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# PRODUCT DATA SHEET Sikafloor®-300 Level (GR)

Medium duty polymer modified cementitious floor levelling compound. 1–20 mm



## DESCRIPTION

Sikafloor<sup>®</sup>-300 Level (GR) is a medium duty, very low emission, polymer modified, cementitious floor levelling compound. It provides a reduced shrinkage and smooth finish compound on subfloors before the application of floor coverings.

### USES

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

- Wood flooring
- Ceramic tiles
- Seamless resin floors
- Textile floor coverings
- Resilient floor coverings (linoleum, vinyl)

## **CHARACTERISTICS / ADVANTAGES**

- Self-levelling
- Smooth finish
- High levelling capacity of surface irregularities
- High level of hardness and strength
- Suitable for application on subfloor heating systems
- Layer thickness: 1–10 mm. Up to 20 mm with aggregate
- Low shrinkage
- Pumpable
- Low surface porosity
- Good grindability
- Polymer modified
- Drying by hydration process
- 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-C30-F7

## **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 refe to packaging.			

Product Data Sheet Sikafloor®-300 Level (GR) February 2022, Version 01.01 020815030010000304 CE Marking and Declaration of Performance as Cementitious floor screed material, CT-C30-F7, according to EN 13813:2002, based on type testing and factory production control.

## **TECHNICAL INFORMATION**

Compressive strength	Time	Temperature	Value	(EN 13892-2)
	28 days	+23 °C	≥ 30 N/mm²	
Tensile strength in flexure	Time	Temperature	Value	(EN 13892-2)
	28 days	+23 °C	≥ 7 N/mm²	
Reaction to fire	A1/A1 <sub>fl</sub>			(EN 13501-1)

## SYSTEM INFORMATION

System structure	Primer/ Bonding agent:			
	Sikafloor <sup>®</sup> -01 Primer	Universal dispersion primer for ab- sorbent substrates Acrylate based primer for non ab- sorbent substrates		
	Sikafloor <sup>®</sup> -02 Primer			
	Floor levelling compound:			
	Sikafloor <sup>®</sup> -300 Level (GR)	Floor levelling compound, Class CT- C30-F7, acc. to EN 13813		
APPLICATION INFOR	MATION			
Mixing ratio	Sikafloor <sup>®</sup> -300 Level (GR)	~6,3 - 6,5 L of water per 25 kg bag		
	Sikafloor®-300 Level (GR) with aggregates	16 kg or 10 L of quartz sand (0,1–3,0 mm) per 25 kg bag (~65 %		
		by weight) ≤ 6,5 L water per 25 kg bag		
Consumption	~ 1,5 kg/m <sup>2</sup> 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 powder yields approximate	25 kg of powder yields approximately 16.7 lt of mortar		
Layer thickness	Product	Layer thickness		
	Sikafloor <sup>®</sup> -300 Level (GR)	1–10 mm		
	Sikafloor®-300 Level (GR) with ag- gregates	10–20 mm		
	Floor coverings	Minimum layer thickness		

	Parquet / wooden plank covering	2,0 mm	
	Resin floor covering	4,0 mm	
Ambient air temperature	min. +10 °C / max. +30 °C		
Relative air humidity	< 75 %		
Substrate temperature	min. +10 °C / max. +30 °C		
Substrate pre-treatment	<b>Important:</b> (1) If the layer thickness of Sikafloor®-300 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®-		

Note: (1:3 or 1:1) denotes primer dilution with water. Primer : Water

300 Level (GR).

Product Data Sheet Sikafloor®-300 Level (GR) February 2022, Version 01.01 020815030010000304



	Substrate		Primer	
	Normal absorbent subst crete, cement screeds, r ment screeds			. ,
	Calcium sulphate substrates (1)		Sikafloor®-03 Primer or Sikafloor®-01 Primer (1:1)	
	Non-absorbent substrates: ceramic tiles, water-resistant adhes- ive residues, epoxy resin layers and mastic asphalt screeds not fully broadcast Wood based substrates: chip- board, OSB, parquet, wooden planks Magnesia screeds (not xylolite)		Sikafloor <sup>®</sup> -02 Primer or	
			Sikafloor®-03 Primer or Sikafloor®-01 Primer Sikafloor®-02 Primer	
		yionte)		
Pot Life	~30 min. at +20 °C			
	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. Note: Application times will be affected by changing substrate and ambi- ent conditions, layer thickness and water content. Sikafloor®-300 Level (GR)can be covered as follows:			
	Floor covering Wood, ceramic tiles, resin, textile, resi-	_ <b>Layer Thickr</b> ≤ 5 mm	ness	Waiting Time ~24 hours
	lient Wood, ceramic tiles, resin, textile, resi- lient	≤ 10mm		~48 hours
	Ceramic tiles (and Sika- floor®-300 Level (GR) applied on concrete or cementitious screeds)	≤ 20 mm		~3 hours
Applied product ready for use	Note: Time will be affected by changing substrate and ambient condi- tions, 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

- Old mastic asphalt screeds IC10 and IC15 (EN 13813), often contain cracks or are embrittled. This substrate will not generally have sufficient tensile strength for taking a low-stress cementitious levelling compound. Consider using a stress-free gypsumlevelling compound.
- 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.
- Wooden substrates covered with Sikafloor<sup>®</sup>-300 Level (GR) used in combination with a final finish

of ceramic tiles, must be designed as an unbonded system by using a membrane or insulation layer. For more information consult Sika Technical Services.

## ECOLOGY, HEALTH AND SAFETY

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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.

