

MC-RockMortar EX (Previously known as MasterPlas EX)

High Fibre Polymer-Modified Base Mortar

Product Properties

- One component, polymer modified, chloride free hydraulic mortar.
- Suitable for spray application by wet-spray techniques.
- Suitable for single application thickness of 10 to 50 mm.
- Shrinkage compensated and excellent adhesion.
- Ideal application and hardening times.
- High flexural tensile strength.
- Resistance to chloride and sea water.

Area of Application

- Free form built-up as a scratch coat in theme plaster and rock works.
- Encapsulation to steel cage work to form a strong cement base course.
- Infill mortar to joint between FRP or GRC panels.
- Base leveling mortar to drywall panel and insulation panel construction.

Application

Substrate treatment

The steel cage works must be clean and free from all loose particles dust, oil and other contaminants. Concrete substrates must have sufficient roughness and for off-form concrete surface, a splatter dash or key coat treatment is recommended.

Manual Application

Before application of MC-RockMortar EX, ensure that the substrate has been pre-wetted to saturated surface dry condition. For very absorbent substrates, a polymer cement slurry bonding coat should be additionally brushed into the pre-wetted surface. The high build mortar, MC-RockMortar EX should then be applied "fresh-on-fresh" to the bond coat by trowel or float. The bond coat shall be based on Botact D10.

Mixing

MC-RockMortar EX 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 EX, approximately 3.80 to 4.20 litres of water is required.

For a 20 kg bag of MC-RockMortar EX, approximately 3.00 to 3.40 litres of water is required.

As with all cementitious products, the quantity of water needed may be varied slightly.

Application

MC-RockMortar EX 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 EX 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. Allow MC-RockMortar EX to cure for 3 days before application of carve coat.

Curing

Care must be taken to ensure MC-RockMortar EX 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 the 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 EX (All values given relate to +25°C and 60% relative humidity)

Characteristic	Unit	Value	Comments
Max Grain Size	mm	2.4	
Fresh Wet Mortar Density	kg/dm ³	1.80	
Dry Mortar Density	kg/dm ³	1.70	
Compressive Strength	N/mm ²	20.0	3 days
		28.0	28 days
Flexural Strength	N/mm ²	6.0	3 days
		10.0	28 days
Bond Strength	N/mm ²	0.3	3 days
		0.8	28 days
Linear Shrinkage			No crack – Countinho Ring Test
Water Ratio	litres	3.00 – 3.40	per 20 kg bag
		3.80 – 4.20	per 25 kg bag
Final Set Time	hours	6.0	at 25°C
		5.0	at 30 °C
Layer Thickness in Wet	mm	10	minimum
		50	maximum
Yield	litres	~ 12.9	per 20 kg bag
		~ 16.1	per 25 kg bag
Minimum Application Condition	°C	>+5	substrate and ambient temp.

Product Characteristics MC-RockMortar EX

Packaging	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 notice of the safety information and advice given on 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.