

# PRODUCT DATA SHEET

## Sikafloor®-100 Level AE

### CEMENTITIOUS, SELF-LEVELLING UNDERLAYMENT

#### DESCRIPTION

Sikafloor®-100 Level AE is a one part, polymer modified, pumpable, self-levelling, fast hardening cementitious underlayment for the levelling and smoothing of interior floors prior to the application of the final floor finish.

Suitable for use in hot and tropical climate conditions.

#### USES

Sikafloor®-100 Level AE can be applied manually or by pump to level floors at a thickness between 2 and 10 millimeter, prior to the subsequent finishing with ceramic or stone tiles, linoleum, PVC sheet, wood flooring or carpets etc.

- Levelling of both large and small surfaces
- Typical uses are in commercial, residential and domestic properties etc.

Sikafloor®-100 Level AE is particularly suitable for the subsequent application of floor coverings using products from the Sikabond® elastic bonding range, tiling mortars from the SikaCeram® range or Sikafloor range under foot traffic.

#### CHARACTERISTICS / ADVANTAGES

- Fast application because of the good flow and cohesion of the fresh product
- Easy to place by pump or manual application
- Low tension
- Good bond and compaction
- Fast hardening and quick drying

#### PRODUCT INFORMATION

<b>Composition</b>	Polymer modified portland cement and graded aggregates	
<b>Packaging</b>	25 kg bag	
<b>Appearance / Colour</b>	Grey powder	
<b>Shelf life</b>	6 months from date of production.	
<b>Storage conditions</b>	Store in dry conditions in original sealed undamaged packaging at temperatures between +5 °C and +35 °C. Protect from direct sunlight, heat and moisture.	
<b>Density</b>	~2.10 kg/l (Fresh mortar)	

#### TECHNICAL INFORMATION

<b>Compressive Strength</b>	~10 N/mm <sup>2</sup> (24 h / +23 °C)	(EN 13892-2)
	~20 N/mm <sup>2</sup> (28 d / +23 °C)	(EN 13892-2)
<b>Tensile Strength in Flexure</b>	~5 N/mm <sup>2</sup> (28 d / +23 °C)	(EN 13892-2)

## APPLICATION INFORMATION

<b>Mixing Ratio</b>	5.25 to 5.50 L of water per 25 kg bag								
<b>Consumption</b>	~2.10 kg/m <sup>2</sup> /mm This figure is theoretical and does not include for any additional material required due to surface porosity, surface profile, variations in level or wastage etc.								
<b>Layer Thickness</b>	Min. 2 mm Max. 10 mm								
<b>Ambient Air Temperature</b>	+10 °C min. / +35 °C max.								
<b>Relative Air Humidity</b>	75 % max.								
<b>Substrate Temperature</b>	+10 °C min. / +35 °C max.								
<b>Substrate Pre-Treatment</b>	<b>Priming:</b> Sika® Astar: (no dilution with water) application by brush or roller, approximate consumption 0.1 - 0.2 kg/m <sup>2</sup> . Please refer to the relevant Product Data Sheet for recommended applications and details. <b>Or,</b> Sikafloor®-01 Primer: (dilution 1 kg Sikafloor®-01 Primer : 3 l water) application by brush or roller, approximate consumption 70 g/m <sup>2</sup> (210 g/m <sup>2</sup> diluted with water). Please refer to the relevant Product Data Sheet for recommended applications and details.								
<b>Pot Life</b>	~30 minutes (23 °C at 50 % r.h.)								
<b>Waiting Time / Overcoating</b>	Sikafloor®-100 Level can be covered with textile and elastic coverings as follows: <table border="1"><thead><tr><th>Layer Thickness</th><th>Waiting Time</th></tr></thead><tbody><tr><td>≤ 3 mm</td><td>~24 h</td></tr><tr><td>≤ 5 mm</td><td>~48 h</td></tr><tr><td>≤10 mm</td><td>~72 h</td></tr></tbody></table> All values are approximate and are subject to climatic variation. When covering the Sikafloor®-100 Level AE always ensure the moisture content has achieved the required value for the product to cover, as the waiting time will vary with the application thickness and ambient humidity. (Refer to the covering product data sheet)	Layer Thickness	Waiting Time	≤ 3 mm	~24 h	≤ 5 mm	~48 h	≤10 mm	~72 h
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≤ 5 mm	~48 h								
≤10 mm	~72 h								
<b>Applied Product Ready for Use</b>	At +23 °C and 50 % r.h. <table border="1"><tbody><tr><td>Foot Traffic</td><td>~8 h</td></tr><tr><td>Fully Cured</td><td>~7 d</td></tr></tbody></table> <b>Note:</b> Times are approximate and will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity.	Foot Traffic	~8 h	Fully Cured	~7 d				
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Fully Cured	~7 d								

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY / PRE-TREATMENT

Suitable substrates: Concrete, cement screeds

- Concrete substrate must be sound, rough and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum pull off strength of 1.5 N/mm<sup>2</sup>.
- Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.
- Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed.

- The substrate must be sound, rough, clean, dry and free of all contaminants such as dirt, oil, grease, coatings, cement laitance, sinter layers and surface treatments, etc.
- The substrate must have adequate strength, load bearing capacity and dimensional stability.
- Repairs to the substrate, filling of blowholes / voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur®, Sikagard®, SikaRep® or SikaMonotop® range of materials.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.

## MIXING

Add cold water according to the desired consistency into a clean mixing vessel before slowly adding the Sikafloor®-100 Level AE powder. Sikafloor®-100 Level AE should be mixed by using low speed electric mixer (approximate 300 to 400 rpm) for 3 minutes or until the mix is free of lumps. After a short maturing time, mix again thoroughly. In case of higher water temperature, the water could be cooled down by using clean ice.

Note: Do not mix Sikafloor®-100 Level AE with cement or other cementitious product. Do not add extra water or other ingredients. Mix only full bags for best results.

## APPLICATION

### Manual:

Pour the mixed material onto the primed surface and apply by trowel or pin screed rake to the required thickness. Roll thoroughly with a spiked roller in two directions to remove any entrapped air.

### Pump application:

Please contact Sika Technical Department for further information

## CLEANING OF EQUIPMENT

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

## IMPORTANT CONSIDERATIONS

Do not apply on substrates with rising moisture. If rising moisture can occur, an effective damp proof membrane must be applied and be in compliance with the relevant national standard. Requirements defined in relevant valid standards, guidelines and data sheets apply.

Use full surface leveling with a minimum layer thickness of 5 mm when covered with parquet.

## BASIS OF PRODUCT DATA

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

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.

## 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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ISO 9001: Sika UAE LLC,  
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Sika Qatar LLC  
ISO 14001: Sika UAE LLC,  
Sika Gulf B.S.C. (c),  
Sika Saudi Arabia Co. Ltd  
OHSAS: Sika UAE LLC,  
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All products are supplied  
under a management  
system certified to conform  
to the requirements of the  
quality, environmental and  
occupational health &  
safety standards ISO 9001,  
ISO 14001 and OHSAS  
18001.

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