

January 2013

Fosroc[®] Conbextra BB92

constructive solutions

High initial strength non-shrink fluid cementitious grout

Uses

Conbextra BB92 is designed for grouting beneath bridge bearings, parapet posts, flanged lighting columns, windfarm installations and any grouting where non-shrink and high early strengths, even at low temperatures are required.

Advantages

- Non-shrink
- High early compressive strengths even at low temperatures
- Suitable for pumping or pouring over a large range of applications.
- Excellent fluidity, particularly at low temperatures

Description

Conbextra BB92 is supplied as a ready to use dry powder. The addition of a controlled amount of clean water produces a freeflowing precision grout. The low water requirement ensures high early strength and long term durability. Suitable for gap depths in the range of 10 to 150 mm. Deeper gaps can be obtained by the addition of 10 mm dry and clean aggregates.

Standards compliance

C€		
0370		
Conbextra BB92		
Fosroc Euco, S.A., Gasteiz Bidea, 11 48213 Izurtza - Bizkaia		
2009		
0370 – CPD - 0805 EN 1504-6 Grouting products		
Pull off strength	displacement ≤ 0,6 mm for a 75 KN load	
Chloride ion content	≤ 0,05%	
Reaction to fire	Class A1	
Dangerous substances	Complies with 5.3	

Properties

The following properties were obtained at a temperature of 20°C.

Test method for	Typical result
Granulometry:	0-2 mm
Water/powder ratio:	0,12 (3 l/25 kg)
Gap depth:	10-150 mm
Final set: (UNE-EN 196-3:1996)	<5 hours
Compressive strength: (EN 12190)	<50 N/mm2 @ 1 day >75 N/mm2 @ 7 days >90 N/mm2 @ 28 days
Flexural strength: (UNE EN 196-1:1996)	>7,5 N/mm2 @ 1 day >11 N/mm2 @ 7 days >13 N/mm2 @ 28 days
Initial flow, slump: (Brass cone) (EN13395-1)	>240 mm
Consistence: (EN 13395-2)	450 mm
Expansion:	0-1 %

Application instructions

Preparation

Foundation surface

The substrate surface must be free from oil, grease or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris.

Pre-soaking

Several hours prior to grouting, the area of cleaned foundation should be flooded with fresh water. Immediately before grouting takes place, any free water should be removed. Pay special attention to the bolt holes or fixing pockets.

Base plate

It is essential that this is clean and free from oil, grease or scale.

Levelling shims

If these are to be removed after the grout has hardened, they should be treated with a thin layer of grease.

Formwork

The formwork should be constructed to be leakproof as Conbextra BB92 is a free flowing grout. This can be achieved by sealing all joints very well.

In some cases it is practical to use a mortar formwork. The formwork should include outlets for the presoaking water.

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.

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Mixing

For best results a mechanically powered grout mixer should be used. For quantities up to 50kg a slow speed drill fitted with a high shear paddle is suitable. Larger quantities will require a high shear vane mixer.

Place the water in the mixer and add slowly the content of the Conbextra BB92 bag. Mix continuously for 5 minutes, ensuring a smooth, even consistency is obtained. Note that during the first 2 or 3 minutes consistency will appear dryer. Use 3 litres of water to each 25 kg bag of Conbextra BB92 to produce a fluid grout.

Placing

Place the grout within 15 minutes of mixing to gain the full benefit of the expansion process. Conbextra BB92 can be placed in thicknesses up to 150 mm in a single pour.

Any bolt pockets must be grouted with mortar or resin prior to grouting between the substrate and the base plate. Continuous grout flow is essential.

Sufficient grout must be available prior to starting and the time taken to pour a batch must be regulated to the time taken to prepare the next one. The mixed grout should be poured only from one side of the void to eliminate the entrapment of air or surplus presoaking water. The grout head must be maintained at all times so that a continuous grout front is achieved.

For large volumes Conbextra BB92 can be pumped.

Curing

On completion of the grouting operation, exposed areas should be thoroughly cured. This should be done by the use of Concure curing membrane, continuous application of water and/or wet hessian.

Cleaning

Conbextra BB92 should be removed from tools and equipment with clean water immediately after use.

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

Estimating

Supply

Conbextra BB92: 25 kg bag

Yield

Allowance should be made for wastage when estimating quantities required. The approximate yield per 25kg bag is 12 litres.

Limitations

Low temperature working

When the air or contact surface temperatures are 5°C or below on a falling thermometer, warm water (30°C to 40°C) is recommended to accelerate strength development. Substrates should be free from ice.

For ambient temperatures below 10°C the grout consistency should be flowable and the formwork should be maintained in place for at least 36 hours.

Normal precautions for winter working with cementitious materials should then be adopted, specifically protecting the grout from freezing in the first 24 hours after placing.

Storage

Conbextra BB92 has a shelf life of 12 months if kept in a dry store in its original packaging. If stored in high temperature and high humidity locations the shelf life may be reduced.

Precautions

Health and safety

Conbextra BB92 is alkaline and should not come in contact with skin and eyes. Avoid inhalation of dust during mixing. Gloves, goggles and dust mask should be worn. If contact with skin occurs, wash with water.

Splashes to eyes should be washed immediately with plenty of clean water and medical advice sought. Do not induce vomiting.

Fire

Conbextra BB92 is not flammable.

For further information, please refer to the Safety Data Sheet of the product.

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