



# Epoxy BS 4000

Water-based, pigmented levelling layer and base coat



Colour	Availability		
	Quantity per pallet		
	Size / Quantity	10 kg	25 kg
	Type of container	Tin bucket	Tin bucket
	Container code	11	26
	Art. no.		
pebble grey	6321	■	■
silver grey	6322	■	■
light grey	6323	■	■
special colours from 200 kg	6320	■	■

**Application rate** See application examples

- Range of use**
- Primer in Remmers water vapour diffusion (WDD) systems
  - Levelling layer and base coat in Remmers water vapour diffusion (WDD) systems
  - Primer and base coat in the systems Remmers Deck OS 8 WD and Deck OS 8 WD-LE
  - Primer in DIBt approved systems for common rooms (general building inspectorate approval Z-156.605-1414)

**Property profile**



- Highly fillable
- Ideal base for uniform flake coatings
- Water vapour diffusion capable
- Freeze/thaw resistant
- System certification for rear moisture penetration
- Contains no plasticisers, nonylphenols or alkylphenols
- Physiologically harmless once fully cured

**Characteristic data of the product**

- **On delivery**  
Solids content 58% by mass
- **On delivery**



	Component A	Component B	Mixture
Density (20 °C)	1.31 g/cm <sup>3</sup>	1.11 g/cm <sup>3</sup>	1.26 g/cm <sup>3</sup>
Viscosity (25 °C)	300 mPa s	450 mPa s	950 mPa s

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

**Certificates**

- [General building inspectorate approval](#)
- [Fire test \(classification\) SL Colorid WDD](#)
- [Fire test \(classification\) SL Floor WDD Flake](#)
- [Fire test \(classification\) TC Floor WDD](#)
- [Certificate of compliance TFI](#)
- [Sustainability data sheet](#)
- [TÜV PROFICERT-PREMIUM\\_Remmers WDD\\_Certificate](#)
- [TÜV PROFICERT-PREMIUM\\_Remmers WDD\\_Annex](#)
- [TÜV PROFICERT-PREMIUM\\_Epoxy SL Deco\\_Certificate](#)
- [TÜV PROFICERT-PREMIUM\\_Epoxy SL Deco\\_Annex](#)

**Possible system products**

- [Epoxy BS 3000 SG \(6380\)](#)
- [Epoxy BS 3000 M \(6370\)](#)
- [Selectmix SBL DF \(6751\)](#)

**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/mm<sup>2</sup> on average (smallest individual value of at least 1.0 N/mm<sup>2</sup>), and the compressive strength must be at least 25 N/mm<sup>2</sup>.

When used in the OS 8 system, the tensile strength of the substrate must be at least 2.0 N/mm<sup>2</sup> on average (smallest individual value of at least 1.5 N/mm<sup>2</sup>).

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. 6 m% moisture
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Cement screed	max. 6 m% moisture
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Other substrates suitable for coating must be primed with Epoxy BS 2000.

The adhesive pull strength of the surface after priming must be at least 1.5 N/mm<sup>2</sup> on average (smallest single value min. 1.0 N/mm<sup>2</sup>), compressive strength at least 25 N/mm<sup>2</sup>. Refer to the current Technical Data Sheet for detailed information on the single products.

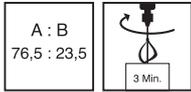
■ **Substrate preparation**

Prepare the substrate by suitable means, e.g. steel shot blasting, so that it meets the specifications listed 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



#### ■ 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.

Add up to 10% by mass of water, depending on the binder, and mix again.

#### Mixing ratio (A : B)

76.5 : 23.5 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.

Good ventilation must be ensured so that water can be released into the air.

#### ■ Working time (+20 °C)

Approx. 25 minutes

#### ■ Waiting time (+20 °C)

Waiting times between the application of each coat: min. 16 hours and max. 48 hours.

In the case of longer waiting times, sand the surface treated in the previous work step and apply primer again.

#### ■ Drying time (+20 °C)

Foot traffic after 1 day, mechanical loads after 3 days, full loading capacity after 7 days.

The times given are reduced at higher temperatures and increased at lower temperatures, in particular in combination with high humidity.

### Application examples



Application	Degree of filling with Selectmix SBL	Binder application rate [kg/m <sup>2</sup> ]	Filler application rate [kg/m <sup>2</sup> ]	Toothed blade
Unfilled coating	-	min. 0.40	-	no. 22
Filled coating	1 : 0.5	min. 0.60 + 10% water	min. 0.30	smoothing trowel
Filled coating	1 : 1.0	min. 0.70 + 10% water	min. 0.70	no. 7
Filled coating	1 : 1.5	min. 1.10 + 10% water	min. 1.65	no. 55

The application rates given for each toothed blade are based on experience values and can vary depending on the conditions on site.

