

PRODUCT DATA SHEET

SikaTop® Seal-109 hi

LIQUID APPLIED CRACK BRIDGING, 2 PACK ACRYLIC CEMENTITIOUS WATERPROOFING COATING SYSTEM

DESCRIPTION

SikaTop® Seal-109 hi is a liquid applied, crack bridging 2 pack acrylic polymer modified cementitious waterproofing coating system with moderate to high degree of elasticity depending on system buildup.

USES

- Used as a seamless, impervious coating on flat roof for both exposed and concealed waterproof coating system
- Basements, water retaining structures, underground concrete structures, pits, basins, sumps etc.
- Used as waterproofing coating on concrete, screed, mortar, brick tiles, cement tiles, plaster or porous stone substrates

CHARACTERISTICS / ADVANTAGES

- Crack-bridging & Elastic
- Good Impermeability against water ingress
- Highly water resistant, arrest salt petre and prevent carbonation
- Extremely good bonding with high abrasion resistance
- Simple application and fast curing
- It has excellent adhesion to concrete, brickwork and corrugated asbestos cement sheets

APPROVALS / STANDARDS

Conforms to: IS 101, IS 2645, ASTM D 2370, EN1348, etc

PRODUCT INFORMATION

Chemical Base	Part A : Acrylic Co-polymer Part B : Specially graded cementitious powder	
Packaging	Part A : 20.0 kg container Part B : 30.0 kg bag	
Appearance / Colour	Part A : White Liquid Part B : Grey Powder Mixed Product : RAL 7037 (Dusty Grey)	
Shelf Life	12 months from date of production.	
Storage Conditions	Components should be stored in original, unopened , undamaged sealed packaging in dry and cool conditions. Liquid component must be protected from frost.	
Density	1.6 kg/liter (mixed density of A+B) at 27°C	
Tensile Strength	2 N/mm ² after 28 days (with Sika® Fab-1)	(ASTM D 2370)
Elongation at Break	~ 35% without Sika® Fab-1 ~ 20% with Sika® Fab-1	(ASTM D 2370)
Tensile Adhesion Strength	~ 2 N/mm ² (Concrete Failure)	(ISO 4624)

Behaviour after Artificial Weathering	No Chalking or Cracking on the film when tested for 500 hours		(IS 101)
Permeability to Water Vapour	Passes		
Water Absorption	Negligible		
System Structure	Build-up	Product	
	Base Coat	SikaTop® Seal-109 hi	
	Fabric Reinforcement*	Sika® Fab-1	
	Top Coat	SikaTop® Seal-109 hi	
	The top coat while wet, must be sprinkled with clean quartz sand before providing protection plaster, mortar, screed or any other adhesive layer. *Optional to use under normal exposures		
Mixing Ratio	Part A : Part B = 1 : 1.5 (by weight)		
Consumption	Build-up	Product	Consumption
	Base Coat	SikaTop® Seal-109 hi	~ 1 kg/m ²
	Fabric Reinforcement	Sika® Fab-1	1 m ² /m ²
	Top Coat	SikaTop® Seal-109 hi	~ 1.2 kg/m ²
	The consumption will vary depending on unevenness and absorption of the surface. All substrates should be in SSD condition prior to using SikaTop® Seal-109 hi system.		
Layer Thickness	1 mm with Sika® Fab-1		
Ambient Air Temperature	+10°C min. / +40°C max.		
Substrate Temperature	+10°C min. / +40°C max.		
Pot Life	~ 30 min at 27 °C (Mixed Material)		
Waiting Time / Overcoating	Between consecutive coats		
	Substrate temperature	Time	
	+30°C	~ 2 to 6 hours	
	If the waiting time period exceeds 24 hours, lightly clean the surface.		

SUBSTRATE QUALITY / PRE-TREATMENT

The substrate must be structurally sound and free of all contaminants, loose and friable particles, cement laitance, oils and grease etc.

The Concrete Pull Off (Tensile Adhesion) strength must be > 1 N/mm².

The substrate must be prepared by suitable mechanical preparation techniques such as high pressure water jetting, needle guns, blast cleaning etc. and properly pre-wetted to a saturated surface dry (SSD) condition. Blast clean to remove all contaminants within pores / blowholes.

MIXING

Used as slurry Part A : Part B = 1: 1.5 (by weight)

The consistency of the mix can be altered by reducing the amount of Component A (liquid) to be used. Under normal circumstances, when the full quantities of both components are mixed together, a slurry consistency will result. For trowellable consistency use only 90% of component A. Mix in a clean container by slowly adding the powder component to the liquid component and stirring with slow speed mixer (500-600 rpm). Mix for 3 minutes until free from lumps.

APPLICATION

Dampen all the surfaces immediately ahead of SikaTop® Seal-109 hi application. While the surface is still damp from saturation, apply the first coat and leave to harden for 2 to 6 hrs. For slurry consistency apply with a hard bristled brush or broom. For trowellable mortars use a notched trowel. After the second coat has been applied, finish by rubbing down with a soft, dry sponge.

Apply the mixed SikaTop® Seal-109 hi mechanically, by spray or by hand using a stiff brush, applied in the same direction. In case the coating is to be reinforced with glass fabric, lay the Sika® Fab-1 into the freshly applied base coat and embed firmly into the wet coat with brush.

Apply the second coat of SikaTop® Seal-109 hi, applied by brush in crosswise direction to the first application as soon as first coat has hardened.

CURING TREATMENT

It is essential to cure SikaTop® Seal-109 hi immediately after application for a minimum of 3 to 5 days to ensure full cement hydration and minimise cracking. Use wet hessian cloth or similar approved methods.

CLEANING OF TOOLS

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

FURTHER DOCUMENTS

Please refer to the Method Statement of SikaTop® Seal-109 hi for detailed application procedure.

BASIS OF PRODUCT DATA

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

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

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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