

Vapor Ban Hybrid

Globally Proven **Construction Solutions** Vapor Ban Hybrid is a high solids, 3-part cementitious epoxy moisture vapour barrier formulated for suppressing the moisture vapor emission from new or existing concrete substrate prior to installing LATICRETE resinous toppings and coatings.



VAPOR BAN HYBRII

FEATURES/BENEFITS

- Applicable over the new concrete in 5 days
- Fast cure ability to apply resilient flooring, LATICRETE underlayments and most resinous coatings in 24 hours
- Low emission
- Easy to apply
- 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
- 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

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STANDARDS/CERTIFICATIONS

- ASTM C579
- ASTM C580
- ASTM D4541
- ASTM D1308
- ASTM E96

Suitable Substrates

- Concrete Slabs
- Polymer cement screed

Packaging

Part A: 1.2kg

Part B: 3.8kg

Part C: 20kg

Coverage

One set of Vapor Ban Hybrid yield a coverage of approximate $6m^2$ at 2mm thick per coat.

Estimated consumption of Vapor Ban Hybrid 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 0 - $43\,^{\circ}\text{C}$.

Limitations

- Not for use over any other substrates, e.g. Magnesium based screed / concrete 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 Vapor Ban Hybrid 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 Vapor Ban Hybrid 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
- Resinous products 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.
- Cementitious based fillers 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 take Internally
- Keep out of reach of children

TECHNICAL DATA

Performance Properties

Test	Test Method	Results
Compressive Strength (7 days)	ASTM C579	>47N/mm²
Flexural Strength (7 days)	ASTM C580	>14N/mm²
Pull off Adhesion Strength (7 days)	ASTM D4541	>4N/mm² (Concrete failure)
Alkalinity Resistance	ASTM D1308	Pass (resist up to 14 pH)
Water Vapour Transmission	ASTM E96/ E96M-16	25g/m²/24hrs
Chemical Resistance	ASTM D1308- 02(2013)	No discoloration No blistering No softening No swelling

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 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 Vapor Ban Hybrid. 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 $10-32^{\circ}$ 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 Vapor Ban Hybrid. 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 Vapor Ban Hybrid. 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 Vapor Ban Hybrid 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 Vapor Ban Hybrid incorporates with Anti-Fracture Fabric. Place the Anti-Fracture Fabric over the crack and saturated with Vapor Ban Hybrid Primer, leave it to cure. Slowly pour the mixture of Vapor Ban Hybrid onto the prepared surface, using the flat side of a trowel force the mortar into the crack. Surface crazing and hairline cracks do not need to be treated. 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 manufacturers' requirements prior to Vapor Ban Hybrid 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 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

Primer: Vapor Ban Hybrid Primer

Before using, store resins at room temperature $65-85^{\circ}F$ ($18-30^{\circ}C$) for 24 hours to ensure ease of mixing. Mix components A and B to a ratio of 1:2 by weight, pour the A component into the larger B component coated metal tin can. Verify that all of the Part A liquid is drained from the coated metal tin can.

Mix with a slow speed drill (<300 RPM) with a helical blade for 1 to 2 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 Vapor Ban Hybrid Primer 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.

Vapor Ban Hybrid

Before using, store resins at room temperature 65-85°F (18-30°C) for 24 hours to ensure ease of mixing. Mix components A, B and C to a ratio of 1.2:3.8:20 by weight. Pour the A component into the larger B component coated metal tin can. Verify that all of the Part A liquid is drained from the coated metal tin can.

Mix with a slow speed drill (<300 RPM) with a helical blade for 1 to 2 minutes, assuring mixture is fully uniform and that all ribbons of contrasting shade are completely eliminated. Add Part C filler into the mixing pail and mix for another 2 - 3 minutes until the mix is homogenous. Pour the fully mixed material onto the substrate immediately after mixing.

Application

Pour the Vapor Ban Hybrid onto the prepared concrete and spread using appropriate clearance control notch squeegee that is designed to apply the desired mil thickness in a single coat. Apply an even thickness making sure to cover all areas thoroughly. Immediately following, while epoxy is still wet, apply spike roller to release entrapped air, to ensure smooth and uniform thickness

Finish Flooring and Self-Leveling Underlayments Installation

Floor goods, including polyaspartic coating, and LATICRETE self-leveling underlayments shall be installed over Vapor Ban Hybrid as soon as the epoxy is tack free 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 Vapor Ban Hybrid within 3 days provided that the surface is protected from traffic, dust, debris, water and any other contaminants. If Vapor Ban Hybrid is left open and unprotected longer than 3 days or the surface becomes contaminated, contact LATICRETE Technical Sales Representative. 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

Cost

Contact a LATICRETE Distributor in your area.

WARRANTY

LATICRETE South East Asia Pte Ltd warrants that Vapor Ban Hybrid 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

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Technical and safety literature

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