Betofix EM 8 2K

PCC I (RC) concrete replacement mortar for static repair of concrete structures

Type/Name	Availability				
	Quantity per pallet	24	30	1	1000
	Size / Quantity	**25 l**	**40 kg**	**1000 l**	
	Type of container	Plastic canister	Paper bag	Container	
	Container code	25	40	61	62
	Art. no.				
Betofix EM 8 2K (cement grey)	5777		■		■
Betofix EM LQ	5780	■		■	

Attention!
Betofix EM LQ is the corresponding mixing liquid; please order separately under its own article number!
Minimum order quantity: 3 pallets; 6 tonnes/silo for silo goods.

Application rate

Approx. 2.0 kg/m²/mm coating thickness, or 2.0 kg/dm³

Range of use

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

Property profile

- High mechanical resistance
- High resistance to water penetration
- Very low shrinkage
- Can be applied by machine
- Freeze/thaw-resistant

Planning information

Betofix EM 8 2K - Classification									
acc. to Rili-Sib 2001	M3								
acc. to DIN EN 1504-3	R4								
Old concrete classes	A2		A3		A4				
Reaction to fire	Class A2fl-s1 (DIN EN 13501-1)								
Impacts from the environment									
Carbonation	XC1		XC2		XC3		XC4		
Chlorides excluding seawater	XD1		XD2		XD3				
Chlorides from seawater	XS1		XS2		XS3				
Frost attack with/without de-icing agent	XF1		XF2		XF3		XF4		
Chemical attack	XA1		XA2*		XA3**				
	* without sulphate attack ** protective measures required for - chemical attack XA3 or higher - high flow rate of water and interaction of chemicals								
Moisture class classification	WO		WF		WA				
Impacts from the concrete substrate									
Backfacing water	XBW1		XBW2						
Freshwater or seawater loads	XW1		XW2						
Static effect	XSTAT								
Application									
Repair principles/procedures	3.1	3.2	4.4	5.3	6.3	7.1	7.2	7.4	10.1

Characteristic data of the product

Shrinkage	7 days: -0.30 mm/m 28 days: -0.48 mm/m 90 days: -0.65 mm/m
Bulk density	Approx. 1.8 kg/dm³
Capillary water uptake	≤ 0.5 kg/(m²h$^{0.5}$)
Flexural strength	1 day: 5 N/mm² 7 days: 8 N/mm² 28 days: 9 N/mm² 90 days: 14 N/mm²
Compressive strength	1 day: 27 N/mm² 7 days: 48 N/mm² 28 days: 55 N/mm² 90 days: 63 N/mm²
Dynamic E-modulus	39 x 10³ N/mm² (at 23 °C)
Maximum grain size	8 mm
External surveillance	KIWA
Bulk density of fresh mortar	Approx. 2.3 kg/dm³
Consistency	Plastic

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

Possible system products

- **Betofix KHB EM (5779)**
- **Betofix EM LQ (5780)**

Preparation

Substrate requirements

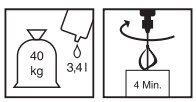
Concrete surface:
Stable, clean, dust-free
Observe the applicable technical regulations for the following parameters:
- Adhesive pull strength of the substrate
- Minimum roughness/roughness depth

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

Substrate preparation

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

Production of the mixture



Mixing

3.4 l Betofix EM LQ (art. 5780) with 40 kg Betofix EM 8 2K
Prepare mixing liquid, add dry mortar and mix until homogeneous.

Mixing time: approx. 4 minutes

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 thickness
Single layer 25 - 100 mm

A bonding layer is required when applying manually.
Apply wet-on-wet.

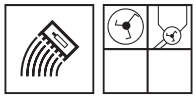
Subsequent processing
Protect fresh mortar surfaces from wind, direct sunlight, rain and/or frost for at least 3 days so that they do not dry too quickly.

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

Tips on use

Protect pretreated reinforcement against corrosion with a double application of Betofix KHB EM.
Use screed rails to ensure that the product is poured to the correct height.

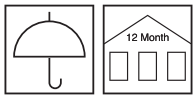
Tools / Cleaning



Mixer, trowel, aluminium rule, finishing trowel, power trowel

Clean tools with water while the material is still fresh.

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 conformity

CE

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

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GBI P60-2
EN 1504-3: ZA.1a
5777

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
Elastic modulus:	≥ 20 GPa
Thermal compatibility part 1 & 4:	≥ 2 MPa
Capillary absorption:	≤ 0.5 kg/(m²h$^{0.5}$)
Reaction to fire:	class A2fl-s1
Dangerous substances:	see Safety Data Sheet