

Kalekim**4210 Groutart**

High Strength Grout Mortar

**Description**

Cement based, polymer modified, non-shrink, high fluid, single component grout mortar.

Fields of Application

- Precision grouting of steel column base plates.
- Prefabricated concrete installation.
- Precision grouting of industrial machines like energy turbines, generators, pumps, etc.
- Concrete repairing.
- Suitable for interior and exterior applications.

Properties

- Maximum application thickness is 150 mm.
- High adhesion strength.
- High compression strength.
- Resistant to freeze thaw cycle.
- Not affected by weather conditions.
- Resistant to water.
- No segregation and low bleeding.
- Easy to prepare and apply.

Preparation of Substrates

- The substrates must be dry, clean and solid.
- The substrates to be coated should be free of adhesion preventive foreign substances such as dust, dirt, mould oil, paint etc.
- Damaged or contaminated concrete should be removed.
- The concrete substrate should be water saturated, without free standing water, at the moment of application.
- Formwork should be fixed well.
- Molds should have enough strength, be lined or coated with a bond-breaker for easy removal and all joints around the molds should be sealed with suitable material to ensure impermeability. Impermeability can be tested by filling water into the molds.
- Surface should be roughened by pressurized water or sanding.

4210 Groutart



Application

- Pour half of the 25 kg of Groutart in 2.5-3.5 lt of clean water slowly, mix well for 3-4 minutes until it is homogeneous. Add the remaining powder into the mortar and continue until no lumps remain. A low speed mixer is recommended to mix. Do not add any additives to the product other than those stated in the application instructions.
- Do not add water into the mortar while curing.
- Be sure that there are no remaining air bubbles in the mortar which may cause adherence problems by inhibiting the surface contact to the concrete.
- Ensure that enough pressure is provided for fluidity.
- It is recommended to complete the process within a maximum of 15 minutes. For the applications which cannot be finished in 15 minutes, use a pump.

Post-Application Protection & Suggestions

- Clean application tools and hands with plenty of water after application.
- Do not add any additive which is not mentioned in the instructions for the application.
- Pour from one side only.
- After application, curing surface should not be neglected.
- Application temperature should be between +5°C and +35°C.
- The consumption values in the table refers to an average consumption amount. It may vary depending on the application conditions and surface properties.
- Since it contains cement, it irritates the eyes, respiratory system and skin. For further information refer to the safety data sheet.

Storage

- Packages should be kept dry and cool at between +5°C and +35°C in moisture free conditions. Avoid direct sunlight.
- Packages should be protected from water, frost and adverse weather conditions.
- Maximum 3 pallets should be stacked on top of each other.
- Shelf life is maximum 12 months conditional to complying with the above mentioned conditions.

Packaging

- 25 kg multi-ply paper bags.

Quality Certificates



Structural grouting mortar conforming EN 1504 - 3 / Class R4.



4210 Groutart

Technical Properties

(at 23 °C and 50% RH)

General Data

Appearance	Grey powder
Shelf Life	12 months when stored in the original sealed packing in a dry place.

Application Data

Application Temperature Range	(+5°C) - (+35°C)
Mixing Ratio	2.5 – 3.5 liters water / 25 kg powder
Pot Life	30 min.
Ready for Use	24 hours
Consumption	2 - 2.4 kg of powder (for 1 dm ³ mortar)
Application Thickness	Min. 10mm / Max. 150 mm

Performance Data

Compressive Strength (EN 12808-3)	≥ 30.0 N/mm ² (1 day) ≥ 60.0 N/mm ² (28 days)
Flexural Strength (EN 12808-3)	≥ 5 N/mm ² (1 day) ≥ 7 N/mm ² (28 days)
Modulus of Elasticity (EN 13412)	≥ 20000 N/mm ²
Bonding to Concrete (EN 1542)	≥ 2.0 N/mm ²
Capillary Water Absorption (EN 13057)	≤ 0.5 kg/m ² h ^{0.5}
Restrained Shrinkage-Expansion (EN 12617-4)	≥ 2.0 N/mm ²
Service Temperature Range	(-30°C) – (+80°C)
Dangerous Substances	See SDS.
Reaction to Fire	A1