MVB

MVB is 100% solids, liquid applied 2-part epoxy coating specifically designed for controlling the moisture vapor emission rate from new or existing concrete slabs prior to installing LATICRETE underlayment, decorative toppings and most resinous coatings. MVB exceeds ASTM F3010 standard with a perm rating of 0.052 grains/h/ft²/in. Hg (3 ng/ft²•s•m²•Pa) at only 12 mil thickness.

<table>
<thead>
<tr>
<th>FEATURES/BENEFITS</th>
<th>USES</th>
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<tbody>
<tr>
<td>Exceeds ASTM F3010 standard</td>
<td>Ensures protection of moisture/pH sensitive floor coverings.</td>
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<tr>
<td>Component of the Laticrete system warranty</td>
<td>Reduces AVER from ≤25 to below 3 lbs/1000 ft²/24hr (170 pg/s • m²).</td>
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<tr>
<td>Can be applied over new concrete in as little as 5 days</td>
<td>Use on concrete up to 100% RH / 14 pH.</td>
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<tr>
<td>Fast cure — ability to apply finish floor goods, Laticrete underlayments and most resinous coatings in as soon as 12 hours</td>
<td>Ideal for slab-on-grade construction and elevated slabs.</td>
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<tr>
<td>VOC content (mixed) &lt;10g/L—UL GREENGUARD Gold Certified</td>
<td>Allows for the installation of vinyl, rubber, VCT, carpet, wood, ceramic tile, stone and other moisture sensitive floor coverings, floor adhesives, epoxies and most resinous coatings.</td>
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<tr>
<td>Low odor</td>
<td></td>
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<tr>
<td>Easy to use</td>
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<tr>
<td>Compatible with Laticrete underlayments, most resinous coatings, as well as non-water based adhesives for hardwood, vinyl, carpet and tile</td>
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<thead>
<tr>
<th>MANUFACTURER/ DISTRIBUTED BY</th>
<th>STANDARDS/CERTIFICATIONS</th>
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<tbody>
<tr>
<td>LATICRETE South East Asia Pte Ltd (Level 2, A3)</td>
<td>ASTM E96</td>
</tr>
<tr>
<td>No. 38 Sungei Kadut, Street 2, Singapore 729245</td>
<td>C1583</td>
</tr>
<tr>
<td>Telephone: +65 6515 3028 Fax: +65 6515 3037</td>
<td>C7234</td>
</tr>
<tr>
<td>Internet: selaticrete.com</td>
<td>D1308</td>
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</table>
Suitable Substrates

- Concrete Slabs

Packaging

Part A: 10kg
Part B: 5kg

Coverage

0.3mm - 4.6m² (wet film thickness)

Estimated consumption of MVB depending on the surface absorption, roughness, loss and wastage.

Shell Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored off the ground in a dry area, at temperatures 0 - 43°C.

Limitations

- Not for use over any other substrates other than concrete slabs cured for a minimum of 5 days at 70°F (21°C)
- All existing expansion joints, cold joints and control joints must be brought up through the MVB and the finish. Failure to honor movement joints will result in cracking and/or loss of bond.
- Laticrete is not responsible for moisture vapor emission from any movement joints, existing cracks, new cracks that may develop or voids in the MVB in the concrete slab after the system has been installed.

Cautions

Before using any LATICRETE product:

- Check se.laticrete.com for any technical bulletins or updated information about the product and its application
- Contact your local LATICRETE Technical Sales representative with any questions
- Consult MSDS for more safety information
- MVB Part A is harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects.
- MVB Part B causes skin irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.
- Once material is fully mixed the reaction may generate high heat if left in mixing container for an extend period of time.
- Do not mix MVB in a plastic bucket.
- Do not take Internally
- Keep out of reach of children

TECHNICAL DATA

Performance Properties

<table>
<thead>
<tr>
<th>Test</th>
<th>Test Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Permeance at 12 mil thickness</td>
<td>ASTM E96</td>
<td>0.052 grains/h/ft²/in. Hg (3 ng/h•m²•Pa)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTL Project 281426</td>
</tr>
<tr>
<td>Tensile Strength (7 days)</td>
<td>ASTM C1583</td>
<td>&gt; 410 psi (&gt; 2.8 MPa)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Concrete Failure</td>
</tr>
<tr>
<td>Pull off Adhesion Strength</td>
<td>ASTM C7234</td>
<td>&gt; 480 psi (&gt; 3.3 MPa)</td>
</tr>
<tr>
<td>Alkalinity Resistance</td>
<td>ASTM D1308</td>
<td>Pass (resist up to 14 pH)</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 installation methods and site conditions.

INSTALLATION SYSTEM

Surface Preparation

Installation over Concrete Slabs

Concrete slabs must be clean, structurally sound, absorptive, and have an ICRI concrete surface profile (CSP) of 3 - 5. All dirt, oil, paint, laitance, efflorescence, sealers, curing compounds and any other bond breaking contaminants must be removed down to the full depth of contamination by shot blasting or other mechanical means then swept and vacuumed clean. Use of chemicals to remove contaminants is prohibited. Use of sweeping compound is not recommended as they may contain oil which can act as a bond breaker. Do not use over gypsum or asphalt based products. Water drop test is recommended prior to application of MVB. If the water drop test yields a non-suction results where the water beads up and does not absorb, please contact LATICRETE Technical Sales Representative. Per ASTM F3010, concrete slab to receive MVB must have a tensile pulloff strength of 200 psi (1.4 MPa) or greater when tested in accordance with ASTM C1583.

