



PRODUCT DATA SHEET

Edition 10.2019/v1 CSC Master Format™ 09 97 26 (03 01 30.61 / 07 16 13) **CEMENTITIOUS COATINGS**

SikaTop® Seal-107^{cA}

FLEXIBLE, WATERPROOF AND PROTECTIVE SLURRY MORTAR

Description	SikaTop® Seal-107 ^{CA} is a two-component, polymer-modified, cementitious waterproof and protective slurry mortar for concrete. It is slightly flexible to tolerate fine cracks and is suitable for both interior and exterior applications. On horizontal surfaces subject to light foot traffic, such as balconies To waterproof concrete drinking water tanks, reservoirs, and clearwells For internal and external, horizontal and vertical water- and damp-proofing of concrete, mortar, blockwork and brickwor For protection of concrete structures against the harmful effects of de-icing salts and freeze/thaw cycles For sealing static hairline cracks in concrete structures not subject to movement For interior and exterior waterproofing of basements To protect rigid, extruded polystyrene foam					
Where to Use						
Advantages	 Improves the watertightness of water-containing concrete tanks, reservoirs, and clearwells Protects against water penetration, while being water vapour permeable (breathable) Excellent freeze/thaw resistance Good adhesion to sound, prepared substrates Mixing and application is fast and easy Good abrasion resistance Protects against concrete carbonation; 2 mm (80 mil) of SikaTop® Seal-107^{CA} is equivalent to 150 mm (6 in) of concrete Formulated with inert, non-reactive aggregates to eliminate potential Alkali-Aggregate Reactivity (AAR) Can be mixed to slurry or trowelable consistency Improves concrete/masonry appearance ANSI/NSF Standard 61 approved for potable water (special order only) 					
	Technical Data Packaging 18 kg (39.6 lb) kit Colour Concrete Grey					

Yield One (1) kit yields 9 L (2.4 US gal.) of slurry. For dampproofing: 1 coat at 1 mm (40 mil).

For waterproofing: 1 Coats at 1 mm (40 mil) per coat. Theoretical thickness (wet film) on smooth substrates: 2 kg/m^2 (4.4 lb/10 ft^2) = 1 mm (1 m^2 /L/mm). Three (3) coats may be required in areas of extremely high water infiltration.

Balcony waterproofing: 1 coat at 1.5 mm (60 mil) for approximately 6 m²/unit (65 ft²/unit)

Note: The above figures are theoretical and do not allow for substrate profile, porosity and wastage.

12 months in original, unopened packaging. Store dry at tempertures between 5 and 32 °C (41 and 89 °F). For best results, condition product between 15 and 24 °C (59 and 75 °F) before using. Protect Component A from freezing and Component B from humidity. **Shelf Life**

Mix Ratio Component A:Component B Slurry consistency 1:4.1 by weight (full unit)

1:4.5 by weight (90 % liquid to full bag) Trowelable consistency

Properties at 23 °C (73 °F) and 50 % R.H.

Density Component A 1.02 kg/L (8.5 lb/US gal.)

Component B 1.5 kg/L (12.5 lb/US gal.) Components A+B (mixed) 2.0 kg/L (16.7 lb/US gal.)

Working Time Approx. 60 min at 20 °C (68 °F)

Approx. 30 min at 30 °C (86 °F)

Compressive Strength ASTM D695

28 days 20 MPa (2900 psi)

Tensile Strength ASTM C307

28 days 6.0 MPa (870 psi) Bond Strength ACI 503R-30 Modified: Pull-off Test 28 days 1.0 MPa (145 psi)

Flexibility ASTM D522 (Modified) 8 % Watertightness under hydrostatic pressure DIN 1048 mod.

1/3 9-230

Water Pressure		Penetrated Water		Water Absorption					
Bars	Meters (Feet)	Grams	Grains	Grams/m ² •h	Grains/ft ² •h				
0.5	5 (16.4)	0	0	0	0				
1	10 (32.8)	1	15	2	3				
3	30 (98.4)	2	31	7	10				
Rendering mortars absorbing less than 64 grams/m ² • h (91 grains/ft ² • h) are considered watertight.									
Vapour Permeability ASTM E96 U.S. perms									
28 days	18 (not a vapour barrier)								
Carbon Dioxide Diffusion Coefficient									
(μCO ₂) Approx. 35 000, equivalent to 150 mm (6 in) of concrete									
Water Vapour D	iffusion Coefficient								
(μH_2O)		Approx. 500 (breathable)							
VOC Content		0 g/L							
Chemical Resistance Consult Sika Canada									
Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment,									

HOW TO USE

Surface Preparation

Concrete, mortar and masonry surfaces must be clean, free from grease, oil and loosely adhering particles. Steel and iron surfaces must be free from scale, rust, grease and oil. All surfaces must be as true and flat as possible. An open-textured, sandpaper-like substrate is ideal (ICRI / CSP 3). All surfaces must be saturated surface dry (SSD), with no standing water at time of application. It is necessary to stop water ingress prior to the application of SikaTop® Seal-107^{CA}. Use a quick-setting, waterproof slurry (Sikaset® Plug) to seal water leaks.

