

ARMORGROUT-70

NON-SHRINK CEMENTITIOUS GROUT FOR UNDER WATER APPLICATION

PRODUCT DESCRIPTION

ARMORGROUT -70 is a non-shrink cementitious grout for under water application. ARMORGROUT -70 is made from carefully selected proprietary ingredients with impressive anti washout characteristics, good flow and high compressive strength.

ARMORGROUT -70 can be used for free flowing grouting application and concrete repair under water.

BENEFITS

- Specifically engineered for under water grouting and concrete repair
- There is no major washout of cement phase when ARMORGROUT 70 is placed underwater
- Non Metallic and Non Staining
- Controlled expansion
- High strength and chemical resistant
- High Flow and Fluidity
- Meets or Exceeds ASTM C1107

USES

- Pillars
- Dams
- Columns bases
- Pile cap re-profiling
- Gap filling and transfer lines
- Bridge bearing

YEILD

At standard water content each bag of ARMORGROUT-70 will yield 9.5 Litres (0.45 cubic ft) of fluid Consistent grout. The standard water content for ARMORGROUT-70 is 3.8 litres of water for 20kg bag.

Approximately 100 bags of ARMORGROUT-70 are required for 1 cubic metre of grout pour.

MIXING

The standard water requirement for ARMORGROUT-70 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-70 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-70 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-70 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.



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STRUCTURAL GROUT

PLACEMENT

ARMORGROUT-70 should be placed by pumping or manual pour. Appropriate formwork should be done that does not allow leakage, to facilitate ARMORGROUT-70 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-70 is 20-25 minutes and final setting time is 25-30 minutes. Pot life is 20 minutes

The recommended thickness of ARMORGROUT-70 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-70.

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-70. 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.

SELF LIFE

Shelf life is 12 months stored in cool dry place in an unopened pack

PACKAGING

Materials are packed in 20kg insulated bags

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			
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





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HEALTH AND SAFETY

This product is hazardous if not used appropriately and it must be administered by trained and professional persons. ARMORGROUT-70 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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