Technical Data Sheet Product number 1094







## **Betofix R4 EM rapid**

Fast-acting, high-strength PCC screed mortar

Type/Name	Availability			
	Quantity per pallet	36		
	Size / Quantity	25 kg		
	Type of container	Paper bag		
	Container code	25		
	Art. no.			
grey	1094			
Application rate	Approx. 2.0 kg/m²/mm coating thickness, or approx. 2.0 kg/dm³			
2.0 kg/ mm thickness ↓ ↓ ↓ 1m <sup>2</sup>				
ange of use	Repair of concrete construct	ion components with a rough surface that are positioned horizontally or at a gent		
	slant			
$\left  \right $	<ul> <li>Bonded screed, floating scre</li> <li>Heated screeds</li> </ul>	Bonded screed, floating screed and screed on separating layer Heated screeds		
* *	<ul> <li>Load-bearing layer underneath reactive resin coatings</li> </ul>			
	Base layer under Remmers Crete coatings			
	Interior and exterior use			
roperty profile	High mechanical resistance			
	Fast curing			
	Low shrinkage			
	<ul> <li>Low-stress and crack-free setting</li> <li>Can be applied by machine</li> </ul>			
	<ul> <li>Can be applied by machine</li> <li>Screed according to DIN EN 13813: CT - C40 - F6 - A7 - B1.5</li> </ul>			
haracteristic data of the roduct	Water requirement	Approx. 8%, equivalent to 2.0 l/25 kg		
product	Deady to be severed	Diffusible coverings/coatings: approx. 12 h		
	Ready to be covered	Vapour-tight coverings/coatings: approx. 24 h		
	Flexural strength			
		Vapour-tight coverings/coatings: approx. 24 h		
	Flexural strength	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup>		
	Flexural strength Reaction to fire	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup> Class A1 <sub>ff</sub> <b>Room temperature 20 °C:</b> 6 h: $\geq$ 15 N/mm <sup>2</sup>		
	Flexural strength Reaction to fire	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup> Class A1 <sub>ff</sub> <b>Room temperature 20 °C:</b> 6 h: $\geq$ 15 N/mm <sup>2</sup> 24 h: $\geq$ 35 N/mm <sup>2</sup>		
	Flexural strength Reaction to fire	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup> Class A1 <sub>ff</sub> <b>Room temperature 20 °C:</b> 6 h: $\geq$ 15 N/mm <sup>2</sup> 24 h: $\geq$ 35 N/mm <sup>2</sup> 28 d: $\geq$ 40 N/mm <sup>2</sup>		
	Flexural strength Reaction to fire	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup> Class A1 <sub>ff</sub> <b>Room temperature 20 °C:</b> 6 h: $\geq$ 15 N/mm <sup>2</sup> 24 h: $\geq$ 35 N/mm <sup>2</sup> 28 d: $\geq$ 40 N/mm <sup>2</sup> <b>Room temperature 5 °C:</b>		
	Flexural strength Reaction to fire	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup> Class A1 <sub>ff</sub> <b>Room temperature 20 °C:</b> 6 h: $\geq$ 15 N/mm <sup>2</sup> 24 h: $\geq$ 35 N/mm <sup>2</sup> 28 d: $\geq$ 40 N/mm <sup>2</sup>		
	Flexural strength Reaction to fire	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup> Class A1 <sub>ft</sub> <b>Room temperature 20 °C:</b> 6 h: $\geq$ 15 N/mm <sup>2</sup> 24 h: $\geq$ 35 N/mm <sup>2</sup> 28 d: $\geq$ 40 N/mm <sup>2</sup> <b>Room temperature 5 °C:</b> 24 h: $\geq$ 30 N/mm <sup>2</sup>		
	Flexural strength Reaction to fire Compressive strength Maximum grain size	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup> Class A1 <sub>ff</sub> <b>Room temperature 20 °C:</b> 6 h: $\geq$ 15 N/mm <sup>2</sup> 24 h: $\geq$ 35 N/mm <sup>2</sup> 28 d: $\geq$ 40 N/mm <sup>2</sup> <b>Room temperature 5 °C:</b> 24 h: $\geq$ 30 N/mm <sup>2</sup> 28 d: $\geq$ 40 N/mm <sup>2</sup> 5 mm		
	Flexural strength Reaction to fire Compressive strength Maximum grain size Bulk density of fresh mortar	Vapour-tight coverings/coatings: approx. 24 h28 d: $\geq$ 6.0 N/mm²Class A1 <sub>fl</sub> Room temperature 20 °C: 6 h: $\geq$ 15 N/mm² 24 h: $\geq$ 35 N/mm² 28 d: $\geq$ 40 N/mm² Room temperature 5 °C: 24 h: $\geq$ 30 N/mm² 28 d: $\geq$ 40 N/mm² 5 mm5 mmApprox. 2.1 kg/dm³		
Possible system products	Flexural strength Reaction to fire Compressive strength Maximum grain size Bulk density of fresh mortar	Vapour-tight coverings/coatings: approx. 24 h 28 d: $\geq$ 6.0 N/mm <sup>2</sup> Class A1 <sub>ff</sub> <b>Room temperature 20 °C:</b> 6 h: $\geq$ 15 N/mm <sup>2</sup> 24 h: $\geq$ 35 N/mm <sup>2</sup> 28 d: $\geq$ 40 N/mm <sup>2</sup> <b>Room temperature 5 °C:</b> 24 h: $\geq$ 30 N/mm <sup>2</sup> 28 d: $\geq$ 40 N/mm <sup>2</sup> 5 mm		
Possible system products	Flexural strength Reaction to fire Compressive strength Maximum grain size Bulk density of fresh mortar The values stated represent typica	Vapour-tight coverings/coatings: approx. 24 h28 d: $\geq$ 6.0 N/mm²Class A1 <sub>fl</sub> Room temperature 20 °C: 6 h: $\geq$ 15 N/mm² 24 h: $\geq$ 35 N/mm² 28 d: $\geq$ 40 N/mm² Room temperature 5 °C: 24 h: $\geq$ 30 N/mm² 28 d: $\geq$ 40 N/mm² 5 mm5 mmApprox. 2.1 kg/dm³		

