



TECHFLOW GROUT GP

GENERAL-PURPOSE CLASS C, NON SHRINK, DUAL EXPANSION CEMENTITIOUS GROUT

15 November 2017

YOUR SMART ADVANTAGES

- Dual expansion compensates for shrinkage in the plastic and hardened state
- Ready to use, pre-mixed, and requires only the addition of water
- Can be pumped, trowelled, rammed or flowed to areas where normal grouting methods do not suffice
- Can be mixed for stiff, plastic, flowable or fluid application
- No metallic iron content to cause staining
- Lower water/cement ratio reduces drying shrinkage, increases durability and reduces permeability

DESCRIPTION

High performance, non-shrink (Class C) cementitious grout.

APPLICATION

Application thickness 10mm-140mm

USES

All general performance grouting
Critical equipment base plates
Heavy duty support beneath machine base plates
Anchoring bolts, bars and fittings
Underpinning
Bridge bearing and crane rails
Applications subject to continuous vibrations and dynamic loads

PRODUCT CHARACTERISTICS

| | |
|-------------|----------|
| Colour | Grey |
| Size | 20KG |
| Item Number | 30840447 |

APPLICATION INSTRUCTIONS

Substrate and Surface 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 surface.

- Bolts or anchor holes must be clean and free from dust or loose material. This can be achieved by blowing clean the hole.
- Base plates must be cleared of all rust, oil or grease. It is essential to provide air pressure relief holes for venting.

Pre Soaking

It is essential to pre-soak the concrete substrate prior to application of **Bostik Techflow Grout GP**. Pre-soak substrate with water for a minimum of 6 hours prior to grouting. Immediately before pouring, the excess water should be removed. In the case of bolt/anchor holes, the holes must be blown out to ensure no traces of free water are present whilst grouting.

Formwork

Formwork must be constructed to facilitate rapid and continuous filling, whilst remaining leak proof and water tight. Foam rubber strips or suitable sealants underneath the formwork are recommended.

Unrestrained Surfaces

As **Bostik Techflow Grout GP** is an expanding grout, unrestrained areas must be kept to a minimum. It is advisable not to leave any unrestrained areas.

Low Temperature Working

At temperatures 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 **Bostik Techflow Grout GP** to 25°C. Do not exceed this temperature.

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APPLICATION INSTRUCTIONS Cont.

High Temperature Working

At temperatures 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. If practical, the installation area should be shaded by erecting shade screens. If ambient temperatures are excessive, grouting should be scheduled for early morning or late afternoon.

Mixing

Bostik Techflow Grout GP requires between 3 - 4.4 litres of potable water per 20kg bag, depending on the desired consistency. For optimum results, use a cage or impeller style mixing stirrer powered by a heavy duty electric mixing drill. Care is to be taken while mixing to avoid the formation of air bubbles.

- Add pre-measured water to a clean mixing bucket.
- Gradually add powder into the water whilst continuously mixing the contents of the bucket. When the entire contents of the bags have been added to the water, mix for a further 3 - 5 minutes to achieve maximum results. Mix product must be smooth, lump free and homogenous consistency.

It is essential that the grouting operation is continuous hence ensure sufficient labour and mixing capacity is available.

| Consistency | Water Addition |
|-------------|----------------|
| | (Litres) |
| Stiff | 3 Li |
| Plastic | 3.1 - 3.6 Li |
| Flowable | 3.6 - 4.0 Li |
| Fluid | 4.0 - 4.4 Li |

* Consistency is in accordance to ASTM C1107/C1107-11 and AS 1478.2-2005 Table 4.1.2.2

CAUTION
DO NOT MIX BY HAND
DO NOT ADD ADDITIONAL WATER
Discard any unused grout that has stiffened or hardened. DO NOT RETEMPER

Pouring

The desired ambient temperature for pouring is approximately 20°C. At this temperature it is essential the grout is placed within 25 minutes of mixing as this will ensure the expansion process is maximised. Ensure the entire area to be grouted is completely filled. We advise the following:

- Use a suitable head box to ensure continuous flow of grout.
- Place/ pour grout from one side, minimizing the likelihood of trapped air.
- 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 flow as this will cause segregation of aggregate.
- Discard any material that shows signs of stiffening.

Curing

On completion of grouting the exposed area should be covered with wet hessian, plastic sheeting or **Bostik Bond 'N' Cure** to prevent excessive moisture loss. At ambient temperature, formwork should be removed no sooner than 24 hours after completion of grouting. The covering should stay in place for a further 6 days. Lack of sufficient curing could result in plastic cracking and drying shrinkage on the surface.

BOSTIK CO-OPERATIVE TEST OPTION

Bostik offer a service in which a program has been established to eliminate potential field problems by pretesting Bostik adhesives with samples of building materials to which the adhesive will be applied. This service is available on large projects where pre-application testing will aid in determining the proper surface preparation method to achieve optimum adhesion. Consult a Bostik representative for further information

PROPERTIES

Set Time

| Consistency | Initial Set | Final Set |
|-------------|-------------|-----------|
| Stiff | 2.5 hours | 3.5 hours |
| Plastic | 4 hours | 5 hours |
| Flowable | 4.5 hours | 7 hours |
| Fluid | 5 hours | 8 hours |

* Tested in accordance to ASTM C191-08

Time for Expansion

Start : 15 mins
Finish : 2 - 3 hours

* Tested in accordance to ASTM C940-98a (re-approved 2003)

Compressive Strength

| Consistency | Water Addition | MPa | | |
|-------------|----------------|-------|--------|---------|
| | | 1 day | 7 days | 28 days |
| | (Litres) | | | |
| Stiff | 3 Li | 30-40 | 60-75 | 75-85 |
| Plastic | 3.1 - 3.6 Li | 25-30 | 50-60 | 65-75 |
| Flowable | 3.6 - 4.0 Li | 20-25 | 35-40 | 50-60 |
| Fluid | 4.0 - 4.4 Li | 15-20 | 30-40 | 40-50 |

* Tested in accordance to AS/NZS 2350.11

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PROPERTIES Cont.

Coverage

(Litres per 20kg bag)

| Consistency | Yield (Litres) |
|-------------|----------------|
| Stiff | 10 - 10.5 |
| Plastic | 10 - 10.5 |
| Flowable | 10.5 - 11 |
| Fluid | 10.5 - 11 |

Fresh Wet Density

Approx 2200 Kg/m³ depending on actual consistency used

Bags Required Per Cubic Metre

85 - 90 bags depending on actual consistency used

Pack Size

20kg

STORAGE AND SHELF LIFE

Bostik Techflow Grout GP has a shelf life of approximately 12 months in unopened bag. Must be stored in a cool, dry elevated place and protected from high humidity.

SAFETY PRECAUTIONS

SEE THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.
EMERGENCY INFORMATION: 1800 033 111 (ALL HOURS)
MSDS can be downloaded from www.bostik.com.au

CLEAN- UP

Bostik Techflow Grout GP should be removed from tools and equipment with clean water immediately after use

VOC - 1 g/Lt

voccertificates.australia@bostik.com

PRECAUTIONS IN USE

Complete details on each of the products mentioned are available on the product Safety Data Sheets. To ensure no harm is caused to persons using Bostik products, it is recommended that all concerned read the appropriate Safety Data Sheets. Visit www.bostik.com/au for copies.

For emergency information contact the Poisons Information Centre, phone 131 126 or the Emergency Response Service, phone 1800 033 111.

BOSTIK HOTLINE

Smart help 1800 267 845



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