

# MC-RIM H

# Highly sulphate- and wastewater resistant mineral coating for horizontal and slightly sloped areas

# **Product Properties**

- One-component
- High water retention
- Open to water vapour diffusion
- Impermeable to water, resistant to permanent water exposure
- Early strength development
- · Can be spattled, smoothed, abraded and pumped
- Chloride-proof

# **Areas of Application**

- Surface protection of horizontal concrete components (new and existing constructions) in wastewater industry with pH 14 to pH 3.5
- Suitable for interior and exterior areas
- Suitable as cement screed class CT/C60 according to EN 13813
- Suitable in accordance with EN 206, exposition classes XA1 XA3

# **Application**

## **Substrate Preparation**

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

# Reinforcement

Zentrifix KMH is used as corrosion protection. See leaflet "General Application Advice for Coarse Mortar / Concrete Replacement Systems".

# Pre-wetting / Bond Coat

Use Nafufill HB-HS as bond coat. See leaflet "General Application Advice for Coarse Mortar / Concrete Replacement Systems".

# Mixing

MC-RIM H 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 agitators 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 H 2.25 to 2.5 litre of water are required. As MC-RIM H is a cementitious product, the water demand might vary.

#### **Application**

MC-RIM H may only be applied by hand. 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 covings must be formed.

# **Finishing**

After application MC-RIM H can be smoothed and abraded with standard equipment. To increase the surface smoothness and -impermeability already abraded surfaces should be smoothed again without pressure.

# Curing

Use jute and plastic foils to prevent MC-RIM H from drying out too rapidly due to direct sun and wind. Also MC-RIM NB can be used for curing. See table "Technical Data".

#### Additional

For regular cleaning intervals of MC-RIM H coatings neutral cleaning agents are to be used.



# **Technical Data for MC-RIM H**

| Characteristic                                    | Unit     | Value*                                       | Comments   |
|---|----------|--|--|
| Largest grain                                     | mm       | 3  |  |
| Fresh mortar density                              | kg/dm³   | approx. 2.27                                 |  |
| Bending tensile strength/<br>Compressive strength | MPa      | 4.5/22.2<br>5.5/34.0<br>6.2/54.0<br>9.5/59.3 | after 24 hours<br>after 2 days<br>after 7 days<br>after 28 days  |
| Dynamic E-modulus                                 | MPa      | 34,700                                       | after 14 days  |
| Diffusion resistance against water vapour         | m        | 2.38   | -  |
| Shrinkage   | mm/m     | 0.40   | after 28 days  |
| Chloride migration coefficient                    | m²/s     | 4.94x10 <sup>-12</sup>                       |  |
| Resistance to water                               | days     | 1 2  | at + 20 °C<br>at + 10 °C   |
| Coverage  | kg/m²/mm | 2.05   | MC-RIM H dry mortar  |
| Pot life  | minutes  | 45<br>30<br>20                               | at + 5 °C<br>at + 20 °C<br>at + 30 °C  |
| Layer thickness                                   | mm       | 9<br>50<br>50                                | min. layer thickness per work step<br>max. layer thickness per work step<br>max. total layer thickness |
| Application conditions                            | °C       | ≥ 5 - ≤ 30                                   | air, material and substrate temperature  |
| Curing time                                       | days     | 5  | jute and foil  |
| Mixing ratio                                      | p.b.w.   | 100<br>9 - 10                                | MC-RIM H<br>water  |

# **Product Characteristics MC-RIM H**

| Colour   | cement-grey  |  |
|----------|--|--|
| Delivery | 25 kg bags   |  |
| Storage  | Can be stored in original sealed packages in dry conditions for at least 12 months. Protect from frost! The same requirements are valid for transport. |  |
| Disposal | Packs must be emptied completely.  |  |

<sup>\*</sup> All technical data relate to + 23 °C and 50 % relative humidity, material temperature between + 15 °C and + 25 °C.

**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 01/11. 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.