

## Crack-Pac® Injection Epoxy

The Crack-Pac® injection epoxy is designed to repair cracks in concrete walls, floors, slabs, columns and beams. The mixed adhesive has the viscosity of a light oil and a low surface tension, allowing it to penetrate fine to medium-width cracks in dry, damp or wet conditions with excellent results. Resin is contained in the cartridge and hardener is contained in the nozzle.

### Features

- Dispenses with a standard size caulking tool, no special dispensing tool needed
- Clean and easy to mix
- Seals out moisture, protecting rebar in the concrete from corrosion and flooring from moisture damage
- Chemically bonds with the concrete to restore strength
- Non-shrink material resistant to oils, salts and mild chemicals
- Repairs fine to medium cracks 0.4–6.4 mm in width

### Applications

- Suitable for repairing non-moving cracks in concrete walls, floors, slabs, columns and beams.
- Can be used to inject cracks in dry, damp or wet conditions with excellent results. Not for use in actively leaking cracks. (See *Definitions on page 95*)
- In order for components to mix properly, the resin and hardener must be conditioned to 15–26°C before mixing.
- **Pressure injection applications require crack repair accessories (E-Z-Click™ Injection System and Paste-over Material). Refer to page 100 for further information or use Crack-Pac® Injection Kit (ETIPAC10KT).**

### Base Material

- Cracked Concrete

### Approvals

- Meets the requirements of ASTM C881, Type I, Grade 1, Class C

### Installation

Refer to pages 101–105 for installation procedures.

Refer to page 102 for cartridge usage estimation guide.

### Shelf Life

24 months from date of manufacture in unopened cartridge.

### Storage Conditions

For best results, store between 7–35°C.

### Colour

Resin — blue, hardener — clear, mixed: light amber. The colour of epoxy will change from amber to blue during the cure process and then fade back to light amber within a few weeks of installation.



**ETIPAC10** (266 ml)

Dispensing Systems: U.S. Patents 6,737,000 and 6,896,001 B2



Suitable for gravity-feed, pressure injection, and overhead applications.

### Clean Up

Wipe up with cotton cloths. If desired scrub area with abrasive, waterbased cleaner and flush with water. If approved, solvents such as ketones (MEK, acetone, etc.), lacquer thinner, or adhesive remover can be used. **DO NOT USE SOLVENTS TO CLEAN ADHESIVE FROM SKIN.** Take appropriate precautions when handling flammable solvents. Solvents may damage surfaces to which they are applied. Cured material — Chip or grind off surface.

### Chemical Resistance

Very good to excellent against distilled water, inorganic acids and alkalis. Fair to good against organic acids and alkalis, and many organic solvents. Poor against ketones.

## Material Properties

Property	Test Method	ETIPAC10 Results*
Viscosity	ASTM D2556	1,400 cps
Bond strength (moist cure)	2 days	13.86 MPa
	14 days	26.41 MPa
Tensile strength (7 days)	ASTM D638	40.40 MPa
Tensile elongation at break		14.1%
Compressive yield strength (7 days)	ASTM D695	77.70 MPa
Compressive modulus		2,196.67 MPa
Flexural Strength	ASTM D790	55.30 MPa
Water absorption (24 hours)	ASTM D570	0.082%
Linear coefficient of shrinkage	ASTM D2566	0.002
Gel time	ASTM C881	16 min — 60 g mass
Volatile Organic Compounds (VOC)	EPA Method 24 ASTM D2369	7 g/L
Initial cure (22°C)	—	24 hours
Mixing Ratio by Volume (Part A:Part B)	—	8:1

\*Material and curing conditions: 73 ± 2°F, unless otherwise noted.

## Additional Components

Condition	Paste-Over Material	Injection Ports
Dry Crack	ETR16, CIPLO22	EIP-EZA,
Wet Crack		EIPX-EZ- RP20 (Drill-In)

Please see page 100 for further information on crack repair accessories (E-Z-Click™ Injection System and Paste-over Material)

## Definitions




**Dry Crack:** A crack containing no moisture.

**Wet Crack:** A crack containing moisture (damp or containing standing water). The surface can be dried and will remain dry during the paste-over operation.

**Seeping Crack:** A wet crack that slowly oozes water. After being dried, the surface slowly becomes wet again.

**Mildly Leaking Crack:** A crack with a slow trickle of water emitting from its face.

## Cartridge Size and Accessories

Cartridge	Size	Box Qty	Ctn Qty	Model No.
	266 ml	1	12	<b>ETIPAC10</b>
	532 ml	1	2	<b>ETIPAC10KT</b>
Dispensing Tools	Description	Model No.		
	High-quality, standard size caulking tool	<b>DT300</b>		

1. Use only appropriate Simpson Strong-Tie® mixing nozzles in accordance with Simpson Strong-Tie instructions. Modification or improper use of mixing nozzle may impair epoxy performance.

Please see pages 99–100 for further information on crack repair accessories (Dispensers, E-Z-Click™ Injection System and Paste-over Material)



Crack-Pac® injection epoxy is also available in the Crack-Pac Injection Kit (**ETIPAC10KT**). The kit includes everything needed to pressure inject approximately 2.4 linear metres of cracks (assumes a concrete thickness of 100 mm and 1.5 mm crack width).

- 2 Crack-Pac cartridge/nozzle sets
- 12 E-Z-Click™ injection ports
- 2 E-Z-Click™ injection fittings with 300 mm tubing
- 473 ml of ETR paste-over epoxy (236 ml of resin + 236 ml of hardener)
- 4 disposable wood paste-over applicators
- 1 pair latex gloves
- Installation video