POLY GROUT CF

General purpose non-shrink Fiber – Reinforcement, cementations grout

Uses

For general purpose grouting over a wide range of applications including heavy duty support beneath machine base plates, crane rails and stanchion bases. Also performs as an excellent anchoring grout for masts, anchor bolts, etc.

<u>Advantages</u>

- Fiber reinforced cementations grout, with none staining.
- Durability high ultimate strength and low permeability
- High early strength- facilitates rapid installation and early operation of plant.
- Ensure long term performance in service.
- Chloride-free composition allows high early strength development without the use of chlorides.
- Shrinkage compensation- gaseous expansion system compensates for shrinkage and settlement in the plastic state.
- Reliability site batching variations eliminated by the use of factory controlled pre-packed material.
- Iron-free- no metallic iron content to corrode ion and cause
- Staining or deterioration due to rust expansion.

Description

POLY GROUT CF is supplied as a ready to use dry powder requiring only the addition of water to produce a free flowing non-shrink grout for gap widths of 50-100 mm.

The material is a blend of Portland cements, pregraded fillers and additives which impart controlled expansion in the plastic state whilst minimizing water demand. The low

Water requirement ensures high early-strength and long term durability. The filler grading is designed to aid uniform mixing and minimize segregation and bleeding

<u>Standards</u>

POLY GROUT CF complies with the requirements of ASTM C 1107 grade C

POLY GROUT CF has been specially formulated for Egypt.

Age (Days)	Compressive Strength N/mm2 Flow able			
1	19.0			
2	47.0			
28	80.0			

Note: the above results are typical for flow able consistency.

<u>Packaging</u>

POLY GROUT CF is supplied in 25 kg plastic bags.

Yield

This depends on the required consistency. The approximate yield per 25 kg bag at each consistency is as follows:

Trowel able	Flow able
12	13.2
	Trowel able

Application instructions Preparation

Under plate grouting: Reference should be made to the design table (Figure 2) when determining the flow distance based on the gap width and fluid head. These should be designed to ensure that the grout will flow through the gap as a continuous front.

The unrestrained surface area of the grout must be kept to a minimum. Generally the gap width between the perimeter formwork and the plate edge should not exceed 150 mm or the pouring side and 50 mm on the opposite side The formwork should be constructed to be leak proof as **POLY GROUT** CF is a free flowing grout. This can be achieved by using foam rubber strip or mastic sealant beneath the constructed formwork and between joints.

In some cases it is practical to use sacrificial semi-dry sand and cement formwork. The formwork should include outlets of the pre-soaking water.

Figure 2

		Max. flow distance in mm			
Grout	G	ap width	50mm	100m	250mm
Consis	stency	mm	head	m	head
Flow a	ıble	20	200	950	160
30	350	1500	2300		
40	600	2200	3000		
50	900	3000	3000+		

N.B. This table is based on the following factors.

Temperature 20°C

Minimum gap width 20 mm.

Water saturated substrate.

Minimum unrestricted flow width 300 mm.

Foundation surface: This material must be free from oil, grease or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris.

Base plate: This must be clean and free from oil, grease or scale. Provide air pressure relief holes to allow venting of any isolated high spots.

Leveling shims: If these are to be removed after the grout has hardened; treat them with a layer of grease. Pre-soaking: Several hours prior to grouting the area of cleaned foundation should be flooded with fresh water. Immediately prior to grouting remove any free water. Care should be taken to blowout all bolt holes and pockets.

Mixing

The quantity of water required to achieve the desired consistency, is precise, and the volume used should be in accordance with the table below.

Consistency	Water content at 20 'C
	(liters/25 kg bag)
Flow able	5.0
Trowel able	4.0

For best results a mechanically powered grout mixer should be used. For quantities up to 50 kg slow speed drill fitted with a high shear paddle is suitable. Larger quantities will require a high shear vane mixer. Do not use a colloidal impeller mixer.

It is essential that machine mixing capacity and lab our availability is adequate to enable the grouting operation to be carried out continuously. This may require the use of a

Holding tank with provision for gentle agitation to maintain fluidity.

The selected water content should be accurately measured into the mixer. Slowly add the total contents of the **POLY GROUT** CF pack, and mix continuously for 5 minutes, ensuring a smooth even consistency.

Pass the mixed grout through a 5mm sieve to remove any lumps prior to placing.

Curing

On completion of the grouting, exposed areas which are not to be cut back should be thoroughly cured by means of water application, Concur* curing membrane or wet Hessian.

Cleaning

POLY GROUT CF should be removed from tools and equipment immediately after use with clean water. Cured material can be removed mechanically or with Acid Etch.



Under technical collaboration with Polycoo Industries Ltd.

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