

## **UltraFlow GP**

High strength, non-shrink cementitious construction grout

### PACKAGING AND COLOURS

UltraFlow GP is supplied in 25 kg bags.

### **COVERAGE AND YIELD**

13 L / 25 kg bag at flowable consistency.

For additional information on **UltraFlow GP** grout or other non- shrink grouting materials, contact your Gulf additive factory representative

### DESCRIPTION

**UltraFlow GP** is a ready to use product in powder form, which requires only the on-site addition of water to produce a non-shrink grout of predictable performance.

### TYPICAL APPLICATIONS

**UltraFlow GP** is formulated for use at plastic or flowable consistency, and may be used with confidence for bedding, grouting and void filling operations including pile cap reprofiling and encapsulation.

### ADVANTAGES

- Non shrink
- Adjustable consistency
- Proven and predictable performance
- Early strength development
- Impermeable
- Filling the bar holes

#### TYPICAL PROPERTIES When tested at w/p 0.18

| Water addition             | 4.5 L / 25 kg        |
|----------------------------|----------------------|
| Compressive Strength       |                      |
| BS 1881 Part 116           | Flowable             |
| 1 day                      | 25 N/mm <sup>2</sup> |
| 3 day                      | 40 N/mm <sup>2</sup> |
| 7 day                      | 50 N/mm <sup>2</sup> |
| 28 day                     | 60 N/mm <sup>2</sup> |
| Flexural Strength          |                      |
| BS 4551: 1980 @ 28 days    | 7 N/mm²              |
| Water penetration          |                      |
| (BS EN 12390 Part 8 :2000) | <10 mm               |

### APPLICATION GUIDELINES SURFACE PREPARATION

The surface onto which the grout is to be applied should be scabbled to remove laitance and expose aggregate. Do not use bush hammers or similar preparation equipment that can crush the aggregate but leave it in place. The surface must be free of oil, dust, dirt, paint, curing compounds or other contaminants that could impair adhesion. Soak area to be grouted to minimise absorption. Surfaces should be damp but free of standing water. Particular attention should be paid to bolt holes to ensure that these are water-free. Use oil free compressed air to blow out bolt holes and pockets as necessary.

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Base plates, bolts, etc. must be clean and free of oil, grease and paint. Set and align equipment. If shims are to be removed after the grout has set, then lightly grease them for easy removal. Ensure formwork is secure and watertight to prevent movement and leaking during the placing and curing of the grout.

### MIXING

Damp down the inside of the grout mixer with water prior to mixing the initial batch of **UltraFlow GP**. Ensure the mixer is damp but free of standing water. Add the pre-measured quantity of water. Slowly add the **UltraFlow GP**, mixing continuously. Mix for 3-5 minutes until a smooth, uniform, lump free consistency is achieved.

### PLACING AND APPLICATION

Place immediately after mixing, into the prepared area in such a manner that the grout has the shortest distance to flow. Pour the grout continuously maintaining a constant hydrostatic head wherever possible. **UltraFlow** grouts are suitable for use with most types of pumping equipment.

Immediately after **UltraFlow GP** grout is placed, cover all exposed grout with clean wet hessian and keep moist until grout surface is ready to be finished, or until final set.Alternatively, consider the use of a curing membrane from the **UltraKure** range.

### HEALTH AND SAFETY

As with other products containing Portland cement, the cementitious material in **UltraFlow GP** grout may cause irritation. In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Call a physician. In case of contact with skin, wash skin thoroughly.

### PRECAUTIONS

The temperature of both the grout and elements coming into contact with the grout should be in the range of  $+5^{\circ}$ C to  $+35^{\circ}$ C. Do not use water in an amount or at a temperature that will produce a consistency more than flowable or cause

mixed grout to bleed or segregate.

**UltraFlow GP** should be laid at a minimum thickness of 10mm and to a maximum depth of 80mm.

## DO NOT OVERWORK AND AVOID USING MECHANICAL VIBRATION.

## UNDER NO CIRCUMSTANCES SHOULD UltraFlow GP BE RETEMPERED BY THE LATER ADDITION OF WATER.

It is essential that a mechanically powered grout mixer is used to obtain the optimum properties. A slow speed drill and mixing paddle may be used for single bag batches only.

### QUALITY AND CARE

All products originating from Gulf additive Factory, Qatar facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

Request and refer to recommended installation procedures for **UltraFlow** grouts prior to use

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