

### **BUILDING TRUST**

## PRODUCT DATA SHEET

# Sikafloor®-200 Level

High-build, polymer-modified, cementitious floor levelling compound

## **DESCRIPTION**

Sikafloor®-200 Level is a high-build, polymer-modified cementitious floor levelling compound with very low VOC emissions. It provides a reduced-shrinkage and smooth finish compound at a layer thickness of 3–40 mm. It can be used on interior subfloors before the application of floor coverings.

## **USES**

Sikafloor®-200 Level is used for:

 Smoothing and levelling interior residential and nonindustrial subfloors, with or without a subsequent covering

Sikafloor®-200 Level is used as a substrate for the following coverings:

- Wood flooring
- Parquet flooring
- Ceramic tiles
- Stone tiles
- Seamless resin floors
- Textile floor coverings such as carpet
- Resilient floor coverings such as linoleum and vinyl Please note:
- The Product may only be used by experienced professionals.
- The Product may only be used for interior applications.

## **CHARACTERISTICS / ADVANTAGES**

- Self-levelling
- Layer thickness of 3–40 mm without addition of aggregates
- Layer thickness of up to 60 mm with aggregates
- Waterproof against dispersion adhesives
- Suitable for use with underfloor heating systems
- Causes very little tension or stress on the substrate
- Pumpable
- Suitable for castor wheels in accordance with EN 12529
- Suitable for producing bonded screeds overlain with ceramic tiles on cementitious substrates

#### **ENVIRONMENTAL INFORMATION**

- Contributes towards satisfying Indoor Environmental Quality (EQ) Credit: Low-Emitting Materials under LEED® v4
- Contributes towards satisfying Materials and Resources (MR) Credit: Building Product Disclosure and Optimization Material Ingredients under LEED® v4
- VOC emission classification GEV Emicode EC1<sup>plus</sup>

## **APPROVALS / STANDARDS**

 CE marking and declaration of performance based on EN 13813:2002 Screed material and floor screeds — Screed material — Properties and requirements — Cementitious screed material

#### PRODUCT INFORMATION

Chemical Base	Cement-based, polymer-modified
Packaging	20 kg Refer to the current price list for available packaging variations.
Appearance / Colour	Grey powder
Shelf Life	12 months from date of production

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Storage Conditions	The Product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to the packaging.  Refer to the current Safety Data Sheet for information on safe handling and storage.		
Product Declaration	EN 13813:2002	Class CT-C25-F6	
TECHNICAL INFORMATION	V		
Compressive Strength	Cured 28 days at +23 °C ≥ 25 N <sub>2</sub>	/mm <sup>2</sup> (EN 13892-2)	
Tensile Strength in Flexure	Cured 28 days at +23 °C ≥ 6 N/r	mm <sup>2</sup> (EN 13892-2)	
Reaction to Fire	A1 <sub>fl</sub>	(EN 13501-1)	
APPLICATION INFORMATION	ON		
Consumption	1.8 kg/m² per mm of thickness  Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the Product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.		
Layer Thickness	General	Layer thickness of Product	
•	Product	3–40 mm	
	Product with aggregates	10–60 mm	
		Layou thickness of Duadyst	
	Special condition Castor wheel loading	Layer thickness of Product Min. 1 mm according to EN 12529	
	Parquet or wooden plank covering	Min. 2 mm	
	Resin floor covering	Min. 4 mm	
	Mastic asphalt screed substrate (IC 10 and IC 15) (EN 13813)	3–5 mm	
Product Temperature	Maximum	+25 °C	
	Minimum	+5 °C	
Ambient Air Temperature	Maximum	+30 °C	
	Minimum	+5 °C	
Relative Air Humidity	< 75 %		
Mixing Ratio	Product without aggregates	3.4–3.6 L of water for 20 kg of Product (yield ~11 ltr)	
	Product with aggregates	13 kg or 8 L of quartz sand (0.1–3.0 mm) for 20 kg of Product (approx. 65 % by weight) ≤ 3.6 L water for 20 kg of Product	



+25 °C

+5 °C

2/5

**Substrate Temperature** 

Maximum Minimum

Waiting Time / Overcoating	Before applying a floor covering, make sure the Product has achieved the moisture content value required by the covering manufacturer. Refer to the manufacturer's Product Data Sheet for the respective covering. The Product can be covered as follows:			
	Floor covering	Layer thickness	Typical waiting time	
	Wood, ceramic tiles, resin, textile, resilient coverings	≤ 5 mm	24 hours	
	Wood, ceramic tiles, resin, textile, resilient coverings	≤ 10 mm	72 hours	
	Ceramic tiles with the Product applied on a concrete or cementitious screed substrate in interiors	≤ 60 mm	4 hours	
	Times measured at an ambient temperature of +20 °C, a substrate temperature of +15 °C with a 65 % relative humidity.  Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity. Times are also dependant on layer thickness.			
Applied Product Ready for Use	Foot traffic: 4 hours  Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.			

