

**CONCRETE PROTECTION & REPAIR PRODUCTS, INC.**

**CRACK INJECTION MANUAL**



**UNIVERSAL CARTRIDGE – LOW VISCOSITY**  
*Complete Kit is designed to repair 8 linear feet.*  
*Cracks wider than 1/8" require extra material (sold separately.)*

**\*READ THIS MANUAL CAREFULLY BEFORE PROCEEDING\***

**\*READ ALL PRODUCT TECHNICAL DATA SHEETS (TDS)  
AND SAFETY DATA SHEETS (SDS)\***

**\*WEAR SAFETY GLASSES AND LATEX GLOVES\***

**\*KEEP WORK AREA WELL VENTILATED \***

**\*WEAR LONG SLEEVES AND LONG PANTS\***

**WHEN IN DOUBT PLEASE CONSULT A  
PROFESSIONAL STRUCTURAL ENGINEER**

**It is recommended that the product be tested to determine if suitable for a specific application. Responsibility remains with the contractor and owner for the design, application, and proper installation of each product.**

# **SAFETY INFORMATION & PROCEDURES**

**\*PRODUCTS ARE TIME AND TEMPERATURE SENSITIVE – CALL US FOR FURTHER INFORMATION\***

**READ PRODUCT DATA SHEET AND SDS PRIOR TO BEGINNING WORK**

**ALWAYS WEAR SAFETY GLASSES, LATEX GLOVES, LONG SLEEVES, AND LONG PANTS WHILE HANDLING THESE MATERIALS**

Make sure material is stored at room temperature

Material is hazardous and corrosive – prevent it from contacting your skin, eyes or mouth

Avoid inhaling fumes from this material – ventilate work area

If material is spilled, absorb and place in closed container – do not allow material to enter waterways

If material touches skin, wash immediately with soap and water

If material touches eyes, flush with water and seek medical attention

If material is swallowed seek medical attention

# PROJECT CHECKLIST

(MATERIALS NOT IN COMPLETE KIT ARE SOLD SEPERATELY)

\*2 pair latex gloves

\*safety glasses

\*drop cloth / trash bag

\*wire brush

\*pencil

\*2 putty knives / trowels



\*single component gun

\*modeling clay

\* injection ports

\*cardboard for mixing

\*surface seal material

\*Surface Slick (optional)

\*injection epoxy material



OR



OR



## CRACK/WALL PREPARATION

First, check the foundation outside at the site of the crack.

If the crack is visible above the soil-line, it must be sealed (using steps below).

Use a grinder or wire brush to clean concrete wall.

Remove all paint, and loose or foreign material at least 2" on each side of crack (best to use vacuum hose also).



## CRACK/WALL PREPARATION

- From the floor up, place a mark next to the crack every 6 vertical inches for port locations. For narrow cracks ( $1/32'' - 1/16''$ ) tighten your port spacing to 4" or 5" apart.
- Place a drop-cloth/plastic trash bag beneath the crack on the floor against the wall.



## SETTING INJECTION PORTS

At a 1:1 ratio, pump or scoop small amount of #602 surface sealer onto cardboard mixing surface



OR



Remove strap and plug of each port. Put the plugs in your shirt pocket for quick access.

