

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

**CRACK INJECTION MANUAL**



**DUAL CARTRIDGE POLYURETHANE**

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

**\*READ 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.**

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## **SAFETY INFORMATION & PROCEDURES**

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

**READ TDS 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

**FOR INFORMATION, TDS, AND SDS**

**VISIT US AT:**

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

**OR CALL US AT (636) 717-0666**

**EMAIL: [info@cpr-products.com](mailto:info@cpr-products.com)**

# PROJECT CHECKLIST

\*multiple pairs latex gloves

\*safety glasses

\*drop cloth / trash bag

\*wire brush

\*pencil

\*2 putty knives / trowels



\*dual component gun

\*modeling clay (for quickly plugging pinhole leaks)

\* injection ports (one for every 5-6" of crack)

\*cardboard for mixing

\*surface seal material (#602)

\*urethane injection material (#900)

\*Surface Slick (optional)



## **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).



**OR**



## **CRACK/WALL PREPARATION**

From the floor up, place a mark next to the crack every 6 inches for port locations. Closer port spacing (4" or 5" apart) will yield better results.

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 seal paste onto cardboard mixing surface



**OR**



**OR**

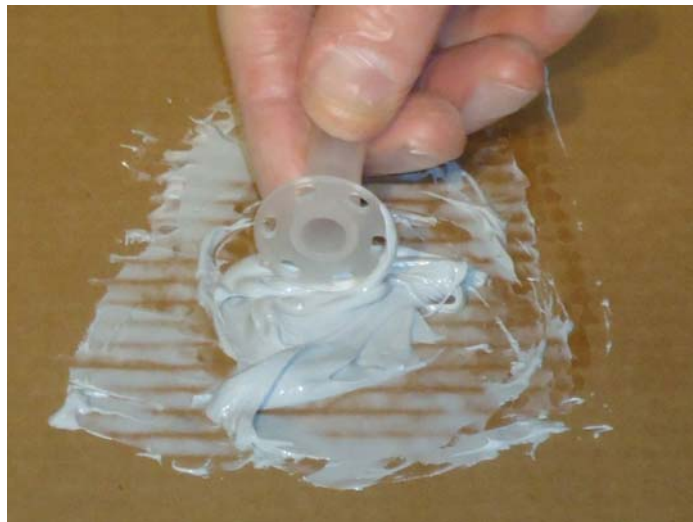
Remove strap and plug of each port.



## 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.
- Spray Surface Slick (optional finishing agent) on to #602 on wall before it hardens
- Rub with gloved hand to smooth appearance.
- Allow #602 to cure until it cannot be marked by your thumbnail (30-40 minutes).



## USING THE CARTRIDGES



- Remove plug from top of cartridge set.
- Fill empty tube with water using squeeze bottle.
- Install static mixer wand and retaining nut.
- Set injection gun to fit 1:1 urethane cartridge set.
- Pump small amount into waste container to remove air bubbles and to even up the follower plates (both tubes pumping out evenly).

## INJECTING THE CRACK



- Insert 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.
- ***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 mixing wand from port.
- Plug bottom port and move to the next port above.

## INJECTING THE CRACK



- Inject each port until urethane flows from the port above.
- Continue from port to port until material is visible at the top of the crack/wall.
- As urethane reacts with water it expands into a dense, closed-cell foam.
- Any leaks should be wiped clean and plugged with clay.

## CLEANUP & AFTERCARE

- Any unused material must be mixed together and allowed to cure and cool before disposal.
- After mixed material is allowed to solidify 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.