

### Globally Proven Construction Solutions

# 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 resistance in high & low temperature
- Excellent adhesion on substrates without use of primer
- Resistance to puncturing, tearing & wearing
- Double usage as a waterproofing membrane & root resistance



## **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 (Level 2, A3)
No. 38 Sungei Kadut, Street 2, Singapore 729245

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

Internet: se.laticrete.com

# STANDARDS/CERTIFICATIONS

- ASTM C836
- ASTM D2240
- ASTM D412
- ASTM E96/E96M
- DIN 4062

This product has been certified green under 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

## **Packaging**

Commercial Unit: 25kg per pail liquid (36 commercial units / pallet)

#### Coverage

25kg of Root Lock Membrane yields approximately 24m<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  $<40^{\circ}$ 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, 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.
- Consult technical service if 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 no take internally
- Keep out of reach of children.

#### TECHNICAL DATA

### **Physical Properties**

Properties	Test Method	Results
Crack Bridging	Adopted ASTM	No cracks @
	C836	2mm
Shore A Hardness	ASTM D2240	>82
Tensile Strength (28 days)	ASTM D412	> 2.2N/mm²
Elongation at Break	ASTM D412	> 370%
Root Resistance Test	Lupine Test, DIN 4062	Excellent
Resistance to Water Penetration (mm)	DIN 1048	0
Water Vapor Transmission	ASTM E96/E96M	< 5g/m².24hr

# **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**

Surface temperature must be 8-35°C 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.

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 <3mm. 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 the touch. Apply a liberal coat of Root Lock Membrane with brush or roller over substrate including pre-treated areas. Apply another liberal coat of Root Lock Membrane over the first coat of Root Lock Membrane. Let topcoat dry to the touch,

<sup>\*\*</sup> This type of substrate should be laid with Laticrete Latex Thin-Set Mortar prior to application

<sup>\*\*\*</sup> Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use

approximately 1-3 hours at  $21^\circ\!\!\mathrm{C}$  and  $50^\circ\!\!\mathrm{KH}$ . When last coat has dried to the touch, inspect final surface for pinholes, voids, thin spot or other defects. Use additional Root Lock Membrane to seal defects.

Allow membrane to cure fully before flood testing, typically 24 hours at  $21^{\circ}$ C and  $50^{\circ}$  RH. Cold and/or wet conditions will require a longer curing time. For temperatures 7-21°C allows 3 days prior to flood testing

Allow Root Lock Membrane to cure 24 hours at 21°C and 50% RH, 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 LATICRTE 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 (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