BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor® Level-15

Cementitious self levelling, fast hardening, underlayment for use 0.5 - 15 mm

DESCRIPTION

Sikafloor® Level-15 is a one part, polymer modified, pumpable self levelling fast hardening cementitous underlayment for the levelling and smoothing of interior floors prior to the application of the final floor finish.

USES

Sikafloor® Level-15 can be applied manually or by pump to level floors at a thickness between 0.5 - 15mm, prior to 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.
- Provides a suitable substrate for ceramic, stone or vitrified clay tiles, carpets and wood flooring

Sikafloor® Level-15 is compatible with the Sika adhesives used to lay these types of floor finishes.

CHARACTERISTICS / ADVANTAGES

- Fast application because of the good flow and cohesion of the fresh product
- Easy to place by pump or manual application
- Capable of levelling surfaces from 0.5 to 15 mm
- Reduced shrinkage. Good bond and compaction
- Fast hardening and good drying
- Good surface hardness

APPROVALS / STANDARDS

All values indicated are internal test results according to EN 13892-2 and EN 13892-8. Conforms to the requirements of EN 13813 CT - C25 - F6

PRODUCT INFORMATION

Chemical Base	Polymer modified Portland cement
Packaging	20 kg bags
Shelf Life	Nine (9) months from date of production if stored as stated.
Storage Conditions	Store properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.
Appearance / Colour	Standard grey powder
Bulk Density	1.02 kg/l ± 0.05 (bulk powder)

TECHNICAL INFORMATION

Compressive Strength	After 24 hours at +20°C	> 15 MPa	(EN 13892-2)
	After 28 days at +20°C	> 25 MPa	
Flexural Strength	After 28 days at +20°C	> 5.0 MPa	(EN 13892-2)
Tensile Adhesion Strength	After 28 days at +20°C	> 1.5 MPa	(EN 13892-2)

SYSTEM INFORMATION

System Structure

Priming:
Prime substrate with Sikafloor®-01 Primer or Sika® Pour on Floor Primer. Can also be primed with Sikafloor®-150 or Sikafloor®-151,fully broadcast with 0.4 - 0.7mm quartz sand. Please refer to the relevant PDS for recommended applications and details.
Levelling:
Place to the required thickness 0.5 - 15mm. Sikafloor® Level-15 is particularly suitable for the subsequent application of floor coverings using products from the Sikabond® elastic bonding range or tiling mortars from the SikaCeram® range.

APPLICATION INFORMATION

Fresh mortar density

1.95 kg/l ± 0.03

Consumption

~ 1.55 ± 0.1 kg of dry powder/m²/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.

Layer Thickness

Minimum: 0.5 mm. Maximum: 15 mm.

Ambient Air Temperature

+8°C min. / +30°C max.

Relative Air Humidity

~ 75% max.

Substrate Temperature

+8°C min. / +30°C max.
Dew Point: Beware of condensation! 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.

Pot Life

Approx. 25 minutes (+20°C / 50% R.H.)
The temperature will affect the pot life. Application at temperatures above +20°C will reduce the pot life and the working time. Temperatures below +20°C will increase the pot life and extend the working time.

Waiting Time / Overcoating

Suitable for overcoating after 24 hours in 5mm thickness where 3% (Tramex) substrate moisture content is required. Times are approximate at +23°C and 50% r.h. and will be affected by changing substrate and ambient conditions, particularly the temperature and relative humidity. When overcoating Sikafloor® Level-15 always ensure the moisture content has achieved the required value for the coating product, as the waiting time will vary with application thickness, temperature and ambient humidity. (Refer to the top coat product data sheet.)

Applied Product Ready for Use

Foot traffic	~ 3 hours	(+20°C and 50% r.h.)
Lightly serviceable	~ 24 hours	
Fully servicable	~ 7 days	

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

LIMITATIONS

- Very absorbent substrates must be saturated with water or primed to prevent loss of the mixing water into the substrate, which can cause problems such as shrinkage, the appearance of surface pores, or weak and dusty surfaces, etc.
- Do not mix with other cements or cement based screeds.
- No loading for at least 3 hours.
- Freshly applied Sikafloor® Level-15 must be protected from damp, condensation and water for at least 24 hours.
- Do not exceed the recommended water dosage. Do not add more water when the product is setting.
- Do not exceed the recommended thickness.
- Do not use for direct wheel traffic, external or industrial applications.
- Temperatures below +20°C extend the drying times.
- Sikafloor® Level-15 does not provide an aesthetic finish. Product must always be overcoated.
- Do not use Sikafloor® Level-15 in areas where it can be exposed to moisture, such as below ground floors without an effective damp proof membrane, or externally in any area.
- Not suitable for slopes or inclines > 0.5%.
- Protect from direct sunlight, hot or strong winds and extremes of temperature to avoid cracking or crazing.
- When overcoating with SikaCeram or Sikabond adhesives (or others), additional mechanical surface preparation may be required to remove any cement laitance which may have formed during application.
- For adhesives other than SikaCeram or Sikabond we recommend a test application prior to use.
- The thickness of the levelling mortar has to be at least 3mm when using waterbased adhesives under impermeable or vapour tight floor finishes.
- At thicknesses greater than 3mm or with floating screeds an edge strip must be placed to separate the screed from the walls and other construction elements.

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

SUBSTRATE QUALITY / PRE-TREATMENT

Substrate Moisture Content: The substrate can be in a saturated surface dry condition, but there must be no rising moisture prior to dampening according to ASTM D 4263 (Polyethylene-sheet test). For further information please refer to the Product Data Sheet of the priming system used.

- The concrete substrate must be sound and of sufficient compressive strength (min. 25 MPa) with a minimum pull off strength of 1.5 MPa.
- The surface must be clean, dry and free of all contaminants e.g. dirt, oils, grease, coatings and surface treatments etc. If in doubt apply a test area first.
- 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.
- Repairs to the substrate, filling of blowholes/voids must be carried out using appropriate products from the SikaTop, Sika MonoTop, Sikafloor, SikaDur and Sikagard range of materials.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.
- A suitable one part acrylic primer such as Sikafloor-01 Primer ot Sika Pour on Floor Primer shall be used to ensure sealing of the substrate, preventing the appearance of bubbles on the underlayment surface and improving the bond to the substrate. Please refer to the relevant PDS. Poor or weak substrates must be primed with Sikafloor-150 or Sikafloor-151 fully broadcast with 0.4 - 0.7mm quartz sand.

MIXING

Mixing: When mixing manually, place 4.6 – 4.8 litres of cool, clean water into a suitable sized clean vessel. Add a full bag (20 kg) of Sikafloor® Level-15 powder slowly to the water, mixing continuously. Mix thoroughly for a minimum of 3 minutes using a low speed electric stirrer (~ 300 - 400 rpm).

APPLICATION

Pump: Use a conventional floor screed dual stage mixer and pump, and control the water dosage to achieve the required flow, measuring the final average flow diameter on a flat, clean, dry flow table.

Cylinder according to EN 12706:2000 **Internal diameter: 30mm** **Height: 50mm**	**ASTM C 230-90 / EN 1015-3** **Top internal diam: 70mm** **Bottom internal diam.: 100mm** **Height: 60mm**
Flow = 130mm ± 5mm (4.8 litres per 20 kg)	Flow = 340mm ± 10mm (4.8 litres per 20 kg)

After placing onto the surface, 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.

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.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened / cured 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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