

ARMORGROUT-60

HIGH EARLY STRENGTH NON-SHRINK PRECISION GROUT

Product Description:

ARMORGROUT -60 is a non-shrink precision structural grout containing expansion agents to prevent shrinkage while the product hardens. It is designed for grouting all kinds of machinery, steel columns, precast concrete, bearing plates and anchoring applications. **ARMORGROUT -60** is designed to achieve high early strength and outstanding ultimate strength.

ARMORGROUT -60 sets rapidly with high early strength in short time frame and impressive ultimate strength. It is particularly suited to grouting machines or plates for precision load bearing support requiring urgency, precision and high strength.

Advantages:

- Specifically engineered for structural precision grouting of machineries and other anchoring applications requiring precision and durability
- **ARMORGROUT 60** is engineered with anti corrosion proprietary ingredients making it suitable
- Suitable for harsh chemical environment
- Excellent Impermeability to water
- Resistance to dynamic mechanical stress.
- Non-metallic and Non-Staining
- Controlled expansion
- High strength and chemical resistant
- High Flow and Fluidity
- Meets or Exceeds ASTM C1107

Uses:

- Machinery bases and sole plates
- Anchor bolts
- Columns bases
- Pile cap re-profiling
- Gap filling and transfer lines
- Bridge bearing
- Pre-cast elements and other grouting conditions requiring high in use strength

Yield:

At standard water content each bag of **ARMORGROUT-60** will yield 9.5 Litres (0.45 cubic ft) of fluid consistent grout. The standard water content for **ARMORGROUT-60** is 3.8 litres of water for 20kg bag. Approximately 100 bags of **ARMORGROUT-60** are required for 1 cubic metre of grout pour.

Mixing :

The standard water requirement for **ARMORGROUT-60** is 3.5-3.8 litres for 20kg bag. In the case of trowellable grout the water requirements is 2.5-2.8 litres for 20kg. However, the correct mix proportion of **ARMORGROUT-60** to water is always dependent on the use to which the grout is to be put. Trial mixes should be conducted in small quantity to achieve desired mix specification before use. **ARMORGROUT-60** should be mixed with a drum mixer or a small drill mixer and allowed to settle for three to five minutes to prevent air entrapment.

Surface Preparation:

Surfaces must be cleaned thoroughly, free of loose and unsound material, cement slurry and any other deposits. Surfaces must be free of oil, grease and other membranes. Rusted surfaces must be properly grinded or abraded by mechanical means.

Area to be grouted with **ARMORGROUT-60** must be saturated surface dry that is it must be saturated with water hours earlier and the surface water must be almost drained before application.

Placement:

ARMORGROUT-60 should be placed by pumping or manual pour. Appropriate formwork should be done that does not allow leakage, to facilitate **ARMORGROUT-60** compaction material should not be vibrated as this may lead to segregation but rather use rodding at interval of short pours. The initial setting time for **ARMORGROUT-60** is 20-25 minutes and final setting time is 25-30 minutes. Pot life is 20 minutes

The recommended thickness of **ARMORGROUT-60** in one pour should be between 20mm-50 mm. Minimum thicknesses should be 10mm and maximum thickness per pour should not exceed 100 mm. Should there be a requirement to pour more than 100mm then coarse aggregate should be added to increase the thickness and strength of **ARMORGROUT-60**.

As a rule of thumb aggregate to be added should not be more than 20% of the grout. Recommended aggregates is the smooth rounded aggregates not more than 10mm in size where aggregates inclusion are not desired, material can be poured in stages to achieve final pour of 100mm

Curing:

As soon as the grouting is completed, it should be cured immediately. Suitable curing such as membrane or plastic sheet should be used to protect freshly applied **ARMORGROUT-60**. Curing should continue for 7 days after pouring. Free water should be removed before pouring and the grout should be poured continuously so as to ensure air is not trapped.

Packaging and Shelf Life :

Materials are packed in 20kg bags. Shelf life is 12 months stored in cool dry place in an unopened pack

Technical Information

Precision Non-Shrink Grout			Plastic
Bag size			50 lb (22.7 kg)
Approx. water content per bag			3 qts + 1 pt (3.3 L)
Flow, ASTM C939			
Flow, at 5 drops, ASTM C1437			100-125
Compressive strength, ASTM C109 : Flowable			
2 hours			(20MPa)
4 hours			(25MPa)
24 hours			3,500 psi (30.2 MPa)
7 days			9,000 psi (55.1 MPa)
28 days			12,500 psi (70.2 MPa)
C-827 expansion			0 - 0.4
Height change, ASTM C1090			
1, 3, 7 and 28 days	0 - 0.2	0 - 0.2	0 - 0.2

Health and Safety Information:

This product is hazardous if not used appropriately and it must be administered by trained and professional persons. **ARMORGROUT-60** contains cementitious content which can be harmful when not handled properly and under constant exposure to eyes. Proper protective equipment should be used when mixing and using all cementitious based materials.



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