

PERMACOAT

3000 CT and XCT

Cold Temperature Coatings

DESCRIPTION

PERMACOAT 3000 CT and XCT are 100% solids modified epoxy coatings/ lining systems, ideally suited for concrete applications between 32 and 60° F. They are self-leveling systems and can be applied as a broadcast and/or reinforced coating system.

PERMACOAT 3000 CT and XCT are specifically designed for applications that cannot be heated to a warmer temperature. Both systems will withstand attack from a wide range of industrial chemicals and extreme mechanical abuses

The vertical formulation of PERMACOAT 3000 CT and XCT are available upon request.

TYPICAL APPLICATIONS

- Process floors
- Containment basins
- Trenches
- Sumps
- Coolers/Freezers
- Any area in general where harsh chemicals are used in colder environments

FEATURES

PERMACOAT 3000 CT allows for a fast application where outstanding chemical and wear resistance are required down to 45° F and PERMACOAT 3000 XCT can be applied down to 32° F. They both can be installed over most sound floors including old or new concrete and most types of repair mortars. At varying thicknesses, the PERMACOAT 3000 CT and XCT systems provide long term chemical resistance for splash and spill, or immersion in a wide range of chemicals.

OTHER FEATURES INCLUDE:

- Rapid cure resulting in minimal downtime
- 100% non-porous
- Odor free
- Non-skid safety finish
- 100% Solid by volume
- 0 VOC as supplied by manufacturer

TYPICAL PROPERTIES

Solids, by Volume	100 %
Compressive Strength ASTM C579	15,000 psi
Flexural Strength ASTM D790	17,000 psi
Tensile Strength ASTM D307	11,300 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

PERMACOAT 3000 CT and XCT are available in 1 and 3 gallon units. The coverage rate is appx. 64 sq ft at 25 mils with the theoretical coverage being 1604 sq ft at 1 mil.

CURE TIME

The cure time of PERMACOAT 3000 CT and XCT and other resinous systems are very dependent upon the temperature of the substrate and the ambient temperatures. These systems are specifically designed to be applied when the substrate and ambient temperatures are down to freezing. Therefore they

should be stored in the areas they will be applied in order for the material to come down to the application temperature. If PermaTec 3000 CT and XCT are applied in normal warm conditions, virtually no working time will be available.

Service (hours)	32°F	45°F	60°F
Foot Traffic	24	16	8
Light Chemical	48	20	12
Forklift	48	24	16

**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 PERMACOAT 3000 CT and XCT.

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 PERMACOAT 3000 CT and XCT.

MIXING

Prior to application, the PERMACOAT 3000 CT and XCT (Resin, Hardener and Silica) and the substrate should be between 32 and 55° F depending on which product.

Premix the Part A (Resin) for appx. 30 seconds with a Jiffiler 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.

Note: The above systems have their vertical counterparts upon request.

STORAGE and SHELF LIFE

PERMACOAT 3000 CT and XCT should be stored at 50-90 degrees F out of direct sunlight. All containers should remain unopened until ready for use. If stored as set out above, PERMACOAT 3000 CT and XCT have a minimum shelf life of one year.

WHERE PERMACOAT 3000 CT and XCT SHOULD NOT BE INSTALLED

PERMACOAT 4000 should not be applied over substrates:

- subject to extreme hydrostatic pressure
- which are unsound
- which are contaminated and cannot be cleaned.
- at temperatures above 65° F (Consult ChemProof Polymers).

SAFETY

Read Safety Data Sheets (“SDS”) before using. PERMACOAT 4000 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

PERMACOAT 3000
Epoxy Floor Coating/Topping

PERMACOAT 5000
Modified Epoxy Floor Coating/ Topping

PERMAGROUT E
Epoxy Grout/Resurfacer

PERMAFLEX 1100
Flexible Epoxy Underlayment

Related Vertical Products

CONTACT INFORMATION

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