

PRODUCT DATA SHEET

SikaTop® Seal-107 IN

TWO PACK POLYMER MODIFIED CEMENTITIOUS WATERPROOFING SLURRY AND PROTECTIVE COATING

DESCRIPTION

SikaTop® Seal-107 IN is a two part acrylic polymer modified cementitious liquid applied waterproofing coating system. It comprises of a liquid polymer and a cement based mix incorporating special admixtures. It is applied to concrete and mortar to prevent water infiltration.

USES

- 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, bathrooms, toilets, 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 / reservoirs
- Terraces and balconies
- Flat and small roofs
- Basement and Retaining walls
- Swimming pools, fountains and water bodies
- RCC gutters, drains and planter boxes
- Bathroom / toilets / Sunk slabs
- Lift pits / Sump
- Seawalls

PRODUCT INFORMATION

Chemical Base

Part A : Liquid polymer & additive

Part B : Portland Cement with selected aggregate and additive

CHARACTERISTICS / ADVANTAGES

- Easy to apply by brush or in thin trowel applications
- No additional water is required to make the slurry
- Pre batched components with consistent quality
- Hand or Spray applied
- Easy and fast mixing
- Increased frost and salt resistance
- Very good adhesion with sound and prepared substrates
- Protects concrete against water penetration, chloride and carbonation
- Non Corrosive to steel and iron
- Approved for potable water contact
- Flexible enough to bridge hairline crack
- Bonds well to all damp substrates
- Can be applied on reinforced concrete, mortar or masonry

APPROVALS / STANDARDS

- SGS Certificate - Free from acute lethal toxicity as per IS 6582
- CFTRI Certificate for repeated use with aqueous foods / water as per USFDA 175.300

Packaging	Part A: 5.0 kg container Part B: 20.0 kg bag Part (A+B) : 25 kg ready to mix units x 2 sets		
Appearance / Colour	Part A : White Liquid Part B : Grey Powder Part A+B : Cement Grey slurry		
Shelf Life	12 months from date of production		
Storage Conditions	Product should be stored in original, unopened, undamaged and sealed packaging in dry and cool conditions. Liquid component must be protected from frost.		
Density	Fresh Slurry : ~ 2.0 kg/ liter at +27°C		
Compressive Strength	<u>3 days</u>	$\geq 2 \text{ N/mm}^2$	(ASTM C 109)
	<u>28 days</u>	$\geq 20 \text{ N/mm}^2$	
	At temperature +27°C		
Tensile Strength	$\geq 4.5 \text{ N/mm}^2$ after 14 days exposure		(ASTM D 2370)
Elongation at Break	~ 8-10% with Sika® Fab-1		(ASTM D2370)
Tensile Adhesion Strength	$\geq 2 \text{ N/mm}^2$ (Concrete Failure)		(ASTM C 882)
System Structure	Base Coat : 1 x SikaTop® Seal-107 IN Fabric reinforcement : 1 x Sika® Fab-1 Top Coat : 1 x SikaTop® Seal-107 IN		
Mixing Ratio	Part A : Part B = 1:4 (By weight)		
Consumption	Layer	Product	Consumption
	1	SikaTop® Seal-107 IN	~ 1.5 kg/m ²
	2	Sika® Fab-1	~1 m ² /m ²
	3	SikaTop® Seal-107 IN	~ 1.5 kg/m ²
	<ul style="list-style-type: none"> ▪ Actual site consumption is dependent on the application area, substrate roughness, surface profile and thickness required ▪ Depending on the type of application, 2 coats are always required. ▪ For waterproofing upto 1m head pressure ~1.5 kg/m² per coat. ▪ Above 1m head pressure ~ 2 kg/m² per coat. ▪ Three coats may be required in areas of extremely high infiltration. ▪ Normally 3 kg/m² of SikaTop® Seal-107 IN is sufficient to cover one square meter area. On well prepared smooth substrate the consumption would be less. ▪ Usage of Sika® Fab-1 is optional. For application areas, where Sika® Fab-1 is must, please consult Sika Technical Services. 		
Layer Thickness	1.5 – 2.0 mm average thickness with Sika® Fab-1		
Ambient Air Temperature	+10°C min. / +40°C max.		
Substrate Temperature	+10°C min. / +40°C max.		
Pot Life	~ 40 minutes at +27°C. Pot life will be shortened at higher temperatures.		
Waiting Time / Overcoating	<p>Waiting Time The waiting time between coats is 2 - 6 hours (at +30°C).</p> <p>Overcoating For overcoating with cementitious materials, allow the second coat to harden for at least 3 days prior to overcoating. For use in water-retaining structures or for applying renders over it or for overcoating with non-cementitious materials, please contact Sika Technical Services.</p>		

