

KEIM Concretal®-Universalmörtel-S Repair mortar for concrete



1. Product description

Fast-repair mortar for concrete repair in building construction as per EN 1504-3, class R3, for normal and light-weight concrete. Fibre-reinforced with integral bonding agent and corrosion protection.

2. Field of application

Repair mortar for reprofiling defects and areas with surface loss in building construction. Layer thicknesses from 5 mm to 30 mm, partially 60 mm, in multiple layers as required.

3. Product properties

- Polymer-modified hydraulically setting mortar.
- Mixing liquid water.
- Can be applied without corrosion protection and bonding bridge.
- Good adhesive power.
- Stable in wall and overhead areas.
- Resistant to freeze/thaw cycles and fluctuating temperatures.
- Fast-setting.

Strength characteristics adapted to the requirements of ordinary building construction.

4. Application instructions

Substrate preparation

The substrate must be clean, solid and free of any substances having a release action, such as dust, oil etc. Roughen smooth, dense substrates. Remove dirt, laitance and unsound layers by means of sand blasting or scabbling. The necessary minimum tensile bond strength on mineral substrates should comply with relevant technical regulations (DAfStb guidelines for the protection and renovation of concrete components; ZTV-ING).

Steel reinforcement

Rust must be removed from steel reinforcement to standard degree of cleanliness SA 21/2 to DIN EN ISO 12944-4. Quartz-free bead blasting is a suitable cleaning method. When exposed and derusted steel reinforcement is covered by a depth of less than 10 mm, two coats of KEIM Concretal-MKH must be applied for corrosion protection.

Mixing

Add KEIM Concretal-Universalmörtel-S to an initial amount of water and mix until homogeneous with a compulsory mixer or slow-running stirrer for approx. 3 minutes. Mixing by hand is not permissible.

Mixing ratio:

3.75 - 4.00 l of water* are required for 25 kg of KEIM Concretal-Universalmörtel-S.

* Water is added depending on the desired consistency and temperature conditions (low temperature = low water requirement; high temperature = higher water requirement).

Application

Before reprofiling areas with surface loss the substrate has to be prewetted. Highly absorbent substrates should be prewetted several times, avoiding standing water. A thin preliminary layer of KEIM Concretal-Universalmörtel-S is initially applied onto the only moist substrate and then reprofiled wet-on-wet. Areas with surface loss deeper than 30 mm should be reprofiled in multiple layers. Spray application is not possible. After application, KEIM Concretal-Universalmörtel-S may be smoothed and finished with a float. Carefully fade out transitional zones to concrete.

Post-treatment

Concretal-Universalmörtel-S should be protected from direct sunlight and wind to prevent it from drying out too rapidly, e.g. by covering and keeping moist.

Application data/Technical data

Grain size:	1.2 mm
Fresh mortar bulk density:	1.85 kg/dm ³
Compressive strength 28d:	49.3 N/mm ²
Bending tensile strength 28d:	6.0 N/mm ²
Dynamic modulus of elasticity:	18.6 GPa
Working time:	at + 20°C approx. 30 min. (Only prepare as much mortar as can be processed within the working time)
Application temperature (air and substrate):	from + 5°C to 30°C
Consumption rate:	approx. 1.6 kg/m ² and mm dry bagged mortar
Layer thicknesses:	5 mm min. layer thickness 30 mm max. layer thickness per application 60 mm max. overall layer thickness



5. Packaging

25 kg sack

6. Storage

Storage life 12 months in unopened original packaging under dry, frost-free conditions.

7. Disposal

EC Waste Code No. 17 01 01
Any residues must be emptied out of containers before recycling.

8. Safety instructions

GISBAU Product Code/ GISCODE: ZP 1

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children.

Low chromate content to TRGS 613.

Please refer to EC Safety Data Sheet.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

