

# General Application Advice

## MC-PowerPro HCR

### Application Advice

#### General

Each coating fulfils its specified properties in an optimal way, when a closed and impervious coating film is achieved. Therefore the existing substrate must be prepared properly. Existing pores, blowholes, surface roughness and increased unevenness must be closed, filled and/or levelled properly prior to application of the coating system MC-PowerPro HCR.

#### Standard system on old concrete

##### Substrate conditions

On vertical areas MC-PowerPro HCR is used in combination with MC-RIM PROTECT and MC-RIM PROTECT-ST as well as on horizontal areas in combination with MC-RIM PROTECT-H. Substrate preparation of the old concrete and application of the products must be in accordance with our technical data sheets.

##### Coating system

Following a waiting time of  $\geq 3$  days all prepared and levelled surfaces are slightly blasted/swept and primed with MC-PowerPro HCRprimer. Following another 2 to 4 hours the primed surfaces are smoothed with MC-PowerPro HCR (+ 3 % MC-Stellmittel TX 19). Following a waiting time of 12 to 24 hours (daily rhythm) the smoothed surfaces are coated with MC-PowerPro HCR. The second layer of MC-PowerPro HCR may be applied after 24 hours.

##### Coating groove

If MC-PowerPro HCR is applied as partial coating, an approx. 4 mm wide and 4 mm deep groove is to be cut into the prepared substrate, prior to application of the complete coating system, where the coating shall end. Any excess primer in the groove is to be removed. The groove is to be coated completely when the primed surface is smoothed.

Note: In case of full-surface coating, a coating groove is not required.

#### Standard system on new concrete

##### Substrate conditions

All concrete substrates to be coated must be prepared by sweeping prior to application of the coating. Pores and blowholes must be opened.

Following substrate preparation the substrate must be sound, clean and free from any loose particles, dust and any mould release agents.

##### Coating system

All prepared and dry surfaces are primed with MC-PowerPro HCRprimer. Following a waiting time of 2 to 4 hours the primed surfaces are smoothed with MC-PowerPro HCR (+ 3 % MC-Stellmittel TX 19). Following another 12 to 24 hours (daily rhythm) the smoothed surfaces are coated with MC-PowerPro HCR. The second layer of MC-PowerPro HCR may be applied after 24 hours.

##### Coating groove

See "Standard system on old concrete".

#### Standard system on steel

##### Substrate conditions

If applied onto steel, MC-PowerPro HCR must always be applied in combination with Colusal SP. Please observe the relevant technical data sheet with regard to substrate preparation of the steel and application of Colusal SP.

##### Coating system

Following a waiting time of 24 hours all surfaces primed with Colusal SP are coated with MC-PowerPro HCR. The second layer of MC-PowerPro HCR may be applied after 24 hours.

#### General information

##### Contact areas

To maintain the layer thickness, covings are to be formed in inner corners (wall/wall, wall/floor, wall/ceiling) with angles  $\leq 140^\circ$ . Please request our technical advice in case of the substrate combination concrete/asphalt.

## Application Advice

### Masking

In order to achieve a precise coating contour for partial coatings, the substrate below the groove is masked with a 50 mm wide stone tape, beginning at the lowest groove edge.

### System alternatives

As the coating system MC-PowerPro HCR is suitable for various areas of application additional system alternatives are possible apart from the standard system (old- and new concrete). Please see footnotes.

#### Standard system on old concrete <sup>1)</sup>

Pos.	Work steps	Product system	Coverage g/m <sup>2</sup>
1	Substrate preparation	see technical data sheet "levelling"	-
2	Levelling <sup>2)3)</sup>	MC-RIM PROTECT / MC-RIM PROTECT-ST MC-RIM PROTECT-H	see technical data sheet
3	Priming	MC-PowerPro HCRprimer	100 - 150
4	Smoothing	MC-PowerPro HCR + 3 % MC-Stellmittel TX 19	250 - 350
5	Coating	MC-PowerPro HCR	450 - 500
6	Coating	MC-PowerPro HCR	450 - 500

#### Standard system on new concrete <sup>1)</sup>

Pos.	Work steps	Product system		Coverage g/m <sup>2</sup>
		Standard (A)	Alternative (B)	
1	Substrate preparation	sweeping	sweeping	-
2	Priming	MC-PowerPro HCRprimer	not applicable	100 - 150
3	Levelling <sup>4)5)</sup>	MC-PowerPro HCR + 3 % MC-Stellmittel TX 19	Nafufill EC <sup>6)</sup>	(A) 250 - 350 (B) 1000 - 1500
4	Priming	not applicable	MC-PowerPro HCRprimer	100 - 150
5	Coating	MC-PowerPro HCR	MC-PowerPro HCR	450 - 500
6	Coating	MC-PowerPro HCR	MC-PowerPro HCR	450 - 500

1) Recommended standard systems for coating of the headspace in capped basins and digestion towers.

2) Alternative for areas not exposed to wastewater : Nafufill EC 6 or Nafufill KM 250 HS.

3) The levelling coat must be swept prior to application of the primer. Nafufill EC 6 does not require any sweeping.

4) Sweeping of the levelling coat is not required.

5) In case of back-bearing moisture penetration the standard system (A) is not suitable. For the alternative system (B) Nafufill EC 6 must be applied in a layer thickness of 3 mm above the grain tips. MC-RIM PROTECT may also be used instead of Nafufill EC 6. But in this case sweeping after 3 days is required.

6) For use of Nafufill EC 6 the following overcoating times must be observed. Following a waiting time of 12 to 24 hours (daily rhythm) Nafufill EC 6 can be primed with PowerPro HCRprimer. Following a waiting time of 2 to 4 hours the primed surfaces are to be coated with MC-PowerPro HCR. The second layer of MC-PowerPro HCR may be applied after 24 hours.

**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 09/20. 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.