

PRODUCT DATA SHEET

Sikafloor®-100 Level

POLYMER MODIFIED CEMENTITIOUS FLOOR LEVELLING COMPOUND FOR RESILIENT FLOORING AND CERAMIC TILES. 2–10 MM

PRODUCT DESCRIPTION

Sikafloor®-100 Level 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 mm – 10 mm
- Suitable for application on subfloor heating systems
- Pumpable
- Suitable for castor wheels in accordance with EN 12529
- Polymer modified
- Very low tension / stress on substrate

ENVIRONMENTAL INFORMATION

VOC emission classification GEV-Emicode EC1PLUS, license number 6156/24.02.97

APPROVALS / STANDARDS

CE Marking and Declaration of Performance to EN 13813 - Screed material and floor screeds. Class CT-C25-F6

PRODUCT INFORMATION

Chemical Base	Cement based, Polymer modified
Packaging	25 kg bag Refer to current price list for packaging variations
Appearance / 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 +5 °C and +35 °C. Always refer to packaging.

TECHNICAL INFORMATION

Compressive Strength	Time	Temperature	Value	(EN 13892-2)
	28 days	+23 °C	≥ 25 N/mm ²	
Flexural Strength	Time	Temperature	Value	(EN 13892-2)
	28 days	+23 °C	≥ 6 N/mm ²	
Reaction to Fire	A1 _{fl}			

APPLICATION INFORMATION

Mixing Ratio	~5,8–6,0 L of water for 25 kg of powder								
Consumption	~1,5 kg/m ² /mm This figure is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.								
Layer Thickness	2–10 mm								
Ambient Air Temperature	+10 °C min. / +30 °C max.								
Relative Air Humidity	< 75 %								
Substrate Temperature	+10 °C min. / +30 °C max.								
Substrate Pre-Treatment	<p>Important: ⁽¹⁾ If the layer thickness of Sikafloor®-100 Level 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.</p> <p>Note: (1:3 or 1:1) denotes primer dilution with water. Primer : Water</p> <table border="1"> <thead> <tr> <th>Substrate</th> <th>Primer</th> </tr> </thead> <tbody> <tr> <td>Normal absorbent substrates: concrete, cement screeds, rapid cement screeds</td> <td>Sikafloor®-01 Primer (1:3) or Sikafloor®-03 Primer</td> </tr> <tr> <td>Calcium sulphate substrates ⁽¹⁾</td> <td>Sikafloor®-03 Primer or Sikafloor®-01 Primer (1:1)</td> </tr> <tr> <td>Non-absorbent substrates: ceramic tiles, water-resistant adhesive residues, epoxy resin layers</td> <td>Sikafloor®-02 Primer or Sikafloor®-01 Primer</td> </tr> </tbody> </table>	Substrate	Primer	Normal absorbent substrates: concrete, cement screeds, rapid cement screeds	Sikafloor®-01 Primer (1:3) or Sikafloor®-03 Primer	Calcium sulphate substrates ⁽¹⁾	Sikafloor®-03 Primer or Sikafloor®-01 Primer (1:1)	Non-absorbent substrates: ceramic tiles, water-resistant adhesive residues, epoxy resin layers	Sikafloor®-02 Primer or Sikafloor®-01 Primer
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Pot Life	~30 minutes at +20 °C.								

Waiting Time / Overcoating

Important: Before applying floor covering, make sure the Sikafloor®-100 Level 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.

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 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 ⁽¹⁾

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 Services for additional information on products for levelling and repairing defects.
- Products must be cured before applying Sikafloor®-100 Level.
- 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.
- 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 Services

Mixing equipment

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

MIXING

Important: Do not add more than 6,0 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 5,8–6,0 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 to achieve the required consistency.
4. To allow entrained air to escape and mature, do not mix for ~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.
4. If required, spike roller immediately to remove any trowel marks or surface defects.

5. If a 2nd layer of Sikafloor®-100 Level is to be applied, prime the hardened 1st layer with Sikafloor®-03 Primer or with Sikafloor®-01 Primer (diluted with water 1:1).

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LIMITATIONS

- 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 $\leq 2,0$ CM-% (heating screeds $\leq 1,8$ CM-%). Calcium sulphate screeds are required to have a reading of $\leq 0,5$ CM-% (heating screeds $\leq 0,3$ CM-%).

VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

GISCODE

ZP-1 - cement products, low in chromate.

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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Product Data Sheet

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