

MonniGrout CCF

Non Shrinkage Grout for Filling Cables Ducts

Product Description

MonniGrout CCF is a high performance, expanding, shrinkage compensated anchoring grout. It is formulated to produce a fluid, non-blending, non-shrink grout with extended working time. It contains migratory corrosion inhibitors to provide corrosion protection for highly stressed steel cables, anchorage and rods. Its fluid characteristics allows the product to be pumped through small openings over long distances and placed into relatively inaccessible areas.

Uses

MonniGrout CCF is specially designed for uses where high fluidity, extended working time, no bleeding, segregation or plastic settlement shrinkage, high strength and resistance to chloride penetration are required.

- ▶ Grouting of post tensioning cables or bar where complete encapsulation of the reinforcing and protection from corrosion are required
- ▶ Pumping grout through small opening over long distances
- ▶ Grouting cable anchorages for highly stressed reinforcing steel

Advantages

- ▶ Ready to use, requires only the addition of specified amount of water
- ▶ Easy to pump or pour
- ▶ Controlled expansion
- ▶ Non-shrink performance provides excellent bearing
- ▶ Flowable and self-leveling
- ▶ High strength
- ▶ Excellent cohesive properties
- ▶ Resistant to water washout and dilution by water in wet ground conditions
- ▶ Thixotropic properties reduce material loss in fractured ground
- ▶ Reduced bleeding
- ▶ Improved resistance to Sulphate attack
- ▶ Very low permeability

Usage Instructions

Surface Preparation

The area/duct to be grouted should be cleaned with water before the application of grout. Any free water must be drained out. Cable anchorages should be sealed before the duct grouting is carried out.

Mixing

Add one 20kg bag of MonniGrout CCF into 6.5 to 7 Liters of potable water. For mixing small quantity use a slow speed drill fitted with a suitable paddle at 200-300rpm. For mixing large quantity, it is recommended to use proper grout vane mixer. Adding more water than the specified limits will result in loss of properties. Mix for 5 minutes till obtaining a homogeneous product, free from lumps.

Application

Place MonniGrout CCF by pouring or pumping into the area to be grouted in a continuous manner and do not allow air pockets to develop. The placing should be within maximum 20 minutes of mixing to gain benefit of the expansion process.

Ensure proper evacuation of air, filling process has to be started from one side till the grout flows at the other side.

MonniGrout CCF can be placed in annular gaps of up to 60 mm in thickness.

Cleaning

All used tools should be cleaned with water before the product cures. Cured materials should be mechanically removed.

Recommendations

- ▶ Use cold water (20-23°C) for mixing the grout
- ▶ Try to eliminate application during the peak temperature of the day Mix enough grout that can be produced during the workable time
- ▶ Store unused materials in a covered dry place
- ▶ It is recommended to shade the working area during mixing and pumping the grout

Technical Data

Category	Typical Values
Appearance	Grey Granular Powder
Wet density at 25°C	2.0 kg/L
VOC	7.0 g/L
Compressive strength	
At 7 days	42 N / mm ²
at 28 days (ASTM C579)	> 50 N / mm ²
Flexural strength	
at 7 days	6.5 N / mm ²
at 28 days (ASTM C580)	7.0 N / mm ²
Chloride content	Nil
Nitrate content	Nil
Fluidity	
Initial	10-20 seconds
After 30 minutes	< 20 seconds
Volume change	positive expansion up to 4%

All values are subject to 5-10% tolerance

Standards Compliance

- ▶ BS 8110, Part 1, Sec. 8, BS 4551
- ▶ EN 445, 446 & 447
- ▶ ASTM C 580
- ▶ UNI 8147

Consumption

20kg bag. MonniGrout CCF yields approximately 13.5 Liters of grout when mixed with specified amount of water.

Packaging

MonniGrout CCF is supplied in 20kg paper bags.

Shelf Life & Storage

Keep in a sheltered and dry place in closed packaging. In these conditions, the product maintains its stability for at least 12months.

Health & Safety

MonniGrout CCF can be harmful to skin as it contains cement powders which may releases alkalis when mixed with water.

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary. In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting

Legal disclaimer

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