

Sikafloor® Level 25

Cementitious Self Smoothing Sub-Floor Screed (Formerly Armorfloor SF Plus and Armorexpress)

Technical Data Sheet

DESCRIPTION

Sikafloor Level 25 is a one component, polymer modified, versatile and durable sub-floor Pumpable Cementitious Screed which can be applied manually or by pump to achieve rapid, flat, economic substrate levelling 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 planks.
- * Roof membrane pre-leveller

ADVANTAGES

- * Self smoothing and highly fluid.
- * Pumpable or manual application.
- * 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)
Coloured (various available)

Density (SG): 2.15 kg/litre (wet)
1.77 kg/litre (dry)

Application temperatures: +10°C min, +25°C max
(Substrate and ambient)

Application thickness: 5 mm minimum
25 mm maximum

MECHANICAL PROPERTIES:

Additional application information: All data tested at +20°C

Compressive strengths: 20 N/mm² @ 24 hours
>35 N/mm² @ 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 25	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 25**. 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 (Hand Application)

Mix the dry powder (25 kg) with clean water. The water addition should be between 4.8 - 5.25 litres per 25 kg of material. When overworking with a **Sikafloor** resin, the ratio should be 4.8 litres per 25 kg of material. When overcoating with a tile or sheet flooring system 5.25 litres per 25 kg of material can be used. 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

Pump

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

Flow - 220 mm ± 5 mm (@ 5.25 litres per 25 kg) (natural).
- 205 mm ± 5 mm (@ 5.25 litres per 25 kg) (coloured)

Flowcone - internal diameter 45 mm, length 68 mm.

After placing onto the primed surface apply by trowel or pin screed rake to the required thickness. Thoroughly spike 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. Thoroughly spike roller in two directions to remove trowel marks and any entrapped air.

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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IMPORTANT NOTES

- * Freshly applied **Sikafloor Level 25** 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 25** (natural) does not provide an aesthetic finish. Product should always be overcoated.
- * 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 25** should be bonded using a bonding primer of **SikaGard 552W Aquaprimer**.
- * For sections >12 mm thickness, to achieve maximum aesthetics and optimum de-aeration with the spiked roller, use a 5 mm (approx) topping layer.
- * Applications of 3 mm are possible for domestic and light traffic environments.
- * If a clear coating is to be used or the screed is to be left unsealed (not recommended) a coloured grade should be used. **Sikafloor Level 25** (natural) is lightly pigmented to achieve a uniform appearance.

CLEANING EQUIPMENT

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

PACKAGING

Refer to latest price list

CONSUMPTION

Approximately 1.77 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).