

CIKOpoxy CF

Solvent free, epoxy resin based Injection crack repair system

Description

CIKOpoxy CF is a solvent free two component epoxy resin based injecting and filling system, recommended for filling and sealing static cracks in concrete and masonry. It provides excellent adhesion to substrates like concrete and act as the monolithic part of the element.

Properties

- Two component epoxy based system.
- Provides excellent adhesion to many substrates.
- Permanent crack filler for static cracks.
- Suitable for structural crack repairs.
- Non-shrink and suitable for hot climates.
- Chemical resistant.

Application area

- For repairing static structural concrete cracks having crack size between 0.1 mm and 10.0 mm.
- Vertical and overhead applications
- High compressive and flexural strengths exceeding that of the concrete structural element.
- Well suited for pressure injection for smaller cracks

Applicable standards

CIKOpoxy CF complies with QCS requirements.

Physical Properties

Criteria	CIKOpoxy CF
Form	2 component system
Colour	Pale yellow
Mixing Ratio	Pre-packed
Solids %	100
Finish	Glossy
Pot Life @ 25 °C	60-90 min
Surface Dry	3-4 hours
Tack-Free	App. 8 hours
Compressive Strength BS 6319	≥85 N/mm ²
Flexural Strength BS 6319	≥40 N/mm ²
Tensile Strength ASTM D638	≥20 N/mm ²

Coverage/Yield

CIKOpoxy CF will provide a yield of 4.0 litres per pack.

Note: Exact coverage depends on the length, width and depth of the crack.

Application instructions

Surface preparation

The cracks must be cleaned to remove contamination, paint, loosely held materials, algae etc. Oil or grease traces if present must be removed by steam cleaning or by using proper detergents. The surface can be cleaned using high pressure water jetting or sand blasting. Finally blow the cracks using compressed air and allow drying.

Mixing

The base [Part-A] and hardener [Part-B] components of CIKOpoxy CF should be mixed thoroughly using a heavy

duty slow speed drill-paddle assembly for three minutes to five minutes and ensure a homogenous mix.

Horizontal Cracks

Application method

After doing the necessary surface preparation sealing the exposed cracks and fixing the nipples using CIKOpoxy Putty as per its respective technical data sheet, inject the mixed CIKOpoxy CF into the cracks through surface nipples using a suitable injection equipment or syringe. The injection points must be equidistant and should not be more than 20 centimetres apart. The cracks must be filled from the top surface of the joint and allow to percolate for some time. The injection procedure must be carried out to fill the crack till the end of material percolation and allow drying for a period of 24 hours.

Surface finishing

Cut open the filled cracks in "V" shape to a depth of maximum 10mm and clean the area to be free from dust and loose particles. Fill the cut opened crack surface using CIKOpoxy Putty leveled to the concrete surface.

Vertical and Overhead cracks

Sealing cracks with packers

Identify the nipple positions (number of nipples depends on width of the cracks and size of the structural element). Fix nipples using CIKOpoxy putty and simultaneously fill the cracks (surface only) all along the length. Allow the material to dry at least 12 hours before proceeding with injection.

Application method

Having made the necessary arrangements, the mixed CIKOpoxy CF must be injected into the cracks through nipple using suitable injection equipment. When the excess material starts flowing out from adjacent nipples, immediately block the nipple and shift injection point to the next nipple. Complete the injection procedure in one operation and allow for 24 hours drying. Remove packer and repair the holes using CIKOpoxy putty.

Packaging

CIKOpoxy CF is available in 4.0 litre kits consisting of Part-A & B.

Shelf Life

CIKOpoxy CF has a shelf life of 12 months if stored in accordance with CIKO instructions.

Storage

CIKOpoxy CF should be stored under cool enclosed shaded at temperatures between 10 and 35°C

Precautions

- CIKOpoxy CF should not be applied at temperatures below 10 °C.
- Assure that the cracks to be injected are static and dry.

Health & safety

CIKOpoxy CF should not come in contact with eyes or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Applicator should wear appropriate clothes, gloves and goggles. Use of barrier cream is recommended to provide additional skin protection. If comes in contact with eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Adhesives and bonding agent
- Concrete repair materials
- Protective coating
- Joint Sealants
- Moulding compounds

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Note: The information presented herein based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control

