

# PRODUCT DATA SHEET

# SikaScreed®-100

Pre-mixed product for screed applications

# PRODUCT DESCRIPTION

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

# **USES**

- Suitable for creating floating or bonded screeds in civil and industrial construction.
- Can be used as a base for tile, ceramic tile, stone, wood floors, PVC, and other floor coverings.
- Installation of floors with compatible with underfloor heating.
- To repair sand and cement screed floors.

# **CHARACTERISTICS / ADVANTAGES**

- Uncomplicated to use add water only, eliminating any errors caused by the use of inappropriate binders and aggregates, or their improper dosing.
- Very low shrinkage.
- Smooth finishing.
- Easy to apply.
- High-strength after the second day of application.
- Can be foot trafficked after only 12 hours.
- Possibility to apply another layer within a very short time.
- Layer thickness from 10 mm to 60 mm per lift.

# **APPROVALS / STANDARDS**

SikaScreed®-100 meets the requirements of EN 13813-CT-C40-F6. Declaration of Performance No. 24895162 and provided with CE-mark.

# PRODUCT INFORMATION

Chemical Base	Cementitious 25 kg	
Packaging		
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.	
Appearance / Colour	Grey colour	
Maximum Grain Size	3 mm	

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#### TECHNICAL INFORMATION

Compressive Strength	24 hours	~25.0 N/mm²	(EN 13892-2)
	28 days	~42.0 N/mm²	
	* These values are obtained under laboratory conditions and procedures in accordance with the relevant standards.		
Flexural Strength	24 hours	~5.5 N/mm²	(EN 13892-2)
	28 days	~6.5 N/mm²	<del></del>

# APPLICATION INFORMATION

1.5 – 2.0 litres of clean water for each 25 kg bag.		
$^{\sim}1.8$ - 2.2 kg/m²/mm. $^{\sim}18$ - 22 kg/m² for 10 mm layer thickness.		
+5°C minimum / +30°C maximum		
~1 hour		
Walkability	~12 hours	
Laying ceramic tiles, stone, vapour- permeable textile floor coverings	~24 hours	
Overlaying cementitious self-level- ling mortar or synthetic self-levelling mortar	~24 hours	
Covering of PVC, linoleum, cork	~48 hours	
Bonding wood floors	~4 days	
	~1.8 - 2.2 kg/m²/mm. ~18 - 22 kg/m² for 10 mm layer thick +5°C minimum / +30°C maximum ~1 hour  Walkability Laying ceramic tiles, stone, vapourpermeable textile floor coverings Overlaying cementitious self-levelling mortar or synthetic self-levelling mortar Covering of PVC, linoleum, cork	

# **VALUE BASE**

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

- When applying the Product, follow the standard rules for the application of screeds.
- In the case of heated floors, before application, install a vapour barrier.
- Before laying the floor, measure the moisture content, which must be in accordance with local standards and recommendations.
- Do not add extra binders (i.e. cement, lime, gypsum, etc.) to the mixture.
- Do not use it after the hardening process starts.
- Do not add other aggregates.
- Do not apply the material below +5°C or above +30°C.

# **ECOLOGY, HEALTH AND SAFETY**

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other

safety-related data.

## **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY / PRE-TREATMENT

#### **Substrate preparation**

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

#### **MIXING**

SikaScreed®-100 is ready to use by mixing only with water. Mix thoroughly for a minimum of 3 minutes. The product can be mixed in an ordinary concrete mixer or single-padded mixer.

The amount of water must be dosed according to instructions on the packaging of the product (e.g. 1.5 litres of water per 25 kg of product), in order to achieve a suitable plastic consistency and ensure the final properties match the indicated values in product data sheet. Too much water will increase the shrink-

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age and the residual moisture. A lack of water may deteriorate the workability of the product, or even cause imperfect hydration of binder components, resulting in a reduction of mechanical properties.

#### **APPLICATION**

The required height level can be ascertained using calibration strips. After compaction, the surface should be smoothed 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. The surface layer must be protected against rapid drying, wind, rain, frost and sudden sunlight. It is essential to cover the surface with plastic sheeting. Install a compressible expansion band around the room, around columns, and all penetrations in the floor. SikaScreed®-100 can be applied in the form of a composite screed (screed thickness of 10 to 30 mm) or floating screed (30 to 60 mm).

#### Bonded screeds:

SikaScreed®-100 applied in a thin screed layer must be anchored to the concrete base. Apply the bonding bridge at the pre-dampened surface, free of dust and dirt. Sika® MonoTop®-1010 (see the relevant product data sheet) can be used as the bonding bridge with fresh, 'green' SikaScreed®-100. Application of SikaScreed®-100 shall be completed wet-on-wet onto the bonding bridge.

#### Screeds on separating layers:

SikaScreed®-100 is applied to a suitable separation layer (i.e. polyethylene film, etc.). Steel reinforcement dowels / thorns should be inserted perpendicular to the working gap to ensure a perfect connection of the material at the construction joints.

#### **CLEANING OF TOOLS**

Clean tools immediately after use with clean water. Cured material can only be removed mechanically.

## 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.

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