



DESCRIPTION

PACTOGrout Flow PT is a ready to use, high strength, highly flowable, non-shrink cementitious grout. It is shrinkage compensated pre-bagged powder requiring only the addition of water on site to produce a fluid and high ultimate strength grout with extended workability retention even at high temperatures.

It consists of Portland cement (Type II as per ASTM C150) and special chemicals for non-shrinkage properties, high fluidity & retention properties of the mix at low water cement ratio.

STANDARD

BS EN 447

TYPICAL USES & APPLICATIONS

- Post-tensioned cable ducts
- Pre-stressed cable ducts
- Cable anchoring
- Sonic tubes in the concrete piles
- Retaining wall tie backs
- Repair of non moving concrete cracks by injection
- Rock bolts and anchors
- Sheet pile anchors

ADVANTAGES

- Ready to use, just add water
- Non-Shrink with controlled expansion
- High early and ultimate strength ensures the permanence and safety of critical installations.
- Good workability retention ensures complete encapsulation of tendons even when grouting long ducts in high ambient temperatures.
- The stable rheology, shrinkage compensation and low water content ensure excellent corrosion protection of steel tendons.
- High bond to steel increases the pull out failure load.
- Highly flowable and prolonged flow retention
- No bleeding and settlement
- Chloride free -no corrosion of metallic parts

APPLICATION INSTRUCTION

SURFACE PREPARATION

For post tension cable ducts:

Ducts to be grouted should be cleaned before the application of grout and any standing water must be removed. Ensure the casing duct is leak proof. Check the air vents & valves are in good working condition.

In case of repairing of concrete cracks & filling intricate voids, the prepared area should be flushed with water for 3-4 hrs prior to the placement of **PACTOGrout Flow PT**. Just prior to placing of grout all free water should be removed.

MIXING

HOT CONDITIONS

Use chilled water and store the bags in a cool place to keep the mixed grout temperature below 25°C where possible, however the maximum grout temperature should not exceed 32°C.

COLD CONDITIONS

Use warm water and store the bags in a warm place to ensure the mixed grout temperature is above 5°C at all times.

It is recommended to use mechanical High Shear Grout Mixer and Grout Pump in order to get optimum dispersion and fluidity. However, for the smaller batches drill machine with a paddle can also be used. Mix 25 kg **PACTOGrout Flow PT** with maximum 9 litres of chilled potable water.

Adding more water than the specified limits will result in loss of ultimate properties. Mix **PACTOGrout Flow PT** to pre measured water and mix for 2 to 3 minutes. Allow a time gap of 2-3 minutes and again re-mix for 2-3 minutes to get the desired flow. Use chilled water to get better flow and retention properties.

MIXING WATCH POINTS

- Do not use excess water.
- Do not use hardened or lumpy grout caused by torn or water damaged bags.
- Do not mix by hand
- Discard any grout that has been left in excess of 30 minutes



TYPICAL PROPERTIES @ 25° C

PROPERTY	TEST METHOD	VALUE		
Component		Single		
Form		Powder		
Colour		Grey		
Fresh Wet Density	BS EN 445	2.00 kg/ltr +/-0.05		
Flow (Marsh Cone)*	BS EN 445	W/P	0.36	0.32
		Initial (t ₀).	< 25 sec.	< 25 sec.
		After 30 min. (t ₃₀)	< 25 sec.,	0.8t ₀ < t ₃₀ < 1.2t ₀
Compressive Strength	BS EN 196-1	7 days	40 N/mm ²	50 N/mm ²
		28 days	55 N/mm ²	65 N/mm ²
Flexural Strength	BS EN 196-1	9 N/mm ² at 28 days, w/p 0.32		
Expansion	BS EN 445	Up to 2% positive expansion		
Bleeding	BS EN 445	< 0.3%		
Chloride Content	BS EN 480-10	Nil to BS EN 934-4		
Sedimentation	Report No. 47	< 2%		
*Properties with the use of high shear colloidal grout mixer. Values may change with the type of mixer.				

APPLICATION

APPLICATION FOR CABLE DUCTS:

Grouting process shall be started from one side of the cable duct till homogenous consistency of **PACTOGROUT FLOW PT** starts flowing from consecutive air vent valves and outlet valves.

FOR SONIC TUBES IN CONCRETE PILES:

PACTOGROUT Flow PT shall be pumped in sonic tube by tremie method. Pumping of grout shall be continued till consistent quality of grout over flows from sonic tube. Grouting shall take place using heavy duty grout mixer pump and flexible grouting hose. Grouting shall be done with continuous flow.

CURING

All exposed grout surfaces should be cured by ponding of water or by using wet hessian. Alternatively, curing compound from PACTOCure range can be used.

PACKAGING AND YIELD

25 kg and 50 kg bags
17 ltr/25 kg bag with 0.36 W/P ratio.

GENERAL INFORMATION

Shelf Life 12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature/humidity may reduce shelf life.

CLEANING

Clean all equipments and tools with water immediately after use.

HEALTH & SAFETY

PACTOGROUT Flow PT is not toxic, but as with other materials containing portland cement it has an alkaline nature and thus can be irritating to skin and eyes. Wear simple dust masks and gloves when handling. Keep out of reach of children. Wash off splashes of grout with clean water. If irritation persists, seek medical advice.



PPE's : Gloves, goggles & suitable mask must be worn.

Precautions : Contact with skin, eyes, etc. must be avoided. If swallowed seek medical attention immediately.

Hazard: Regarded as non-hazardous for transportation.

Disposal : Do not reuse containers. To be disposed off as per local rules and regulations.

For additional information please refer to the MSDS and method statement available on request.



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