

Maxx Powergrout – 60

High Precision, Non Shrink, Pourable & Flowable Cementitious Grout

Description

MAXX POWERGROUT- 60 is a cement based ready to mix, high early strength, non shrink, pourable & flowable, high quality binder for precision grouting applications in engineering objects subjected to static and dynamic loads.

Uses

- To grout bearings, machine foundations, columns joints in precast construction etc. ▪
- To grout anchors in concrete
- To grout cavities, gaps and voids in concrete
- To grout base plate of turbine, compressor, boilers, pumps and heavy machinery.
- Sealing around penetrations
- For fixing and anchoring the precast elements.

Features & Benefits

- Non Shrink, Non Expandable Grout
- Develops very high early and final strengths
- Excellent bond strength
- Very good flow characteristics
- Non – Corrosive
- Consistent in quality
- Shrinkage Compensated
- Chloride free

Method Of Application

- The substrate shall be thoroughly clean, free from dust, loose material, laitance with suitable methods like by using wire brush, water jetting, mopping etc.
- Proper checking of reinforcement and other elements to be grouted need to be carried out as per the structural requirements before placing MAXX POWERGROUT-60. The shuttering has to be proper without any gaps or loose materials to ensure nil leakages during the MAXX POWERGROUT-60 usages.

Mixing

- MAXX POWERGROUT – 60 can be mixed with a low speed (< 500 rpm) hand drill mixer to avoid entraining too much air. Mix only full bags for best results. Pour around 80 to 90% of the recommended water in a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly at least for 3 minutes adding balance water within the mixing time to the maximum specified amount to adjust the grout to the required consistency and flow properties. Do not mix more grout, which cannot be used within pot life. Do not add extra water.

Application

- Remove excess water from substrate surface e.g. with clean sponge, until surface is dark matt in appearance without glistening (saturated surface dry). Surface pores and pits shall not contain water. Let the grout stand for 5 minutes to release air entrained by mixing. Pour grout immediately after mixing into the prepared openings using a sufficient pressure head to maintain a continuous flow of grout. Ensure air displaced by the grout can easily escape, otherwise entrapped air will prevent full contact grouting. For optimum use of the expansion properties apply the grout as quickly as possible.

Placing

Placing make sure that the necessary formwork is firmly placed and watertight. Pour grout within 60 minutes. During that time, keep material in mixer well agitated. After 1 hour discard any grout mix that shows signs of stiffening. During the pouring process, ensure that a good hydrostatic head is maintained to keep the flow of the grout continuous and entrapped air displaced by the grout is allowed to escape. Maxx Powergrout 60 may be placed in thickness up to 100mm in one pour. For thicker sections more than 100mm, it is necessary to use well-graded aggregates typically a 10mm size to minimize heat buildup. Quantities of aggregate added to the mix should not exceed one part aggregate to one part Maxx Powergrout 60 by weight.

Curing

On completion of the grouting operation, exposed areas should be thoroughly cured by means of water application.

Properties

Chemical Base	Cement, special additives, and aggregates
Packaging	40 kg bag
Appearance / Colour	Grey powder
Shelf Life	6 months from date of production
Storage Conditions	Store properly in dry conditions in undamaged and unopened original sealed packaging.
Bulk Density	1.15–1.60 kg/L (dry powder density)
Maximum Grain Size	2.36 mm

Technical Information

Wet Density	2250 – 2350 kg/cum
Compressive Strength	1 day \geq 23 N/mm ² 3 days \geq 35 N/mm ² 7 days \geq 45 N/mm ² 28 days \geq 65 N/mm ²

Note: Size of the cubes used 70 mm*70 mm

Flexural Strength @ 28 days Mpa	10 - 11 Mpa
Split tensile strength @28 days Mpa	4 Mpa
Pull-Out Strength @28 days	7 Mpa
Tensile Strength @28 days	6

Water Ratio	Flowable Water : Powder = 0.16–0.18 by weight 6.4 – 7 liters water per 40 kg bag Pourable Water : Powder = 0.12 by weight 4.8 liters water per 40 kg bag
Consumption	1950 kg/m ³ at water powder ratio 0.16
Chloride Content	Nil
Initial Setting Time	30 Min
Shrinkage	No shrinkage
Pot Life	60 Min

Compressive strength with addition of aggregates			
Age	Compressive strength (N/mm ²) W/P 0.18% of aggregates		
	50%	75%	100%
1	30	30	33
3	51	52	57
7	63	64	68
28	70	75	77

Grout Consistency	Max Flow distance in mm			
	Gap Width (mm)	50 mm head	100 mm head	250 mm head
Flowable	30	350	1000	1500
	40	500	1500	2000
	50	900	2000	3000+

Note : The technical data provided in this technical data sheet is as per our internal lab testing and may vary as per the actual method of application at sites.

Packaging

40 Kg HDPE bag

Shelf Life

MAXX POWERGROUT- 60 has a shelf life of 6 months from the date of manufacture. Store at cool and dry place.

Safety Directions : MAXX POWERGROUT- 60 is non-toxic. Use of gloves and goggles recommended. Any splashes to the skin or eyes should be washed off with clean water. In case of prolonged irritation, medical advice should be sought. MAXX POWERGROUT-60 is non-flammable.