

PRODUCT DATA SHEET

SikaTop[®] ES K+H 101

1-component, polymer-modified corrosion protection and bonding primer for SikaTop[®] ES-104 and -108

DESCRIPTION

SikaTop[®] ES K+H 101 is a cementitious, polymer modified 1-component coating material used as bonding primer and reinforcement corrosion protection. It will be applied with water.

SikaTop[®] ES K+H 101 is low in chromate according to TRGS 613.

USES

- Component for the concrete repair systems according to ZTV-ING, Part 3, Section 4
- Suitable as a bonding primer for SikaTop[®] ES-104 and -108
- Suitable as reinforcement corrosion protection for SikaTop[®] ES-104 and -108

PRODUCT INFORMATION

Packaging	15 kg
Shelf life	12 months from date of production
Storage conditions	In undamaged, unopened, original sealed packaging in cool and dry conditions.
Density	~2.0 kg/dm ³

CHARACTERISTICS / ADVANTAGES

- Can be applied with a brush or by wet spray technique
- Only mixed by water
- Excellent adhesion
- Good resistance to water and chloride penetration

APPROVALS / CERTIFICATES

- CE marking according to EN 1504-7

APPLICATION INFORMATION

Mixing ratio	~ 3.75 litres of water per 15 kg sack SikaTop® ES K+H 101 : Water = 100 : 25 (parts by weight)			
Consumption	Mixed concrete	2-2.5* kg/m ²		
	Dry mortar	2.0 kg/m ²		
	*Consumption is strongly dependent on the roughness of the concrete substrate.			
Ambient air temperature	Minimum: +5 °C Maximum: +30 °C			
Substrate temperature	Minimum: +5 °C Maximum: +30 °C			
Application time		+5 °C	+23 °C	+30 °C
	SikaTop® ES K+H 101	6.0 hours	2.5 hours	0.5 hours
	SikaTop® ES-104/108	2.0 hours	1.0 hours	0.75 hours

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.

ECOLOGY, HEALTH AND SAFETY

CE MARKING

See Declaration of Performance

HAZARD INFORMATION

GISCODE: ZP 1

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. Further notes and information data sheets on product safety and disposal can be found on the Internet at www.sika.de.

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.

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APPLICATION

As reinforcement corrosion protection: SikaTop® ES K+H 101 is applied to the suitably prepared substrate in 2 working steps. The minimum waiting time between the work steps is 20 minutes at +20 °C.

As bonding primer: SikaTop® ES K+H 101 is applied in one working step. The substrate must be matt damp after pre-wetting. The minimum waiting time between corrosion protection and bonding primer is 30 minutes at +20 °C.

The exposed and prepared steel reinforcement must be given the anti-corrosion treatment layers before installing the replacement concrete. SikaTop® ES K+H 101 is system tested according to German ZTV-ING standards. Before applying the PCC, repair / screed depth gauges should be adjusted and fixed to prevent them moving out of position when the mortar / concrete is placed and compacted.

To improve the adhesion of the modified cement mortar to the existing concrete substrate, always apply a bond coat.

Important

Do not allow the bond coat to dry, apply the repair mortar / concrete 'wet on wet'.

Embed the PCC mortar in the bond coat after pre-filling any larger holes / defects. Spread the mixed mortar evenly, overfill the areas and then draw-off / screed-off any excess with a beam and vibrator, then fully compact. Final floating and finishing of the surface should be carried out to produce a fine-grained, sandpaper-like texture. Never add any additional water, SikaTop® ES Additive-100K or SikaTop® ES Additive-100V to the mix or the surfaces and do not sprinkle them with cement or any other materials.

Maintain only the joints that must be brought through from the substructure; additional joints are unnecessary and could damage the integrity of the system.

Sikaflex elastic joint sealants are available for finally sealing the joints at the surface when required.

SikaTop® ES-104 and -108 can be installed manually. The use of a beam vibrator is usually recommended for larger applications.

CURING TREATMENT

Prevent the freshly applied material from drying out too quickly, e.g. due to direct sunlight or wind; follow standard rules for the curing of cement based mortars. Freshly applied and hardened surfaces must be kept damp by covering with suitable hessian matting / plastic sheeting and / or mist spraying with water. ZTV-ING, Part 3, Section 4 shall apply for the curing period. Avoid cold water shock on the surface. Alternatively, the newly finished surfaces can be impregnated with Sikafloor®-150 after 3-10 hours. Detailed information on this option is given on our separate system data sheet "Fresh Concrete Impregnation For Trafficked Structures".

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured 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 the 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.

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