LATAPOXY® Moisture Shield

LATAPOXY® Moisture Shield is a two component, roller applied, breathable epoxy coating specifically designed to reduce moisture vapour emissions in concrete and other substrates.

For The Builders of A Better World

FEATURES/BENEFITS

- Easy to use - rolls on like paint
- Cures in 24 hours
- Can be applied over green concrete (min. 7 days old)

SUITABLE SUBSTRATES

- Concrete slabs
- Concrete masonry
- Cement renders & beds
- Brick masonry
- Cement Backer Board

USES

Use over dry and damp concrete and other masonry substrates to reduce the moisture vapour emission rate (MVER) in substrates to facilitate the installation of membranes, tiles, vinyl, timber, adhesives or other floor covering that require protection from moisture.

PACKAGING

- 20 litre unit (10 litre Part A pail and 10 litre Part B pail); 40 pails per pallet
- 10 litre unit (5 litre Part A pail and 5 litre Part B pail); 50 pails per pallet

MANUFACTURER

LATICRETE Australia Pty Ltd
29 Telford Street
Virginia, QLD 4014 Australia

Telephone:	07 3865 1599
Toll Free:	1800 331 012
Fax:	07 3865 2250
Internet:	www.laticrete.com.au

Coverage

- Each 20 litre unit will yield approximately 30 m^2 with a dry film thickness of nominally 300µm after two coats, which will block higher levels of MVER's as commonly present in swimming pool shells and external works.
- Each 20 litre unit will yield approximately 60m2 with dry film thickness of nominally 150µm after a single coat which will block low levels of MVER's.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored off the ground in a dry area.

Note: High humidity will reduce the shelf life of bagged product.

Limitations

- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE Waterproofing Membrane.
- **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, L/720 for ceramic tile/brick to external framed and sheeted substrates or L/720 for thin bed stone installations where L=span length.
- Water based, do not allow to freeze.
- LATICRETE is not responsible for moisture emissions from expansion and isolation joints, existing cracks, or new cracks that may develop after the system has been installed.
- Not for use in areas subject to negative hydrostatic pressure greater than 2 BARS.
- Not all adhesives are suitable to use directly over LATAPOXY Moisture Shield. LATICRETE 254 Platinum Adhesive and LATAPOXY 300 Epoxy Adhesive can be used over Moisture Shield.
- For use with other tile adhesives and SLU's, sand seed a wet top coat.

Cautions

Before using any LATICRETE product:

- Read and understand the Product Data Sheet and Safety Data Sheet.
- Check www.laticrete.com.au for any technical bulletins or updated information about the product and its application.
- Contact your local LATICRETE Technical Sales Representative with any questions.
- Conduct Calcium Chloride tests per ASTM F–1869 prior to and subsequent to installation of LATAPOXY® Moisture Shield where relevant MVER data is required. The required performance of Moisture Shield is contingent upon proper completion of ASTM F–1869 by competent testing personnel.
- During cold weather, protect finished work from traffic until fully cured.
- Keep out of reach of children.

TECHNICAL DATA

VOC Information

Green Building Council of Australia Green Star Office Design. VOC: 5 grams/litre.

Working Properties

Pot Life	120 minutes at 25 °C
Density	1.24 kg/Litre
Time to Traffic	24 hours at 21 °C
Dry Time to Full Cure	7 days at 21 °C
Dry Film Thickness Nominally	300µm
Surface Application Temperatures	>10 °C and < 35 °C

Specifications are subject to change without notification. Technical data shown in LATICRETE product data sheets and technical data sheets are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions. Field test results will vary due to critical job site factors.

INSTALLATIONS

Testing

Where testing is required for MVER's, conduct 3 calcium chloride tests for the first 90m2 and 1 calcium chloride test for 90m2 thereafter to surfaces to receive the LATAPOXY Moisture Shield. For areas that have low MVER's, apply a single liberal coat and retest for compliance to the desired MVER. For areas that have high MVER's, apply a second or subsequent coats of LATAPOXY Moisture shield, until the desired MVER is achieved.
See TDS 1166 for further information on Moisture Vapour Emission Rate, Relative Humidity and Moisture Testing of Concrete.

Surface Preparation

- Surface temperature must be 10–35 °C during application and for 24 hours after installation.
- Before using, store resins at room temperature 21 °C for 24 hours to ensure ease of mixing and application.
- In all cases, the surface temperature of the concrete or substrate must be warm enough to avoid condensation of the surface as the LATAPOXY Moisture Shield cures.
- All substrates must be structurally sound, clean and free of dirt, oil, grease, paint, laitance, efflorescence, concrete sealers or curing compounds. Surfaces treated with form release agents or other bond inhibiting contaminants must be properly shot or bead blasted to ensure all contaminants are removed.
- Mechanical scarification, shot or bead blasting of the surface is required to obtain an ICRI profile of CSP 3 (Light shot-blast). Acid etching, solvents, sweeping compounds, and sanding equipment are not acceptable means of cleaning the substrate.
- Maximum deviation in the substrate shall not exceed 5mm in 3m from the desired plane. Make rough or uneven concrete smooth to a wood float or better finish with a LATICRETE Underlayments. Do not level with gypsum or asphalt based products.
- If the concrete substrate is too uneven (typically CSP 6 or higher) to provide a uniform film thickness of the LATAPOXY Moisture Shield, the substrate can be made smooth using a skim coat of LATICRETE 254 Adhesive. The skim coat of LATICRETE 254 Adhesive must be allowed to cure a minimum of 24 hours at 21 °C prior to the installation of LATAPOXY Moisture Shield.
- Dampen hot, dry surfaces and sweep off excess water –installation may be made on a damp surface with NO standing water.
- Treatment for Construction, Control (Saw-Cut), and Cold Joints; Dormant, and Shrinkage Cracks. All non-structural cracks in the subfloor shall be repaired to minimise telegraphing through the underlayment, tile and stone.
  1. Movement Joints—honour all expansion and isolation joints up through the LATAPOXY Moisture Shield and underlayment or topping.
  2. Saw Cuts, Control Joints and Dormant Cracks—Clean all non-structural cracks and joints of all loose debris and elements. Use LATAPOXY Moisture Shield to fill small,

