



## Betofix OS 5b+

Crack-bridging, mineral surface protection system (OS 5b, OS DI) with general test certificate according to DIN 18533 / PG-FBB



Availability	
Quantity per pallet	18
Size / Quantity	
	<b>25 kg</b>
Type of container	Combi-container (1 x 8.7 kg liquid + 16.3 kg powder)
Container code	25
Art. no.	
1113	■

### Application rate

Approx. 1.7 kg/m<sup>2</sup>/mm dry layer thickness  
Approx. 3.4 kg/m<sup>2</sup> at 2 mm dry layer thickness



### Range of use



- Surface protection system for concrete according to DIN EN 1504-2 for methods 1.3, 2.2, 2.3, 7.7, 8.2 and 8.3
- Meets the requirements of the OS 5b/OS DI system at a layer thickness of 2 mm
- Coating for concrete surfaces that are exposed to weathering and not subjected to wheel loads, with near-surface cracks also in the spray area of de-icing salts
- Waterproofing under permeable road surfaces
- Waterproofing according to DIN 18533
- Waterproofing building element joints according to PG-FBB

### Property profile

- Freeze/thaw resistant
- Plastic-modified
- Tested on crack formation of greater than 3 mm (according to DIN EN 14891)
- Resilient to cold down to -20 °C (B2)
- Rainproof after 2 hours
- Fire behaviour class B-s1, d0 (DIN EN 13501-1)
- Can be applied by machine
- Radon-tight (verified through testing)

### Characteristic data of the product



Resistance to rain	After 2 hours
Minimum layer thickness	<b>Dry:</b> 2 mm as OS 5b/OS DI (2 layers) 2 mm as MDS (2 layers) <b>Wet:</b> 2.3 mm as OS 5b/OS DI (2 layers) 2.3 mm as MDS (2 layers)
Crack-bridging	> 3 mm
Crack bridging class	B2 (-20°) in OS 5b-system R1-E according to DIN 18533-1 R1-B according to DIN 18535-1
Water impact classes	W1-E, W2.1-E, W3-E, W4-E according to DIN 18533-1 W1-B according to DIN 18535-1
Drying time	Approx. 1 d (20 °C, 65% RH)
Reaction to fire class	B-s1, d0
Bulk density of fresh mortar	Approx. 1.45 kg/dm <sup>3</sup>
Adhesive pull strength	> 1.0 N/mm <sup>2</sup> (also on sanded substrates)

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

**Certificates**

- [Angaben zur Ausführung DIN EN 1504-2](#)
- [Prüfbericht Radondichtigkeit](#)
- [Klassifizierungsbericht KB-Hoch-220747](#)
- [EPD-Erklärung \(Remmers\)](#)
- [EPD-DBC-20220217-IBF1-EN](#)

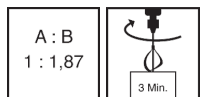
**Possible system products**

- [Betofix R4 \(1096\)](#)
- [Betofix SPCC TS \(5781\)](#)
- [Betofix Fill \(1008\)](#)
- [Betofix Fill SR \(1080\)](#)
- [MB ADD S \(3079\)](#)
- [VZ MB \(3005\)](#)
- [WP DKS rapid <sup>\[basic\]</sup> \(0423\)](#)
- [Color PA Fill \(6490\)](#)
- [Color PA \(6500\)](#)
- [Tape VF-series](#)

**Preparation**

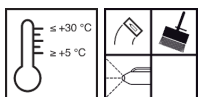
- **Substrate requirements**  
The substrate must be dry, level, stable and clean. It must also be free of dust, oil, grease and release agents.
- **Substrate preparation**  
Remove projecting seams and mortar remains.  
Break off or chamfer corners and edges.  
Use a suitable mortar to create a sealing cove.  
Seal off indentations > 5 mm using a suitable filling knife.  
Roughen the surface of plastic pipes with sandpaper; clean and, if necessary, sand metal pipes.  
Apply a scratch coat of the product to act as a contact layer and reduce blistering.

**Production of the mixture**



- **Combi-container**  
**Mixing ratio liquid : powder = 1 : 1.87**  
Stir the liquid component with a suitable mixing tool.  
Loosen the powder component and add it in full to the liquid component.  
Mix for approx. 1 minute before suspending the mixing process to allow the air that has been stirred in to escape.  
Remove the powder adhering to the side.  
Mix again for approx. 2 minutes.  
Keep the mixing tool near the bottom of the bucket while mixing.

**Directions**



- **Conditions for use**  
Temperature of the material, air and substrate: from min. +5 °C to max. +30 °C.  
Low temperatures increase, while high temperatures decrease the working and setting time.  
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. 45 minutes



Apply a scratch coat to the sanded substrate. Use a slurry brush, smoothing trowel or spraying equipment to apply in two layers.

Apply the product in two layers on the previously prepared substrate.

Apply second layer once sufficiently dry.

**Tips on use**

Once it has hardened, mortar must not be made workable again by adding either water or more wet mortar. When using liquid waterproofing materials, exposure to direct sunlight and/or wind can accelerate skin formation and cause blistering.

The maximum total wet coat thickness must not exceed 5 mm.

Moving the material (e.g. by stirring) in the mixing bucket can prevent premature skin formation.

Do not use in direct sunlight.

Protect fresh waterproofing from rain, frost and condensation.

Once dry, protect from mechanical damage.

Please contact Remmers Technical Service (phone +49 5432 83900) before applying with machine processing.

**Notes**

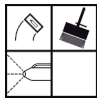
Low chromate content in accordance with Directive 2003/53/EC.

The characteristic data of the product were calculated under laboratory conditions at 20°C and 65% relative humidity.

Current regulations and legal requirements must be taken into account and deviations from these must be agreed separately.

The relevant test certificates must be observed when planning and carrying out work.

**Tools / Cleaning**



Mixing tool, trowel, wide brush

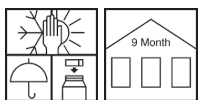
Clean tools with water while the material is still fresh.

Remove hardened material by tapping or scraping.

**Remmers tools**

- > **Mischgefäß (4030)**
- > **Collomix Rührer DLX 152 HF (4286)**
- > **Remmers Quirlex (4282)**
- > **Profile Trowel (5047)**
- > **Rundkelle (4114)**
- > **Schlämbbürste (4517)**
- > **Smoothing Trowel (4004)**
- > **Glättkelle (4117)**
- > **Smoothing Trowel Duo (4118)**
- > **Schichtdickenkelle (4000)**

**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 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.

**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.

**Declaration of performance**

- > **Declaration of performance**



Declaration of conformity



**NB 0761**

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**GBI-P 88-1**

EN 1504-2: 2004

**1113**

**Surface protection systems for concrete – coating**

Linear shrinkage:	NPD
Coefficient of thermal expansion:	NPD
Cross-cut test:	NPD
Permeability to CO <sub>2</sub> :	S <sub>D</sub> > 50 m
Water vapour permeability:	S <sub>D</sub> < 5 m (class I)
Capillary absorption and water permeability:	w < 0.1 kg/(m <sup>2</sup> h <sup>0.5</sup> )
Thermal compatibility:	≥ 0.8 N/mm <sup>2</sup>
Resistance to thermal shock:	NPD
Chemical resistance:	NPD
Crack bridging ability:	B2 (-20 °C)
Adhesion strength by pull-off test:	≥ 0.8 N/mm <sup>2</sup>
Reaction to fire class:	B-s1, d0
Skid resistance:	NPD
Artificial weathering:	passed
Antistatic behaviour:	NPD
Adhesion on wet concrete:	NPD
Dangerous substances:	Compliance with 5.4

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.