

PIOFLOW CABLE GROUT

Non-shrink cement-based grout for post tensioned cables

DESCRIPTION

PIOFLOW CABLE GROUT is a specially formulated Portland cement powder mix designed for the grouting of cables in pre-stressed and in post-tensioned concrete. **PIOFLOW CABLE GROUT** mix design consists of a blend of fine and ultra-fine cement plus a set of synergistic admixtures. The grout has a chloride free mix design enabling the use of cable grout in contact with reinforcing steel.

USAGES

- Grouting of anchor cables in suspended bridges
- Grouting of anchors in post tensioning cases
- Soil stabilization grouting and micro-grouting
- Cavity infill under foundations and grade slabs
- Pre-stressed cable ducts

ADVANTAGES

- Free flow characteristics
- Non-shrink with high adhesion
- Low thermal coefficient
- Hydrogen and chloride free
- Tropical formulation suitable for MENA region
- Develops high ultimate strength and low permeability to ensure durability of the hardened grout
- Suitable for grouting post tensioned cables and anchors
- Contains migratory corrosion inhibitors to protect stressed steel cables and anchors

TECHNICAL DATA

PIOFLOW CABLE GROUT	Typical values	
Compressive Strength (BS EN 169-1) (N/mm ²)	Day 7 47	Day 28 60
Flexural Strength (BS-4551) (N/mm ²)	6.0	6.5
Bleeding (BS EN445)	Nil After 24 hours	
VOC Content (ASTM D2369)	10 gm/liter	
Fresh Wet Density	2.0-2.1 kg/liter	
Flow Cone (BS EN445-1997) T0 (initial) T30 (in 30 seconds)	14 seconds 13 seconds	

USAGE INSTRUCTIONS

1. Surface preparation

The area to be grouted must be flooded with fresh water a few hours before, immediately before grout takes place any free water should be removed, and all cable ducts must be thoroughly cleaned, and cable anchorages should be sealed before grouting.

2. Mixing

The exact amount of water shall be put in a clean vessel (or mixer) and gradually add the powder while mixing, continue mixing till homogenous consistency free from lumps is achieved. It is recommended to use an electric drill mixer of maximum 400 – 500 rpm (medium/heavy duty) with an appropriate mixing paddle, mixing manually can affect the performance of grout. It is not recommended to mix more than that you can place within 60 minutes. DO NOT RETEMPER to restore workability.

STANDARDS

PIOFLOW CABLE GROUT is complying with;

- ASTM C939-10
- ASTM C1741 (Testing of post-tensioning tendon grout)
- EN 1992 & EN 447

PIOFLOW CABLE GROUT	Liters
20 kg bag	6.5 – 7.0
Yield	13.0

3. Placement

PIOFLOW CABLE GROUT should be pumped using positive displacement type pump capable of generating at least 10-bar pressure. Up to 40-bar may be required to fill particularly long or high upward running duct. The rate and continuity of placing should be controlled to encourage good penetration of grout into the voids within the duct and the expulsion of air from the duct. Grout must start from one side of the cable till it flows from consecutive air vent valves and outlet valves.

4. Curing

PIOFLOW CABLE GROUT is cement-based grout, ACI recommendations should be followed during mixing, placement or curing. After placement, the grout shall be cured properly for 3-days (at least) or Curing compound **ENECURE WB** can be used. Protect

PACKAGING

PIOFLOW CABLE GROUT is supplied in 20 kg bags.

HEALTH & SAFETY

PIOFLOW CABLE GROUT is non-toxic and non-hazardous, if material comes in contact with skin, cleaning with water and soap is recommended.

For Ecology: Do not dispose directly to water or soil, re-use it if possible or mix with water and wait until it hardens then bury it in landfill in accordance with national regulation.

STORAGE & SHELF LIFE

PIOFLOW CABLE GROUT shall be stored in normal conditions away from extreme temperatures, and any source of moisture. Shelf – life is 12-months.

TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:
concretedoctor@arkaz.com

LEGAL DISCLAIMER

The information given is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification. Since the conditions of use are beyond our control, we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale including those limiting warranties and remedies which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would violate or infringe statutory obligations or any rights belonging to a third party.

These products may be covered by patents or patents pending.



Copyright 2021
Printed in K.S.A. Version 2.0
13-March-2020