: enquiry@laticrete.com.sg

# Technical and safety literature

To acquire technical and safety literature, please visit our website at se.laticrete.com