

# Method Statement

## Renderoc S2

### Section A : General Comments

#### High temperature working

It is suggested that, for temperatures above 35°C, the following guidelines are adopted as good working practice:

- (i) Store unmixed materials in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.
- (ii) Keep equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment, which will come into direct contact with the material itself.
- (iii) Try to avoid application during the hottest times of the day, arrange temporary shading as necessary.
- (iv) Make sufficient material, plant and labor available to ensure that application is a continuous process.
- (v) Where mixing water is required in the application of a product, it is advised to maintain such water at a maximum of 20°C.

#### Equipment

It is suggested that the following list of equipment is adopted as a minimum requirement

<i>Protective clothing</i>	:	Protective overalls
	:	Good quality gloves, goggles and face mask
<i>Preparation equipment</i>	:	Wire brush
	:	Proprietary blasting equipment
<i>Mixing equipment</i>	:	Measuring jug
	:	1 KW slow speed drill, 400 or 500 rpm
	:	+ Fosroc <b>MR4</b> mortar mixing paddle
	:	+ suitably sized mixing vessel, for single bag mixing, or
	:	Proprietary forced-action mixer for multiple bag mixing
<i>Application equipment</i>	:	Hand application trowel
	:	Wooden float
	:	Steel or plastic finishing float
	:	Finishing sponge, paint brush.

#### Application - points of note

Fosroc operates a policy to encourage the use, where possible, of registered applicators, since the long-term performance of the materials is dependent upon proper application.

## **Section B : Application Method**

### **1.0 Surface preparation**

Attention to full and proper preparation of the substrate is essential for complete repair adhesion.

- 1.1 The surface of the substrate should be thoroughly cleaned to remove all traces of dust, oil, paint, curing compounds, grease, corrosion deposits, algae or any unsound material which might affect subsequent bond between Renderoc S2 and the substrate.
- 1.2 Oil and grease deposits are best removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. The effectiveness of decontamination should be assessed by a pull-off test.
- 1.3 The substrate should further be 'roughened' to remove excess laitance, to expose pinholes & blowholes, corrosion deposits and to provide a mechanical key for subsequent application of Renderoc S2. This is most effectively achieved by the use of proprietary blast media, such that the fine aggregate is exposed but not polished.
- 1.4 Suitable formwork arrangements are to be made as per the site requirements.
- 1.5 Where preparation techniques result in voids of greater than 50 mm depth, it will be necessary to use other Renderoc products to make local repairs before over coating with Renderoc S2. Such areas, once repaired, will not require additional preparation prior to the application of Renderoc S2.
- 1.6 Immediately prior to application of Renderoc S2, the prepared substrate should be blown clean with oil-free compressed air.
- 1.7 The specifications mentioned in Data sheet shall be strictly adhered to.

### **2.0 Substrate priming**

- 2.1 All prepared areas should be thoroughly soaked with clean, potable water immediately prior to the application of Renderoc S2, such that the substrate is "saturated surface dry".
- 2.2 Since Renderoc S2 is only a skim coat, reinforcing steel shall be treated with Nitozinc primer and Nitobond AR shall be used as the bonding agent.

### **3.0 Mixing**

Care should be taken to ensure that Renderoc S2 is thoroughly mixed. In all cases the powder should be added to the water and mixed strictly in accordance with appropriate procedure.

#### **3.1 Mixing - small quantities**

- a) Small quantities - up to 5 kg - may be mixed manually.
- b) The mixing ratio, by volume, should be 3.25 to 3.5 liters of water+0.25 kg polymer to 25 kg Renderoc S2. In any circumstances the water content should not exceed 3.5 liters.( for 5 kg of Renderoc S2 add 0.7liters of water+0.05 kg of polymer)

#### **3.2 Mixing - large volumes**

- a) For larger volumes of material it will be necessary to mix using
  - a proprietary forced action mixer, or
  - slow speed drill (400/500 rpm) + Fosroc **MR4** mortar paddle attachment.
- b) For each bag of Renderoc S2 to be mixed, measure out and place 3.25 to 3.5 liters of cool, potable water into the mixer+ 0.25 kg of polymer. Always add the powder to the water. With the mixer in operation add one full bag of Renderoc S2, and mix continuously for 5 minutes until fully homogenous.
- d) Enhanced performance properties can be gained by adding up to 0.625 liters of Nitobond AR (per full bag of Renderoc S2) in addition to the normal gauging water, until the desired consistency is achieved.

#### 4.0 Application

Do not proceed with the application when rainfall is imminent, unless in a sheltered or protected position.

- 4.1 Apply the fully mixed Renderoc S2 to the prepared substrate, up to 5 to 50 mm thickness, by steel trowel. It should be applied with the minimum of working, and be allowed to partly set before finally trowelling to a smooth finish.
- 4.2 Thickness of application should be in accordance with that laid down in the '**Application criteria**' section of the current product data sheet.

#### 5.0 Finishing

- 5.1 Renderoc S2 is finished by striking off with a straight edge and closing with a steel or plastic float. Note that water can be drawn to the surface if 'overworking with the float occurs, and an unsightly finish may result.
- 5.2 Damp sponges or plastic floats may be used to achieve a desired surface texture, but care should again be taken not to overwork the surface.

#### 6.0 Curing

- 6.1 Curing of Renderoc S2 is required as per normal construction practices. However, Fosroc recommends Concure WB for effective curing.

#### 7.0 Cleaning

- 7.1 All equipment should be washed with clean water immediately after use. Equipments used with Nitozinc primer and Nitobond EP should be cleaned with Nitoflor Solvent. Cured material can only be removed by mechanical means.

### Section C : Approval and variations

This method statement is offered by Fosroc as a 'standard proposal' for the application of Renderoc S2. It remains the responsibility of the Customer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to Fosroc for comment, in writing, prior to the commencement of any work.