

High Flow Grout

Technical Specification



Adomast

Pourable, High Strength Repair Grout

High Flow Grout is a non shrink, high strength cementitious grout comprising of low alkali high specific area Portland cements and other cementitious binders combined with high purity aggregates and a system of compatible admixtures to achieve high in service performance.

This grout has high flow characteristics to achieve penetration and levelling with no bleed and zero shrinkage when placed at 0.22 water solid ratio.

USES

High Flow Grout has been specifically designed to provide a high strength fluid grout for pouring into and under stanchion plates, machine base plates, parapet rails, for supporting bridge bearings and for filling ducts in post tensioned and pre-stressed structures.

Advantages

- Equivalent Sodium Oxide is less than 3.0kg/m³
- High ultimate strength.
- Shrinkage compensated.
- Can be used for grouting sections up to 100mm thick.
- Chloride Free
- High Fluidity – Can be pumped or poured
- High Flow Grout is Compliant with D.o.T Highways Agency Spec.2601 for “Bedding Mortars”.

Performance

All tests performed at 20°C

Compressive Strength (N/mm²)

1 day 15.0

7 day 40.0

28 day 65.0

Flexural Strength (N/mm²)

1 day 3.0

7 day 6.0

28 day 8.0

Setting Times (Minutes)

Initial 240

Final 360

Expansion Results (%)

1 day 0.01

7 day 0.05

Water/ Solid ratio 0.22

Pot Life Approximately 30 mins (Can vary with temperature)

Application thickness : 10mm-100mm

Flow Characteristics:

A typical flow-channel figure would be in the range of 500mm - 700mm.

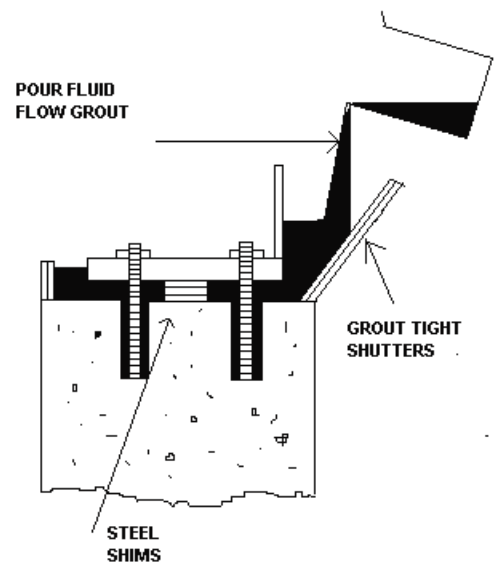


FIGURE 1. GROUT SHUTTER DETAIL

Application

MIXING INSTRUCTIONS

The grout should be mixed using water which 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

High Flow Grout 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 such as Adomast Concrete Primer A. 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 maintained to enable the material 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 or drying conditions should be suitably protected, preferably by coating with a wax-free Curing Agent

See Figure 1 for shutter detail for pouring Adomast High Flow Grout

Coverage

The approximate yield of mixed grout per tonne of dry powder is 0.61 m³.

The approximate quantity of dry powder required to produce 1m³ of set grout is 1.64 tonnes. This equates to 12.2 litres / 20kg of dry powder.

These figures do not allow for site wastage.

Storage

Palletised material should be stored in cool dry areas clear of the ground sheeted or under cover and stacked not more than two pallets high. The product should be used on a first in – first out basis.

Shelf Life

Shelf life is typically 6 months, unopened/airtight. Subject to humidity & temperature

Specification

High Flow Grout is supplied by Adomast Manufacturing Ltd and shall be applied strictly in accordance with the manufacturer's instructions.

For specific advice regarding any aspect of this product, please consult our Technical Department

Health and Safety

During application avoid contact with eyes and skin. In the event of eye contact irrigate immediately with copious quantities of water and then seek medical advice. In the event of skin contact, wash with soap and water.

Wear protective eyewear and gloves when handling and using.

See Safety Data Sheet for further information.