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Construction

# Method Statement for Application "SIKA EGYPT"

# Sikadur<sup>®</sup> -52

**Scope:** Low viscosity injection resin for sealing vertical cracks with width less than 0.5mm

#### Preliminary Works and surface preparation

- 1.1 Clean out surfaces, using small wire brushes or compressed air to remove all loose and friable materials, as well as mud and other impurities.
- 1.2 Concrete surfaces must be clean, free from standing water and all loosely adhering particles.
- 1.3 The cracks and adjacent substrate must be clean, sound and free of frost. Remove dust, laitance, grease, curing compounds, waxes, impregnations, foreign particles, efflorescence and other bond inhibiting materials from the surface by mechanical means, i.e. sandblasting, high pressure water blasting, etc., as approved by the Engineer.

Epoxy resin adhesive - repair area may be dry or damp, but free of standing water prior to product application. (Fig. 1)

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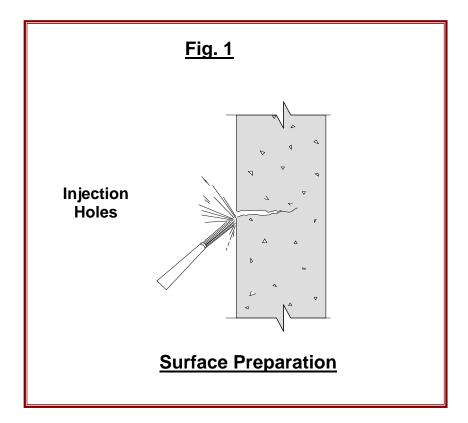
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#### 2. Execution

## 1 Mixing and Application

#### 1.1 Mixing

Mixing the epoxy resin adhesive for sealing the cracks. Premix each component. Proportion two parts of Component "A" to one part Component "B" into a clean, dry mixing pail. Mix thoroughly for 3 minutes min. on a low speed (400-600 rpm) drill. Mix only that quantity of material that can be used within its pot life *(refer to technical data sheet)* 





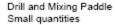
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### **Mixing Tools**





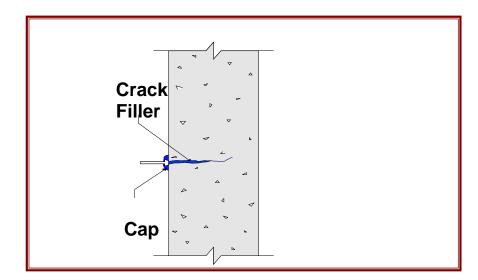


Double Mixing Paddle Medium quantities

### 2.2 Application

Using Sikadur<sup>®</sup> -52 (A two components, solvent free low viscosity injection) liquid, based on high strength epoxy resins, complies with the ASTM -C - 881 - 78 Type I, Grade 1 Class B+C).

- Surface injection is done using Sika high-pressure nipples and
  Sika injection equipment (pressure obtained 3 30 bar)
- Sika high-pressure nipples is fixed on surfaces with spacing from 25-50cm apart according to the crack width (0.5-5mm) the bigger the crack width the bigger the distance using Sika Dur 31.
- The crack is sealed using Sika Dur 31 (A two components epoxy resin adhesive complies with the ASTM-C-881-90 type I, II, IV & V grade 3).
- Allow sufficient time for Sika Dur 31 adhesive to set before injection.
- After that start the injection of Sika Dur 52 using Sika injection equipment under steady pressure (minimum 3 bars).
- The injection is to be from down to up.





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# Notes:

- Maximum width of cracks to be injected 5mm, if the width of crack is greater than this width use Sika Dur 42.
- Minimum age of concrete: 3-6 weeks.
- Minimum temperature of concrete to be injected + 5°c 10° (depending on width and depth of crack).
- Crack surfaces should be dry or damp free from standing water – prior Sika Dur 52 application,

For any further clarification don't hesitate to contact Sika Egypt Technical Department.

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