



FLOWFILL GROUT HIGH STRENGTH

HIGH STRENGTH COMPENSATING GROUT

KEY FEATURES

- Gaseous expansion system compensates for shrinkage and settlement whilst in the plastic state
- It is designed for flowable and pumpable grouting work
- Ready to use, pre-mixed, requires only the addition of water
- No metallic iron content to cause staining
- Lower water/content ratio reduces drying shrinkage, increases durability and reduces permeability
- Excellent flow characteristics, when used in fluid consistency, will fill intricate cavities
- Complete void filling resulting from gaseous expansion in plastic state

DESCRIPTION

Flowfill Grout High Strength is a high strength shrinkage compensating grout. It is based on Portland cement, graded aggregate and chemical additives, which impart controlled expansion whilst in the plastic state. The gaseous expansion system compensates for shrinkage and settlement in the plastic state.

RECOMMENDED USES

- Grouting in column based, base filling
- For installation of anchor bolts, heavy machinery base plate.
- Filling core holes, rod holes and defects in concrete
- Fill in grout for hollow block walls
- Joint between precast panels and other joints.

SUBSTRATE PREPARATION

The substrate surface must be clean, sound and free from oil, grease, curing compound or any loose materials. It must be mechanically abraded back to a sound concrete. Bolts or anchor holes must be clean and free from dust or loose materials. This can be achieved by blowing clean the hole.

APPLICATION INSTRUCTION

PERFORMANCE PROPERTIES

Appearance	Grey Powder
Water Consumption	4.8 to 5.5 Litres of water per 25kg bag
Flow Consistency	10 to 30 Sec, ASTM C939
Compressive Strength	≥ 70N/mm ² , ASTM C942
Expansion/ Shrinkage	≤ 0.4% at 3 days & 28 days 0% at 28 days ASTM C940
Setting Time	Initial Set ≥ 1 hour Final Set ≤ 10 hours

PRE-SOAKING

It is essential to pre-soak the concrete substrate prior to application of Flowfill Grout High Strength. Pre-soak substrate with water for a minimum of 6 hours prior to grouting. Immediately before pouring, the excess water should be removed, all water in the anchor and bolts holes must be blown out and no traces of free water present whilst grouting.

BASE PLATE

All traces of rust, oil or grease must be removed. It is essential to provide air pressure relief holes for venting.

FORMWORK

It is essential that formwork be constructed to facilitate rapid continuous and complete filling at area to be grouted. It is essential that the formwork constructed to be leak proof and water tight. Foam rubber strips of suitable sealants underneath the formwork are recommended. Formwork should allow gravity flow of grout between the base plate and foundation ensuring grout is kept in full contact with base plate and concrete substrate.

UNRESTRAINED SURFACE

As Flowfill Grout High Strength is an expanding grout, unrestrained areas must be kept to minimum. It is advisable not to have any unrestrained areas.

LOW TEMPERATURE WORKING

Normal precautions for winter working with cementitious materials should then be adopted. At temperature below 5°C the cure rate and strength development rate will be dramatically reduced. If early strength is required it is advisable to use heated water

and condition Flowfill Grout GP to 25°C. Do not exceed this temperature.

HIGH TEMPERATURE WORKING

At temperature above 30°C, it is advisable to use water below 20°C when mixing grout. All materials must be kept cool and away from direct sunlight with installation area should be shaded by erecting shade screens. If ambient temperature are excessive, perform grouting in early morning or late evening.

MIXING

Flowfill Grout High Strength is supplied in a ready to use form requiring only the addition of fresh clean water. For optimum results a Flowfill Grout High Strength must be mixed with a mechanical forced action mixer with a high shear stirrer. It is essential that the grouting operation is continuous hence ensure sufficient labour and mixing capacity is available.

The selected water content should be accurately measured into a mixing vessel. Slowly add the dry powder while mixing. The mixing should continue for a maximum of 5 minutes until a uniform homogeneous consistency is obtained. DO NOT MIX BY HAND.

PLACING

It is essential that at ambient temperatures the grout is placed within 25 minutes of mixing and this will ensure the expansion process will be maximized. Flowfill Grout High Strength can be placed in thickness ranging from 20mm to 50mm in single application. Where thickness is greater than 50mm, special procedures may be necessary.

Avoid trapping air and water by placing grout from one side only. It is recommended that a suitable head box be used to ensure continuous flow of grout. Ensure entire area to be grouted is filled by bringing level to above underside of machine base plate and remain at this level throughout grout placement. The grout head must be maintained at all times so that a continuous grout front is achieved. Do not use mechanical vibrators to assist in flows as this will cause segregation of aggregate. For large areas it is recommended that Flowfill Grout High Strength be pumped.

The information and recommendations relating to the application and end-use of the product are given in good faith and based on tests which we believe to be reliable. Differing materials, substrates, environments, site conditions, and product storage, handling and application may affect results. However, no warranty in respect of merchantability or fitness for a particular purpose, nor any liability arising out of any legal relationship, whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. No guarantee of their accuracy can be made because of the great range of field conditions and variation encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with limited warranty only, and on condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Bostik be liable to anyone except for replacement of the products or refund of the purchase price.

CURING

On completion of grouting, exposed area should be covered with wet hessian, plastic sheeting to prevent excessive moisture loss. Keep grout covered for a minimum of 24 hours. Remove formwork no sooner than 24 hours after completion of grouting and continue to cure with plastic sheeting. Lack of sufficient curing could result in plastic cracking and drying shrinkage on the surface. The surface should be protected for at least 7 days with either a curing compound or wet hessian, plastic sheeting or water.

PACKAGING

Flowfill Grout High Strength is supplied in 25 kg bag.

CLEAN UP

Flowfill Grout High Strength should be removed from tools and equipment with clean water immediately after use.

STORAGE AND SHELF LIFE

Store all materials in a cool dry place, in an elevated condition. Flowfill Grout High Strength has a shelf life of approximately 12 months if kept in a dry environment away from moisture.

PRECAUTION

- Do not add additional water other than specified
- For large areas apply grout in a continuous operation
- Unrestrained areas must be kept to minimum
- Cure time and set will be extended when applied at temperature lower than 5°C

HEALTH AND SAFETY

Cement products are classified as hazardous under General Health and Safety guidelines. Materials containing Portland cement are alkaline in nature. During use avoid inhalation of dust, contact with skin and eyes. Suitable protective clothing, dust mask, gloves and eye protection should be worn. Continual or extended contact with cement products can cause skin irritation. If skin irritation occurs, remove contaminated clothing and flush skin thoroughly with water for a minimum of 15 minutes. Read Material Safety Data Sheet carefully before using this product.

BOSTIK HOTLINE

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