

# PERMAGROUT E Medium

(Cold Temperature)

## DESCRIPTION

PERMAGROUT E Medium is a 100% solids epoxy floor topping designed for cool temperature applications commonly found in food and beverage processing facilities. The PERMAGROUT E Medium system consists of a two-component resin binder and graded aggregate. It is applied with a trowel or screed rake at 1/8 -1/4 inches (125-250 mils) in a one coat application, including a silica broadcast. There is no need for a primer or sealer coat. An optional glaze coat may be used to improve the appearance and cleanability.

The vertical formulation of PERMAGROUT E Medium is trowel applied at 1/8 inches (125 mils).

## FUNCTION

The primary use of PERMAGROUT E Medium is as a high strength floor topping for industrial service where severe mechanical abuse and/or chemical exposure is anticipated and where application temperatures between 55 deg. F. and 75 deg. F. are encountered. Typical applications include food processing plants, breweries, laboratories, chemical processing plants, waste disposal facilities, pulp and paper mills, refineries, mines, chemical storage areas and other industrial processing areas where chemicals are used.

## FEATURES

PERMAGROUT E Medium is a 100% solids system and allows for a fast application where good chemical and wear resistance are required. PERMAGROUT E Medium can be installed over most sound floors including old or new concrete, steel and most types of repair mortars. At varying thickness up to 1/4 inches, the

PERMAGROUT E Medium system provides long term chemical resistance for splash and spill or immersion in many chemicals. (For specific recommendations refer to the PERMA TEC 3000 "Chemical Resistance Guide").

PERMAGROUT E Medium provides excellent physical protection even in the harshest industrial settings. The physical properties of PERMAGROUT E Medium are many times those of standard concrete.

Other features include:

- Rapid cure, resulting in minimal "downtime"
- 100% non-porous
- Odor free
- Non-skid safety finish
- Can be applied in temperatures between 55 and 75 deg. F.

## TYPICAL PROPERTIES

Solids, by Volume	100 %
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Compressive Strength	
ASTM C579-82	14,000 psi
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Flexural Strength	
ASTM C580-85	4,000 psi
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Tensile Strength	
ASTM C307-83	2,000 psi
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Bond Strength	Failure in
To Concrete	Concrete
ASTM D4541-89	
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Taber Abrasion	25 ms loss/1000
ASTM C501-80	cycles w/1000 gms.
	CS-17 Wheel
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Water Absorption	+0.10%
ASTM C413-93	
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## PACKAGING and COVERAGE

PERMAGROUT E Medium is available in 5-gallon units. Each unit consists of pre-measured components, Part A (Resin) and Part B (Hardener). Graded aggregates are available or may be sourced locally.

Application thickness may vary from 1/8 to 1/4 inches, depending on the expected service conditions. Factors to consider are 1) length of chemical exposure (i.e., immersion vs. splash/spill) and 2) mechanical abuses

(i.e., tow traffic, loaded trucks vs. cart and foot traffic, etc.).

## CURE TIME

The cure time of PERMAGROUT E Medium 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 degrees F.

Service (hours)	55F	65F	75F
Foot Traffic	8	6	4
Light Chemical	12	10	10
Fork Lift	24	16	12
Heavy Chemical	7days	6days	3days

## MIXING and APPLICATION

For mixing and application information, please refer to the PERMAGROUT E Medium Brochure.

## STORAGE and SHELF LIFE

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

## WHERE PERMAGROUT E Medium SHOULD NOT BE INSTALLED

PERMAGROUT E Medium should not be applied over substrates:

- Subject to hydrostatic pressure.
- Unsound structures.
- Contaminated substrates which cannot be cleaned.
- At temperatures below 45 degrees F (Consult ChemProof Polymers).
- Which are wet during application.

## SAFETY

PERMAGROUT E Medium 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 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 ChemProof Polymers, Inc. and Owner/End User or Purchaser.

The full product warranty is available at [www.chemproof.com](http://www.chemproof.com).

## **CONTACT INFORMATION**

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