

PRODUCT DATA SHEET

SikaTop®-107 Plus ES

Cementitious mortar for waterproofing and protection

DESCRIPTION

SikaTop®-107 Plus ES is a two component waterproofing mortar, cement based with special additives and modified polymers.

USES

SikaTop®-107 Plus ES is used for:

- Interior and exterior waterproofing of concrete structures, mortar, concrete blocks or brick structures.
- Waterproofing of basement walls in new construction and refurbishment works.
- Concrete protective coating according to EN 1504-2:
 - Method 2.2 Moisture control
 - Method 8.2 Increasing resistivity
- Protection of concrete structures against the effects of de-icing salts and freeze thaw attack.
- Pore / blowhole filling.
- Cracks bridging in concrete structures (not subject to movement).
- Waterproofing of water tanks.

FEATURES

- Protects against liquid water penetration
- Allow water vapour transmission
- Easy to apply by brush or trowel
- Pre-dosed components, no water required
- Manual or projected application

PRODUCT INFORMATION

Composition	Part A: Liquid polymer and additive Part B: Portland cement, selected aggregates, recycled material and admixture
Packaging	Part A: 5 kg pail Part B: 20 kg bag
Shelf life	12 months from date of production if stored properly in undamaged and

- Easy and fast mixing
- Non-corrosive to steel or iron
- Overpaintable

SUSTAINABILITY

- IBU Environmental Product Declaration (EPD) available
- Conformity with LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization – Environmental Product Declarations
- Conformity with LEED v4 MRc 3 (Option 2): Building Product Disclosure and Optimization - Sourcing of Raw Materials
- Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization - Material Ingredients
- SikaTop®-107 Plus ES is part of the Sika BREEAM product portfolio and contributes to 5 assessment issues of BREEAM ES VIVIENDA 2020

CERTIFICATES AND TEST REPORTS

- CE Marking and Declaration of Performance to EN 1504-2 - Surface protection product for concrete - Coating
- CE Marking and Declaration of Performance to EN 14891 - Liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives
- Suitable for contact with drinking water according to RD 3/2023, LABAQUA, Test Report nº 3797821

unopened original sealed packaging in dry and cool conditions

Storage conditions	Store properly in undamaged and unopened original packaging in cool and dry conditions. Liquid component must be protected from frost. Protect from moisture and weather inclemencies
Appearance and colour	Part A: white liquid Part B: grey powder Mixed product: Grey
Maximum grain size	max. 0.35 mm

TECHNICAL INFORMATION

Compressive strength	3 day ~ 9.74 MPa 7 day ~ 19.2 MPa 28 day ~ 28 MPa	EN 12190
-----------------------------	---	----------

Modulus of elasticity in compression

Tensile strength	3 day ~ 2.98 MPa 7 day ~ 5.1 MPa 28 day ~ 7.77 MPa	EN 12190
-------------------------	--	----------

Tensile adhesion strength	≥ 0.8 MPa	EN 1542
----------------------------------	-----------	---------

*Values obtained with 2 layers with 1.5 mm thickness each one

	Test Method	Value obtained	Requirement	UNE EN 14981:2017
Initial tensile adhesion strength	A.6.2.	1,1 N/mm ²	≥ 0.5 N/mm ²	
Tensile adhesion after water contact	A.6.4.	0,6 N/mm ²	≥ 0.5 N/mm ²	
Tensile adhesion after heat ageing	A.6.5.	0,9 N/mm ²	≥ 0.5 N/mm ²	
Tensile adhesion after freeze-thaw cycles	A.6.6.	0,6 N/mm ²	≥ 0.5 N/mm ²	
Tensile adhesion after contact with lime water	A.6.9.	0,5 N/mm ²	≥ 0.5 N/mm ²	
Tensile adhesion after chlorinated water	A.6.8.	0,6 N/mm ²	≥ 0.5 N/mm ²	

*Values obtained with 2 layers with 2 mm thickness each one

Elongation at break	0.84 mm at +23°C 0.45 mm at -5°C	UNE EN 14891:2017
----------------------------	-------------------------------------	-------------------

*Values obtained with 2 layers with 2 mm thickness each one

Water permeability	w < 0.1 kg/m ² h ^{0.5}	EN 1062-3
---------------------------	--	-----------

Water penetration under pressure	~ 0.9 MPa	DTU 14.1 Anexo
---	-----------	----------------

Water penetration under negative pressure	~ 0.6 MPa	DTU 14.1 Anexo
--	-----------	----------------

