

# 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 a scratch coat, 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 systems.
- Class R2 according to EN 1504 part 3.
- Certified according to EN 1504 part 3 for principle 3, procedures 3.1 and 3.3.

## 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.

## APPLICATION NOTES:

- **Substrate preparation:** 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:** After application, **Nafufill KM 103** can be smoothed and finished with a dry, smooth sponge. In case of sprayed applications the surface can remain spray-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 DATA:

Characteristic	Unit	Value	Comments
Mixing ratio	p. b. w.	100 : 17-18	Nafufill KM 103 : Water
Largest grain size	mm	0.2	
Fresh mortar density	kg/dm <sup>3</sup>	2.09	
Bending tensile/ compressive strength	N/mm <sup>2</sup>	5.0/17.0	After 2 days
		9.0/27.0	After 7 days
		10.1/32.8	After 28 days
Dynamic E-modulus	N/mm <sup>2</sup>	24,000	After 28 days
Static E-modulus	N/mm <sup>2</sup>	14,500	After 28 days
Consumption (dry mortar)**	kg/m <sup>2</sup> /mm	1.75	As surface filler
	kg/m <sup>2</sup>	0.8 – 1.5	As scratch coat and pore
			And cavity filler
Pot life	Minute	60	At 5°C
		45	At 20°C
		30	At 30°C
Waiting times	Hour	1	
Layer thickness	mm	1	Minimum layer thickness per work step
		3	Maximum layer thickness per work step
		3	Maximum total layer thickness
Overcoating time	Hour	3	MC-Color Flair pure & pro và MC-Color Flex pure, pro & vision
Application conditions	°C	5 - 30	Air, material and substrate temperature

\*Specifications are based on laboratory conditions (21°C ± 2 and 50% RH) and are subject to change under actual application conditions.

\*\* Consumption depends on density, porosity, and surface type. In order to determine the specific material cost of a project, we recommend placing a sample area for more accurate construction.

#### PRODUCT CHARACTERISTICS:

<b>Color</b>	Grey
<b>Packaging</b>	25kg paper bag.
<b>Shelf-life and storage</b>	Unused packages can be stored for at least 1 year in a cool and dry place.
<b>Disposal</b>	Packages should be completely emptied.

**Note:** The information provided here is based on our experience and correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual building projects, to the specific application and to non-standard local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. Given these preconditions we shall be liable for the accuracy of the information given as outlined in our sales and delivery terms and conditions. Recommendations by our employees that deviate from this information are only binding for us if they have been confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be adhered.

Edition **01/2024**. Some technical changes have been made to this print medium. Older editions are invalid and may not be used.