Vapex Waterproofing Membrane

Vapex Membrane is a versatile and easy to use exposed waterproofing membrane that provides excellent flexibility & protection of substrates from water penetration & ultra violet rays. Ideal for use on all rooftops, terraces & balconies floors and walls.

FEATURES/BENEFITS
- Easy to install—applies like paint
- Protects substrates from water damage
- Excellent resistance in high & low temperature
- Excellent adhesion on substrates without use of primer
- Able to bridge cracks up to 3mm

USES
- Interior and exterior
- Rooftops, roof terraces
- Balconies
- Over existing metal roof

STANDARDS/CERTIFICATIONS
- ASTM D2370
- ASTM D2240
- ASTM C836
- ASTM E96
- ASTM E154
- ASTM G154

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
Suitable Substrates
- Concrete
- Existing steel structures/roofing
- Concrete & brick masonry
- Cement mortar beds
- Cement plasters
- Gypsum wallboard*
- Exterior glue plywood*
- Ceramic tile & stone**
- Cement terrazzo***
- Cement backer board****
* Interior applications only.
** If skim coated with a LATICRETE Laticrete ThinSet Mortar.
*** Consult cement backer board manufacturer and LATICRETE Technical Department for specific installation recommendations and to verify acceptability for exterior use.

Packaging
Commercial Unit: 25kg pull liquid
(36 commercial units / pallet)

Color: Grey & White

Approximate Coverage
25kg of Vapex Waterproofing Membrane yields approximately 24 m² 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.
- 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/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.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Test Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength @ 28 days</td>
<td>ASTM D2370</td>
<td>&gt;1.8N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>ASTM D2370</td>
<td>&gt; 500%</td>
</tr>
<tr>
<td>Shore Hardness</td>
<td>ASTM D2240</td>
<td>&gt; 60</td>
</tr>
<tr>
<td>Crack Bridging</td>
<td>ASTM C836</td>
<td>No cracks @ 2mm</td>
</tr>
<tr>
<td>Water Vapor Transmission</td>
<td>ASTM E96</td>
<td>&lt; 20g/m².24h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puncture Resistance</td>
<td>ASTM E154</td>
</tr>
<tr>
<td>QUV Accelerated Weathering</td>
<td>ASTM G154</td>
</tr>
</tbody>
</table>

Specifications subject to change without notification. 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
Vapex Waterproofing Membrane can be applied using a paint brush, roller or trowel. Where movement is expected, AntiFracture Fabric / reinforcing mesh is recommended to be used to embed within liquid membrane. All areas must have at least two coats to ensure waterproofing capabilities. When using a paint roller, substrate will not show through Vapex Waterproofing Membrane.

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, latex, 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. Dampan 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, and control joint to a smooth finish using a Laticrete Fortified Thin Set. Alternatively, a liberal coat of Vapex Waterproofing Membrane applied with a paint brush or trowel may be used to fill in non structural joints and cracks less than 3mm. Apply a liberal coat of Vapex Waterproofing 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 latex fortified thin-set mortar. Alternatively, a liberal coat of Vapex Waterproofing 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 Vapex Waterproofing Membrane approximately 200mm wide over substrate coves and floor/wall transitions using a paint brush or roller (heavy napped roller cover). Imbed 150mm AntiFracture Fabric (if necessary) and then apply a second coat of Vapex Waterproofing Membrane.

Pre-Treat Drains
Drains must be of the clamping ring type, with weepers and as per ASME A112.6.3. Apply a liberal coat of Vapex Waterproofing Membrane liquid around and over the bottom half of drain clamping ring. Imbed 150mm AntiFracture Fabric (if necessary) and then apply a second coat of Vapex Waterproofing Membrane. When dry, apply a
Laticrete™ bead where the Vapex Waterproofing Membrane meets the drain throat. Install top half of drain clamping ring.

Pre-Treat Penetrations
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 LATICRETE Enshield Waterproofing liquid around penetration opening. Imbed 150mm Anti-Fracture Fabric (if necessary) and then apply a second coat of Vapex Waterproofing Membrane. Bring Vapex Waterproofing Membrane up to level of tile or stone. When dry, seal flashing with Lutasil.

Priming
Substrate must be sound, clean & free of dust, if not it is strongly recommended to use Admix & Primer. Shake thoroughly before using. Pour, mop, or spray primer onto the surface. Apply an even thickness of primer to the prepared substrate using a bristle broom to ensure the primer is absorbed into the substrate, removing any puddles or thick areas. Allow the primer to dry to a clear film usually 30 – 45 minutes, but less than 3 hours before application of Vapex Waterproofing Membrane.

Mixing
Use direct from pail

Application
Allow any pretreated areas to dry the touch. Apply a liberal coat of Vapex Waterproofing Membrane with brush or roller over substrate including pretreated areas. Then embed the 150mm wide Anti-Fracture Fabric and allow to bleed through (if necessary). Let topcoat dry to the touch, approximately 1 – 3 hours at 21°C and 50% RH. Apply second coat of Vapex Waterproofing Membrane. When second coat has dried to the touch, inspect final surface for pinholes, voids, thin spot or other defects. Use additional Vapex Waterproofing Membrane to seal defects. 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.

Installing Finishes
Allow Vapex Waterproofing Membrane to dry for 24 hours before ceramic tile, stone or brick may be installed by the thin bed method with a LATICRETE Latex ThinSet Mortar. Do not use solventbased adhesives directly on Vapex Waterproofing Membrane.

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 Lutasil and backer rod.

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 online distributor information, visit LATICRETE at se.laticrete.com

Cost
Contact a LATICRETE Distributor in your area.

WARRANTY
LATICRETE South Asia Pte Ltd warrants that VAPEX 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 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 Asia Pte Ltd
(Level 2, A3)
No. 38 Sungei Kadut, Street 2,
Singapore 729245
Telephone: (65) 65153028
Fax: (65) 65153037
Email: enquiry@laticrete.com.sg

Technical and safety literature
To acquire technical and safety literature, please visit our website at se.laticrete.com