BUILDING TRUST

PRODUCT DATA SHEET

Sika MonoTop®-910 N

Bonding primer and reinforcement corrosion protection cement based slurry

DESCRIPTION

Sika MonoTop®-910 N is a cementitious, polymer modified one-component coating material containing silica fume used as bonding primer and reinforcement corrosion protection.

USES

- Suitable for control of anodic areas (Principle 11, method 11.1 of EN 1504-9)
- Suitable as a bonding primer as part of a concrete repair system
- Suitable as reinforcement corrosion protection as part of a concrete repair system

FEATURES

- Can be applied with a brush or by wet spray technique
- Easy to use just add water
- Adhesion to concrete and steel
- Good resistance to water and chloride penetration

PRODUCT INFORMATION

Composition	Portland cement, silica fume, re-dispersible polymer powder, selected aggregates and additives
Packaging	25 kg bag or 2 x 5 kg bag in plastic container
Appearance and colour	Grey powder
Shelf life	9 months from date of production
Storage conditions	Store properly in undamaged original sealed packaging, in dry cool conditions between +5 °C and +35.
Density	Fresh mortar density ~2.0 kg/l
Soluble chloride ion content	≤ 0.01 % (EN 1015-17)

TECHNICAL INFORMATION

Compressive strength	1 day 3 days 7 days 28 days	~21.0 N/mm² ~24.0 N/mm² ~27.0 N/mm² ~35.0 N/mm²	(EN 12190)
Tensile adhesion strength	28 days	~2.0 N/mm²	(EN 1542)

Diffusion resistance to water vapour	~ 300 μH_2O	
Corrosion test	Pass	(EN 15183)
Shear adhesion strength	Pass	(EN 15184)
Diffusion resistance to carbon dioxide	~ 3800 μCO_2	

APPLICATION INFORMATION

Mixing ratio	For brush application ~5.25 litre water (21%) per 25 kg bag For spraying application ~5.0 litre water (20%) per 25 kg bag
Consumption	As Bonding Primer - This depends on the substrate roughness and thickness of layer applied. As a guide, ~1.5 – 2.0 kg of powder per m² per mm thick. As Reinforcement Corrosion Protection - As a guide, ~2.0 kg of powder per m² per 1mm layer thickness
Yield	25 kg of powder yields approximately 14.3 litres
Layer thickness	As bonding primer - sufficient to coat the concrete surface in a thin layer filling unevenness, pores and pits As reinforcement corrosion protection - 2 mm minimum thickness
Ambient air temperature	+5°C minimum; +30°C maximum
Substrate temperature	+5°C minimum; +30°C maximum
Pot Life	at +20°C ~90 to 120 min
Waiting time to overcoating	Apply concrete repair wet on wet with bonding primer Apply concrete repair wet on dry reinforcement corrosion protection

SYSTEM INFORMATION

System structure

Sika MonoTop®-910 N is part of the range of Sika mortars and comprising of:

Bonding Primer / Reinforcement Corrosion Protection	
Sika MonoTop®-910 N	Normal Use
Repair Mortar / Grouting	
Sika MonoTop®-613 IND / -615 HB / SikaGrout® Series	Concrete Repair Mortars

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.

IMPORTANT CONSIDERATIONS

- Avoid application in direct sun and/or strong wind and/or rain
- Do not add water over recommended dosage
- Apply only to sound, prepared substrates

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete:
The concrete shall be thoroughly clean, free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. De-laminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means.

Steel Reinforcement:
Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed. Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting to SA 2 (ISO 8501-1) Reference shall be made to EN1504-10 for specific requirements.

MIXING

Sika MonoTop®-910 N can be mixed with a low speed (< 500 rpm) hand drill mixer or by hand for a small quantity,
Pour the recommended water in a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly at least for 3 minutes.

APPLICATION

As Bonding Primer
Thoroughly pre-wet the prepared substrate a recommended 2 hours before application. Keep the surface wet and do not allow to dry. Before application remove excess water e.g. with a clean sponge. The surface shall appear a dark matt appearance without glistening and surface pores and pits shall not contain water. Using a suitably clean brush, roller or suitable spraying equipment cover the substrate in a thin layer filling all unevenness, pits and pores.
As Reinforcement Corrosion Protection
Using a suitably clean brush or spraying equipment apply a first layer to cover the reinforcement bars approximately 1 mm thick. When first coat is hard to the finger nail apply second layer approximately 1 mm thick. If using a spray method protect substrate from excessive over-spray wiping away any concentrated accumulation and wait until completely dry before to apply repair mortar.

CURING TREATMENT

As reinforcement corrosion protection - protect the fresh mortar immediately from premature drying and contamination using an appropriate curing method

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

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 exact product data and uses.

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.

PT. Sika Indonesia Head Office and Manufacturing
Jl. Raya Cibinong-Bekasi Km.20
Limusnunggal-Cileungsi
Bogor 16820-Indonesia
Tel. +62 21 8230025, Fax +62 21 8230026