MB FL 2K

3 in 1 composite waterproofing
Combines the functions of waterproofing, tile cement and joint filler in one material

GEPRÜFT NACH C1E S2 DIN EN 12004

	Availability		
	Quantity per pallet	44	18
	Size / Quantity	**6,67 kg**	**20 kg**
	Type of container	Combi-container (1 x 4.2 kg powder + 1 x 2.47 kg polymer)	Combi-container (3 x 4.2 kg powder + 3 x 2.47 kg polymer)
	Container code	06	20
	Art. no.		
	3001	■	■

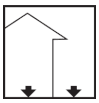
Application rate

As waterproofing:
Min. 1.3 kg/m²/mm dry layer thickness

As tile cement:
8 mm tooth: approx. 2.9 kg/m²
10 mm tooth: approx. 3.5 kg/m²
12 mm tooth: approx. 4.4 kg/m²

As joint filler:
Approx. 0.2 kg/m² (6 mm joint width, tile 30/60 cm, 6 mm thick, total joint length 410 cm)

Range of use



- 3 in 1: waterproofing, tile cement and joint mortar
- Interior and exterior, floor areas
- Waterproofing in a bond under tiles (AIV-F) according to DIN 18534-3
- Suitable for new and old buildings
- Waterproofing balconies and covered walkways according to DIN 18531-5
- Waterproofing bathrooms and transition areas in swimming pools

Property profile

- Highly flexible
- Water impermeable
- Reactive drying
- A light colour shade enables pigmentable joint colours
- Joint width of 6 - 12 mm
- For heated floor coverings

Characteristic data of the product

Base	Polymer binder, cement, additives, special fillers
Rain resistance (joint)	2 hours (23 °C, 65% RH)
Layer thickness	1.2 mm wet layer thickness yields approx. 1 mm dry layer thickness
Water impermeability	Approx. 1.5 bar
Drying time	1 mm layer thickness: approx. 4 hours (23°C, 50% RH); approx. 11 hours (5°C, 90% RH) 2 mm layer thickness: approx. 8 hours (23°C, 50% RH); approx. 22 hours (5°C, 90% RH)
Reaction to fire class	E
Bulk density of fresh mortar	Approx. 1.14 kg/dm³
Consistency	Paste-like

The values stated represent typical characteristic data of the product and are not to be understood as binding product specifications.

Certificates

- **Verarbeitungsanleitung**
- **EPD-Erklärung (Remmers)**
- **EPD-DBC-20220219-IBF1-EN_modified mineral mortars, group 3**
- **Zertifikat ETA-22/0666 vom 04.11.2022**

Possible system products

- **Kiesol MB (3008)**
- **Clean FL (0651)**
- **Pigment FL (2863)**
- **Betofix R4 EM [basic] (1086)**
- **Protect MKT 1* (3024)**
- **Primer Hydro F (2842)**
- **Tape VF-series**

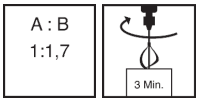
*Use biocidal products carefully.
Always read the label and product information before use.

Preparation

Substrate requirements
The substrate must be clean, dry, flat and capable of bearing a load, and free of dust, oil, grease and release agents.
Roughen non-mineral and pore-free substrates.
Absorbent mineral substrates, not self-compacting concrete (SCC), may be slightly damp.

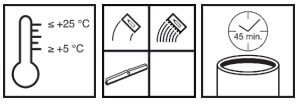
Substrate preparation
Remove projecting seams and mortar remains.
Break off or chamfer corners and edges.
Prime absorbent mineral substrates with Kiesol MB.
Create a scratch coat using the product as a contact layer and in order to prevent blisters.
If necessary, use suitable products to level out any sloping (e.g. Betofix R4 EM).
Waterproofing:
Reinforce connection areas such as floor-to-ceiling doors and window elements, internal corners, floor-to-wall connections and transitions to balcony edge profiles with joint tape from the Tape VF series.
In interior areas:
Interiors: calcium sulfate screeds must be sanded then vacuumed.
Residual moisture CA/CAF screed heated < 0.3 CM-%/ unheated <0.5 CM-%.
Prime gypsum-based substrates (Primer Hydro F).

Production of the mixture



Mixing
Stir the liquid component with a suitable mixing tool.
Loosen the powder component and add it in full to the liquid component.
Mix for approx. 1 minute, stop mixing to scrape off any powder that adheres to the edge. (Venting the mixture is not necessary.)
Mix again for approx. 2 minutes.
Keep the mixing tool near the bottom of the bucket while mixing.
Mixing ratio for wall tiles A : B 1 : 2.3
Mixing ratio for waterproofing and floor tiles A : B 1 : 1.7

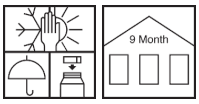
Directions



Conditions for use
Temperature of the material, air and substrate: from min. +5 °C to max. +25 °C.
Low temperatures increase, while high temperatures decrease the working and setting time.

