

REPCON IR

LOW VISCOSITY EPOXY SYSTEM FOR CRACK INJECTION

REPCON IR is a 100% reactive, two component material designed as a moisture insensitive adhesive for numerous injection and sealing needs. This high modulus material is formulated at a very low viscosity for deep penetration into fine cracks.

PRIMARY APPLICATIONS

- Permanent bonding of structural damage
- Parking structures
- Bridge structures
- Marine structures
- Retaining walls
- Vertical and overhead applications

FEATURES / BENEFITS

- Excellent adhesive for pressure injection of fine cracks.
- Moisture insensitive for bond to dry or damp surfaces.
- Provides a tough, weather resistant seal for porous concrete.
- Penetrates deep into concrete cracks and fissures.
- Formulated in a 2 to 1 mixing ratio for use with most injection equipment.
- The bond strength is more than the tensile strength of good grade concrete.

PACKAGING

REPCON IR is packaged in 1 gal (3.8 liter) kits.

TECHNICAL INFORMATION

Typical Engineering Data

Tensile Strength

ASTM D638-97 57.1 MPa

Tensile elongation at break

ASTM D638-97 3.2%

Shear strength

ASTM D 882-91 21.9 MPa

Tensile modulus

ASTM D638-97 2635 MPa

Shore D hardness

ASTM D2240 85

Flexural strength

ASTM D790-97 72.9 MPa

Viscosity 220 cps at 75°F (24°C)

Gel Time

1 gal (3.8 liter) unit 26 min

Mix Ratio, Part A to Part B: 2 to 1 by volume

Compressive Strength - ASTM D695-96

1 day 102.0 MPa

3 days 110.2 MPa

7 days 119.0 MPa

14 days 127.5 MPa

DIRECTIONS FOR USE

Crack Injection - REPCON IR can be gravity fed or pressure injected into horizontal cracks. Vertical and overhead cracks must be pressure injected. Insert one way polyethylene valves or ports into hole drilled at an angle to intersect the crack. Areas around the entry port and the crack between ports should be sealed with **EPOMORT 1000 Gel**. Inject the neat material with an epoxy injection machine or other mechanical means. Make sure that two component injection equipment is properly set for a 2 to 1 mixing ratio (Part A to Part B) by volume.

Mixing - All materials should be in the proper temperature range of 16°C to 32°C. When not using a two component pump, mix parts A and B (resin & hardener) for 2 minutes using a drill and mixing prop. For ease of mixing, add the part B to the part A (not the reverse). The epoxy must be well mixed to ensure proper chemical reaction.

Crack Healing - After mixing, pour or squeegee epoxy into cracks and allow to seep in. Continue to apply material until crack is full.

CLEAN-UP

Clean tools and equipment with solvent such as **CEMTEC SOLVENT**, xylene, xylol, toluene or MEK. Do not allow the resin to harden in the equipment.

PRECAUTIONS / LIMITATIONS

- Epoxy components may cause irritation; avoid contact with skin and eyes.
- Always wear protective clothing (rubber gloves, eye protection, etc.) when using product.
- Always use goggles when injecting at pressure.
- Solvent used for clean-up are flammable. Keep away from heat, sparks, open flame or lighted cigarettes.

“High Quality Construction Chemicals”

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QUALITY STATEMENT

CMCI manufacture its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with Quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products. CMCI also offers full technical field support to consultants, Architects, Contractors, applicators and End Users

The Technical Specification information and recommendation given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product. CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.