Industrial Thin Set

Terroxy Thin Set is a thin mil coating system designed to provide a chemical resistant and durable high gloss finish. UV and chemical resistant top coats form a protective flooring system which is both durable and functional.

System Benefits:
- Chemical and stain resistant
- Impact and abrasion resistant
- Durable and easy to clean
- Available in multiple colors
- Zero V.O.C. System (Clear Top Coat)
- Low V.O.C System (Pigmented Top Coat)

Typical Applications:
- Interior industrial areas with heavy traffic
- Kitchens, Restaurants & Cafeterias
- Chemical Processing Plants
- Docks & Ramps
- Locker rooms and restrooms
- Clean rooms & laboratories
- Classrooms & auditoriums
- Maintenance Areas

<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion Resistance</td>
<td>ASTM D-4060 C-517 Wheel 1000 Cycles</td>
<td>30-50 mg loss</td>
</tr>
<tr>
<td>Adhesion</td>
<td>ACI 503R</td>
<td>300 psi (100% concrete failure) (2.07 MPa)</td>
</tr>
<tr>
<td>Color</td>
<td>-</td>
<td>Clear &amp; Standard Colors</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>ASTM C-579</td>
<td>12000 psi (82.7 MPa)</td>
</tr>
<tr>
<td>Flammability</td>
<td>ASTM D-635</td>
<td>Self-extinguishing over concrete</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ASTM C-580</td>
<td>4000 psi (27.6 MPa)</td>
</tr>
<tr>
<td>Hardness</td>
<td>ASTM D-2240, Shore D</td>
<td>70/65</td>
</tr>
<tr>
<td>Impact Resistance</td>
<td>MIL-D-3134J</td>
<td>Withstands 13.3 ft - lbs without cracking, delamination or chipping (1.8 m - kg)</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM C-307</td>
<td>1700 psi (11.7 MPa)</td>
</tr>
<tr>
<td>ASTM D-638</td>
<td>6000 psi (41.4 MPa)</td>
<td></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>
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</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 Industrial 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 Industrial 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 Industrial Thin Set should have a steel trowel finish.
6. Substrate should not been 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 50°F (10°C) and rising. Substrate temperature must be at least 5°F 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>

Different optional top coats - Consult individual Technical Data Sheet for mixing and application instructions.
Terroxy Industrial Coating
Terroxy Polyaspartic
Essential Polymers T-Rx Coating

Terroxy Primer
Mixing: Temperature of Terroxy Primer and air temperature must be 50-90°F (10 - 32.2°C). 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 in 40 minutes.

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
Mixing: Premix Industrial Coating 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 Industrial Coating Part A to 1 part Industrial Coating 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.

Application: Apply Industrial Coating using a squeegee or trowel and back roll with a 3/8” nap roller at a spread rate of 50-160 square feet per gallon (1.3-4.0 meters squared per liter) to yield 10-30 mils (250-750 microns) 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**

**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 Terroxy 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.

**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.

NOTE: Other Top Coats available, please consult Product Data Sheet of desired top coat for mixing and application instructions.

**System’s Broadcast Coat (Skid Resistant Only, usually second to last or final coat)**

**Mixing:** Premix selected coating according to the Product Data Sheet.

**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 120 square feet. 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 dry silica Sand (20-40 mesh or other approved Skid resistant aggregate) into the wet resin much the same as grass seed is spread. Sand may be spread by hand or mechanical blower but should be broadcast in such a way that the sand falls lightly into the resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.

Allow to cure, sweep off excess sand with a clean, stiff bristled broom. Clean sand can be saved for future use. All imperfections such as high spots should be smoothed before the application of the grout coat.

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

NOTE: Industrial Thin Set may be placed into service after the base coat has cured. Topcoats can be applied based upon desired texture and finish

**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 Industrial 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 Industrial Thin Set is easily cleaned with neutral pH Balance Cleaners or detergents. Routine hand scrubbing is recommended for all surfaces having a Skid 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 Industrial 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 Industrial Thin Set fails to meet this warranty, the liability of Terrazzo & Marble will be limited to replacement of any non-conforming Terroxy Industrial 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 Industrial 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 nonconformity. Terrazzo & Marble reserves the right to inspect the non-conforming Terroxy Industrial 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.

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