



MC-RIM[®] PW 301

Pure mineral high-performance coating for horizontal surfaces in drinking water areas

Product Properties

- Based on DySC[®]-technology
- Cement-bound, only to be mixed with water
- Classified as type 1 in accordance with DVGW-leaflet W 300
- Tested and approved according to DVGW-leaflet W 347
- Type 1 does not require any approval in accordance with DVGW-leaflet W 270
- Application by hand
- Open to water vapour diffusion and impermeable to water
- Highly sulphate resistant and chloride-proof
- Low porosity, thus high resistance against hydrolysis
- Class R4 according to EN 1504 part 3

Areas of Application

- Surface protection for horizontal surfaces in drinking water reservoirs, drinking water purification plants and concrete components in drinking water protection zones
- Suitable for concrete components in statically relevant and non-statically relevant areas
- Also suitable for creation of coverings
- Certified and classified according to EN 1504 part 3 for principle 3 and 7, procedure 3.1 and 7.1

Application

Substrate Preparation

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

Pre-wetting / Bond Coat

Use Nafufill BC as bond coat. See leaflet "General Application Advice Coarse Mortar / Concrete Replacement Systems".

Mixing

MC-RIM[®] PW 301 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 301 approx. 2.50 to 2.75 litre of water are required. As MC-RIM[®] PW 301 is a cementitious product, the water demand might vary.

Application

MC-RIM[®] PW 301 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

Finishing of MC-RIM[®] PW 301 may be carried out conventionally using a float, steel trowel, surface scraper and sword trowel, or mechanically using a disc- and power trowel. We recommend to finish the surface several times.

Curing

Curing must be carried out immediately after surface finishing. 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 301 coatings neutral cleaning agents are to be used.



Technical Data for MC-RIM® PW 301

Characteristic	Unit	Value*	Comments
Largest grain size	mm	3	-
Fresh mortar density	kg/dm ³	2.18	-
Flexural strength / Compressive strength	MPa	7.3 / 41.5 8.7 / 54.0 9.1 / 60.6 9.0 / 63.5	at + 10 °C after 7 days at + 21 °C after 7 days at + 10 °C after 28 days at + 21 °C after 28 days
Dynamic E-modulus	MPa	30,000	after 28 days
Water-cement ratio	w/C _{eq}	< 0.5	
Fresh mortar air void content	vol.-%	< 5.0	
Total air void content**	vol.-%	6.8 4.9	after 28 days after 90 days
Coverage	kg/m ² /mm	1.95	MC-RIM® PW 301 dry mortar
Application time	minutes	45 45 30	at + 5 °C at + 10 °C at + 20 °C
Layer thickness	mm	12 40	minimum layer thickness per work step maximum total layer thickness
Application conditions	°C	≥ 5 - ≤ 30	air-/material-/substrate temperature
Mixing ratio	p.b.w.	100 : 10 - 11	MC-RIM® PW 301 : water

Product Characteristics for MC-RIM® PW 301

Delivery	25 kg bags
Storage	Can be stored in cool and dry conditions for at least one year in original unopened packs.
Disposal	Packs must be emptied completely.

* All technical values have been determined in the lab at + 10 °C and 80 % relative humidity.

** Lab value, determined at + 10 °C.

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 10/18. 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.