

# SikaTop® Seal-107

## Cementitious waterproofing slurry and protective coating

### Product Description

SikaTop® Seal-107 is a two part polymer modified cementitious waterproof mortar slurry comprising of a liquid polymer and a cement based mix incorporating special admixtures. It is applied to concrete and mortar to prevent water infiltration.

### Uses

SikaTop® Seal-107 is used for:

- Interior and exterior waterproofing and damp-proofing of concrete, cementitious rendering, brickwork and blockwork
- Protection of concrete structures against the effects of de-icing salts and freeze-thaw attack
- Exterior waterproofing of basement walls in new construction and refurbishment
- Pore / blowhole filling
- Rigid waterproofing of water tanks, swimming pools, etc.
- Sealing fine "hairline" cracks in concrete structures not subject to movement
- Sealing internal basement walls against dampness
- Levelling mortar for concrete repair works

#### *Areas of application*

- Potable concrete water tanks
- Basements
- Terraces and balconies
- Retaining walls
- Swimming pools and fountains
- RC gutters and planter boxes
- Bathroom floors
- Seawalls

### Characteristics / Advantages

- Pre-batched components – mixes and applies easily
- Slurry or trowellable consistency
- Good adhesion to sound, prepared substrates
- Increased frost and salt resistance
- Protects against concrete carbonation and water penetration
- Non toxic – suitable for contact with drinking water
- Non corrosive to steel or iron

### Tests

#### Approval / Standards

SikaTop® Seal-107 has been approved for contact with potable water by:

- SIRM Test Report No. 2000KL0033.
- British Board of Agreement, Certificate Number 87/1938.
- WRc. UK. Reference PGA/8905512/SJD.2123.
- Complies with SS 245:1981. Report Number Q-40230-5101-KYP.



## Product Data

### Form

<b>Appearance / Colours</b>	Part A:	White liquid
	Part B:	Grey powder
	Mixed product:	Grey slurry

<b>Packaging</b>	25 kg sets
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### Storage

<b>Storage Conditions / Shelf-Life</b>	6 months from date of production if stored properly in undamaged and unopened original sealed packaging in dry and cool conditions. Liquid component must be protected from frost.
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### Technical Data

<b>Chemical Base</b>	Part A:	liquid polymer and additive
	Part B:	portland cement, selected aggregate and additives

<b>Density</b>	1.9 – 2.00 kg per litre (freshly mixed mortar)
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<b>Adhesive Strength</b>	1.0 to 1.5 N/mm <sup>2</sup> (on concrete)
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<b>Coefficient of Permeability, K</b> (m/sec – under 3 kg/cm <sup>2</sup> of water pressure)	■ Mortar (Grade 20 N/mm <sup>2</sup> ) = 6.49 x 10 <sup>-11</sup>
	■ Mortar coated with SikaTop <sup>®</sup> Seal 107 = 1.27 x 10 <sup>-12</sup>
	■ Comparative ratio 0.02
	■ Extracted from SETSCO Report Ref. No. B14942/CL

<b>Typical Results</b>	■ E-Modulus (static)	~ 8,400 N/mm <sup>2</sup>		
	■ CO <sup>2</sup> Diffusion Resistance	37,015μ		
	■ Water Absorption A (kg per m <sup>2</sup> .h <sup>0.5</sup> )	Concrete		0.66
		Concrete coated with SikaTop <sup>®</sup> Seal-107		0.035
	■ Water Vapour Resistance (Sd in m)	Concrete		1.70
Concrete coated with SikaTop <sup>®</sup> Seal-107			2.06	

Based on Test Report LPM A2957 (test conducted with 1 mm thick coat). Extract of test conclusions: *On the basis of the test results, the suitability of SikaTop Seal-107 coating as a protective concrete coating is proven.*

## System Information

### Application Details

<b>Coverage</b>	■ Waterproofing bathrooms, terraces and balconies is 1.0 kg/m <sup>2</sup> per coat
	■ Waterproofing coating up to 1 m waterhead is 1.5 kg/m <sup>2</sup> per coat
	■ Waterproofing coating more than 1 m waterhead is 2.0 kg/m <sup>2</sup> per coat
	■ As a protective coating is 2.0 kg/m <sup>2</sup> per coat

#### Note

- SikaTop<sup>®</sup> Seal-107 must be applied in minimum 2 coats
- 3 coats may be required in areas of extremely high infiltration

<b>Substrate Quality</b>	The substrate must be structurally sound and free of all traces of contaminants, loose and friable particles, cement laitance, sharp edges, oils and grease etc.
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The concrete "pull off" (tensile adhesive) strength must be > 1.0 N/mm<sup>2</sup>.

