



## **POLY GROUT 3000- NON-SHRINK GROUT MORTAR**

### **DESCRIPTION :**

POLYGROUT 3000 is a cement based, single component, non-shrinking, fluid grout mortar with high adherence and strength.

### **ADVANTAGE:**

- Both indoors and outdoors.
- Assembly of prefabricated concrete construction elements.
- Engineering constructions such as subway, highway, dam etc.
- As fluid filling in hard-to-reach places.
- Fixing steel columns and poles.
- Fixing any kind of industrial machinery.
- Filling concrete cracks and grooves.
- Production of partitions and column heads.

### **AREA OF USE :**

- Any kind of industrial, reinforced concrete building
- Floorings on special coverings and surface repairs for areas with light or medium traffic load
- Filling tension gaps (rod clearances/tie-rod holes) and core spaces in concrete buildings,
- Repairing concrete that is obtained via molding during any kind of construction work and repairment of cracks,
- Engineering constructions such as subway, motorway, dam etc.,
- Repairment, restoration and reinforcement projects,
- Repairing surface disorders of 10 – 40 mm thick at once.

### **SURFACE PREPARATION :**

- The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.
- The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application. The surface should be cleaned and prepared by means of appropriate mechanical surface preparation techniques such as high-pressure water jet, roughening, sandblasting etc.
- For applications with mould, make sure the moulds are clean and impermeable, before fixing them as required. If there is water leakage in application area, the leakage should be drained by means of appropriate stopper. Highly absorbant surfaces should be saturated with water before the application. It should be paid attention to that there are no water puddles on the surface as well.

### **STANDARDS :**

EN 1504-3, Class R4

### **MIXTURE PREPARATION :**

- 25 kg of POLYGROUT 3000 is slowly poured into 3.5-4.5 liters of clean water. Preferably with a low-speed mixer, it is mixed with water for a minimum of 1-2 minutes up until when a homogeneous mixture is obtained.
- The prepared mortar is left to develop for 3 minutes after which is then lastly stirred for another 2 minutes.
- The fresh mortar should be used within 30 minutes.

### **APPLICATION :**

- The prepared mortar should be poured into the molds without delay, just enough to create a thickness of between 10mm and 75mm. In order to prevent air from getting trapped inside, the mortar should be poured into the mold from one side and without interruption.
- During the application there should not be any air bubbles inside the product.
- Since the air bubbles would inhibit the surface adhesion of the product they would reduce the adhesion strength.
- In such cases, the placement of the mortar should be done with a steel stick.
- Resting time between layers is 3 hours. Second layer is applied only after the first layer is finished drying/setting.
- The prepared mortar should be used within 20-25 minutes.
- Consumption: 2.0 kg/m<sup>2</sup> (for 1 mm application thickness).

### **PRECAUTION IN APPLICATION:**

- Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.
- Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.
- The application area should be protected from the effects of wind and direct sunlight.
- After application, carry out curing on surface with curing agent in order to prevent premature drying.
- Do not use for patch repair.
- The mortar should not be subject to vibration until it sets.
- Moulds can be removed after 24 hours. In machinery assemblies, machines should not be run until the mortar is set.
- The final consumption amount might vary depending on application conditions and surface characteristics.



#### STORAGE AND SHELF LIFE :

Must be stored at temperatures between +5°C and +35°C. Under proper storing conditions, the product's shelf life is 12 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use

#### SECURITY INFORMATION :

Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.

#### PACKING :

25 kg craft bags.

#### TECHNICAL PROPERTIES:

|              |                                                        |   |
|--------------|--------------------------------------------------------|---|
| Appearance   | Grey Powder                                            | - |
| Pot Life     | Min. 45 Minutes                                        | - |
| Aplication   | Between +5°C and +35°C                                 | - |
| Tempeture    |                                                        |   |
| Mixing Ratio | 3.5 -4. 5 L water / 25 kg powd                         | - |
| Applicaition | max. 75 mm (per layer)                                 | - |
| Thickness    |                                                        |   |
| Consumption  | 2.0 kg/m <sup>2</sup> (for 1 mm application thickness) | - |

#### PERFORMANCE :

|                                  |                                              |            |
|----------------------------------|----------------------------------------------|------------|
| Compressive Strength (28 days)   | ≥ 60 N/mm <sup>2</sup>                       | EN 12190   |
| Flexural Strength (28 days)      | ≥ 9 N/mm <sup>2</sup>                        | EN 1015-11 |
| Adhesive Strength (28 days)      | ≥ 2 N/mm <sup>2</sup>                        | EN 1542    |
| Capillary Water Absorption       | ≤ 0.5 kg/(m <sup>2</sup> .h <sup>0.5</sup> ) | EN 13057   |
| Elastic Modulus                  | > 20 Gpa                                     | EN 13412   |
| Restrained Shrinkage / Expansion | ≥ 2 N/mm <sup>2</sup>                        | EN 12617-4 |
| Chloride Ion Content             | ≤ 0.05 %                                     | EN 1015-17 |
| Reaction to Fire                 | A1                                           | EN 13501-1 |

Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

