

# Fosroc® Conbextra BB92-O



constructive solutions

**Free flow, High strength, Non Shrink, Sulphate resistant cementitious precision grout**

## Uses

Conbextra BB92-O is designed for precision grouting of foundations subjected to static & Dynamic Loads. Product is specifically suitable for grouting base frame of steel wind turbine tower and also Horizontal & Vertical joints of Precast concrete wind turbine towers. Product can also be suitable for situations where sulphate resistance is a critical function.

## Advantages

- High early & Ultimate compressive strength
- Excellent flow characteristics and rheology permits pumping
- Dynamic Load resistant
- Non Shrink
- Prepacked material overcomes onsite batching variations

## Description

Conbextra BB92-O is supplied as ready to use dry powder which is blend of Portland cement, graded fillers and chemical additives which impart controlled expansion in plastic state while minimising water demand.

The addition of a controlled amount of clean water produces a Free flowing, non shrink grout with high early & ultimate strength. The mixed material is suitable for grouting gaps ranging from 10 - 150 mm thickness

## Technical support

An experienced technical advisory team is available to give technical service on request.

## Technical Properties

Test method	Typical result
Mixed Density	: 2.4 kg/litre
Expansion	: 0-1%
Mixing ratio w/p	: 2.75 - 3.0 Ltrs/25 kg
Thickness applicable	: 10-150 mm
Final Set	: < 5 hours
Compressive strength (70.6mm cubes)	: > 30 N/mm <sup>2</sup> @ 1 day : > 75 N/mm <sup>2</sup> @ 7 days : > 90 N/mm <sup>2</sup> @ 28 days
Flexural Strength (BS 4551, 40x40x160mm)	: > 4 N/mm <sup>2</sup> @ 1 day : > 10 N/mm <sup>2</sup> @ 7 days : > 12 N/mm <sup>2</sup> @ 28 days
Tensile Strength (ASTM C 307)	: > 5N/mm <sup>2</sup> @ 28 days
Initial flow (BS 890 Cone)	: 240 mm

**Note:** The typical physical properties given above are derived from testing in a controlled laboratory environment. Results

derived from testing field-applied samples may vary, dependent on actual site conditions.

## Application instructions

### Surface Preparation

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

### Pre Soaking

Several hours prior to placing, the concrete substrates should be saturated with fresh water.

Immediately before grouting takes place any free water should be removed with particular care being taken to blow out all bolt holes and pockets.

### Base Plate

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

### Levelling Plates

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 leak-proof given the high fluidity of grout. This can be achieved by using foam rubber strip or mastic sealant beneath the constructed formwork and between joints.

In some cases it is practical to use sacrificial semi dry sand and cement formwork the formwork should include outlets for presoaking.

Unrestrained surface area should be kept to a minimum, Generally the width of the gap between the perimeter of the casing and the plate should not exceed 150mm at the discharge side and 50mm on the opposite side. There should be no holes in the sides.

### Mixing

For best results use a mechanical powered grout mixer should be used. When quantities upto 50Kg are used, slow speed drill (400-500Rpm) fitted with a paddle is suitable, large quantities will require a heavy duty mixer. Place the water into the mixer and add the contents of the Conbextra BB92-O bag Mix for 5minutes to ensure uniform consistency.

Note: During the first two or three minutes, the mixture will have a hard consistency. Add 2.75 to 3.00 Liters of water to a 25kg bag to obtain a fluid grout.

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## Conbextra BB92-O

### Placement

In order to maximize the expanding effect is convenient to place the grout within 15 minutes of mixing, Conbextra BB92-IN can be placed up to thickness of 150mm. The Bolts should be fixed with mortar or resin before pouring.

It is essential that the discharge/pumping is continuous. Always make sure to have enough grout before starting and controlling the time of mixing and the time needed to prepare the next batch. The discharge must always be performed from the same side of the bed to prevent the formation of air pockets. Efforts will be made to the advancing front of the grout is uniform.

In case of pumping, prior lubrication of all equipment by a cementitious slurry composed of two parts of cement and water in sufficient quantity for the circuit to be in contact with the grout be lubricated. Grout should be pumped after lubrication, eliminating the initial slurry used for lubrication.

### Curing

To complete the operation, air exposed areas should be cured. This should be done by Concure curing membrane, continuous application of water and/or wet hessian.

### Cleaning

All tools and equipment can be cleaned simply with water immediately after use, if the material is hardened clean mechanically or with a solution of Fosroc Acid etch

### Packing

Conbextra BB92-O : 25 kg

### Storage

Conbextra BB92-O has a shelf life of 6 months kept in a dry store in sealed bags. If stored in high temperature and high humidity locations the shelf life may be reduced.

### Precautions

#### Health and Safety

Conbextra BB92-O is alkaline and should not come in contact with skin and eyes. Avoid inhalation of dust during mixing. Use Gloves, goggles and mask.

If there is contact with skin, wash with water, Splashes in the eyes should be washed immediately with clean water and consult a Doctor. Do not induce vomiting.

#### Fire

Conbextra BB92-O is not flammable.

For additional information, please refer to product MSDS.

#### Additional information

The Fosroc range of associated products include high strength cementitious, epoxy grout, polyester resin based mortar for rapid presetting of steel shims to level or for direct bedding of small base plates; Resin Anchoring systems for same day anchoring of bolts in drilled holes in concrete or rock. Also available a range of products for use in construction; viz., admixtures, curing compounds, release agents, flooring systems and repair mortars.

Separate datasheets are available on these products.



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### Important note :

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, 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.

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