ETI *Injection Epoxy*

ETI injection epoxies are specially designed formulations for the injection of cracks in concrete. ETI epoxies are two-component, 1:1 ratio, high solids formulations. They are available in 22 ounce side-by-side cartridges and are dispensed through a static mixing nozzle using a manual, battery or pneumatic dispensing tool. ETI is available in two viscosities: ETI-LV (low viscosity) and ETI-GV (gel viscosity) to handle a wide range of crack widths. Properly installed, they provide a repair that is both waterproof and high strength (structural).

FEATURES:

- Chemically bonds with the concrete to provide a structural repair (meets the requirements of ASTM C-881 as a structural repair epoxy)
- Seals the crack from moisture, protecting rebar in the concrete from corrosion and flooring from moisture damage
- Both viscosities formulated for maximum penetration under pressure
- Side-by-side cartridge dispensing provides reliable mixing and ratio control when used with the New Simpson Strong-Tie® Opti-Mix® static mixing nozzle
- Eliminates the need for expensive bulk dispensing equipment. Either formulation can be dispensed using a manual or pneumatic dispensing tool (ETI-LV requires the use of the Opti-Mix® nozzle, model EMNO22, which is included with the cartridge)
- Black and white components allow easier verification of mixing than systems utilizing same color components. The mixed epoxy is gray for a better color match with the concrete for exposed conditions
- Suitable for pressure injection or gravity-feed applications.
- Non-shrink material resistant to oils, salts and mild chemicals

ETI-LV Low Viscosity Injection Epoxy

- Low viscosity epoxy (1790 cps) for repair of fine to medium width cracks 1/64" - 1/4" in width
- Low surface tension allows the material to effectively penetrate narrow cracks
- Suitable for structural repairs

ETI-GV Gel Viscosity Injection Epoxy

- Gel viscosity epoxy for repair of medium cracks 3/32" - 1/4" in width.
- Decreases in viscosity under pressure for increased flowability.
- Suitable for structural repairs.

APPLICATION: Epoxy-Tie® injection epoxies are suitable for repairing non-moving cracks in concrete walls, floors, slabs, columns and beams. They can be used to inject cracks in damp or wet conditions with excellent results. Apply to concrete 40°F or above. For best results, warm material to 60°F or above prior to application.

SHELF LIFE: 2 years in unopened cartridge

STORAGE CONDITIONS: For best results, store between 45°-90°F

COLOR: Resin- white, hardener- black. When properly mixed the adhesive will be a uniform gray color.

CLEAN UP: Removal of cured adhesive – Chip or grind off surface. Uncured Adhesive – 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 surface to which they are applied.

TECHNICAL SPECIFICATIONS:

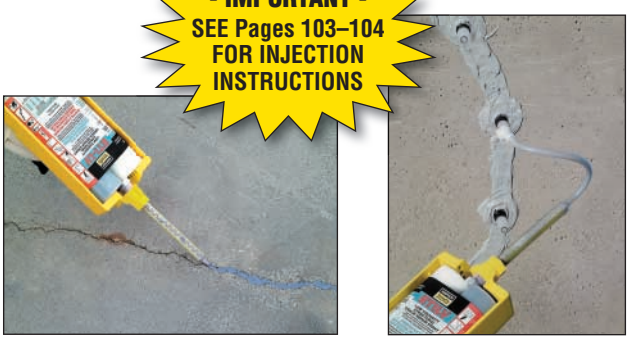
- **ETI-LV:** Meets the requirements of ASTM C-881 Type I, II, IV and V, Grade 1, Classes B & C. Approved under NSF/ANSI Standard 61 (22 in^2/1000 gal).
- **ETI-GV:** Meets the requirements of ASTM C-881 Type I, II, IV and V, Grade 3, Classes B & C.

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.

ACCESSORIES: See page 109 for information on mixing nozzles, parts, fittings and paste over material.

ETI-LV

ETI-GV



Caution – The ETI-LV must be used with the Opti-Mix® nozzle (EMN022) for proper mixing. ETI-GV may also be used with the EMN22 mixing nozzle for gravity feed applications in large cracks.

ETI Cartridge System

Model No.	Capacity ounces (cubic inches)	Cartridge Type	Carton Quantity	Dispensing Tool	Mixing[1] Nozzle
ETILV22	22 (39.7)	side-by-side	10	EDT22B, EDT22AP, or EDT22CKT	EMNO22 (included)
ETIGV22					

1. Bulk containers also available, call Simpson Strong-Tie for details.
2. Use only appropriate Simpson Strong-Tie® mixing nozzle in accordance with Simpson Strong-Tie instructions. Modification or improper use of mixing nozzle may impair epoxy performance.

PROPERTY	TEST METHOD	ETI-LV RESULTS	ETI-GV RESULTS
Viscosity (75°F)	ASTM D 2393	1,790 cps	Non-sag gel
Bond strength (moist cure)	ASTM C 882	2,500 psi (2 days) 2,530 psi (14 days)	1,109 psi (2 days) 3,994 psi (14 days)
Tensile strength	ASTM D 638	7,470 psi (7 days)	•
Tensile elongation at break	ASTM D 638	9.4%	•
Compressive yield strength	ASTM D 695	12,480 psi (7 days)	11,564 psi (7 days)
Compressive modulus	ASTM D 695	342,000 psi	403,200 psi
Deflection temperature	ASTM D 648	130°F	131°F
Water absorption (24 hours)	ASTM D 570	0.76%	0.58%
Linear coefficient of shrinkage	ASTM D 2566	0.004	0.000
Gel time (60 gram mass)	ASTM C 881	120 min.	135 min.
Initial cure (72°F)	•	24 hours	24 hours