

PRODUCT DATA SHEET

SikaTop® Seal-107 FL-X

CEMENTITIOUS SLURRY FOR WATERPROOFING AND CONCRETE PROTECTION



DESCRIPTION

SikaTop® Seal-107 FL-X is a two part, polymer modified, cementitious, waterproof mortar slurry, comprising of a liquid polymer and cement based mix, incorporating special admixtures.

USES

SikaTop® Seal-107 FL-X is used for:

- Interior and exterior waterproofing of substrates such as concrete, cementitious rendering, brickwork and blockwork
- Waterproofing of basement walls in new structures and refurbishment works
- Waterproofing of concrete tanks and basins
- Protection of concrete structures against the effects of de-icing salts and freeze/thaw attack
- Pore / blowhole filling
- Sealing fine "hairline" cracks in concrete structures (not subject to movement)

CHARACTERISTICS / ADVANTAGES

- Protects against water penetration
- Protects concrete against carbonation
- Allows water vapour transmission
- Easy to apply by brush
- All components ready delivered, no additional water required

- Hand or spray applied
- Easy and fast mixing
- Non-corrosive to steel or iron
- Overpaintable
- Semi-flexible
- Approved-certified product for contact with drinking water. Complies with the quality demands from the French Ministry of Health, in accordance with the instructions of the Supreme Council of Public Health of France, regarding its compatibility in contact with drinking water.

APPROVALS / CERTIFICATES

- CE-marking and Declaration of Performance as Surface Protection Product - Coating according to EN 1504-2:2004, Principle 1 (Protection against ingress) - Method 1.3, Principle 2 (Moisture Control) - Method 2.3 and Principle 8 (Increasing Resistivity) - Method 8.3 according to EN1504-9:2008, based on certificate of factory production control issued by notified factory production control certification body and type testing.
- Certificate of Compliance for contact with potable water (conforms with positive list results, CARSO-Department of Health and Environmental Hygiene of Lyon), dated 14/12/2017, version number 17 CLP LY 069 (grey).

PRODUCT INFORMATION

Chemical base	Part A: liquid emulsion with additives Part B: portland cement, selected aggregates and additives
Packaging	28.4 kg units (A+B): Component A: 6.4 kg pail & Component B: 22 kg bag
Appearance / Colour	Part A: white liquid Part B: grey powder Mix: cement grey

Shelf life	12 months from date of production	
Storage conditions	Store properly in undamaged and unopened original sealed packaging in dry and cool conditions, at temperatures between +5°C up to +35°C. Protect from direct sunlight. Component B must be protected from frost.	
Density	~ 1.9 kg/lt (fresh mortar density)	(EN 1015-6)
Maximum Grain Size	0.25 mm	

TECHNICAL INFORMATION

Compressive Strength	7 days ≥ 11 MPa	28 days ≥ 18 MPa	(EN 12190)
Tensile Strength in Flexure	7 days ≥ 4 MPa	28 days ≥ 7 MPa	(EN 196-1)
Tensile Adhesion Strength	≥ 1.0 MPa		(EN 1542)
Permeability to Water Vapour	Class I		(EN ISO 7783-1)
Capillary Absorption	w < 0.1 kg/m ² ·h ^{0.5}		(EN 1062-3)
Water Penetration under Pressure	No penetration (1.5bar / 3 days)		(EN 12390-08)
Permeability to Carbon Dioxide	S _D > 50 m		(EN 1062-6)

APPLICATION INFORMATION

Mixing Ratio	Mix A+B: 22 kg (B) + 6.4 kg (A) Depending on the prevailing conditions, the substrate, the application method, the quantity of Component A might be reduced: Mix A+B: 22 kg (B) + 6.2 kg (A)		
Consumption	Dependent on the substrate roughness, surface profile and thickness of the layer applied. As a guide, ~ 1.9 kg/m ² / mm (excluding wastage, surface pro-filled and porosity, e.t.c.). At least 2 coats are necessary.		
Layer Thickness	0.75 mm min. / 1.50 mm max.		
Ambient Air Temperature	+8°C min. / +35°C max.		
Substrate Temperature	+8°C min. / +35°C max.		
Pot Life	~30 minutes (at +20°C)		
Waiting Time / Overcoating	+10°C	~ 12 hours	
	+20°C	~ 6 hours	
	+30°C	~ 3 hours	
	If waiting time period exceeds 24 hours, lightly blastclean the surface. SikaTop® Seal-107 FL-X can be overpainted using solvent based primers or coatings. SikaTop® Seal-107 FL-X must be cured for a minimum of 7 days before overcoating.		

APPLICATION INSTRUCTIONS

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 > 1.0 MPa.

The substrate should be prepared by suitable mechanical preparation techniques, such as high water pressure (400 bar) or grit blasting, water jetting to remove all previous coatings, wire-brushing. Dust must be removed using electric vacuum cleaner. If necessary, repair damaged, delaminated or weak concrete using Sika MonoTop® / SikaRep® range or repair mortars. Smooth down all corners or sharp profile variations (floor and wall intersections, e.t.c.) shaping them in

the form of concave coves, using Sika MonoTop® mortars, in order to improve the efficiency of the application.

Dampen the substrate up to saturation. Avoid standing water or condensed water on the surface prior to the application (the surface must have a dark, matt appearance).

Concrete joints, pipe penetrations and all kind of discontinuities in the construction must be sealed and waterproofed, for example using Sikadur® Combiflex® SG system.

MIXING

SikaTop® Seal-107 FL-X 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.

APPLICATION

Shake Component A before using it. Pour approximately half of Component A into the mixing container and add Component B slowly while mixing. Add the remaining of Component A and continue mixing until a uniform lump free consistency is achieved. The surface must be prewetted to a saturated surface dry condition before application.

Apply the mixed SikaTop® Seal-107 FL-X mechanically, by spray or by hand using a stiff brush. Applied in the same direction.

Apply the 2nd coat of SikaTop® Seal-107 FL-X by brush, crosswise to the first coating as soon the first has hardened.

Application for high crack bridging ability:

Apply the first coat of mortar and insert the special glass mat while it is still fresh, making sure it can be fully integrated into the mortar. When the first layer is cured, apply the second coat of mortar.

CURING TREATMENT

It is essential to start curing of SikaTop® Seal-107 FL-X immediately after application for a minimum of 3 to 5 days to ensure full cement hydration and to minimise cracking. Use polythene sheeting or similar approved methods.

CLEANING OF EQUIPMENT

Removal of fresh remnants from tools and application equipment can be carried out using water immediately after use. Hardened / cured material can only be mechanically removed.

IMPORTANT CONSIDERATIONS

- SikaTop® Seal-107 FL-X is not a decorative treatment and may display signs of "blooming" after rain or under high relative humidity conditions. This does not affect the performance of the coating, in any way.
- Avoid application under direct sunlight and/or strong wind.
- Do not add water in any circumstances.
- Apply only to sound, prepared substrates.
- Do not exceed maximum layer thickness.
- For waterproofing or damp proofing application, al-

ways 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 freezing conditions and rain etc.
- SikaTop® Seal-107 FL-X does not provide a passable finish.
- Wetting between layers is not demanded.

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 performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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.

Sika Hellas ABEE
15 Protomagias Str.
14568 Kryoneri
Attica-Greece
Tel.: +30 210 8160 600
Fax: +30 210 8160 606
www.sika.gr | sika@gr.sika.com



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