

SECTION 03 62 16

INJECTION EPOXY GROUTING

PART 1 GENERAL

1.1 SUMMARY

- A. Provide injection epoxy for repair of the cracks in the existing concrete wall.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation for each material and product used. Include manufacturer's Material Safety Data Sheets.

1.3 REFERENCES

- A. ASTM C 881: Epoxy-Resin-Base Bonding Systems for Concrete

1.4 QUALITY ASSURANCE

- A. Installer's Qualifications: The contractor shall be qualified to perform the work specified by reason of experience.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life.
- B. Store products in a dry area. Protect from direct sunlight.
- C. Handle products in accordance with manufacturer's printed recommendations.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Injection epoxy shall be ETI-GV Gel Viscosity Injection Epoxy by Simpson Strong-tie. If the crack width is less than 3/32", then use ETI-LV Low Viscosity Injection Epoxy by Simpson Strong-Tie.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.

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- B. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas from contact due to mixing and handling of materials.

3.2 CRACK PREPARATION:

- A. Clean the crack and the surface surrounding it to allow the epoxy to bond to sound concrete. Take care not to impact any debris into the crack during cleaning.
- B. Using clean, oil free compressed air, blow out the crack to remove any dust or debris. Best results will be obtained if the crack is dry at the time of injection.
- C. Remove the paint next to the existing crack. If this is not possible, route out the opening of the crack in a “V” shape using a grinder in order to get past the surface contamination.
- D. To adhere the E-Z click injection ports to the concrete wall, apply a small amount of epoxy around the bottom of the port base and place the port at one end of the crack. Repeat this step until the entire crack is ported, with injection ports placed 8” apart along the length of the crack.
- E. Using a putty knife, generously work epoxy along the entire length of the crack as recommended by the epoxy supplier. If the crack extends all the way through the wall, then seal the back of the crack.
- F. Allow the paste-over to harden before beginning injection.

3.3 INJECTION PROCEDURE

- A. Comply with manufacturer’s printed instructions for the cartridge preparation.
- B. Attach the E-Z click fitting to the end of the nozzle and that all ports are pushed into the open position.
- C. Attach the E-Z click injection fitting to the bottom E-Z click port until it clicks into place. Inject epoxy until it will no longer flow into the crack. Close the port and remove the injection fitting per the manufacturer’s instructions.
- D. Repeat the previous step at each port moving up the crack until the crack is completely filled.
- E. See manufacturer’s instructions for special injection tips and troubleshooting recommendations.

3.4 CURING AND CLEANING

- A. Once the injection epoxy has cured, remove the injection ports and paste-over epoxy. The epoxy can be removed with a chisel, scraper or grinder. Continue to grind surface until all excess epoxy is removed.

END OF SECTION

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