

Maleki-RM 500

Patching mortar

Item-No.: 1416

Versatile environmentally friendly repair mortar for concrete and masonry. For repair and coating work.

Technical data

Mixing ratio	5.0 l water per 25 kg powder	Grain	0 – 0.5 mm
Compressive strength	approx. 56 N/mm ²	Flexural strength	approx. 3 N/mm ²
Processing temperature	Min. +5 °C, max. +35 °C	Processing time at 20°C	approx. 30 min
Application thickness	max. 10 mm if applied flatly, ground depressions up to 50 mm	Consumption	approx. 1.8 kg / m ² and mm layer thickness
Loadability	Curing at 20°C	Density	
Walkable	after hours	Bulk density	approx. 1.3 kg/dm ³
Light load	1 day	Fresh mortar density	approx. 2.1 kg/dm ³
Fully loadable	5 days		

Properties

- Eco-Binder technology
- environmentally friendly
- mineral
- VOC – and APEO-free
- low in chromate according to DIN EN 196-10
- fast curing and tension-relieved
- high compressive strength
- high abrasion resistance
- easy application
- good chemical resistance

Range of usage

- for repair work on concrete and facades
- for the formation of fillets at wall / floor and wall / wall connections
- for smoothing work
- suitable for concrete, cement screed, brick and limestone masonry
- for surface preparation in combination with subsequent coating or waterproofing i.e. with Maleki-DS 250 Flex
- applicable in layer thicknesses of 3 – 50 mm

Preparation of substrate

Prior to coating, ensure that the surface is stable and has sufficient surface tensile strength. The surface should also be ready for coating, dry or matt damp, clean and free from all kinds of debris. Mechanical surface preparation e.g. shot-blasting is recommended. Due to roughening the surface, the adhesion for the subsequent layer can be improved. Deeper ruptures must be filled with Maleki-VM 530. The surface should be permanently vibration-free and crack-free.

Already existing cracks must be repaired professionally. The adhesive strength of the substrate must be at least 1.5 N/mm². The concrete surface must be dry for priming. The substrate must be dried for 2 hours after priming with Maleki-TG 110. Please refer to the technical data sheet of Maleki-TG 110 for more information.

Mixing and application

Mix the material by using a mixing machine. First, add 5.0 – 5.25 liters of water per 25 kg powder material into the mixing container. Then, pour Maleki-RM 500 inside while stirring. For manual applications the hand-held mixer BSM 2882 by Baier Tools and the Collomix mixing paddle WK 140 HF are recommended. By using the respective mixing paddle, a proper thread adapter must be used. For mixing of partial quantities in smaller containers the mixing paddle WK 90 S for drilling machines is recommended. The material has to be mixed intensely for 2 minutes, left to set for 2 minutes, and then mixed again for 1 more minute. After mixing apply Maleki-RM 500 onto the primed surface by using a trowel. The fresh surfaces can be re-coated after 3 – 6 hours (at 20°C). Depending on ambient temperature and relative humidity the specified waiting time may vary. The coating has to be protected from too quick drying (solar radiation, draft), frost and rain for the 1st 24 hours. Do not cover the finished surface with foils or other materials.

Tools and cleaning

Hand-held mixer, stirrer, brush, trowel.
All equipment should be washed clean and dried before and after application.

Packaging and shelf-life

25 kg paper bag
Original packing is storable for 12 months in dry and controlled

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temperate areas (not below 0 °C, recommended 10 – 25 °C).
Reseal opened containers immediately and use within a very short time.

Associated products

Maleki-RM 500 Item-No. 1416
Maleki-TG 110 Item-No. 1110


Safety notes

Maleki-RM 500 contains cement and reacts alkaline with moisture/water. Avoid inhaling dust when opening packaging. Protect skin and eyes during the mixing process. Please refer to the Material Safety Data Sheet which can be requested on www.malekigmbh.com for further information on safety during transportation, storage, handling and disposal. Follow instructions on the packaging.

Notes

Mixed and already dried mortar cannot be refreshed by adding water or powder. Do not process the mortar at temperatures below +5°C. Low temperature extends, high temperature shortens the processing and setting time.

The content of this technical data sheet corresponds to the latest development and our applications experience. All information is based on ideal conditions and therefore does not apply for every application purpose. Due to different materials, substrates and different actual site conditions no warranty is given for the customer's application. In particular, we assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for the case of intent or gross negligence. In that case the customer has to prove that he has transmitted all required information completely and in a timely manner for a proper and promising evaluation by Maleki GmbH. Any further details regarding the application of our products have to be confirmed in writing by Maleki GmbH. The customer must test the product's suitability for the intended application and purpose. We reserve the right to change the product specifications due to the ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product. The technical data sheet can be requested on www.malekigmbh.com.

	
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EN 1504-3:2005 Concrete protection and repair product for statically non-relevant restoration. EN 1504-3: ZA.1a	
Compressive strength	Class R2
Chloride ion content	≤ 0,05 %
Adhesion	≥ 0,8 MPa
Impaired expansion	≥ 0,8 MPa
Carbonization resistance	NPD
Elastic modulus	NPD
Fire behavior	A1