

Flo-Grout CR

Free flow non-shrink grout for post tensioned cables



DESCRIPTION

Flo-Grout CR is a pre-packed powder consisting of cement selected, admixtures and expansive material. Flo-Grout CR reduces the water demand at the desired flow, producing high strength grout with low permeability and excellent bond to steel.

The low permeability grout produced will reduce the ingress of harmful agents and will protect the cables from corrosion.

APPLICATIONS

Flo-Grout CR is ideally designed as free flow grouting in post tensioned cables used in bridges, deck ducts, etc. It is also suitable for use in cable ducts and pre-stressed structural elements.

ADVANTAGES

- › A non-shrink grout which is compensated for shrinkage and settlement in the plastic stage.
- › An extremely low permeability grout at low water to cement ratio.
- › Reduces the ingress of harmful substances.
- › High bond to steel.
- › High initial and ultimate strength.
- › Chloride and hydrogen free.
- › Flo-Grout CR can be supplied with an Anti-corrosion impregnating additive.

STANDARDS

Flo-Grout CR complies with EN447.

METHOD OF USE

SUBSTRATE PREPARATION

- › Sufficient materials should be available on site to ensure continuous grouting.
- › Cables should be carefully cleaned prior to grouting.
- › Cable anchorage should be sealed prior to duct grouting.

TECHNICAL PROPERTIES:

Colour:	Grey		
Test Type	Test Result	EN 447 requirements	Remarks
Fluidity: Flow time t 0 min t 30 min (after re-mixing)	= 20 sec ≤ 25 sec	≤ 25 sec ≤ 25 sec	Comply
Grout spread (71.6 cc cone)	= 165 mm	≥ 140 mm	Comply
Homogeneity: Sieve test 2 mm	No lumps	No lumps	Comply
Compressive strength: @ 1 day @ 7 days @ 28 days	≥ 25 MPa ≥ 50 MPa ≥ 55 MPa	N/A ≥ 27 MPa ≥ 27 MPa	-- Comply Comply
Flexural strength: after 7 days	> 7.0 MPa	N/A	--
Density: EN 445:2007	2.0 g/cm ³	N/A	--
Bleeding:	0%	0.3% max.	Comply
Expansion:	Up to 4 %	N/A	--
Volume change:	+1.68%	-1% to +5%	Comply
Setting time: Initial set Final set	6 - 8 hr 18 hr	≥ 3 hr ≤ 24 hr	Comply Comply

*Notes: Compressive strength @ 1 day is under restrain.
Compressive strength @ 7 & 28 days is under wet cure.*



Flo-Grout CR

MIXING

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used.

25 kg of Flo-Grout CR should be added slowly to 7.50 - 8.75 litre of water and mixed continuously for 5 minutes with speed between 500 - 600 rpm until a uniform consistency is obtained.

PLACING AND FINISHING

In case of pumping, a suitable diaphragm pump must be used (screw and piston pump may also be suitable). The mixed grout should be pumped from one point only to eliminate air entrapment. The mixed grout should be pumped within 20 - 30 minutes of mixing.

CURING

Only exposed areas should be properly cured with water.

CLEANING

All tools should be cleaned immediately after application using fresh water. Hardened materials must be cleaned mechanically.

PACKAGING

Flo-Grout CR is available in 25 kg bags.

YIELD

Approximately 16.5 litre of mixed grout is obtained when mixing 25 kg Flo-Grout CR, and 8 litre water.

STORAGE

Flo-Grout CR has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 35°C in original unopened bags.

If these conditions are exceeded, DCP Technical Department should be contacted for advise.

CAUTIONS

HEALTH AND SAFETY

Flo-Grout CR contains Portland cement and sand, Flo-Grout CR may cause irritation to skin or eyes.

In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advise if necessary.

For further information refer to the Material Safety Data Sheet.

FIRE

Flo-Grout CR is nonflammable.

MORE FROM DON CONSTRUCTION PRODUCTS

A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.

Don Construction Products Qatar W.L.L

New Industrial Area,
Doha, Qatar
info.qatar@dcp-int.com
www.dcp-int.com

Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

www.dcp-int.com

DCP Building Excellence