

# PRODUCT DATA SHEET

# SikaScreed® Binder

Cement-based cementitious binder specifically designed to create quick-drying screeds.

#### PRODUCT DESCRIPTION

SikaScreed® Binder is a cementitious binder based on hydraulic binders and special additives to replace cement in conventional aggregate-based floor screeds. It provides quick-drying indoor and outdoor cementitious screeds with high strength and low shrinkage. Ideal for laying ceramic tiles, natural stones, wood flooring, resilient floor materials and embedded underfloor heating components.

### **USES**

- To create 40 to 60 mm thick screeds for residential applications.
- Can be used as bonded, unbonded or floating screed.
- Suitable for the embedment of underfloor heating systems.

# **CHARACTERISTICS / ADVANTAGES**

- Quick drying.
- Very low shrinkage.
- Smooth surface finish.
- High strength.
- Can be used with locally sourced, readily available aggregate.
- Easy to mix and apply.
- Can be used internally and externally.
- Allows a rapid return to service.

Based on the mixture of 25 kg of SikaScreed® Binder, 12 litres of water and 200 kgs of aggregate.

#### PRODUCT INFORMATION

Packaging	25 kg bags	25 kg bags				
Shelf Life	12 months from d	12 months from date of production				
Storage Conditions	packaging in dry c	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +25°C. Always refer to packaging.				
Appearance / Colour	Grey powder	Grey powder				
TECHNICAL INFORMA	TION					
Compressive Strength	24 hours	≥ 7,5 N/mm²	(EN 13892-2)			
	28 days	≥ 25 N/mm²				
	Based on the mixture of 25 kg of SikaScreed® Binder, 12 litres of water and 200 kgs of aggregate.					
Flexural Strength	24 hours	≥ 2,5 N/mm²	(EN 13892-2)			
	28 days	≥ 6 N/mm²				
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#### APPLICATION INFORMATION

Mixing Ratio	SikaScreed® Binder: 200 to 250		kg	25 kg 160 to 200 kg		
	Aggregate:	1 m <sup>3</sup>				
	Water: 140 to 150 L		L	11 to 12 L		
	Aggregates must be clean and dry. 0/4 mm sharp sand can be used as aggregate.					
Consumption	~ 0,20 to 0,25 kg/m²/mm.					
	~ 2 to 2,5 kg/m² for 10 mm layer thickness.					
Layer Thickness	40 to 60 mm per layer.					
Ambient Air Temperature	+5 °C minimum / +25 °C maximum					
Substrate Temperature	+5 °C minimum / +25 °C maximum					
Pot Life	~1 hour					
Waiting Time / Overcoating	Walkable		~12 hours ¹			
	Laying of ceramic tiles ~24 hours 1		5 1			
	Natural stone or marbl	e	~48 to 72 hours <sup>2</sup>			
	Laying of wood flooring	g or resilient	~7 days <sup>3</sup>			
	floors		·			
	1 Times measured at +23 °C / 50	) % r.h.				
	2 Stones and marble are sensitive to humidity, so the time must be extended to 7 days, if required.					
	3 Times measured at +23 $^{\circ}$ C / 50 $^{\circ}$ r.h., with a screed thickness of less than 50 mm, and ventilation higher than 2 m/sec.					

#### **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**

- Before laying wood flooring or resilient floors, check with a carbide hygrometer to ensure the screed relative humidity is <2 %, or as recommended by the flooring manufacturer.
- Do not use the product if it becomes difficult to apply. That indicates pot life has ended. Prepare a fresh mixture.
- Do not add more water than recommended.
- Do not add other binders to the product (i.e. cement, lime, gypsum, etc.).
- If the tiles are fitted within a short time (24 hours), the gap between adjacent tiles must be at least 3 to 4 mm.
- Do not apply at temperatures lower than 5°C, or higher than 30°C.
- Protect from direct sunlight, strong wind and extreme temperatures.
- To prevent cracking on the screed surface, reduce the water used for finishing and start curing immediately after finishing.

#### **ECOLOGY, HEALTH AND SAFETY**

For information and advice on the safe handling, storage and disposal of chemical products, users must refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

# **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY / PRE-TREATMENT

Substrates must be prepared in the same way as conventional cementitious screeds depending on the type of screed required (i.e. bonded, unbonded, floating and heated). Ancillary works such as placing materials to form isolation and crack control joints, thermal insulation, etc. must be incorporated the same as a conventional cementitious screed. National building standards must also be consulted to ensure compliance.

#### **MIXING**

#### Aggregate

Aggregates must be clean and (ideally, to enable accurate water additions) dry.

#### **Mixing**

Prepare the correct quantities of SikaScreed® Binder, aggregate and water to suit the type of screed and flooring

Mix the binder with aggregate and water using an ordinary concrete mixer, forced action mixer, pan mixer, Turbosol-type screw mixer or other suitable equipment to achieve a plastic, highly workable paste.

#### **APPLICATION**

#### **Application**

Apply mixed screed in the same way and with the same equipment as a conventional screed.

# Finishing

Float finish with conventional manual or machine-applied equipment within 60 minutes after spreading. To increase speed, the surface of the screed can be



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splashed with water from a brush. A screed surface with a wood flooring finish can have a rough texture to improve adhesion of the adhesive.

#### Curing

Cure floated screed in the same way as a conventional screed.

#### **CLEANING OF TOOLS**

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