



D-I-Y Crack Repair Kit Instructions
PLEASE READ

Post Concrete Repair & Waterproofing Supply Inc.

5240 S. Archer Ave. Chicago, IL 60632

Phone: (773) 581-5800

Fax: (773) 581-9549

Email: web@postconcrete.com

Website: www.postconcrete.com

Concrete Foundation Crack Repair Using Epoxy Injection

Very Important:

- This Kit is for Inside Repair
- All materials need to be used at Room Temperature
- Always wear safety goggles
- Wear rubber gloves when handling epoxy resin
- To prevent leaking epoxy from hardening on the injection gun, apply a coating of hand cream to the entire gun. Injection guns need to be returned in their original clean state in order to receive refund of gun deposit.

Materials included in the D-I-Y Kit:

1. One Unit of Surface Seal Paste Epoxy-Parts A and B
2. Four 6oz. Cartridges Epoxy Injection Resin
3. One Patcher Trowel
4. One Barrier Cream
5. Rubber Gloves
6. Wire Brush
7. Two 1 ½" Paint Brushes
8. Four Margarine Tubs
9. Ten Ports
10. Ten Straws
11. Clay
12. Two Nozzles

Selecting the Correct Epoxy for the Repair:

Our Epoxy Resin is available in 3 viscosities that vary in thicknesses. Determine the size of the crack in order to select the best epoxy.

Width of the Crack:

Hairline 1/32" wide

Medium 1/16" wide

Large 1/8" wide

Epoxy Type:

Thin 221

Medium 222

Thick 224

Step One:

Surface Preparation of the Crack

1. The crack must be visible at all points along where it is to be repaired.
2. Wire brush crack area with intention of creating a clean surface to apply the surface seal material.
3. Using the palm of the hand, pat the crack area to remove dust or vacuum clean.

Step Two:

Placement of straws

1. The first straw should be approximately 4" off the floor and each additional straw should be 6-8" apart, all the way up the length of the crack
2. Using barrier cream, grease the end of the straw.
3. Insert straw into the crack by pinching the end and pushing into the crack

Step Three:

Surface Seal Ports in Place

1. Mix equal parts of A&B in clean margarine tub (about 2-3 tablespoons of each A&B). Stir rapidly until you achieve a uniform color. The mixture should be streak free. This mixture will completely harden/cure in about 8 hours, giving you time to work with it in it's pliable state to set ports in place.
2. Apply the surface seal mixture around each straw using the patcher trowel, leaving excess around each one. The barrier cream that was applied to the straw will prevent the hardened surface seal from sticking to the straw making it easy to remove them later.
3. Remove the plug from the port assembly. Caps will be replaced in each port after injection.
4. Slide a port over each straw, pressing it tight to the wall.
5. Make sure each port flange base is covered with surface seal.
6. Apply remaining surface seal over the entire crack surface 1" to 1 ½" on each side of the crack.
7. Using 1 ½" paint brush, brush the surface seal all around the ports to eliminate pinholes.

Note: If when looking at the crack from outside the home, a portion of the crack is visible above grade, this section of the crack should have a layer of surface seal applied to it to prevent the injection resin from leaking through on the outside.



Wait for surface seal to harden/cure completely before injecting the crack with resin. Fast setting surface seal will harden in approximately 30 Minutes. The slow setting surface seal could take up to 8 hours. You should not be able to dent the surface seal material with your fingernail. It must be hard.

Once the surface seal is hard- Remove the straw from each mounted point.

Step Four:

Mixing Epoxy Resin

1. Remove tape from cartridge
2. Pull dasher rod up towards neck of cartridge. This will release the aluminum foil barrier where the tape was removed.
3. Depress cartridge slightly in the area where you removed the tape, this will help deform the aluminum foil.
4. To Mix: cover red cap with your hand or place it on the floor so the cap does not open during mixing. Push dasher rod to the bottom of cartridge and begin mixing in a spiral clockwise motion from top to bottom of cartridge, moving the dasher rod in and out of cartridge in one complete stroke. 20 strokes are suggested to make sure the two-part resin is completely mixed. On the last stroke, pull dasher rod to top of cartridge.
5. Remove red end cap.
6. Unscrew dasher rod from the top of the cartridge.

Step Five:

Loading the Injection Gun

1. Screw a nozzle onto the end of the cartridge.
2. Unscrew retainer from gun base.
3. Grease the inside of the gun retainer including the treads with barrier cream.
4. Insert the cartridge into the gun.
5. Affix hand gun base to retainer.

Step Six:

Injection

1. Nozzle tip can easily be cut with utility knife to obtain a larger opening but should not be cut so short that the nozzle will not fit into the port opening.
2. Insert nozzle into the bottom port. ALWAYS INJECT FROM BOTTOM TO TOP.
3. Squeeze the gun trigger and begin injecting resin into the crack.
4. While injecting, watch the port located directly above the one you are injecting. When you can see resin inside that port, back off the gun pressure by disengaging gun crank.
5. Back the nozzle out of the port and immediately cap with port plug. and move up to the next port to repeat the process.
6. When a cartridge is empty, remove from the gun and begin mixing the next cartridge by removing the tape and following the mixing procedure outlined in step four.
7. Repeat the process in each port moving up the wall.

Note: If any pinholes appear in the surface seal when pumping the epoxy resin, use the clay to plug those areas.

Even though it is not necessary to remove the injection ports, they can be broken off the wall after they have had 72 hours to cure.