



For the Builders
of a Better World™

Root Lock Membrane

Root Lock Membrane is a one-component, strong & durable liquid applied waterproofing membrane that cures into a flexible, high adhesion membrane that provides a green solution for planter & landscaping applications. It contains special fillers to prevent roots from puncturing through the membrane.



FEATURES/BENEFITS

- Excellent thermal resistance in high and low temperatures.
- Excellent adhesion to the substrates without the use of primer.
- Resistance to puncturing, tearing & wearing.
- Dual usage as a waterproofed and root-resistant membrane.

USES

- Interior and exterior
- Swimming pools, fountains and water features
- Spas and hot tubs
- Planter boxes

MANUFACTURER/DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd
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STANDARDS/CERTIFICATIONS

- | | |
|--------------|--------------|
| ▪ DIN 1048 | ▪ ASTM E96 |
| ▪ ASTM D4541 | ▪ DIN 4062 |
| ▪ ASTM D412 | ▪ ASTM D3618 |
| ▪ ASTM D1640 | |
| ▪ ASTM C836 | |
| ▪ ASTM D2240 | |



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

Suitable Substrates

- Concrete
- Existing steel structures/ roofing
- Concrete & brick masonry
- Cement mortar beds
- Cement plaster
- Waterproofed glue plywood
- Gypsum wallboard*
- Ceramic tile & stone**
- Cement terrazzo**
- Cement backer board***

* Interior applications only

** This type of substrate should be laid with Laticrete Latex Thin-Set Mortar prior to application

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

Packaging

25kg per pail liquid
(24 pails / pallet)

Coverage

25kg of Root Lock Membrane yields approximately 24m² per 2 coats.

Shelf Life

Factory-sealed containers of this product are guaranteed to be of the highest quality for one (1) years if stored under shelters at temperatures $\geq 0^{\circ}\text{C}$ and $\leq 40^{\circ}\text{C}$.

Limitations

- **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.
- DO NOT bond to particle board, luan plywood, Masonite or hardwood surfaces.
- DO NOT use over dynamic expansion joints, structural cracks or cracks with vertical differential movement
- DO NOT use over cracks $\geq 3\text{mm}$ 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.
- Consult with technical service is to be used as a primary waterproofing membrane over occupied space.

Cautions

- Consult MSDS for more safety information.
- During cold weather, protect finished work from traffic 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

Properties	Test Method	Results
Water Penetration	DIN 1048	0
Adhesion to Substrate (28 days cure)	ASTM D 4541	$\geq 1\text{N/mm}^2$
Tensile Strength (standard)	ASTM D412	$\geq 2\text{N/mm}^2$
Elongation at Break	ASTM D412	$\geq 350\%$
Set to Touch	ASTM D1640	≤ 2 hours
Crack Bridging	ASTM C836	No Crack
Hardness (Shore A)	ASTM D2240	≥ 80
Water Vapor Transmission	ASTM E96	$\leq 7\text{g}/(\text{m}^2.24\text{hrs})$
Root Resistance	DIN 4062	Excellent
Eco-friendliness	ASTM D3618	SGBC - Waterproofing Product, Non-toxicity, Low VOC, Non-existence of Heavy Metals

* 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

Root Lock Membrane can be applied using a paint brush, roller 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 5°C to 40°C . This range ensures optimal curing and adhesion of Root Lock Waterproofing Membrane. All substrates must be structurally sound, clean and free of dirt, oil, grease, paint, laitance, efflorescence, concrete sealers or curing compounds. Make good to rough or uneven concrete by smoothening with 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 – however, the installation may be made on a damp surface. New concrete slabs shall be damp cured and a minimum of 14 days old before application.

Fill all substrate cracks, cold joints, and control joint to a smooth finish using a LATICRETE Latex Fortified Thin Set. Alternatively, a liberal coat of Root Lock Membrane applied with a paint brush or trowel may be used to fill in non structural joints and cracks. Apply a liberal coat of Root Lock Membrane approximately 200mm wide over substrate cracks, cold joints, and control joints using a paint brush or roller (heavy napped roller cover).

Fill all substrate coves and floor/wall transitions to a smooth finish and changes in plane using a LATICRETE latex fortified thin-set mortar. Alternatively, a liberal coat of Root Lock Membrane applied with a paint brush or trowel may be used to fill in cove joints and floor/wall transitions $<3\text{mm}$. Apply a liberal coat of Root Lock Membrane approximately 200mm wide over substrate coves and floor/wall

transitions using a paint brush or roller (heavy napped roller cover).

Main Application

Allow any pre-treated areas to dry to the touch. Apply a liberal coat of Root Lock Membrane 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 Root Lock Membrane 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 Root Lock Membrane to seal defects. Root Lock Membrane will change from light to dark color when fully cured. The combined dried coating should be 0.5–0.9mm.

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

Allow Root Lock Membrane to cure 24 hours, before installing ceramic tile stone, brick or covering with concrete, thick bed mortar, screeds, toppings, coatings, epoxy adhesives, terrazzo, moisture sensitive resilient or wood flooring.

Do not use solvent-based adhesives directly on Root Lock Membrane. 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, Inc (TCNA) Handbook Installation Method EJ171. Use LATICRETE Latasil and backer rod.

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 Root Lock 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 in Data Sheet.

MAINTENANCE

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap 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

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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.