Decorative Thin Set

Terroxy Mosaic Decorative Thin Set is a coating system designed to provide a durable and chemical resistant mosaic pattern floor covering. Mosaic vinyl flakes are incorporated in a clear or pigmented epoxy and sealed with a clear, high gloss finish.

Terroxy Quartz Decorative Thin Set provides a durable and protective decorative colored quartz aggregate floor covering. UV and chemical resistant grout and top coats form a protective surfacing system which is aesthetically pleasing, skid resistant, and resistant to wear.

System Benefits:
- Broad Color Pallet
- Aesthetically Pleasing
- Chemical and stain resistant
- Impact and abrasion resistant
- Durable and easy to clean
- Zero V.O.C. System
- Seamless

Typical Applications:
- Interior high traffic areas
- Kitchens, restaurants & cafeterias
- Locker rooms and restrooms
- Clean rooms & laboratories
- Classrooms & auditoriums
- Office buildings
- Hospitals and healthcare facilities

<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
<th>Results - Mosaic Decorative Thin Set</th>
<th>Results - Decorative Thin Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion Resistance</td>
<td>ASTM D-4060 C-517 Wheel 1000 Cycles</td>
<td>35 mg loss</td>
<td>35 mg loss</td>
</tr>
<tr>
<td>Adhesion</td>
<td>ACI 503R</td>
<td>300 psi (100% concrete failure) (2.07 MPa)</td>
<td>300 psi (100% concrete failure) (2.07 MPa)</td>
</tr>
<tr>
<td>Color</td>
<td>-</td>
<td>Custom color blends</td>
<td>Custom color blends</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>ASTM C-579 / ASTM D-695</td>
<td>12,000 psi (82.7 MPa) Minimum</td>
<td>12,000 psi (82.7 MPa) Minimum</td>
</tr>
<tr>
<td>Flammability</td>
<td>ASTM D-635</td>
<td>Self-extinguishing over concrete</td>
<td>Self-extinguishing over concrete</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ASTM C-580</td>
<td>10,000 psi (68.9 MPa)</td>
<td>4,500 psi (31 MPa)</td>
</tr>
<tr>
<td>Hardness</td>
<td>ASTM D-2240, Shore D</td>
<td>70/75</td>
<td>70/75</td>
</tr>
<tr>
<td>Impact Resistance</td>
<td>MIL-D-3134J</td>
<td>Direct: 13.3 ft - lbs, Pass (1.8m - kg)</td>
<td>Withstands 16 ft - lbs (2.2m - kg) without cracking, delamination or chipping</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM C-307</td>
<td>2,200 psi (15.2 MPa)</td>
<td>2,200 psi (17.2 MPa)</td>
</tr>
<tr>
<td>Resistance to Elevated Temperatures</td>
<td>MIL-D-3134J</td>
<td>No Slip of flow at required temperature of 158°F (70°C)</td>
<td>No Slip of flow at required temperature of 158°F (70°C)</td>
</tr>
<tr>
<td>Fungus &amp; Bacterial Resistance</td>
<td>MIL F-5250S 4.4.2.11</td>
<td>Will not support growth of fungus or bacteria</td>
<td>Will not support growth of fungus or bacteria</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>ASTM D-570</td>
<td>&lt; 0.010%</td>
<td>&lt; 0.010%</td>
</tr>
</tbody>
</table>
Installation

Terroxy materials shall only be installed by approved contractors. The following information is to be used as a guideline for the installation of the Decorative Thin Set. Contact the Technical Service Department for assistance prior to application.

Surface Preparation - General

Terroxy systems can be applied to a variety of substrates, if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc. Should there be any questions regarding a specific substrate or condition, please contact the Technical Service Department prior to starting the project.

Concrete Substrate Preparation:

Terroxy Decorative Thin Set can be applied to a variety of substrates given that the surface is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate.

1. Concrete slab shall have an efficient moisture/vapor barrier (suggested minimum: 15 mils / 0.4mm thickness) directly under the concrete slab.
2. Allow substrate to cure a minimum of 28 days.
3. Sub-floor should be level - maximum variation not to exceed 1/4” in 10 ft (6.35 mm in 3 m).
4. The recommended preparation method is shot blasting.
5. Surface to receive Terroxy Decorative Thin Set should have a steel trowel finish.
6. Substrate should not be treated with a curing agent as this may prevent bonding. If curing agent present, surface must be shot blasted.

