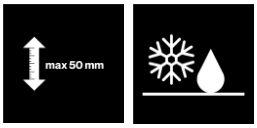
REPROFILING MORTAR RM 04



> can be mechanically processed
> statically relevant for horizontal repairs
> high freeze-thaw resistance
> low shrinkage

Product description

The RM 04 reprofiling mortar is a cement-bound, freeze-thaw resistant, low-shrinkage concrete repair mortar for horizontal surfaces (e.g. before the application of coatings or bridge waterproofing).
For the manual and mechanical repair of concrete components both indoors and outdoors in layer thicknesses of up to 50 mm per work stage (partially up to 80 mm).
The RM 04 reprofiling mortar meets the requirements of ÖNORM EN 1504-3 as a statically relevant repair mortar with exposure to freeze-thaw environments (R4, XF4). - Repair of concrete structures (process 3.1)
- Improvement or restoration of the load-bearing capacity of concrete structures (process 4.4)- Preservation and restoration of passivity (processes 7.1 and 7.2)

The RM 04 reprofiling mortar is also suitable as a dimensionally stable lining mortar (e.g. on wall banks) and as a setting mortar.

Delivery format

Container	Outer packaging	Pallet
25 KG / PS	-	42 PS

Storage
Can be stored frost-free, cool, and dry on wooden shelves in the unopened original container for 730 days

Processing

Recommended tools
Slow-rotating electric agitator, suitable mixing vessel, brick trowel, smoothing trowel, spatula, batten.

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Mixing
Put the recommended amount of water in a clean mixing vessel, add the SM 20 renovating mortar and mix using a slow-rotating mixer until a homogeneous and lump-free blend is obtained (mixing time approx. 3 minutes).
Never use more water than specified for mixing!

Processing
Process the mixed mortar quickly. Mortar that has already stiffened may not be reprocessed by adding water.
Any anti-corrosion protection applied beforehand must be fully dry before the repair mortar is applied.
When using an adhesive slurry, the repair mortar must be applied wet-in-wet to the adhesive slurry.
Processing can take place manually or mechanically (eccentric screw pumps) after mixing.
When machine processing with a mixing pump, the required amount of water must be determined in advance.
Surface finishing, such as felting or rubbing should be carried out without adding water, if possible, so as not to alter the properties of the mortar.

Post-treatment:
Keep the fresh mortar from drying out too fast by taking appropriate measures (e.g. covering).

Cleaning tools:
Clean tools and appliances with water immediately after use. Hardened material can only be removed mechanically.

Technical data

Chemical base	Cements, aggregates and admixtures
Grain size	4 mm
Consumption	approx. 2.2 kg per m²/mm layer thickness
Water consumption	~ 4 litres per 25 kg of RM 04 reprofiling mortar
Layer thickness	10 - 50 mm
Processing time	approx. 30 Min.
Bending tensile strength	(28d) approx. 8.5 MPa
Compressive strength	after 24 hours ~ 10 MPa; after 7 days ~ 40 MPa; after 28 days ~ 50 MPa
Shrinkage behaviour	< 1 mm/m (after 90 days)
E-module	approx. 30 GPa
Capillary water absorption	~ 0.10 kg*m²*h0.5
Thermal shock resistance	with freeze-thaw stress: ~ 2.0 MPa
Object and material processing temperature	min. +5 °C / max. +30 °C
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Solid mortar density	min. +5 °C / max. +30 °C
Mixing time	approx. 3 minutes
Adhesive tensile strength	(28d) approx. 2 MPa
Fire class	Euroclass A1

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Substrate

Suitable substrates

Concrete:

The substrate must be clean, solid, load-bearing and free from separating agents and adhesion-reducing components. Old coatings are to be removed. The concrete substrate must have a compressive strength of > 25 MPa and a surface tear strength of at least 1.5 MPa (constructively supplementary R3) or 2.0 MPa (constructively load-bearing R4) as well as a surface roughness of at least 1 mm.

Shot blasting is a suitable form of substrate pre-treatment for horizontal surfaces. Other mechanical substrate pre-treatments (milling or chiselling) lead to structural defects in the concrete and require additional post-processing by blasting.

The concrete substrate must be pre-wetted to capillary saturation at least 12 hours before the application of repair mortar. When applying the repair mortar, the concrete must be matt and damp with no standing water.

Steel:

Steel surfaces must be clean, solid, load-bearing and free from separating and adhesion-reducing components. Rust must be removed using suitable methods (e.g. high-pressure water jets, blasting with solid blasting material) (Degree of cleanliness of the steel after treatment: SA 2).

If the repair concept and process require corrosion protection, Murexin Reinforcement Protection BS 7 should be applied in 2 work steps.

Adhesive slurry:

Murexin concrete repair mortars do not require any adhesive slurry on well-prepared and pre-wetted substrates. If an adhesive slurry is required, use Murexin HS 1 adhesive slurry and apply the repair mortar wet-on-wet.

Product and processing instructions

Material advice:

- If processing outside the ideal temperature and/or humidity range, the material properties could change markedly.
- Allow the materials to reach the correct temperature before processing!
- In order to maintain the product properties, do not add any foreign materials!
- The added water quantities or dilution information must be strictly adhered to!
- Check coloured products before use for colour accuracy!
- Colour consistency can only be guaranteed within a batch.
- The colouring is significantly influenced by the environmental conditions.

Environmental information:

- Do not process at temperatures below +5 °C!
- The ideal temperature range for material, substrate and air is +15 °C to +25 °C.
- The ideal relative air humidity range is between 40% to 60%.
- Increased humidity and/or lower temperatures delay, lower air humidity and/or higher temperatures accelerate drying, setting and hardening.
- Ensure adequate ventilation during the drying, reaction and hardening phase; avoid draughts!
- Protect against direct sunlight, wind and weather!
- Protect adjacent components!

Tips:

- We recommend using a test surface first or a small area for initial, small-scale testing.
- Please observe the product data sheets of all MUREXIN products used in the process.
- Keep a genuine original container of the respective batch for later repair work.

The information provided reflects average values that have been obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual batches may vary slightly without impacting the product suitability.

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Safety instructions

Please refer to safety data sheet for product-specific information with regard to composition, handling, cleaning, corresponding actions and disposal.
Limiting and monitoring exposure
Personal protective equipment:
General protection and hygiene measures:
- Keep away from foodstuffs, beverages and feedstuffs.
- Take off contaminated, impregnated clothing immediately.
- Wash your hands before taking breaks and when finishing work.
- Avoid contact with the eyes and skin.
Breathing protection:
- Breathing protection is recommended.
- Filter P2.
Hand protection:
- Protective gloves.
- The glove material must be impermeable and resistant to the product/substance/preparation.
Glove material
- Use gloves made from stable materials (e.g. nitrile).
- The selection of a suitable glove depends not only on the material, but also on other quality properties, which may vary from manufacturer to
manufacturer.
Penetration time of the glove material
- The precise penetration time is to be found out from the protective glove manufacturer and complied with.
Eye protection: tightly sealed protective goggles.
Body protection: protective clothing.

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Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt.
This version is rendered invalid if a new version is released. The most recent data sheets, safety data sheets and the terms and conditions are available online at www.murexin.com.

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