

## Flo-Add LV Method Statement

(Low viscous superplasticising shrinkage compensating grout admixture)

### 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) Avoid application through peak temperatures of the day.
- (iv) Make sufficient material, plant and labour available to ensure that application is a continuous process.

#### Equipment

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

<i>Protective clothing</i>	:	<i>Protective overalls</i>
	:	<i>Good quality gloves, goggles and face mask</i>
<i>Preparation equipment</i>	:	<i>Electric or pneumatic breaker</i>
	:	<i>Hammer and chisel</i>
<i>Mixing equipment</i>	:	<i>Measuring jug: 1 KW slow speed drill, 400 or 500 rpm</i>
	:	<i>Mixing paddle and mixing vessel, or</i>
	:	<i>Forced-action mixer, fitted with a suitable paddle</i>
<i>Application equipment</i>	:	<i>Formwork</i>
	:	<i>Pouring equipment</i>

### Section B : Application

#### 1.0 Surface Preparation

- 1.1 The substrate surface must be free from oil, grease or any loosely adherent material.
- 1.2 If the concrete surface is defective or has laitance, it must be cut back to a sound base.
- 1.3 Bolt holes or fixing pockets must be blown clean of any dirt or debris.



expertise



quality



full range

## 2.0 Formwork

### 2.1 General

- 2.1.1 Before fixing any formwork, ensure that the area to be grouted is clean.
- 2.1.2 The formwork itself must be constructed to be leak proof, to prevent any possible grout loss. This can be achieved by using foam rubber strip or mastic sealant beneath the formwork, and at any joints in the formwork. It shall, however, also be provided with drain holes and plugs.
- 2.1.3 The formwork should also be constructed in such a way as to keep the final, unrestrained surface area of the grout to a minimum, to avoid problems with cracking at a later stage.

### 2.2 Geometry

- 2.2.1 Pouring side : The pouring side should be raised by means of a hopper or grout box to maintain a minimum of 300 mm head of grout at all the times.

## 3.0 Pre-soaking

- 3.1 All concrete surfaces within the formwork area should be saturated with clean, fresh water for a minimum period of 24 hours prior to grouting.

## 4.0 Mixing

- 4.1 To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used for quantities up to 50 kg.
- 4.2 High shear vane mixer is required when mixing large quantities.
- 4.3 The required water content should accurately measure and added into the mixer. Add the full quantity of Flo Add LV powder at first and mix for 1 - 2 minutes. Then slowly add cement and sand (if required) and mix till smooth consistency is achieved.
- 4.4 Under **no circumstances** should part bags be used, or additional water employed. Either of these two actions will change the water: powder ratio, adversely affecting material performance and automatically invalidating DCP standard product guarantee.

## 5.0 Placing

- 5.1 It is essential that the machine mixing capacity, material supply and labour availability is adequate to enable the grouting operation to be carried out continuously.
- 5.2 **Immediately** prior to placement, the mixed grout should be briefly agitated to release any surface tension. Place the grout within 30 minutes of mixing to gain the full benefit of the expansion process.



- 5.3 Continuous grout flow during the grouting operation is essential. Sufficient grout must be available prior to starting, and time taken to pour a batch must be regulated to the time taken to prepare the next one.
- 5.4 The mixed grout should be poured only from one side of the void to eliminate the entrapment of air, or surplus pre-soaking water. The grout head must be maintained at all times so that a continuous grout front is achieved.
- 5.5 When the grout reaches the open side of the formwork, and rises above the underside of the base plate, pouring should continue slowly down the length of the base plate until completed.

## 6.0 Finishing

- 6.1 Wherever possible unrestrained “shoulders” are to be avoided. These have a tendency to crack and/or debond, due to their unrestrained nature.

## 7.0 Curing

- 7.1 On completion of the grouting operation, all exposed areas of grout should be thoroughly cured. For best results, curing should be done by means of water application, Setseal curing membrane or wet Hessian.

## 8.0 Cleaning

- 8.1 All tools should be cleaned **immediately** after application using fresh water. Hardened materials should be cleaned mechanically.

## Section C : Approval and variations

This method statement is offered by DCP as a ‘standard proposal’ for the application of **Flo-Add LV**. 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.