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# PRODUCT DATA SHEET Sika MonoTop<sup>®</sup>-610

# BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTION CEMENT BASED SLURRY

## DESCRIPTION

Sika MonoTop<sup>®</sup>-610 is a cementitious, polymer modified one-component coating material containing silica fume used as bonding primer and reinforcement corrosion protection.

Suitable for use in hot and tropical climatic conditions.

## USES

- Suitable as a bonding primer as part of a concrete repair system
- Suitable as reinforcement corrosion protection as part of a concrete repair system

## **CHARACTERISTICS / ADVANTAGES**

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

PRODUCT	INFORMATION

Composition	Portland cement, silica fume, re-dispersible polymer powder, selected ag- gregates and additives	
Packaging	25 kg bags	
Appearance / Colour	Pink / grey powder	
Shelf life	12 months from date of production.	
Storage conditions	Store properly in undamaged original sealed packaging, in dry cool condi- tiones between +5 °C and +35 °C. Protect from direct sunlight, heat and moisture.	

## **TECHNICAL INFORMATION**

Tensile Strength in Flexure	≥ 5.5 N/mm² (w/p=0.2)	(ASTM C348)
Tensile Adhesion Strength	~2.0 MPa (28 d) (w/p=0.2)	(EN 1542)

## **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
Fresh Mortar Density	~2.0 kg/l

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Consumption	As Bonding Primer - This depends on the substrate roughness and thick- ness of layer applied. As a guide, ~1.5 - 2.0 kg of powder per m <sup>2</sup> per mm thick. As Reinforcement Corrosion Protection - As a guide, ~2.0 kg of powder per m <sup>2</sup> per 1 mm layer thickness	
Yield	25 kg of powder yields approximately 15.0 litres	
Layer Thickness	As bonding primer - sufficient to coat the concrete surface in a thin layer filling uneveness, pores and pits. As reinforcement corrosion protection - 2 mm minimum thickness	
Ambient Air Temperature	+5 °C minimum; +35 °C maximum	
Substrate Temperature	+5 °C minimum; +35 °C maximum	
Pot Life	~100 minutes (+20 °C)	
Waiting Time / Overcoating	Apply concrete repair wet on wet with bonding primer Apply concrete repair wet on dry reinforcement corrosion protection	

## **APPLICATION INSTRUCTIONS**

## SUBSTRATE QUALITY / PRE-TREATMENT

### Concrete:

The concrete shall be thoroughly clean, rough, 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).

### MIXING

Sika MonoTop<sup>®</sup>-610 can be mixed with a low speed (<500 rpm) hand drill mixer.

Pour the recommended water in a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly at least 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. Application by 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 accumulation of material and wait until Sika MonoTop®-610 cured, before to apply repair mortar ('wet on dry' application).

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#### **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.

## IMPORTANT CONSIDERATIONS

- Avoid application in direct sun and/or strong wind and/or rain
- Do not add water over the recommended dosage
- Apply only to sound, prepared substrates
- Refer to the Method Statement for Concrete Repair using Sika MonoTop<sup>®</sup> system for more information

# **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.



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## 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.

## **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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