



# VAPOR BAN™ ER

DS-35216-0624

**Globally Proven  
Construction Solutions**



## 1. PRODUCT NAME

VAPOR BAN™ ER

## 2. MANUFACTURER

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## 3. PRODUCT DESCRIPTION

VAPOR BAN™ ER is a rapid curing, single-coat moisture vapor barrier designed for controlling the moisture vapor emission rate from new or existing concrete slabs. A two-part, 100% solids epoxy, it exceeds ASTM F3010 standard with a perm rating of 0.094 grains/h/ft<sup>2</sup> /in. Hg (5.4 ng/h • m<sup>2</sup> • Pa). VAPOR BAN ER is oil tolerant and can be applied by squeegee or roller.

For decorative and resinous coating applications, VAPOR BAN ER can be pigmented through the use of SPARTACOTE® Universal Pigments (a full line of vibrant color pigments for both polyaspartic and epoxy products) and can accept broadcasts of either SPARTACOTE Blended Chip or SPARTACOTE Blended Quartz without negatively affecting its performance.

LATICRETE VAPOR BAN ER can be used with our NXT and SUPERCAP line of high performing self-leveling underlayments and traffic bearing overlays.

## 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  $\mu\text{g}/(\text{s} \cdot \text{m}^2)$ ).
- Use on concrete up to 100% RH / 14 pH
- Ideal for slab-on-grade construction and elevated slabs.
- Allows for the installation of most resinous coatings, vinyl, rubber, VCT, carpet, wood, ceramic tile, stone and other moisture sensitive floor coverings.
- Can be used as a primer for slabs contaminated by petroleum, vegetable oil, and other chemicals.

## Advantages

- Rapid curing allows for fast return to service
- Exceeds ASTM F3010 standard
- Reduces MVER  $\leq 25$  lbs to below 3 lbs/1000 ft<sup>2</sup>/24hrs (170  $\mu\text{g}/(\text{s} \cdot \text{m}^2)$ )
- Can be applied over new concrete in as little as 5 days
- Oil Tolerant
- Can be pigmented with SPARTACOTE Universal Pigments
- Can be used as a broadcast coat for SPARTACOTE Chip and SPARTACOTE Quartz systems
- Provides protection for the installation of moisture sensitive coatings
- Compatible with SPARTACOTE resinous coatings
- Compatible with NXT underlayments and decorative overlays
- Compatible with non-water based adhesives for hardwood, vinyl, carpet and tile.

## Suitable Substrates (Interior Use Only)

- Concrete
- CMU
- Backer Board

## Packaging

3 Gal (11.4 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 ER is a kit of two pails. Individual pails (Part A and 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

WFT	DFT	Coverage
16.0 mils (0.41 mm)	16.0 mils (0.41 mm)	100 ft <sup>2</sup> /gal (2.5 m <sup>2</sup> /L)

WFT = Wet Film Thickness

DFT = Dry Film Thickness

Coverage values are approximate and will vary based on surface condition, preparation methods and application technique.

#### 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

- Substrate temperature must be between 50°F (10°C) and 90°F (32°C)
- Ambient relative humidity must not exceed 90%
- Substrate temperature must be 5°F (3°C) above dew point
- For interior use only

#### Cautions

- FOR PROFESSIONAL USE ONLY
- Thoroughly read all technical data sheets, application guidelines, warranty disclaimers and Safety Data Sheets (SDS) prior to use. Application guides are available at [www.laticrete.com](http://www.laticrete.com).
- Wear protective gloves, protective clothing and eye protection.
- Keep out of reach of children

## 4. TECHNICAL DATA

#### VOC/LEED Product Information

<100 g/L (as intended for use)

## Physical Properties

Property	Test Method	Result
Vapor Permeance	ASTM E96	0.094 grains/h/ft <sup>2</sup> /in. Hg (5.4 ng/h • m <sup>2</sup> • Pa)
Adhesion	ASTM D7234	>300 psi (>2.1 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

#### Moisture Evaluation

Moisture testing must be conducted in accordance with finish floor goods and adhesive manufacturers' requirements prior to VAPOR BAN ER 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.

#### Surface Preparation - Concrete

Surfaces to be coated must be thoroughly cleaned and structurally sound. Always check the surface for any bond inhibitors prior to application. 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 mechanical means then swept and vacuumed clean. Use of sweeping compound is not recommended as they may contain chemicals which can act as a bond breaker. Any repairs must be addressed prior to application and should be repaired in accordance with ICRI standards. Do not use over gypsum or asphalt based products.

Concrete slabs must be porous and readily absorb water prior to installation. Refer to ASTM F3191 for concrete water absorption test. If the water absorption test results non-porous/non-absorptive contact LATICRETE Technical Sales Representative.

