

PRODUCT DATA SHEET

SikaScreed®-100

PRE-MIXED PRODUCT FOR SCREEDS



DESCRIPTION

Sika® Screed-100 is a pre-mixed product based on hydraulic binders, quartz mineral charges, copolymers of organic nature and specific additives, able to realize quick drying shrinkage-free indoor and outdoor screeds. Sika® Screed-100 meets the requirements of EN 13813-CT-C40-F6.

USES

- Suitable for making floating or anchoring screeds in civil and industrial construction
- The possibility of laying a quick walk-layer with the requirements of low moisture content
- Can be used as a base for tile, ceramic tile, stone, wood floors, PVC and other floor coverings
- Installation of floors with underfloor heating suitable for repairing areas with requirement of rapid use
- Suitable for making loped layers for balconies

CHARACTERISTICS / ADVANTAGES

- Suitable for immediate use (mixing with water only) eliminates any errors caused by the use of inappropriate binders and aggregates or their improper dosing
- Very low shrinkage
- Very good finishing
- High-strength after the second day of application
- Foot traffic after 12 hours
- Possibility to apply another layer within a very short time
- Thickness layer from 10 mm to 60 mm

APPROVALS / CERTIFICATES

CE-marking and Declaration of Performance as Cementitious screed for use in buildings, CT-C40-F6, according to EN 13813, based on type testing and factory production control.

PRODUCT INFORMATION

Composition	Cementitious
Packaging	25 kg
Appearance / Colour	Grey colour.
Shelf life	12 months from the date of production
Storage conditions	Stored properly in original, unopened and undamaged sealed packaging, in dry conditions, at temperatures between +5 °C and +30 °C.
Maximum Grain Size	max. 3 mm

TECHNICAL INFORMATION

Compressive Strength

(EN 13892-2)

After 24 hours	After 28 days
~ 25,0 N/mm ²	~ 42,0 N/mm ²

* These values are obtained under laboratory conditions and procedures in accordance with the relevant standards.

Tensile Strength in Flexure

(EN 13892-2)

After 24 hours	After 28 days
~ 5,5 N/mm ²	~ 6,5 N/mm ²

* These values are obtained under laboratory conditions and procedures in accordance with the relevant standards.

APPLICATION INFORMATION

Mixing Ratio

1,5 – 2,0 l of clean water per 25 kg bag
It is advisable to use a lower ratio of water when needed to increase the ratio.

Consumption

~ 18 – 22 kg/m² for 10 mm layer thickness

Ambient Air Temperature

+5°C min. / +30°C max.

Pot Life

~ 1 hour

Waiting Time / Overcoating

Walkability	~ 12 hours
Laying ceramic tiles, stone, vapour-permeable textile floor coverings	~ 24 hours
Overlaying cementitious self-leveling mortar or synthetic self-leveling mortar	~ 24 hours
Covering of PVC, linoleum, cork	~ 48 hours
Bonding wood floors	~ 4 days

These values are at +23 °C and 65% relative humidity, the thickness of the screed ≤ 5 cm and ventilation ≥ 2 m/s. Before laying, it is necessary to measure the moisture with appropriate methods.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Substrate preparation

Sika® Screed-100 can be used on any substrate. The substrate is exposed to rising damp can affect moisture characteristics screed and it is therefore recommended to separate the base from the screed waterproofing membrane. The substrate must be sound, free of loose and friable particles, dust, dirt and cracks. In particular, must be removed layers of oil and grease, laitance which found on the surface. Concrete substrates must be dry.

MIXING

SikaScreed®-100 is ready to use after mixing only with water. Mix thoroughly for a minimum of 3 minutes. The product can be mixed in an ordinary concrete mixer or in a screw mixer of Turbosol type. The amount of water must be dosed according to instructions on the packaging of the product (1,5 lt of water per 25 kg of product), in order to achieve a suitable plastic consistency and the final properties match the indicated values in product data sheet. Too much

water will increase the shrinkage and the residual moisture. Lack of mixing water may deteriorate workability of the product or even cause an imperfect hydration of binder component resulting in reduction of mechanical properties.

APPLICATION

The material is treated in the same way as other cement-based screeds. Required height level is achieved by using calibration strips. Applying a composition for good compaction surface smoothing trowel. After compaction the surface should be smooth by a trowel. Smoothing work should be performed immediately after the distribution of material within 60 minutes of mixing. To facilitate the smoothing work surfaces can be sprayed with water (especially when using a power trowel). The applied material can be reinforced with conventional reinforcing steel or network. The surface layer is made must be protected against rapid drying, wind, rain, frost and sudden sunlight. It is important to cover surface with foil to. Around the room, around columns and all penetrations in the floor to install compressible expansion band. SikaScreed®-100 can be applied in the form of a composite screed (screed thickness of 10-30 mm) or floating screed (30-60 mm).

Composite screeds :

SikaScreed®-100 in thin layer must be anchored to the concrete substrate. At the pre-dampened, free from dust and dirt surface apply bonding bridge SikaMono-Top®-910 (please refer to the most recent technical data sheet). In cases of application to "green" concrete, apply SikaScreed®-100 as a bonding bridge. Subsequent application of SikaScreed®-100 shall be done wet on wet.

Screeds on separating layers :

SikaScreed®-100 is applied to a suitable separation layer (for example polyethylene film). To ensure a perfect connection of the material at the construction joints should insert steel reinforcement-thorns perpendicular to the working gap.

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

- When processing a material follow the standard rules for the production of screeds, such as reinforcement fabrication contraction joints, e.t.c.
- In case of floor heating, before application install the vapor barrier.
- Before laying the floor, measure the moisture content, which must be in accordance with local norms and recommendations.
- Do not add to the mixture, no additional binders (cement, lime, gypsum etc.).
- Do not use material when the hardening process started.
- Do not add other aggregates.
- Do not apply the material at environmental temperatures $\leq +5^{\circ}\text{C}$ or $\geq +30^{\circ}\text{C}$.

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.

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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.

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