

## Non-shrink, free flow, extra high strength grout

### Uses

Conbextra AT is used for heavy duty support beneath load bearing units especially where high static and dynamic forces occur. Also as an efficient medium for transferring all operational loads to the foundation. And for effective grouting of base plates and bolt pockets of Turbo Generators, Diesel Generating sets, Crane and Transporter Rails even with high wheel loadings, Heavy Reciprocating Equipments, Compressors, Pump sets, Pulverising mills, Metal Shearing and Processing Machines, Steel Rolling Mill Beds, Cement, Textile, Granite and Paper Plant machinery.

### Advantages

- Nonshrink : Will continue to occupy the filled space without shrinkage. Ensures high level of contact with load bearing areas. Also helps complete filling without voids. No need for external aids like rodding, poking, chaining etc.
- Increased strength: Can be used under heavy duty machines and equipment with high operational and static loads
- Prepacked and factory controlled: Consistency and reliability ensured. Site batching and blending variations eliminated.
- Iron free : No chance of deterioration by uncontrolled rust expansion, corrosion and staining of grout.
- Chloride free : Does not cause corrosion of machine parts, anchor bolts etc., in contact with grout

### Description

Conbextra AT is supplied as a ready-to-use dry powder, requiring only the addition of water to produce a free flowing non-shrink grout. The material is a blend of specially processed cement, pregraded fillers and additives which impart :

- High early and final strengths due to very low water requirement
- Controlled expansion to retain the original volume filled even after setting
- Free flow characteristics without any segregation and bleeding
- Conbextra AT, on setting, will have a microcellular structure with high frost, fire and oil resistance.

### Technical Support

Fosroc offers a comprehensive range of high performance, high quality concrete repair and construction products. In addition, Fosroc offers technical support service to specifiers, end-users and contractors, as well as onsite technical assistance in locations all over the country.

### Properties

Compressive strength ( N/mm<sup>2</sup>)

	1 day	3days	7days	28days
Flowable (W/P 0.16)	40	60	70	80

Note : Cubes cast are kept under restraint before testing, to simulate site conditions. Size of the cubes used 70.6mm x 70.6mm x 70.6mm tested at 27°C.

Tensile strength : At 28 days tensile strength achieved is typically 3.5 N/mm<sup>2</sup> .

Young's modulus : 28 KN/mm<sup>2</sup>

Expansion characteristics : Controlled expansion occurs in the unset material to ensure that the grout, when cured, will continue to occupy its original volume within the confines of the voids in which it was placed (2% max.).

Unrestrained expansion : Upto 4%

Time for expansion : Expansion starts 20 minutes after mixing and will be completed 150 minutes later.

Pressure to restrain plastic expansion: Appro. 0.004N/mm<sup>2</sup>

Coefficient of Thermal expansion : 11 x 10<sup>-6</sup> per °C

Thermal conductivity : 1W/m°C

Fresh wet density : At flowable consistency 2200kg/m<sup>3</sup>

W/P ratio : Recommended water powder ratio for flowable consistency is 0.16. Total quantity of water required for 25 kg bag is 4 litres.

Flow characteristics : The maximum distance of flow is governed by the gap width and the head of the grout. Typical data for flow design, assuming grout is poured immediately after mixing, is given in the table below :

Grout Consistency	Gap Width (mm)	Max. flow distance in mm		
		50mm head	100mm head	250mm head
Flowable	30	200	1000	2000
	40	500	1500	2500
	50	1000	2000	3000

N.B : This table is based on the following factors. Temperature : 27°C; Water saturated substrate; Minimum unrestricted flow width : 300mm.

# Conbextra AT

(Formerly Conbextra Spl.)

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## Application guidelines

### A few DOs and DON'Ts

#### DO's

- Measure water precisely
- Mix mechanically
- Use mixed grout within 30 minutes
- Clean concrete and steel surfaces thoroughly before grouting
- Build a strong, carefully designed leakproof shuttering
- Start curing when grout reaches 'touch-hard' state - within 4 - 6 hrs.
- Cure properly for at least 7 days.

#### DONT'S

- Mix cement, sand, fibres, admixtures, etc., with Conbextra AT
- Mix water more than specified
- Pour grout from two sides while grouting base plates.
- Pour grout from a height
- Use vibrators in grout
- Use damaged bags of Conbextra AT

Detailed application procedure will be supplied by Fosroc on request.

## Estimating

### Packaging

Conbextra AT is supplied in 25 kg bags.

### Yield

One bag of Conbextra AT will yield 12.5 litres at flowable consistency

### Shelf life

6 months when stored under cold dry conditions in unopened bags.

### Precautions

### Health & Safety instructions

Conbextra AT is nontoxic, but alkaline in nature. Gloves should be worn while handling this product. Splashes of grout on the skin or eyes should be washed off with clean running water. In the event of prolonged irritation, seek medical advice.

### Additional information

The Fosroc range of associated products includes Admixtures, Floorings, Protective coatings, Repair and Protection systems, sealants and waterproofing compounds Adhesives & Mining. Separate datasheets are available on these products.

## 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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