

# CEMCRETE CABLE FLOW

Free Flow Non-shrink Grout for Post Tensioned Cables

## Description:

CEMCRETE CABLE FLOW is a high performance, expanding, non-shrinkage, flowable anchoring cementitious grout. It is formulated to be mixed with a reduced amount of water to give the designed flow required. The addition of expansive and super plasticizer additives produce a fluid, non-blending, non-shrink expansive grout with extended working time. The mix also contains corrosion inhibitors additive to provide corrosion protection for post tension steel cables, anchorage and rods. Its fluid characteristics allow the product to be pumped through small openings over long distances and placed into relatively inaccessible areas.

## Applications:

CEMCRETE CABLE FLOW was designed with characteristics of free flow no bleeding non-shrinkage high strength grouting to be used when complete encapsulation of the reinforcing and protection from corrosion are required. Some of the applications include:

- In post tensioned cables used in segregation or plastic settlement shrinkage, high strength and resistance to chloride penetration are required.
- Bridges, deck ducts, etc. It is also suitable for use in cable ducts and pre-stressed structural elements.
- Grouting of post tensioning cable ducts in bridges and high rise buildings.
- Pumping grout through small opening over long distances.
- Grouting cable anchorages for pre-stressed reinforcing steel in structural element.

## Advantages:

- Ready to use, requires only the addition of specified amount of water.
- Shrinkage and settlement compensated grout.

- Low permeability grout at low water /cement ratio
- Reduces the ingress of harmful substances.
- High bond to steel with excellent cohesive properties.
- No bleeding of grout while casting.
- High initial and final strength.
- Chloride free.
- Easy to pump or pour, even in narrow and long ducts.
- Flowable grout with Controlled expansion factor.
- Improved resistance to sulphate attack.

## Instructions for Use:

### Surface Preparation:

To prepare for placement of CEMCRETE CABLE FLOW, ensure sufficient material available on site to ensure continuous grouting. All post tensioned Cables should be carefully cleaned with water prior to grouting process. Any free water must be drained out after cleaning. Cable anchorage should be sealed prior to duct grouting.

### Mixing:

CEMCRETE CABLE FLOW must be mixed mechanically with low speed drill mixer 200-300 rpm fitted with suitable paddle. For large quantities use proper grout vane mixer. Add the contents of the 20 kg powder bag to a container filled with 6.5-7 liters of clean water. Mix for minimum of 4 minutes till obtaining a homogeneous lumps free mix.

### Application:

In case of pumping, a suitable pump must be used. Screw and piston pump may also be suitable. Place CEMCRETE CABLE FLOW by pouring or pumping the mix into the area to be grouted in a continuous manner. The mixed grout should be pumped from one point only to eliminate air entrapment. The placing should also be completed within maximum 20 minutes of mixing in order to get the benefit of the expansion process. CEMCRETE CABLE FLOW can be placed to fill gaps up to

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75 mm thick. After completing the job, clean the used tools immediately with clean water before the grout dries out.

### Standards:

CEMCRETE CABLE FLOW conforms to:

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

### TECHNICAL PROPERTIES

Appearance	: Grey Powder
Volumetric Change	: + 4%
Density	: 2000 Kg/m <sup>3</sup>
Pot life time at 25°C	: 60 minutes
Compressive Strength	: 42 N/mm <sup>2</sup> @ 7 days 50 N/mm <sup>2</sup> @ 28 days
Flexure Strength	: 6.5 N/mm <sup>2</sup> @ 7days 7.0 N/mm <sup>2</sup> @ 28 days
Bleeding	: 0.0 - 0.03 max
Chloride Content	: 0.0%
Nitrate Content	: 0.0%
Fluidity	: Initial 10-20 sec <20 sec after 30 min
Initial Setting	: 6-8 hours
Final Setting	: 18 hours

### Coverage:

CEMCRETE CABLE FLOW achieves 13 liters of wet grout.

### Packaging:

CEMCRETE CABLE FLOW available in 20 kg paper bags.

### Storage:

Store in original packing in dry conditions away from direct sunlight and high humidity levels.

### Shelf Life:

CEMCRETE CABLE FLOW can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

### Cleaning:

Clean tools and equipment with water before material harden.

### Remarks:

- For application during summer season, it is recommended to shade the working area. Use cold water for mixing the grout, and keep the tools in shade.
- Try to eliminate application during the peak temperature of the day.
- Mix enough grout that can be produced during the open time.
- Store unused material in unopened bags under a covered area in a dry place.

### Health and Safety:

- Use goggles and gloves during application. Do not breathe dust of product.
- Avoid contact with eyes or skin.
- In case of eyes contact, clean immediately with plenty of clean water and seek medical care.

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

