

PRODUCT DATA SHEET

Sikafloor® Level 30 (AU)

HIGH PERFORMANCE SELF-LEVELLING COMPOUND FOR INTERIOR OR EXTERIOR USE

DESCRIPTION

Sikafloor® Level 30 (AU) is a High performance polymer modified self-levelling compound for interior and exterior applications.

USES

- Industrial medium to high load (heavy-traffic + forklift pallet truck with impact load)
- Finished surface (when sealed or densified)
- Suitable for structural strengthening (principle 4, method 4.4 of EN 1504-9)
- Suitable for restoration work (Principle 3, method 3.1 of EN 1504-9)

ADVANTAGES

- Self smoothing and highly fluid
- Easy to apply by pump or manual application
- High strength > 40Mpa @ 28 days
- Good workability and pot life
- Fast setting and drying
- 3 hours walk on time (+23°C)
- Very low VOC

APPROVAL/STANDARDS

- Initial type tests and factory production control carried out by Test Laboratory HARTL, in Seyring, Austria
- Non-combustible material
- Conforms to the requirements of EN 13813 CT - C40 - F10 - A12
- Conforms to the requirements of EN 1504-3 for principles 3 (CR), 4 (SS) and 7 (RP) as R3 mortar.

PRODUCT DATA

Colours	Powder - Standard grey
Packaging	20kg Bag
Storage & Shelf Life	Nine months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.

TECHNICAL DATA

Chemical base density	Polymer modified rapid hardening cement. 1.25kg/l ± 0.05 (bulk powder) 2.00kg/l ± 0.03 (fresh mortar)
Layer Thickness	3mm min / 30 mm
Thermal Expansion Coefficient	$\alpha \approx 16.3 \cdot 10^{-6}$ per °C (EN 1770) (Temperature range: -20°C to +40°C)

MECHANICAL/PHYSICAL PROPERTIES

	Requirements according to EN 1504-3		
	Results (ITT)	Requirement (R3)	Test methods
Compressive strength	40.2 N/mm ² (MPa)	≥ 25 N/mm ² (MPa)	EN 12190
Adhesive strength	2.2 N/mm ² (MPa)	≥ 1.5 N/mm ² (MPa)	EN 1542
Controlled shrinkage	1.83 N/mm ² (MPa) average	≥ 1.5 N/mm ² (MPa)	EN 12617-4
Skid resistance	Class III	Class I : >40 units wet tested Class II : >40 units dry tested Class III : >55 units wet tested	EN 13036-4
Thermal Compatibility Part 1: Freeze-Thaw	2.25 N/mm ² (MPa)	≥ 2.0 N/mm ² (MPa)	EN 13687-1
Capillary Absorption	0.5 kg*m ⁻² *h ^{-0.5}	≤ 0.5 kg*m ⁻² *h ^{-0.5}	EN 13057

MECHANICAL/PHYSICAL PROPERTIES

Compressive strength	> 18 Mpa (after 24 hours / +23°C) (EN 13892-2) > 40 Mpa (after 28 days / +23°C) (EN 13892-2)		
Flexural strength	> 3 Mpa (after 24 hours / +23°C) (EN 13892-2) > 10 Mpa (after 28 days / +23°C) (EN 13892-2)		
Sip resistance	Slip Resistance Values (ENV 12633:2003)		
	Substrate	SRV Dry	SRV Wet
	Sikafloor Level-30 (AU)	75	55
Abrasion resistance	TRRL Pendulum, Rapra 4S Slider Class A 12 (EN 13892-3) (12 cm ³ / 50 cm ² wear) acc. to Böhme AR 0.5 (EN 13892-4) (< 50 µm) acc. to BCA RWA 100 (EN 13892-5) (< 100 cm ³) acc. to RWA		

SELF LEVELLING

NEAT: 20kg bag of Sikafloor® Level 30 (AU) mixed with water covers 4m² at 3mm thick, or equal 12L of product. Recommended build 3 – 30mm in one application.

BULKING: 5kg of clean 2 – 3mm aggregates may be mixed with 20kg of Sikafloor® Level 30 (AU), this will cover 1m² at 15mm or equal 15L of product. Recommended build 10 – 50mm in one application. **DO NOT** add additional water if using bulking aggregates.

COVERAGE

NEAT= 12L
BULKED -4:1= 15L

SUBSTRATE QUALITY & PREPARATION

The concrete substrate must be sound and of sufficient compressive strength(min. 25 Mpa) with a minimum pull off strength of 1.5 Mpa. Industrial applications should have a fresh mechanical profiled surface prior to applying primer and Sikafloor Level 30. See priming applications below for further details. Concrete floors should be fully cured, structurally sound, clean, dry, and free of efflorescence, surface contaminants and dust for Eg. Concrete must accept water penetration. Test by lightly sprinkling water on various areas of the substrate. If water penetrates, then a good bond with a selected primer can be achieved. If water beads and fails to be absorbed by the concrete surface contaminants are present then loss of adhesion may occur. Contaminates that are present should be mechanically removed before installation. All Substrates should be moisture tested prior to the application of Sikafloor levelling systems. If concrete is high in moisture a suitable barrier & primer should be selected. Ambient temperature of surfaces and materials should be maintained at temperatures higher than 9°C. For repairs to the substrate speak with a Sika Technical Representative in your state.