The degree of filling is heavily dependent on the climate conditions on the building site and must be corrected upward or downward depending on temperature.

#### ■ 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. 0.15 - 0.25 kg/m <sup>2</sup> binder (depending on the substrate)
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#### ■ Levelling layer/scratch coat

Once the material has been filled up to 1:1.5 parts by weight, apply to the prepared surface, spread using a suitable notched spreader, and go over again with a looped roller if necessary.

Use Selectmix SBL as the filler.

The application rate depends on the condition of the substrate.

Either coat with Epoxy BS 4000 or seal with Epoxy BS 3000 M or Epoxy BS 3000 SG.

Application rate	(see table)
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#### ■ Coating

Once the material has been filled up to 1:1.5 parts by weight, apply to the prepared surface, spread using a suitable notched spreader, and go over again with a looped roller if necessary.

Use Selectmix SBL as the filler.

The application rate depends on the condition of the substrate.

Seal with Epoxy BS 3000 M or Epoxy BS 3000 SG.

Application rate	(see table)
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■ **Base layer for blinded coatings**

Once the material has been filled up to 1:1.5 parts by weight, apply to the prepared surface, spread using a suitable notched spreader, and go over again with a looped roller if necessary.

Scatter an excess of quartz sand or Colorid/sediment flakes over the base layer while it is still wet.

For use in OS 8 systems, see the applicable test certificates.

Use Selectmix SBL as the filler.

Remove any loose, surplus sand after hardening.

Then, apply the fixing agent or sealant as per the system specifications.

Application rate	(see table)
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**Notes**

Unless otherwise specified, all of the values and application rates given above have been determined under laboratory conditions (20 °C) using standard colours. 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.

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

Shades of colour with low hiding power (e.g. yellow, red or orange) tend to have a translucent effect on the subsequently applied sealant. In such cases, a colour-coordinated construction, e.g. light grey, is necessary.

The maximum degree of filling for levelling layers may vary depending on the colour. If necessary, check special colours to determine their suitability for filling.

The coating system has a lightly textured surface that is characteristic of this type of system.

In order to achieve even surfaces, appropriate allowances for roughness depth must be taken into consideration.

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

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.

Observe the corresponding test certificate for OS 8 systems.

For the installation of systems that are subject to approval, the directions contained in the relevant approval must be observed.

**Tools / Cleaning**

Notched trowel, smoothing trowel, looped roller, paintbrush, epoxy roller and mixer

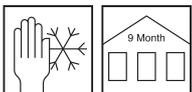


More detailed information can be found in the Remmers Tool Programme.

Clean tools, equipment and any splashed material immediately with water while still fresh. Take suitable protective and waste disposal measures when cleaning.

**Storage / Shelf life**

If stored unopened in its original container in a cool, dry place and protected against frost, the product will keep for at least 9 months.



**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).



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 "Decopaint" Directive (2004/42/EC)

EU limit value for the product (cat A/j): max. 140 g/l (2010).  
This product contains < 140 g/l VOC.

VOC	
Kat.	A/j
2010:	140g/l
max.:	140g/l

Declaration of performance

➤ **Declaration of performance (EN)**



Declaration of conformity



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GBIII 058\_3

EN 1504-2:2004

6320

Surface protection products – Coating

Abrasion resistance:	weight loss < 3000 mg
Permeability to CO <sub>2</sub> :	s <sub>D</sub> > 50 m
Water vapour permeability:	class II
Capillary absorption and permeability to water:	w < 0.1 kg/(m <sup>2</sup> h <sup>0.5</sup> )
Thermal compatibility:	≥ 2.0 (1.5) N/mm <sup>2</sup> *
Resistance to severe chemical attack:	reduction in hardness < 50 %
Impact resistance:	class I
Adhesion strength by pull-off test:	≥ 2.0 (1.5) N/mm <sup>2</sup> *
Reaction to fire:	class B <sub>fl</sub> - s1
Skid resistance:	class III

\* The value in parentheses is the smallest permissible value per reading

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EN 13813:2002

6320

Synthetic resin screed for use internally in buildings

Reaction to fire:	E <sub>fl</sub>
Release of corrosive substances:	SR
Wear resistance:	≤ AR 1
Bond strength:	≥ B 1.5
Impact resistance:	≥ 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.