



**For the Builders  
of a Better World™**

## 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.



### FEATURES/BENEFITS

- Component of the Laticrete system warranty
- Can be applied over new concrete in as little as 5 days
- Fast cure — ability to apply finish floor goods, Laticrete underlayments and most resinous coatings in as soon as 12 hours
- VOC content (mixed) <10g/L— UL GREENGUARD Gold Certified
- Low odor
- Easy to use
- Compatible with Laticrete underlayments, most resinous coatings, as well as non-water based adhesives for hardwood, vinyl, carpet and tile

### USES

- Ensures protection of moisture/pH sensitive floor coverings
- Reduces MVER from  $\leq 25$  to below 3 lbs/1000 ft<sup>2</sup>/24hr (170 pg/(s.m<sup>2</sup>))
- Use on concrete up to 100% RH / 14 pH
- Ideal for slab-on-grade construction and elevated slabs
- 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

### MANUFACTURER/ DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd

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

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

Internet: [se.laticrete.com](http://se.laticrete.com)

### STANDARDS/CERTIFICATIONS

- ASTM E96
- ASTM C1583
- ASTM C7234
- ASTM D1308

**Suitable Substrates**

- Concrete Slabs

**Packaging**

Part A: 10kg

Part B: 5kg

**Coverage**0.3mm – 46m<sup>2</sup> (wet film thickness)

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

**Shelf 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  $\geq 0^{\circ}\text{C}$  and  $\leq 40^{\circ}\text{C}$

**Limitations**

- Not for use over any other substrates other than concrete slabs cured for a minimum of 5 days at 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](http://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**

Test	Test Method	Results
Vapor Permeance at 12 mil thickness	ASTM E96	0.052 grains/h/ft <sup>2</sup> /in. Hg (3 ng/h.m <sup>2</sup> .Pa) CTL Project 281426
Tensile Strength (7 days)	ASTM C1583	$\geq 410$ psi ( $\geq 2.8$ MPa) Concrete Failure
Pull off Adhesion Strength	ASTM C7234	$\geq 480$ psi ( $\geq 3.3$ MPa)
Alkalinity Resistance	ASTM D1308	Pass (resist up to 14 pH)

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.

Surface temperature must be 5 - 40°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 long-term 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 non-moving joints and dormant cracks (e.g. saw cuts, surface cracks, grooves, etc.) must be cleaned out and free of all loose debris. Non-structural 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. Non-moving 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 2-3 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 operational 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 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 non-shedding paint roller to back-roll at 90° 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 Self-Leveling 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 on-line 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

(Level 2, A3)

Singapore 729245

Telephone: (65) 6515-3028

Fax: (65) 6515-3037

Email: [enquiry@laticrete.com.sg](mailto:enquiry@laticrete.com.sg)

**Technical and safety literature**

To acquire technical and safety literature, please visit our website at [se.laticrete.com](http://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](http://se.laticrete.com).