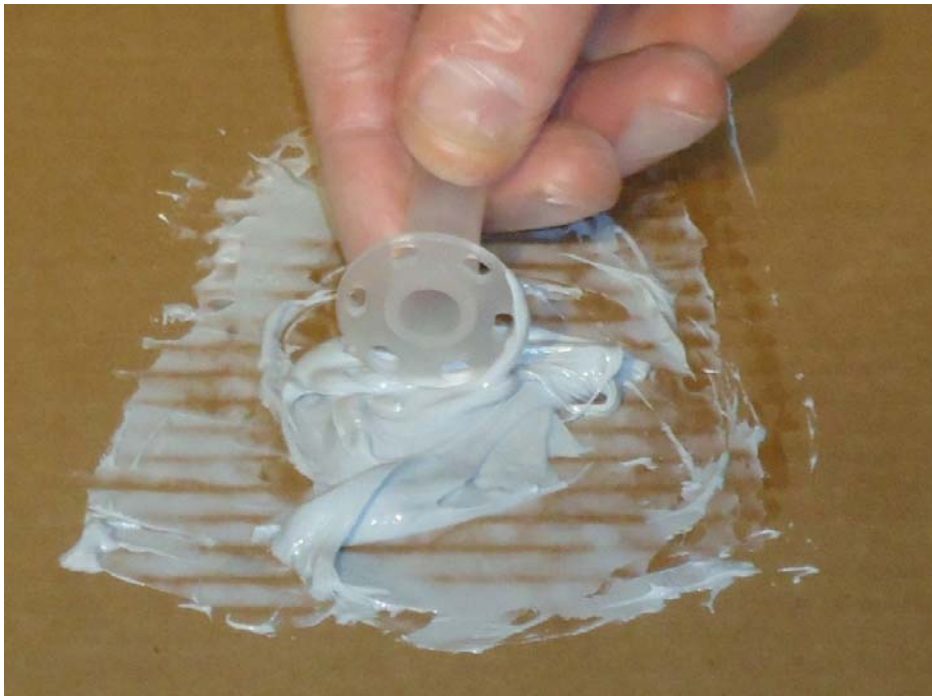




## SETTING INJECTION PORTS

Use trowel/putty knife to thoroughly mix #602 into an even, grey consistency.

**ONCE MIXED, MOVE FAST: #602 WILL GET TACKY AND UNWORKABLE IN 5 TO 7 MINUTES.**



Roll the base of the port in mixed #602 along the edge – make sure not to plug hole in center of base.

## SETTING INJECTION PORTS



Stick each port to the wall over center of crack at each of the marks you made.





## SURFACE SEAL APPLICATION



- Mix additional batches of #602.
- Use trowel/putty knife to apply #602 on wall over crack.
- Firmly seal crack and base of each port.
  - #602 should be 1/8" thick, and 3" wide, centered over crack.
- Leave top 1/8" of crack unsealed.
- Allow #602 to cure until it cannot be marked by your thumbnail (30-40 minutes).

# UNIVERSAL CARTRIDGE SET UP

**CAUTION:** Wear safety glasses, gloves and protective clothing. Keep material at 60 – 80 degrees Fahrenheit.



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**Make sure the wall crack is at least 1/32" wide before injecting. Space injection ports 6" apart or closer.**

## INJECTING THE CRACK

- Make sure the crack is at least 1/32" wide and that your mixing wand is clean and new.
- Insert the tip of the mixing wand into the bottom port.



- **IMPORTANT:** Do not jiggle the port – this will break the brittle #602 and cause the port to snap off.
- If you meet resistance, either the crack is too narrow to accept resin, or you have cured material inside your mixer, causing an obstruction.
- **IMPORTANT:** The crack will fill at the same rate no matter how hard you pump – too much pressure causes ports to blow off or material to flow out the back of the cartridge.
- Using only 2 fingers, pump trigger slow and steady until material appears at the next port up.
- Press gun's thumb lever to release pressure before removing nozzle from port.
- Plug bottom port and move to the next port above.

## INJECTING THE CRACK



- When switching from an empty tube to a new one, resume injection at the same port where you left off.
- Continue from port to port until material is visible at the 1/8" opening you left at the top of the crack. Use clay to plug the top 1/8".
- After 15-30 minutes, resin will drain back and down inside the wall, leaving some higher ports looking empty
- From the bottom up, inspect each port: make sure epoxy material is visible.
  - If not, remove plug from that port and the one above. Inject until epoxy is seen at the port above.
  - Any leaks should be wiped clean and plugged with clay.
- Repeat inspection – top off again in 15 minutes until all ports appear full.

## CLEANUP & AFTERCARE

Any unused material must be mixed together and allowed to cure and cool before disposal.

After mixed material is allowed to harden and cool it may be deposited in a landfill in accordance with local, state and federal regulation.

Wash skin thoroughly with soap and water before eating or smoking. Wash or discard contaminated clothing.

After a minimum 48 hours, protruding injection ports may be cut or sawed flush with wall.

Before painting over repair, roughen surface sealer with sand paper to allow better paint adhesion.

**NEVER** use a grinder to remove cured surface sealer. If removal is necessary, it is brittle enough to be chipped off using a hammer drill with a chipping bit.

FOR INFORMATION, SDS, AND TDS  
VISIT US AT:

[www.cpr-products.com](http://www.cpr-products.com)

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