

# CCI NEOGROUT AT

## Non-shrink, Free-flow, Extra High Strength Grout

### Description

CCI NeogROUT 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.
- ✓ CCI NeogROUT AT, on setting, will have a microcellular structure with high frost, fire, and oil resistance.

### Uses

CCI NeogROUT AT is used for heavy-duty support beneath load bearing units especially where high static and dynamic forces occur. It is also used 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 Equipment, Compressors, Pump sets, Pulverising mills, Metal Shearing and Processing Machines, Steel Rolling Mill Beds, Cement, Textile, Granite, and Paper Plant machinery.

### Advantages

- ✓ **Non-shrink:** 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.

### Standard Compliance

CCI NeogROUT AT conforms to ASTM C1107 (Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Non-shrink)).

### Technical Support

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

### Properties

Compressive strength (N/mm <sup>2</sup> )	1 day	3 days	7 days	28 days	
Flowable (W/P 0.16)	40	60	70	80	
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% maximum)				
Unrestrained expansion	Up to 4%				
Time for expansion	Expansion starts 20 minutes after mixing and will be completed 150 minutes later				
Pressure to restrain plastic expansion	Approximately 0.004 N/mm <sup>2</sup>				
Coefficient of Thermal expansion	11 × 10 <sup>-6</sup> /°C				
Thermal conductivity	1 W/m°C				
Fresh wet density	At flowable consistency 2200 kg/m <sup>3</sup>				
Water/Powder ratio	Recommended water/powder ratio for flowable consistency is 0.16. Total quantity of water required for 25 kg bag is 4 L				
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 table below:				
	<b>Maximum flow distance in mm</b>				
Grout consistency	Gap width (mm)	50 mm	100 mm	250 mm	
		30	200	1000	2000
Flowable		40	500	1500	2500
		50	1000	2000	3000

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

**NB:** This table is based on the following factors:

**Temperature:** 27°C; Water saturated substrate  
**Minimum unrestricted flow width:** 300 mm

**Note:** The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing of field-applied samples may vary, depending on actual site conditions.

## Application Guidelines

### A few DOs and DON'Ts

#### Dos

- ✓ 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 to 6 hours
- ✓ Cure properly for at least 7 days

#### Don'ts

- ✓ Mix cement, sand, fibres, admixtures, etc., with **CCI NeogROUT 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 **CCI NeogROUT AT**

Detailed application procedure will be supplied by CCI on request.

## Packaging

**CCI NeogROUT AT** is supplied in 25 kg bags.

## Yield

One bag of **CCI NeogROUT AT** will yield 12.5 kg at flowable consistency.

## Shelf life

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

## Precautions

### Health & Safety instructions

**CCI NeogROUT 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.

Before use, refer to the Material Safety Data Sheet (MSDS). The MSDS is available on [www.ccichemicals.in](http://www.ccichemicals.in) or contact us at [info@ccichemicals.in](mailto:info@ccichemicals.in).

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