



GPG



GLOBCON POWER GROUT is a single component, ready to mix, non-shrink free flowable grout. It is used for precision grouting to withstand static and dynamic loads. It is ready to use powder to be mix with water during application. It is also used to fill gaps around pipes in wet areas which are vulnerable to leakage. It can be used at any consistency from fluid to damp pack.

RECOMMENDED APPLICATION

- General purpose grouting
- Base plate of turbines, generators, pumps, centrifugal compressors
- Bedding joints in pre cast sections
- Filling cavities, voids, gaps, and recesses
- Anchor rods, bearing plates • Anchor bolts
- Suitable for bridge bearings application

BENEFITS & KEY FEATURES

- EASY TO USE**
- IMPERMEABLE**
- MULTIPLE FLUIDITY**
- IMPACT RESISTANCE**
- HIGH EARLY STRENGTH**
- EXTENDED WORKING TIME**
- HIGH COMPRESSIVE STRENGTH**
- SHRINKAGE COMPENSATING**
- HIGH BOND STRENGTH TO STEEL & CONCRETE**

TECHNICAL SPECIFICATION

Appearance & Form	Grey Granular Powder
Compressive Strength @ 18% W/P (BS 1881 Pt. 1161) 70mm cubes for CT.	24 Mpa @ 1 Day 45 Mpa @ 3 Days 55 Mpa @ 7 Days 65 Mpa @ 28 Days
Compressive Strength @ 16% W/P (BS 1881 Pt. 1161) 70mm cubes for CT.	28 Mpa @ 1 Day 54 Mpa @ 3 Days 66 Mpa @ 7 Days 75 Mpa @ 28 Days
Flexural Strength @ 18%	3 Mpa @ 1 Day 8.5 Mpa @ 7 Days >9 Mpa @ 28 Days
Tensile Strength	3.4 Mpa @ 28 Day
Shear Strength	13 Mpa @ 28 Day
Initial Setting Time	3-4 Hours @ Flowable consistency 5-6 Hours @ Pourable consistency
Final Setting Time	5-6 Hours @ Flowable consistency 7-8 Hours @ Pourable consistency

FLOW CHARACTERISTICS

The maximum distance of flow is governed by the gap width and the head of the grout. Typical data for flow design assuming grout is poured. Immediately after mixing is given in the table below:

Grout Max. flow distance in mm

Grout Consistency	Gap Width (MM)	50 MM	100 MM	250 MM
Flowable	30	350	1000	1400
	40	500	1400	2000
	50	900	1900	>3000

This table is based on the following factors temperature 30°C. Water saturated substrate, Minimum unrestricted flow width is 300mm.

DIRECTION FOR USE

SURFACE PREPARATION



- Remove all dirt, oil, grease, and other bond inhibiting materials by mechanical means.
- Particular attention should be paid to bot holes to ensure that these are water-free.
- Several hours before placing, the concrete substrates should be saturated with fresh water. The surface should be in SSD conditions.

The formwork should be constructed to be leakproof. This can be achieved using a foam rubber strip or mastic sealant beneath the constructed formwork and between joints.

FORM WORK CRITERIA

MIXING



- The quantity of clean water required to be added to a 25kg bag to achieve the desired consistency is given below:
Pourable: 4.125 litres. / Flowable : 4.5 litres.
- Mix with a high torque (400/500 rpm) rotary drill fitted mixer with a mixing paddle.

- Do not attempt to add more water to mix. Mix the required quantity only.
- The adequate mixing capacity and labour availability should be there for continuous applications.
- Mix continuously for 5 minutes, ensuring a smooth, even consistency of the mix.
- The mixed material should be applied immediately after mixing.
- Maintain a hydrostatic head at least 15 cm. On the side where the grout has been poured, allow 10 cm clearance between the sides of the form and the base plate, and on the opposite side, allow 5-10 cm clearance between the formwork and base plate.
- Immediately cover all exposed grout with clean damp hessian or cure with curing compound.

MIXING RATIO

1. Plastic stage: 14 to 15 % of the material of powder material.
2. Pourable: 16 % of the material of powder material.
3. Flowable: 18 % of the material of powder material.

MODULUS OF ELASTICITY

The static modulus of elasticity, measured by applying a load corresponding to 1/3 of the strength, is approximately 28,000 N/mm² at 28 days.

FATIGUE RESISTANCE

Cube samples, produced with GLOBCON POWER GROUT and cured for a month, underwent fatigue tests of 2,000,000 pulsing stresses ranging between 20 and 50 n/mm² at a frequency of 500 cycles/min. Tested specimens were undamaged. Their compressive strength was higher than that of a similar example that was not subjected to fatigue tests.

PACKAGING

25 kg

COVERAGE

- Pourable - 12 Ltr yield per 25 kg Bag.
- Flowable - 13 Ltr yield per 25 kg Bag.
- *Part Mixing of bag is strictly prohibited.

SHELF LIFE

12 months from date of packing. It must be seal pack & stored under proper condition. Store in a cool & dry place, keep away from direct sunlight.