

TECHNICAL DATA SHEET

Stafloor EP Primer®

Colourless EP primer and binding matrix for EP mortars and screeds.

Product description

Stafloor EP Primer is a reliable 2-component, solvent-free epoxy resin binder.

Fields of application

It is intended for use as a primer for concrete and cement coverings, as a binding matrix for epoxy resin screeds, for repairs, in levelling mortars, and for forming plinths, baseboards, and gullies.

It is used in flooring systems, for example, in industrial, exhibition, and retail spaces, warehouses, paper mills, food processing plants, and nuclear power plants, in environments with heavy pedestrian, forklift, and vehicle traffic.

Characteristics

- Universal application.
- Colourless.
- Low odour.
- High penetration capabilities.
- Good adhesion to substrate.
- Dust-suppressing and pore-sealing.

Product data

Colour shade Colourless.

Packaging standard

Stafloor EP Primer (set)	22.5 kg net, including:
Stafloor EP Primer Komp. A:	15.0 kg (main component).
Stafloor EP Primer Komp. B:	7.5 kg (hardener).

Shelf life 12 months in a dry environment in originally sealed containers at temperatures between +3 °C and +30 °C.

The expiration date of the warranty period of storage is indicated on the container labels.

Technical data

Density (mixture) $\cong$ 1.1 kg/l, DIN 53217.

Thermal stability Without simultaneous chemical or mechanical load.

Primer coating:	continuous exposure up to +50 °C,
Epoxy coating:	continuous exposure up to +80 °C,
	Short-term exposure: in a dry environment up to 120 °C, in a humid environment up to +100 °C.

Systems

Coating structure, material consumption

Structure	Material	Consumption
Primer		
Primer	Stafloor EP Primer	0.25 – 0.40 kg/m ² depending on the surface
	Quartz sand 0.1 - 0.7 mm	0.80 – 1.00 kg/m ²
Levelling filler and primer coating		
Levelling filler	Stafloor EP Primer + quartz sand 0.1 – 0.7 mm	≅ 1.20 kg/m ² of mixture: 0.40 kg/m ² Stafloor EP Primer (1 part by weight) 0.80 kg/m ² of quartz sand* (2 parts by weight)
Dressing compound	Quartz sand 0.1 – 0.7 mm	0.80 - 1.00 kg/m ²
Epoxy screed, thickness ≅ 8 mm		
Primer	Stafloor EP Primer	0.25 – 0.40 kg/m ² depending on the surface
Epoxy screed	Stafloor EP Primer + Quartz sand 0.1 – 0.7 mm + Quartz sand 1.0 – 1.5 mm + Quartz sand 2.0 – 3.0 mm	≅ 19.8 kg/m ² of mixture at 8 mm: 1.80 kg/m ² Stafloor EP Primer (1 part by weight) 9.00 kg/m ² of sand 0.1 – 0.7 mm* (5 parts by weight) 4.50 kg/m ² of sand 1.0 – 1.5 mm* (2.5 parts by weight) 4.50 kg/m ² of sand 2.0 – 3.0 mm* (2.5 parts by weight)
Sealant	Stafloor EP Primer + silica flour powder 0 – 80 mcm	≅ 0.48 kg/m ² of mixture: 0.32 kg/m ² Stafloor EP Primer (2 parts by weight) 0.16 kg/m ² silica flour* (1 part by weight)
Repair and shaping mortar		
Primer	Stafloor EP Primer	0.25 - 0.40 kg/m ² depending on the surface
Epoxy mortar	Stafloor EP Primer + Quartz sand 0.1 – 0.7 mm + Quartz sand 0.7 – 1.2 mm + Quartz sand 2.0 – 3.0 mm When doing flat surface repairs, the coarse-grained quartz sand (2 – 3 mm) should be excluded, thereby producing a finer, more resin-rich mixture.	≅ 19.80 kg/m ² of mixture per cm: 2.20 kg/m ² Stafloor EP Primer (1 part by weight) 8.80 kg/m ² of sand 0.1 – 0.7 mm* (4 parts by weight) 4.40 kg/m ² of sand 0.7 – 1.2 mm* (2 parts by weight) 4.40 kg/m ² of sand 2.0 – 3.0 mm* (2 parts by weight)

** All values were determined using quartz sand and silica flour at a material and substrate temperature of +20°C.
Other types of sand affect the results, such as flowability, air removal, filling, appearance, and consumption.
Lower temperatures reduce flowability, air removal, and filling.*

Only calcined quartz sand and silica flour are allowed.

