



Fosroc Conbextra GPA

(Formerly Conbextra GPTS)

Non shrink cementitious aggregate filled grout

Uses

Conbextra GPA is used to grout gap thicknesses of 50-200mm. General pre-packaged non shrink cementitious grouts without aggregates are only suitable for gap thicknesses upto 100mm. due to the high exothermic heat generation and the consequent risk of thermal cracking. Conbextra GPA contains aggregates that reduce this heat generation making it ideally suited to thick section grouting. In pockets, volumes of 100 litres can be achieved easily with Conbextra GPA. Typical applications of Conbextra GPA are:

- thick section voids beneath baseplates
- voids around below-ground tanks
- large bolt pockets

Advantages

- Non shrink and non metallic.
- High compressive strength.
- Resistant to impact from dynamic and repetitive loading.
- No need to site batch aggregates.
- Highly flowable.
- Extended workability.
- Can be pumped or poured.
- Chloride free.

Standards compliance

Conbextra GPA meets or exceeds the test requirements of ASTM C 1107.

Description

Conbextra GPA is supplied as a ready to use dry powder. The addition of a controlled amount of clean water will produce a fluid, aggregate filled grout for pouring or pumping into large voids between structural elements.

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

Specification

Where shown on the contract documents, all grouting of gap thicknesses typically 50-200mm must be carried out with the non shrink cementitious aggregate filled pre-bagged grout, Conbextra GPA, supplied by Fosroc. It shall provide a compressive strength of minimum 75N/mm² at 28 days.

Properties

The physical properties shown below were obtained under laboratory conditions at 23°C at a water:powder ratio of 0.12, and may vary in practice.

Compressive strength (BS EN 196-1)	: > 35 N/mm ² at 1 day > 50 N/mm ² at 7 days > 75 N/mm ² at 28 days
Flexural Strength (BS EN 196-1)	: > 12 Mpa at 28 days
Permeability (BS EN 12390 Part 8)	: < 10 mm
Fresh wet density	: 2380 kg/m ³

Instructions for use

Preparation

The substrates must be free from oil, grease or any loosely adhering material. If concrete surfaces are defective or have laitence, they must be cut back to a sound base. Bolt holes and pockets must be blown clean of any dirt and debris.

Soak concrete substrates for a minimum of two hours continuously prior to placing the aggregate filled grout. Immediately prior to placing, all free water should be removed leaving the substrate in a surface dry condition.

Baseplates

Must be clean and free from oil, grease and scale. Air pressure relief holes should be provided to allow venting of any isolate 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 150mm on the pouring side and 50mm on the opposite side. There should be no gap at the flank sides.

Mixing and Application

Do not attempt part-mixes. 25kg bags of Conbextra GPA may be mixed in a clean drum using a Flosroc Mixing Paddle MR3 fitted to a slow speed drill. Pour the water into the drum and with the paddle in motion, slowly add the contents of Conbextra GPA to the accurately measured water and mix continuously for 3-5 minutes. In order the desired consistency use appropriate amount of water as mentioned below:

Consistency of grout mix

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

Trowellable	: 1.75 to 2.5 litres /25kg
Flowable	: 3 litres /25kg

Fosroc Conbextra GPA

The selected water content should be accurately measured into the mixer. The total contents of Conbextra GPA 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.

Pour or pump Conbextra GPA from one point only to eliminate the entrapment of air.

Conbextra GPA is formulated to give extended workability but must be placed within 45 minutes of mixing.

If pumping, Conbextra GPA, use a piston pump (eg. Putzmeister P13) with a minimum pump line diameter of 50mm.

Curing

All exposed areas should be cured using Concure RB90** continuous application of water or with wet hessian.

Cleaning

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

Cured material can be removed only mechanically.

Limitations

At ambient temperatures above 35°C, the mixed grout should be placed immediately after mixing. Mixing should be employed with water below 20°C.

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.

Estimating

Supply

Conbextra GPA	: 25 kg packs
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Yield

Conbextra GPA(Flowable)	: 12.00 litres/25kg bag
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Conbextra GPA(Trowable)	: 11.50 litres/25kg bag
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Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service. **All Fosroc datasheets are updated on a regular basis. It is the user's responsibility to obtain the recent version.**

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Storage

When stored in warehouse conditions below 35°C, Conbextra GPA will have a shelf life of 12 months.

Fire

Conbextra GPA, is non-flammable and thus presents no fire hazard.

For further information, please refer to the Product Material Safety Data Sheet for Conbextra GPA.

Hot weather working

Whilst the performance of Conbextra GPA at elevated temperatures is assured, application under such conditions can sometimes be difficult. It is therefore suggested that, for temperatures above 35°C, the following guidelines are used:

- (i) Store unmixed materials in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.
- (ii) Keep mixing and placing equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come into direct contact with the material itself.
- (iii) Try to eliminate application in the middle of the day, and certainly avoid application in direct sunlight.
- (iv) Ensure that there are sufficient operatives available to complete application within the material's pot life.

Precautions

Health and safety

Conbextra GPA contains cement powders which, when mixed with water or upon becoming damp, release alkalis which can be harmful to the skin. During use, avoid inhalation of the dust and contact with the skin or eyes. Wear suitable protective clothing - eye protection, gloves and respiratory equipment (particularly in confined spaces). The use of barrier creams to provide additional skin protection is also advised. In case of contact with the skin, rinse with plenty of clean water, then cleanse thoroughly with soap and water. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do **not** induce vomiting.

* **Denotes the trademark of Fosroc International Limited**

† **See separate data sheet**