



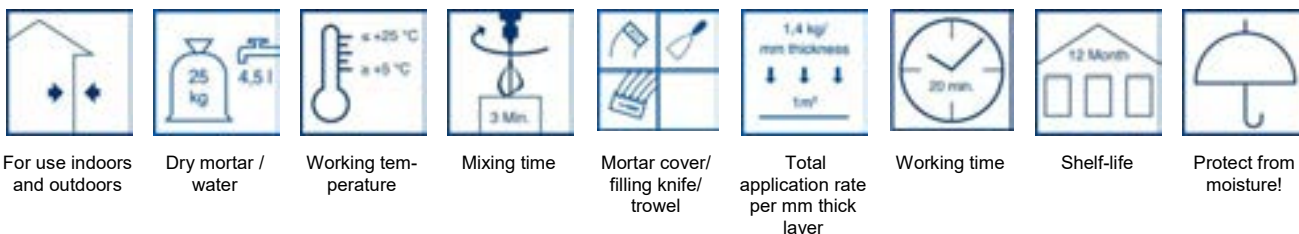
## Technical Data Sheet Art. No. 1093

# Betofix R2

Versatile, fast repair mortar for repairing concrete in just a few hours

Basic test R2 by RWTH Aachen

Low in chromate in accordance with RL 2003/53/EC



### Range of use

Versatile and reliable fast repair mortar

- Fast concrete repairs in facade areas
- For repairing superficial damage on concrete, reinforced concrete and light-weight concrete
- As mineral corrosion protection for reinforcement steel (with Remmers Rust Inhibitor M, Art. No. 0919)
- For closing broken out areas, pipes, pores, unevenness and gravel pockets

### Property profile

Remmers Betofix R2 is a factory-mixed, highly modified, fast repair mortar that is ready to use after mixing with water and sets hydraulically.

- For versatile corrosion protection, can be used with coarse and fine mortar. No bonding layer required!
- Very easy to use, high yielding
- Can be applied with a filling knife and felted
- Can be worked overhead

### Characteristic data of the product

Colour:	grey
Grain:	0 – 0.5 mm
Working time (20 °C):	approx. 20 min.
Commencement of setting:	approx. 60 min.
Compressive strength (EN 12190):	after 3 hours: approx. 5 N/mm <sup>2</sup> after 24 hours: approx. 9 N/mm <sup>2</sup> after 28 days: approx. 20 N/mm <sup>2</sup>
Flexural strength (EN 12190):	after 28 days: approx. 5 N/mm <sup>2</sup>
Loading class	R2 according to DIN EN 1504-3

- High adhesive pull strength and good adhesion
- Can be applied in any thickness since it is very low stress and crack free
- Binds water quickly, can be coated over after 2- 3 hours
- Frost resistant, can be used indoors and outdoors

substrate must correspond to the relevant technical rules. The pre-wet substrate should be still slightly absorbent. De-rust exposed reinforcement steel to blank metal SA 2 ½ and remove dust and grease. If there are deeper broken out areas, the adhesive pull strength of the substrate should be at least 1.5 N/mm<sup>2</sup>.

Then mix 2 parts by weight Betofix R2 with 0.9 parts by weight Rust Inhibitor M until a homogeneous brushing consistence has been achieved.

**Ratio by volume: 2 parts by volume dispersion + 2.5 parts by volume powder.**

### Substrate

At the time of application the substrate must be dry to matt damp, sound and load-bearing. Remove loose material that could interfere with adhesion and cement grout by sandblasting, bush hammering, milling or similar treatment. The substrate must also be sufficiently rough. The pull-off strength of the

Coat the entire surface of the steel reinforcement with the freshly mixed corrosion inhibiting grout at least 1 mm thick.

Apply a second coat of fresh corrosion inhibiting grout after a waiting time of at least 30 minutes. After a further 30 minutes, the broken out area can be closed with Betofix R2.

### Directions

Pour **4.5 l of water** into a clean container (mortar tub) and add **25 kg Betofix R2**.

Mix thoroughly with a mixer/drill and paddle for approx. 3 minutes until the proper consistence for working has been achieved. For a 5 kg container, add 0.9 litres of water. Partial amounts can be mixed with 1 part by volume water and 4 parts by volume powder. Betofix R2 sets quickly and can be coated over the same day. Mix only the quantity of mortar that can be applied within 20-40 minutes (depending on temperature).

Betofix R2 starts to set during pot-life which allows even deep broken out areas to be completely closed in one working operation.

When used as a surface filler, Betofix R2 can be kept smooth within the first 20 minutes without adding more water by stirring.

### ■ Closing broken out areas

Do not pre-wet the concrete substrate before applying Betofix R2. The mortar can be applied to dry or matt damp (not wet) substrates. After mixing, apply Betofix R2 with a trowel in the desired layer thickness and then smooth. An additional bonding layer is not necessary.

After 15-30 minutes the surface can be rubbed very fine and smooth with a red sponge float. If necessary, the surface can be finished to match the texture of adjacent surfaces.

### ■ Coatings, fillings

Apply Betofix R2 to the dry or matt damp substrate as a scratch coat to fill pipes or as a coating. Finish the surface as desired by felting, rubbing, smoothing or texturing.

### Notes

Initially set mortar cannot be made workable again by adding water or fresh mortar. Do not use if the temperature of the air, substrate and building material is below +5 °C or above +25 °C. The characteristic data given for this product were determined under laboratory conditions at 23 °C and 50 % relative humidity. Low temperatures lengthen, high temperatures reduce working and setting time.

May contain traces of pyrite or iron sulphide.

Protect the repaired areas from drying out too quickly in direct sunlight or drafts.

### Tools, cleaning

Mixing equipment, brush, filling knife, stainless steel trowel, red sponge float, plasterer's float  
Clean tools with water while the material is still fresh.

### Packaging, application rate, shelf-life

#### Packaging:

25 kg paper bags

#### Application rate-dry mortar:

Approx. 1.4 kg/m<sup>2</sup>/mm thick layer

#### Shelf-life:

At least 12 months stored dry in closed buckets/bags

### Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology is found in the latest Safety Data Sheet.



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**EN 1504 – 3:2005**

**GBI P4-1**

**Betofix R2**

PCC Mortar for structural repair for concrete

Compressive strength:	class R2
Chloride ion content:	≤ 0.05 %
Adhesive bond:	≥ 0.8 MPa
Restrained shrinkage / expansion:	≥ 0.8 MPa
Carbonation resistance:	NPD
Elastic modulus:	NPD
Thermal compatibility:	≥ 0.8 MPa
Capillary absorption:	≤ 0.5 kg/(m <sup>2</sup> • h <sup>0.5</sup> )
Reaction to fire:	class E

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

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