





Epoxy ST 100

Transparent priming and mortar resin

	Availability						
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	Quantity per pallet	168	120				
	Size / Quantity	1 kg	2,5 kg	10 kg	25 kg	240 kg	720 kg
	Type of container	Multi-chamber bag	Multi-chamber bag	Tin bucket	Tin bucket	Drum	Drum
	Container code	01	03	11	26	71	70
	Art. no.						
	1160			•	•		
	6361	•					
720 kg drums on request							

Application rate	See application examples
Range of use	■ Primer, bonding layer, levelling layer
	Producing compression-resistant mortars, flow coatings
	■ Base layer for blinded covers
	■ Primer in the Remmers Deck OS 8 classic system
Property profile	Can be subjected to mechanical loads
	■ Can be subjected to chemical loads
	Good penetration characteristics
	Contains no plasticisers, nonylphenols or alkylphenols
	■ Physiologically harmless once fully cured

Characteristic data of the product

On delivery

	Component A	Component B	Mixture
Density (20 °C)	1.12 g/cm³	1.03 g/cm ³	1.10 g /cm³
Viscosity (25 °C)	870 mPa s	200 mPa s	600 mPa s

Once fully cured

Flexural tensile strength	20 N/mm ²
Compressive strength	87 N/mm²

^{*} Epoxy resin mortar 1:5 with standard sand





The values stated represent typical characteristic data of the product and are not to be understood as binding product specifications.

Certificates

- > Application directions Remmers Deck OS 8 classic
- > Fire test (classification) Remmers Deck OS 8 classic
- > Rear moisture penetration
- Slip resistance R11 V4
- > Fire test (classification)
- Sustainability data sheet

Possible system products

- > PUR Uni Color (6800)
- > Epoxy OS Color (6980)
- > Epoxy Color Top (6191)

Preparation

Substrate requirements

The substrate must be firm, dimensionally stable, capable of bearing loads and free of loose constituents, dust, oil, grease, rubber marks and other substances that could interfere with adhesion.

The tensile strength of the surface of the substrate must be at least 1.5 N/mm² on average (smallest individual value of at least 1.0 N/mm²), and the compressive strength must be at least 25 N/mm².

When used in the OS 8 system, the tensile strength of the substrate must be at least 2.0 N/mm² on average (smallest individual value of at least 1.5 N/mm²).

Test report available on bond behaviour in conjunction with rear moisture penetration according to DIN EN 13578 in the OS 8 system.

Substrates must have reached their moisture balance and must also be protected against moisture penetration from the reverse side, including during use.

Concrete	max. 4 m% moisture
Cement screed	max. 4 m% moisture
Anhydrite screed	max. 0.3 m% moisture
Magnesite sereed	2 / m9/ moietura

Magnesite screed 2-4 m% moisture

In the case of anhydrite and magnesite screeds, moisture cannot be permitted to penetrate from building elements or the ground.

As a general principle, systems which permit the diffusion of water vapour are recommended for use with anhydrite and magnesite screeds.

Substrate preparation

Prepare the substrate by suitable means, e.g. steel ball jetting or diamond grinding, so that it meets the requirements specified above.

Broken out or missing areas in the substrate should be filled flush with the surface using Remmers PCC systems or Remmers EP mortars.

Production of the mixture





Multi-chamber bag

Open the outer packaging along the perforation and remove the transparent multichamber bag. Remove the dividing strip on the bag. Then mix the two components together by kneading the contents of the bag intensively (approx. 60 seconds).

Combi-container





Add the entire quantity of the hardener (component B) to the base compound (component A).

Mix thoroughly with a slow-speed electric mixer

(approx. 300 - 400 rpm).

Pour the mixture into a separate container and mix again thoroughly.

Mix for at least 3 minutes.

Insufficient mixing is indicated by streaks forming.

Mixing ratio (A:B) 75:25 parts by weight

In the case of filled systems, slowly stir the corresponding quantity of filler into the reaction resin mixture and mix thoroughly.

As soon as the mixture is ready to use, apply it in full to the prepared surface and spread it using suitable tools.

Directions







For professional users only!

Conditions for use

Temperature of the material, air and substrate: from min. +8 °C to max. +30 °C. During the curing process, the applied material should be protected from moisture which could impair the surface and impair the adhesion.

Relative humidity should not exceed 80%.

The temperature of the substrate must be at least 3 °C above the dew point temperature during application and curing.

Working time (+20 °C)

Approx. 25 minutes

Waiting time (+20 °C)

Waiting times between coats should be at least 12 hours and max. 48 hours. If waiting times are longer due to site conditions, the surface of the previous coat must be broadcast in a specific manner with fire-dried quartz sand (e.g. grain size 0.3-0.8 mm) while fresh or sanded back until stress-whitening begins to occur before proceeding to the next step.

Drying time (+20 °C)

Foot traffic after 1 day, mechanical loads after 3 days, full loading capacity after 7 days. At lower temperatures: foot traffic after 1.5 days (+12 °C) or 2 days (+8 °C).

Setting may be accelerated by adding ACC H. The associated directions for use are available upon request.

As a general principle, higher temperatures will reduce and lower temperatures will increase the times stated.

Application examples

Impregnation/strengthening

The mixed resin is diluted with up to 20% by mass of Remmers V 101 Thinner and applied to the surface until saturation, using a suitable tool, e.g. rubber blade, and then worked into the substrate with an epoxy roller.

It may be necessary to apply several layers.

