PRODUCT DATA SHEET

PS HI-FLOW GROUTING MORTAR

DESCRIPTION (1 Day Compressive Strength 15N/mm^2)

PS Hi-Flow Grouting Mortar is a blend of low alkali, high specific surface portland cements and other cementitious binders, combined with high purity aggregates and a system of compatible admixtures. **PS Hi-Flow Grouting Mortar** is a high fluidity grout that will neither bleed nor shrink.

USES

PS Hi-Flow Grouting Mortar has been specifically designed for anchor or baseplate grouting, under machinery and stanchion plates, grouting rails and bridge bearings, fixing bolts, parapet rails etc.

KEY PROPERTIES

- Equivalent sodium oxide less than 3.0Kg/m^3.
- High ultimate strength
- Chloride free
- Shrinkage compensated in both the plastic and hardened states.
- Can be used for grouting sections up to 100mm thick.
- Complies with Highway Spec 2601 for bedding mortars.

TYPICAL PERFORMANCE

Compressive Strength (N/mm^2)	
1 day	15.0
7 day	45.0
28 day	60.0 (Typical)
Flexural Strengths (N/mm^2)	
1 day	4.0
7 day	5.5
28 day	6.5
Expansion Results (%)	
1 day	0.003
3 day	0.003
Setting Times:	Approximately 4 hours Initial
	Approximately 6 hours Final
Water/ solids ratio	0.22
Pot Life (Can vary with temperature)	Approximately 45 minutes
(Results derived from specimens produced at 0.17 water/solids ratio at 20˚C)	
Flow Characteristics:	A typical flow-channel figure for **PS Hi-Flow Grouting Mortar** would be in the range of 500mm. (The quoted set and flow characteristics are dependent on temperatures higher or lower than 20˚C, for example, will result in reduced or extended setting times).

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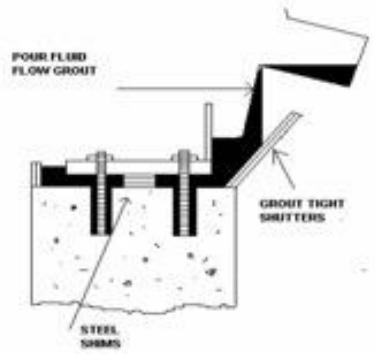
YIELD

The approximate yield of mixed grout per tonne of dry powder is 0.61m^3. The approximate quantity of dry powder required to produce 1m^3 of set grout is 1.64 tonnes. This equates to 12.2 litres per 20kg of dry powder. These figures do not allow for site wastage.

FIGURE 1. GROUT SHUTTER DETAIL



MIXING INSTRUCTIONS

PS Hi-Flow Grouting Mortar should be mixed using water that complies with BS EN 1008 (as for concrete).
It should be mixed in a suitable container using either an electric (1kW) or pneumatic power tool. Larger amounts can be mixed in a forced action paddle mixer. 20kg of the grout powder should be added carefully to 4.4 litres of water, progressively mixing until a fluid grout consistency is achieved. Small quantities can be mixed by hand, care being taken to accurately measure the water. Once mixed, the material must not be re-worked.

APPLICATION AND PLACING

PS Hi-Flow Grouting Mortar can either be poured or pumped into position. Due to the relatively short pot life, pumped operations must be executed quickly, particularly in warm weather conditions. The grout should be placed immediately on completion of mixing for best results.
Ensure all surfaces with which the grout will come into contact are clean and dust free. Ideally, concrete substrates should be thoroughly soaked for several hours prior to the grout being applied to reduce suction.
Permeable concrete should be treated with a suitable concrete primer. Shutters must be impermeable to the passage of water and both strong enough and sufficiently supported to contain the placed grout. When gravity placed, sufficient hydrostatic head must be given and grout volume to enable it to flow completely through the void to be filled from one side of shutter only. A minimum 50mm head is recommended. Immediately prior to placement all excess water should be removed. Any grout exposed to wind, drying conditions or low temperatures should be suitably protected, preferably by coating with **PS Cure 90** curing agent. See figure 1 for shutter detail for pouring.

ANCILLARY PRODUCTS

- **PUDLO CWP**
- **Surestop BWB**
- **Surestop SM**

PACKAGING AND STORAGE

PS Hi-Flow Grouting Mortar is available in 20kg paper sacks. **PS Hi-Flow Grouting Mortar** should be stored in cool dry areas clear of the ground sheeted or pallets high. The product should be used on a first in – first out basis. Shelf life is 6 months subject to temperature, humidity and storage conditions.