

# **BUILDING TRUST**

# PRODUCT DATA SHEET

# Sikafloor®-100 Level (GR)

Polymer modified cementitious floor levelling compound for resilient flooring and ceramic tiles. 2–10 mm



## **DESCRIPTION**

Sikafloor®-100 Level (GR) is a very low emission, polymer modified cementitious floor levelling compound. It provides a smooth finish compound on subfloors before the application of resilient flooring and ceramic tiles.

## **USES**

Formulated for smoothing and levelling interior residential and non-industrial subfloors before applying:

- Ceramic tiles
- Resilient floor coverings (linoleum, vinyl)
- Textile coverings (carpet)

# **CHARACTERISTICS / ADVANTAGES**

- Water proof against dispersion adhesives
- Self-levelling
- Smooth finish
- Layer thickness: 2-10 mm
- Suitable for application on subfloor heating systems
- Pumpable
- Polymer modified
- Very low tension / stress on substrate

## **SUSTAINABILITY**

VOC emission classification GEV-Emicode EC1PLUS

# **APPROVALS / CERTIFICATES**

CE Marking and Declaration of Performance to EN 13813 - Cementitious floor screed material, Class CT-C25-F6

# PRODUCT INFORMATION

Composition	Cement based, Polymer modified	
Packaging	25 kg bag	
Appearance and colour	Powder / Grey	
Shelf life	6 months from date of production	
Storage conditions	Product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +10 °C and +30 °C. Always refer to packaging.	
Product declaration	CE Marking and Declaration of Performance as Cementitious floor screed material, CT-C25-F6, according to EN 13813:2002, based on type testing and factory production control.	

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# **TECHNICAL INFORMATION**

Compressive strength	Time	Temperature	Value	(EN 13892-2)	
	28 days	+23 °C	≥ 25 N/mm <sup>2</sup>		
Tensile strength in flexure	Time	Temperature	Value	(EN 13892-2	
J	28 days	+23 °C	≥ 6 N/mm <sup>2</sup>		
Reaction to fire	A1/A1 <sub>fl</sub>	A1/A1 <sub>fl</sub>			
SYSTEM INFORMATION					
System structure	Primer/ Bonding agent:				
	Sikafloor®-01 P	Sikafloor®-01 Primer		Universal dispersion primer for absorbent substrates	
	Sikafloor®-02 Primer		Acrylate based primer for non absorbent substrates		
	Floor levelling compound:				
	Sikafloor®-100 Level (GR)		Floor levelling compound, Class CT- C25-F6, acc. to EN 13813		
APPLICATION INFORMA	TION				
Mixing ratio	6,0 - 6,2 L of water per 25 kg bag				
Consumption	~1,5 kg/m² of powder per 1 mm thickness.  This figure is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.				
Yield	25 kg of powde	25 kg of powder yields approximately 16.7 lt of mortar			
Layer thickness	2–10 mm	2–10 mm			
Ambient air temperature	min. +10 °C / m	min. +10 °C / max. +30 °C			
Relative air humidity	< 75 %	< 75 %			
Substrate temperature	min. +10 °C / m	iax. +30 °C			
Substrate pre-treatment	mm prime the and fully broad not fully broad 100 Level (GR). Note: (1:3 or 1: Substrate Normal absorb	Important: (1) If the layer thickness of Sikafloor®-100 Level (GR) exceeds 10 mm prime the calcium sulphate substrate twice with Sikafloor®-155 WN and fully broadcast with quartz sand (0,2–0,8 mm). If Sikafloor®-155 WN is not fully broadcast, use Sikafloor®-02 Primer before applying Sikafloor®-100 Level (GR).  Note: (1:3 or 1:1) denotes primer dilution with water. Primer: Water  Substrate  Normal absorbent substrates: concrete, cement screeds, rapid cement  Sikafloor®-01 Primer (1:3) or  Sikafloor®-03 Primer			
	screeds	te substrates (1)	Sikafloor®-03 Prim		
	<u> </u>		Sikafloor®-01 Prim	er (1:1)	
	Non-absorbent tiles, water-res residues, epoxy		Sikafloor®-02 Prim Sikafloor®-01 Prim		
Pot Life	~30 min. at +20	~30 min. at +20 °C.			
Waiting time to overcoating	Level (GR) has a the covering m Note: Times are	Important: Before applying floor covering, make sure the Sikafloor®-100 Level (GR) has achieved the required moisture content value required by the covering manufacturer. (Refer to the covering Product Data Sheet). Note: Times are approximate and measured at +20 °C (ambient) / +15 °C (substrate) / 65 % r.h.			

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Note: Application times will be affected by changing substrate and ambient conditions, layer thickness and water content.

Note:  ${}^{(1)}$ Refers to concrete / screed substrates. For other substrates, the waiting time is ~24 hours.

Sikafloor®-100 Level (GR) can be covered as follows:

Floor covering	Layer Thickness	Waiting Time
Resilient	≤ 3 mm	~24 hours
Resilient	≤ 5 mm	~48 hours
Resilient	≤ 10 mm	~72 hours
Ceramic tiles	2–10 mm	~4–6 hours <sup>(1)</sup>

#### Applied product ready for use

Note: Time will be affected by changing substrate and ambient conditions, layer thickness and water content.

