CRACK-PAC® Injection Epoxy

SIMPSON Strong-Tie

The Crack-Pac® two-part, high solids, low-viscosity crack injection epoxy is designed to repair cracks in concrete. The mixed adhesive has the viscosity of a light oil and a low surface tension that enables it to penetrate fine to medium width cracks. Resin is contained in the cartridge and hardener is contained in the nozzle. Once the nozzle is threaded onto the cartridge, the hardener is released into the resin-filled cartridge by turning the knob at the base of the nozzle. The two components are mixed by shaking the cartridge.

FEATURES:

- . Dispenses with a standard caulking tool, no dedicated dispensing tool needed
- · Low viscosity
- . Clean and easy mixing; no additional tools required
- . Chemically bonds with the concrete to restore strength
- · Resistant to oils, salts and mild chemicals
- · Non-shrink
- . Conforms to of ASTM C-881 Type I & II, Grade 1, Classes B & C

APPLICATION: Suitable for repair of cracks ranging from V_{64} " to V_4 " wide 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. Apply to concrete 40°F or above.

SHELF LIFE: 24 months from date of manufacture, unopened

USAGE TEMPERATURE: In order for components to mix properly, the resin and hardener must be conditioned to 60°-80°F before mixing.

STORAGE CONDITIONS: For best results, store between 45°F - 95°F

COLOR: Resin - blue, hardener - clear, mixed: light amber. The color 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.

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.), laquer 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.

PROPERTY	TEST METHOD	RESULTS
Viscosity (mixed, 72°F)	ASTM D 2393	1,400 cps
Bond strength (moist cure)	ASTM C 882	2,010 psi (2 days) 3,830 psi (14 days)
Water absorption	ASTM D 570	0.082% (24 hrs)
Tensile strength	ASTM D 638	5,860 psi (7 days)
Elongation at ultimate	ASTM D 638	14.1%
Compressive yield strength	ASTM D 695	11,270 psi (7 days)
Compressive modulus	ASTM D 695	318,600 psi
Linear coefficient of shrinkage	ASTM D 2566	0.002
Gel time (72°F)	ASTM C 881	2 hours - 60 g mass
Initial cure (72°F)		24 hours
Mixing ratio		8:1

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.

Crack-Pac® Cartridge System

Model No.	Capacity ounces (cubic inches)	Cartridge Type	Carton Quantity	Dispensing Tool(s)	
ETIPAC10	9 (16.2)	single	12	CDT10S or standard	
ETIPAC10KT	18 (32.4)	single	2 (kits)	caulking tool	



Crack-Pac® Injection Epoxy (ETIPAC10) Dispensing Systems: U.S. Patents 6,737,000 and 6,896,001 B2



Crack-Pac® Kit (ETIPAC10KT)



Crack-Pac® Kit Components

Crack-Pac® injection epoxy is also available in the Crack-Pac Injection Kit. The kit includes everything needed to pressure inject approximately 8 lineal feet of cracks:

- · 2 Crack-Pac cartridge/nozzle sets
- 12 E-Z-Click™ injection ports
- 2 E-Z-Click™ injection fittings with 12" tubing
- 1 pint of paste-over epoxy (8 oz. of resin + 8 oz. of hardener)
- · 4 disposable wood paste-over applicators
- · 1 pair latex gloves
- Installation video



Crack-Pac® injection epoxy using the E-Z-Click Port System

CRACK-PAC® Injection Epoxy





Wear gloves when handling the Crack-Pac® cartridge once the resin and hardener are mixed, as material may become hot. Eye protection is recommended.

CARTRIDGE PREPARATION AND MIXING INSTRUCTIONS:

Usage tip: After the product is mixed, a small volume of air will remain in the cartridge. Keeping this cushion of air at the back of the cartridge during dispensing will allow the dispensing of the final bit of epoxy from the nozzle once the cartridge is empty.



1. Remove the red cap from the top of the cartridge.



Screw the threaded portion of the nozzle into the cartridge.



3. Turn the black valve so that the #1 on the valve aligns with the arrow on the neck of the nozzle.



4. Twist off the tip of the nozzle and allow the material contained within to drain into the cartridge.

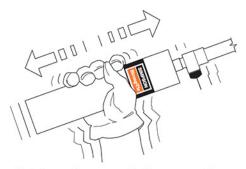


Turn the black valve to the #2 position.

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6. Attach the clear cap securely to the end of the nozzle.



7. Shake the cartridge at a rate of 2 shakes per second for 2 minutes or until the mixed material is a uniform color.



8. Insert the cartridge into the caulking tool.



9. Turn the black valve to the #3 position and remove the black cap from the end of the nozzle. If performing gravity feed, the material is ready to dispense. If performing pressure injection, attach the E-Z-Click™ injection fitting to the end of the nozzle.



Warning: Do not mix product until ready to use within 30 minutes. A full cartridge of mixed epoxy will harden in 65-75 minutes and will reach a peak temperature of 350°F (177°C) within two hours. To prevent pressure build up possibly resulting in cartridge breach and injury, remove cartridge from the caulking tool when not dispensing. Use caution handling or disposing of cartridge until cool.