High Pressure Injection Grout System **Welds & Repairs Structural Units & Cracks**

Epoxy Injection

Repairs cracks of any size

Stop leaks from the inside

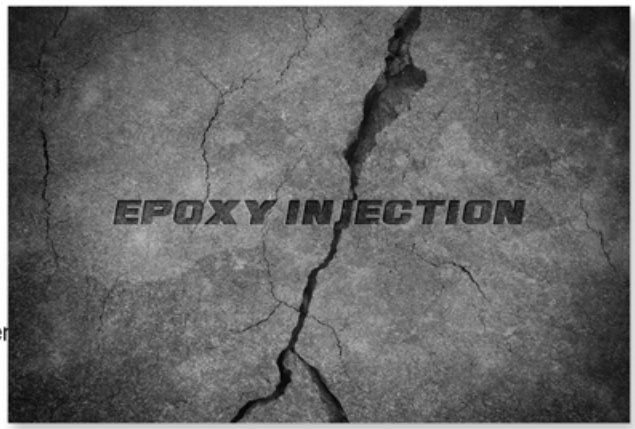
Product Description:

Our Epoxy Injection consists of a wide range of special 100% solids epoxy formulations. Each one is designed to perform definite adhesive functions that are ideally suited for high pressure injection grouting.

Epoxy Adhesive MV is a medium viscosity for general purpose work. Epoxy Adhesive LV is a low viscosity for sealing of hairline cracks. Epoxy Adhesive HV is a heavy viscosity for use in sealing wide cracks.

These products are resistant to water, moisture and most chemicals. When fully cured, it achieves strengths many times greater than the highest grade concrete available, making it suitable to re-unite and repair structural cracks and voids caused by foundation settlement, over loading, wear and building movement.

Epoxy Adhesive #100 will grout and seal cracks and voids in concrete and masonry, to repair, rebond and weld structural units and surfaces together , fast and economically. Will last indefinitely.



Basic Uses:

- Repair structural cracks
- Bond new concrete member together
- Seal and re-weld cracks in walls, foundations, beams, columns, lintels, sills and bridge decks
- Repairs any size crack
- Material can be injected with a small inexpensive hand pump or a large volume high pressure pump
- Materials are premixed before injection to insure complete job success
- Use above or below grade
- Repairs last indefinitely
- Re-bonds delaminated concrete floor
- Re-laminates fabricated wood beams

Limitations:

- If crack is caused by structural defect, overloading or settlement, consult structural engineer
- If temperature is below 40ºF at time of injection use LT type
- Under wet conditions use WV grade

Formulations:

- Standard Grade MV – of medium viscosity. For general purpose grouting of cracks up to 3/16" wide
- LV Grade – Light viscosity for high pressure grouting of hairline cracks
- HV Grade – Heavy viscosity for cracks from ¼" to ½" and for surface sealing
- WC Grade – For curing under water or wet conditions
- LT Grade – For use at tempera- low as 25ºF

Surface Preparation:

Prior to injection process, cracks shall be cleaned free of dust, silt and any other material which may impair bond. Cleaning shall be done with oil free com pressed air jets or preferably by vacuum with an industrial vacuum cleaner. Any grease, oil or other foreign matter shall be removed by solvent, alkaline detergent or other means as required. Flush repeatedly and allow to dry.

Repair or correct cause of cracking ie: footing settlement, structural defect, overloading, water, etc. Areas to be bonded must be structurally sound.

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Sealing or damming up a crack:

After exposed edge and inner surface of crack has been cleaned and allowed to dry, the edge must be sealed to prevent Epoxy Adhesive from escaping and to force grout as deeply into crack as possible.

On horizontal surfaces (floors), if width and depth of crack doesn't require high pressure grouting, a hand or air operated caulking gun may be used to easily fill crack in a neat manner, without prior sealing exposed crack or masking adjoining surface. However, if crack is wide and material may escape or seep into area below, it may be necessary to force sand into crack at depth level desired. Pump premixed Epoxy Adhesive into crack to level of floor surface.