Concrete must be mechanically profiled to an ICRI CSP-3 to 5. Ensure that all surface laitance is removed prior to coating. The prepared surface should have a tensile pull-off strength of 200 psi (1.4 MPa) or greater when tested in accordance with ASTM C1583. If wet grinding, allow surface to fully dry prior to coating. Surface temperature must be maintained at 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.

### **Surface Preparation - Oil Contaminated Concrete**

Surfaces to be coated must be thoroughly cleaned of gross contaminants, oil and grease that may impede adhesion prior to application. Always check the surface for any bond inhibitors prior to application. Clean the concrete using a citrus based degreasing agent per ICRI Guideline No. 310.2R-2013 Section 8.4. Note that the degreasing process may need to be repeated several times when testing shows heavy contamination a citrus degreaser may not be sufficient. Once the floor is degreased, thoroughly rinse the concrete using a 3000 psi pressure washer. Any repairs must be addressed prior to application and should be repaired in accordance with ICRI standards.

After the degreasing process, concrete must be mechanically profiled to an ICRI CSP-3 to 5. Ensure that all surface laitance is removed prior to coating. The prepared surface should have a tensile pull-off strength of 200 psi (1.4 MPa) or greater when tested in accordance with ASTM C1583. Surface temperature must be maintained at 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 ER. 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.

When using in resinous and decorative coating applications, SPARTACOTE product application over moving cracks and joints is not recommended. Moving joints (e.g. expansion joints, isolation joints, etc.) and dynamic cracks must be honed up through the VAPOR BAN ER coating. LATICRETE is not responsible for vapor emission through untreated joints or for areas

where cracks may develop later.

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 1/8" (3 mm) in width can be filled with VAPOR BAN 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 mixed VAPOR BAN ER and 3 parts clean, kiln dried sand. 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 the crack is higher than the other) have structural implications and cannot be repaired using this method.

### **Tinting with SPARTACOTE Universal Pigments**

If desired, VAPOR BAN ER may be tinted with SPARTACOTE Universal Pigments. Best practice is to mix in gallon increments or full kits. Measure out appropriate amounts of parts A and B, observing 3A:2B vol. mix ratio, prior to adding SPARTACOTE Universal Pigments.

Required loading for SPARTACOTE Universal Pigments is (1) small unit per gallon of mixed resin (A+B) or (1) large unit per 5 gallons of mixed resin. 3 gal kits will require (3) small SPARTACOTE Universal Pigments. White, Safety Yellow, and Safety Red require doubling the loading level.

Mix parts A and B according to instructions below then immediately add full contents of SPARTACOTE Universal Pigment unit(s) at the required loading directly into mix and use a slow speed drill with jiffy paddle to fully disperse the pigments until a uniform color and consistency is achieved, approximately 2 additional minutes. Immediately after mixing apply product to properly prepared substrate.

### **Mixing**

Before using, store resins at room temperature 65-85°F (18-30°C) for 24 hours to ensure ease of mixing. Prior to mixing, stir individual components to disperse any materials that may have settled.

Combine 3 parts A (resin) with 2 part B (hardener) by volume. Mix for 2-3 minutes with a slow speed drill (<300 rpm) with a jiffy blade until a uniform consistency and appearance is achieved. Immediately after mixing apply product to properly prepared substrate.

### **Application**

LATICRETE VAPOR BAN ER may be applied by brush, roller, resin broom and/or notched squeegee.

- When using as a base coat in SPARTACOTE GUARD or METALLIC systems apply at a nominal thickness of

of 16 mils WFT (0.41 mm) or a spread rate of 100 ft<sup>2</sup>/gal (2.5 m<sup>2</sup>/L).

- When using as a broadcast coat in SPARTACOTE CHIP or QUARTZ systems apply at a nominal thickness of 16 mils WFT (0.41 mm) or a spread rate of 100 ft<sup>2</sup>/gal (2.5 m<sup>2</sup>/L)
- When using as a primer for NXT underlayments and decorative overlayments apply at a nominal thickness of 16 mils WFT (0.41 mm) or a spread rate of 100 ft<sup>2</sup>/gal (2.5 m<sup>2</sup>/L).
- When using as a vapor reduction coating for moisture sensitive flooring (vinyl, VCT, carpet, wood, etc.) apply at a nominal thickness of 16 mils WFT (0.41 mm) or a spread rate of 100 ft<sup>2</sup>/gal (2.5 m<sup>2</sup>/L).

Pour ribbons of LATICRETE VAPOR BAN ER onto the prepared concrete and spread to the desired mil thickness as outlined above. Spread evenly over all prepared surfaces and immediately backroll with a high quality 3/8" nap non-shedding roller to ensure full coverage and uniform thickness. Periodically check film thickness with a wet film gauge.

When used in SPARTACOTE resinous coating systems, to aid in inter-coat adhesion, it is recommended to lightly buff and acetone wipe the surface prior to re-coating and anytime re-coat window exceeds 12 hours.

