

## Flo-Add 20 Method Statement

(Expansive and plasticising grout admixture for pre-casted concrete elements)

### Section A : General Comments

#### High temperature working

The following guidelines are adopted as good working practice:

- (i) Store unmixed materials in a shaded area, avoiding exposure to direct sunlight.
- (ii) It is not recommended to apply the materials during the hottest time of the day.
- (iii) It is also recommended to use tap water with temperature not exceeding 25°C.
- (iv) To ensure continuous grout pouring, enough materials, water, and labour should be available.

#### Equipment

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

<i>Protective clothing</i>	:	<i>Protective overalls and safety shoes</i>
	:	<i>Good quality gloves, goggles and face mask</i>
<i>Equipment</i>	:	<i>Graduated cylinder, drill mixer and suitable mixing paddle</i>
	:	<i>Mixing bucket (25 litre)</i>
	:	<i>Screw pump</i>

### Section B : Application

#### 1.0 Surface Preparation

- 1.1 Surface must be clean and sound.
- 1.2 All dust, laitance, grease and curing compound should be removed by suitable method.
- 1.3 The width of the joint must be at least 10 mm. If the joint is open from the both side, use a stopper board on one of the sides.
- 1.4 Primer is not required because dampening the substrate with clean water is recommended before applying the grout mixture.

#### 2.0 Mixing

- 2.1 To ensure proper mixing, a mechanically powdered mixer or drill fitted with suitable paddle should be used.



- 2.2 The required water quantity should be accurately measured and added into mixer according to the specified strength and consistency.
- 2.3 1 kg of Flo-Add 20 powder should be added to  $15 \pm 1.0$  litres of water at first to the water and mix for 1 - 2 minutes.
- 2.4 Then slowly add cement and sand and mix for 5 minutes until smooth even consistency is achieved.

### 3.0 Placing and Finishing

- 3.1 After mixing, the grout should be pumped into the joints and levelled with a steel trowel.
- 3.2 If the joint is opened on the both sides, place a stopper board on one side of the joints
- 3.3 Remove the stopper board once sufficient amount of time has elapsed depending on the working conditions and use a trowel to finish the joint.
- 3.4 The grout can be applied using a normal screw pump. Pump the grout carefully into the joints to ensure that the joint is thoroughly filled with the material and obtain a structurally functional joint.
- 3.5 For the application behind reinforcement bars, a piece of steel tube with a pointed tip is attached to the hose to allow the ease of application.

*Note: Do not vibrate the grout in the vertical joints.*

### 4.0 Curing

- 4.1 The Exposed section should be kept to the minimum and cured by using curing compound like Setseal 22 or by using wet hessian sheets covered with polyethylene sheets.
- 4.2 At low temperatures (below  $8^{\circ}\text{C}$ ), warm water is recommended to achieve the early strength. And the stopper board is recommended to be kept longer time.
- 4.3 At high temperatures ( $35^{\circ}\text{C}$  and above), cold water (less than  $20^{\circ}\text{C}$ ) must be used for mixing.

## Section C : Approval and variations

This method statement is offered by DCP as a 'standard proposal' for the application of **Flo-Add 20**. It remains the responsibility of the Engineer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to DCP for approval, in writing, prior to commencement of any work. DCP will not accept responsibility or liability for variations to the above method statement under any other condition.