For complete guidelines refer to Resinous Flooring Concrete Surface Preparation(RFCSP)

Temperature

Throughout the application process, substrate temperature should be above 50ºF (10ºC) and rising. Substrate temperature must be at least 5ºF above the dew point. Applications on concrete substrates should occur while temperature is falling to lessen off-gassing. The material should not be applied in direct sunlight, if possible.

Application Information

<table>
<thead>
<tr>
<th>Material</th>
<th>Mix Ratio</th>
<th>Theoretical Coverage Per Coat</th>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terroxy Primer</td>
<td>2:1</td>
<td>250 ft²/gal</td>
<td>3 gal</td>
</tr>
<tr>
<td>Terroxy Industrial Coating</td>
<td>2:1</td>
<td>50-200 ft²/gal</td>
<td>3 gal</td>
</tr>
<tr>
<td>Terroxy UV Clear</td>
<td>2:1</td>
<td>250 ft²/gal</td>
<td>3 gal</td>
</tr>
</tbody>
</table>

(Optional top coats - Consult individual Technical Data Sheet for mixing and application instructions.
Terroxy Polyaspartic
Essential Polymers T-Rx Coating)

Terroxy Primer

Mixing: Temperature of Terroxy Primer and air temperature must be 50-90ºF (10-32.2ºC). Mix two parts Part A (Resin) and one part Part B (Hardener) for three minutes with a low speed electric drill mixing paddle. Avoid whipping air into the product. If thinning is desired, add no more than one quart (.9 liters) of xylene per gallon (3.8 liters) of primer at the time of mixing. Mix only that amount of material that can be used within its pot life.

Applications: Remove any standing water from concrete surface. Spread Terroxy Primer at a rate of 200-250 ft² per blended gallon (18.6-23.2 m² per blended 3.8 liters). Apply uniformly to the surface while trying to eliminate puddling. Apply with brush roller or squeegee. Wait until primer is tacky (usually 1 hour minimum), before applying the slurry. If primer is not going to be topped within open time, broadcast silica sand into resin lightly but uniformly and allow to cure overnight.

Cure Time: Initial Cure: 6-8 hours; Final Cure: 24 hours

Terroxy Industrial Coating (Mosaic Flakes Only)

Mixing: Temperature of Terroxy Industrial Coating must be 50ºF (10ºC) or above at time of mixing. Stir each component separately before blending. Mix one part, by volume of Part A with one Part B for three minutes with low speed electric drill and a mixing paddle, until uniform. Mix only that quantity that can be used within its pot life.

Applications: Immediately pour the mixed material onto the substrate and pull out using a 1/4” v-notched trowel or 1/4” red rubber squeegee at 50-160 square feet. Allow material to self-level minutes, the surface should be lightly back-rolled with a looped roller to help smooth. Use a spiny roller to aid in the release of air. Begin evenly broadcasting mosaic vinyl flakes into wet resin much the same as grass seed is spread. Mosaic vinyl flakes should be broadcast in such a way that the flakes fall lightly into resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.

Cure Time: Allow to cure for 12 hours, sweep off excess vinyl chips with a stiff bristled broom. Allow to cure overnight (a minimum of 24 hours) at 75ºF (23.8ºC) surface temperature before opening to traffic. Material cures more slowly at lower temperatures.
**Terroxy UV Clear (Quartz Only)**

Different optional aggregates available - Consult technical services for availability, mixing and application instructions.

**First Broadcast Mixing:**
Temperature of Terroxy UV Clear must be 50°F (10°C) or above at time of mixing. Premix Terroxy UV Clear using a low speed drill and mixing paddle. Mix for one minute and until uniform, exercising caution not to introduce air into the material. Add 2 parts Terroxy UV Clear Part A to 1 part UV Clear Part B by volume. Mix with low speed drill and mixing paddle for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.

**Applications:** Immediately pour the mixed material onto the substrate and pull out using a 1/4” v-notched trowel or 1/4” red rubber squeegee. Cross roll with a 3/8” nap roller at a spread rate of 140-145 square feet per gallon. Allow material to self-level, the surface should be lightly back-rolled with a looped roller to help smooth. Use a spiny roller to aid in the release of air. Begin evenly seeding decorative aggregate into the wet resin much the same as grass seed is spread. Aggregate may be spread by hand or mechanical blower but should be done in such a way that the aggregate falls lightly into the resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.