EQUIPMENT

SikaTop® Seal-107 IN must be mechanically mixed using a forced action mixer or in a clean drum using a drill and paddle (max. 500 rpm). A normal concrete free fall mixer is NOT suitable.

SUBSTRATE QUALITY / PRE-TREATMENT

The substrate must be structurally sound and free of all traces of contaminants, loose and friable particles, cement laitance, oils and grease etc. The concrete "Pull Off" (tensile adhesive) strength must be > 1 N/mm².

General

The substrate must be prepared by suitable mechanical preparation techniques such as high pressure water jetting, needle guns, blast cleaning, scabblers etc. and properly pre-wetted to a saturated surface dry (SSD) condition.

For Pore / Blowhole filling

Blast clean to remove all contaminants including from within pores / blowholes.

As a levelling mortar

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.

Absorbent surfaces have to be thoroughly saturated with water, preferably 2 hours prior to application of first coat of SikaTop® Seal-107 IN. However, no standing water should be on the surface before application. The surface shall not be allowed to dry-out before application of SikaTop® Seal-107 IN. All intersections of horizontal and vertical surfaces should be profiled with a mortar fillet of minimum 25 mm x 25 mm or seal with Sika® Seal Tape S.

MIXING

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 low speed mixer (max. 500 rpm). Mix for 3 minutes until free from lumps.

APPLICATION

The surface must be pre-wetted to a saturated surface dry condition with no standing water at time of application. While the surface is still damp from saturation, apply the first coat and leave to harden for 2-6 hrs at +30°C before applying the second coat.

As a slurry

Apply the mixed SikaTop® Seal-107 IN by hand using a

hard plastic bristled brush or broom. Applied in the same direction. Apply the second coat of SikaTop® Seal-107 IN in crosswise direction to the first application as soon as first coat has hardened.

As a mortar

SikaTop® Seal-107 IN is applied by trowel (e.g. for a smooth surface finish), the product must be mixed with a 10 % reduction of part A. Apply the second coat of SikaTop® Seal-107 IN as soon as the first coat has hardened.

For pore / blowhole filling, tightly trowel into the pores / blowholes of the surface.

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. For more details, please contact Sika Technical Services.

CURING TREATMENT

For cement based products, proper curing is important for minimum 3 to 5 days.

Protect newly applied SikaTop® Seal-107 IN against direct sunlight, wind, rain and frost to ensure full cement hydration and minimise cracking. Use polythene sheeting or similar approved methods.

CLEANING OF TOOLS

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

FURTHER DOCUMENTS

For detailed information on application, please refer to the Method Statement of SikaTop® Seal-107 IN.

LIMITATIONS

- SikaTop® Seal-107 IN 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 IN with any approved Sika range of protective and decorative coatings.
- Avoid application in direct sun and/or strong wind. Do not add water in any circumstances. Apply only to sound, prepared substrates and surfaces should be well dampened but free of surface water and leaks. Do not exceed maximum layer thickness.
- For waterproofing or damp proofing application, always use at least 2 coats to give a total thickness of between 1.5 - 2 mm. In areas of severe water penetration, three coats might be required.
- Protect freshly applied material from freezing conditions, rains etc.
- SikaTop® Seal-107 IN does not provide a trafficable finish. In case the roof needs to be made trafficable a screed need to be laid on the finished system. A bonding agent may be necessary.

- For waterproofing / damp-proofing works, special attention is required to avoid puncturing the waterproof coating with fixings.
- Sika®Seal Tape S is recommended to be used as a component of a composite sealing system in conjunction with SikaCeram® waterproof tile adhesive and ceramic tiles to achieve water tightness in wet rooms and around wet areas.
- SikaTop® Seal-107 IN will not bond well to surfaces that have been treated previously with water repellent. Remove any wax based curing compounds before application.

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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