

## Urethane Concrete Aliphatic Topcoat

### **Description:**

Terroxy Urethane Concrete Aliphatic Topcoat (**UC Aliphatic Topcoat**) is a three-component water-based polyurethane cement for flooring applications that is non-yellowing and UV stable. This system is odorless, and contains no VOC's or HAP's. Properties include excellent chemical resistance against acids, bases, oils, and organic solvents. This product has self-leveling properties and is squeegee or trowel applied and back-rolled for a smooth finish. This product develops a hard, scratch resistant surface and withstands exposure to thermal shock and moisture vapor transmission. Before direct application to concrete substrate, thoroughly prepare surface by grinding or shot-blasting. Terroxy UC Aliphatic Topcoat is available in a variety of colors through the use of liquid color packs.

### **Product Benefits:**

- Excellent chemical and stain resistance
- Non-yellowing/UV stable
- Impact and abrasion resistant
- Durable and easy to clean
- Available in multiple colors
- V.O.C. compliant in all states
- Fast cure time
- Doesn't support bacterial growth
- Thermal shock and cycling resistant
- High heat resistance
- Slip resistant
- Up to 99% RH concrete moisture tolerance

### **Typical Applications:**

- Interior industrial uses with heavy traffic
- Kitchens, Restaurants & Cafeterias
- Docks & Ramps
- Food and beverage processing
- Chemical Processing
- Breweries

### **Coverage:**

Terroxy UC Aliphatic Topcoat can be applied to a variety of substrates (primarily Terroxy Urethane Concrete Systems) given that the surface is properly prepared. Typical coverage is 200-350 ft<sup>2</sup> (18.6-32.5 m<sup>2</sup>) per kit (10 - 20 mils).

### **Installation Instructions**

#### **Mixing:**

Terroxy UC Aliphatic Topcoat is a three-component product (with additional color pack) and must be properly mixed and applied in order to perform as specified.

Add 6 oz. of Urethane Concrete Colorant to UC Aliphatic Topcoat Part A and blend gently until color is uniform. Be sure to scrape all contents of the colorant into the Part A.

\*\*\*Add UC Topcoat Part C (10 lb. bag) to pigmented UC Aliphatic Topcoat Part A and mix with medium agitation for approximately 60 seconds, This will create a paste-like consistency; continue mixing until a smooth consistency has been obtained. Lastly, pour UC Aliphatic Topcoat Part B into the mixing vessel and mix with medium agitation until product is uniform (approximately 30-45 seconds). Material has 6-8 minute pot life at 72°F.

**Mix ratio:**      Color Pack - 1 gal. Part A (with 6 oz. pigment pack), 1 gal. Part B, 10 lbs. Part C (neutral).  
                      Pre-pigmented - 1 gal. Part A (pigmented), 1 gal. Part B, 10 lbs. Part C (neutral)

**Note:** Do not split kits or mix off ratio

**Application:**

Apply UC Aliphatic Topcoat using a flat squeegee or trowel (V-notch/flat) and back roll with a 1/4" nap roller at a spread rate of 200-350 ft<sup>2</sup> (18.6-32.5m<sup>2</sup>) per kit to yield 10-20 mils (254-508 microns) making sure of uniform coverage. Take care not to puddle materials and ensure even coverage.

**Limitation:**

Rapid Cure. Do not mix more material than can be applied in 6-8 minutes. Slab on grade requires vapor/moisture barrier. Do not thin this product. Solvents may prevent proper curing. Substrate temperatures should be 38°F (3.3°C) minimum and rising. For best results, material should be maintained and stored at temperatures between 50 - 80°F (10 - 27°C) prior to and during application. Additionally, for installations between 38°-55°F, use of additional catalyst package is necessary for full cure. Please contact technical support for further information.

Due to various raw materials used in Terroxy Urethane Concrete Systems, the finished color of these systems may appear different from samples seen on Terroxy Resinous color charts. For physical color samples of finished Terroxy Urethane Concrete systems, contact your technical representative.

**Cure Time:**

Allow to cure approximately 7-8 hours at 72°F (22.2°C) surface temperature before opening to traffic. Material cures more slowly at lower temperatures.

**Technical Data:**

Property	Method	Results
Flexural Strength	ASTM-C 580	2,300 psi (14.7 MPa)
Abrasion Resistance	ASTM D-4060 C-S17 Wheel 1000 Cycles	10-20 mg loss
Flammability	ASTM D-635	Self-extinguishing over concrete
Hardness	ASTM D-2240, Shore D	75-80
Tensile Strength	ASTM C-307	1,000 psi minimum (6.9 MPa)
Compressive Strength	ASTM C-579	5000 psi (34.5 MPa)
Adhesion	ACI 503R	350 psi (2.4 MPa) 100% Concrete Failure
Impact Resistance	MIL D-3134F 4.7.3	Withstands 16 ft/lbs without cracking, delaminating or chipping
Thermal Coefficient of Expansion	ASTM C-531	0.89 x 10 <sup>-5</sup> inches per inch/degrees Fahrenheit maximum (1.6 x 10 <sup>-5</sup> mm/°C)
Fungus & Bacterial Resistance	MIL F-52505 4.4.2.11	Will not support growth of fungus or bacteria
Water Absorption	ASTM C-413	0.10%
Chemical Resistance	ASTM D-1308	No deleterious effects when exposed to: Alcohol Ethylene Glycol Fats, Oils & Sugars Gasoline, Diesel & Kerosine Hydrochloric Acid (<35%) Lactic Acid (Milk) Mineral Oils Most Organic Solvents Muriatic Acid Nitric Acid (<10%) Nitric Acid (<30%) Slight Softening PM Acetate Phosphoric Acid (<50%) Potassium Hydroxide (<50%) Sodium Hydroxide (<50%) Sulfuric Acid (<50%) Slight Gloss Loss Water Xylene

## Clean Up

Clean up mixing and application equipment immediately after use. Use acetone or denatured alcohol. Observe all fire and health precautions when handling or storing solvents

## Maintenance:

After completing the application of UC Aliphatic Topcoat, 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 UC Aliphatic Topcoat is easily cleaned with neutral pH 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 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 UC Aliphatic Topcoat 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 UC Aliphatic Topcoat fails to meet this warranty, the liability of Terrazzo & Marble will be limited to replacement of any non-conforming Terroxy UC Aliphatic Topcoat 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 UC Aliphatic Topcoat. 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 UC Aliphatic Topcoat 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.

Distributed By:



464 Northgate Parkway  
Wheeling, IL 60090  
p: 847.947.7300

12632 Monarch St. Unit B  
Garden Grove, CA 92841  
p: 714.901.1400

6100 Seaforth St.  
Baltimore, MD 21224  
p: 410.633.6200



[www.domusterrazzo.com](http://www.domusterrazzo.com)

5789 Steeles Avenue West  
Toronto, ON M9L 2W3  
p. 416.789.5387