

MC-RIM PW 40

One-component, silica-modified sprayed mortar

Product Properties

- Application by dry spraying technique
- 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
- Open to water vapour diffusion and impermeable to water
- Class R4 according to EN 1504 part 3

Areas of Application

- Dry sprayed mortar for repair of wall- and overhead areas 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 as levelling coat underneath MC-RIM PW 101
- Certified according to EN 1504 part 3 for principle 3 and 7, procedure 3.3 and 7.1

Application

Substrate Preparation

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

Application/Spraying technique

Prior to spray application the substrate must be pre-wetted and slightly damp, but not saturated with water.

The water intake of the nozzle's mixing unit is to be adjusted to achieve a homogeneous and dust-free spray mortar. The spray angle between spray nozzle and substrate must be 90°. The distance of the nozzle to the substrate must be 0.5 m.

MC-RIM PW 40 may be applied in one or more layers. MC-RIM PW 40 is to be applied in at least two layers to achieve a dense and closed coating matrix.

Finishing

In case of two-layer application we recommend to leave the first layer spray-rough or to finish it using a toothed (5-10 rows) stainless steel grid float. The second layer is to be smoothed using a stainless steel trowel. Afterwards the surface is to be rubbed off using a plastic float and finally planished to increase the surface density.

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-leaflet W 300. The relative humidity must be between 85 and 95 % during the entire curing time, achieved by using suitable air humidifiers.

General information

For information on equipment technology, compressor, rebound, supportive casing and application conditions, see leaflet „General Application Advice Coarse Mortars/Concrete Replacement Systems“.

For regular cleaning intervals of MC-RIM PW 40 surfaces neutral cleaning agents are to be used.

If MC-RIM PW 40 is used as levelling coat underneath MC-RIM PW 101, the surface of MC-RIM PW 40 must remain spray-rough in order to achieve a proper bond or, alternatively, finished using a toothed (5-10 rows) stainless steel grid float.



Technical Data for MC-RIM PW 40

Characteristic	Unit	Value*	Comments
Largest grain	mm	4	
Fresh mortar density	kg/dm ³	2.13	
Flexural tensile / Compressive strength	MPa	5.9 / 48.3 6.7 / 57.0 7.8 / 61.0 8.0 / 65.0	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	37,400	after 28 days
Water-cement ratio	w/c _{eq}	< 0.49	
Fresh mortar air void content	vol.-%	< 5.0	
Total air void content**	vol.-%	6.0	after 28 days
Coverage (dry mortar)	kg/m ² /mm	1.90	
Application time	minutes	60 60 45	at + 5 °C at + 10 °C at + 20 °C
Layer thickness	mm	15 30 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

Product Characteristics MC-RIM PW 40

Delivery	25 kg bags
Storage	Can be stored in cool and dry conditions for at least 12 months in originally sealed 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 standard conditions.

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.