Acoustical Membrane

Description:
Terroxy Acoustical Membrane is a 100% solid, highly-flexible epoxy membrane designed to reduce sound transmission and suppress reflective cracking in terrazzo flooring systems. The unique bonding and elongation properties of this polymer provide extraordinary crack suppression and is recommended for use over interior concrete surfaces prior to the flooring’s installation.

Product Benefits:
• Sound suppression; Insulates noise created by mechanical vibrations
• Integrated single-source system to include Acoustical Membrane, Primer, and Epoxy terrazzo
• Tested for acoustics specifically for terrazzo flooring
• Exclusively developed and tested by T&M
• Single-source warranty
• Crack resistant, provides 140–160% elongation allowing for horizontal substrate movement
• Suppresses reflective and hairline cracking
• Superior bonding performance
• 100% post-consumer rubber adds to recycled content for LEED contribution.
• Excellent shock absorption qualities
• Environmentally friendly. No VOC’s

Concrete Substrate Preparation:
1. Concrete slab shall have an efficient moisture/vapor barrier (suggested minimum: 15 mils thickness) directly under the concrete slab (for concrete slabs on grade only).
2. Test concrete substrate to determine acceptable moisture levels prior to installation. Testing should be conducted according to ASTM F2170 (determining relative humidity in concrete slabs using in situ probes).
3. Concrete shall have a minimum cure time of 28 days. No curing agents should be used.
4. Flatness of concrete sub-floor shall not exceed ¼” in 10 feet (6.4mm in 3m).
5. Concrete shall receive a steel trowel finish.
6. Concrete surface shall be prepared mechanically by shot blasting. Surface preparation results should achieve a CSP3–CSP5 profile according to ICRI Guideline No. 03732.

For complete guidelines refer to Industrial Flooring Concrete Surface Preparation(IFCSP).

Installation Instructions
Mixing:
Product and air temperature must be a minimum of 60°F / 15.5°C for 24 hours prior to, during and after application. Mix 3 gallons (11.34 liters) of Terroxy Acoustical Membrane Part A Resin with 3 gallons (11.34 liters)of Terroxy Acoustical Membrane Part B Hardener. Mix thoroughly. Slowly incorporate approximately 30 pounds (13.64kg) (or approximately 9 gallons (34 liters)) of recycled rubber granules. Continue to mix thoroughly for additional 2-3 minutes.

Application:
Prime substrate with Terroxy Primer. Trowel approximately 1/8” (3.2mm) of Terroxy Acoustical Membrane mixture over prepared substrate. Allow to cure overnight. Set divider strips in accordance with architectural specifications. Divider strips shall be permanently bonded to substrate with 100% solid epoxy resin as suggested by Terroxy Resin Systems. Ready to pour terrazzo. Do not use in temperatures below 60°F / 15.5°C, as cooler temperatures may delay hardening.

Coverage:

<table>
<thead>
<tr>
<th>Membrane Thickness</th>
<th>Approximate Coverage Per Blended 6 Gallon Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8” (3.2 mm)</td>
<td>140-150 ft² / 13-13.9 m² (Coverage will vary depending on surface profile and porosity.)</td>
</tr>
</tbody>
</table>
Installation Diagram:

Technical Data:

<table>
<thead>
<tr>
<th>Property</th>
<th>Method</th>
<th>Typical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life</td>
<td>—</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Viscosity (Mixed)</td>
<td>—</td>
<td>10,000 cps</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D-412</td>
<td>1,200 psi (8.27 MPa)</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D-412</td>
<td>&gt;100%</td>
</tr>
<tr>
<td>Adhesion / Bond Strength</td>
<td>ACI 503R</td>
<td>300 psi (2.07 MPa) - 100% concrete failure</td>
</tr>
<tr>
<td>Hardness</td>
<td>ASTM D-2240, Using Shore A Durometer</td>
<td>50–70</td>
</tr>
<tr>
<td>Impact Resistance</td>
<td>ASTM D-2794</td>
<td>14 ft. lbs. (21.69 N·m)</td>
</tr>
<tr>
<td>STC*</td>
<td>ASTM E-90</td>
<td>62</td>
</tr>
<tr>
<td>IIC*</td>
<td>ASTM E-989 &amp; ASTM E492</td>
<td>59</td>
</tr>
<tr>
<td>Δ IIC*</td>
<td>ASTM E2179</td>
<td>12</td>
</tr>
<tr>
<td>Recycled Content</td>
<td>—</td>
<td>60% by volume</td>
</tr>
</tbody>
</table>

*Testing was done on epoxy terrazzo over Terroxy Acoustical Membrane on 6” (15.24 cm) concrete slabs with insulated gypsum ceiling.

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 or T&M Technical Department at 708.385.6633 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 Acoustical Membrane 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 Acoustical Membrane fails to meet this warranty; the liability of T&M will be limited to replacement of any non-conforming Terroxy Acoustical Membrane 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 Acoustical Membrane. No customer, distributor or representative of T&M is authorized to alter 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 Acoustical Membrane prior to replacement. Except for the expressly stated warranty, 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.

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