BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor®-150 Plus

Low-odour epoxy primer, levelling mortar and mortar screed

PRODUCT DESCRIPTION

Sikafloor®-150 Plus is a two-part, low-odour, low-viscosity, multipurpose epoxy resin which can be used as an epoxy primer, levelling mortar and mortar screed.

USES

Sikafloor®-150 Plus installation works to be carried out only by Sika Approved Contractors. Please observe information given by Product Data Sheets.

Sikafloor®-150 Plus is used as a:
- Primer for concrete substrates, cement screeds and epoxy mortars
- Primer for normal to strongly absorbent surfaces
- Primer for Sika® epoxy and polyurethane flooring systems

CHARACTERISTICS / ADVANTAGES

- Low odour
- Low viscosity
- Good penetration
- Good bond strength
- Multipurpose

APPROVALS / STANDARDS

- CE marking and declaration of performance based on EN 13813:2002 Screed material and floor screeds — Screed material — Properties and requirements — Synthetic resin screed material
- CE marking and declaration of performance based on EN 1504-2:2004 Products and systems for the protection and repair of concrete structures — Surface protection systems for concrete — Coating

PRODUCT INFORMATION

Chemical Base	Solvent-free epoxy	
Packaging	Container Part A	18.5 kg
	Container Part B	6.5 kg
	Container Part A + Part B	25 kg ready to mix units
	Sikafloor®-150 Plus is also available in 2.5 kg and 10 kg unipacks. Refer to the current price list for available packaging variations.	
Colour	Part A	Transparent
	Part B	Brownish
Shelf Life	24 months from date of production	
Storage Conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to the packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.	

Density	Mixed Product	1.08 kg/l	(EN ISO 2811-1)
	Part A	1.13 kg/l	
	Part B	0.99 kg/l	
Solid content by mass	100 %		
Solid content by volume	100 %		
Colour	Part A	Liquid	
	Part B	Liquid	

TECHNICAL INFORMATION

Shore D Hardness	Cured 14 days at +23 °C	83	(EN ISO 868)
Tensile adhesion strength	> 1.5 N/mm² (failure in concrete)		(EN 1542)
Service Temperature	Short-term, maximum 7 days	+60 °C	

IMPORTANT
Product damage due to mechanical and chemical strain at elevated temperatures
While the Product is exposed to temperatures up to +60 °C, simultaneous mechanical or chemical strain may cause damage to the Product.
1. Do not expose the Product to chemical or mechanical strain at elevated temperatures.

APPLICATION INFORMATION

Mixing Ratio

Part A : Part B (by weight)	74 : 26

Consumption

Coating system	Product	Consumption
Primer	1–2 × Sikafloor®-150 Plus	1–2 × 0.3–0.5 kg/m²
Levelling mortar or scratch coat	1 pbw Sikafloor®-150 Plus + 1 pbw quartz sand (0.1–0.3 mm) + 0.015 pbw Sika® Extender T	1.7 kg/m² per mm of thickness
Bonding agent	1–2 × Sikafloor®-150 Plus	1–2 × 0.3–0.5 kg/m²
Mortar screed (15–20 mm layer thickness) / Repair mortar	1 pbw Sikafloor®-150 Plus + 10 pbw quartz sand	2.2 kg/m² per mm of thickness

The following sand mixtures are suitable for layer thicknesses of 15–20 mm:
- 25 pbw quartz sand 0.1–0.5 mm
- 25 pbw quartz sand 0.4–0.7 mm
- 25 pbw quartz sand 0.7–1.2 mm
- 25 pbw quartz sand 2–4 mm

The maximum grain size must not exceed 1/3 of the finished layer thickness. Aggregates and the most suitable mix should be selected depending on the grain shape and application temperatures. For mortar mixes, practical trials should be carried out to assess the appropriate aggregate grain size distribution.

Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the product to a test area to calculate the exact consumption of the specific substrate conditions and proposed application equipment.

Product Temperature	Maximum	+30 °C
	Minimum	+10 °C
Ambient Air Temperature	Maximum	+30 °C
	Minimum	+10 °C
Relative Air Humidity	Maximum	80 % r.h.
Dew Point	Beware of condensation. The substrate and uncured applied product must be at least +3 °C above the dew point to reduce the risk of condensation or blooming on the surface of the applied product. Low temperatures and high humidity conditions increase the probability of blooming.	
Substrate Temperature	Maximum	+30 °C
	Minimum	+10 °C

Substrate Moisture Content

Substrate	Test method	Moisture content
Cementitious substrates	Calcium carbide (CM method)	≤ 4 %
Cementitious substrates	ASTM D4263 (polyethylene sheet)	No rising moisture

Pot Life

+10 °C	60 minutes
+20 °C	30 minutes
+30 °C	15 minutes

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

Waiting Time / Overcoating

Substrate temperature	Minimum	Maximum
+10 °C	17 hours	4 days
+20 °C	9 hours	2 days
+30 °C	7 hours	1 day

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

VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTS

Refer to the following method statements:
- Sika Method Statement — Evaluation and preparation of surfaces for flooring systems
- Sika Method Statement — Sikafloor® mixing and application

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

APPLICATION INSTRUCTIONS

EQUIPMENT

MIXING EQUIPMENT
- Electric double-paddle mixer (> 700 W, 300 rpm to 400 rpm)

