MB 2K

- Multi-Tight 2K -

Two-component multi-functional building waterproofing

	Availability		
Quantity per pallet	44	18	18
Size / Quantity	**8,3 kg**	**25 kg**	**25 kg**
Type of container	Combi-container (1 x 4.8 kg powder + 1 x 3.5 kg polymer)	Combi-container (1 x 14.4 kg powder + 1 x 10.6 kg polymer)	Combi-container (3 x 4.8 kg powder + 3 x 3.5 kg polymer)
Container code	08	11	25
Art. no.			
3014	■	■	■

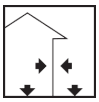
Application rate

Min. 1.1 kg/m²/mm dry layer thickness

Layer thicknesses and application rate when used as a crack-bridging mineral waterproofing slurry in interior and exterior areas: see application rate table under application examples.

Apply to a large enough trial area to determine the precise amount required.

Range of use



- Rapid waterproofing
- Waterproofing in new buildings
- Horizontal waterproofing in and underneath walls
- Subsequent waterproofing of existing buildings according to WTA
- Can be applied > 3 m in the ground
- Approved for connecting to water impermeable concrete structures
- Waterproofing of plinths and base points
- Waterproofing in a bond
- Bonding layer on old bitumen coatings
- For attaching perimeter insulation panels

Property profile

- Tested on crack formation of greater than 3 mm (according to DIN EN 14891)
- Complete drying and cross-linking occur rapidly, after just 18 hours at 5 °C and 90 % rel. humidity.
- Meets the test requirements for PMBC
- Radon-tight (verified through testing)
- Very low emissions (GEV-EMICODE EC 1^{Plus})
- Solvent-free
- Bitumen-free
- Water pressure tight
- High tensile adhesion strength
- Excellent adhesion even on non-mineral substrates (e.g. plastics, metals)
- Highly flexible, elastic and crack-bridging
- Can be covered after a very short time (≥ 4h)
- UV-resistant
- Freeze/thaw-resistant
- Can be plastered and painted over
- Can be applied as a slurry, with a brush or trowel, or by spraying

Characteristic data of the product

Base	Polymer binder, cement, additives, special fillers
Watertightness class	W2B as per DIN EN 15820
Crack-bridging	≥ 3 mm (for a dry layer thickness ≥ 3 mm)
Crack-bridging ability class	CB2 as per DIN EN 15812
Layer thickness	1.1 mm wet layer thickness yields approx. 1 mm dry layer thickness
Cross-slit pressure tests	Passed, even without reinforcement inlay
Compressive strength class	C2B as per DIN EN 15815
Water vapour permeability	1755
Water impermeability	Approved up to 8 m water column, tested up to 50 m water column
Drying time	Approx. 18 hours for a layer thickness of 2 mm (5 °C, 90% RH) Approx. 9 hours for a layer thickness of 2 mm (23 °C, 50% RH)
Reaction to fire class	E as per DIN EN 13501-1
Bulk density of fresh mortar	Approx. 1.0 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

- PZ10849_3014_DE_1_78593_en.pdf
- PZ10848_3014_DE_1_78592_en.pdf
- PZ10850_3014_DE_1_78594_en
- BBA Certificate
- GEV licence Emicode EC1 Plus
- Fire behaviour classification DIN EN 13501-1_MPA BS
- AbP according to PG-FPD_P-1201/554/18 MPA BS
- AbP according to PG AIV-F_P-1201/551/18 MPA BS
- AbP according to PG MDS_P-1201/552/18 MPA BS
- AbP according to PG FBB_P-1202/361/19 MPA BS
- Radon tightness_Dr. Kemski Bonn
- Determination of crack bridging_Brifa 19-438
- Thermal shock compatibility acc. to DIN EN 1504-2_Kiwa P12015
- HFA backwater connection for floor-to-ceiling elements_test certificate
- Structural connection of windows_test report 21-000979-PR05_ift Rosenheim
- Remmers flex system_interior waterproofing according to WTA 4-6_valid until 15.01.2025
- Remmers International Guarantee
  Inasmuch as a Remmers Internationl Guarantee (RIG) has been granted, only the conditions / requirements indicated in the written contract between die RIG specialist firm and Remmers shall apply.

Additional information

- Classification of fire behaviour
- Waterproofing the building plinth with floor-to-ceiling windows (single-skin masonry with "WDVS")
- Waterproofing floor-to-ceiling windows (double-skin masonry)
- Execution protocol
- Special agreement for buried ceiling areas
- Special agreement on basement waterproofing
- Statement: Standardised plinth waterproofing in accordance with DIN 18533
- EPD declaration (Remmers)
- EPD-DBC-20220218-IBF1-EN

Possible system products

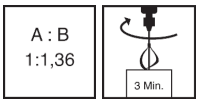
- Kiesol MB (3008)
- MB Fix 2K (0855)
- VZ MB (3005)
- WP DS Levell (0426)
- VM Fill (0517)
- VM Fill rapid (0519)
- Remmers waterproofing slurries
- Tape VF-series
- FL fix (2817)
- Kiesol (1810)
- DS Protect (0823)
- Color PA (6500)
- Tape B 240 E / Tape B 240 (4806)

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.
Reinforce transitions/connections/joints to and on non-mineral substrates/components with joint tape (Tape VF).
Optionally, use a suitable mortar to produce a sealing cove.
Close indentations > 5 mm with a suitable filler or with MB 2K mixed with suitable quartz sand (MR of between 1:1 and 1:3).
Roughen the surface of plastic pipes; clean and, if necessary, sand metal pipes.
If necessary, provide damp proofing.
Prime absorbent mineral substrates with Kiesol MB.
Apply a scratch coat (approx. 500 g of MB 2K/m²) with the product itself as a contact layer and in order to prevent blisters.

