

# EPOCRETE PC

## Flowable Pile Head Re-profiling Epoxy Grout

### Description:

EPOCRETE PC is a three component epoxy based high strength impermeable grout, formulated to meet the requirements of pile head treatment as a re-profile grout and waterproof layer treatment of the pile head. Once applied on top of the pile, it creates a high bonded waterproof barrier which prevents the underground water to leak from ground to pile caps through the pile head.

EPOCRETE PC is composed of a resin base (part A), hardener (part B) and graded filler (part C). When mixed, the resulted product becomes flowable grout that cures to a high strength impermeable epoxy grout.

### Uses:

EPOCRETE PC is designed to be used as:

- Pile head water proofing treatment system.
- To prevent the chance of underground water to leak to the basement by capillary forces along the reinforcement bars.
- High compressive strength re-profiling grout for pile heads.
- Anchoring bolts in rails, crane and bridge bearing seats.

### Advantages:

- High compressive strength.
- Self-compacting, free flowing grout, easy to apply
- No water penetration which ensures a full waterproofing barrier to the pile head.
- Excellent bond to pile head.
- Excellent performance under dynamic loads.
- High resistance to soil chemical attacks.
- Compatible to most types of waterproofing systems.

### Instructions for Use:

#### Surface Preparation:

The boundary of the pile should be cut at the required level using a concrete saw to provide a neat cut with

no feather edging. The area of the pile head to be repaired may then be broken out up to the prepared level. All reinforcement bars should be straighten, clean from rust. Bars which show signs of corrosion should be grit blasted to bright metal. Immediately after the cleaning of steel bars is completed, coat the bars with LAVAFER or LAVAZINC EP as a protection layer to prevent further corrosion. The substrate should then be clean, free from dust, inconsistent parts, traces from stripping oils, efflorescence, rust, etc.

Construct a leak proof formwork for the pile as EPOCRETE PC is a free flowing grout. Coat the formwork from inside with release agent to ease the de-bonding of the shutter afterward. Extra care should be taken when applying the release agent not to coat the top of pile head.

#### Mixing:

EPOCRETE PC is a three part system. It is recommended to stir the base resin and the hardener separately for two minutes to ensure that they are blended well. Add the contents of container B (hardener) to the contents of container A (base) and mix mechanically with low speed drill mixer fitted with a suitable paddle for 3 minutes. While mixing, add the contents of part C (filler) and mix for 3-5 minutes more until a homogenous lump free mixture is obtained. Allow the mix to rest for few minutes to allow releasing the entrapped air. Partial mixing of the three components should not be allowed under any circumstances.

#### Application:

Place the mixed EPOCRETE PC directly to the pile head. Allow the grout to self-level while watching the formwork integrity for any possible leakage. Level the poured grout with a steel trowel with the upper edge of the formwork. Always prepare a controlled mix quantity suitable to grout a full pile head or equal multiples. It is not recommended to mix partial quantities. This will result in disintegration in the waterproofing characteristics of the epoxy grout layer.

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Remove the formwork after grout cures and check for disintegration in the perimeter of the epoxy grout. Apply touch up with LAVAPOXY FINISH to allow a smooth integrated tight epoxy layer. This layer can be considered as a waterproofing integral part.

## Standards:

EPOCRETE PC conforms to:

- ASTM C579,ASTM C580,ASTM C307

TECHNICAL PROPERTIES	
Appearance	: Grey Paste
Density	: 1.90 Kg./Lt.
Pot life time at 25°C	: 60 minutes
Compressive Strength	: 85.0 N / mm <sup>2</sup> @ 7 days
Flexure Strength	: 21.0 N/ mm <sup>2</sup> @ 7 days
Tensile Strength	: 18.0 N / mm <sup>2</sup> @ 7 days
Water Permeability	: NIL
Chloride Content	: NIL
Sulphate Resistance	: Excellent
Impact strength	: Higher than concrete :
Abrasion Resistance	Higher than concrete :
Bond Strength	Higher than the cohesive strength of concrete

## Coverage:

EPOCRETE PC achieves 15.0 liters of wet mixed grout per 30 Kg. Kit

## Packaging:

EPOCRETE PC available in 30 kg kit of three components (two metallic containers and a bag of filler).

## Storage:

Store in original packing in dry conditions away from direct sunlight and in a temperature controlled warehouse.

## Shelf Life:

EPOCRETE PC can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

## Cleaning:

Clean tools and equipment with SOLVENT before material harden.

## Remarks:

- Do not apply where ambient temperatures are below 5°C.
- Partial mixing of the product components should not be allowed under any conditions.
- EPOCRETE PC can be used for thick section applications.
- Extra care should be taken when applying at high temperature as pot life of the mixed product will shorten dramatically.
- It is recommended to shade the working area while mixing and placing EPOCRETE PC. Tools should be kept in shade prior to use.

## Health and Safety:

- Use goggles and gloves during application. Do not breathe vapor of product.
- Avoid contact with eyes or skin.
- In case of contact with eyes clean with water and seek immediate medical assistance.

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

