





Betofix SPCC TS

Fibre-reinforced SPCC (SRM) for static repair of concrete structures

Colour	Availability			
	Quantity per pallet	40		
	Size / Quantity	25 kg	1000 kg	
	Type of container		Container	
	Container code	25	62	
	Art. no.			
grey	5781			
Minimum order quantity: 3 pallets, 15 t/silo for silo goods.				

Application rate

Approx. 2.1 kg/m 2 /mm coating thickness, or 2.1 kg/dm 3



Range of use



- Concrete replacement for structurally relevant repairs
- Concrete replacement according to
 - DIN EN 1504-3
 - Rili-SIB DAfStb 2001
 - ZTV-ING
 - ZTV-W LB 219
- Repair and anode embedding mortar for cathodic corrosion protection
- Dry spraying

Property profile

- High carbonation resistance
- High resistance to water penetration
- Very low shrinkage
- Well suited to overhead working
- Freeze/thaw-resistant

Planning information





Betofix SPCC TS - Classification								
acc. to Rili-Sib 2001	M3							
acc. to DIN EN 1504-3	R4							
Old concrete classes	А3		A4					
Reaction to fire	Class A1							
Fire resistance test (acc. to EN 1363-1) * analogous to DIN EN 13501	>F 120*							
Impacts from the environment	XALL							
Carbonation	XC1		XC2		XC3		XC4	
Chlorides excluding seawater	XD1		XD2					
Chlorides from seawater	XS1		XS2					
Frost with/without de-icing agent	XF1		XF2		XF3		XF4	
Chemical attack	XA1		XA2					
Moisture class classification	WO		WF		WA			
Impacts from the concrete substrate	е							
Backfacing water	XBW1		XBW2					
Freshwater or seawater loads	XW1		XW2					
Static effect	XSTAT							
Dynamic stresses on application	XDYN							
Application								
Repair principles/procedures	3.3	4.4	5.3	6.3	7.1	7.2	7.4	10.1

Characteristic data of the product

Capillary water uptake	$\leq 0.5 \text{ kg/(m}^2 h^{0.5})$			
Shrinkage (28 days)	< 0.8 ‰			
Compressive strength (28 d)	≥ 45 N/mm²			
Flexural tensile strength (28 days)	≥ 8 N/mm²			
Dynamic E-modulus	27 kN/mm²			
Maximum grain size	2 mm			
Bulk density of fresh mortar	Approx. 2.1 g/cm ³			
pH value	> 12 (10% solution)			
The values stated represent typical characteristic data of the product and are not to be understood as binding product specifications.				

Possible system products

> Betofix K (5782)

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. Mechanical mixing only!

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.





Layer thickness:

Vertical: single layer 8 - 25 mm Horizontal overhead: single later 8 - 20 mm multi-layer 16 - 60 mm Broken-out areas partially up to 100 mm

Waiting time per application

Approx. 120 minutes at 5 °C Approx. 45 minutes at 23 °C Approx. 30 minutes at 30 °C

For optimum spraying results (low rebound, high compaction), the mixture should be applied at a nozzle distance of approx. 1 metre and a spraying angle of 90°.

Subsequent processing

Protect fresh mortar surfaces from wind, direct sunlight, rain and/or frost for at least 3 days so that they do not dry too quickly.

Machine working

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

Tips on use	Machine processing only.
Tools / Cleaning	Mixing apparatus Rotor machines such as the Mader WM 14 are suitable for pneumatic conveyance in dry-spraying processes. Observe the machine manufacturer's specifications concerning air, water and power supply. Compressor power min. 5 m³/min, nozzle diameter 18 mm, hose diameter 38 mm, hose length from min. 40 m to 180 m, booster pump required, water pressure constant > 5 bar. Clean tools with water while the material is still fresh. Any material that has already begun to dry can only be removed mechanically.
Storage / Shelf life	If stored unopened in its original container in a cool, dry place and protected against frost, the product will keep for 9 months.

Cafaty	data	/ Regulation	nc
Saleiv	uala	/ Keymano	115

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.

Personal protective equipment

Respiratory protection with a particle filter P2 must be worn during spraying, together with protective goggles. Wear suitable protective gloves and clothing.

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

(6

Remmers GmbH

Bernhard-Remmers-Str. 13, D-49624 Löningen

18

GBI-P 63-3

EN 1504-3: 2005

5781

Product for structural and non structural repair for concrete

Compressive strength: Class R4 Chloride ion content: < 0.05 % Adhesive bond: ≥ 2 MPa Carbonation resistance: Passed ≥ 20 GPa Elastic modulus: Thermal compatibility: ≥ 2 MPa $\leq 0.5 \text{ kg/(m}^2\text{h}^{0.5})$ Capillary absorption: 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

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.