Foot traffic: ~3 hours

## **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.

# IMPORTANT CONSIDERATIONS

- Do not apply on substrates with rising moisture.
   If rising moisture can occur, an effective damp proof membrane must be applied in compliance with the relevant national standard.
- The following guidelines may assist when floor coverings can be applied over Sikafloor®-100 Level: German regulations state the subsequent installation of floor coverings on cement-based substrates such as screeds, are required to display a residual moisture reading of ≤ 2,0 CM-% (heating screeds ≤ 1,8 CM-%). Calcium sulphate screeds are required to have a reading of ≤ 0,5 CM-% (heating screeds ≤ 0,3 CM-%).

# **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

#### Suitable substrates

- Concrete
- Cementitious screeds
- Rapid cement screeds
- Calcium sulphate screeds

#### Substrate quality

- Cementitious substrates (concrete / screed) must be sound.
- Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease, polish, coatings, water soluble and water-resistant adhesives, varnish, laitance, surface treatments and loose friable material.

Remove separation and sinter layers.

### **Pre-treatment**

- Prepare substrates, separation and sinter layers mechanically by selecting and using abrasive blast cleaning, grinding or planing / scarifying equipment for the type of substrate.
- The final texture of the substrate must be open textured and gripping.
- Remove weak cementitious and levelling layers.
- Surface defects such as blow holes and voids must be fully exposed using the surface preparation equipment.
- Use products from the Sikafloor®, Sikadur® and Sikagard® range of materials to level the surface or fill cracks, blow holes and voids. Contact Sika Technical Dpt. for additional information on products for levelling and repairing defects.
- Products must be cured before applying Sikafloor®-100 Level (GR)
- Seal remaining water-soluble adhesive residue by priming floor with Sikafloor®-155WN/-150/-151/-156/-160/-161 or Sika® Primer MB Rapid and fully broadcast with kiln dried quartz sand. If quartz sand is not used, the sealing primer must be coated with Sikafloor®-02 Primer before applying Sikafloor®-100 Level (GR)
- Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the product.
- To improve the adhesion and provide a pore free surface for subsequent coverings, use Sikafloor®-01 Primer, Sikafloor®-02 Primer or Sikafloor®-03 Primer.

#### **EQUIPMENT**

Select the most appropriate equipment required for the project:

#### Substrate preparation equipment

- Abrasive blasting cleaning equipment
- Planing machine
- Scarifying machine
- High pressure water blasting equipment
- Sanding equipment

For other types of preparation equipment, contact Sika Technical Dpt.

# Mixing equipment

Electric single or double paddle mixer (<</li>
 600 rpm) with Helical Disc-Shaped or spiral helix



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#### paddle

- Scraper
- Clean mixing containers

For other types of mixing equipment, contact Sika Technical Services

#### Application equipment

- Mixed material carrier
- Pin-leveller (Pin-rake)
- Surface blade
- Screed rake
- Notched trowel
- Smoothing trowels
- Spike roller

For types of pumping equipment, contact Sika Technical Dpt.

#### **MIXING**

**Important:** Do not add more than 6,2 litres of water to 25 kg of powder.

**Important**: Do not mix or blend with OPC cements or other binders.

Requirement: Use an electric single or double paddle mixer (< 600 rpm) with helical disc-shaped mixing paddle.

- 1. Pour ~6,0-6,2 litres of clean water into a clean mixing container.
- 2. Mix the water slowly while gradually adding the complete bag of powder.
- 3. Mix continuously for 2,0 minutes to achieve a smooth, uniform mix. If necessary, add more water (up to the max.) to achieve the required consistency.
- 4. To allow entrained air to escape and mature, let the mixture to stand for  $^{\sim}2$  minutes.
- 5. Mix for a further ~1 minute.

#### **APPLICATION**

**Important**: Edge and movement joints must be brought through to the finished surface and must be protected so the product will not flow into the joint.

**Important**: The product must be applied to the required thickness and surface flatness as specified by the floor covering manufacturer.

Important: Use an isolating strip / tape to prevent product bonding onto vertical surfaces, i.e. pipes, ducts, conduits, walls, columns etc. Important: To reduce the risk of cracking, protect freshly applied product from high ambient

- temperatures, direct sunlight and draughts.

  1. Pour the mixed product onto the substrate.
- 2. Spread the product evenly using a smoothing trowel, surface blade, screed rake or pin-leveller (pin-rake) to the required thickness.
- 3. Allow product to smoothen over the substrate.

# CLEANING OF EQUIPMENT

water 1:1).

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.

4. If required, spike roller immediately to remove

5. If a 2nd layer of Sikafloor®-100 Level (GR) is to be

03 Primer or with Sikafloor®-01 Primer (diluted with

applied, prime the hardened 1st layer with Sikafloor®-

any trowel marks or surface defects.

## **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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