

FLEX  O-MERIC™

DO IT YOURSELF

CRACK REPAIR KIT

FLEXKIT-100 SERIES

FLEXKIT-200 SERIES

STEP-BY-STEP

INSTRUCTIONS



REQUIRED TOOLS & MATERIALS

- 2 Flexomeric FLEXTUBE-110/210 Crack Repair Resin (300ml)
- 1 Flexomeric Crack Surface Paste and Port Adhesive (Part A & Part B)
- 2 Injection Nozzles
- 2 Pieces of Vinyl Tubing
- 12 Injection Ports & Caps
- 2 Wooden Stir Sticks
- 1 Plastic Trowel
- 2 Pair of Rubber Gloves
- 1 Wire Brush *
- 1 Safety Goggles *
- 1 Chalk **
- 1 Water Bottle **
- 1 Garbage Bag **
- 1 Standard Injection Gun **
- 1 Hobby Knife with blades ***
Chisel (Not included)
Hammer (Not included)

* Included in all "X" and "COM" FLEKKITS.

** Included in all "COM" FLEKKITS.

*** Included in all FLEKKIT-102 & FLEKKIT-202 kits.

WARNING

- Be careful around floor drains and drainage tile.
- Do not inject between concrete and wood.
- For actively leaking cracks where the crack surface will not dry for patching purposes, alternative hydraulic cement may be used in place of Flexomeric Crack Surface Paste and Port Adhesives.
- The temperature of the concrete must be at least 5°C.
- Protective gear must be worn.
- Uncured resins can irritate eyes and skin. Ensure good ventilation or wear respirator. See Safety Data Sheet.

CRACK INJECTION PROCEDURE

Read the following instructions completely prior to starting the repair. Follow each step carefully. Be prepared. Wear protective goggles, suitable gloves, and clothing.

Step 1: Preparing the work area

- Cover floor below the working area with a drop sheet or garbage bags.
- Cover any nearby furniture, appliances, or other personal belongings to avoid concrete dust.
- Lay out all kit components and required tools to ensure all components are present.

Step 2: Cleaning the poured concrete wall

- Clean area to be repaired from loose concrete, paint, oil, dirt, and other debris by using a wire brush in and around the area to be repaired (i.e. crack, tie rod, around a pipe). A chisel or utility knife can also be used to clean out any loose concrete in the crack.
- Make sure that the concrete surface is dry.

Step 3: Marking injection port locations

Using a chalk, mark injection port locations according to the guidelines below:

- **Concrete Cracks:** Mark the first injection port position at or near floor level. Measure from the first port position up and along the crack the remaining port positions with the distance between each port equal to the wall thickness (usually 8"-10").
- **Tie Rods:** Use one injection port for each tie rod.
- **Around Pipes:** Mark four injection port positions (0°, 90°, 180°, and 270°) around the pipe. For pipes less than 2" in diameter, two injection port positions are sufficient (90° and 270°).

Step 4: Pre-drilling and inserting drill ports

This step only applies to kits containing drill ports. If you do not have drill ports, skip this step.

- Using a hammer drill with a 1/2" bit, drill in the holes for the drill ports. Use your markings in Step 3 as a guide for each drill hole location.
- Using a hobby knife, remove and clean any loose concrete or debris from the port holes that were drilled. Make sure the port holes are cleaned out very well and visible to the crack.
- The drill ports have a fish-hook like end which is inserted in the crack and once inserted properly, it is tightly secured from the pressure caused from the injection. Using a chisel and hammer, place a drill port into the pre-drilled hole and with the chisel on the fish-hook, hammer the port into position.

Step 5: Applying Flexomeric Crack Surface Paste and Port Adhesive to injection ports and crack

MIXING PART A AND PART B INSTRUCTIONS

For best results:

Adhesives must be at 8°C or above when ready to mix. Do not use on wet surfaces or expose part A to moisture. Keep out of direct sunlight, store at room temperature. Keep adhesives warm when using in cool conditions.

