

SikaTop[®]-107 Seal

Cementitious waterproof coating

Construction

Description	SikaTop-107 Seal is a two-component, predosed, ready for use waterproofing slurry based on polymer modified cementitious material.
Uses	<p>On concrete, mortar, brickwork, steel.</p> <p>For rigid waterproofing membranes, eg:</p> <ul style="list-style-type: none"> ▪ Basements inside and outside. ▪ Watertanks, reservoirs ▪ Retaining walls <p>Balconies, terraces, small flat roofs, etc.</p> <p>As a thin layer render in concrete repair to effectively seal the surface of the concrete, eg:</p> <ul style="list-style-type: none"> ▪ Building facades, beams, columns, slabs, etc. ▪ Bridge deck soffits and parapets. ▪ Tunnels. <p>As protective coating in marine environments against salt attack, eg:</p> <ul style="list-style-type: none"> ▪ Wharves, piers and docks.
Advantages	<ul style="list-style-type: none"> ▪ Certified for use in contact with potable water. AS4020:2005. ▪ Predosed kits. ▪ Easy to mix & use. ▪ Waterproof . ▪ Excellent adhesion to sound substrates. ▪ Good crack bridging capabilities. ▪ Impermeable to water and water borne salts. ▪ Non-toxic. ▪ Good resistance to abrasion and erosion. ▪ Non-corrosive, non flammable. ▪ No drying or shrinkage cracks when used in accordance with instructions. ▪ Can be applied to suit application by brush or trowel.
Storage and Shelf Life	Minimum 12 months shelf life if stored in unopened original container in dry frost-free condition.
Instructions for Use	
Surface Preparation	<p>Concrete, mortar, brickwork. Sound, clean, free of oil, grease, dust or laitance; as even as possible.</p> <p>Steel, Iron. Clean, free of oil, grease and rust.</p> <p>Absorbent substrates have to be thoroughly watered and must be matt wet prior to the application of the first coat of SikaTop-107 Seal.</p> <p>In instances where the substrate has been previously coated, or contains contaminants difficult to remove, mechanical means of preparation must be used, i.e. grit or sand blasting, grinding, etc.</p>
Mixing	<p>Pour half of component A (liquid) into mixing vessel. Add all of component B (powder) and mix until you have a slurry of uniform consistency.</p> <p>Add rest of component A and mix again until you have a uniform, lump-free mixture. Mechanical slow speed mixer (500 rpm) is recommended. Mix for 2-3 minutes. If SikaTop-107 Seal is to be applied by trowel, use only 90% of component A (liquid).</p>
Coating	<p>By brush: on vertical surface use a suitable brush with synthetic bristles. On horizontal surfaces use a rubber squeegee or broom.</p> <p>By trowel: for the first coat use a toothed trowel with 3mm teeth, for the second coat use a straight edge trowel.</p>

Application Always apply a minimum of 2 coats, the first coat on the still damp (prewetted) substrate. The second coat is to be applied after the first coat has already started to set and can support the following coat, usually after 2-6 hours, depending on the climate. Finish off by brushing with a dry sponge or felt float when setting of the second coat has started.

SikaTop-107 Seal can be adapted to bridge cracks subject to limited movement by the addition of an alkali resistant glass fibre mesh and controlled debonding from the concrete on either side of the crack with a suitable separating agent, provided the width of the debonded zone is adjusted to accommodate the expected crack movement.

The alkali resistant mesh is also suitable to use where it is necessary to ensure a layer of uniform thickness or extra strength is required, eg. around corners, edges, etc.

Curing As with all cement based products, curing is important. Protect the freshly applied product against direct sunlight and strong winds. Use damp hessian or polythene sheeting to aid curing. Protect the applied SikaTop from rain and water splashes until fully hardened.

Cleaning Clean tools with water before any adhering material has hardened. Hardened SikaTop-107 Seal can only be mechanically removed.

Technical and Physical Data

Density at 23°C	Part A:	1.04 kg/litre
	Part B:	1.5 kg/litre
	Mixed A + B	2.0 kg/litre
Mixing ratio	A : B for brush application:	1 : 3.4 by weight
	A : B for trowel application:	1 : 4 by weight
Potlife at 23°C	1 hour approx.	
Typical Strength at 20°C 50% R.H.	3 days	28 days
Compressive strength	12.1 MPa	29.7 MPa
Flexural strength	4.5-5 MPa	10-12 MPa
E-Modulus	5 x 10 ³ MPa	
Adhesive strength to concrete	2-3 MPa	

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Consumption	<ul style="list-style-type: none"> ▪ Protective coating against salt (chloride ion) attack 2.0 kg/m² per coat. ▪ Waterproof membrane up to 1 metre waterhead, 1.5 kg/m² per coat. ▪ Waterproof membrane more than 1 metre waterhead 2.0 kg/m² per coat. (Minimum 2 coats should always be used.) 						
Colour	<table> <tr> <td>Part A:</td> <td>Pale milky yellow liquid</td> </tr> <tr> <td>Part B:</td> <td>Grey Powder</td> </tr> <tr> <td>Mixed:</td> <td>Grey slurry</td> </tr> </table>	Part A:	Pale milky yellow liquid	Part B:	Grey Powder	Mixed:	Grey slurry
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Important Notes	<ul style="list-style-type: none"> ▪ Minimum application temperature +8°C. ▪ Apply a minimum of 2 coats. ▪ Do not use more than 4kg/m² per coat (i.e. max. 2 mm thick coats). ▪ Spread material as evenly as possible. ▪ Must not be applied to substrates that will be subject to hydrostatic pressure before SikaTop-107 Seal has cured. ▪ In instances where SikaTop-107 Seal is applied to a substrate not previously protected by a membrane, it may be subjected to salts and moisture trapped within. This can lead to sub-fluorescence and blistering of the SikaTop-107 Seal. ▪ SikaTop-107 Seal is not a decorative treatment and may display signs of white "blooming" after rain or in damp weather conditions. This does not affect the quality of the coating in any way. For decorative finishes, overpaint SikaTop-107 Seal with Sikagard-680S or other approved Sika protective and decorative coatings. ▪ If the substrate to which the SikaTop-107 Seal is applied cannot dry, the polymer emulsion in it will not coalesce and the SikaTop-107 Seal will not cure to a waterproof render. ▪ Substrates affected by continual water seepage and actual water leaks require pre-sealing with Sika-4A. Consult Sika's Technical Services for further information.
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Handling Precautions	<ul style="list-style-type: none"> ▪ Avoid contact with the skin. ▪ Protective gloves and clothes are recommended when using this product. ▪ A full Material Safety Data Sheet is available from Sika Australia Pty Limited.
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Important Notification	<p>The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Australian version of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.</p>
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PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

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