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 a trowelable consistency, use only 90 % of component A. Mix in a clean container by slowly adding the powder component to the liquid component and mixing with slow speed (300 - 450 rpm) drill and mixing paddle.

Application

SikaTop® Seal-107^{cA} can be applied by trowel, notched trowel, stiff bristle-broom, or spray equipment. Work the material well into the prepared substrate, filling all pores and voids.

For brush consistency: Apply the first coat of SikaTop® Seal-107^{CA} with horizontal brush strokes and leave to harden (4 to 8 hours). Apply the second coat with vertical brush strokes.

For trowel consistency: Apply the first coat with a notched trowel and leave to harden (4 to 8 hours). Apply the second coat with a flat trowel.

For spray application: Use a hopper gun spray equipment, textured sprayer (e.g. Texspray E110c), or a rotor/stator pump equipment. Allow the first coat to harden (4 to 8 hours) prior to the application of the second coat. As soon as the mortar layer starts to set, a uniform surface texture can be obtained by rubbing the surface with a fine sponge or a plastic trowel. Do not overwork SikaTop® Seal-107^{CA} during finishing and avoid the use of water. Where required, a third coat of SikaTop® Seal-107^{CA} may be applied no later than 24 hours after the second coat (in this case, do not trowel or sponge finish the second coat). If intercoat period exceeds 24 hours, light grit blasting is required prior to further application.

Balcony Waterproofing Layer: Fill in any spalled areas in the existing substrate with the appropriate Sika® repair mortar as required. Apply an appropriately sized closed cell backer rod along transition (wall-slab) to prevent three-sided adhesion. Apply a continuous cant bead of Sikaflex®-1a or Sikaflex®-2c EZ Mix to a depth of 6 mm (1/4 in) minimum with a 10 mm (3/8 in) contact surface on each side of the joint. Allow sealant to cure sufficiently. Substrate must be SSD with no standing water at time of application. Apply a 1.5 mm (60 mil) thick layer of SikaTop® Seal-107^{CA} over the entire balcony. While the material is still wet, apply a "360 degree pull" non-alkaline, woven fiberglass mesh (such as the Saint Gobain Adfors 0038/292 woven mesh, 145 g/m² in weight, manufactured by Saint-Gobain Adfors America) to reinforce SikaTop® Seal-107^{CA} layer along static hairline cracks, wall to slab transitions and patched areas. Using trowels, remove any wrinkles in the mesh by forcing the fabric down into the SikaTop® Seal-107^{CA}. Ensure the mesh is completely embedded and covered with SikaTop® Seal-107^{CA}. If any areas are not covered, apply additional SikaTop® Seal-107^{CA} over top of the mesh to cover. Trowel to a smooth, uniform finish. Allow time for curing so that surface can take foot traffic without harming the coating. Apply Sikagard® Color A50 Lo-VOC for a decorative and protective finish.

Curing

2/3

As with all cement-based products, curing is important. Protect newly applied product against direct sunlight, wind, rain and frost.

Clean Up

Clean all tools and equipment after use with water. Once hardened, the product can only be removed manually or mechanically. Wash soiled hands and skin thoroughly in hot soapy water or use Sika® Hand Cleaner towels.

Limitations

- If rain is anticipated within 1-2 days after application, the surface should be protected in order to prevent streaking.
- Not an aesthetic coating
- Minimum ambient and substrate temperatures are 7 °C (44 °F) and rising at the time of application.
- Maximum application thickness per coat = 2 mm (80 mil). Do not apply less than 1 L/m² = 1 mm (40 mil).
- As with all cement-based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur®-32 Hi-Mod.





Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN

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, within their shelflife. 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

SIKA CANADA INC. Head Office 601, avenue Delmar Pointe-Claire, Quebec H9R 4A9

Other locations Toronto Edmonton Vancouver

1-800-933-SIKA www.sika.ca

Certified ISO 9001 (CERT-0102780) Certified ISO 14001 (CERT-0102791)