Surface temperature must be 10-32°C during application and for 24 hours after installation. In all cases, the surface temperature of the prepared concrete slab must be warm enough to avoid condensation on the surface of the concrete.

Joints, Cracks, Surface Depressions and Other Irregularities

All joints and cracks should be evaluated and repaired if necessary prior to installation of MVB. A good crack repair technique depends on knowing the causes and selecting appropriate repair procedures that take these causes into account. Repairing a crack without addressing the cause may only be a temporary fix. Successful longterm repair procedures must address the cause of the crack as well as the crack itself. Refer to ACI 224.1R for guidance on evaluation and repair of cracks in concrete. Laticrete product application over moving cracks and joints is not recommended.
1. Moving joints (e.g. expansion joints, isolation joints, etc.) and dynamic cracks must be honored up through the MVB. Laticrete is not responsible for vapor emission through untreated joints or for areas where cracks may develop later.

2. All nonmoving joints and dormant cracks (e.g. saw cuts, surface cracks, grooves, etc.) must be cleaned out and free of all loose debris. Nonstructural cracks up to 3 mm in width can be filled with MVB epoxy during main application. Inspect these areas to ensure cracks are completely filled with no voids.

3. Nonmoving joints, dormant cracks greater than 3 mm wide, can be patched with mixture of 1 part MVB 3 parts clean, washed play sand. In a suitable container, such as an empty MVB pail, pour 1 part MVB pre-blended to 3 parts clean, washed play sand, using a 300 rpm drill with jiffy paddle, mix together for 23 minutes until the MVB and qualified sand mixture is consistent. Slowly pour the mixture into the crack, using the flat side of a trowel force the mortar into the crack. Surface crazing and hairline cracks do not need filling. Construction joints, expansion joints and large moving cracks that have lost aggregate lock (one side of crack is higher than the other) have structural implications and cannot be repaired using this method.

**Moisture Evaluation**

Moisture testing must be conducted in accordance with finish floor goods and adhesive manufacturers’ requirements prior to MVB application. When evaluating moisture conditions the HVAC system or a properly conditioned temporary enclosure must be operated and in place for the minimum specified time period recommended in the moisture test standard. The concrete floor slabs and the ambient air space above the floor must be at service temperature and relative humidity for at least 48 hours before taking moisture measurements in the concrete slab. These conditions must remain throughout the test period to ensure accurate results.

**Mixing**

Before using, store resins at room temperature 65-85°F (18-30°C) for 24 hours to ensure ease of mixing. Mix components A and B to a ratio of 2:1 by volume (components are packaged into the pails to the specified ratio). Pour the B component into the larger A component steel pail. Verify that all of the Part A liquid is drained from pail. Mix with a slow speed drill (<300 RPM) with a jiffy blade for 3 minutes, assuring mixture is fully uniform and that all ribbons of contrasting shade are completely eliminated. Pour the fully mixed material onto the substrate immediately after mixing.

**Application**

Pour ribbons of MVB onto the prepared concrete and spread using appropriate round or square notch squeegee that is designed to apply the desired mil thickness in a single coat. Apply an even coat making sure to cover all areas thoroughly. Immediately following, while epoxy is still wet, use a high quality 3/8” (9 mm) nap nonshedding paint roller to back-roll at 900 from the squeegee direction to help ensure full coverage and uniform thickness. Always consult flooring and adhesive manufacturer’s installation instructions, restrictions and confirm compatibility with MVB. Always test performance and compatibility of floor systems prior to application.

**Finish Flooring and SelfLeveling Underlayments Installation**

Floor goods, including polyaspartic coating, and Laticrete self-leveling underlayments shall be installed over MVB as soon as the epoxy is slightly tacky to the touch with no transfer, typically 12 hours after application depending on ambient and substrate conditions. The maximum time to install goods and LATICRETE self-leveling underlayments over MVB is 3 days provided that the surface is protected from traffic, dust, debris, water and any other contaminants. If MVB is left open and unprotected longer than 3 days or the surface becomes contaminated, contact Laticrete Technical Sales Representative. Laticrete self-leveling underlayments require the use of Admix & Primer. Refer to TDS for detailed primer installation instructions. Always refer to finished floor manufacturer’s recommendations regarding installation instructions, restrictions, moisture conditions and compatibility. Always test performance suitability and compatibility of finished floor systems prior to their application. Sample surfaces should be installed as a field test so as to be representative of entire surface and tested for intended use.

**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](http://se.laticrete.com)

**Cost**
Contact a LATICRETE Distributor in your area.

**WARRANTY**
LATICRETE South East Asia Pte Ltd warrants that MVB is free from manufacturing defects and will not to break down, deteriorate or disintegrate under normal usage for a period of one (1) year from date of purchase subject to terms and conditions stated.

**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**

**Technical Assistance**
Information is available by calling:

LATICRETE South East Asia Pte Ltd
No. 38 Sungei Kadut, Street 2, Singapore 729245
Technical and safety literature
To acquire technical and safety literature, please visit our website at
se.laticrete.com