Mixing and applying instructions:

Flexomeric Crack Surface Paste and Port Adhesives Part A and Part B are mixed at a 1:1 ratio. The surface to be sealed is to be free of all contaminants that would act as a bond breaker. Surface must be dry and dust-free. Wear rubber gloves provided in the kit for protection.

- Unscrew the top caps on the Part A and Part B. Using separate wooden stir sticks for each component, poke the foil to open seal. Stir each component separately. Do not share the sticks between the two parts.
- Pour equal amounts of Part A and Part B onto a piece of cardboard and mix with a plastic trowel until a uniform appearance is achieved (approx. 2 - 4 minutes depending on temperature). **ONLY MIX AMOUNTS YOU WILL USE WITHIN 2 MINUTES AT A TIME.**
- If you used drill ports, skip this bullet. To apply the flat or corner injection ports, use the plastic trowel to carefully spread the adhesive mixture on the bottom of the port being **cautious not to cover the injection hole**. Glue port over the crack so that the port injection hole lines up over the crack and hold in place until secure. Use your markings in Step 3 as a guide to position and glue each injection port.
- Once injection ports are in place, use the plastic trowel to apply adhesive evenly over the crack and over base of injection ports. Use generous amounts of adhesive mixture to ensure no resin leakage during injection.
- If the crack is visible above grade level on the outside of the foundation wall (or on the other side), clean surface with a wire brush, wipe and dry surface from dirt and residue, then apply adhesive mixture to that surface as well. This will act as a wall barrier during the injection process.

ALLOW ADHESIVE TO CURE COMPLETELY BEFORE CONTINUING TO THE NEXT STEP.

Adhesive is cured when mixture is dry and hard to the touch. Curing time depends on ambient temperature and accuracy of the mixture.

Step 6: Establishing water flow through the crack

- Using a hand-held water spray bottle or squirt bottle, flush crack by injecting water into top injection ports, allowing water to drain from the lower ports, ensuring a clear and wet path in the crack.
- If leakage occurs along the crack during this process other than through the port injection holes, stop and reseal areas with additional adhesive mixture and allow paste to cure before proceeding onto the next step.

NOTE: This step is very important. In addition to establishing the water flow, the FLEXTUBE resin also needs the water to activate. By flushing the crack from port to port, the entire crack then becomes wet. As the resin penetrates into the wet crack, it will chemically react with the water, quickly expand and cure to fully seal the full thickness of the wall.

Step 7: Sealing the crack by injection

Be prepared. Wear protective goggles, suitable gloves, and clothing.

- Cut off the tip of the FLEXTUBE-110/210 and the end of the injection nozzle tip. Screw on the nozzle. Attach the piece of vinyl tubing onto the nozzle.
- Load cartridge into standard, single-component injection gun.
- Starting from the **bottom** injection port, insert the vinyl tube over the injection port and inject slowly, applying even pressure, allowing material plenty of time to react. Continue injecting until resin flows out of the next injection port up (this should take approximately 20-240 seconds). Cap the current port and continue injection through the next port up. Continue the same

procedure from one port onto the next until the entire crack is sealed.

NOTE: IN CASE OF LEAKAGE, STOP INJECTION AND RESEAL WITH ADHESIVE MIXTURE. If flow to the next port is not established, then slightly increase pressure to break through the plugged passage. If flow is still not established, release the pressure on the injection gun and insert a long, fine wire into this port. If the flow is still not established, continue injection from the next port up.

Step 8: Curing

Once crack is completely filled, let cure (approximately 24 hours) and remove injection ports and sealing cement (adhesive once cured) if you wish. The cured adhesive can be removed by applying heat over the material with a heat gun, which will soften it to a flexible state and can then be removed with a metal scraper.

THANK YOU FOR YOUR ORDER

NEED MORE MATERIALS?

To order additional materials, you may contact us by phone at 1-855-236-5566 or visit our online store at:

www.flexomeric.com

HAVE ANY QUESTIONS?

We are happy to help answer any questions you may have regarding your concrete crack repair and how to use this kit. One of our concrete crack repair specialists will be available to answer your questions.



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