PRODUCT DATA SHEET

SikaTop®-107 Plus ES
July 2024, Version 03.01
020701010020000349

Permeability to water vapour	Class I $S_D < 5 \text{ m}$	EN ISO 7783-1 EN ISO 7783-2
Chloride ion diffusion resistance	Chloride ion diffusion 0.06 % Cl ⁻ <small>*Values obtained with 2 layers with 2 mm thickness each one</small>	UNE EN 13396:2005
Reaction to fire	Roof and wall A2-s1, d0 Floor A2 _{fl} -s1	EN 13501-1:2019

SYSTEM INFORMATION

System structure	The mortar can be placed with Armatop®-100 reinforcement.	
	Armatop®-100:	
	Material	Anti-alkali fiberglass mesh
	Weight	0.172 kg/m ²
	Thickness	0.8 mm
	Tensile strength	Warp: 180 daN/5 cm Plot: 180 daN/5 cm
	Packing	Roll of 1 m x 50 m

APPLICATION INFORMATION

Fresh mortar density	~ 1,8 kg/l	
Consumption	~ 2.0 kg/m ² per mm of thickness (excluding allowances for loss wastage, surface profile and porosity, etc.) 1 unit of 25 kg yields ~ 12.5 liters of mortar	
Layer thickness	0.75 mm min. / 1.5 mm max. per layer At least 2 layer and total thickness of 3 mm.	
Mixing ratio	A:B 1:4 (parts by weight) by trowel A:B 1:3,5 (parts by weight) by brush	
Substrate temperature	+ 8°C min. / + 35°C max.	
Pot Life	~ 30 minutes at + 20°C	
Waiting time to 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®-107 Plus ES can be overpainted using solvent based primers or coatings. SikaTop®-107 Plus ES must cure for a minimum of 7 days before overcoating with tiles.	

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- SikaTop®-107 Plus ES 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.
- Avoid application in direct sun and/or strong wind.
- Do not add water in any circumstances. Apply only to sound, prepared substrates. Do not exceed maximum layer thickness.

um layer thickness.

- For waterproofing application, always use at least 2 layers to give a total thickness of 3 mm. In areas of severe water penetration, three coats might be required.
- Protect freshly applied material from freezing conditions and rain etc.
- SikaTop®-107 Plus ES does not provide a trafficable finish
- Avoid application in abrasive environment

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 Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data

APPLICATION INSTRUCTIONS

EQUIPMENT

Electrical mixer, trowel, hard-haired brush, roller and spray machine

SUBSTRATE QUALITY

The concrete "pull off" (tensile adhesive) strength must be $> 1.0 \text{ N/mm}^2$

SUBSTRATE PREPARATION

Remove deteriorated concrete by mechanical means, sandblasting or pressurized water, until a healthy and-drought, cohesive substrate is obtained. The substrate must be sound, clean, free of grease, oil, friable parts, laitance.

In case of irregularities in the substrate, it can be first regularized with SikaMonotop®-125 Thick ES or another from SikaMonotop® range.

All singular points should be treated first with SikaMonotop®-125 Thick ES or another from SikaMonotop® appropriate range.

Before applying SikaTop®-107 Plus ES, the substrate must be moistened until saturated without flooding it.

MIXING

SikaTop®-107 Plus ES must be mechanically mixed with a low speed ($< 500 \text{ rpm}$) electrical mixer. Mix for 3 minutes until you get a homogeneous paste. It is not suitable to use a concrete mixer.

APPLICATION METHOD / TOOLS

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

As a slurry:

Predosing A:B = 1:3,5. Apply the mixed SikaTop®-107 Plus ES either mechanically, by spray or by hand using a stiff brush.

Apply the second coat of SikaTop®-107 Plus ES in crosswise direction to the first application.

As a mortar:

Predosing A:B = 1:4. Apply SikaTop®-107 Plus ES by trowel in the same direction.

Apply the second coat of SikaTop®-107 Plus ES in the same direction to the first application.

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

The application must be done covering the whole surface of the substrate with uniform thickness.

CURING TREATMENT

Protect the fresh mortar immediately from premature drying using an appropriate curing method, e.g. Sika® Antisol®-3 E, moist geotextil membrane, polythene sheet, etc.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with clean water immediately after use.

Hardened / cured material can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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 Services AG

Tüffenwies 16
8048 Zürich
Tel: +41 58 436 4040
www.sika.com



PRODUCT DATA SHEET

SikaTop®-107 Plus ES
July 2024, Version 03.01
020701010020000349

SikaTop-107PlusES-en-CORP-(07-2024)-3-1.pdf

