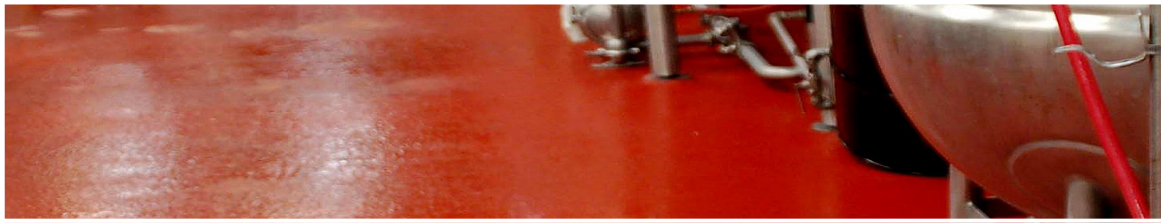
PETRACRETE U- TC

advanced coating systems



POLYURETHANE CONCRETE FLOOR SYSTEM

GENERAL PRODUCT DESCRIPTION

Petra Crete U-TC is a hybrid, three component polyurethane-concrete floor system. Its unique formulation makes it ideal for many harsh environmental conditions. It is especially suited to handle high temperature sanitary wash down and steam where thermal cycling is present. Petra Crete U-TC is a topcoat version of PetraCrete U that is typically used in conjunction with the TC, SL or HF formulations. In addition, the Petra Crete U system has excellant chemical resistance. The TC system is generally applied between 1/16" and 1/8" (60-125 mils). Petra Crete U is USDA accepted for use in federally inspected food facilities .

Advantages:

- Resistant to thermal shock
- -50 to 250 degrees F temperature range
- Ideal for CIP (Cleaning-In-Place) applications
- Handles severe impact conditions
- Anti-slip surface
- Seamless flooring system
- Essentially odorless
- Withstands heavy forklift traffic
- Chemical resistant
- Abrasion resistant

INDUSTRIAL APPLICATIONS

- Beverage Plants
- Dairies
- Food Processing
- Freezers and Cold Storage
- Meat Packing and Poultry
- Fryer Lines
- Chemical and Secondary Containment
- Commercial Kitchens
- Bakeries
- Pharmaceutical

PRODUCT DATA

Volumetric Ratio:	1 to 1
V.O.C.	0
Application Temperature:	65-90°F and 5° above the dew point
Thinning:	Not required
Pot Life:	15 minutes
Time to mix batches:	20 minutes
Cure Time @ 75°F:	4-6 hours (walking)
	12-16 hours (traffic)
Shelf life:	6 months
USDA Food and Beverage:	Meets requirements

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	8,200 psi	ASTM C 579
Flexural Strength	2,375 psi	ASTM C 580
Tensile Strength	920 psi	ASTM D 307
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Coefficient of Thermal Expansion	<- 12.6 X 10	ASTM C 531
Water Absorption	.10% maximum	ASTM D 413
Linear Shrinkage	.20% maximum	ASTM C 531
Impact Resistance	16 ft. lb. - no failure	Mil-D-3134H
Anti-Microbial	Passes	G-21
Coefficient of Friction	Passes	ASTM D 2047
Modulus of Elasticity	1.8 X 10	ASTM D 580
Temperature Rating	230F	

CHEMICAL RESISTANCE

Acetic Acid 30%	R	Hydrochloric Acid 37%	R
Alcohol, Ethyl	NR	Nitric Acid 30%	SS
Alcohol, Isopropyl	SS	Phosphoric Acid	SS
Aluminum Hydroxide	R	Skydrol R	R
Citric Acid	R	Sodium Bisulfate	R
Copper Chloride	R	Sodium Chloride	R
Diesel	R	Sodium Hydroxide 50%	R
Ferric Acid	R	Sulfuric Acid 50%	R

Note: The above guide is based on seven days exposure of the listed chemical at 72 degrees F (22 degrees C)
Key: R = Recommended, SS = Splash and Spill, NR = Not Recommended.
Above chart serves as a guideline only. Samples will be furnished upon request for testing.

PetraCrete U-TC

CONCRETE PREPARATION

Before the coating is applied, the concrete must be:

Clean – Contaminants removed
Profiled – Surface etched
Sound – Cracks repaired

Mechanical methods are preferred for preparing concrete prior to coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should approximate 60-80 grit sandpaper after preparation.

MIXING

Volume mix ratio of Petra Crete U-TC is 1 to 1 to 1 or one part of A, one part of B, and one bag of top-coat C. Mix the following with a drill and jiffler mixer.

1. In an empty five gallon bucket, pour 1 gallon of Part A and 1 gallon of Part B. If pigment is on the side, add 4 oz. of pigment. Mix with jiffler mixer for 30-45 seconds.
2. Add one 12 pound bag of Top Coat Part C and mix with a jiffler mixer another 1-2 minutes or until thoroughly mixed.

APPLICATION PROCESS

Petra Crete U-TC is typically applied as a topcoat over a slurry broadcast, cove base or troweled HF coat.

Apply Petra Crete U-TC (Topcoat mix) at approximately 100-150 SF per gallon (10-16 mils). Using a squeegee on a pole or a trowel pull the topcoat as tight as possible and then quickly backroll one direction and apply a random broadcast of 20-36 grit aluminum oxide for improved wear and slip resistance.

An optional coat of Xtra-Kote TC Epoxy or Petra-Thane RCU is recommended for gloss and stain resistance after Petra Crete U-TC is thoroughly dry (24 hours).

COLOR SELECTION

Petra Crete U-TC is available in the following colors: Charcoal, Dark Gray, Gray, Tile Red, Green, Blue and Tan . Other colors are available at an additional charge.

PACKAGING

Petra Crete U-TC is available in a 2 gallon and 10 gallon kit size:

	Part A	Part B	Part C
2 Gallon kit	1-gal.	1-gal.	1 Bag
10 Gallon Kit	5 gal.	5 gal.	5 Bags

CLEANUP

PetraCrete U-TC while in a liquid state may be cleaned up with water and degreaser. Otherwise a strong solvent may be required while PetraCrete U-TC is setting up.

WARRANTY

Petra Industrial Polymers products are warranted for one year after date of application. Please refer to the Petra Industrial Polymer's Limited Material Warranty for additional clarification.

SAFETY

Consult PetraCrete U-TC material safety data sheet. Avoid PetraCrete U-TC contact with skin.

Information expressed in this data sheet is correct to the best of our knowledge. The technical data sheet does not constitute a warrenty, expressed or implied as to the performance of this product. The use and application of this product is beyond our control. Warrenty and liability therefore is limited to the replacement only for defective materials. Technical information is subjected to change without cause.

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