PermaCoat 3000 CT

ChemProof Polymers, Inc. 2750 Charles Page Blvd. Tulsa, OK 74127-8315 918-584-0364/Fax 0366 chemproof.com

DESCRIPTION

PERMACOAT 3000 CT is a 100% solids epoxy floor coating designed for cool weather applications between 45 and 65 degrees F.

The PERMACOAT 3000 CT 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 com-ponents, resin and hardener, in both horizontal and vertical formulations. Application of PERMACOAT 3000 CT is accomplished with rubber squeegees and short nap paint rollers.

FUNCTION

The PERMACOAT 3000 CT 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 CT can be installed over most sound substrates including old or new concrete, steel and wood. PERMACOAT 3000 CT provides a cost effective alternative to high build floor toppings.

FEATURES

PERMACOAT 3000 CT allows for fast, easy applications at tem-peratures as low as 45 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

MIXING and APPLICATION

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

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 CT 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) me- chemical abuses; and 2) substrate texture.

CURE TIME

The cure time of PERMACOAT 3000 CT and other resinous systems are 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)	50 F	60 F	70 F
Foot Traffic	14	10	8
Light Chemical	24	16	12

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

Surface Preparation

NEW CONCRETE - The concrete should be well cured for a minimum of 28 (twentyeight) 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 CT system. In addition, the substrate must be allowed to dry before application begins.

EXISTING CONCRETE - Concrete must be structurally sound and free of all contaminates. 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 CT system the resin, hardener, silica and substrate should be between 45 degrees F and 65 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

Step		Coverage (SF/gal)	
1)	First Coat	100	
2)	Broadcast		
3)	Second Coa	t 100-120	

75-90 mils

	<u>Step</u>	Coverage (SF/gal)
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 CT 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 CT should be stored at 50-70 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 CT SHOULD NOT BE INSTALLED

PERMACOAT 3000 CT should not be applied over substrates:

- which are wet during the application
- subject to extreme hydrostatic pressure
- unsound structures
- contaminated substrates which cannot be cleaned
- at temperatures below 45 degrees F (Consult ChemProof Polymers).

SAFETY

PERMATEC 3000 CT contains blended Epoxies as the resin and blended Amines as the hardener. Protective clothing and gloves are recommended to prevent sensiti-zation 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

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