



VAPOR BAN™ Primer ER

DS-35222-0424

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

VAPOR BAN™ Primer ER

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

VAPOR BAN Primer ER is a single-coat, 100% solids, liquid applied 2-part epoxy coating specifically designed for controlling the moisture vapor emission rate from new or existing concrete slabs. It requires minimal to no surface preparation. VAPOR BAN Primer ER will perform as a primer prior to installing NXT® Level and SUPERCAP® self-leveling underlayments. Combining two steps into one.

Uses

- Ensures protection of moisture/pH sensitive floor coverings.
- Reduce MVER ≤ 25 to below 3lbs/1000ft²/24hrs (170 $\mu\text{g}/(\text{s}\cdot\text{m}^2)$)
- Use on concrete up to 100% RH / 14 pH.
- Ideal for slab-on-grade construction and elevated slabs.
- Can be used for the installation of vinyl, rubber, VCT, carpet, wood, ceramic tile, stone and other moisture sensitive floor coverings and floor adhesives.

Advantages

- Exceeds ASTM F3010
- Reduce MVER ≤ 25 lbs to below 3 lbs/1000ft²/24hrs (170 $\mu\text{g}/(\text{s}\cdot\text{m}^2)$)
- Easy to use, minimal to no surface preparation needed
- A moisture vapor coating and a primer, ALL-IN-ONE
- Can be applied over new concrete in as little as 5 days
- Fast cure: ability to apply finish floor goods, LATICRETE adhesives, NXT® Level and SUPERCAP® self-leveling underlayments in as little as 3 to 4 hours
- Can be used with NXT Overlays - as a primer with sand broadcast for rapid installs
- Less material and labor needed, saves a step
- Compatible with non-water based adhesives for hardwood, vinyl, carpet and tile

Suitable Substrates (Interior Use Only)

- Concrete

Packaging

3 Gal (11.6 L)

VAPOR BAN ER is mixed at 3A:2B by volume.

3 Gal Kit

- Part A: 1.8 gal (6.8L) in a 4 gal pail
- Part B: 1.2 gal (4.5L) in a 2.5 gal pail

VAPOR BAN Primer ER is a kit of two pails. Individual pails (Part A or Part B).

NOTE!: Packaging sizes and configuration were updated in July 2022. Newer versions will have a white background on the label. Pay special attention to the mix ratio and A/B components when mixing.

Approximate Coverage

VAPOR BAN Primer ER is to be applied at minimum thickness of 16 mils. VAPOR BAN Primer ER when applied at a minimum 16 mils thickness exceeds ASTM F3010 and will control moisture vapor emission rate up to ≤ 25 lbs to below 3 lbs/1000ft²/24hrs (170 $\mu\text{g}/(\text{s}\cdot\text{m}^2)$)[^]. In order to help insure coverage, periodically check mil thickness using an NXT Wet Film Thickness Gauge.

WFT	DFT	Coverage
16.0 mils (0.41 mm)	16.0 mils (0.41 mm)	100 ft ² /gal (2.5 m ² /L)
Each full unit will yield approximately 300 ft ² (27.9 m ²)**		

WFT = Wet Film Thickness

DFT = Dry Film Thickness

- Coverage values are approximate and will vary based on surface condition, preparation methods and application technique.
- **Coverage is approximate and will vary depending on CSP (concrete surface profile), mil thickness, absorption, and other field conditions.
- ^No visible water or condensation on the surface.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures > 32° F (0° C) and < 90° F (32° C).

Limitations

- Interior use only unless used as a primer with FRACTURE BAN™
- All existing expansion joints, cold joints must be brought up through the VAPOR BAN™ Primer ER and the finish. Failure to honor movement joints will result in cracking and/or loss of bond.
- Cured concrete for a minimum of 5 days at 70°F (21°C)
- LATICRETE is not responsible for moisture emission from expansion and isolation joints, existing cracks, or new cracks that may develop in the concrete slab after the system has been installed.
- Coverage is approximate and will vary depending on CSP (concrete surface profile), mil thickness, absorption, and other field conditions.
- VAPOR BAN Primer ER is not to be used with SPARTACOTE systems

Cautions

- Consult SDS for more safety information.
- VAPOR BAN Primer ER Part A causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
- VAPOR BAN Primer ER Part B causes severe skin burns and eye damage. Harmful if swallowed or inhaled. May cause an allergic skin reaction.
- Check www.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.
- Once material is fully mixed the reaction may generate high heat if left in mixing container for an extended period of time.
- Protect finished work from traffic until fully cured.
- Do not take internally.

- Keep out of reach of children.

4. TECHNICAL DATA

Physical Properties

Property	Test Method	Result
Vapor Permeance	ASTM E96	0.094 grains/h/ft ² /in. Hg (5.4 ng/h • m ² • Pa)
Adhesion	ASTM D7234	660 psi (4.6 MPa) Substrate Failure
Alkalinity Resistance	ASTM D1308	Pass (Resist up to 14 pH)

Working Properties

Property	Value
Mix Ratio	3 Part A : 2 Part B by volume
Working Time	20-30 minutes
Minimum Re-Coat Time	3-4 hours
Maximum Re-Coat Time	24 hours
Full Cure	7 days

Working properties based on 70°F & 50% RH. Changes in ambient conditions may cause times to vary.

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.

5. INSTALLATION

Surface Preparation

VAPOR BAN Primer ER™ can be installed on concrete slabs that are clean, structurally sound, and absorptive with no further surface preparation required.

