

**Product Data Sheet**  
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Identification no:  
02 07 01 01 002 0 000024  
SikaTop® Seal 109 hi

## SikaTop® Seal 109 hi

Elastic, liquid applied crack bridging, 2 Pack acrylic cementitious waterproofing coating system

<b>Product Description</b>	SikaTop® Seal 109 hi is an elastic liquid applied, crack bridging 2 pack acrylic polymer modified cementitious waterproofing coating system
<b>Uses</b>	<ul style="list-style-type: none"><li>■ Used as a seamless, impervious coating on flat roof for both exposed and concealed waterproof coating system</li><li>■ Basements, water retaining structures, underground concrete structures, pits basins, sumps etc.</li></ul>
<b>Characteristics / Advantages</b>	<ul style="list-style-type: none"><li>■ Crack-bridging</li><li>■ Elastic</li><li>■ Good Impermeability against water ingress</li><li>■ Highly water resistant, arrest salt petre and prevent carbonation</li><li>■ Extremely good bonding with high abrasion resistance</li><li>■ Simple application and fast curing</li><li>■ It has excellent adhesion to concrete, brickwork, corrugated asbestos and asbestos cement</li></ul>
<b>Tests</b>	
<b>Approvals / Standards</b>	Conforms to: IS 101, IS 2645 ASTM D 2370
<b>Product Data</b>	
<b>Form</b>	
<b>Appearance / Colour</b>	Part A : White Liquid Part B : Grey Powder Mixed Product : RAL 7037 ( Dusty Grey)
<b>Packaging</b>	25 kg System : Part A: 10.0 kg container Part B: 15.0 kg bag  50 kg System : Part A: 20.0 kg container Part B: 30.0 kg bag



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## Storage

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<b>Storage Conditions / Shelf Life</b>	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry and cool conditions. Liquid component must be protected from frost.
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## Technical Data

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<b>Chemical Base</b>	Part A : Acrylic Copolymer Part B : Specially graded cementitious powder	
<b>Density</b>	1.6 kg/l ( mixed density ) at 27°C	
<b>System Layer Thickness</b>	1mm with SikaFab 1	
<b>Mechanical / Physical Properties</b>		
<b>Tensile Strength</b>	~ 2 N/mm <sup>2</sup> after 28 days (with SikaFab 1)	According to ASTM D 2370
<b>Pull Out Bond Strength</b>	~ 2 N/mm <sup>2</sup> ( Concrete Failure)	According to ISO 4624
<b>Slant Shear Bond Strength</b>	~ 4 N/mm <sup>2</sup>	According to FIP 5.15
<b>Elongation at Break</b>	~ 35 % without SikaFab 1 & ~ 20 % with SikaFab 1	According to ASTM D 2370
<b>Workable Time</b>	~ 30 min at 27 °C	
<b>Workable Permeability</b>	Passes	
<b>Water Absorption</b>	Negligible	
<b>Accelerated Weathering, 500 hours</b>	No Chalking or Cracking on the film	According to IS 101

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## System Information

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<b>System Information</b>	<i>Exposed Roofing-system</i> Layer thickness : 1.5 mm Base Coating : 1 x SikaTop® Seal 109 hi Fabric reinforcement : 1 x Sika Fab 1 Top Coat : 1x SikaTop® Seal 109 hi <i>Concealed Roofing-system:</i> Layer thickness : 1.5 mm Base Coating : 1 x SikaTop® Seal 109 hi Fabric reinforcement : 1 x Sika Fab 1 Top Coat : 1x SikaTop® Seal 109 hi + Sand Sprinkling UV-protection : Screed concrete with slope ( min avg. Thickness 50 mm )
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## Application Details

Consumption / Dosage	Coating System	Product	Consumption
	<i>Exposed Roofing-system,</i>	1 x SikaTop® Seal 109 hi First Coat 1 x Sika® Fab-1 1 x SikaTop® Seal 109 hi Top Coat	~ 0.70 kg/m <sup>2</sup> ~1 sq.mt / sq.mt ~ 1.5 kg/m <sup>2</sup>
	<i>Concealed Roofing-system (according to ETAG 005)</i>	1 x SikaTop® Seal 109 hi First Coat 1 x Sika® Fab-1 1 x SikaTop® Seal 109 hi Top Coat	~ 0.70 kg/m <sup>2</sup> ~1 sq.mt / sq.mt ~ 1.5 kg/m <sup>2</sup>

The consumption will increase for uneven / absorptive surface and should be in SSD condition.

### Substrate Quality

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 adhesive) strength must be > 1 N/mm<sup>2</sup>

### Substrate Preparation

*General :*

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.

*For Pore / Blowhole filling :*

Blast clean to remove all contaminants within pores / blowholes

## Application Conditions / Limitations

**Substrate Temperature** +10°C min. / +40°C max.

**Ambient Temperature** +10°C min. / +40°C max.

## Application Instructions

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

**Mixing Time/ Tools** 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 Method / Tools

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 ( 2-6 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.

As a Slurry :

Apply the mixed SikaTop® Seal 109 hi mechanically, by spray or by hand using a stiff brush. Applied in the same direction.

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.

### 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.

**Waiting Time / Overcoating**

Between consecutive coats

Substrate temperature	Time
+30°C	~ 5 hours

If the waiting time period exceeds 24 hours, lightly clean the surface.

**Notes on Application / Limitations**

**Curing Details**

**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 polythene sheeting or similar approved methods.

**Value Base**

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.

**Health and Safety Information**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet 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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