SPARTACOTE™ Moisture Vapor Barrier

1. PRODUCT NAME
SPARTACOTE™ Moisture Vapor Barrier

2. MANUFACTURER
LATICRETE International, Inc.
1 LATICRETE Park North
Bethany, CT 06524-3423 USA

   Telephone: +1.203.393.0010, ext. 1235
   Toll Free: 1.800.243.4788, ext. 1235
   Fax: +1.203.393.1684
   Website: laticrete.com

3. PRODUCT DESCRIPTION
SPARTACOTE Moisture Vapor Barrier 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. SPARTACOTE Moisture Vapor Barrier exceeds ASTM F3010 standard with a perm rating of 0.052 grains/h/ft²/in. Hg (3 ng/h • m² • Pa). SPARTACOTE Moisture Vapor Barrier is oil tolerant and reduces the emission of oils and other chemicals from the substrate.

SPARTACOTE Moisture Vapor Barrier can be pigmented with SPARTACOTE Epoxy Pigment for use as a base coat or broadcast coat with SPARTACOTE® system offerings. SPARTACOTE Epoxy Pigment is available in 8 different colors: Black, White, Light Grey, Medium Grey, Dark Grey, Sand Beige, Dark Beige and Tile Red.

Uses
- Ensures protection of moisture/pH sensitive floor coverings.
- Reduces MVER from ≤25 to below 3 lbs/1000 ft²/24hr (170 µg/(s • m²)).
- Use on concrete up to 100% RH / 14 pH.

Advantages
- Exceeds ASTM F3010 standard
- Can be applied over new concrete in as little as 5 days
- Fast cure – ability to apply resinous coatings and finish floor goods, in as soon as 12 hours
- VOC content (mixed) 75g/L
- UL GREENGUARD Gold Certified
- Low odor
- Easy to use
- Compatible with SPARTACOTE systems, most resinous coatings, and other moisture sensitive flooring.
- Oil Tolerant
- Can be pigmented with SPARTACOTE Epoxy Pigments
- Can be used as a broadcast coat for SPARTACOTE Chip PURE and SPARTACOTE Quartz PURE systems.

Suitable Substrates
- Concrete

Packaging
- Full Unit Kit - Part A: 2.2 Gal (8.3L) packaged in a steel pail
- Full Unit Kit - Part B: 4.3 Gal (16.3L) packaged in a steel pail.
- Mini Unit Kit - Part A: 0.8 Gal (2.8L) packaged in a steel pail.
- Mini Unit Kit - Part B: 1.7 Gal (6.8L) packaged in a steel pail.
- Pigment Base Full Unit Kit - Part A: 2.2 Gal (8.3L) packaged in a steel pail.
- Pigment Base Full Unit Kit - Short Filled Part B: 3.8 Gal (14.3L) packaged in a steel pail to receive 0.5 Gal (1.9L) of SPARTACOTE Epoxy Pigments
- Pigment Base Mini Unit Kit - Part A: 0.8 Gal (3L) packaged in a steel pail.
- Pigment Base Mini Unit Kit - Short Filled Part Part B: 1.4 Gal (5.3L) packaged in a steel pail to receive 0.2 Gal (0.8L) of SPARTACOTE Epoxy Pigment

Approximate Coverage

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Approximate Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 mils (0.3 mm)</td>
<td>133 ft²/gal (3.2 m²/L)</td>
</tr>
<tr>
<td>16 mils (0.4 mm)</td>
<td>100 ft²/gal (2.4 m²/L)</td>
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</tbody>
</table>
### 4. TECHNICAL DATA

#### Physical Properties

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

#### 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 <110°F (43°C) and off the ground in a dry area.

#### Limitations

- Not for use as a waterproofing membrane and is not intended to stop liquid water intrusion through or into the slab.
- Not for use over any other substrates other than concrete slabs cured for a minimum of 5 days at 70°F (21°C)
- LATICRETE is not responsible for moisture vapor emission from any movement joints, existing cracks, new cracks that may develop or voids in the SPARTACOTE Moisture Vapor Barrier in the concrete slab after the system has been installed.
- LATICRETE is not responsible for any aesthetic issues or pinholes that arise from concrete off-gassing.

