

- B. The product shall produce an initial set in approximately 1 minute.
- C. A controlled rate of set must be provided to minimise risk of thermal cracking.
- D. The product must be chloride free.

### **13.2.6 Micro-Concrete**

- A. Shall be supplied as a pre-bagged special purpose product requiring only the addition of a pre-determined volume of water at site to produce a mix of predictable performance.
- B. Micro-Concrete shall have the following characteristics:
  - 1. A single component.
  - 2. Shrinkage controlled.
  - 3. Free flowing concrete.
  - 4. Min compressive strength: 60 N/mm<sup>2</sup> at 28 days.
  - 5. High Flexural strength.
  - 6. Free of chlorides and nitrate ion.
  - 7. Water permeability when tested to DIN 1048 shall not exceed 10 mm.
  - 8. Free from corrosive effects.
- C. Bonding agents and ancillary materials shall be as recommended by the repair material manufacturer, unless otherwise directed by the Engineer.

### **13.2.7 Crack Injection Resins**

#### **13.2.7.1 *Crack injection resins shall comply with the following:***

- 1. Foaming agents shall be water reactive, solvent free, two-component polyurethane injection resin.
- 2. Epoxy resins shall be two-component injection resin.
- 3. Polyurethane resin shall be two-component system, which forms a permanent flexible compound.
- 4. Vinyl ester resin shall be a self-swelling compound (self-water grade).

### **13.2.8 Shotcrete**

- A. Pre-bagged shotcrete shall be a single compound cementitious material suitable for dry mix applications.
  - 1. Maximum aggregate size 12.5 mm.