RICHTECH INDUSTRIES

Crack Injection Resin

INSTRUCTION GUIDE

RICHADH300 • RICH110 • RICH115

REQUIRED TOOLS & MATERIALS

- Latex Gloves
- Safety Glasses
- Respirator
- Scissors/Utility Knife
- Trash Bag
- Vacuum
- Wire Brush
- Pencil/Marker
- Putty Knife & Trowel
- Paint Roller
- Paint Roller Pan
- Tape Measure/Ruler
- Prop Mixer and Drill

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 Richtech Crack Surface Paste and Port Adhesives.

The temperature of the concrete must be at least 41°F (5°C)

Protective gear must be worn (i.e. face shield, goggles, or safety glasses and long sleeves).

Ensure good ventilation or wear respirator.

Uncured resins can irritate eyes and skin. See Safety Data Sheet (SDS) for more information.

CRACK INJECTION PROCEDURE

Read the following instructions completely prior to starting the repair. Follow the 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 trash bag. Cover any nearby furniture, appliances, or other personal belongings to avoid concrete dust.

Step 2: Cleaning the crack

Clean area to be repaired from loose concrete, paint, oil, dirt, and other debris by using a wire brush or wheel to allow for better surface seal bond to concrete. A chisel or hobby knife can also be used to clean out any loose concrete in the crack. Make sure that the concrete surface is dry. Use a vacuum to remove any remaining dust that may be on the wall.

Step 3: Marking injection port locations

Using chalk/pencil, 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 6”).

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: Add Water to Empty Tube

Prior to injecting, fill empty cartridge from the top with water (cut off half of the white top plug, DO NOT REMOVE BLACK PLUNGER FROM BOTTOM). Remove plug and install mixer/nut.

Step 5: Inserting drill ports

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

- Clean the holes out by injecting water through a wand that will reach to the back of the hole.
- Insert packer or bang in port. Remove the zerk tips from all of the ports except the first one to be injected.
- Inject clean water into port at 250 psi min. Air and water will begin to flow out of the crack and ports above. Repeat this process for each port.
- Remove the zerk tips from all ports except the first one to be injected. Be sure to use a different pump or flush the pump thoroughly with solvent.
- Starting with the first port pump RICH110 at 250 psi. Increase the pressure as needed to gain full penetration. Always use the lowest pressure possible to inject the crack. Never exceed maximum safe operating pressures.
- Once the material has fully penetrated the crack or begins to flow out of the next port, put the zerk tip on the next port and begin pumping. Repeat this procedure until the entire crack has been pumped.
- Flush out your pump at the end of the day. Material left in the pump may cure overnight and ruin the pump.
- Contact Richtech Industries for further application instructions.

Step 6: Injection ports and crack

Beginning at the bottom port, inject the epoxy with steady pumps. Pump until resin appears at the next port above. Work your way up the wall until you have reached the top.

Flush out your pump at the end of the day. Material left in the pump may cure overnight and ruin the pump.

Step 7: 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.

Once dried the epoxy is stronger than the actual concrete.