**Product Data Sheet Sikafloor®-300 Level (GR)** February 2022, Version 01.01 020815030010000304



## **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY / PRE-TREATMENT

#### Suitable Substrates

- Concrete
- Cementitious screeds
- Rapid cement screeds
- Calcium sulphate screeds
- OSB boards
- Parquet flooring
- Wooden planks
- Chipboard
- Mastic asphalt screeds (IC 10 and IC15, acc. to EN 13813) thickness 1 - 3 mm
- Magnesia screeds
- Ceramic tiles
- Natural stones

#### Substrate quality

- Cementitious substrates (concrete / screed) must be sound. Repair or relay broken / loose ceramic tiles or stones and securely fix wood substrates to the subfloor.
- 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 weak cementitious or mastic asphalt substrates and levelling layers.
- Remove separation and sinter layers.

#### Pre-treatment

- Prepare cementitious, mastic asphalt, ceramic tile and natural stone substrates mechanically by selecting and using abrasive blast cleaning, grinding or planing, scarifying or abrading (sanding) equipment suitable for the type of substrate.
- The final texture of the substrate must be open textured and gripping.
- Surface defects such as blow holes and voids must be fully exposed using the surface preparation equipment.
- Use products from the Sikafloor<sup>®</sup>, Sikadur<sup>®</sup> and Sikagard <sup>®</sup> 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<sup>®</sup>-300 Level (GR).
- Repair or relay tiles or stones.
- Existing mastic asphalt screeds must be open textured and gripping after preparation or have a rough sand broadcast surface. If the surface is smooth (insufficiently broadcast / worn surface).
   Prime substrate with primer Sikafloor®-02 Primer or Sikafloor®-01 Primer undiluted before applying Sika-

floor<sup>®</sup>-300 Level (GR).

- Wood substrates must be mechanically abraded using sanding equipment to achieve a rough textured gripping surface profile.
- Securely fix loose planks or boards to sub-floor.
   Fill joints, cracks or holes with wood filler to prevent leakage of the applied Sikafloor®-300 Level (GR). Wood filler products must be fully hardened before applying Sikafloor®-300 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®-300 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
- Grinding equipment
- Planing machine
- Scarifying machine
- Abrading (sanding) equipment
- Industrial vacuuming equipment
- For other types of preparation equipment,

contact Sika Technical Dpt.

#### Mixing equipment

- Electric single or double paddle mixer (< 600 rpm) with helical disc-shaped mixing paddle.
- Scraper
- Clean mixing containers

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

#### Application equipment

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

For types of pumping equipment, contact Sika Technical Dpt.

#### MIXING

Important: Do not add more than 6,5 litres of water to

Product Data Sheet Sikafloor®-300 Level (GR) February 2022, Version 01.01 020815030010000304



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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.

#### Unfilled compound

1. Pour ~6,3-6,5 litres of clean water into a clean mixing container.

2. Mix the water slowly while gradually adding the complete bag of powder.

 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.
 To allow entrained air to escape and mature, let the mixture to stand for ~2 minutes.

5. Mix for a further ~1 minute.

#### Aggregate filled compound

1. Pour ~6,3-6,5 litres of clean water into a clean mixing container.

2. Mix the water slowly while gradually adding the complete bag of powder.

3. Gradually add 16 kg of aggregates.

4. Mix continuously for at least 2,0 minutes to achieve a uniform mix. If necessary, add more water (up to the max.) to achieve the required consistency.
5. To allow entrained air to escape and mature, let the mixture to stand for ~2 minutes.

6. Mix for a further ~1 minute.

#### APPLICATION

Important: 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: Before application, confirm substrate moisture content, relative air humidity, dew point, substrate, air and product temperatures. Important: Edge and movement joints must be brought through to the finished surface and must here are the mediate will not flow into the

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:** In a 2-layer application, the 2nd layer must

not exceed the 1st layer thickness. Important: To reduce the risk of cracking, protect freshly applied product from high ambient temperatures, direct sunlight and draughts. Note: If a pin-leveller (pin-rake) is used instead of a trowel. It avoids having to remove trowel marks with a spike roller or to level more than once.

1. Pour the mixed product onto the substrate.

Spread the product evenly using a smoothing trow-

el, 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<sup>®</sup>-300 Level (GR) is to be applied, prime the hardened 1st layer with Sikafloor<sup>®</sup>-03 Primer or with Sikafloor<sup>®</sup>-01 Primer (diluted with water 1:1).

**Recommended surface conditioning for resin flooring** Note: The tensile adhesion strength of the cured Sikafloor<sup>®</sup>-300 Level (GR) / primer / scratch coat must be at least ~ 1,0 N/mm<sup>2</sup>.

1. After the required Sikafloor<sup>®</sup>-300 Level (GR) waiting time, apply by fleece roller, a double primer coat of Sikafloor<sup>®</sup>-03 Primer.

2. Allow primer to harden 'tack free'.

3. Apply a scratch coat of Sikafloor<sup>®</sup>-151 + 2 % Extender T.

4. Inspect scratch coat and fill any pores with Sikafloor®-151 + 2 % Extender T.

5. Apply resin flooring product / system.

#### **CLEANING OF EQUIPMENT**

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.

## 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.

**Product Data Sheet Sikafloor®-300 Level (GR)** February 2022, Version 01.01 020815030010000304



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## **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 Sikafloor®-300 Level (GR) February 2022, Version 01.01 020815030010000304 Sikafloor-300LevelGR-en-GR-(02-2022)-1-1.pdf



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