Surface requirements

The surface should be sufficiently strong (compressive strength of at least 25 N/mm²).
The surface should be flat, finely roughened, firm, dry, and free of grease, oil, and loose debris. Pull-off adhesion strength must be at least 1.5 N/mm². Compatibility with existing coatings must be checked.
Dense surfaces made of rigid materials, as well as those containing subsequent repair materials, water repellents, or other chemical fillers, may interfere with the adhesion of coatings if the surface is not adequately prepared.

Surface preparation

Insufficiently strong layers and contaminants should be removed mechanically, for example, by shot blasting or milling.

Defective areas, depressions, and craters are levelled using Stafloor EP Primer.

Conditions of application

Application and curing temperature

Min. +10 °C;
Max. +30 °C (surface and ambient).

Humidity of surfaces

No more than 4 % according to the carbide method.
The surface should be waterproofed to prevent water from seeping from the concrete surface onto the coating during operation.

Relative humidity

Max. 80 %.

Dew point

Ensure the surface temperature is at least 3°C above the dew point. Protect from condensation.

General instructions

Before application, during application and until hardening of liquid compositions, it is necessary to prevent contact with materials containing silicone and with other products that interfere with the hardening reaction.

Application instructions

Mixing ratio by weight

Komp. A : Komp. B = 2 : 1.

Preparation of coating material

Material Preparation

Prior to mixing, stir component A using a mixing machine. Then, add component B in the prescribed proportions and blend gently. To avoid splashing or even spilling, begin with a brief, low-speed stir using an electric mixer. Finally, increase the mixer speed to a maximum of 300 rpm for intensive mixing.

After about 2 minutes, add the prescribed amount of quartz sand. Continue mixing for at least 3 minutes, or until a homogeneous mixture is achieved.

Pour the mixture into a clean container and stir briefly again as described above.

When preparing mixtures for epoxy screed and mortar, the use of a forced-action mixer is advised.

**Application methods,
tools**Primer:

Apply the prepared Stafloor EP Primer mixture generously and evenly by a floor brush, surface brush, roller, or squeegee. Then scatter quartz sand (particle size 0.1 – 0.7mm) into the coating while still wet.

Scratch filler:

Apply the prepared Stafloor EP Primer mixture and scratch over peaks with a smoothing trowel. Then scatter quartz sand (particle size 0.1 – 0.7mm) into the coating while still wet.

Resin screed:

Apply the prepared Stafloor EP Primer mixture in a thin preliminary coat to a blast-cleaned surface. Then, apply the prepared epoxy screed mixture “wet on wet” using a flooring trowel or a screed float, then compact with a smoothing trowel or power float.

Repair- or levelling mortar:

Apply a thin layer of Stafloor EP Primer mixture, then apply the prepared epoxy repair mortar mixture “wet-on-wet” using a flooring trowel, then compact with a smoothing trowel.

Sealant:

Apply the Stafloor EP Primer mixture with silica flour and finish with a smoothing trowel.

Equipment cleaner

Solvent P-4

Hardened material can only be removed mechanically.

Pot life

Surface temperature	+20°C
Stafloor EP Primer	25 min

**Hardening, operational pause,
overcoating**

Surface temperature		+ 20°C
Walkable	after	16 hours
Overcoatable	after	16 hours
Full loading	after	7 days

Important notice**VOC content:
in accordance with EU Directive
(2004/42/EC)**

Permitted content of volatile organic compounds (VOC) in accordance with EU Decopaint Directive (2004/42/EC) in ready-to-use condition (product category IIA/h, type Lb): (Limit 2010) = 750 g/l. For Stafloor EP Primer the maximum content of VOC in ready-to-use condition is <750 g/l.

Health and Safety Information

For the safe handling of our products, please refer to the corresponding physical, toxicological, environmental, and safety data sheets for the relevant product. Always adhere to applicable regulations, including those for hazardous substances.

Value Base

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.

Legal Notes

The information provided above, based on our knowledge and experience, particularly the recommendations relating to the preparation, application, and end-use of STATERM products, is intended only for normal conditions, when properly stored, and used as intended. Due to the variety of materials, surfaces to be treated, and working conditions, compliance with the instructions contained herein, as well as verbal recommendations (which have no legal force), does not guarantee a positive result, and we assume no liability for such results, except in cases of intentional misrepresentation or gross negligence on our part. In such cases, the Buyer must prove that they have promptly provided STATERM with detailed written information about the project and received written confirmation from STATERM for the use of the products. The Buyer is obliged to verify the suitability of the products for the intended purpose. The manufacturer reserves the right to change product specifications. Third-party proprietary rights are respected. The accepted terms of sale and delivery remain valid. The latest version of the technical instructions applies and should be requested from us.