Technical Data Sheet	
Product number 1094	

**Betofix R4 EM rapid** 





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>. Production of the mixture Mixing Prepare water, add dry mortar and mix until homogeneous. When using as a bonding slurry, add approx. 11% water. Mixing time: approx. 3 minutes Directions Conditions for use Temperature of the material, air and substrate: from min. +5 °C to max. +25 °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. Application time:: (+20 °C): approx. 30 minutes Layer thickness Single layer thickness < 80 mm Layer thickness in breakouts up to max. 100 mm In the case of bonded screeds, apply the product while the bonding layer is still wet. 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. **Tools / Cleaning** Mixing tool, trowel, aluminium rule, smoothing trowel, power trowel Clean tools with water while the material is still fresh. Remmers tools Mischgefäß (4030) > **Smoothing Trowel (4004)** Bodenglätter (4116) > 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

## C E K

## Remmers GmbH (CE)

Bernhard-Remmers-Str. 13, D – 49624 Löningen Remmers (UK) Limited (UKCA)

Unit 4, Lloyds Court, Manor Royal Crawley, RH10 9QU

20 (CE); 23 (UKCA) **GBI-P 68-4** EN 13813: 2002 (CT – C40 – F6 – A7 - B1,5) **1094** 

For applications with low performance requirements in construction and civil engineering

Reaction to fire:	A1fl
Release of corrosive substances:	СТ
Water permeability:	NPD
Water vapour permeability:	NPD
Compressive strength:	C40
Flexural strength:	F6
Sound insulation:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical resistance:	NPD

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.