



# Emcekrete RS

## Rapid-Setting Concrete Repair Mortar

### Properties

- One-component, polymer-modified, chloride-free, rapid set mortar
- Hand application by trowel or float
- Excellent bond strength to concrete
- Very good abrasion resistance
- Rapid setting, achieves 20 N/mm<sup>2</sup> in two hours
- Shrinkage-compensated
- Cost effective in reducing down time
- Ideal application for fast track projects

### Area of Application

- Rapid-setting structural repair mortar for various building, civil and mechanical installations such as floor toppings, manholes, base plate or anchor fixings

### Application

#### Substrate Preparation

The surface must be clean and free from all loose particles, dust, oil and any other contaminant which may affect adhesion. A substrate pull-off strength of  $\geq 1.5\text{N/mm}^2$  is required. Prepare the substrate to expose sound aggregates for increased mechanical adhesion.

#### Manual Application

Before application of Emcekrete RS, pre-wet the substrate to saturated surface dry condition (SSD) with no standing water. For very absorbent substrates, it is recommended that a bond coat be applied using a slurry prepared with the mortar. The repair mortar, Emcekrete RS, should then be applied "wet-on-wet" by trowel or float.

#### Mixing

Measure the recommended water and pour approximately 80% of it into a clean container. Gradually add the **Emcekrete RS** powder while mixing continuously with a mechanical mixer for about 2 minutes until homogeneity and the desired mortar consistency is attained. If necessary, add the remaining water as required while mixing continuously. Do not exceed the recommended maximum water dosage. Lightly stir for several seconds to release trapped air before placing it. Mix only the quantity which can be applied within the pot life.

#### Application

Emcekrete RS can be applied by hand with floats or trowels. For large volume applications where thickness is in excess of 50mm, aggregate addition is recommended at a weight ratio of 1 part aggregate : 2 parts Emcekrete RS.

Aggregates shall be clean and in the size range of 10 to 20mm.

Emcekrete RS should not be applied at temperatures below +5°C (air and substrate) or above 40°C.

#### Curing

As with all cementitious materials, care must be taken to ensure that Emcekrete RS is protected from the drying effects of wind and sun. Use plastic sheets, wet hessian or a suitable curing compound.



### Technical Data for Emcekrete RS

(All values are taken from laboratory tests at 25<sup>0</sup>C and 60% RH unless otherwise stated.)

Characteristics	Unit	Value*	Comments
Density	kg/dm <sup>3</sup>	2.0-2.2	Fresh mortar
Water dosage	litres	3.75-4.0	To one 25kg bag of Emcekrete RS
Mixing time	minutes	2	
Yield	litres	~13.7	25kg bag of Emcekrete RS mixed with 3.75 litres of water
Flow, BS Cone	cm	> 25	
Compressive strength, after	N/mm <sup>2</sup>		
- 2 hours		> 20	
- 18 hours		> 38	
- 7 days		> 50	
- 28 days		> 56	
Flexural strength	N/mm <sup>2</sup>	5-6	After 2 hours
Pot life	minutes	~ 15	At 20 <sup>0</sup> C
Shrinkage compensation			Yes
Expansion after 3 hours	%	0.0	ASTM C 940

### Product Characteristics for Emcekrete RS

Packing	25kg bags
Storage & Shelf-life	6 months if kept unopened in cool, dry and shaded place
Disposal	Bags must be emptied completely

**Note:** The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

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