

MC-APC

Self-curing, crack-bridging spray coat with IMB-technology

Product Properties

- Open to water vapour diffusion, resistant to UV and weathering
- Impermeable to water (positive and negative pressure)
- Carbonation-retarding / -resistant
- Resistant to de-icing salts, frost-thaw, chloride-resistant, highly resistant to alkali
- Resistant to permanent water up to +50 °C
- Application by wet spraying technique, curing-free
- Certified in accordance with EN 1504 part 2

Areas of Application

- Surface protection for water-exposed concrete components, e.g. rain spillway basins, static fire tanks, industrial water tanks, sprinkler tanks, final sedimentation basins, cooling tower pits
- Suitable for horizontal and vertical surfaces as well as overhead areas
- REACh-assessed exposure scenarios: long-term water-contact, periodical inhalation, application
- Principle 1, 2 and 8; procedure 1.3, 2.2 and 8.2 (EN 1504-9)

Application

System Description

The MC-APC-system was especially developed for areas exposed to permanent water. It consists of 3 components: MC-APC *BaseCoat*, MC-APC *TopCoat* and MC-APC *Liquid* and is applied in three work steps.

Substrate Preparation

See leaflet "General Application Advice for MC-APC".

MC-APC *BaseCoat* - Mixing

MC-APC *BaseCoat* is mixed with MC-APC *Liquid* and water in a mixing ratio of 1 : 1 : approx. 1 p.b.w.

The correct mixing order must be observed: The powder component is added to the prepared water and mixed together for 1 minute. Afterwards MC-APC *Liquid* is added under constant stirring, mixing takes again 1 minute.

MC-APC *BaseCoat* - Application

The mixed MC-APC *BaseCoat* is applied onto the prepared, levelled substrate using a roller or brush and worked in thoroughly. If MC-APC *BaseCoat* is

applied by spraying it must also be worked in afterwards.

MC-APC *TopCoat* - Mixing

MC-APC *TopCoat* consists of powder component and liquid component MC-APC *Liquid*. The powder component is added to the liquid component and mixed thoroughly until a homogeneous, lump-free, soft-elastic, easy-to-spread mortar is achieved. Fast rotating mixers with basket mixer are suitable for mixing. Mixing by hand and mixing of partial quantities is not permitted. Mixing takes at least 3 minutes.

MC-APC *TopCoat* - Application

MC-APC *TopCoat* is applied in two work steps by wet spraying technique (also horizontal surfaces). The total layer thickness is 3.0 mm. Spray application is carried out using the associated membrane pump. Please ask for our special advice.

Surface Finishing / Curing

The surface remains spray-rough. Surface finishing is not permitted. MC-APC *BaseCoat* and MC-APC *TopCoat* require no curing.



Technical Data for MC-APC

Characteristic	Unit	Value*	Comments	
Largest aggregate	mm	0.3	MC-APC <i>TopCoat</i>	
Density	kg/dm ³	1.55 1.28	MC-APC <i>TopCoat</i> MC-APC <i>BaseCoat</i>	
Crack-bridging (static)	+20 °C -20 °C	mm mm	approx. 0.8 approx. 0.8	complete system dry layer thickness 2.5 mm
Coverage**	g/m ²	approx. 200 - 300 2 x 2,300	MC-APC <i>BaseCoat</i> MC-APC <i>TopCoat</i>	
Application time	minutes	approx. 45 approx. 30 approx. 20	at + 10 °C at + 20 °C at + 30 °C	
Waiting time	hours	12 1 12	levelling coat / MC-APC <i>BaseCoat</i> MC-APC <i>BaseCoat</i> / MC-APC <i>TopCoat</i> MC-APC <i>TopCoat</i> / MC-APC <i>TopCoat</i>	
Layer thickness	mm	1 2 4	min. layer thickness per work step max. layer thickness per work step max. total layer thickness	
Resistant to permanent water	days	7	waiting time	
Rain-proof	hours	4 - 6	depending on weathering / temperature	
Application conditions	°C % K	≥ 10 - ≤ 30 ≤ 80 3	air, material and substrate temperature relative humidity above dew point	
Mixing ratio	p.b.w. p.b.w.	1 : 1 : approx. 1 100 : 40	MC-APC <i>BaseCoat</i> : MC-APC <i>Liquid</i> : water MC-APC <i>TopCoat</i> : MC-APC <i>Liquid</i>	
Material temperature	°C	10 - 25		

Product Characteristics for MC-APC

Colour	creme
Delivery	MC-APC <i>TopCoat</i> = 25 kg bags MC-APC <i>BaseCoat</i> = 5 kg buckets and 10 kg bags MC-APC <i>Liquid</i> = 10 kg buckets
Storage	Can be stored in original sealed packages in dry conditions for at least 12 months. Protect from frost! Same requirements are valid for transport
Disposal	Packs must be emptied completely.

* All technical data relate to + 23 °C and 50 % relative humidity.

** All indicated coverage rates and layer thicknesses are recommended values.

To determine the exact project-specific values we recommend to apply a trial surface.

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 07/09. 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.