

# 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
- Suitable for exposure class XTWB
- 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
- Suitable for exposure class XTWB
- 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 ADVICE

**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 VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments	
mixing ratio	p.b.w.	100 : 10 - 11	powder component : water	
working time	minutes	45	at 5°C	
		45	at 10°C	
		30	at 20°C	
application conditions	°C	≥ 5 ≤ 30	air, substrate and material temperatures	
consumption	kg/m <sup>2</sup> /mm			
dry mortar		1.95		
layer thickness	mm	12	minimum layer thickness per pass/operation	
		40	maximum total layer thickness	
Maximum grain size	mm	3		
fresh mortar bulk density	kg/dm <sup>3</sup>	2.18		
water/cement ratio	w/c	< 0.5		
compressive strength	N/mm <sup>2</sup>	41.5	at 10°C	
		7 d	54	at 21°C
		28 d	60.6	at 10°C
		28 d	63.5	at 21°C
fresh mortar air void content	Vol.-%	< 5		
flexural strength	N/mm <sup>2</sup>	7.3	at 10°C	
		7 d	8.7	at 21°C
		28 d	9.1	at 10°C
		28 d	9	at 21°C
E-modulus (dynamic)	N/mm <sup>2</sup>	30,000	after 28 days	
total air void volume	Vol.-%	6.86	after 28 days at 10 °C	
		4.94	after 90 days at 10 °C	

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

delivery form	Sack goods @ 25 kg
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs.
packaging disposal	Make sure single-use containers are completely empty. Ensure compliance with our information leaflet "Return of Emptied Transportation and Sale Packaging". We will be glad to send you this on request.

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2100005145]