

# PRODUCT DATA SHEET

## SikaScreed<sup>®</sup>-1

READY TO USE SCREED FOR LAYING CERAMIC TILES AND PARQUET



### DESCRIPTION

SikaScreed<sup>®</sup>-1 is a pre-mixed product for quick drying shrinkage-free screeds in indoor and outdoor applications.

### USES

- 3 to 6 cm thick screeds in civil or industrial environments. It can be covered with tiles, parquet or resilient coverings.
- Heated screeds, by embedding radiating coils in the layer
- Applicable in industrial environment, offices, commercial centers, e.t.c.

### CHARACTERISTICS / ADVANTAGES

- Ready-to-use, ideal in areas where raw material supplying can be a problem (i.e. confined spaces, historical city centers, e.t.c.)
- Cures without shrinkage
- Very good finishing
- Quick hardening

### APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance according to EN 13813 - Resin screed material for internal use in buildings - Class CT C25 F5

### PRODUCT INFORMATION

Composition	Hydraulic binders, silicon/quartz mineral charges, copolymers of organic nature and specific additives
Packaging	25 kg bags
Appearance / Colour	Granular grey powder
Shelf life	12 months
Storage conditions	In original, unopened and undamaged packaging in dry conditions.

### TECHNICAL INFORMATION

Compressive Strength	Age	Value	(EN 13892-2)
	7 days	~13 MPa	
28 days	≥ 25 MPa		

  

Tensile Strength in Flexure	Age	Value	(EN 13892-2)
	28 days	≥ 5 MPa	

### APPLICATION INFORMATION

<b>Mixing Ratio</b>	1,8 - 2,0 L of clean water per 25 kg bag	
<b>Consumption</b>	16 - 18 kg/m <sup>2</sup> per cm of screed thickness	
<b>Layer Thickness</b>	3 to 6 cm thickness	
<b>Ambient Air Temperature</b>	min. +5°C / max. +35°C	
<b>Substrate Temperature</b>	min. +5°C / max. +35°C	
<b>Pot Life</b>	~ 45 min*	
<b>Waiting Time / Overcoating</b>	Walkable:	~ 12 hours *
	Laying of ceramic tiles:	~ 24 hours *
	Laying of natural stone or marble:	~ 72 hours **
	Laying of parquet:	~ 7 days***

\* Times have been measured in ambient temperature +23°C and R.H. 50%. Higher temperatures reduce those times; oppositely, lower temperatures increase them.

\*\* For stones and marbles sensitive to humidity the time must be extended to 7 days.

\*\*\* Times have been measured in ambient temperature +23°C and R.H. 50%, screed thickness ≤ 5 cm and ventilation ≥ 2 m/sec.

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY / PRE-TREATMENT

It is possible to realize screeds adhering to substrate or floating on a separating layer, i.e. PVC membrane; in this case the thickness must be at least 4 cm. If the thickness is less than 4 cm, it is necessary to perform a screed adhering to the substrate. To achieve adhesion to the substrate, an epoxy bonding agent can be used for fresh concrete such as Sikadur®-32 EF applied by brush. Another option is to produce a slurry made by a part by volume of SikaL-atex® and a part of water, mixed with Portland cement and apply it by brush. The screed must be laid on the slurry or on the epoxy bonding bridge "wet on wet".

### MIXING

SikaScreed®-1 is ready to use. Add only water. The product can be mixed in an ordinary concrete mixer, in a screw mixer of Turbosol type or in a continuous mixer type PFT or Continental.

The amount of water must be dosed in order to get a plastic, highly workable paste. Too little water (damp soil consistency) will considerably reduce the mechanical strength of the finished screed. On the other hand, too much water (fluid) will increase the hygrometric shrinkage, making it inadvisable to fix ceramic tiles after only 24 h.

The mixing operation must be effected within 2 minutes, do not let the mixer revolving, while containing the product.

### APPLICATION

Compressible material must be positioned all around the edges of the room and around any pillar, so as to create insulation jointw. The product must be applied

in the same way as a normal cementitious screed, by preparing the level strips, which will then serve for spreading with a striker.

Laying is carried out as for a normal cementitious screed. Spread the mixture, taking care to compact the surface to obtain a homogeneous layer.

Float finishing must be carried out immediately after the product has been spread or within 60 minutes.

When this operation is carried out, the surface of the screed can be sprinkled with water from a brush, so as to make the job easier and faster, especially if a machine with a steel disc is used.

### CLEANING OF EQUIPMENT

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

## IMPORTANT CONSIDERATIONS

- Do not use SikaScreed®-1 for parquet that must be fixed in less than 10 days.
- In the case of parquet flooring, position the steam barrier before casting the screed.
- Before fixing the parquet, check with a carbide hygrometer to make sure that the residue humidity is < 2%.
- Do not use the product after it has stiffened. Prepare a fresh mixture.
- Do not add other binders to the product (cement, lime, gypsum, etc.).
- If the tiles are fixed within a short time (24 h), the gap between them must be at least 3-4 mm.
- Do not apply at temperatures lower than 5°C or higher than 35°C.

## 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 Material Safety Data Sheet 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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