

# 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.

### FEATURES

- 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 3.6 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 3.6 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.



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STRUCTURAL GROUT

### 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 roding 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			
24 hours			20 N/mm <sup>2</sup>
7 days			50 -55 N/mm <sup>2</sup>
28 days			60 N/mm <sup>2</sup>
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





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### HEALTHY 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.

### LIMITED WARRANTY

All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty either expressed or implied. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk and liability resulting from his or her use of the product. Nothing contained in any supplied materials relieves the user of the obligation to read and follow the warnings and instruction for each product as set forth in the current Technical Data Sheet, product label and Safety Data Sheet prior to product use away.

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