



## Betofix R3 SR

Fibre-reinforced PCC/SPCC (RM/SRM) for static repair of concrete

Colour	Availability	
	Quantity per pallet	36
	Size / Quantity	
	Type of container	Paper bag
	Container code	25
	Art. no.	
grey	1107	■

### Application rate

Approx. 2.0 kg/m<sup>2</sup>/mm layer thickness, or approx. 2.0 kg/dm<sup>3</sup>



### Range of use



- Wet spraying method
- Concrete replacement for structurally relevant repairs
- Concrete substitution according to
  - DIN EN 1504-3
  - DIN 19573
- Repair and coating mortar for wastewater facilities

### Property profile

- Sulphate-resistant
- Low effective alkali content (SR/NA)
- Very low shrinkage
- Freeze/thaw-resistant
- Well suited to overhead working

### Planning information

Betofix R3 SR - Classification				
acc. to DIN EN 1504-3	R3			
Old concrete classes	A2	A3		
Reaction to fire	Klasse A1			
<b>Environmental impacts</b>	XALL			
Carbonation	XC1	XC2	XC3	XC4
Chlorides excluding seawater	XD1	XD2	XD3	
Chlorides from seawater	XS1	XS2	XS3	
Frost with/without de-icing agent	XF1	XF2	XF3	XF4
Chemical attack	XA1	XA2	XA3	
Wear stress	XM1	XM2		
Waste water	XWW1	XWW2	XWW3	
Moisture class	WO	WF	WA	
<b>Impacts from the concrete substrate</b>				
Backfacing water	XBW1	XBW2		
Water impact from fresh or seawater	XW1	XW2		
Static contribution	XSTAT			



Application	3.1	3.2	3.3	4.4	5.3	6.3	7.1	7.2	7.4
Principles/procedures for repair									

**Characteristic data of the product**

Water requirement	Approx. 11.2%, equivalent to approx. 2.8 l/25 kg
Capillary water uptake	≤ 0.5 kg/(m <sup>2</sup> h <sup>0.5</sup> )
Shrinkage (28 days)	≤ 0.60 mm/m
Flexural strength	Approx. 7.0 N/mm <sup>2</sup>
Compressive strength	1 d = approx. 7 N/mm <sup>2</sup> 7 d = approx. 25 N/mm <sup>2</sup> 28 d = approx. 30 N/mm <sup>2</sup>
Dynamic E-modulus	≥ 15000 N/mm <sup>2</sup>
Surface tensile strength	≥ 1.5 N/mm <sup>2</sup>
Maximum grain size	2 mm
External surveillance	QDB

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

**Possible system products**

- **Betofix KHB SR (1079)**
- **Betofix Fill SR (1080)**

**Preparation**

■ **Substrate requirements**

**Concrete surface:**

Stable, clean, dust-free

Observe the applicable technical regulations for the following parameters:

- Adhesive pull strength of the substrate
- Minimum roughness/roughness depth

Pre-wet the substrate so that it is slightly moist.

**Reinforcement:**

Degree of purity SA 2 ½ if applying corrosion protection, otherwise SA 2

**Production of the mixture**



■ **Mixing**

Prepare water, add dry mortar and mix until homogeneous.

**Mixing time:** approx. 3 minutes

**Maturing time:** approx. 1 minute.

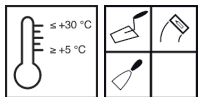
**Final mixing time:** approx. 1 minute

Wait at least 24 hours before applying subsequent layers.

Add a little water if necessary.

If working with a continuous mixer, the relevant parameters must be determined on site.

**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.

Once it has hardened, mortar must not be made workable again by adding either water or more wet mortar.

**Working time**

(+20 °C): Approx. 60 minutes

**Layer thicknesses**

Single layer thickness 5 - 20 mm.

Two-layer thickness up to ≤ 40 mm, apply wet-on-wet.

Single layer thickness in broken-out areas < 70 mm.

**Tips on use**

Automatic mixing only.

**Tools / Cleaning**

Mixing tool, trowel, smoothing trowel

Clean tools with water while the material is still fresh.



**Remmers tools**

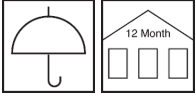
- **Mischgefäß (4030)**



- > Profile Trowel (5047)
- > Rundkelle (4114)
- > Smoothing Trowel (4004)
- > Glättkelle (4117)
- > Smoothing Trowel Duo (4118)

**Storage / Shelf life**

If stored in an unopened container and in a dry place, the product will keep for approx. 12 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**



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**GBI-P 19-1**  
EN 1504-3: 2005  
**1107**

Product for structural and non-structural repair for concrete

Compressive strength:	class R3
Chloride ion content:	≤ 0.05 %
Adhesive bond:	≥ 1.5 MPa
Restrained shrinkage/expansion:	≥ 1.5 MPa
Elastic modulus:	≥ 15 GPa
Thermal compatibility part 1 & 4:	≥ 1.5 MPa
Capillary absorption:	≤ 0.5 kg/(m <sup>2</sup> h <sup>0.5</sup> )
Reaction to fire:	class A1

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

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