

# Conbextra TS



## Shrinkage compensated cementitious aggregate filled grout

### Uses

Conbextra TS is used to grout gap thicknesses 75-500 mm. Applications include grouting thick section voids beneath baseplates; voids around below ground tanks; large bolt pockets etc.

Generally pre-packaged shrinkage compensated cementitious grouts without aggregates are only suitable for gap thicknesses up to 100 mm. Grouting of gap thicknesses in excess of 100 mm, normally requires the addition of aggregate to reduce the exothermic heat generation and the consequent risk of thermal cracking. Conbextra TS contains aggregates that reduce this heat generation making it ideally suited to thick section grouting.

### Advantages

- Shrinkage compensated
- High compressive strength
- No need to site batch aggregates
- Highly flowable
- Extended workability
- Can be pumped or poured

### Description

Conbextra TS 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 TS is a blend of Portland cements, graded aggregates and additives.

The low water requirement produces a fluid grout of high strength with good workability.

### Technical service

Fosroc offers a comprehensive range of high quality, high performance construction products. In addition Fosroc offers worldwide technical support to specifiers and users of our products.

### Properties

At a water powder ratio of 0.13 at 20°C.

Test method	Typical result
<b>Compressive strength (BS1881 Part 116):</b>	32 N/mm <sup>2</sup> @ 3 days 48 N/mm <sup>2</sup> @ 7 days 64 N/mm <sup>2</sup> @ 28 days
<b>Initial set (BS4550):</b>	6.5 hours
<b>Final set (BS4550):</b>	9 hours
<b>Expansion characteristics (ASTM C827-87):</b>	Up to 2% at 24 hours

### Specification clauses

#### Performance specification

All grouting of gap thicknesses 75-500 mm must be carried out with a pre-bagged, shrinkage compensated, cementitious aggregate filled grout supplied by a registered firm.

The compressive strength of the grout shall be at least 60 N/mm<sup>2</sup> at 28 days.

The aggregate filled 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.

#### Supplier specification

All grouting of gap thicknesses 75-500 mm (specify details and areas of application) must be carried out using Conbextra TS manufactured by Fosroc and used in strict accordance with the manufacturers instructions.

### Instructions for use

#### Preparation

The substrates must be free from oil, grease or any loosely adherent 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 two hours continuously prior to placing the aggregate filled grout. Immediately before placing **all** free water should be removed using wet vacuuming if required.

### Baseplates

Must be clean and free from oil grease and 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 150 mm on the pouring side and 50 mm on the opposite side. There should be no gap at the flank sides.

Formwork should be made leak-proof by using Fosroc Silicone Sealant 33HM beneath the formwork and between joints. Coat all formwork with Fosroc Demokret Bio DDH12 to enable easy formwork release.

### Mixing and placing

Water addition is 3.3 litres per 25 kg bag. **Do not attempt part mixes.**

25 kg bags of Conbextra TS may be mixed in a clean drum using a Conbextra mixing paddle in a slow speed drill. Carefully measure out the water in a calibrated vessel and pour into the drum and, with the paddle rotating, slowly add the contents of Conbextra TS to the water and mix continuously for 3-5 minutes ensuring a smooth consistency is achieved.

For larger quantities a forced action grout mixer is recommended. Refer to Fosroc Customer Services for advice on suitable mixers. **Always add the powder to the water.**

Continuous grout flow is essential and the necessary mixing equipment and labour must be available to achieve this.

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

Conbextra TS is formulated to give extended workability but must be placed within 20 minutes of mixing.

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

### Curing

All exposed areas should be cured using Fosroc Concure WB, continuous application of water or with wet hessian.

### Cleaning

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

Cured material can be removed mechanically or with Fosroc Acid Etch.

### Limitations

#### Low temperature working

When air or contact surface temperatures are 5°C or below on a falling thermometer warm water (30-40°C) is recommended to accelerate strength gain.

Normal precautions for winter working with cementitious materials should always be adopted.

#### High temperature working

At ambient temperatures above 35°C the mixed grout should be kept in the shade prior to placement. Water less than 20°C should be used for mixing.

### Estimating

#### Supply

Conbextra TS is supplied in 25 kg moisture resistant bags.

#### Yield

Approximate yield per 25 kg bag is 12 litres (0.012 m<sup>3</sup>).

### Storage

Conbextra TS has a shelf life of 12 months if kept in a dry store in sealed bags. Storage at high temperature or humidity may reduce shelf life.

## Precautions

### Health and safety

Conbextra TS 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 dust mask. The use of 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.

For further information see Product Safety Data Sheet.

### Fire

Conbextra TS is non-flammable.



#### Fosroc Limited

Coleshill Road  
Tamworth  
Staffordshire  
B78 3TL  
Tel 01827 262222  
Fax 01827 262444  
[www.fosrocuk.com](http://www.fosrocuk.com)

Conbextra is the trade mark of Fosroc International Limited

### 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 Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.