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# PRODUCT DATA SHEET SikaRep<sup>®</sup> NF

# MULTI-PURPOSE, FIBRE REINFORCED, ECONOMICAL, PATCHING AND REPAIR MORTAR

## DESCRIPTION

SikaRep<sup>®</sup> NF is a cementitious, synthetic fibre reinforced, silica fume and polymer containing, one-component repair mortar.

Suitable for use in hot and tropical climatic conditions.

## USES

SikaRep<sup>®</sup> NF can be used for cosmetic or structural repair of deteriorated concrete and mortar on exterior or interior, horizontal and vertical applications.

## **CHARACTERISTICS / ADVANTAGES**

- Easy to mix, apply and finish
- Good adhesion
- Shrinkage compensated
- Compatible with the properties of typical concretes
- Low water absorption, but vapour permeable
- Non corrosive
- Excellent chloride and carbonation resistance
- Fibre reinforced

## **PRODUCT INFORMATION**

Composition	Polymer containing cementitious mortar with different additives		
Packaging	25 kg bag		
Appearance / Colour	Grey powder		
Shelf life	12 months minimum from production		
Storage conditions	Store in a dry area in original sealed packaging at temperatures between +5 °C and +35 °C. Protect from direct sunlight, heat and moisture.		
Maximum Grain Size	~1.7 mm		
TECHNICAL INFORMATI	ON		
Compressive Strength	~50 N/mm² (w/p = 0.15)	(ASTM C109)	
Tensile Adhesion Strength	> 1.5 N/mm <sup>2</sup> (concrete failure)	(BS 1881 Part 208)	
APPLICATION INFORMA	TION		
Mixing Ratio	3.75 - 4.25 L of water per 25 kg bag		
Fresh Mortar Density	~2.25 kg/l (25 °C)	~2.25 kg/l (25 °C)	
Yield	~12.8 L per 25 kg bag		

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Layer Thickness	Min. 5 mm per layer Max. 30 mm per layer
Ambient Air Temperature	+5 °C min / +40 °C max
Substrate Temperature	+5 °C min / +40 °C max
Pot Life	~45 min (25 °C)

## **APPLICATION INSTRUCTIONS**

## SUBSTRATE QUALITY / PRE-TREATMENT

- Substrates must be properly cured, structurally sound, free of any loose or friable particles, clean, dry and free of any contaminants such as dust, dirt, oil, grease, cement laitance or efflorescence.
- Depending on the substrate condition and contaminants to be removed from the surface, perform adequate preparation techniques, such as water-jet washing or blast cleaning, in order to remove all traces of any materials that could reduce the product's adhesion to the substrate.
- For applications in hot climates / environments and / or on absorbent substrates, thoroughly pre-dampen the surface immediately prior to the product application, but avoid any ponding / standing water on the surface, which must not be damp to touch and not with a dark-matt / wet surface appearance i.e. it must be saturated surface dry (SSD).

## BONDING AGENT AND STEEL PROTECTION

- Embedded steel reinforcing should be free from scale, rust, oil and grease, and treated with a suitable anticorrosion coating such as SikaTop® Armatec®-110 EpoCem®.
- The application of a suitable bonding agent, such as Sikadur®-32 LP or SikaTop® Armatec®-110 EpoCem®, will improve adhesion on large areas or where particularly dense concrete substrates are involved.

#### MIXING

Mix 25 kg bag with the necessary, above mentioned, amount of cold water, using an electric blender with a suitable mixing spiral, in a clean bucket. Add the SikaRep® NF powder slowly while mixing continuously for at least 3 minutes and until a homogeneous consistency is achieved.

Use a blender at 500 rpm maximum; do not mix at faster rate because of mechanical strength decay of the cured product. The obtained mix results very creamy, easily spreadable and thixotropic.

## APPLICATION

Apply SikaRep<sup>®</sup> NF while the bonding agent is still wet. The mortar can be applied by spatula or trowel. For any thickness more than 30 mm, SikaRep<sup>®</sup> NF must be applied in several layers.

As soon as the mortar has started to set it can be smoothed by wooden or synthetic float. For fine surface finish SikaRep<sup>®</sup> Fine N, SikaRep<sup>®</sup> Fine PC can be applied over the SikaRep<sup>®</sup> NF.

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#### CURING TREATMENT

Where ambient conditions may lead to rapid surface drying, the use of light water fogging for 48 hours or application of a suitable water based curing compound like Sika<sup>®</sup> Antisol WB is recommended. Do not commence fogging until final set has been reached.

## **CLEANING OF EQUIPMENT**

Application and mixing tools should be cleaned with water while the material is still fresh. Hardened material can only be removed mechanically.

## **IMPORTANT CONSIDERATIONS**

Do not over work the finished surface as this will produce a cement rich surface texture, which may cause the formation of random (crazing) cracking in the surface. Over work of the finished surface could also disturb the mortar bond on the concrete substrate.

## **BASIS OF PRODUCT DATA**

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

# ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.



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## **LEGAL NOTES**

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and OHSAS

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