



DIY FOUNDATION

CONCRETE CRACK REPAIR KIT

INSTRUCTIONS

The information for waterproofing cracks in poured concrete has been compiled from several professional sources as recommended guidelines. Due to the variability in poured wall conditions, the selection of the proper material for the intended application and installation is the sole responsibility of the applicator.

STEP 1: CRACK PREPARATION

Place drop cloth on the floor in front of work area.

Clean the concrete surface surrounding the crack using the wire brush provided. Remove loose concrete, dust, efflorescence, or paint approximately 1-2 inches on either side of the crack.

After brushing, wipe down or vacuum the surface removing dust and loose debris from the surface and inside the crack.

TIP – The concrete surface must be dry for proper adhesion of surface ports and surface adhesive. If the concrete surface is damp, wait a few days until dry or if necessary, use a hot air gun, hair drier, or oil free compressed air to dry out.



STEP 2: PORT PLACEMENT

Ports are placed apart the thickness of the concrete wall (usually about 8"), centered over the crack, starting at a point closest to the floor (vertical cracks).

TIP – Mark port locations on the wall with chalk prior to adhering surface ports.

Prepare the surface adhesive using separate wooden sticks to remove equal amounts of Part A and Part B (wooden sticks should not be shared between containers to prevent remaining material from hardening.)

TIP – The adhesive hardens quickly! Use about a tablespoon from each jar when mixing.

Place equal amounts of adhesive on a scrap piece of cardboard and mix with the plastic trowel (repeat this step each time you run out of mixed adhesive).

Remove the cap from the surface port then apply a small amount of mixed adhesive to the bottom of the port base. **Do not allow epoxy to block the bottom of the port opening or the crack under it.**



Place the first port starting at the bottom of the crack and repeat every 8" until the entire crack is ported.

After adhering the ports to the surface, work more of the mixed surface adhesive along the entire length of the crack using the plastic trowel. The recommended application is 1/8" thick and 2" wide. Make sure to mound a sufficient amount of adhesive AROUND the base of the ports. Expect to use approximately 16 ounces of surface adhesive, the total amount provided, for an 8-foot crack.

TIP – Do not work the adhesive "into" the crack, just paste over the surface.

Let the surface seal and port adhesive cure before beginning urethane injection (2-4 hours or until fingernail hard).



STEP 3: POLYURETHANE INJECTION

Flush the crack with 1-2 cups of water poured into the top port using the plastic bottle provided. Water should come out of every port below the top port indicating that the crack is contiguous and that ports are not blocked by adhesive. Water is also necessary to flush the crack and aid in foam activation.

Remove the plastic blue cap from the Polyurethane Injection Foam cartridge and then twist-and-pull to remove the plastic seal (view diagram on back.)

Place the RESTRICTOR on the cartridge and then place the MIXING NOZZLE (3/8 X 24) over the restrictor on the cartridge and attach with the PLASTIC NUT. Place the Polyurethane Injection Foam cartridge in your caulking gun.

Attach the flexible HOSE ASSEMBLY (wide end) over the MIXING NOZZLE tip by pushing firmly.

Attach the small end of the HOSE ASSEMBLY into the lowest port, by pressing firmly.

Begin injecting the polyurethane foam slowly, using low pressure (allowing the resin time to flow into and fill all small fissures) until the resin begins to flow out from the port above it.

TIP – The secret to effective crack injection is patient, low pressure introduction of the resin. Hairline cracks will require 3-4 minutes at each port for proper filling to take place. To improve the ability to penetrate hairline cracks, heat the polyurethane foam by placing the polyurethane cartridge in a pot of hot tap water for 20 minutes. This temperature exposure should thin the material so that it can flow into the crack with less resistance.

Use the white plastic PINCH VALVE on the HOSE ASSEMBLY to turn off resin flow. Plug the port with the cap provided. Move up to the next port. Repeat this procedure until the entire crack has been injected with resin.



STEP 4: PORT REMOVAL

The ports can be removed by striking with a hammer after 4+ hours after foam injection. Dispose of used materials properly. The surface adhesive is paintable if desired.

ONE (1) RadonSeal® DIY Foundation Crack Repair Kit fills up to 10 linear feet of cracks in poured concrete walls from hairline to 1/2" wide (up to 22" thick walls). Consumption of the polyurethane foam varies. A crack will consume more polyurethane foam, typically in the lowest injection port (due to voids around footings and behind walls). If needed, additional materials can be purchased by visiting www.radonseal.com or by calling 800-472-0603.