APPLICATION EQUIPMENT
- Squeegee
- Fleece roller

SUBSTRATE QUALITY

Cementitious substrates must be structurally sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1.5 N/mm².
Substrates must be clean, dry and free of contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

SUBSTRATE PREPARATION

MECHANICAL SUBSTRATE PREPARATION

IMPORTANT

Surface defects due to voids in the substrate

1. If not repaired during preparation, voids and blow holes in the substrate will weaken the surface and damage the covering product.
2. Fully expose blow holes and voids during surface preparation to identify the required repairs.
3. Remove weak cementitious substrates.
4. To remove cement laitance, prepare cementitious substrates mechanically using abrasive blast cleaning, abrasive planing or scarifying equipment.
5. Where thin layer resins will be applied, high spots should be removed by proper grinding equipment.
6. Remove all dust and loose and friable material from the application surface with industrial vacuuming equipment.
7. Level the surface or fill cracks, blow holes and voids with products from the Sikafloor®, Sikadur® and Sikagard® range of materials.

For additional information on products for levelling and repairing defects, contact Sika® Technical Services.

SUBSTRATE PREPARATION OF NON-CEMENTITIOUS SUBSTRATES

For information on substrate preparation of non-cementitious substrates, contact Sika® Technical Services.

TREATMENT OF JOINTS AND CRACKS

Construction joints and existing static surface cracks in the substrate require pre-treating before full layer application. Use Sikadur® or Sikafloor® resins.

MIXING

Note: To increase the viscosity of the Product you can add Sika® Extender T.

TWO-PART MIXING PROCEDURE

1. Mix Part A (resin) for ~30 seconds.
2. Add Part B (hardener) to Part A.
3. IMPORTANT Do not mix excessively. Mix Part A + B continuously for ~3 minutes until a uniform mix is achieved.
4. To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
5. During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

LEVELLING MORTAR AND RESIN SCREED MIXING PROCEDURE

1. Mix Part A (resin) for ~30 seconds.
2. Add Part B (hardener) to Part A.
3. While mixing Parts A + B, gradually add the required filler or aggregates.
4. IMPORTANT Do not mix excessively. Mix for a further 2 minutes until a uniform mix is achieved.
5. To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
6. During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

IMPORTANT CONSIDERATIONS

Protect from moisture: After application, protect the Product from damp, condensation and direct water contact for at least 24 hours.

Damaged finish due to heating with fossil fuel heaters: Fossil fuel heaters powered by gas, oil or paraffin produce large quantities of both carbon dioxide and water vapour, which may adversely affect the finish. For temporary heating, use only electrically powered warm air blower systems. Do not use gas, oil, paraffin or other fossil fuel heaters.

Pinholes caused by the application during rising temperature: If the Product is applied to porous substrates during rising temperature, pinholes may form from rising air. Apply the Product during falling temperatures.

Blistering caused by pin holes: If pin holes are present after the Product has cured, blistering may occur in the subsequent layer. Close any pin holes using the following steps.

1. Lightly grind the cured surface.
2. Apply a scratch coat consisting of the Product mixed with ~3 % of Sika® Extender T.

STANDARD PRIMER APPLICATION

1. Pour the mixed Product onto the substrate. Note For consumption, refer to Application Information.
2. Apply the Product evenly over the surface with a short pile roller or a squeegee.
3. Back-roll the surface in two directions at right angles with a fleece roller. Note Maintain a "wet edge" during application to achieve a seamless finish.
4. If broadcasting is required, wait between 15 and 30 minutes, then broadcast the surface with quartz sand. Broadcast lightly at first, then to excess.
5. IMPORTANT Confirm waiting time to overcoating is achieved before applying subsequent products. (Refer to the "waiting time to overcoating" section of Application Information) Once the product has hardened sufficiently, remove all loose sand with industrial vacuuming equipment.

SCRATCH COAT

1. Pour the mixed Product onto the substrate. Note For consumption, refer to Application Information.
2. Apply the Product evenly over the surface with a trowel or a squeegee.

BONDING AGENT

1. Pour the mixed Product onto the substrate. Note For consumption, refer to Application Information.
2. Apply the Product evenly over the surface with a brush, fleece roller or a squeegee.
3. Back-roll the surface in two directions at right angles with a fleece roller. Note Maintain a "wet edge" during application to achieve a seamless finish.
4. **(Optional)** If required, apply a second priming coat.

RESIN SCREED

Not suitable for contact with water: The Product is not suitable for contact with water unless sealed with seal coat.

1. Pour the mixed Product "wet on wet" onto the still tacky primer. Note For consumption, refer to Application Information.
2. Spread and compact the Product with a trowel to the required thickness between screed rails / battens, if installed.
3. Level the screed surface with a levelling beam spanning onto the screed rails / battens.
4. Finish the surface to the required surface texture with trowels or walk-behind power floats.

RESIN PATCH REPAIR MORTAR

1. Pour the mixed Product "wet on wet" onto the still tacky primer.
2. Apply the Product with a trowel to the required thickness.
3. Compact the applied product with a trowel.
4. IMPORTANT Confirm waiting time to overcoating is achieved before applying subsequent products. (Refer to the "waiting time to overcoating" section of Application Information). Smoothen the surface with a trowel.

CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Thinner C immediately after use. Hardened material can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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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