**Cure Time:** Allow to cure overnight (a minimum of 24 hours) at 75°F (23.8°C), sweep off excess granules with a clean, stiff bristled broom. Clean granules can be saved for future use. All imperfections such as high spots should be smoothed before the application of the second broadcast.

**Second Broadcast Mixing:**
Mixing: Premix Terroxy UV Clear using a low speed drill and mixing paddle. Mix for one minute and until uniform, exercising caution not to introduce air into the material. Add 2 parts Terroxy UV Clear Part A to 1 part UV Clear Part B by volume. Mix with low speed drill and mixing paddle for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.

**Applications:** Immediately pour the mixed material onto the substrate and pull out using a 1/4” v-notched trowel or 1/4” red rubber squeegee. Cross roll with a 3/8” nap roller at a spread rate of 120 square feet per gallon. Allow material to self-level, the surface should be lightly back-rolled with a looped roller to help smooth. Use a spiny roller to aid in the release of air. Begin evenly seeding decorative aggregate into the wet resin much the same as grass seed is spread. Aggregate may be spread by hand or mechanical blower but should be done in such a way that the aggregate falls lightly into the resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.

**Cure Time:** Allow to cure overnight (a minimum of 24 hours) at 75°F (23.8°C), sweep off excess granules with a clean, stiff bristled broom. Clean granules can be saved for future use. All imperfections such as high spots should be smoothed before the application of the Grout Coat.

**NOTE:** Aggregate distribution is critical to the success if the application. The decks finished appearance depends on the manner in which the aggregate have been applied. In grass seed like fashion, allow the aggregate to fall after being thrown upward and out. **DO NOT THROW DOWNWARD AT A SHARP ANGLE USING FORCE.**

**Terroxy UV Clear Grout Coat**
**Application:** Apply Terroxy UV Clear using a squeegee or trowel and back roll with a 3/8” nap roller at a spread rate of 115 square feet per gallon to yield 14 mils making sure of uniform coverage. Take care not to puddle materials and insure even coverage.

**Cure Time:** Allow to cure overnight (a minimum of 24 hours) at 75°F (23.8°C) surface temperature before opening to traffic. Material cures more slowly at lower temperatures.

**Terroxy UV Clear Top Coating**
**Application:** Apply Terroxy UV Clear using a squeegee or trowel and back roll with a 3/8” nap roller at a spread rate of 160-200 square feet per gallon to yield 10-8 mils making sure of uniform coverage. Take care not to puddle materials and insure even coverage.

**Cure Time:** Allow to cure overnight (a minimum of 24 hours) at 75°F (23.8°C)surface temperature before opening to traffic. Material cures more slowly at lower temperatures.

**Clean Up**
Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.
Maintenance:
After completing the application of Terroxy Decorative Thin Set, the installer should provide the owner with proper maintenance instructions. If the floors become slippery due to animal fats, oil, grease, soap or other topical residue, promptly remove contaminants and rinse thoroughly.

Terroxy Decorative Thin Set is easily cleaned with neutral pH Balance Cleaners or detergents. Routine hand scrubbing is recommended for all surfaces having a slip resistant texture.

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 warrants for a period of one (1) year that Terroxy Decorative Thin Set will be free of manufacturing defects and will conform to published specification when handled, stored, mixed and applied in accordance to recommendations of Terrazzo & Marble. If Terroxy Decorative Thin Set fails to meet this warranty, the liability of Terrazzo & Marble will be limited to replacement of any non-conforming Terroxy Decorative Thin Set only if notice of such non-conformity is given to Terrazzo & Marble within one (1) year from the delivery of materials. Terrazzo & Marble may, according to its discretion, refund the price received by Terrazzo & Marble in lieu of replacing the Terroxy Decorative Thin Set. No customer, distributor or representative of Terrazzo & Marble 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 Terrazzo & Marble. In order to obtain replacement or refund, the customer must provide written notice containing full details of the non-conformity. Terrazzo & Marble reserves the right to inspect the non-conforming Terroxy Decorative Thin Set 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. Terrazzo & Marble’s obligation shall not extend beyond the obligations expressly undertaken above and Terrazzo & Marble 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.