

For the Builders of a Better World™

# HYDRO BAN® WATERPROOFING MEMBRANE

HYDRO BAN Waterproofing membrane 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

- Allow for flood testing in 24 hours\*
- Bonds directly to metal and PVC plumbing
- Thin, only 0.5mm 0.8mm thick when cured
- Changes colour from light sage to 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 anti-microbial product protection
- Safe No solvents and non-flammable
- Install tile, brick and stone directly onto membrane
- \*When cured 21°C or higher at 50% RH. Lower temperature at higher RH will require longer curing time

#### **MANUFACTURER**

LATICRETE (Malaysia) Sdn Bhd #18-08, Faber Tower 2, Jalan Desa Bahagia, Taman Desa,

58100 Kuala Lumpur, Malaysia

Tel: +603 7989 9188 Fax: +603 7972 0331

Website: https://ma.laticrete.com

#### **SUITABLE SUBSTRATES**

- Concrete
- Concrete & Brick Masonry
- Cement Mortar Beds
- Cement Plaster
- Drywall Board\*\*
- Ceramic Tile & Stone\*
- Cement Terrazzo\*
- Self-leveling Underlayment\*\*\*
- \*Skim coated with a LATICRETE Latex Thin-set Mortar
- \*\*Consult cement backer board manufacturer for specific installation
- \*\*\*Interior use only

#### **PACKAGING**

25KG/pail; 36 pails per pallet

# **USES**

- Interior and exterior
- Swimming pools, fountains and water features
- Showers 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 vapour barrier)



This product has been certified green under the Singapore Green Building Council

#### **Approximate Coverage**

25kg of HYDRO BAN® Waterproofing Membrane yields approximately 20 – 25m² per 2 coats with a consumption of 0.5 – 0.6kg/m²/coat

#### **Shelf Life**

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures > 0°C and < 40°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 vapour barrier (especially in steam rooms)
- DO NOT expose to negative hydrostatic pressure, excessive vapour 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, screed, terrazzo or other trafficbearing finish. Use protection board for temporary cover
- Consult technical service if to be used as a primary waterproofing membrane over occupied space
- Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick ad 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 installation where L=span length

#### **Cautions**

Consult MSDS for more safety information

- Allow membrane to cure fully (typically 24hours
   @ 21°C and 50% RH before flood testing);
   Flood test prior to applying tile or stone
- Maximum amount of moisture in the concrete/mortar bed substrate should not exceed 283µg/s • m² per ASTM F-1869 or 75%

- relative humidity as measured with moisture probes
- For white and light-coloured marbles, use a white LATICRETE thin set mortar
- For green and moisture sensitive marble, agglomerates and resin backed tile and stone use LATAPOXY 300 adhesive
- Allow wet mortars/plasters (deck mud consistency) to cure for 72 hours at 21°C prior to installing HYDRO BAN
- For temperatures between 7-21°C allow 3 days prior to flood testing
- Protect from exposure to traffic until fully cured
- During wet weather, protect finished work until fully cured
- May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. Inc ase of contact, flush thoroughly with water
- Do not take internally
- Keep out of reach of children

#### **TECHNICAL DATA**

# **Performance Properties**

Test	Test Method	Results
Tensile Strength (3 days)	ASTM D412	>2.7N/mm²
Tensile Strength after Heat Ageing	ASTM D412	>4.7N/mm <sup>2</sup>
Adhesion Strength	ASTM D4541	>2.4N/mm²
Elongation at Break	ASTM D412	> 500%
Crack Bridging	ASTM C836	No cracks @ 2mm
Resistance to water penetration	DIN 1048	0
Shore A Hardness	ASTM D2240	>76

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

#### **Working Properties**

HYDRO BAN waterproofing membrane can be applied using a paint brush, roller, trowel or airless sprayer. All areas must have two coats to ensure waterproofing capabilities. When the second coat is applied the substrate will not show through HYDRO BAN waterproofing membrane if coated at 0.5 –

0.8mm dry thickness. Colour changes from light sage to olive green when fully cured.

#### **INSTALLATION**

# **Surface Preparation**

Surface temperature must be 8°C - 35°C during application. 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 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 from a uniform light sage to olive green colour, apply second liberal coat of liquid membrane to seal reinforcing **LATICRETE** Wateproofing / Reinforcing Fabric.

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**

**Protection** 

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 Waterproofing Membrane around penetration opening. Imbed 150mm 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®

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 21°C and 50% RH

#### Mixing

Use direct from pail

# **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 – 3 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 a olive green colour when fully cured. Use additional HYDRO BAN to seal defects.

\*Curing time will greatly vary depending on substrate, temperature and relative humidity

# **Installing Finishes**

Allow HYDRO BAN to dry for at least 24 hours before ceramic tile, stone or brick may be installed by the thin bed method with a LATICRETE Latex Thinset Mortar. Allow HYDRO BAN to cure 24 hours at 21°C and 50% RH before covering with concrete, thick bed mortar, screed, toppings, coatings, epoxy adhesive, 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 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 9mm in diameter.

Apply a continuous HYDRO BAN film with an overlapping spray. The wet film has a light sage appearance and dries to a darker olive green colour. When the first coat has dried to a uniform darker olive green colour, approximately 45 – 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 the 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 – 0.6mm thick. The combined dried coating should be 0.5 – 0.8mm thick.

Check application thickness with a wet film gauge periodically as 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 HYDRO BAN to cure in accordance with the instructions prior to the installation of the tile or stone finish.

It is important to note that areas not scheduled to receive HYDRO BAN should be taped off and protected from any potential overspray.

Expansion and movement joints should be honoured and treated as outlined in this document.

# Cleaning

While wet, HYDRO BAN can be washed using tools with water

#### **AVAILABILITY AND COST**

# **Availability**

LATICRETE materials are available worldwide For distributor information, call: Telephone: +603 7989 9188

Fax: +603 7972 0331

For online distributor information, visit LATICRETE at

https://ma.laticrete.com

#### Cost

Contact a LATICRETE distributor in your area

#### **WARRANTY**

LATICRETE (Malaysia) Sdn Bhd warrants that HYDRO BAN Waterproofing Membrane 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 subjected to terms and conditions stated

#### **MAINTENANCE**

LATICRETE grouts require routine cleaning with a neutral pH detergent and water. All stone and tiles should be maintained and sealed with STONETECH® products as appropriate for the specific tile / stone and installation situation

All other LATICRETE materials require no

All other LATICRETE materials require no maintenance, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers

#### TECHNICAL SERVICE/CONTACT

#### **Technical Assistance**

Information is available by calling:

LATICRETE (Malaysia) Sdn Bhd #18-08, Faber Tower 2, Jalan Desa Bahagia, Taman Desa, 58100 Kuala Lumpur, Malaysia

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# Technical and safety literature

To acquire technical and safety literature, please visit our website at https://ma.laticrete.com