

# PIOFLOW EP10

Epoxy resin free flow grout

## DESCRIPTION

**PIOFLOW EP10** is a two component, solvent free, low viscosity epoxy resin, designed to deeply penetrate cracks in concrete, brickwork and masonry using gravity or low pressure injection methods, filling the crack completely to stop the ingress of moisture, chloride or other contaminants, whilst restoring structural integrity due to its superior physical properties.

## USAGES

- Heavy and light train rails, cranes and other transport rails
- Gaps where subjected to a very high strength
- Base Plate grouting and heavy machineries which subjected to continuous vibration
- Heavy industries such as refineries, chemical plants, and steel fabrication plants
- Fill cracks down to 0.2 mm in width

## USAGE INSTRUCTIONS

### 1. Surface preparation

Long term durability and function can only be achieved with good surface preparation to give a strong adhesive & mechanical bond to the substrate.

Concrete surfaces particularly if new, should be fully cured with a maximum residual relative humidity (RH) of 75%, clean and free from contamination such as dust, oil, grease, organic growth, release agents & curing compounds.

If using the gravity method, cracks greater than 1 mm in width & 5 mm in depth should be raked out, then thoroughly cleaned using high pressure compressive air to remove dust & debris.

Cracks are less than 1 mm in width or 5 mm in depth should be sawn using angle grinder at 60° angle into the concrete to create a dovetail effect as a key for **PIOFLOW EP10**.

If low pressure injection equipment to be used, saw cut along the entire line of the crack to a minimum depth of 5 mm, then use high pressure compressed air to remove dust & debris. Fix injection packers along the line of the saw cut, at approximately 100-250 mm centers depending on the width of the crack.

### 2. Priming

Priming is not normally required.

### 3. Mixing

Stir component A & B separately, then pour all contents of the hardener container into the base container, mix using a slow speed power mixer until achieving a homogeneous mix.

## TECHNICAL DATA

### PIOFLOW EP10

### Typical values

Compressive Strength  
@7 days (BS 6319-p2)

90 N/mm<sup>2</sup>

Tensile Strength  
@7 days (BS 6319-p7)

5 N/mm<sup>2</sup>

Gel Time (time to reach  
800 cps)

120 min

Touch Dry @30°C

6 – 8 hours

Full Cure @30°C

7 days

Viscosity, poise @30°C

2.2

Density

1.05 g/cm<sup>3</sup>

## ADVANTAGES

- Resistant to vibration and continuous dynamic loads
- Non-shrink and adherent to surfaces attached with
- Easy to apply and achieves early strength
- Low creep characteristics under sustained loading
- Cost effective
- Provides a waterproof pile head treatment preventing water ingress into pile caps
- Excellent durability, high compressive strength, and tensile strength ensuring a long working life

#### 4. Placement

##### Gravity method

A bead of sealant both sides of the cracks to prevent excess of **PIOFLOW EP10**.

Pour the mixed material into the prepared crack of reservoir and allow a few minutes for material to penetrate

##### Low pressure injection method

Inject the mixed material through the injection packers into the prepared crack starting at the lowest until the material appears at the next packer which is an indication that all crack has been filled, then plus the packer and move the equipment to the end point where material appeared, and continue the same method explained above until all cracks are filled.

PIOFLOW EP10	Coverage
5 liters	50 LM/1mm width/100mm depth

## STORAGE & SHELF LIFE

**PIOFLOW EP10** shall be stored in normal conditions away from direct sun with minimum temperature of 10°C, and any source of moisture. Shelf – life is 12-months.

## PACKAGING

**PIOFLOW EP10** is supplied in 5 liters set, component A & B.

## HEALTH & SAFETY

Before applying **PIOFLOW EP10** all safety protections should be worn during application, such as safety goggles and rubber gloves to avoid any harmful accidents.

If any of **PIOFLOW EP10** parts splashed to skin, it must be washed off by water and soap at once, and if any irritation, seek a medical attention.

### TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
concretedoctor@arkaz.com

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