<b>Substrate Preparation</b>	<p><i>General</i> The substrate must be prepared by suitable mechanical preparation techniques such as high pressure water jetting, needle guns, blastcleaning, scabblers, etc. and properly pre-wetted to a saturated surface dry condition.</p> <p><i>For pore / blowhole filling</i> Blast clean to remove all contaminants including from within the pore / blowholes.</p> <p><i>As a levelling mortar</i> Prepare and clean all surfaces by suitable mechanical means such as abrasive blast cleaning or equivalent to ensure cement laitance, surface contamination and all existing coatings are removed and all blowholes and honeycombed areas are exposed. The resultant surface must be profiled to achieve maximum bond strength.</p> <p>Absorbent surfaces have to be thoroughly saturated with water prior to application of first coat of SikaTop® Seal-107. However, no standing water should be on the surface before application.</p> <p>All intersections of horizontal and vertical surfaces should be profiled with a mortar fillet of 25 mm x 25 mm.</p> <p>Note: SikaTop® Seal-107 will not bond to surfaces that have been treated previously with water repellent.</p>
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## Application Instructions

<b>Mixing</b>	<p>Under normal circumstances, when the full quantities of both components are mixed together, a slurry consistency will result. The consistency of the mix can be altered by reducing the amount of Part A (liquid) to be used. For trowel application, use only 90% of Part A (approximately 4.5 kg).</p> <p>Mix in a clean container by slowly adding Part B (powder) to Part A (liquid) and stirring with a low speed mixer. Use within 30 minutes.</p>
<b>Mixing Time</b>	~ 3 minutes
<b>Mixing Tools</b>	SikaTop® Seal-107 must be mechanically mixed using a forced action mixer or in a clean drum using a drill and paddle (max. 500 rpm). A normal drum mixer is NOT suitable.
<b>Application Method / Tools</b>	<p>Whilst the substrate is still damp from saturation, apply the first coat. Leave to harden for approximately 4 – 8 hours at temperatures above 20°C before applying the second coat.</p> <p><i>As a slurry:</i> Apply the mixed SikaTop® Seal 107 by hand using a hard plastic bristled brush or broom. Applied in the same direction. Apply the second coat of SikaTop® Seal-107 in crosswise direction to the first application as soon as first coat has hardened.</p> <p><i>As a mortar:</i> When SikaTop® Seal-107 is applied by trowel (e.g. for a smooth surface finish), the product must be mixed with a 10% reduction of part A (~ 1A : 4.5B). Apply the second coat of SikaTop® Seal-107 as soon as the first coat has hardened.</p> <p>For pore / blowhole filling, tightly trowel into the pores / blowholes of the surface.</p> <p>For floor applications, to avoid risk of damage to the first coat, it is recommended that the second coat be applied before 24 hours. If the second coat is applied 12 hours or later, the first coat shall be slightly prewetted, preferably by using a fine spray. After the second coat has been applied, a better finish can be achieved by rubbing down with a soft, dry sponge.</p> <p>For more details, please consult our Technical Service Department.</p>
<b>Cleaning of Tools</b>	Clean all tools and application equipment with clean water immediately after use. Hardened / cured material can only be removed mechanically.
<b>Pot Life</b>	~ 30 minutes at +30°C. Pot life will be shortened at higher temperatures
<b>Waiting Time / Overcoatability</b>	<p>For overcoating with cementitious materials, allow the second coat to harden for at least 3 days prior to overcoating.</p> <p>For overcoating with non-cementitious materials, please consult our Technical Service Department.</p>

## Notes on Application / Limitations

SikaTop® Seal-107 is not a decorative treatment and may display signs of “blooming” after rain or in damp weather. This does not affect the performance of the coating, in any way. Where a decorative finish is required, overpaint SikaTop® Seal-107 with any approved Sika® solvent based protective and decorative coatings, e.g. Sikagard®-680S.

Avoid application in direct sun and/or strong wind. Do not add water in any circumstances. Apply only to sound, prepared substrates – surfaces should be well dampened but free of surface water and leaks.

For waterproofing or damp proofing application, always use at least 2 coats to give a total thickness of between 1.5 to 2.0 mm. In areas of severe water penetration, three coats might be required.

Protect freshly applied material from direct rain for at least 4 hours.

SikaTop® Seal-107 does not provide a trafficable finish. Protect with a SikaLatex® bonded screed.

For waterproofing / damp-proofing works, special attention is required to avoid puncturing the waterproof coating with fixings.

When used in contact with drinking structures, ensure that all associated products and construction materials also comply with the local regulations for drinking water contact.

## Curing Details

### Curing Treatment

Generally not required but precautions should be taken for applications done directly under sunlight and windy conditions.

### Notes

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

### Protective Measures

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

### 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 (available upon request)..

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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