

MC-RIM PW 201

Special concrete replacement for repair in drinking water areas

Product Properties

- Cement-bound, only to be mixed with water
- Classified as type 2 in accordance with DVGW-leaflet W 300, but without polymer-containing additives
- Tested according to DVGW-leaflets W 347 and W 270
- Application by hand and wet spraying technique
- Open to water vapour diffusion and impermeable to water
- Low porosity
- Class R4 according to EN 1504 part 3

Areas of Application

- Concrete replacement for wall-, floor- and overhead areas, for concrete components in statically relevant and non-statically relevant areas in drinking water reservoirs, drinking water purification plants and drinking water protection zones
- Concrete replacement for large-scale increase of the concrete cover at wall- and overhead areas
- According to DAfStb-repair guideline M3 concrete replacement
- Also suitable for creation of coverings
- Certified and classified according to EN 1504 part 3 for principle 3, 4 and 7, procedure 3.1, 3.3, 4.4, 7.1 and 7.2

Application

Substrate Preparation

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

Reinforced Steel

Nafufill KMH is to be used as corrosion protection. See leaflet "General Application Advice Coarse Mortars / Concrete Replacement Systems".

Bond Coat

For hand application only Nafufill BC is to be used. See leaflet "General Application Advice Coarse Mortar / Concrete Replacement Systems".

Mixing

MC-RIM PW 201 is added to the water under constant stirring and mixed until a homogenous, lump-free and workable mortar is achieved. Forced action mixers or slowly rotating double mixers must be used for mixing. Mixing by hand and preparation of partial quantities is not allowed. Mixing takes at least 5 minutes.

Mixing Ratio

Please see "Technical Data" table. For a 25 kg pack of MC-RIM PW 201 approx. 3.75 to 4.00 litres of water are required. As with other cement-

bound products the quantity of added water may vary.

Application

MC-RIM PW 201 can be applied by hand or wet spraying technique. The material may be applied in one or more layers. A worm pump with adjustable discharge flow is advised for spray application. Please request our assistance or a spraying technique equipment planner leaflet in such a case.

Finishing

After application MC-RIM PW 201 may be smoothed and finished with a wooden or plastic float. To improve the surface smoothness and impermeability smoothed surfaces should be re-finished again without pressure.

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.



Technical Data for MC-RIM PW 201

Characteristic	Unit	Value*	Comments
Largest grain size	mm	2	-
Fresh mortar density	kg/dm ³	2.10	-
Bending tensile / Compressive strength	MPa	7.5 / 47.0 7.7 / 45.0 9.0 / 54.3 9.8 / 57.7	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	33,000	after 28 days
Water-cement ratio	w/c _{eq}	< 0.5	
Fresh mortar air void content	vol.-%	< 5.0	
Total air void content**	vol.-%	7.6 6.8	after 28 days after 90 days
Coverage (dry mortar)	kg/m ² /mm	1.81	
Pot life	minutes	60 60 45	at + 5 °C at + 10 °C at + 20 °C
Layer thickness	mm	10 25 50	minimum layer thickness per work step maximum layer thickness per work step maximum total layer thickness
Application conditions	°C	≥ 5 - ≤ 30	air, material and substrate temperature
Mixing ratio	p.b.w.	100 : 15 - 16	MC-RIM PW 201 : water

Product Characteristics for MC-RIM PW 201

Colour	light-grey
Delivery	25 kg bags
Storage	Can be stored in cool (below 20 °C) and dry conditions for at least one year in original unopened packs. Protect from frost!
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.

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 12/19. 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.