

Epo Inject Kit STD is Epoxy Low Viscosity Resin

Reinforced Concrete Crack, Sealing Off the Void Gap Using Injection & Packer Port with Injecting by Electric High Pressure Pump

Product

LaMaCo-Epo Inject Kit STD

Description

LaMaCo- Epo Inject Kit STD, is a 2 component, solvent-free, low viscosity injection-liquid, based on high Tensile & Compressive Strength epoxy resins. It is free flowing & fast curing and after mixing, **Epo Inject Kit STD** can be injected into cavities and cracks in concrete under dry, damp or wet conditions (no standing water). Cured **Epo Inject Kit STD** possesses high mechanical strength, excellent adhesion, non-shrinking properties and a chemical resistance typical of all epoxy resins grout. Cracks as small as 0.2mm in width has been successfully sealed with **Epo Inject Kit STD** and although it has very high strength.

Injecting at Reinforced Concrete Structure Cracks Lines, Honey Comb, and Sealing Gap for Increase of Loading Bearing.

Advantage for goods resistance, goods flow mechanical properties, goods penetration into concrete stability & excellent bonding to structures.

Performance Properties

Please refer to specification data sheet

Equipment/Tools

Electric Drill Mixer, Packer Port [Injection Methods] for Insert into Structure, Injection Pump, Concrete Cutter, Air Compressor and MISC tools.

Preliminary Works

Mark out the defective work to be repaired
Measure the repair work to be carried in Linear Meter
Estimate the required quantity of material for the repair

Consumption for Injected by Special Equipment System:

LaMaCo-Epo Inject Kit STD

- a) 1 mm width Crack = 100mm Thick Concrete/Linear Meter required
(= 0.75 to 1.50 kg of Epo Inject Kit)
- b) 2 mm width Crack = 100mm Thick Concrete/Linear Meter required
(= 1.50 to 3.00 kg of Epo Inject Kit)
- c) 1 mm width Crack = 125mm Thick Concrete/Linear Meter required
(= 1.00 to 2.00 kg of Epo Inject Kit)
- d) 2 mm width Crack = 125mm Thick Concrete/Linear Meter required
(= 2.00 to 4.00 kg of Epo Inject Kit)

Procedures to Solve Crack Lines for Reinforced Concrete Structure

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Application Method on Horizontal or Bottom or Vertical Column, Slab, Beam & Other Structures

Surface Preparation

For sealing cracks at reinforced concrete slab or beam or column to increase loading bearing with injected of "LaMaCo- Epo Inject Kit STD" Epoxy Chemical Resin Grout, the following steps are generally followed:

1 Cleaning/Sealing Crack Surfaces

Diamond cut existing crack surfaces. After cutting the defective concrete, remove dust and loose particles by the most appropriate method (water jet, wire brush, air-compressor etc.)

When R. C. crack lines are contaminated at the outside, it will be necessary to clean the crack surface, so as the crack can be exactly located. If it's a wide crack or high water flow is encountered, it will be necessary to seal the surface of the crack with a surface sealing material (example: epoxy grout, epoxy putty, cement grout or hydraulic cement). The surface sealing can be done before or after drilling the injection holes (depending on a particular situation).

2 Drilling the Injection Holes

There are different diameters, depth and angles of injection holes. The standard is a 16mm diameter hole. The angle of drilling is 25 ° to 45 °C to the surface and the holes will be half (1/2) the thickness of the concrete.

Spacing of the injection ports depends on the width of the reinforced concrete and cracks, but normally varies between 100 to 300 mm. Injection holes should always be staggered from one side of the crack to the other (if possible).

3 Installation and Insertion of Injection Drill Packers

Place the drill packer in the drilled 16mm diameter so that the top of the sleeve is just below the reinforced concrete surface. Tighten by using a ratchet and socket or an open-end wrench by turning clockwise as tightly as possible. The drill packer or injection port are supplied with a one-way ball check valve.

4 Flush Crack

Sometimes it's necessary to flush the crack with water to remove debris and drill-dust out of the crack. Flushing will tell you how the crack will behave during grout injection. If the same pump is used for flushing and grout, make sure that the water is completely removed from the pump before pumping the **Epoxy Inject Kit STD** grout.

5 Injection of "LaMaCo- Epo Inject Kit STD" Epoxy Resin Grout

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Depending on the nature of the crack, different epoxy resin grout can be injected. Don't forget to clean the pump with a washing agent before resin grouting is started.

Begin the injection at the lowest drill packer on a vertical crack or at the first packer which has been flushed for a horizontal crack.

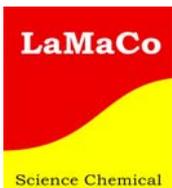
During injection, you will notice that water is displaced from the crack by the **Epo Inject Kit STD** grout.

Keep injecting until the **Epo Inject Kit STD** grout appears at the adjacent packer.

Disconnect and start injection at the adjacent packer. After injecting a few packers, return to the first packer and inject all the ports for the second time. Some of the ports will take some grout which will fill up the crack.

Injection pressure will vary from 1,000 to 3,000 psi depending on the width of the crack, thickness of the reinforced concrete and condition of the structure.

After injection, the drill packers or injection ports can only be removed after 24 hours. Don't forget to let the **Epo Inject Kit STD** grout to be totally cured before removing the drill packers.



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