- Tensile strength of the concrete slab must be at least 200 psi, tested in accordance with ASTM C1583.
- All dirt, oil, paint, laitance, efflorescence, sealers, curing compounds, dust, construction debris, and any other bond breaking contaminants must be removed by diamond grinding or shot blasting to an ICRI concrete surface profile (CSP) of 1–3 then swept and thoroughly vacuumed clean.
- Use of chemicals to remove contaminants is prohibited. Use of sweeping compound is not recommended as they may contain oil which will act as a bond breaker.
- Water drop test is recommended to determine if concrete is absorptive prior to application. Refer to TDS230 for water drop test instruction. If the water drop test yields a non-suction/non-absorptive result the surface must be prepared by diamond

grinding or shot blasting to an ICRI concrete surface profile (CSP) of 1-3.

- Surface temperature must be 50–90°F (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 VAPOR BAN Primer ER. 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 causes of the cracks as well as the cracks themselves. Refer to ACI 224.1R-07 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 (moving) cracks must be honored up through the VAPOR BAN Primer ER.

2. All non-moving joints and dormant cracks (e.g. saw cuts, surface cracks, grooves, control joints, etc.) must be cleaned out and free of all loose debris. Non-structural cracks up to 1/8" (3 mm) in width can be filled with VAPOR BAN Primer ER during main application. Inspect these areas to ensure cracks are completely filled with no voids. Non-moving joints, dormant cracks greater than 1/8" (3 mm) wide, can be patched with a mixture of 1 part (A+B) VAPOR BAN Primer ER and 3 parts clean, dried sand. In a suitable container, such as an empty and clean VAPOR BAN Primer ER metal pail, pour 1 part VAPOR BAN Primer ER pre-blended to 3 parts clean, oven dried sand, using a 300 rpm drill with jiffy paddle, mix together for 2-3 minutes until the VAPOR BAN Primer ER and qualified sand mixture is consistent. Slowly pour the mixture into the crack, using the flat side of a trowel force the epoxy/sand mixture 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.

Mixing

Before using, store resins at room temperature 65-85°F (18-30°C) for 24 hours to ensure ease of mixing. Combine 3 parts A with 2 parts B by volume. 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 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.

Note: Do not mix VAPOR BAN Primer ER in a plastic bucket as mix generates excessive heat!

Application

Pour ribbons of VAPOR BAN Primer ER 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 degrees from the squeegee direction to help ensure full coverage and uniform thickness. Replace worn squeegee blades and paint rollers when necessary to help ensure proper application. Use a paint brush to apply epoxy around penetrations, columns, and any other obstructions. Periodically check mil thickness using a wet film thickness gauge. Allow to cure for 3 to 4 hours at 50 to 90°F (10 to 32°C) prior to installation of underlayment or finish flooring.

Flooring and NXT® Level or SUPERCAP® Self Leveling Underlayments Installation

In all cases the VAPOR BAN™ Primer ER surface must be protected from traffic, dust, debris, rain, and any other contaminants. NXT® or SUPERCAP® self-leveling underlayments shall be installed over VAPOR BAN Primer ER as soon as the epoxy is slightly tacky to the touch with no transfer; typically, 3-4 hours after application depending on ambient and substrate conditions. The maximum time to install finished floor goods or self-leveling underlayments over VAPOR BAN Primer ER is 24 hours provided that the surface is protected from traffic, dust, debris, water and any other contaminants.

If VAPOR BAN Primer ER is not protected and becomes contaminated, contact a LATICRETE Technical Sales Representative. If the 24 hour open window has past, VAPOR BAN Primer ER can be re-applied. Primer Plus (1:1 slurry mix – refer to TDS230) or PRIME-N-BOND™ (refer to product data sheet) can be used as well, before a NXT or SUPERCAP self-leveling underlayment is placed.

Tile Installation

Always refer to finished floor manufacturer's recommendations regarding installation instructions, restrictions, moisture conditions and compatibility. Tile or stone can be installed using LATAPOXY® 300 Adhesive, 254 Platinum, 257 Titanium™, MULTIMAX Lite™ and TRI-LITE™. These shall be installed over VAPOR BAN Primer ER as soon as the epoxy is slightly tacky to the touch with no transfer; typically, 3-4 hours after

application depending on ambient and substrate conditions. The maximum time to install finished floor goods over VAPOR BAN Primer ER is 24 hours provided that the surface is protected from traffic, dust, debris, water and any other contaminants.

If the 24 hour open window has past, apply PRIME-N-BOND™ (refer to product data sheet), HYDRO BAN® and FRACTURE BAN™ SC may be used as an anti-fracture membrane (refer to product data sheet). 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.

Use as a Primer for Overlays

When using VAPOR BAN Primer ER with a sand broadcast (required) as a primer for NXT overlay products, refer to TDS230 for surface prep and installation instructions.

6. AVAILABILITY AND COST

Availability

LATICRETE materials are available worldwide.

For Distributor Information, Call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line distributor information, visit LATICRETE at laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

- 1 Year Product Warranty (US) (English)
- 5 Year System Warranty (US) (English)
- 10 Year System Warranty (US) (English)
- 25 Year System Warranty (US) (English)
- LATICRETE Lifetime System Warranty (US) (English)
- Concrete Remediation Lifetime System Warranty (US) (English)
- Concrete Remediation Lifetime System Warranty (Canada) (English)
- Concrete Remediation Lifetime System Warranty (Estados Unidos) (Español)

8. MAINTENANCE

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

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235

Telephone: +1.203.393.0010, ext. 1235

Fax: +1.203.393.1948

Technical and Safety Literature

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

10. FILING SYSTEM

Additional product information is available on our website at laticrete.com. The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)
- DS 230.99: LATICRETE Lifetime System Warranty (United States and Canada)
- TDS 230N: NXT Substrate Preparation and Primer Guide
- DS-307 PRIME N BOND
- DS 65437: Primer Plus

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