

MC-RockMortar RK (Previously known as MasterPlas RK)

Polymer-Modified Mortar

Properties

- Thixotropic formulation enabling high build application
- One-component, polymer modified, chloride free and hydraulic mortar
- Suitable for spray application by wet-spray techniques
- Suitable for thickness of 10 to 50mm
- Shrinkage compensated and excellent adhesion
- Ideal application and hardening times

Areas of Application

- Concrete repair of both large and localized areas. MC-RockMortar RK provided a protection for embedded steel reinforcement. It is ideal for vertical and overhead repair operations.
- Built-up in landscaping or sculpturing works.

Application

Surface Treatment

The surface must be clean and free from all loose particles dust, oil and other contaminants. The substrate must have sufficient roughness, e.g. sound aggregates should be visible. The clean substrate shall be thoroughly saturated with water.

A polymer cement slurry bond coat shall then be used to prime the saturated substrate before the application of MC-RockMortar RK. MC-RockMortar RK shall be applied over this slurry bond coat on a "fresh-on-fresh" basis.

Mixing

MC-RockMortar RK is a single-component mortar which is mixed with water. The dry powder is slowly added to water and mixed thoroughly until a homogeneous, creamy consistency is achieved. Forced action mixers are recommended. Mixing should take approx. 3 minutes. Mixing by hand is not permitted. Use full pack-sizes only.

Mixing Ratio

For a 25 kg bag of MC-RockMortar RK, approximately 4.25 to 4.75 litres of water is required. For a 20 kg bag of MC-RockMortar RK, approximately 3.40 to 3.80 litres of water is required. As with all cementitious products, the quantity of water needed may be vary lightly.

Application

MC-RockMortar RK can either be applied by hand with floats or trowels, or by wet-spray techniques.

It is recommended to apply in layers of up to 50mm each. For thicker application, apply overcoat only after the previous coat has attained the final set. MC-RockMortar RK should not be applied at temperature below +5°C (air and substrate)

Before application of overcoat all loose particles on the surface shall be removed.

Curing

Care must be taken to ensure MC-RockMortar RK is suitably protected to prevent it from drying out too rapidly, especially from the effects of direct sun and wind. As with all cementitious materials, it shall be protected from rain before its final set.

General

Coverage depends on texture and porosity of the substrate. To determine this exactly, a trial area should be laid and coverage noted.

Technical Data for MC-RockMortar RK (All values given relate to +25°C and 60% relative humidity)

Characteristic	Unit	Value	Comments
Max grain size	mm	2.5	
Fresh Wet Mortar Density	kg/dm ³	1.85	
Dry Mortar Density	kg/dm ³	1.70	
Compressive Strength	N/mm ²	15.0	7 days
		20.0	28 days
Flexural Strength	N/mm ²	2.0	28 days
Bond Strength	N/mm ²	0.6	28 days
Linear Shrinkage			No Crack (Coutinho Ring method)
Mixing Ratio	litres	3.40 – 3.80	per 20 kg bag
		4.25 – 4.75	per 25 kg bag
Pot Life	minutes	45	at +20°C
		30	at +30°C
Layer Thickness	mm	5	minimum
		50	maximum
Yield	litres	~ 12.7	per 20 kg bag
		~ 15.9	per 25 kg bag
Minimum Application Condition	°C	>+5°C	substrate and ambient temp.

Product Characteristics for MC-RockMortar RK

Delivery	20 kg and 25 kg bag
Storage	Can be stored in cool and dry conditions for at least 6 months in original unopened bags.
Disposal	In the interest of the environment, please empty all bags completely & dispose in accordance with local regulations.

Safety Advice

Please take note of the safety information and advice given in the packaging labels and safety information sheets.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 05/20. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.