



5020

High Strength Shrinkage Compensated Repair Mortar



Product Code : 5020
Quality Certificates

The product conforms to the EN 1504-3 standard R4 class.

Description: A cement based, single component, shrinkage compensated, high strength grout mortar which has plastic consistency.

Application Areas: In repairs that require early high strength, in repairing reinforced concrete construction elements and surfaces, in repairing concrete exposed to segregation, in horizontal and vertical beveling applications, in grouting joints that exist between old and new concrete, in grouting tie-rod holes and core gaps, in grouting the gaps that exist around the installation pipes and elements.

Advantages:

- Does not shrink. It is in plastic consistency
- Provides high compressive strength
- Resistant to impact and vibrations
- Provides high adherence to concrete and reinforcement
- Resistant to water and moisture
- Does not contain corrosive materials
- Can be mixed only with water, easily applied

Preparation of the Surface: Special attention must be given that the application surface is cured. The application surface must be clear of weakly bonded parts and materials that prevent bonding, such as dust, oil, paint, curing agents, detergents, mold release oils and silicone. The application surface must be wet and kept damp, however the excess water on the application surface has to be removed. In order to prevent leakage during the replacement and curing of the mortar in molded applications, attention must be paid that the mold is sound and the application area must be protected from any vibration until the mortar is hard. In case the expansion force of the mortar is desired to be used at maximum level, the mortar must be placed into a rectangular hole with straight vertical borders. Minimum depth is 6 mm. If the product is intended to be used as a covering, maximum recommended thickness is 50 mm. If thicker application is required, the repair mortar can be applied in layers.

Preparation of the Mortar: Only half of the powder in 25 kg bag is added to 3,9 lt of water and mixed by a mixer with low speed (400 - 600 rpm) until there are no lumps. Then the rest of the powder is added and mixed. 12.2 lt of mortar is obtained

Application Information: The prepared mortar is poured continuously from one side in order to prevent air to remain inside the mold, generating 10 mm - 40 mm thickness at each layer. It should not be exposed to any vibration and should be located with a steel wire. The molds can be demounted after 24 hours. It should be cured immediately following the application. Insufficient curing may reduce initial expansion that is required to compensate the subsequent shrinkage.

Consumption: Aprx. 20 kg/m² (for thickness of 10 mm)

Caution: Avoid application in temperatures below +5°C and above +35°C. Special attention must be given to water mixing rates during mixing. It must be mixed with a low speed mixer, do not mix manually. If the ambient temperature is below +8°C, the application surface has to be covered and located mortar has to be kept at minimum +8°C. Avoid application on frozen areas, on areas under risk of freezing in 24 hours or on areas open to direct sunlight or wind. Never attempt to extend the expired mortar by adding powder and water

Packaging: 25 kg craft bags

Shelf Life: Unopened packages can be stored in dry environments for up to 12 months, stacked maximum 10 packages on a pallet

Health and Safety: As with all chemical products, contact with food, skin, eyes and mouth should be avoided during usage and storing. If swallowed by accident, consult a doctor. In case of contact with skin, rinse with plenty of water. Keep out of reach of children



Technical Properties	
Appearance	: Grey colored powder
Powder Density	: ~1,40 kg/lt
Water Mixing Rate	: 4 lt water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: Aprx. 45 minutes
Application Temperature	: Between +5°C and +35°C
Compressive Strength	: 1 day : ≥ 20 N/mm ² (EN 12190)
	7 days : ≥ 50 N/mm ² (EN 12190)
	28 days : ≥ 65 N/mm ² (EN 12190)
Application Thickness (On Each Layer)	: Minimum 10 mm Maximum 40 mm
Walk-on Time	: 24 hours

Application instructions and technical data provided for the products are obtained in line with our experience and the tests we implemented according to international standards under ambient temperatures of 23 ± 2 °C and ambient relative humidity conditions of 50% ± 5. Higher temperatures decrease the times and lower temperatures increase them.