



Sikafloor® Level 50

Deep Section Cementitious Self Smoothing Sub-Floor Screed (Formerly Armorfloor SF 50)

Technical Data Sheet

DESCRIPTION

Sikafloor Level 50 is a one component, polymer modified, smoothing sub-floor compound which can be applied manually to achieve rapid flat, economic substrate levelling between 20-50 mm prior to the application of the final floor finish.

USES

- * Factories.
- * Manufacturing facilities.
- * Commercial buildings.
- * Cellars.
- * Corridors.
- * Warehouses.
- * Hospitals.
- * Domestic.
- * 'Weekend' floor repairs.
- * Levelling pre-cast concrete units.
- * Pre-leveller for **Sika-Trocal** roof membranes.

ADVANTAGES

- * Self smoothing and highly fluid.
- * Levels and renovates old floors.
- * Rapid drying.
- * 4 hour walk on time (20°C).
- * Excellent underlay for tiles or sheet systems.
- * Excellent underlay for resin flooring.
- * Protein free.
- * Low odour.

Technical Data (typical)

Colours:	Natural grade (Beige)
Density (SG):	2.10 kg/litre (wet) 1.90 kg/litre (dry)
Application temperatures:	+10°C min, +25°C max (Substrate and ambient)
Application thickness:	20 mm minimum 50 mm maximum

MECHANICAL PROPERTIES:

Additional application information:	All data tested at +20°C
Compressive strengths:	20 N/mm ² @ 24 hours >28 N/mm ² @ 28 days
Pot life:	20 mins
Overcoating:	Water based materials 8 hrs Solvent free materials 24 hrs Solvented materials 36 hrs
Final drying times:	
Foot traffic	4 hrs
Lightly serviceable	1 day
Fully serviceable	2 days

All above values are approximate.

SYSTEM TABLE

Final Top Surface	Substrate Priming System	Screed Layer	Multi-layer Bonding Primer	Topping	
				Sikafloor®	Other
Uncoated or open for water vapour diffusion	Sikafloor 155W (0.3 kg/m ²) broadcast with quartz sand (0.6-1.2 mm) @ 2 kg/m ²	Sikafloor Level 50	SikaGard 552W Aquaprimer (0.1-0.2 litres/m ²) (wet on wet)	Nothing or vapour permeable system	
Sealed with an impervious system (resin/sheet/tile)	Sikafloor 156/261 (0.3 kg/m ²) broadcast with quartz sand (0.6-1.2 mm) @ 2 kg/m ²			Sikafloor Primer (156/2530W) + Sikafloor Resin System	Conventional sheet/tile system

SURFACE PREPARATION

The cementitious substrate should be sound and of sufficient compressive strength. (Min 25 N/mm²) .

Minimum pull off strength 1.5 N/mm².

The surfaces must be dry and free of all contaminants eg oils, grease, surface treatments and coatings etc. The substrate must be prepared mechanically to achieve an open textured fine gripping surface, free of cement laitance. Weak concrete should be removed and surface defects such as blowholes and voids must be fully exposed.

All dust, loose and friable material must be completely removed from all surfaces before application of the coating preferably by brush and vacuum.

Ensure that an effective damp proof membrane is in place before installation of **Sikafloor Level 50**. For advice on how to achieve this, please contact Sika Limited Technical Department.

Prime substrate using the appropriate primer (see system table), ensuring aggregate is blinded into the wet primer.

MIXING

Mix the dry powder (25 kg) with clean water. The water addition should be 3.4 litres per 25 kg of material. Thoroughly mix with a low speed electric stirrer (300-400 rpm) for a minimum of 3 minutes until a uniform mix has been achieved. Leave material to stand in container until the majority of air bubbles have dispersed.

APPLICATION

Pour the mixed material onto the primed surface and apply by trowel or pin screed rake to the required thickness. Since it is not possible to effectively spike roll material at depths in excess of 15 mm some air bubbles may be left at the surface.

This in no way detracts from the performance of the product.

IMPORTANT NOTES

- * Freshly applied **Sikafloor Level 50** should be protected from damp, condensation and water for at least 24 hours.
- * Do not exceed the recommended water dosage.
- * Low temperatures extend the drying times.
- * Temperature variations will affect the pot life.
- * **Sikafloor Level 50** does not provide an aesthetic finish. Product should always be overcoated or overlaid.
- * Not suitable for slopes or inclines >0.5%.
- * When applying outside, protect from direct sunlight, hot or strong winds and extremes of temperature to avoid cracking or crazing.
- * When overcoating with **Sikafloor** resins, mechanical preparation is required to remove any laitance which may have formed during application.
- * Any subsequent layers of **Sikafloor Level** should be bonded using a bonding primer of **SikaGard 552W Aquaprimer**.
- * For deep sections, improved aesthetics may be obtained using 6-7 mm (approx) topping layer of **Sikafloor Level 25**.

CLEANING EQUIPMENT

Use water. Hardened material may have to be mechanically removed.

PACKAGING

Powder: 25 kg bags.

CONSUMPTION

Approximately 2.10 kg/m²/mm. (These figures do not allow for surface porosity, profile or wastage).

STORAGE AND SHELF LIFE

Minimum 12 months in sealed containers stored in dry warehouse conditions (+5°C - +25°C).

Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

Important Note

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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Please consult our Technical Sales Department for further information

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