ChemProof Polymers

PERMATEC 3000 CT

(COLD TEMPERATURE)

DESCRIPTION

PERMATEC 3000 CT is a 100% solids epoxy floor topping designed for cold temperature applications commonly found in food and beverage processing facilities. PERMATEC 3000 CT is designed to withstand attack from moderately concentrated acids, and caustic cleaning agents. Along with outstanding chemical resistance, resistance to mechanical abuses is second to none.

The vertical formulation of PERMATEC 3000 CT is trowel applied at 1/8 inches (125 mils).

FUNCTION

The primary use of PERMATEC 3000 CT is as a high strength floor topping where severe mechanical or chemical exposure is anticipated and where application temperatures between 45 and 65° F are encountered.

FEATURES

PERMATEC 3000CT allows for a fast application where outstanding chemical and wear resistance are required. PERMATEC 3000 CT can be installed over most sound floors including old or new concrete and most types of repair mortars. At varying thicknesses up to 1/4 inches, the PERMATEC CT 3000 system provides long term chemical resistance for splash and spill, or immersion in a wide range of chemicals. (For specific recommendations refer to the “Chemical Resistance Guide" and your local distributor.)

OTHER FEATURES INCLUDE:

- Rapid cure resulting in minimal downtime
- 100% non-porous
- Odor free
- Non-skid safety finish
- Can be applied between 45 and 65° F.
- 100% Solid by volume
- 0 VOC as supplied by manufacturer

TYPICAL PROPERTIES

Solids, by Volume	100 %
Compressive Strength ASTM C579	14,000 psi
Flexural Strength ASTM D790	4,000 psi
Tensile Strength ASTM D307	2,000 psi
Bond Strength to Concrete ASTM D4541	Exceeds tensile strength of concrete. Failure in concrete
Taber Abrasion ASTM D4060 CS 17 Wheels	Loss/1000 cycles =25 mg
Water Absorption ASTM D413	0.10% Maximum

PACKAGING AND COVERAGE

PERMATEC 3000 CT is available in 20 and 100 square foot units based on ¼ inches. 5 gallon units are also available.

CURE TIME

The cure time of PERMATEC 3000 CT and other resinous systems are very dependent upon the temperature of the substrate. The ambient temperature may not be the same as the substrate temperature. For example, during winter concrete may be colder than the surrounding ambient temperature. As temperatures during the day may increase, large masses of concrete will be much slower to react. During summer days direct sunlight will increase the concrete temperature over that of ambient air. The substrate temperature should be monitored and remain at or above 45° F.

Service (hours)	45°F	55°F	65°F
Foot Traffic	12	8	4
Light Chemical	12	10	10
Forklift	24	16	12

**Where heavy chemical abuses are anticipated, longer cure times may be required. Contact ChemProof Polymers or the local distributor for specific recommendations. These times are after the final coat has been applied.*

SURFACE PREPARATION

NEW CONCRETE – The concrete should be well cured for a minimum of 10 (ten) days, per ACI 308-81, (R-1986), clean, dust-free and free of all contaminants. Mechanical methods such as sandblasting, scarifying or shot blasting should be employed to remove the weak layer of surface laitance. A minimum tensile strength of 200 psi is required of the prepared surface. Acid etching with muriatic acid is acceptable but less desirable. Care must be taken to completely remove all residual acid prior to the application of PERMATEC 3000 CT.

EXISTING CONCRETE – Concrete must be structurally sound and free of all contaminants. Weak or contaminated concrete must be removed until sound concrete is realized. Old coatings, toppings, waxes, oils, etc. must be removed prior to the application of PERMATEC 3000 CT.

MIXING

Prior to application, the PERMATEC 3000 CT (Resin, Hardener and Silica) and the substrate should be between 45 and 65° F.

Premix the Part A (Resin) for appx. 30 seconds with a Jiffler type mixer prior to adding the Part B (Hardener). After adding Part B mix for an additional 1 minute before pouring onto the substrate.

APPLICATION METHODS

Basic Broadcast
In order to achieve a 60 mil system, apply a 22 mil (73 sq ft/gal) basecoat and for a 125 mil system, apply a 48 mil (34 sf/gal) basecoat. Within 20 minutes of the basecoat being applied broadcast to excess using a 20/40 mesh silica. Once the basecoat is cured, apply a 10-16 mil topcoat utilizing squeegees and short nap paint rollers.

Basic Broadcast Reinforced
A 1.5 oz chopped or a fiberglass scrim cloth can be added to the basecoat of the 125 mil system prior to the silica broadcast.

Slurry Broadcast
Split the mixed Pt A and Pt B into two 5 gallon buckets or add entire unit into a 3 cf mortar mixer. Slowly mix in a 2:1 by weight ratio of silica to liquid (appx 1-50 lb. bag per 2.5 gallons). Apply to substrate to appx. 1/8 or 3/16 inch and within 15 minutes broadcast silica to excess.

Slurry Broadcast Reinforced
Apply a basecoat of 35 mils and embed the fiberglass of choice. Allow to cure and commence the desired slurry broadcast system.

Note: The above systems have their "vertical rolling or troweling) counterparts.

STORAGE and SHELF LIFE

PERMATEC 3000 CT should be stored at 45-90° F out of direct sunlight. All containers should remain unopened until ready for use. If stored as set out above, PERMATEC 3000 CT has a minimum shelf life of one year.

WHERE PERMATEC 3000 CT SHOULD NOT BE INSTALLED

PERMATEC 3000 CT should not be applied over substrates:

- subject to extreme hydrostatic pressure
- which are unsound
- which are contaminated and cannot be cleaned.
- at temperatures below 45° F (Consult ChemProof Polymers).

SAFETY

Read Safety Data Sheets ("SDS") before using. PERMATEC 3000 CT contains blended Epoxies as the resin and blended Amines as the hardener. Protective clothing and gloves are recommended to prevent sensitization to these materials. In case of ingestion or eye contact, it is advisable to contact a physician immediately. SDS are available for this product upon request.

WARRANTY

ChemProof Polymers, Inc. warrants our products to be free of manufacturing defects in accord with applicable ChemProof quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by ChemProof Polymers, Inc. No other warranty or guarantee of any kind is made by ChemProof Polymers, expressed or implied, statutory, by operation of law or otherwise, including merchantability and fitness for a particular purpose.

The full product warranty is available at www.chemproof.com.

CLEAN-UP

All mixing and application equipment should be cleaned immediately after use. If this is done, soap and water or biodegradable cleaners can be used. If the material has begun to set, more aggressive solvents will be necessary. Before using solvents, refer to their respective SDS for handling considerations.

RELATED & ANCILLARY PRODUCTS

PERMATEC 4000
Epoxy Floor Coating/Topping

PERMATEC 5000
Modified Epoxy Floor Coating/ Topping

PERMAGROUT E
Epoxy Grout/Resurfacer

PERMAFLEX 1100
Flexible Epoxy Underlayment

Related Vertical Products

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