



MC-RIM PW 30

Cement-bound coating for horizontal surfaces in drinking water areas based on DySC®-technology

Product Properties

- Only to be mixed with water, pure mineral
- Open to water vapour diffusion, impermeable to water
- Hand application, pumpable
- Chloride-proof, highly sulphate resistant
- Surface finish with disc- and power trowel (please request advice)
- Approved according to DVGW, work sheet W 270, W 347 and W 300
- Mortar class R4 according to EN 1504 part 3

Areas of Application

- Surface protection for horizontal areas in drinking water structures
- Partial concrete replacement on horizontal surfaces; Suitable to increase the concrete cover
- Certified and classified according to EN 1504 part 3 / part 9 for principle 3 and 7; procedure 3.1, 7.1 and 7.2

Application

Substrate Preparation

See leaflet "General Application Advice for Coarse Mortar / Concrete Replacement Systems".

Reinforcement

MC-RIM PW-CP is used as corrosion protection. See leaflet "General Application Advice for Coarse Mortar / Concrete Replacement Systems".

Pre-wetting / Bond Coat

Use MC-RIM PW-BC as bond coat. See leaflet "General Application Advice for Coarse Mortar / Concrete Replacement Systems".

Mixing

MC-RIM PW 30 is added to the prepared water under constant stirring and mixed until a homogeneous and lump-free mortar is achieved. Forced mixers or slowly rotating double mixers must be used for mixing. Mixing by hand or mixing of partial quantities is not permitted. Mixing takes at least 5 minutes.

Mixing Ratio

See table "Technical Data". For a 25 kg bag of MC-RIM PW 30 2.25 to 2.5 litre of water are required. As MC-RIM PW 30 is a cementitious product, the water demand might vary.

Application

MC-RIM PW 30 can be applied by hand only. Trowels or trueing devices are to be used for application. Close and cavity-free application must be ensured. To achieve even surfaces height gauges should be used. All joints of the substructure must be taken over into the coating. At floor/wall connections coverings must be formed.

Finishing

After application MC-RIM PW 30 can be smoothed and abraded with trowels or steel floats. To increase the surface smoothness and -impermeability already abraded surfaces should be smoothed again without pressure using a surface scraper or stainless steel trowel.

Curing

Curing must be carried out immediately after surface finishing. Due to the high requirements to concrete surfaces in the water chambers, the curing times indicated in DIN 1045-3 must be observed and tripled according to DVGW, work sheet W 300. The relative humidity must be between 85 and 95 % during the entire curing time, achieved by using suitable air humidifiers.

Additional

For regular cleaning intervals of MC-RIM PW 30 coatings neutral cleaning agents are to be used.

Technical Data for MC-RIM PW 30

Characteristic	Unit	Value*	Comments
Largest grain	mm	3	
Fresh mortar density	kg/dm ³	approx. 2.26	
Flexural tensile / Compressive strength	N/mm ²	3.6/15.0 3.6/33.9 5.9/43.4 5.0/46.4 8.0/67.0 8.1/62.6	at + 10 °C after 2 days at + 20 °C after 2 days at + 10 °C after 7 days at + 20 °C after 7 days at + 10 °C after 28 days at + 20 °C after 28 days
Dynamic E-modulus	N/mm ²	33,000	after 28 days
Water-cement ratio	w/c _{eq}	< 0.5	
Fresh mortar air void content	vol.-%	< 5.0	
Chloride migration coefficient	m ² /s	1.60x10 ⁻¹²	
Total air void content	vol.-%	5.0	after 28 days
Coverage	kg/m ² /mm	2.05	MC-RIM PW 30 dry mortar
Pot life	minutes	45 45 30	at + 5 °C at + 10 °C at + 20 °C
Layer thickness	mm	15 60 60	min. layer thickness per work step max. layer thickness per work step max. total layer thickness
Application conditions	°C	≥ 5, - ≤ 30	air, material and substrate temperature
Mixing ratio	p.b.w.	100 9 - 10	MC-RIM PW 30 water

Product Characteristics MC-RIM PW 30

Colour	cream-white**
Delivery	25 kg bags
Storage	Can be stored in original sealed packages in dry conditions for at least 12 months. Protect from frost! The same requirements are valid for transport.
Disposal	Packs must be emptied completely.

* All technical data relate to + 10 °C and 80 % relative humidity.

** During application and curing and depending on achieved density and local climatic conditions. MC-RIM PW 30 shows a blue-/greenish colouration (greening) in the first instance. The light colour is developing by and by as described in test report no. 2010/445 issued by the "Institut für Baustoff-Forschung (FEhS)".

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 03/11. 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.