Nafufill KMH

Corrosion protection coat and bond coat



PRODUCT PROPERTIES

- One-component, only to be mixed with water
- Easy application due to spreadable consistency
- Short overcoating times
- Approved according to DVGW, work sheet W 270, W 347 and W 300
- Certified and externally monitored according to ÖVGW
- Registered with DGNB (Code: M6HPK8)
- Certified suitability as active corrosion protection coat according to DIN 50017, DIN 50018 and DIN 50021
- Approved according to ZTV-ING, part 3 "Solid Construction" for the areas of use PCC I and PCC II and according to DafStb-repair guideline for exposure classes M 2 and M 3

AREAS OF APPLICATION

- Active corrosion protection coat for exposed concrete steel in reinforced concrete constructions
- Bond coat for concrete replacement systems for repair of new and old structures
- Suitable for interior and exterior use
- Certified according to EN 1504 part 7 for principle 11, procedure 11.1
- Corrosion protection coating in drinking water tanks, drinking water treatment plants and for concrete components in drinking water protection zones

APPLICATION ADVICE

Substrate Preparation

Reinforced Steel: The reinforced steel must be prepared to standard SA 2 1/2 according to DIN EN ISO 12944-4. There must be no rust film or other separating or corrosion-conducive materials. Compressed air blasting with solid grit is suitable to achieve the specified standard degree of cleanliness.

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

Mixing: Nafufill KMH is added to the prepared water under constant stirring and mixed until a homogenous and lump-free mortar with an easy-to-spread consistency is achieved. Mixing takes at least 5 minutes. Use slowly rotating mixers.

Mixing Ratio: For a 5 kg bag of Nafufill KMH approx. 0.9 to 0.95 litres of water are required, while a 20 kg bag takes approx. 3.6 to 3.8 litres. As with other cement-bound products the quantity of added water may vary.

Application

As Corrosion Protection: Nafufill KMH is applied onto the prepared reinforced steel in two work steps, using suitable painting tools (brushes, paint-brushes). Tying wires, edges and the juncture between reinforcement and concrete must be treated thoroughly to achieve the necessary layer thickness.

As Bond Coat: Before application of Nafufill KMH the substrate must be pre-wetted. Highly absorbent substrates must be pre-wetted repeatedly. Nafufill KMH must then be brushed thoroughly into the slightly damp, non-saturated, substrate. If applied onto horizontal areas ponding is not permitted and must be avoided. Do not pre-wet a larger area than can be overworked fresh-in-fresh. Short-bristled brushes are suitable for application.

If used for horizontal/floor application Nafufill KMH may also be applied by spraying, using a worm pump with a discharge flow of < 1 litre per minute. If the bond coat is applied in such a way it must be worked in subsequently, using brushes.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	p.b.w.	100 : 18 - 19	powder component : water
Working time	minutes	75	at 5° C
		60	at 20 °C
		45	at 30 °C
Application conditions	°C	≥ 5 ≤ 35	
Consumption 1)	kg/dm³		
Dry mortar		1.7	
Applied quantity	g/m	120	as a corrosion inhibitor (steel Ø 8 mm)
	g/m²	1,000 - 1,100	as a bond coat
Fresh mortar bulk density	kg/dm³	2.1	
Overworkable after	hours	approx. 3	1st layer / 2nd layer
		approx. 3	2nd layer / application of bond coat

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

1) The coverage rates depend on the roughness and temperature of the substrate, as well as on the storage- and working-temperatures. We recommend to lay sample areas to determine the object-specific coverage.

Form	pulverous	
Colour	Cement grey	
Delivery form	Packing unit 2 x 5 kg bags, 20 kg bag	
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs.	
Packaging disposal	Make sure single-use containers are completely empty.	

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. [2400022255]