



## STRUCTURAL INJECTION EPOXY

FX-E400L is a two-component, solids, moisture- insensitive, ultra-low viscosity, high strength, high modulus, multi-purpose liquid epoxy adhesive, and is suitable for small crack repair.

- PRODUCE NAME : Structural Injection Epoxy
- PRODUCT CODE : FX-E400L
- SIZE : 400ML
- RATIO : 3:1
- COLOR : PART A- Clear to light Amber  
PART B- Amber  
MIXED- Amber

## PRODUCT USAGE

Use Structural Injection Epoxy FX-E400L for pressure-injection of thin cracks in structural concrete, masonry, etc. can also be used for layer injection, gravity feed filling of cracks in lateral concrete and masonry. It is useful as an epoxy resin binder for epoxy mortar patching and overlay of inner, lateral surfaces.

## ADVANTAGES

- ☑ Very-low viscosity for deep perforation.
- ☑ Structurally restore integrity of concrete.
- ☑ High strength and modules structural adhesive.
- ☑ Dampness tolerant.
- ☑ Solvent free

## TECHNICAL DATA

### PROPERTY APPRAISAL

Storage Conditions	5°C – 35°C (40°F – 95°F)
Condition material to	18°C – 29°C (65°F – 85°F) before using.
Mix Ratio	3:1
Viscosity	100-500 cps
Gel Time (60 g mass)	30~40 minutes
Tack Free Time (230°C)	3 to 5 hours



Test Item	Test Method	Test Result
Tensile Strength (ksi)	ASTM D638-14 (Type I, V= 5 mm/min)	5.03
Flexural Strength (ksi)	ASTM D790-17 Procedure AI	10.59
Compressive Strength (ksi)	ASTM D695-15	11.68

\*\*\* For information only - not for specification purposes. \*\*\*.

\*\*\* Note: Epoxy cure is affected by temperatures. Low temperatures will increase cure time, higher temperatures with decrease cure time. \*\*\*

### CONDITION PRODUCT

→ Condition cartridge and contents to a temperature of 18°C-29°C (65°F-85°F) for easier dispensing.

### SHELF LIFE /STORAGE

→ 24 month shelf life when stored in unopened containers in dry conditions and stored at 4°C-35°C (40°F-95°F)

## LIMITATIONS AND WARNINGS

- Substrate and ambient air temperature between 6°C and 38°C (50°F and 100°F) to be maintained during the curing period.

## APPLICATION INSTRUCTIONS

- **MIXING :** Part A : Part B = 3 : 1 by volume

## APPLICATION METHOD

### STEP1. PREPARATION

1. Inspect the crack that is being repaired.
2. Mark any areas that the crack is not continuous
3. Place plastic down on floor
4. Clean the crack and immediate surrounding areas with a wire brush.

### STEP2. PORT LOCATIONS

#### Continuous Cracks

- Stain port locations approximately every 18" starting from the bottom of the crack.

#### Discontinuous Cracks

- Stain port locations just above any discontinuous point in the track.
- Space remaining ports may be required for cracks with multiple discontinuous locations.

**\*\* Note:** Additional ports may be required for cracks with multiple discontinuous locations.

### STEP3. PORT INSTALLATION

1. Remove port cap from the side of the port and set aside.
2. Prepare a small amount of High Strength Epoxy Paste FX-1100PS onto a disposable work surface such as cardboard or painters tray.
3. Roll the entire flat edge of the port in the High Strength Epoxy Paste FX-1100PS.
4. Make sure the hole for the port is not plugged with epoxy.
5. Pressing firmly place the port directly over the crack at previously marked location.

### STEP4. COVERING THE CRACK

1. Administer approximately 1/3 of the tube of the High Strength Epoxy Paste FX-1100PS onto the disposable work surface (like cardboard). Add more as needed.
2. Put the High Strength Epoxy Paste FX-1100PS over the entire crack.
3. Feather the epoxy approximately 2" or more out on both sides of the crack
4. At port locations apply the epoxy around the entire port until the port base is no longer visible.

### STEP5. INJECTION

1. On the caulking gun, swap the black plastic pull located on the back of the caulking gun with one of the plastic pushers.
2. Place the Structural Injection Epoxy FX-2100PS/FX-E400L (for small crack) or Polyurethane Foam FX-PU1100 (for big crack) with the static mixer into the caulking gun.
3. Starting at the bottom port push the static mixer into the port until you feel a click.
4. Dispense resin until you see the resin coming out of the port located directly above.
5. Remove the caulking gun and push the cap into the port.
6. Move to the next port and repeat the process until you have worked all the way up the wall.
7. Repeat entire process for the additional two corner repairs.

### STEP6. CLEAN UP

Once the material have cured take off the ports off the wall using a hammer.

## HEALTH AND SAFETY INFORMATION

- For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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