



MC-RIM PROTECT-H

Highly sulphate resistant surface protection coating
for use on horizontal areas in sewage industry

Product Properties

- One-component, cement-bound, polymer-modified
- Hand and pump application
- Resistant to pH 14 to pH 3.5
- Resistant to temperature, frost and de-icing salt
- Resistant to permanent water exposure, chloride-proof
- Open to water vapour diffusion, impermeable to water
- Abrasion resistant, tested in accordance with Böhme
- Certified in accordance with EN 13813

Areas of Application

- Suitable for use on horizontal and slightly sloped areas (incl. scraper trackways)
- Also suitable for repair of partial defects
- Suitable for exposure to XD 1-3, XS 1-3, XA 1-3, XF 1-4, XM 1 and XWW 1-3
- Classified according to EN 13813 as cement screed of class CT/C60

Application

Substrate preparation

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

Bond Coat

Use MC-RIM PROTECT-BC as bond coat.

Mixing

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

Mixing ratio

Please refer to the "Technical Data" table. For a 25 kg bag of MC-RIM PROTECT-H approx. 2.50 to 2.75 litres of water are required. As with other cement-bound products the quantity of added water may vary.

Application

MC-RIM PROTECT-H can be applied by hand or mechanically. Irrespective of the application method, a void-free application must be ensured.

To achieve uniform layer thicknesses we recommend using height gauges. Existing joints in the substructure (old concrete) must be transferred to the surface coating. At floor/wall areas permanently exposed to water a coving must be formed.

Finishing

Following application MC-RIM PROTECT-H can be smoothed, finished with standard curing equipment and slightly smoothed again to increase the surface smoothness and density.

Details on mechanical application

MC-RIM PROTECT-H may be conveyed to the place of application using standard screed pumps. To ensure proper application, please request support and assistance of our technicians beforehand.

Curing

MC-RIM PROTECT-H must be cured for 5 days using moist jute and plastic foil. The jute must not dry out during this time and must be kept moist. Alternatively MC-RIM PROTECT-H may also be cured with the curing agent MC-RIM PROTECT-C.

Technical Data MC-RIM PROTECT-H

Characteristic	Unit	Value*	Comment
Largest aggregate	mm	3	
Fresh mortar density	kg/dm ³	approx. 2.21	
Flexural tensile- / Compressive strength	MPa	6.0 / 30.0 6.2 / 54.0 9.5 / 56.2	after 2 days after 7 days after 28 days
Shrinkage	mm/m	0.47	after 28 days
Chloride migration coefficient	m ² /s	4.94x10 ⁻¹²	
Water load capacity	days	1 2	at + 20 °C at + 10 °C
Coverage	kg/m ² /mm	1.99	MC-RIM PROTECT-H dry mortar
Application time	minutes	45 30 20	at + 5 °C at + 20 °C at + 30 °C
Layer thicknesses**	mm	15 60 60	min. layer thickness per work step max. layer thickness per work step max. total layer thickness
Application conditions	°C	≥ 5 - ≤ 35 ≥ 5 - ≤ 30	air- and substrate temperature material temperature
Mixing ratio	p.b.w.	100 10 - 11	MC-RIM PROTECT-H water

Product Characteristics MC-RIM PROTECT-H

Colour	cement-grey
Delivery	25 kg bags
Storage	Can be stored in cool and dry conditions for at least one year in original unopened packs. Protect from frost.
Disposal	Packs must be emptied completely.

* All technical data are lab values and relate to + 23 °C and 50 % relative humidity, material temperature between + 15 °C and + 25 °C.

** For use on scraper trackways MC-RIM PROTECT-H must be applied in combination with MC-RIM PROTECT-SH.

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 04/17. 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.