### 4.2.1.1 Product Description

CI 060 EP is a liquid epoxy that is packaged in a self-contained cartridge with resin and hardener. The CI 060 EP is designed for repairs of thin cracks less than 1/4" (6 mm) in concrete base material.

**Product Features**
- Low viscosity, penetrates cracks as narrow as 0.002" (0.051 mm)
- No shrinkage, no solvent fumes
- Bonds to both concrete and steel
- Excellent resistance to water, salt water, alkalis and many chemicals
- Forms strong, permanent, water resistant bonds

### 4.2.1.2 Material Specifications

- **Injection Resin CI 060 EP**
  - Shelf life from date of manufacture when stored at 50°F to 80°F (10°C and 27°C)
  - Resin and hardener: 2 years
  - Rec. application temp. Range 50° to 113°F (10°C and 45°C)
  - Working Time 90 minutes at 50°F (10°C)
  - 40 minutes at 73°F (23°C)
  - 15 minutes at 90°F (32°C)
  - Min. curing time at 68°F (20°C) Approx. 24 hrs

#### CI 060EP

- **Compressive Strength** 12,000 psi
- **Tensile Strength** 7,120 psi
- **Compressive Modulus** 265,000 psi
- **Contents** 1 tube CI 060 EP resin and hardener = 14.3 in³

- **Surface Sealing Compounds**
  - Shelf life from date of manufacture when stored at 59°F to 77°F (15°C and 25°C)
  - Resin and hardener: 1 year
  - Rec. application temp. Range 40° to 90°F (4°C and 32°C)

#### CI 070EP

- **Working Time** 34 mins at 40°F (4°C)
- **Approx. Cure Schedule** Min. 3 hrs at 70°F (21°C)

#### CI 070EP

- **Compressive Strength** 11,000 psi
- **Tensile Strength** 6,900 psi
- **Compressive Modulus** 239,000 psi
- **Contents** 1 quart resin and hardener (covers approx. 50–70 ft)

#### Quick Set Epoxy

- **Working Time** 6 mins at 40°F (4°C)
- **Approx. Cure Schedule** Approx. 30 mins at 73°F (23°C)
- **Contents** 9 fl oz tube (covers approx. 50–70 ft)

### 4.2.1.3 Installation Data

#### Basic Use

CI 060 EP is a heavy duty, low viscosity epoxy, designed to make repairs in cracked concrete structures. CI 060 EP offers no shrinkage, no solvent fumes and bonds to concrete and steel. Cracks as narrow as 0.002" to 1/4" wide can be repaired. CI 060 EP forms strong, permanent water resistant bonds that provide excellent resistance to water, salt water, alkalis and many chemicals.

#### Coverage

- 1 cartridge of CI 060 EP = 14.3 in³ (234 cm³)
- One quart of Surface Sealing Compound = 58 in³ (32 fl oz, 950 cm³) and covers approx. 50-70 ft of crack

#### Limitations

- Minimum crack width 0.002" to maximum crack width 1/4"
- Do not use CI 060 EP system at less than 40°F (4°C) base material temperature
- Do not use CI 060 EP in cracks with flowing or standing water
- Sealing only one side of a crack may cause the loss of epoxy resin

### CI 060 EP Crack Injection System Volume of Epoxy required (in³) per Linear Foot of Crack

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<th>Depth of Crack (in.)</th>
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<th>0.0100</th>
<th>0.0200</th>
<th>0.0312 (1/32&quot;)</th>
<th>0.0400</th>
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<td>182.00</td>
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</table>

1 Assumes no waste.
### 4.2.1.4 Installation Instructions

1. Clean surface along the crack. Blow out crack with dry and oil-free compressed air.

2. Bond injection ports with CI 070 EP Crack Sealing Compound. Port spacing approximately 6” to 12” with wider spacing for thinner slabs.

3. Seal the crack with CI 070 EP surface sealing compound in strips of minimum 2” wide, 1/8” deep. (Seal both sides if crack goes completely through concrete.)

4. A light tap with a hammer to the rear end of the CI 060 EP cartridge breaks the internal glass cylinder, releasing the hardener. Mix by seesaw motion for approximately 30 motions. Do not shake.

5. Puncture the seal of the cartridge tip. Then screw on connection hose.

6. Plug connection hose to bottom port. Place air relief stopper in next port above.

7. Inject CI 060 EP resin until it appears visibly in the next port above. Remove air relief stopper (non-return valve is now closed) and insert into next port. Continue injecting into original port until the port accepts no more resin (when normal hand pressure is used on the dispenser).

8. Detach connection hose from port and plug to the next higher port. Repeat operating steps 6 and 7 up to the end of the crack.

9. After the injection resin has set, generally over night, the ports and the sealing compound can be removed with a flat chisel. If required, the surface can be ground even.

### 4.2.1.5 Ordering Information*

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
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<tr>
<td>CI 060 EP Kit</td>
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<tr>
<td>Includes 12 tubes injection epoxy (172 in³), injection epoxy, 30 ports with non-return valves, 6 connection hoses with non-return valves, 4 air relief stoppers</td>
</tr>
<tr>
<td>CI 070 EP Surface Sealing Compound (1 quart)</td>
</tr>
<tr>
<td>CI 070 EP Surface Sealing Compound, Case of 4 quarts</td>
</tr>
<tr>
<td>Bag of 30 ports with non-return valves</td>
</tr>
<tr>
<td>Bag of 6 connection hoses with non-return valves</td>
</tr>
<tr>
<td>Bag of 4 air relief stoppers</td>
</tr>
<tr>
<td>CB 200 PI dispenser (fully enclosed)</td>
</tr>
<tr>
<td>Adhesive dispenser for 10.5 oz tubes</td>
</tr>
</tbody>
</table>

*Not available in Canada