#### Cautions

- Consult SDS for more safety information
- Part A causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.
- Part B causes skin irritation. Causes serious eye irritation. 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.
- Do not mix in a plastic bucket.
- Do not take internally.
- Keep out of reach of children.
- Wear eye protection, protective gloves and protective clothing when handling Parts A and B.

#### Specifications

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Re-coat Time</td>
<td>12 Hrs</td>
</tr>
<tr>
<td>Maximum Re-coat Time</td>
<td>72 Hrs</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.

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### 5. INSTALLATION

#### Surface Preparation

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 mechanical means then swept and vacuumed clean. 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. 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 show heavy contamination a citrus degreaser may not be sufficient. Once the floor is degreased, thoroughly rinse the concrete slab by mechanical profiling concrete surface to ICRI CSP 3-5, clean and degrease oil contaminated concrete with an independent lab that specializes in this type of testing. Consult with an independent lab that specializes in this type of testing.

#### Testing Concrete Slabs for Contaminants

Concrete slabs should be tested for contaminants using Ion Chromatography and IR Spectroscopy prior to installation. Consult with an independent lab that specializes in this type of testing.

#### Degreasing Oil Contaminated Concrete

For slabs containing moderate amounts of oil, after preparing the slab by mechanical profiling concrete surface to ICRI CSP 3-5, clean the concrete using L&M CITREX 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 3000 psi pressure washer.

#### Joints, Cracks, Surface Depressions and Other Irregularities

All joints and cracks should be evaluated and repaired if necessary prior to installation of SPARTACOTE Moisture Vapor Barrier. 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 valuation and repair of cracks in concrete.

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 honored up through the SPARTACOTE Moisture Vapor Barrier. LATICRETE is not
Moisture testing must be conducted in accordance with finish floor goods and adhesive manufacturers' requirements prior to SPARTACOTE Moisture Vapor Barrier 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 65-85°F (18-30°C) for 24 hours to ensure ease of mixing. Mix Part A and Part B to a ratio of 1:2 by volume (components are packaged into the pails to the specified ratio). Pour the Part A into the larger Part B steel pail. Verify that all of the Part A liquid is drained from the 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.

Mixing For Pigment Base
Add SPARTACOTE Epoxy Pigment to SPARTACOTE Moisture Vapor Barrier Pigment Base Short Filled Part B and mix for 2-3 minutes until the SPARTACOTE Moisture Vapor Barrier and 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 the 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 SPARTACOTE Moisture Vapor Barrier 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.

Application
Pour ribbons of SPARTACOTE Moisture Vapor Barrier onto the prepared concrete and spread using a pump garden type sprayer and allow moisture to absorb just prior to applying SPARTACOTE Moisture Vapor Barrier. Broom out excess water. Concrete should readily absorb water. Do not apply SPARTACOTE Moisture Vapor Barrier if there is standing water on top of the concrete. If water beads or does not absorb within 60 seconds additional surface prep is needed.

Finish Flooring and Self Leveling Underlayments Installation
Floor goods, including resinous coatings, and self-leveling underlayments can be installed over SPARTACOTE Moisture Vapor Barrier 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 self-leveling underlayments over SPARTACOTE Moisture Vapor Barrier is 3 days provided that the surface is protected from traffic, dust, debris, water and any other contaminants. If SPARTACOTE Moisture Vapor Barrier is left open and unprotected longer than 3 days or the surface becomes contaminated, contact a LATICRETE Technical Sales Representative. NXT self-leveling underlayments require the use of NXT LEVELEX™ Primer. Refer to TDS 230N 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.
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:
▪ LATICRETE Product Warranty

8. MAINTENANCE
LATICRETE 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 1 Year Product Warranty
▪ DS 502.0: NXT® Primer
▪ TDS 230N: NXT Substrate Preparation and Primer Guide
▪ DS 087.1: SPARTACOTE Epoxy Pigment
▪ DS 086.3: SPARTACOTE Blended Chip
▪ DS 087.2: SPARTACOTE Blended Quartz