



# NanoGrout CFG

Pre Mixed Grout for Post-Tensioned Cable Ducts  
and Sonic Tubes in Concrete Piles

<b>DESCRIPTION</b>	<b>NanoGrout CFG</b> is a ready to use, high strength, highly flowable, non-shrink cementitious grout. It requires only addition of water at site. It consists of portland cement and special chemicals for non-shrinkage properties, high fluidity and retention properties of the mix at low water cement ratio.
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<b>STANDARDS</b>	BSEN 447
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<b>USES</b>	Grouting of: <ul style="list-style-type: none"> <li>• Post-tensioned cable ducts</li> <li>• Sonic tubes in the concrete piles</li> <li>• Repair of non moving concrete cracks by injection</li> <li>• Rock anchors</li> <li>• Sheet pile anchors</li> </ul>
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<b>ADVANTAGES</b>	<ul style="list-style-type: none"> <li>• Ready to use, only requires addition of water</li> <li>• Highly flowable and superior flow retention</li> <li>• Non-shrink with controlled expansion</li> <li>• High strength</li> <li>• No bleeding and settlement</li> <li>• Chloride free, no corrosion of metallic parts</li> </ul>
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## TYPICAL PROPERTIES at 25°C

PROPERTY	TEST METHOD	VALUE		
Component	-	Single		
Form	-	Powder		
Colour	-	Grey		
Fresh Wet Density	BSEN 445	2.00 kg/ltr +/-0.05		
Flow (Marsh Cone)*	BSEN 445	W/P	0.36	0.32
		Initial (t <sub>0</sub> )	< 25 sec	< 25 sec
		After 30 min(t <sub>30</sub> ) < 25 sec., 0.8 t <sub>0</sub> < t <sub>30</sub> < 1.2 t <sub>0</sub>		
Compressive Strength	BSEN196-1	7 days	40 N/mm <sup>2</sup>	50 N/mm <sup>2</sup>
		28 days	55 N/mm <sup>2</sup>	65 N/mm <sup>2</sup>
Flexural Strength	BSEN196-1	9 N/mm <sup>2</sup> at 28 Days		
Expansion	BSEN 445	Upto 2% positive expansion		
Bleeding	BSEN 445	< 0.3%		
Chloride Content	BSEN 480-10	Nil to BSEN 934-4		
Sedimentation	Report No. 47	< 2%		
*Properties with the use of high shear colloidal grout mixer. Values may change with the type of mixer.				

<b>SURFACE PREPARATION</b>	<b>For post-tension Cable Ducts:</b> Ducts to be grouted should be cleaned before the application of grout and any standing water must be removed. Ensure that the casing duct is leak proof. Check the air vents and valves are in good working condition.
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### FOR CONCRETE REPAIR:

In case of repairing of concrete cracks and filling intricate voids, the prepared area should be saturated with water for 3-4 hrs prior to the placement of **NanoGrout CFG**. Prior to the placing of grout all free water should be removed.

### MIXING

It is recommended to use mechanical High Shear Grout Mixer and Grout Pump in order to get optimum dispersion and fluidity. However, for the smaller batches drill machine with a paddle can also be used. Mix 25 kg **NanoGrout CFG** with maximum 9 liters of potable water. Adding more water than the specified limits will result in loss of ultimate properties. Mix **NanoGrout CFG** to premeasured water and mix for 2 to 3 minutes. Allow a time gap of 2-3 minutes and again remix for 2-3 minutes to get the desired flow. Use chilled water to get better flow and retention properties.

### APPLICATION

#### FOR CABLE DUCTS:

Grouting process should start from one side of the cable duct till homogenous consistency of **NanoGrout CFG** flows from consecutive air vent valves and outlet valves.

#### FOR SONIC TUBES IN CONCRETE PILES:

**NanoGrout CFG** should be pumped in sonic tube by tremie method. Pumping of grout should be continued till consistent quality of grout over flows from sonic tube. Grouting should take place using heavy duty grout mixer pump and flexible grouting hose. Grouting should be done with continuous flow.

### CURING

All exposed grout surfaces should be cured by ponding of water or by using wet hessian. Alternatively, curing compound from **JetCure** range can be used.

### NOTE

**NanoGrout CFG** also available based on non gaseous expansion system. Consult Conmix for details.

### PACK SIZE

25 kg and 50 kg

### YIELD

17 ltr/25 kg bag with 0.36 W/P ratio

### GENERAL INFORMATION

#### Shelf Life

12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature / humidity may reduce shelf life.

#### Cleaning

Clean all equipments and tools with water immediately after use.

### HEALTH and SAFETY

#### PPE's

Gloves, goggles and suitable mask must be worn.



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<b>Precautions</b>	Contact with skin, eyes, etc. must be avoided. If swallowed seek medical attention immediately.
<b>Hazard</b>	Regarded as non-hazardous for transportation.
<b>Disposal</b>	Do not reuse containers. To be disposed off as per local rules and regulations.
<b>Additional Information</b>	Refer MSDS. (Available on request.)
<b>TECHNICAL SERVICE</b>	<b>CONMIX Technical Services</b> are available on request for onsite support to assist in the correct use of its products.

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