Working time (+20 °C)
Min. 45 minutes

Waterproofing:
Apply at least two coats of the product to the prepared substrate in accordance with the regulations.
The total dry layer thickness must be ≥ 2 mm.
Connection details/building element joints
Reinforce internal corners and connection joints, as well as connections to non-mineral building components with joint tape from the Tape VF series.
Apply the product, embed Tape VF over the entire surface, ensuring that there are no bubbles or creases.
Laying the tiles:
Existing waterproofing layers must be completely dry before further work is carried out.
Apply the product as a thin-bed mortar using a suitable notched trowel, and lay the covering material in the fresh mortar bed before a skin forms.
In outdoor areas or when laying large-format tiles and slabs, application using the buttering floating method is recommended.
Immediately remove any soiling / mortar residue on the surface of the covering with water, keep the joint area free of mortar residue.
Grouting tiles:

	The joints must be completely dry to avoid trapping moisture in the joint. Apply MB FL 2K grout to the joints with an epoxy grouting scraper in sections. If necessary, the consistency for use as a grout can be adjusted by adding max. 300 ml clean water (to 6.67 kg material). Wipe surfaces promptly with a sponge and wash clean with a sponge float and water. After complete drying, residues/adhesions can be cleaned with Remmers Clean FL.
Tips on use	In the case of liquid-applied waterproofing materials, direct sunlight and/or wind exposure can cause accelerated skin formation and accompanying blistering. Do not use in direct sunlight. Do not use on untreated aluminium. The scratch layer does not as a rule count as a waterproofing layer. The maximum total wet coat thickness must not exceed 5 mm. Moving the material (e.g. by stirring) in the mixing bucket can prevent premature skin formation. Mortar that has already set cannot be made workable again by adding water or fresh mortar. Protect the fresh waterproofing layer from rain, direct sunlight, frost and condensation water. Once dry, protect from mechanical damage. Add a further load-distributing layer if using the product for waterproofing under raised floor supports. Ensure sufficient ventilation when applying the product in closed areas (wear respiratory protection if necessary).
Notes	The characteristic data of the product were calculated under laboratory conditions at 20°C and 65% relative humidity. Current regulations and legal requirements must be taken into account and deviations from these must be agreed separately. Certificates of suitability (EAD) must be observed during planning and execution. Special agreements and certificates of suitability can be downloaded online at www.remmers.com. Always set up a trial area/trial areas first. Peel tests are neither suitable nor authorised for assessing the suitability of the product for use. **Joints in exterior areas:** To prevent possible green growth on surfaces grouted with MB FL 2K, it is recommended to add Remmers Protect MKT 1.
Tools / Cleaning 	Clean tools with water while the material is still fresh. Any material that has already begun to dry can only be removed mechanically. Dry, adhering material can be cleaned with Remmers Clean FL.
Storage / Shelf life 	If stored unopened in its original container in a cool, dry place and protected against frost, the product will keep for at least 9 months.
Safety data / Regulations	For further information on the safety aspects of transporting, storing and handling the product and on disposal and environmental matters, please see the current Safety Data Sheet.
Disposal	Larger quantities of leftover product should be disposed of in the original containers in accordance with the applicable regulations. Completely empty, clean containers should be recycled. Do not dispose of together with household waste. Do not allow to enter the sewage system. Do not empty into drains.
Declaration of performance	› **Declaration of performance**

Declaration of conformity

Remmers GmbH (CE)

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GBI-P 151-1

NB 0799

Performance according to EAD 030352-00-0503 (01.2019) + ETA 22/0666

Liquid applied water impermeable product for floors and/or walls in wet rooms

Repairability (acc. to EN 14891 A.6.2.A):	passed
Joint bridging capability:	no leaks
Water vapour permeabiilty (µ):	313
Water impermeability at penetrations (Appendix A, F):	water-tight
Crack bridging (EN 1062-7):	category 1

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NB 0761

Performance according to EN 12004

Cementitious mortar for elevated requirements with extended open time **(class C1 TE S2)**

Initial tensile adhesion strength:	≥ 0.5 MPa
Tensile adhesion strength after water immersion:	≥ 0.5 MPa
Tensile adhesion strength after heat ageing:	≥ 0.5 MPa
Tensile adhesion strength after freeze-thaw cycles:	≥ 0.5 MPa
Open time: tensile adhesion strength	≥ 0.5 MPa
Extended open time: tensile adhesion strength	≥ 0.5 MPa
Slipperiness***:	≥ 0.5 MPa

***With a mixing ratio of LC : PC = 1 : 2.3**

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NB 0761

Performance according to EN 14891

Liquid applied water impermeable product for external use under ceramic tile and slab coverings (class CM 01)

Initial tensile adhesion strength:	≥ 0.5 MPa
Tensile adhesion strength after water contact:	≥ 0.5 MPa
Tensile adhesion strength after heat ageing:	≥ 0.5 MPa
Tensile adhesion strength after freeze-thaw cycles:	≥ 0.5 MPa
Tensile adhesion strength after contact with lime water:	≥ 0.5 MPa
Tensile adhesion strength after contact with chlorinated water:	≥ 0.5 MPa
Water impermeability:	water impermeable
Crack bridging ability under normal conditions:	≥ 0.75 mm
Crack bridging ability at low temperatures (-5°C):	≥ 0.75 mm