Allow to cure for 3-4 hours at 50-90°F (10-32°C) prior to installation of underlayments, overlayments, finish flooring or recoating. Always consult flooring and adhesive manufacturer's installation instructions, restrictions and confirm compatibility with LATICRETE VAPOR BAN ER. Always test performance and compatibility of floor systems prior to application.

#### **SPARTACOTE Broadcast Applications**

Immediately after applying LATICRETE VAPOR BAN ER and while the material is still wet broadcast media (chips or quartz) with either a mechanical sprayer or by hand in a "rainfall pattern" into the wet resin to refusal or rejection (full coverage). There should be no resin showing or visible "wet" areas. If necessary, broadcast additional material.

Allow to cure for a minimum 3-4 hours at 50-90°F (10-32°C) prior to cleaning surface and applying topcoat or second broadcast.

#### **NXT Traffic Bearing Overlayment Installation**

LATICRETE VAPOR BAN ER must be used with a sand broadcast when applied as a moisture vapor barrier before a NXT Self Leveling Overlay application. Refer to TDS230 (Substrate Preparation and Primer Guide) for surface preparation and installation instructions.

#### **NXT Self-Leveling Underlayment Installation**

When using LATICRETE VAPOR BAN ER as a moisture vapor barrier before a NXT Self-Leveling Underlayment applications, a primer or sand broadcast is required. LATICRETE Prime-N-Bond or Primer Plus (slurry coat) can be installed over LATICRETE VAPOR BAN 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. Refer to TDS230 (Substrate Preparation and Primer Guide) for surface preparation and installation instructions. The maximum time to install finished floor goods over VAPOR BAN ER is 1 day provided that the surface is protected from traffic, dust, debris, water and any other contaminants. If LATICRETE VAPOR BAN ER becomes contaminated, contact LATICRETE Technical Sales Representative.

#### **Tile & Stone Installation**

LATICRETE HYDROBAN® and FRACTURE BAN® SC can be applied over VAPOR BAN ER for use as a crack isolation membrane under tile and stone installations. Do not apply HYDROBAN or FRACTURE BAN SC under self-leveling products (self-leveling underlayments, etc.). In all cases the LATICRETE VAPOR BAN ER surface must be protected from traffic, dust, debris, rain, and any other contaminants. HYDROBAN or FRACTURE BAN can be installed over LATICRETE VAPOR BAN 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 surface should be protected from traffic, dust, debris, water and any other contaminants. If LATICRETE VAPOR BAN ER is left open and becomes contaminated, contact LATICRETE Technical Sales Representative. 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.

#### **Finish Flooring Installation**

In all cases the LATICRETE VAPOR BAN ER surface must be protected from traffic, dust, debris, rain, and any other contaminants. Finish floor goods can be installed over LATICRETE VAPOR BAN 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 surface should be protected from traffic, dust, debris, water and any other contaminants. If LATICRETE VAPOR BAN ER is left open and becomes contaminated, contact LATICRETE Technical Sales Representative. Tile or stone can be installed using LATAPOXY® 300 Adhesive or 254 Platinum. 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. Please always refer to the adhesive/finish floor manufacturer installation instructions or requirements.

#### **Note**

Mock-ups and field test areas are required in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti dusting, abrasion



resistance, chemical resistance, stain resistance, coefficient of friction, etc.) to ensure system performance as specified for the intended use, and to determine approval of the coating system.

Variability in job site conditions (including but not limited to surface preparation, sunlight, humidity, dew point, temperature, etc.) during application of VAPOR BAN ER and SPARTACOTE products may lead to fisheyes, blistering, pinholes, wrinkling, or outgassing of air in the concrete and are not product defects. Multiple coats, shading or evening application may be required.

### Cleaning

Use acetone or xylene to clean tools and equipment.

## 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](http://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

The long term performance, appearance, and life expectancy of wear surface products are critically dependent upon a good routine maintenance program designed specifically for the installed wear surface. SPARTACOTE floor coating systems are nonporous, causing dirt and contaminants to remain on the surface. The use of properly placed walk-off mats, inside and outside, will help increase the life of the floor. Recommend maintenance program consist of frequent and thorough cleaning utilizing a neutral pH cleaner. The

frequency of washing will vary depending on floor usage type, traffic and age. Please Refer to TDS 420 "SPARTACOTE™ Floor Maintenance Guide" available at [www.laticrete.com](http://www.laticrete.com) for more information.

## 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](http://laticrete.com).

## 10. FILING SYSTEM

Additional product information is available on our website at [laticrete.com](http://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)
- DS 65437: Primer Plus
- TDS 230N: NXT Substrate Preparation and Primer Guide
- DS 087.1: SPARTACOTE Epoxy Pigment
- DS 086.7: SPARTACOTE Blended Chip
- DS 097.2: SPARTACOTE Blended Quartz
- TDS 420: SPARTACOTE Floor Maintenance Guide

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