



**For the Builders
of a Better World™**

HYDRO BARRIER™

HYDRO BARRIER Waterproofing Membrane is a liquid applied fast self curing liquid rubber polymer which can be easily applied to form a flexible seamless waterproof anti-fracture membrane. HYDRO BARRIER can be used on interior and exterior, horizontal or vertical surfaces and is approved by IAPMO for use as shower pan liner.



FEATURES/BENEFITS

- Allows for flood testing in 24 hours*
- Thin, only 0.5–0.9mm thick when cured.
- Bonds directly to metal and PVC plumbing fixtures
- Changes in color from a light blue to a darker blue when cured.
- Anti-fracture protection of up to 3mm over shrinkage and other non-structural cracks.
- Exceeds ANSI A118.10 and A118.12
- IAPMO approved containing antimicrobial product protection.
- Lighter color for ease of inspection.
- Safe — no solvents and non-flammable.
- Install tile, brick and stone directly onto membrane.

* Will cure at 24°C or higher at 50% RH, lower temperature at higher RH will require longer curing time

USES

- Interior and exterior
- Swimming pools, fountains and water features*
- Showers
- 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

* Small ~ Medium size only

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

STANDARDS/CERTIFICATIONS

- | | |
|--------------|--------------|
| ▪ ASTM D412 | ▪ ASTM D1640 |
| ▪ ASTM D4541 | ▪ ASTM E154 |
| ▪ ASTM C836 | ▪ ASTM D5385 |
| ▪ ASTM D2240 | ▪ ASTM C627 |
| ▪ DIN 1048 | |



This product has been certified green by the Singapore Green Building Council.

Suitable Substrates

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

* Interior use only

** 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

25kg pail liquid
(24 pails/ pallet)

Approximate Coverage

25kg of HYDRO BARRIER yields approximately 24m² 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°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 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
- DO NOT install directly over single layer wood floors, plywood tubs/ showers/ fountains or similar constructs.
- 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.

- Allow membrane to cure fully (typically 24 hours @ 24°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 283 µg/s.m² per ASTM F-1869 or 75% relative humidity as measured with moisture probes.
- For white and light-colored marbles, use a white LATICRETE Latex Portland Cement 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 24°C prior to installing HYDRO BARRIER.
- 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. In case of contact, flush thoroughly with water.
- Do not take internally.
- Keep out of reach of children.

TECHNICAL DATA

Physical Properties

Test	Test Method	Results
Water Penetration	DIN 1048	0
Adhesion to Substrate (4 hours cure)	ASTM D4541	≥1.0N/mm ²
Adhesion to Substrate (3 days cure)	ASTM D4541	≥2.0N/mm ²
Tensile Strength (standard)	ASTM D412	≥2.0N/mm ²
Tensile Strength (after immersion)	ASTM D412	≥2.0N/mm ²
Tensile Strength (after heat aging)	ASTM D412	≥3.0N/mm ²
Elongation at Break	ASTM D412	≥300%
Set to Touch	ASTM D1640	≤1 hour
Crack Bridging	ASTM C836	No Crack
Hardness (Shore A)	ASTM D2240	≥70
Puncture Resistance	ASTM E154	≥250N
Hydrostatic Pressure Resistance	ASTM 5385	Pass

* 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 BARRIER 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 BARRIER if coated at 0.5–0.9 mm dry thickness. Color changes from a light blue to darker blue when fully cured.

INSTALLATION

Surface Preparation

Surface temperature must be 5-40°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 BARRIER 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 BARRIER 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 from a uniform light blue to darker blue color, apply second liberal coat of liquid membrane to seal reinforcing LATICRETE Waterproofing/ 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

Allow for a minimum 3 mm 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 BARRIER liquid around penetration opening. Imbed 150 mm LATICRETE Waterproofing/ Reinforcing Fabric and then apply a second coat of HYDRO BARRIER. Bring HYDRO BARRIER 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 6 hours at 24°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 BARRIER with brush or roller over substrate including pre-treated areas. Apply another liberal coat of HYDRO BARRIER over the first coat of HYDRO BARRIER. Let topcoat dry to the touch, approximately 4-6 hours* at 24°C and 50% RH. When last coat has dried to the touch,

inspect final surface for pinholes, voids, thin spots or other defects. HYDRO BARRIER will dry to a darker blue color when fully cured. Use additional HYDRO BARRIER to seal defects. * The curing time will greatly vary depending on substrate, temperature and relative humidity

Installing Finishes

Allow HYDRO BARRIER to dry for at least 4 hours before ceramic tile, stone or brick may be installed by the thin bed method with a LATICRETE Latex Thin-Set Mortar. Allow HYDRO BARRIER to cure 4-6 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 BARRIER.

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 BARRIER

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 BARRIER 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 BARRIER to ensure continuous application of liquid. The hose length should not exceed 30m min length and 9 mm in diameter.

Apply a continuous HYDRO BARRIER film with an overlapping spray. The wet film has a light blue appearance and dries to a darker blue color. When the first coat has dried to a uniform darker blue color, approximately 30 to 45 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 0.4–0.6 mm thick. The combined dried coating should be 0.5–0.8 mm thick.

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

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

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

Cleaning

While wet, HYDRO BARRIER can be washed using 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 se.laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

WARRANTY

LATICRETE South East Asia Pte Ltd warrants that HYDRO BARRIER 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
(Level 2, A3)

No. 38 Sungei Kadut, Street 2,
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

Disclaimer

LATICRETE is not responsible for product use beyond its intended application. Liability is limited to replacing defective materials. We are not responsible for any loss or damage resulting from improper use. Product specifications are subject to change without notice. For the most up-to-date information, please visit our website at se.laticrete.com.