

Conbextra TS

Non-shrink cementitious aggregate filled grout

Uses

Conbextra TS is used to grout gap thicknesses of 50-500 mm. Applications include grouting thick section voids beneath base-plates, voids around below-ground tanks, large bolt pockets etc.

Generally pre-packaged non shrink 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

- 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

Description

Conbextra TS is supplied as a ready to use dry mix. 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 cement, graded aggregates and additives. The low water requirement produces a fluid grout of high strength with good workability.

Specification clauses

Performance specification

All grouting of gap thicknesses, typically 50-500 mm must be carried out with a pre-bagged, non shrink, cementitious aggregate filled grout.

The compressive strength of the grout shall be at least 60 N/mm² 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 thickness typically 50-500 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.

Properties

At a water powder ratio of 0.133 at 20°C.

Test method	Typical results
Compressive strength (BS1881 Part 116)	32 N/mm ² at 3 days 48 N/mm ² at 7 days 64 N/mm ² at 28 days
Initial set (BS4550)	6.5 hours
Final set (BS4550)	9.0 hours
Expansion characteristics (ASTM C827-87)	Up to 2% at 24 hours

Application instructions

Preparation

The substrates 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 several hours continuously prior to placing the aggregate filled grout. Immediately before placing all free water should be removed.

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 Nitoseal 125 beneath the formwork and between joints. Coat all formwork with Reebol to enable easy formwork release. Unrestrained surfaces must be kept to a minimum.

Conbextra TS

Mixing and placing

Water addition is 3.30 litres per 25 kg bag. Do not attempt part mixes.

Up to three 25 kg bags of Conbextra TS may be mixed in a clean drum using a Conbextra mixing paddle in a slow speed drill. Pour the water into the drum and with the paddle rotating, slowly add the contents of Conbextra TS to the accurately measured water and mix continuously for 3-5 minutes ensuring a smooth consistency is achieved. For larger quantities, a forced action grout mixer is recommended (e.g. Creteangle). 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 45 minutes of mixing.

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

Curing

All exposed areas should be cured using Concure 90, 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

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.

Estimating

Supply

Conbextra TS is supplied in 25 kg moisture resistant bags.

Coverage

Approximate yield per 25 kgs bag is 11.67 litres.

Storage

Shelf life

Conbextra TS has a shelf life of 12 months if kept in a dry store in sealed bags.

Storage conditions

Store in a cool place free from humidity. 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 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, refer to the products' Material Safety Data Sheet.

Fire

Conbextra TS is non flammable.

Additional information

Further information on cementitious grouting is available in the Fosroc publication "Precision Grouting in the Construction Industry".



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