## **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.

### **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**

## **EQUIPMENT**

Select the most appropriate equipment for the project.

SUBSTRATE PREPARATION EQUIPMENT

- Abrasive blast cleaning equipment
- Grinding equipment
- Planing machine
- Scarifying machine
- Abrading (sanding) equipment
- Industrial vacuuming equipment

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

#### MIXING EQUIPMENT

- Electric single-paddle or double-paddle mixer (< 600 rpm) with helical, disc-shaped mixing paddle</li>
- 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
- Spiked roller

For types of pumping equipment, contact Sika Technical Services.

#### **SUBSTRATE QUALITY**

Suitable substrates:

- Concrete
- Cementitious screeds
- Rapid cement screeds
- Calcium sulphate screeds
- Mastic asphalt screeds (IC 10 and IC 15) (EN 13813)
- Magnesia screeds
- Ceramic tiles
- Natural stones

Substrate quality:

- Cementitious substrates such as concrete and 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.

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 Old mastic asphalt screeds IC 10 and IC 15 (EN 18813) often contain cracks or are brittle. This substrate will not generally have sufficient tensile strength for taking a low-stress cementitious levelling compound. Consider using a stress-free gypsumlevelling compound.

#### SUBSTRATE PREPARATION

#### **IMPORTANT**

## Impaired Product properties due to substrates with rising moisture

- Do not apply the Product on substrates with rising moisture.
- If rising moisture can occur, apply an effective dampproof membrane that complies with the applicable national standard.

#### **IMPORTANT**

#### Surface defects due to voids in the substrate

Voids and blow holes in the substrate will weaken the surface and damage the covering Product if not repaired during the preparation process.

 Fully expose blow holes and voids during surface preparation to identify the required repairs.
 CEMENTITIOUS, CALCIUM SULPHATE, MASTIC AS-PHALT, CERAMIC TILE AND NATURAL STONE SUB-

STRATES

1. Remove separation and sinter layers.

- 2. IMPORTANT The final texture of the substrate must be open-textured and gripping. Remove weak cementitious and levelling layers, and fully expose defects such as blow holes and voids. Note Suitable methods for surface preparation are abrasive blast cleaning, grinding, planing or scarifying equipment, depending on the type of substrate.
- 3. Repair or relay broken or loose tiles and stones.
- 4. Repair and fill blow holes and voids using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials.
- 5. Any repair materials must be cured before starting to apply the Product.
- 6. Before applying the Product, remove all dust, loose and friable material from the application surface with an industrial vacuuming equipment.
- 7. Prime the substrate. Select the primer as indicated in further priming instructions.

PRIMING NORMALLY-ABSORBENT SUBSTRATES SUCH AS CONCRETE, CEMENT SCREEDS, RAPID CEMENT SCREEDS

1. Prime the substrate with Sikafloor®-01 Primer diluted 1:3 with water.

PRIMING CALCIUM SULPHATE SUBSTRATES WITH PLANNED PRODUCT LAYER THICKNESS OF LESS THAN 10 MM

Prime the substrate with Sikafloor®-03 Primer undiluted or Sikafloor®-01 Primer diluted 1:1 with water.

PRIMING CALCIUM SULPHATE SUBSTRATES WITH PLANNED PRODUCT LAYER THICKNESS OF MORE THAN 10 MM

- Prime the substrate twice with Sikafloor®-155 WN or Sikafloor®-161.
- Fully broadcast the primer with quartz sand (0.2–0.8 mm).
- If the primer is not fully broadcast, apply Sikafloor®-02 Primer before applying the Product.

#### PRIMING MASTIC ASPHALT SCREEDS

IMPORTANT This is applicable to interiors only. Existing mastic asphalt screeds must be open textured and gripping after preparation or have a rough sand broadcast surface. If the surface is smooth and not gripping or broadcast, apply Sikafloor®-02 Primer or Sikafloor®-01 Primer undiluted.

PRIMING NON-ABSORBENT SUBSTRATES SUCH AS CERAMIC TILES, WATER-RESISTANT ADHESIVE RESIDUES AND EPOXY RESIN LAYERS

Prime the substrate with Sikafloor®-02 Primer undiluted or Sikafloor®-01 Primer undiluted.

