

PRODUCT BULLETIN

TUFCRETE

HYBRID THREE COMPONENT POLYURETHANE CONCRETE

DESCRIPTION

Tufcrete is a hybrid, three component polyurethane-concrete floor topping. Its design features make it an ideal system for many harsh environmental conditions, especially where thermal cycling is present. It is generally applied at a thickness of 3/8". Its design features provide for the highest industrial demands. Advantages:

- Resistant to thermal shock
- -50°F to 250°F temperature range
- Ideal for CIP applications and steam cleaning
- Handles severe impact conditions
- Seamless flooring system
- Essentially odorless
- Withstands heavy forklift traffic
- Chemical resistant
- Abrasion resistant

APPLICATIONS

- Beverage plants
- Dairies
- Food processing
- Freezers and cold storage
- Meat packing and poultry
- Fryer lines
- Chemical and secondary containment
- Commercial kitchens
- Bakeries
- Pharmaceutical

TYPICAL PROPERTIES

<u>PROPERTY</u>	<u>VALUE</u>	<u>REFERENCE</u>
Compressive Strength	8,200 psi	ASTM C579
Flexural Strength	2,375 psi	ASTM C580
Tensile Strength	920 psi	ASTM C307
Bond to Concrete	350 psi (<i>concrete fails at this point</i>)	ASTM C470
Coefficient of Thermal Expansion	<- 12.6 x 10 ⁻⁶ ->	C-531
Water Absorption	.10% maximum	ASTM D570
Linear Shrinkage	.20% maximum	ASTM C531
Impact Resistance	16 ft./lb. – no failure	Mil-D-3134F
Anti-Microbial	Passes	G-21
Coefficient of Friction	Passes	ASTM D2047
Modules of Elasticity	1.8 x 10 ⁵	
Temperature Rating	230°F	

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PRODUCT DATA

Volumetric Ratio:	1 to 1
Solids:	100% (\pm 1%)
Application Temperature:	65-90°F
Thinning:	Not required
Pot Life:	15 minutes
Time to join one batch to next batch on floor:	20 minutes
Cure Time:	4-6 hours (walking) 12-16 hours (traffic)
USDA Food & Beverage:	Meets requirements

PERSONNEL

Only trained Tufco applicators are authorized to install Tufcrete.

CARE AND MAINTENANCE

Tufcrete is designed to be a maintenance-free flooring compound. The high degree of chemical resistance imparted by the polyurethane binder allows this system to be cleaned with strong acid or caustic cleaners without damage.

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CHEMICAL RESISTANCE

The following chemical resistance listing for Tufcrete is provided to help determine the utility of this product. Substances not found on this list are those not yet tested by Tufco at the time of publication. In the event a substance of interest is not listed, please contact Tufco for further information.

CHEMICAL RESISTANCE OF TUFCRETE

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

NOTE: The above guide is based on seven (7) days exposure of the listed chemical at 72°F (22°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.

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