



For the Builders
of a Better World™

Hydopel Waterproofing Membrane

Hydopel Waterproofing Membrane is a two component cementitious seamless waterproofing membrane polymer modified which cures to form a tough flexible membrane to protect all concrete and masonry surfaces against the ingress of water and moisture.



FEATURES/BENEFITS

- No primer required on the substrate before application
- Can be applied on damp - not moist — substrates
- Non-toxic, ideal for potable water uses
- Install tile, brick and stone directly onto membrane
- Safe — no solvents and non-flammable
- Excellent bond on the substrates and good adhesion under water impact
- Smooth & creamy. Easy to apply
- Good climate resistance

USES

- Recommended for wall & floor in wet areas such as toilets, bathrooms, and kitchen
- For cellar walls
- Balconies and terraces
- Sewers
- For Grain Silos
- Surface protection for structural concrete (as protection against CO₂, Chlorides, Sulphate, humidity)

MANUFACTURER/DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd
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STANDARDS/CERTIFICATIONS

- DIN 1048
- ASTM D4541
- ASTM D412
- ASTM D1640
- ASTM C836
- ASTM D2240
- ASTM 118.10
- ASTM D5385
- SS 375



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

EXCELLENT
SGBP 4309

Suitable Substrates

- Concrete
- Cement Mortar Beds
- Drywall*
- Concrete Masonry
- Brick Masonry
- Cement Plaster

* Consult cement backer board manufacturer and LATICRETE Technical Department for specific installation recommendations and to verify acceptability for exterior use.

Packaging

1 set (36kg /set) consists of:

1 pail of 14kg liquid and 1 bag of 22kg powder

Approximate Coverage

22 kgs of Hydropel Waterproofing Membrane (powder) with 14kg of Hydropel Waterproofing Membrane (liquid) can yield approximately 32.3 m² with 2 coats.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year* for powder & two (2) years* for liquid if stored off the ground in a dry area at temperatures $\geq 0^{\circ}\text{C}$ and $\leq 40^{\circ}\text{C}$.

* High humidity will reduce the shelf life of bagged product.

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.
- Do not take internally.
- Keep out of reach of children.

TECHNICAL DATA

Physical Properties

Test	Test Method	Results
Hydrostatic Test (28 Days)	ANSI 118.10	Pass
Water Penetration	DIN 1048	0
Adhesion to Substrate (28 days cure)	ASTM D4541	$\geq 0.6\text{N}/\text{mm}^2$
Shear Bond Strength to concrete	ANSI 118.10	$\geq 1.0\text{N}/\text{mm}^2$
Tensile Strength (standard)	ASTM D412	$\geq 1.5\text{N}/\text{mm}^2$
Tensile Strength (After Immersion)	ASTM D412	$\geq 1.5\text{N}/\text{mm}^2$
Tensile Strength (After Heat Aging)	ASTM D412	$\geq 2.5\text{N}/\text{mm}^2$
Hardness (Shore A)	ASTM D2240	≥ 70
Elongation at Break	ASTM D412	$\geq 150\%$
Crack Bridging	ASTM C836	No crack
Water Permeability Test	DIN 1048	Pass
Non-Toxicity Test	SS375	Pass
Set to Touch	ASTM D1640	≤ 2 hours
Hydrostatic Pressure Resistance	ASTM D5385	Pass

Working Properties

Pot Life (25 ^o C)	2 hours
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*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.

INSTALLATION

Surface Preparation

Surface temperature must be 5 - 40^oC 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 LATICRETE underlayment. Do not level with gypsum or asphalt based product. Dampen hot, dry surfaces and sweep off excess water – installation may be made on a damp surface. 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 Hydropel approximately 200mm wide using a paint brush or roller (heavy napped roller cover). Fold 15cm wide LATICRETE Waterproofing/ Anti-Fracture Fabric in half. Lay it into the coat of wet Hydropel and smooth out any wrinkles. Flash LATICRETE Waterproofing/ Anti-Fracture Fabric 75mm up walls and other vertical surfaces. Press down on LATICRETE Waterproofing/ Anti-Fracture Fabric with brush or roller until liquid “bleeds” through from below. When the first coat has dried, apply second liberal coat of liquid to seal reinforcing LATICRETE Waterproofing/ Anti-Fracture 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 Hydropel around penetration opening. Imbed 150 mm LATICRETE Waterproofing/ Anti-Fracture Membrane Fabric and then apply a second coat of Hydropel. Bring Hydropel up to level of tile or stone. When dry, seal flashing with Latasil.

Mixing

Place 14 kg (1 pail) of Hydropel Waterproofing Membrane liquid in a clean plastic pail. Do not dilute it. Add 22 kgs (1 bag) of Hydropel Waterproofing Membrane Powder to Hydropel Waterproofing Membrane Liquid and mix to a smooth, trowelable consistency. Allow mortar to slake for 5 to 10 minutes. Adjust consistency if necessary. Remix and apply with roller, paint brush or airless sprayer.

Application

Allow any pre-treated areas to dry to the touch. Apply a liberal coat of Hydropel with roller, paint brush or airless sprayer over substrate including pre-treated areas. Let it dry to the touch, approximately 30 minutes—2 hours* depending on site temperature, internal or exterior application.

Apply another liberal coat of Hydropel 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 Hydropel to seal defects. The combined dried coating should be 0.5–0.9mm.

* The curing time will greatly vary depending on substrate, temperature and relative humidity

Application Conditions:

Substrate Temperature: 5°C to 40°C, Ambient Air Temperature: 10°C to 40°C, Relative Humidity: Maximum 80%, Substrate Moisture Content: Shall not exceed 17.0% (By EXTECH Moisture Meter)

Installing Finishes

Once Hydropel has dried to the touch, ceramic tile, stone or brick may be installed by the thin bed method with a LATICRETE Latex Thin-Set Mortar. Allow Hydropel to cure 24 hours before covering with concrete, thick bed mortar, screeds, toppings, coatings, epoxy adhesives, terrazzo or moisture sensitive resilient or wood flooring.

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 LATICRETE Latasil and backer rod.

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.

Cleaning

Clean 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 Hydropel 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 subject to the terms and conditions stated.

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:

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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