non-moving cracks, control joints, construction joints and cold joints in existing concrete substrates. To fill dormant, non-structural cracks up to 1.5 mm in width, the epoxy material shall be LATAPOXY Moisture Shield. To fill dormant, nonstructural cracks up to 6 mm in width, the cementitious material shall be LATICRETE 254 Adhesive. The filling of dormant cracks, as described above, is recommended to prevent moisture emissions through these cracks. Once the cracks or joints are filled, allow these areas to cure for a minimum of 24 hours at 21 °C prior to proceeding with the installation of the LATAPOXY Moisture Shield over the entire surface.

- Where Required, sand seed a 250µm top coat of wet moisture shield with a clean dry 0.5mm sand to refusal. Allow 24 hours at 21 °C to dry before vacuuming and removing loose sand. The Moisture Shield should be barely visible after the removal of loose sand.

Movement Joints and Cracks

In no case should expansion joints, isolation joints or moving cracks be filled with this epoxy. All moving joints and cracks must be honored up through the moisture control system, the LATICRETE underlayment or topping, and the floor covering or coating by installing LATASIL™ in the movement joint.

Mixing

- Mix equal volumes of Part A and B in a clean container until thoroughly mixed and uniform in colour. Mix both components with a low speed stirrer at 300rpm for 10 minutes. Avoid air entrapment.

Application

- Apply LATAPOXY Moisture Shield to the substrate using a 9 mm nap roller. Apply an even coat making sure to cover all areas thoroughly, allow to dry for 24 hours at 21 °C prior to determining if a second coat is necessary.
- Application can also be made with a trowel or paint brush.
- For porous substrates, re-coat after 2 hours at 21 °C .
- If moisture level still does not meet the requirements of the finish flooring then a second coat can be applied after the first coat has dried for 24 hours at 21 °C. Allow the second coat to dry for 24 hours at 21 °C, before verifying moisture levels.
- Do not proceed with the installation of the finish flooring if the vapour emission rate exceeds the requirement of the finishing flooring manufacturer. Allow LATAPOXY Moisture Shield to dry for 24 hours at 21 °C before conducting moisture testing of the Moisture Shield or installing the floor finish.
- Apply top coat within 2 days at 21 °C. Older or rapidly cured installations will require abrasive treatment to ensure adequate adhesion.
- If an anti-fracture and/or waterproofing membrane is required, use HYDRO BAN® over cured LATAPOXY Moisture Shield. Nominally 24 hours after application at 21 °C on dry surfaces. Cold and damp conditions will retard drying/curing.
- Use LATICRETE 254 Adhesive or LATAPOXY 300 Adhesive to install ceramic tile or suitable stone. Nominally 24 hours after application at 21 °C on dry surfaces. Cold and damp conditions will retard drying/curing.

Sand Seeding Application Instructions

Apply a 250µm thick coat of LATAPOXY Moisture Shield, and whilst still wet and tacky, broadcast into the coat, clean, dry river sand*, to refusal. Allow to dry and set, before vacuuming and removing any loose sand. After vacuuming, the Moisture Shield should be barely visible and with the sand partly embedded but exposed and free of epoxy.

** Silica sand that has been washed, classified, screened and kiln dried with a particle size graded at 0.3mm—0.5mm in coarseness. (at a nominal rate of 800g per sqm)*

AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY® materials are available worldwide.

For Distributor information:
Toll Free: 1800 331 012
Telephone: 07 3865 1599

For online distributor information, visit LATICRETE at **www.laticrete.com.au**

Cost

Contact a LATICRETE Distributor in your area.

MAINTENANCE

LATICRETE and LATAPOXY grouts, sealers and sealants require routine maintenance and cleaning with a neutral pH detergent and water. See TDS 1113 for more information.

All other LATICRETE and LATAPOXY non-finish materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

TECHNICAL SERVICES

Technical assistance

Information is available by calling:

Toll Free: 1800 331 012
Telephone: 07 3865 1599
Fax: 07 3865 2250

Technical and safety literature

To acquire technical and safety literature, please visit our website at **www.laticrete.com.au**

DISCLAIMER

- The information contained in this document is given in good faith and to the best of our knowledge is true and accurate.
- This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information.
- The use of this product is beyond our control and liability is assumed by the user when used incorrectly and not in accordance with LATICRETE guidelines.
- The manufacturer is not responsible for any loss or damage arising from incorrect usage of this product.
- The specifier or other party responsible for the project must ensure that the details in this data sheet are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this specification.
- Efflorescence is a normal condition of Portland cement and is not covered by any warranty. The use of LATAPOXY® 310 Stone Adhesive, LATAPOXY 300 Adhesive, LATAPOXY SP-100, LATAPOXY Moisture Shield, SPECTRALOCK® PRO Premium Grout† and SPECTRALOCK 2000IG will not contribute to any noticeable efflorescence.

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