PRIMING

- Sikafloor® 01 Primer – Mix ratio diluted 1:2 or 1:3 with clean water
- Sikafloor® Level PRO Primer - undiluted (Neat)

Note: Correct amount of primer should always be applied to the prepared

substrate giving good penetration and film build. Thin applications may result in pinholing in finished surface or debonding levelling compound from the substrate. Do Not allow primer to pool while drying. On particularly porous (mechanically profiled) surfaces or where the initial prime coat is absorbed immediately a second coat is recommended. Dry time 10 – 30 min (per coat) Primer should be allowed to dry as recommended for the specific primer prior to the application of Sikafloor® Levelling Systems.

APPLICATION CONDITIONS / LIMITATIONS

- Substrate Temperature +9°C min. / +30°C max.
- Ambient Temperature +9°C min. / +30°C max.

BEWARE OF CONDENSATION!

Do Not allow Sikafloor® Level 30 (AU) to get wet in first 24 hrs after application. The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation, blooming or cement laitance on the floor finish.

MIXING

When mixing manually place 3.7 – 3.8 L of cool water into a suitable sized vessel. Add a full bag (20kg) of Sikafloor® Level 30 (AU) powder slowly to the water, mixing continuously.

- Additional water over the recommended amount stated may result in poor product performance and possible failure.

HAND MIXING

Mix thoroughly for a minimum of 3 minutes with a suitable high speed drill and mixing paddle.

- Mixing for the recommended time will provide maximum product performance.

APPLICATION

Pour or pump Sikafloor® Level 30 (AU) then spread with a long handled gauged rake, stand up trowel, screed bar to required thickness. For small touch-ups use a flat steel hand trowel. To help optimise colour consistency the use of a spike roller is recommended during the application. If Sikafloor® Level 30 (AU) is being use as a finished surface a seal coat using a densifying liquid or similar is recommended. A light grind / heavy sand prior to applying Sikafloor® epoxy coatings is recommended to improve penetration and bond strength. A keyed surface must be achieved.

CLEANING OF TOOLS

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

POT LIFE

Conditions	Time
+23°C / 50% r.h	15 minutes

The temperature will affect the pot life. Application at temperatures above +23°C will reduce the pot life and the working time. Temperatures below +23°C will increase the pot life and extend the working time.

WAITING TIME: COATING & SEALING

Suitable for moisture sensitive coatings (epoxy) after	
Product thickness	Waiting time
Layer thickness up to 20mm:	~ 24h
Layer thickness up to 50mm:	~ 48h
Suitable for Sealing & Densifying liquids after	
Layer thickness up to 20mm:	~ 24h
Layer thickness up to 50mm:	~ 48h

All times are approximate and at +23°C and 50% r.h. and thus will be affected by changing site conditions, particularly the temperature and relative humidity. When applying industrial coatings to Sikafloor® Level 30 (AU) always ensure the moisture content has achieved the required value for the coating product, as the waiting time will vary with the application thickness and ambient humidity. (Refer to the top coat product data sheet)

NOTES ON APPLICATION / LIMITATIONS

- Do not buff / grind within 48 hrs of application.
- Do not mix with other cements or cement based screeds.
- No loading for at least 6 hours.
- Freshly applied Sikafloor® Level 30 (AU) must be protected from damp, condensation and water for at least 24 hours.
- Do not exceed the recommended water dosage. Overwatering will result in product inconsistencies and possible failures.
- Due to the natural variability of the raw materials of the self-levelling screeds, the finished surface may present some colour variations.
- The surface must be sealed for a final floor finish. Failure to do so may result in permanent staining and displeasing aesthetic appearance.
- Temperatures below +20°C extend the drying times.
- Not suitable for slopes or inclines > 0.5%.
- Protect from hot direct sunlight, hot strong winds and extremes of temperature to avoid cracking or crazing for 12hrs after being applied. Small superficial hairline cracks or crazing sometimes occurs under these conditions and do not constitute a reason for claim. The thickness of the levelling mortar has to be at least 3mm when using water-based adhesives under impermeable or vapour tight floor finishes.

CURING DETAILS

At +23°C and 50% r.h.	
Foot traffic	~ 3 hours
Lightly serviceable	~ 24 hours
Fully serviceable	~ 7 days

APPLIED PRODUCT READY FOR USE:

Note: Times are approximate and will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity.

HEALTH AND SAFETY INFORMATION

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet containing physical, ecological, toxicological and other safety-related data. Sentences required according to Blue Angel seal scope of use:

- Keep out of reach of children
- Ensure good ventilation during and after application and drying
- Avoid eating, drinking or smoking while processing this product
- In case of contact with eyes or skin rinse immediately with plenty of water.
- Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil
- Only properly emptied containers may be recycled. Dried product residues can be disposed of as normal household waste
- Wear protective gloves
- Storage conditions: Keep in dry and cool place. Reseal container tightly immediately after use

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.