

Injection Grout

Cementitious crack injection grout/adhesive for the repair of hairline to 3/4 inch cracks in masonry and concrete.

WHERE TO USE

Repair and reconstruct brownstone, sandstone, limestone, cast stone, concrete, marble, granite, terracotta and brick.

Performance Characteristics

Low shrinkage

- n Maintains integrity of repair, resists cracking.

Thermal compatibility

- n Prevents delamination due to temperature change.

Durable

- n Resistant to weathering action, excellent freeze/thaw stability and abrasion resistance.

Low Viscosity

- n Excellent flow into cracks and voids.

Breathability

- n Will not cause damage to structure by restricting moisture vapor flow.

Single Component

- n Easy to batch in less than full pail quantities.

Surface Preparation

- n Remove loose and deteriorated material, laitance, dirt, dust, oil and any surface contaminants that will inhibit proper bond.
- n It is recommended to use air or water to remove unseparated debris from the crack interior prior to injection.
- n Test all cracks and voids for proper flow prior to injection. If potable water will not flow into the crack, the injection grout will not be successful either.
- n Surface temperature and ambient temperature should be greater than 40°F and less than 90°F.

Mixing

- n Mechanically mix using a low speed drill (400-600 rpm) and mixing paddle or mortar mixer.
- n Pour 5.5 – 6.5 quarts of potable water into a clean mixing vessel and slowly add all of the powder. Use a 3:1 powder to water ratio for small batches.
- n If using as an adhesive, use a mix ratio of 4:1 – 5:1 depending on

preference of the installer.

- n Mix only as much material as can be placed in 15 – 20 minutes.
- n Do not overmix, as this will entrain excess air.

Application

- n Drill a series of injection ports directly into the center of the crack at a downward (approximately 45°) angle to the substrate. Determine the spacing of the ports by first drilling a single port and filling it with water. This will provide a visual reference as to the space required between each port.
- n After drilling all ports, clean debris from the crack with both compressed air and water.
- n To prevent seepage of grout between ports, seal with a non-staining, easy to remove clay, sealant or caulk.
- n Begin by injecting the lowest port in the crack and work upwards. Move to the next higher port when the grout is visible at that port or when the crack will no longer accept additional material.
- n For cracks more than 3/4" wide place foam backer rod into crack and proceed as described above. Once the grout has hardened, remove backer rod and fill remaining depth with ISR-CM, Matrix or Conpro Set repair mortar.

When using injection grout to fill behind a delaminated substrate

- n Determine the spacing required as discussed above. Once this has been determined, lay out a grid of ports spaced equidistant in a vertical and horizontal plane.
- n Inject grout into the lowest line of ports and continue until it flows freely from this port and

other ports at the same level.

- n Seal ports using a non-staining clay, sealant or caulk and proceed to the next highest vertical line of ports.
- n Repeat the process until each port will no longer accept additional material.
- n Clean up overflow and seepage immediately with clean water to prevent staining.

When using as an adhesive to reconstruct broken masonry elements

- n Before mixing grout, fit broken pieces together and determine if clamps and/or wedges are needed to secure pieces while they cure. Use dowels or reinforcing pins as determined by an engineer.
- n Saturate interface with water where grout will be applied, while surface is still damp, apply a thin coat (1/16") to both sides of the entire interface.
- n Press and hold pieces together. Wipe excess from face with a sponge and clean water.
- n Do not disturb the repair for 24 hours.

Equipment

- n Injection can be achieved by using injection syringes, modified bulk guns, or low pressure grout pumps (less than 30 psi).
- n **Note:** Strain grout with a fine screen or sieve prior to syringe application.

Curing

- n 24 hours under normal circumstances.

Clean Up

- n Clean tools and equipment with water immediately after use.
- n Cured material must be removed mechanically.

Injection Grout

Coverage/Yield

- n 0.41 ft³/30 lb pail.

Product Handling

Packaging

- n 30 lb plastic pails.

Shelf Life

- n 18 months when properly stored.

Storage

- n Transport and store in cool, clean, dry conditions in unopened containers.
- n High temperature or high humidity will reduce shelf life.

First Aid

- n If swallowed, contact a medical professional immediately.
- n Do not induce vomiting unless directed to do so by a qualified medical professional.
- n In case of skin contact, wash thoroughly with soap and water.
- n In case of eye contact, flush with a high volume of water for at least 15 minutes.
- n For respiratory problems, remove person to fresh air. If difficulty persists, contact a medical professional.

Disposal

- n Dispose of material in accordance with local, state and federal regulations.

Technical Data

Physical state and appearance	Gray powder		
Viscosity	65 – 75 KU immediate lab		
Specific gravity – wet	1.8		
Volume ratio	1 part water/3 parts powder		
Weight ratio	1 lb. water/2.3 lbs. powder		
		7 Days	28 Days
Compressive strength	ASTM C 109	≥ 2800 psi	≥ 3800 psi
Tensile strength	ASTM C 348		≥ 475 psi

FOR PROFESSIONAL USE ONLY

Conproco warrants this product for one year from the date of manufacture to be free from manufacturing defects and to meet the technical properties on the current technical data sheet if used as directed within shelf life. User determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product, exclusive of labor or cost of labor. June 10, 2020.

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