

Nafufill KMH (Previously known as Zentrifix KMH M) Mineral Corrosion Protection and Bonding Coat

Product Properties

- One component
- Solvent-free
- Short overcoating times
- · Improves adhesion between cementitious materials
- Approved for Nafufill concrete repair mortars

Areas of Application

- As an active corrosion protection for steel reinforcement during concrete repair
- As a bonding coat for hand applied coarse mortars

Application

SURFACE PREPARATION

Steel Reinforcement

The reinforcing steel must be prepared to SA 2½ in accordance with DIN 55928, part 4. They must be free from rust and any other contaminants or corrosion developing products. The reinforcement should be treated by shot-blasting with quartz-free abrasive materials, sand-blasting or other suitable techniques.

Concrete Surface

The surface must be clean and free from all loose particles, dust, oil and other contaminants. A substrate pull-off strength of >1.5 N/mm² is required. The substrate must have sufficient roughness, e.g. sound aggregates should be visible. Before application of Nafufill KMH, the surface must be pre-wetted. It should be damp, but not saturated with water.

Mixing

Nafufill KMH must be mixed with water only. Nafufill KMH is slowly added to the water while stirring continuously, until a homogeneous, lump-free mixture is achieved. Mixing takes about 5 minutes. Slowly rotating mixers are particularly suitable.

For a 20 kg bag of Nafufill KMH about 3.60 to 3.80 litres of water is required.

The amount of water may be varied slightly in order to match the actual site conditions. However excessive overdose of water must be avoided.

APPLICATION

As Corrosion Protection

The homogeneously mixed material is applied to the prepared reinforcing steel with suitable brushes in two coats. Care must be taken that tying wires and the areas between reinforcement and concrete are fully coated to ensure sufficient coat thicknesses.

As a Bonding Coat

The homogeneously mixed material is carefully brushed into the pre- wetted surface. Short-bristle brushes are recommended.

The coarse repair mortar is then applied onto this fresh bond coat. Only so much surface should be prepared as can be worked "fresh-on-fresh". If working times have been exceeded, these areas can be coated with Nafufill KMH again.

When applying Nafufill KMH on floor areas the bond coat can also be applied by spraying techniques. We would recommend to use worm geared spraying equipment with a volume flow of < 2 litres per minute.

General

Coverage is dependent on the texture and porosity of the substrate. To determine this exactly, a trial area should be laid and coverage noted.



Technical Data for Nafufill KMH (All technical values given relate to temperatures of +20°C and 50% relative humidity)			
Characteristic	Unit	Value	Comments
Density	kg/ dm³	2.10	
Water Dosage	litre	3.6 - 3.8	per 20 kg bag
Pot Life	minutes	75	at + 5⁰C
		60	at + 20°C
		45	at + 30°C
Overcoating Time	hours		
as Corrosion Protection		~3	between 1st and 2nd coat
		~3	between 2nd coat and bond coat
as Bonding Coat		slightly moist, fresh-on-fresh	between bond coat and coarse repair mortar
Compressive Strength	MPa	~38	after 28 days
Coverage	g/running meter	~120	as Corrosion Protection
	g/m²	~1,000 - 1,100	as Bond coat
Minimum Application Conditions	٥C	> +5	substrate and ambient temperature

Product Characteristics for Nafufill KMH		
Colour	Cement-grey	
Packaging	20 kg & 25 kg bag	
Storage	Can be stored in shaded, cool and dry conditions for 12 months in original unopened packs.	
Disposal	In the interest of the environment, please empty all bags completely & in accordance with local regulations.	

Safety Advice

This product does not contain any hazardous substances requiring labeling. It is safe for use with standard precautions followed in the construction industry. Such as use of hand gloves, safety goggles etc.

For detailed Health and Safety and Environmental Information please refer to the product Material Safety Data Sheet.

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 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 06/21. 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.