PRIMING MAGNESIA SCREEDS (NOT XYLOLITE)

1. Prime the substrate with Sikafloor®-02 Primer undiluted.

PRIMING SUBSTRATES WITH WATER-SOLUBLE ADHESIVE RESIDUE

- Prime the substrate with Sikafloor®-155 WN, Sikafloor®-150, Sikafloor®-151, Sikafloor®-161, or Sika® Primer MB Rapid.
- 2. Fully broadcast the primer with kiln-dried quartz sand
- 3. If the primer is not fully broadcast, apply Sikafloor®-02 Primer before applying the Product.

#### MIXING

#### **IMPORTANT**

#### Incompatibility with Portland cement

The Product is a special cement binder-based mortar which can expand in contact with standard Portland cements.

Do not mix or blend the Product with Portland cements or other binders.

#### **IMPORTANT**

## Reduced Product performance due to overaddition of water

1. Do not add more than the prescribed water amount to the Product.

#### **UNFILLED COMPOUND**

- Pour the minimum amount of water into a suitable clean mixing container.
- 2. IMPORTANT Use an electric single-paddle or double-paddle mixer (< 600 rpm) with a helical, disc-shaped mixing paddle. Mix the water slowly while gradually adding the complete bag of the Product.
- Mix continuously for 2 minutes to achieve a smooth, uniform mix. If necessary, add more water to achieve the required consistency.
- 4. Do not mix for 2 minutes to allow entrained air to escape and for the mixture to mature.
- 5. Mix for a further 1 minute.

#### AGGREGATE-FILLED COMPOUND

- 1. Pour the minimum amount of water into a suitable clean mixing container.
- IMPORTANT Use an electric single-paddle or doublepaddle mixer (< 600 rpm) with a helical, disc-shaped mixing paddle. Mix the water slowly while gradually adding the complete bag of the Product.
- 3. Gradually add the amount of aggregate specified in the mixing ratio.
- 4. Mix continuously for 2 minutes to achieve a smooth, uniform mix. If necessary, add more water to achieve the required consistency.
- 5. Do not mix for 2 minutes to allow entrained air to escape and for the mixture to mature.
- 6. Mix for a further 1 minute.



#### **APPLICATION**

#### **IMPORTANT**

#### Strictly follow installation procedures

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

**IMPORTANT** 

## Subfloor cracking due to incorrect assessment of site requirements

- Bring edge and movement joints through to the finished surface and protect them so the Product will not flow into the joint.
- Use an isolating strip to prevent the Product bonding onto vertical surfaces, such as pipes, ducts, conduits, walls and columns.
- 3. Protect the freshly-applied Product from high ambient temperatures, direct sunlight and draughts.

#### **IMPORTANT**

#### Inadequate protection from water

Using the Product in wet areas unprotected may affect its mechanical properties.

1. Overlay the Product with a waterproofing layer.

#### Subfloor thickness and flatness

Note: The Product must be applied to the required thickness and surface flatness as specified by the floor covering manufacturer.

#### APPLYING A SINGLE LAYER

- 1. Pour the mixed Product onto the substrate.
- Spread the Product evenly using a smoothing trowel, surface blade, screed rake or pin leveller (pin rake) to the required thickness.
- 3. Allow the Product to smooth over the substrate.
- 4. Immediately use a spiked roller to remove any trowel marks or surface defects, as required. Note This step is more likely if a trowel was used for spreading, rather than a pin leveller.

### APPLYING TWO LAYERS

- 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 the Product to smooth over the substrate.
- 4. Immediately use a spiked roller to remove any trowel marks or surface defects, as required. Note This step is more likely if a trowel was used for spreading, rather than a pin leveller.
- 5. Allow the first layer to harden.
- 6. Prime the first layer with Sikafloor®-01 Primer diluted 1:1 with water.
- 7. IMPORTANT In a two-layer application, the thickness of the second layer must not exceed the thickness of the first layer. Apply a second layer of the Product. RECOMMENDED SURFACE CONDITIONING FOR RESIN

Sika South Africa (Pty) Ltd

**FLOORING** 

9 Hocking Place, Westmead, 3608 South Africa Phone +27 31 792 6500 www.sika.co.za







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#### Tensile adhesion strength after conditioning

Note: The tensile adhesion strength of the cured Product with primer and scratch coat must be at least 1.0 N/mm<sup>2</sup>.

- 1. Wait until the Product is ready for overcoating.
- 2. Apply a double coat of Sikafloor®-03 Primer using a fleece roller.
- 3. Allow the primer to harden until the surface is tackfree.
- Apply a scratch coat of Sikafloor®-161 with 2 % Sika® Extender T.
- 5. Inspect the scratch coat and fill any pores with Sikafloor®-161 with 2 % Sika® Extender T.
- 6. Apply the resin flooring product or system.

#### **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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