Moisture Vapor Treatment

Description:
When used in conjunction with Terroxy Primer, Terroxy Moisture Vapor Treatment is the ideal treatment for cured concrete that exhibits excessive moisture vapor transmission. Terroxy Moisture Vapor Treatment is a water-based epoxy primer designed specifically for damp or green conventional concrete. Terroxy Moisture Vapor Treatment is compatible with Terroxy Primer, Terroxy Iso-Crack Epoxy Membrane and Terroxy Epoxy Matrix.

Product Benefits:
- Eliminates the negative effects of moisture vapor transmission upon your finished terrazzo & industrial flooring system
- Tolerates Moisture Vapor Transmission (MVT) 80% or greater relative humidity as measured by ASTM F 2170 (determining relative humidity in concrete slabs using in situ probes) & up to 20 lbs. per 1,000 ft$^2$ (9 Kg. per 92.9 m$^2$) per 24 hours as measured by ASTM F 1869 (calcium chloride test).
- Calcium chloride test should not be used unless building is fully climate controlled per ASTM Standards
- Environmentally friendly, zero VOC content
- Low formulation viscosity allows for excellent penetration of concrete substrate
- Effective with green or highly alkaline conventional concrete
- Allows fast-track construction schedules

ASTM E-96 Test Results:
According to ASTM E–96, Standard Test Method for water Vapor Transmission Materials, Terroxy Moisture Vapor Treatment measured the following permanence under the testing conditions.

<table>
<thead>
<tr>
<th>Test Conditions</th>
<th>Test Results</th>
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<tbody>
<tr>
<td>Uncoated concrete over water</td>
<td>2.69 perms</td>
</tr>
<tr>
<td>Uncoated concrete with constant 85% RH</td>
<td>1.33 perms</td>
</tr>
<tr>
<td>Over water, concrete treated with Terroxy Moisture Vapor Treatment</td>
<td>0.26 perms</td>
</tr>
<tr>
<td>and Terroxy Primer</td>
<td></td>
</tr>
<tr>
<td>With constant 85% RH, concrete treated with Terroxy Moisture Vapor</td>
<td>0.21 perms</td>
</tr>
<tr>
<td>Treatment and Terroxy Primer</td>
<td></td>
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</tbody>
</table>

Coverage:
Typical coverage is approximately 425 ft$^2$, (39.48 m$^2$) per blended unit. Coverage will vary depending on surface profile and porosity. When product is applied to light-weight concrete, coverage rates will decrease significantly.

Concrete Substrate Preparation:
1. Concrete slab shall have an efficient moisture/vapor barrier (suggested minimum: 1.5 mils / 0.4mm thickness) directly under the concrete slab.
2. No curing agents should be used.
3. A light steel trowel is needed to provide an acceptable surface with minimum laitance.
4. Allow for lightweight concrete to cure for a minimum of 30 days prior to testing for moisture vapor transmission and strength development. MVT not recommend for green lightweight concrete.
5. If recently poured conventional concrete:
   a. Product applied as soon as bleed water evaporates off of concrete surface
   b. If MVT is not applied within 24 hours of concrete pour, then concrete surface shall be prepared mechanically by shot blasting to achieve a CSP3–CSP5 profile according to ICRI Guideline No. 03732.
   c. All surface contaminants must be removed.

   – OR –
   a. Concrete surface shall be prepared mechanically by shot blasting. Surface preparation results should achieve a CSP3–CSP5 profile according to ICRI Guideline No. 03732.
   b. All surface contaminants must be removed.

For Terroxy Industrial Flooring Systems refer to Industrial Flooring Concrete Surface Preparation (IFCSP).
**Installation Instructions**

**Mixing:**
Terroxy Moisture Vapor Treatment is a three-component product and must be properly mixed and applied in order to perform as specified. Substrate and all materials must be maintained at 60–90°F (15.5-32.2°C) for 24 hours before, during and after installation. Using clean 3–1/2 gallon container provided, pour Part B (Hardener) into clean pail, then mix Part A (Resin) into Part B with a slow speed mixer, thoroughly mix Part A & B for a minimum of 2–3 minutes. This will result in a creamy emulsion. Add one gallon of water slowly while continuously mixing. Let mix for several minutes to ensure homogenous consistency.

**Applications:**
Apply Terroxy Moisture Vapor Treatment at a rate of 425 ft² (39.48 m²) per blended unit. Avoid puddles or standing water visible on the concrete substrate surface. T&M no longer recommends re-wetting the concrete surface prior to application of MVT. The Terroxy Moisture Vapor Treatment can be brushed or rolled onto the concrete. It can also be sprayed or applied with a squeegee. In order for product to perform as specified it is critical to not exceed the recommended coverage rate of 200 ft² (18.6 m²) per gallon. Avoid leaving any puddles of Terroxy Moisture Vapor Treatment. Allow product to cure for a minimum of 8 hours or until the water is clear and dry in appearance and then apply Terroxy Primer, as required, at a rate of 250 ft² (23.2 m²) per gallon. Proceed with normal sequence of terrazzo installation after Terroxy Primer has been applied.

**Cure Time:**
Minimum of 8 hours or until water is clear and dry in appearance then apply Terroxy Primer.

**Additional Considerations:**
Do not use in temperatures below 60°F (15.5°C). Do not use where known hydrostatic pressure conditions exist. Not recommend for use with green lightweight concrete. Allow 30 days of cure prior to RH testing.

Where relative humidity exceeds 95% and/or Moisture Vapor Transmission rates exceed 20 lbs. per 1,000 ft² (9 Kg. per 92.9 m²) per 24 hours, contact the [T&M Technical Department at 708.385.6633](tel:7083856633).

**Technical Service:**
Terrazzo & Marble Supply Companies, distributor of Terroxy Resin Systems, provides services and consultations on material selection, specifications and troubleshooting concerning proper thin-set epoxy terrazzo installation. Contact our [Terrazzo Sales Desk at 800.7.MARBLE](tel:8007MARBLE) or [T&M Technical Department at 708.385.6633](tel:7083856633) for questions or assistance.

**Precautions:**
Refer to cautionary information printed on the product container. For medical emergencies, contact Chemtrec, the Chemical Emergency Transportation Center, at 800.424.9300.

**Warranty:**
Terrazzo & Marble Supply Companies (T&M) warrants for a period of one (1) year that Terroxy Moisture Vapor Treatment will be free of manufacturing defects and will conform to published specification when handled, stored, mixed and applied in accordance with recommendations of T&M. If Terroxy Moisture Vapor Treatment fails to meet this warranty; the liability of T&M will be limited to replacement of any non-conforming Terroxy Moisture Vapor Treatment only if notice of such non-conformity is given to T&M within one (1) year of delivery of materials. T&M may, according to its discretion, refund the price received by T&M in lieu of replacing the Terroxy Moisture Vapor Treatment. No customer, distributor or representative of T&M is authorized to change or modify the published specification of this warranty in any way. No one is authorized to make oral warranties on behalf of T&M. In order to obtain replacement or refund, the customer must provide written notice containing full details of the non-conformity. T&M reserves the right to inspect the non-conforming Terroxy Moisture Vapor Treatment prior to replacement. Except for the expressed warranty stated above, there is no other warranties, expressed or implied, including without limitation, implied warranty of merchantability or fitness for purpose. T&M’s obligation shall not extend beyond the obligations expressly undertaken above and T&M shall have no liability or responsibility to the purchaser or any third party for any loss, cost, expense, damage or liability, whether direct or indirect, or for incidental or consequential damages.