Application rate approx. 0.30-0.50 kg/m² of binder (depending on substrate)





Priming

Apply the mixed resin generously to the surface. Distribute with a suitable tool, e.g. rubber blade, and work into the substrate with an epoxy roller so that pores in the surface of the substrate are completely filled.

It may be necessary to apply several layers.

Application rate approx. 0.30-0.50 kg/m² of binder (depending on

substrate)

Levelling layer/scratch coat

The filled material (up to 1: 1 parts by weight) is applied to the primed surface and distributed with a suitable trowel. If necessary, roll over with a spiked roller.

Application rate per mm layer thickness: approx. 0.85 kg/m² of binder

and 0.85 kg/m² of Selectmix 01/03

Synthetic resin mortar

The filled material (up to 1:10 parts by weight) is distributed with a smoothing trowel and smoothed.

Application rate per mm layer thickness: approx. 0.2 kg/m² of binder

and 0.2 kg/m² of Selectmix 0/10

Base layer for blinded coatings

The filled material (up to 1:1 parts by weight) is applied to the primed surface and distributed with a suitable toothed trowel or toothed rubber blade. If necessary, roll over with a spiked roller.

Then liberally broadcast fire-dried quartz sand over the base layer while it is still fresh. Remove any loose, surplus sand after hardening.

Application rate per mm of base layer thickness

> approx. 0.85 kg/m² of binder and 0.85 kg/m² of Selectmix 01/03

Notes

Unless otherwise specified, all of the values and application rates given above have been determined under laboratory conditions (20 °C). Slight deviations from these values may arise if the product is worked with on site.

Primers must always be applied so that all pores are filled; it may therefore be necessary to increase the application rate or to apply a second coat.

As mineral substrates have different absorption capacities, impregnated surfaces have a spotted appearance. Not suitable for high-visibility surfaces.

When coating continuous surfaces, only use materials with the same batch number as slight differences in colour, gloss and texture may occur.

Abrasive mechanical loads leave traces of wear.

Epoxy resins are generally not colourfast when exposed to UV light or weather.

Observe the corresponding test certificate for OS 8 systems.

Further notes on working, system construction and maintenance of the listed products can be found in the latest Technical Data Sheets and the Remmers system recommendations.

Tools / Cleaning



Smoothing trowel, toothed trowel, toothed squeegee, rubber scraper, epoxy roller, spiked roller, mixing equipment, positive mixer if required

More detailed information can be found in the Remmers Tool Programme.

Clean tools, equipment and splashed material immediately while fresh with V 101 Thinner. Take suitable protective and waste disposal measures when cleaning.





Storage / Shelf life	If stored unopened in the original container and kept cool, dry and protected from frost, min. 12 months (component A)/min. 24 months (component B).
Safety data / Regulations	For professional users only! For further information on the safety aspects of transporting, storing and handling the product and on disposal and environmental matters, please see the current Safety Data Sheet and the brochure entitled "Epoxy Resins in the Construction Industry and the Environment", issued by Deutsche Bauchemie e.V. (2nd edition 2009).
Personal protective equipment	This information can be obtained from the current Safety Data Sheets and/or the relevant professional associations.
Disposal	Larger quantities of leftover product should be disposed of in the original containers in accordance with the applicable regulations. Completely empty, clean containers should be recycled. Do not dispose of together with household waste. Do not allow to enter the sewage system. Do not empty into drains.
VOC content as per the	EU limit value for the product (cat A/j): max. 500 g/l (2010).

Declaration of performance

VOC

Kat. A/j
2010: 500g/l
max.: 500g/l

"Decopaint" Directive (2004/42/EC)

> Declaration of performance

This product contains < 500 g/l VOC.





Declaration of conformity



1119, 1658

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GBIII 012_6 EN 1504-2:2004

1160

Surface protection products - Coating

Abrasion resistance: weight loss < 3000 mg

Permeability to CO_2 : $S_D > 50 \text{ m}$ Water vapour permeability: class III

Capillary absorption and permeability to $w < 0.1 \text{ kg/(m}^2 \text{ h}^{0.5})$

water:

Thermal compatibility: ≥ 2.0 (1.5) N/mm²*

Resistance to severe chemical attack: reduction in hardness < 50 %

Impact resistance: Class I

Adhesion strength by pull off test: \geq 2.0 (1.5) N/mm²* Reaction to fire: Class B_{fl} - s1 Skid resistance: Class III

* The value in brackets is the smallest permitted value per reading

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GBIII 012_6 EN 13813:2002

1160

Synthetic resin screed for use internally in buildings

Reaction to fire: E_{fl} Release of corrosive substances: SR Wear resistance: \leq AR 1 Bond strength: \geq B 1.5 Impact resistance: \geq IR 4

Please note that the data and information given above have been calculated as guidelines in the laboratory and from real-life experience and are therefore not binding as a basic principle.

This information is therefore of a general nature only and describes our products and how they are used and worked with. In this respect, it must be borne in mind that the varied and diverse nature of the prevailing working conditions, materials used and construction sites encountered means that not every individual case can be covered. In this respect, we therefore recommend either conducting tests or liaising with us in the event of any doubt. Unless we have provided express written assurance of the products' specific suitability or characteristics in respect of a contractually stipulated intended use, any technical application-related advice or instruction will never

be binding, even though it is provided to the best of our knowledge. In all other respects, our general terms and conditions of sale and delivery shall apply.

When a new version of this Technical Data Sheet is published, it shall replace the previous version.