

# Nafufill KM 103

Fine mortar for levelling of concrete surfaces



## PRODUCT PROPERTIES

- One-component, polymer-modified
- Application by hand and wet spraying technique
- High water retention
- Resistant to de-icing salt and temperature changes
- May also be used as scratch coat as well as pore and cavity filler
- Can be overcoated with MC-Color Flair pure and pro and MC-Color Flex pure, pro and vision after approx. 3 hours
- Tested and approved according to ZTV-ING TL/TP BE PCC and DIN V 18026 as OS 4 and OS 5a system
- Class R2 according to EN 1504 part 3

## AREAS OF APPLICATION

- PCC fine filler for non-accessible and non-driven-on concrete components, both interior and exterior
- Closing of pores, blow holes and surface roughness
- Certified according to EN 1504 part 3 for principle 3, procedure 3.1 and 3.3

## APPLICATION ADVICE

**Substrate Preparation / Pre-wetting:** See leaflet "General Application Advice Fine Fillers".

**Mixing:** Nafufill KM 103 is added to the water under constant stirring and mixed until homogenous and lump-free. Forced mixers or slowly rotating double mixers must be used for mixing. Mixing by hand and preparation of partial quantities is not allowed. Mixing takes at least 5 minutes.

**Mixing Ratio:** Please refer to the "Technical Data" table. For a 25 kg pack of Nafufill KM 103 approx. 4.25 to 4.50 litres of water are required. As with other cementitious products the quantity of added water may vary.

**Application:** Nafufill KM 103 can be applied by hand or wet spraying technique and may be applied in one or several layers. When applying it by hand, trowels and trueing devices should be used. For spraying a worm pump with adjustable discharge flow should be used. In these cases please request our assistance or the equipment planner leaflet.

**Finishing:** Nafufill KM 103 is to be pre-smoothed with a stainless steel smoother after the application of the last layer. Nafufill KM 103 should then be rubbed off with a fine-pored sponge and, if necessary, smoothed again. In case of spray application, the fine filler surface can also be left rough.

**Overcoating Time:** If two or more layers are applied, the intervals between the individual work-steps must be observed (see "Technical Data" table).

**Curing:** At + 20 °C Nafufill KM 103 can be coated with MC-Color Flair pure and pro and MC-Color Flex pure, pro and vision three hours after finishing. Higher temperatures and wind exposure shorten the overcoating times. If it is only overcoated the following day, Nafufill KM 103 must be protected until overcoating from direct sunlight and wind to prevent it from drying out too rapidly. In case of moist exposure (rain, dew) at an early stage, slight discolorations might develop on the surface. Before starting further work loose particles must be removed.

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Maximum grain size	mm	0.2	
Mixing ratio	p.b.w.	100 : 17 - 18	powder component: water
Working time	minutes	60	at 5°C
		45	at 20°C
		30	at 30°C
Application conditions	°C	≥ 5 ≤ 30	air, substrate and material temperatures
Consumption	kg/m <sup>2</sup> /mm		
As a skim coat		1.75	factory-dried mortar
As a scratch coat	kg/m <sup>2</sup>		
		0.8 - 1.5	factory-dried mortar
As a pore and blowhole filler	kg/m <sup>2</sup>	0.8 - 1.5	factory-dried mortar
Flexural strength	N/mm <sup>2</sup>		
48 h		5	
7 d		9	
28 d		10.1	
Compressive strength	N/mm <sup>2</sup>		
48 h		17	
7 d		27	
28 d		32.8	
E-modulus (dynamic)	N/mm <sup>2</sup>	24.000	after 28 days
E-modulus (static)	N/mm <sup>2</sup>	14.500	after 28 days
Layer thickness	mm	1	minimum layer thickness per pass/operation
		3	maximum layer thickness per pass/operation
		3	maximum total layer thickness
Fresh mortar bulk density	kg/dm <sup>3</sup>	2.09	
Overworkable after	hours	3	MC-Color Flair or MC-Color Flex
Waiting times	minutes	60	1st step / 2nd step

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

Form	pulverous
Colour shade	Cement grey
Delivery form	25 kg bag
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs. Protect from frost.
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. [2200011211]