

# MC-RIM PROTECT-H

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



## PRODUCT PROPERTIES

- One-component, cement-bound, polymer-modified
- Hand and pump application
- Resistant from 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, XC1-4, 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 ADVICE

**Substrate preparation:** See leaflet “General Application Advice Coarse Mortars / Concrete Replacement Systems”.

**Bond Coat:** Use Nafufill BC as bond coat. See leaflet “General Application Advice Coarse Mortars / Concrete Replacement Systems”.

**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 values & product characteristics” 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 VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	mass fractions	25 : 2.5 - 2.75	powder component : water
Working time	minutes	45	at 5° C
		30	at 20 °C
		20	at 30 °C
Application conditions	°C	≥ 5 ≤ 35	air and substrate temperatures
		≥ 5 ≤ 30	material temperature
Consumption	kg/m <sup>2</sup> /mm	1.99	factory-dried mortar
Layer thickness	mm	15	minimum layer thickness per pass/operation
		60	maximum layer thickness per pass/operation
		60	maximum total layer thickness
Water resistant after	days	1	at 20 °C
		2	at 10° C
Maximum grain size	mm	3	
Fresh mortar bulk density	kg/dm <sup>3</sup>	approx. 2.21	
Compressive strength	N/mm <sup>2</sup>	30	
7 d	N/mm <sup>2</sup>	54	
Flexural strength	N/mm <sup>2</sup>	6	
7 d	N/mm <sup>2</sup>	6.2	
Shrinkage	mm/m	0.47	after 28 days
Chloride migration coefficient	m <sup>2</sup> /s	4.94 · 10 <sup>-12</sup>	

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

Equipment cleaning agent	water
Colour	Cement grey
Delivery form	25 kg bag
Storage	Can be stored in original sealed packages at temperatures between 5°C and 25°C in dry conditions for at least 12 months.
Packaging disposal	Make sure single-use containers are completely empty.

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : ZP1

**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. [2400020492]