

Sika® MonoTop®-610

Bonding slurry and anti-corrosion reinforcement primer

Product Description

Sika® MonoTop® -610 is a cementitious, polymer modified one component bonding slurry and primer with active corrosion inhibitors, used for protection of reinforcing steel.

Uses

- Corrosion protection for steel reinforcement in concrete repair.
- Bonding slurry on prepared concrete and mortar for Sika® MonoTop® repair mortars.

Characteristics / Advantages

- Only requires mixing with water
- Easy, user friendly application
- Excellent adhesion to concrete and steel
- Good resistance to water and chloride penetration
- Meets ZTV-SIB requirements for corrosion protection
- Moisture insensitive
- Good mechanical properties
- Sprayable by wet spray method
- Adjustable consistency

Tests

Approval / Standards

Product Data

Form

Appearance / Colour Powder Grey

Packaging 25kg bags

Storage

Storage Conditions / Shelf Life 6 Months in original, unopened packaging. Store in a dry area between 5°C and 30°C. Protect from direct sunlight and moisture.

Technical Data

Chemical Base Cement and Crystalline free Silica aggregate.

Density Approx. 2.0 kg/litre density of fresh mortar.

Layer Thickness 0.5 – 2 mm



Mechanical Properties

Compressive Strengths (28 days, +23°C / 50% r.h.) 30 – 35 N/mm²

Adhesive Tensile 1.5 – 2.5 N/mm² (concrete failure)

Application Details

Consumption / Dosage Bonding Slurry: 1.5 – 2.0 kg/m² Anti-corrosion Primer: 4 kg/m² @ 2mm thick

Substrate Quality

The concrete substrate must be sound and of sufficient compressive strength (min.20 N/mm² (MPa) with a minimum pull off strength of 1.5 N/mm² (MPa).

The surface must be dry and free of all contaminants such as oils, grease, coatings and surface treatments etc.

The substrate must be prepared mechanically to remove cement laitance and achieve a profile open textured surface.

Weak concrete should be removed and surface defects such as honeycombed areas; blowholes and voids must be fully exposed.

Repairs to substrate, filling of blowholes/voids and surface levelling should be carried out using appropriate from the Sikafloor®, SikaDur® and SikaGard® range of materials.

Substrate Preparation / Priming

Precise and efficient surface preparation is essential to achieve the high adhesive qualities of Sika® MonoTop®.

All concrete, mortar and stone substrates must be sound, clean and free from oils, grease or surface contaminants. All loose materials and surface laitance must be removed by high pressure water jet blasting or similar mechanical means. Small areas and 'spot' repairs should be mechanically prepared by needle gunning, bush hammering or similar means.

The prepared substrate should be thoroughly soaked with clean water until uniformly saturated, leaving no standing water.

Steel reinforcement should be grit blasted to a bright steel condition to remove all traces of rust and contamination prior to applying Sika® MonoTop®-610 corrosion protection.

Application Conditions / Limitations

Substrate Temperature +5°C min. / +30°C max.

Ambient Temperature +5°C min. / +35°C max.

Substrate Humidity < 10%

Application Instructions

Mixing (Ratio/ Dosage) 5.0 – 5.5 litres water per 25kg powder

Add the Sika® MonoTop®-610 slowly while mixing continuously. To avoid entraining too much air use a slow speed mixer (max. 500 rpm). By gradually adding the powder in portions, the desired application consistency can be obtained. Sika® MonoTop®-610 must be mixed to a brushable, almost non-drip consistency.

Application Method / Tools

As a Reinforcement Primer

Apply two coats of approximately 1 mm thickness each, using a stiff brush or suitable spray equipment, onto the cleaned reinforcement. Allow to reach initial set ('thumb-nail' hard) - up to 5 hours between coats depending on conditions. Allow at least 24 hours curing after second coat if repair mortar is to be spray applied.

As a Bonding Bridge

Apply onto the pre-saturated concrete substrate a coat of Sika® MonoTop®-610 not less than 0,5mm thick by brush, roller or suitable spraying equipment. To achieve a good bond with the substrate, and ensure that the whole area is fully coated, work the bonding slurry well into the substrate. Repair mortars must be applied wet on wet to the bonding slurry.



Cleaning of Tools	Application and mixing tools should be cleaned with water immediately after use. Hardened material must be removed mechanically.
Pot Life (Max. Open Life)	Approx. 90 – 120 minutes
Notes on Application / Limits	Allow the mixed Sika® MonoTop®-610 to stand for approximately 10 minutes before applying. Concrete should be a minimum of 28 days old. The normal precautions pertaining to dew point should be observed.
Local Restrictions	Please note that as a result of specific local regulations the performances of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

Health and Safety Information

Protective Measures Cement containing material may cause skin irritation. Wear gloves and goggles or apply barrier cream to hands while working with the mortar.

Ecology

Transportation Class

Important Notes Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.

Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the Material Safety Data Sheet.

Toxicity

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 or accessed on the Internet under <https://eth.sika.com>



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