Conbextra G2



Non shrink cementitious grout

Uses

Conbextra G2 is used to grout gap thicknesses in the range of 10 - 100 mm.

Applications include grouting voids beneath base plates, voids around below-ground tanks, bolt pockets, annular gaps and pipe line sleeves.

Advantages

- Non shrink and non metallic
- High compressive strength
- Fluid
- Rapid strength development
- Can be pumped or poured
- Chloride free

Specification

All grouting of gap thicknesses, typically 10 - 100 mm must be carried out with a pre-bagged, non shrink, cementitious grout supplied by a registered firm under the ISO 9001 : 2000 Quality Assurance Scheme.

The compressive strength of the grout shall be at least 50 $\mbox{N/mm}^2$ at 28 days.

The grout must be stored, handled and placed in strict accordance with the manufacturers instructions. No site batched additions to the pre-bagged grout shall be allowed.

Description

Conbextra G2 is supplied as a ready to use dry powder. The addition of a controlled amount of clean water will produce a fluid grout for pouring or pumping into voids.

Conbextra G2 is a blend of Portland cements, graded aggregates and additives. The low water requirement produces a fluid grout of high strength with good workability.

Properties

At a water:powder ratio of 0.14 at 20°C:

Compressive strength (BS 1881 Part 116)	:	20 N/mm ² at 1 day 45 N/mm ² at 7 days 55 N/mm ² at 28 days
Time for expansion	:	Start: 15 minutes Finish: 2 hours
Expansion characteristics (ASTM C940)	:	Up to 2% @ 24 hours

Technical support

Fosroc offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance, an AutoCAD facility and dedicated specification assistance in locations all over the world.

Instructions for use

Preparation

The substrate must be free from oil, grease or any loosely adhering material. If concrete surfaces are defective or have laitance, they must be cut back to a sound base.

Bolt holes and pockets must be blown clean of any dirt and debris.

Pre-soaking

Soak concrete substrates for a minimum of 2 hours continuously prior to placing the grout. Immediately before placement all free water should be removed.

Base plates

It is essential that this area is clean and free from oil, grease or scale. Air pressure relief holes should be provided to allow venting of any isolated high spots.

Formwork

The unrestrained surface area of the grout must be kept to a minimum.

Generally the gap width between the perimeter formwork and the plate edge should not exceed 75 mm on the pouring side and 25 mm on the opposite side.

There should be no gap at the flank sides. Formwork should be made leak-proof by using foam rubber strip or mastic sealant beneath the formwork and between joints.

Coat all formwork with Reebol*1 to enable easy formwork release.

Mixing

For best results a mechanically powered grout mixer should be used. When quantities up to 40 kg are used, a slow speed drill fitted with a Fosroc Mixing Paddle (MR3) should be used. Larger quantities will require a high shear vane mixer.

Do not use a colloidal impeller mixer. To enable the grouting operation to be carried out continuously, it is essential that sufficient mixing capacity and labour are available. The use of a grout holding tank with provision to gently agitate the grout may be required.

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Consistency of grout mix

The quantity of clean water required to be added to a 25 kg bag to achieve the desired consistency is given below:

Trowellable	: 2.75 litres
Flowable	: 3.50 litres

The selected water content should be accurately measured into the mixer. The total contents of Conbextra G2 bag should be slowly added and continuous mixing should take place for 5 minutes. This will ensure that the grout has a smooth even consistency.

Placing

At 25°C place the grout within 15 minutes of mixing to gain the full benefit of the expansion process.

Conbextra G2 can be placed in thicknesses up to 100 mm in a single pour. Bolt pockets must be grouted prior to commencement of underplate grouting.

Pour or pump Conbextra G2 from one point only to eliminate the entrapment of air. For pumping advice please contact Fosroc.

Curing

After formwork striking all exposed areas should be cured using Concure RB90, continuous application of water or with wet hessian.

Any gaps or grouting slots should be cured immediately after grouting.

Cleaning

Conbextra G2 should be removed from all tools and equipment with clean water immediately after use.

Cured product can be removed mechanically or with Fosroc Acid Etch*1.

Sampling procedure

Cementitious grouts cannot be tested as concrete. Special sampling procedure are required refer to your local Fosroc office for further details.

Limitations

- At ambient temperatures above 35°C, the mixed grout should be placed immediately after mixing. Water with a temperature less than 20°C should be used for mixing.
- Grouts should not be placed in any unrestrained situation, i.e. base plate plinths, etc. Failure to comply may lead to crack development in the grout.

High temperature working

For temperatures above 35°C, special procedures need to be adopted, refer to your local Fosroc office for advice.

Estimating

Supply

Conbextra G2	:	25 kg bags
Yield		
Trowellable	:	11.8 litres/25 kg bags
Flowable	:	12.5 litres/25 kg bags

Storage

Conbextra G2 has a shelf life of 12 months if kept in a cool dry store in sealed bags and out of direct sunlight. Storage at high temperature will reduce shelf life.

Precautions

Health and safety

Conbextra G2 contains cement powders that when mixed or become damp, release alkalis that can be harmful to the skin. During use, avoid inhalation of dust and contact with skin and eyes. Wear suitable protective clothing, gloves, eye protection and a dust mask. The use of a barrier cream provides additional skin protection. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. If swallowed, seek medical attention immediately - do not induce vomiting.

- * Denotes the trademark of Fosroc International Ltd.
- ↑ See separate data sheet

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service

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