

PRODUCT DATA SHEET

SikaScreed[®]-1

READY TO USE SCREED FOR LAYING CERAMIC TILES AND PARQUET

DESCRIPTION

SikaScreed[®]-1 is a pre-mixed product for quick drying shrinkage-free indoor and outdoor screeds.

USES

- Formation of unbonded 30 mm to 60 mm thick screeds in civil or industrial environments.
- Formation of bonded 12 mm to 60 mm thick screeds.
- Can be covered with tiles, parquet or resilient materials.
- Heating screeds, by burying radiating coils in the layer. Plasticizer additives do not need to be added to the mixture when SikaScreed[®]-1 is used.
- Suitable for industrial environments, offices, commercial centres, etc.

CHARACTERISTICS / ADVANTAGES

- Ready-to-use.
- No shrinkage.
- Very good finishing.
- Quick hardening.

APPROVALS / STANDARDS

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

PRODUCT INFORMATION

Chemical Base	Hydraulic binders, silicon/quartz mineral charges, copolymers of organic nature and specific additives
Packaging	25 kg bags
Shelf Life	12 months
Storage Conditions	In original unopened and undamaged packaging in a dry area at temperatures between +5°C and +25°C.
Appearance / Colour	Granular grey powder

TECHNICAL INFORMATION

Compressive Strength	After 7 days: >13 MPa - after 28 days: >25 MPa according to EN 13892-2
Flexural Strength	After 28 days: ≥ 5 MPa according to EN 13892-2

APPLICATION INFORMATION

Mixing Ratio	1.8 - 2.0 L of clean water for each 25 kg bag
Consumption	16 - 18 kg/m ² per cm of screed thickness

Layer Thickness	Unbonded 30 to 60 mm thickness. Bonded 12mm to 60mm thickness.	
Ambient Air Temperature	min. +5°C - max. +35°C	
Substrate Temperature	min. +5°C - max. +35°C	
Pot Life	~ 45 min*	
Waiting Time / Overcoating	<u>Walkable:</u>	~ 12 hours *
	<u>Laying of ceramic tiles:</u>	~ 24 hours *
	<u>Laying of natural stone or marble:</u>	~ 72 hours **
	<u>Laying of parquet:</u>	~ 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.

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.

LIMITATIONS

- 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 becomes difficult to apply. 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.

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.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

It is possible to achieve screeds adhering to a substrate or floating on a separating layer, i.e. a PVC membrane; in this case the thickness must be at least 3 cm. If the thickness is <3 cm, it is necessary to apply a screed adhering to the substrate. To get adhesion to the substrate an epoxy bonding agent for fresh concrete such as Sikadur®-32 can be used; or make a mixture of using a part by volume of SikaCeram® T-Latex and a part of water, mixed with Portland cement to obtain a slurry-consistency paste, to be applied by brush. The screed must be laid on the slurry or on the epoxy bonding agent when still fresh.

MIXING

Mix 1.8 -2.0 L of clean water for each 25 kg bag. The product can be mixed in an ordinary concrete mixer, in a screw mixer 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, and 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 completed within 2 minutes

APPLICATION

Compressible material must be positioned all around the edges of the room and around any pillar, so as to form the insulation joint. 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. The laying is carried out as for a normal cementitious screed. Spread the mixture, taking care to compact the surface to obtain an 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 splashed 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 TOOLS

Clean with water before hardening. Hardened product must be mechanically removed.

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.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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