Exposed edge of cracks in walls and overhead (also fine cracks in floors) must be sealed to prevent Epoxy Adhesive under pressure from escaping.

Injection port holes must be provided every 6 to 12 inches along entire length of crack, drilled at a width of 1/2". Apply Adhesive Epoxy HV to threads of bushings and screw them tightly into the drilled holes. Seal the rest of the crack with Epoxy Adhesive HV, brushed well into void. For cosmetic reasons it may be desirable to remove excess epoxy with scraper knife and wiped with cloth saturated with Epoxy Solvent. For neatness, mask along entire length of crack within 1/8" of edge and seal crack as above with Epoxy Adhesive HV.

Diagram A

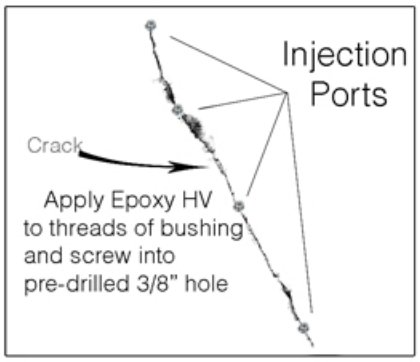


Diagram B

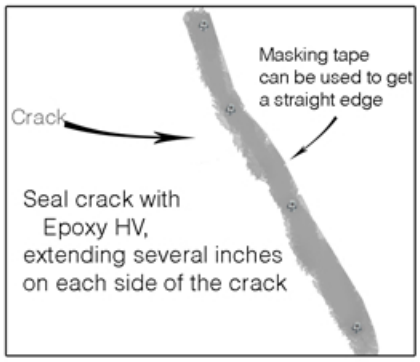
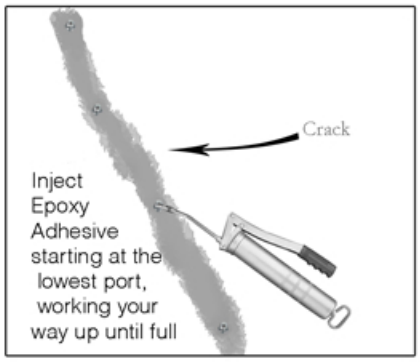


Diagram C



Injection of Epoxy Adhesive:

For low and medium pressure grouting, depending on width and depth of crack to be sealed, either a professional grade caulking gun or a high pressure grease gun (available up to 10,000 PSI) may be used. Mix Epoxy adhesive at a ratio of 3 Parts Resin "Part A" to 1 Part Activator "Part B", being sure to fully mix 2 parts are equally blended. Fill gun with Epoxy Adhesive and hold firmly over the lowest port hole and begin pumping epoxy into the crack, completely permeating and saturating entire crack until grout appears at next port. Move gun to next port where excess has just appeared and repeat pumping operation of grout. Continue in this manner until you have reached the end of the crack. Allow epoxy to dry 24 hours and remove the ports by knocking them off with a hammer, if necessary.

For very fine cracks as may be found in granite or stone, where high pressure is required, hypodermic type needles may be exposed into crack at port holes and with appropriate grease fittings, Epoxy Adhesive LV may be pumped into crack under similar procedure as above.

Installation: Read carefully before starting

The entire concept of using Florok Epoxy Adhesive as an injection grout is to force, under reasonably high pressure, as much Epoxy Adhesive as possible into cracked area. When the Epoxy Adhesive cures and hardens, it will weld together both surfaces equal to or better that original strength.

Equipment: Type of pressure pump to be used depends on quantity of work and depth of penetration required, etc. For large grouting jobs use a mechanical or electrical ratio pump machine designed to extrude Epoxy Adhesive. Information on request.

In most cases a good quality, high pressure grease gun (hand or air operated) of 10,000 PSI is recommended for use with Zerc fittings and studs or bushings.

For wider cracks requiring low pressure to force material into place, a professional type caulking gun (hand or air operated) may be used.

For very fine cracks, such as found in granite or stone, a needle nose grease fitting tip or as fine. as a hypodermic needle may be required.

Needle nose tip

High pressure grease gun

Zerc fittings

Stud Bushing