

# PERMACOAT

## 3000 XCT

### DESCRIPTION

PERMACOAT 3000 XCT is a 100% solids epoxy floor coating designed for cold applications between 32 and 45 degrees F. The PERMACOAT 3000 XCT system is applied as a two or three coat (30-90 mils) flooring material incorporating a broadcast of various blends of graded silica between coats.

The system consists of two components, resin and hardener, in both horizontal and vertical formulations. Application of PERMACOAT 3000 XCT is accomplished with rubber squeegees and short nap paint rollers.

### FUNCTION

The PERMACOAT 3000 XCT system is designed as a medium duty (30- 90 mils) floor coating and/or secondary containment system where moderate mechanical abuse and chemical exposures are anticipated. PERMACOAT 3000 XCT can be installed over most sound substrates including old or new concrete, steel and wood. PERMACOAT 3000 XCT provides a cost effective alternative to high build floor toppings.

### FEATURES

PERMACOAT 3000 XCT allows for fast, easy applications at temperatures as low as 32 degrees F. In addition, the system provides chemical resistance and physical performance much higher than those found in paints and many other thin mil coatings.

### OTHER FEATURES INCLUDE:

- Rapid cure, resulting in minimal "downtime"
- Very low odor
- Non-skid safety finish

### TYPICAL PROPERTIES

Solids by Volume	100%
Compressive ASTM C579-82	12,400 psi
Flexural Strength ASTM C580-85	14,000 psi
Tensile Strength ASTM C307-83	9,000 psi
Hardness (Shore D) ASTM D 2240	80-85
Taber Abrasion ASTM C501-80 CS 17 Wheels	Loss/1000 cycles=25 mg

### PACKAGING and COVERAGE

The PERMACOAT 3000 XCT system is packaged in one and three gallon units. Each unit consists of pre measured components, Part A (Resin) and Part B (Hardener).

Application thickness may vary from 30-90 mils, depending on the expected service conditions. Factors to consider are 1) mechanical abuses; and 2) substrate texture.

### CURE TIME

The cure time of PERMACOAT 3000 XCT and other resinous systems is very dependent upon the temperature of the substrate. The chart below represents the approximate times for the respective service conditions, following the last coat:

Service(hours)	32 F	45 F	60 F
Foot Traffic	24	16	6
Light Chemical	48	24	12

### MIXING and APPLICATION

The following is a brief summary of concrete preparation and the application procedure for PERMACOAT 3000 XCT. This information is intended for use in the system evaluation, applicators

should refer to the "PERMACOAT 3000 XCT Applications" bulletin for more detailed application procedures.

## Surface Preparation

**NEW CONCRETE** -The concrete should be well cured for a minimum of 28 (twenty-eight) 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 the PERMACOAT 3000 XCT system. In addition, the substrate must be allowed to dry before application begins.

**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.

## MIXING

Prior to application of the PERMACOAT 3000 XCT system the resin, hardener, silica and substrate should be between 32 degrees F and 45 degrees F.

Premix the Resin (Part A) for 30 seconds using a Jiffler mixer blade attached to a 500-750 RPM drill. Add the Hardener (Part B) only when the batch is ready to be applied. Mix for approx. 90-120 seconds. After mixing pour immediately onto the floor.

## Coating Thickness

40-50 mils	
<u>Step</u>	<u>Coverage</u>
<u>(SF/gal)</u>	
1) First Coat	100
2) Broadcast	
3) Second Coat	100-120
75-85 mils	
<u>Step</u>	<u>Coverage (SF/gal)</u>
1) First Coat	100
2) Broadcast	
3) Second Coat	80-100

- 4) Broadcast
  - 5) Third Coat
- 80-100

## APPLICATION

Use a rubber squeegee to spread the resin over the pre-measured area to be covered. Immediately back roll the PERMA COAT 3000 XCT with a short nap (1/8 inches) wool or mohair roller. After the coating has been back rolled and uniform thickness verified, the surface should be saturated with a silica broadcast.

After the first coat supports foot traffic, the excess silica can be removed and the remaining steps completed.

## CLEAN UP

All mixing and application equipment should be cleaned immediately after use. If this is done, soap and water, or bio-degradable cleaners can be used.

If the material has begun to set, more aggressive solvents will be necessary. Before using solvents, refer to their respective MSDS for handling considerations.

## MAINTENANCE

For systems designed for splash and spill exposures, routine wash downs are recommended to reduce the length of chemical exposure. This step is not necessary where the product is recommended for containment service.

## STORAGE AND SHELF LIFE

PERMACOAT 3000 XCT should be stored at 40-50 degrees F out of direct sunlight. All containers should remain unopened until ready for use. If stored as set out above, this product has a minimum shelf life of one year.

## WHERE PERMACOAT 3000 XCT SHOULD NOT BE INSTALLED

PERMACOAT 3000 XCT should not be applied over substrates:

- which are wet during the application

- subject to hydrostatic pressure
- unsound structures
- contaminated substrates which cannot be cleaned
- at temperatures below 32 degrees F (Consult ChemProof Polymers).

## SAFETY

PERMATEC 3000 XCT 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. MSDS are available for this product upon request.

## WARRANTY

ChemProof Polymers, Inc. warrants that at the time of shipment, its products are free of defects in material and workmanship. 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. ChemProof Polymers, Inc. makes no warranty concerning the suitability of its product for application to any surface, it being understood that the goods have been selected and the application ordered by the Owner/End User or Purchaser. CHEMPROOF POLYMERS, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THE GOODS SHALL BE MERCHANTABLE OR THAT THE GOODS ARE FIT FOR ANY PARTICULAR PURPOSE. THE WARRANTY OF REFUND OR REPLACEMENT SET FORTH HEREIN IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES ARISING BY LAW OR OTHERWISE; AND CHEMPROOF POLYMERS, INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWN TIME, DAMAGES TO PROPERTY OF THE OWNER/END USER, PURCHASER OR OTHER PERSONS, OR DAMAGES FOR WHICH THE OWNER/END USER OR PURCHASER MAY BE LIABLE TO OTHER PERSONS, WHETHER OR NOT OCCASIONED BY CHEMPROOF POLYMERS, INC.'S NEGLIGENCE. This warranty shall not be extended, altered or varied except by written instrument signed by

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