Production of the mixture



Combi-container
Mix the liquid component (component A) with a suitable mixing tool.
Pour the loosened powder component (component B) completely onto the liquid component.
Mix for approx. 1 minute before suspending the mixing process to allow the air that has been stirred in to escape.
Remove the powder adhering to the side.
Mix again for approx. 2 minutes.
Keep the mixing tool near the bottom of the bucket while mixing.

Directions

Conditions for use
Temperature of the material, air and substrate: from min. +5 °C to max. +30 °C.
Low temperatures increase, while high temperatures decrease the working and setting time.
The temperature of the substrate must be at least 3 °C above the dew point temperature during application and curing.

Working time (+20 °C)
30 - 60 minutes

Vertical surface waterproofing
Apply the product in two layers on the previously prepared substrate.
Horizontal surface waterproofing
Apply the product in two layers on the previously prepared substrate.
After the waterproofing has dried thoroughly, place two layers of PE sheet over the waterproofing before the screed is laid.
At the edges, the waterproofing layer is applied up to the upper edge of the floor or up to the horizontal barrier.
Horizontal waterproofing in and underneath walls
Apply the product in two layers on the previously prepared substrate.
Connection details/building element joints
Reinforce internal corners and connection joints, as well as connections to non-mineral components (e.g. floor-to-ceiling windows, doors, etc.) and joints on insulation boards with joint tape from the VF series.
Apply the product, embed Tape VF over the entire surface, ensuring that there are no bubbles or creases.
Pipes passing through walls
W1-E: seal pipe penetrations by using the product to form a cove around them.
W2.1-E: use an adhesive flange or a suitable loose/fixed flange to integrate pipe penetrations into the waterproofing material.
Wall base render
The product can be overcoated with adhesive and reinforcing mortar, e.g. Remmers VM Fill / VM Fill rapid, after approx. 4 hours.
Embed the reinforcing fabric into the render layer over the entire surface.
Follow-up work and coverings
After 4 hours, work can be continued with adhesive mortar, filling mortar or reinforcement mortar.
Coating
Direct coating with binder-rich dispersion coats.
Always set up a trial area/trial areas first.

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).
Please contact Remmers Technical Service (phone +49 5432 83900) before applying with machine processing.

Application examples

Water impact classes (DIN 18533/18534/18535)		Minimum dry layer thickness (mm)	Wet layer thickness (mm)	Application rate (kg/m²)	Yield 25 kg (m²)
W1-E*	Ground moisture and non-pressing water	≥ 2	approx. 2.2	approx. 2.2	approx. 11.3
W2.1-E**	Moderate impact of pressing water ≤ 3 m immersion depth	≥ 3	approx. 3.3	approx. 3.3	approx. 7.5
W2.1-E** Transition to elements made of water-impermeable concrete	Moderate impact of pressing water ≤ 3 m immersion depth	≥ 3	approx. 3.3	approx. 3.3	approx. 7.5
W2.2-E***	High impact of pressing water > 3 m immersion depth	≥ 4	approx. 4.4	approx. 4.4	approx. 5.6
W3-E**	Non-pressing water on earth-covered slabs	≥ 3	approx. 3.3	approx. 3.3	approx. 7.5
W4-E	Splash water and ground moisture at the wall base, and capillary water in and under walls	≥ 2	approx. 2.2	approx. 2.2	approx. 11.3
W0-I and W1-I	Low and moderate water impact	≥ 2	approx. 2.2	approx. 2.2	approx. 11.3
W2-I and W3-I	High and very high water impact without chemical impacts	≥ 2	approx. 2.2	approx. 2.2	approx. 11.3
W2-B	Water impact in vessels with a fill level ≤8 m	≥ 3	approx. 3.3	approx. 3.3	approx. 7.5

* Special agreement required for application to masonry
** Special agreement required
*** Special agreement required - **only permitted on concrete substrates up to an immersion depth of 10 m**

Layer thickness allowance according to DIN 18533:
The German standard provides for a layer thickness allowance d_z to ensure the minimum dry layer thickness d_{min}. This takes into account both processing-related fluctuations d_v and the additional amount required for levelling the substrate d_u. If the substrate is levelled separately (e.g. by means of a scratch coat) d_u is not included in the calculation.
d_u = scratch coat, application rate approx. 0.5 kg/m² (depending on the substrate)
d_v = Not required with layer thickness trowel / Application rate approx. 0.4 kg/m² without layer thickness trowel

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 (abP) 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.

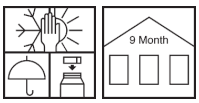
Tools / Cleaning

Clean tools with water while the material is still fresh.
Any material that has already begun to dry can only be removed mechanically.

Remmers tools

- **Collomix Rührer DLX 152 HF (4286)**
- **Collomix® Stirrer KR (4292)**
- **Collomix® HEXAFIX® Nachrüstadapter (4283)**
- **Kratzkelle (4113)**
- **Schöpfkelle (4103)**
- **Schichtdickenkelle (4000)**
- **Rundkelle (4114)**
- **Schlämmbürste (4517)**
- **Flächenstreicher (4540)**
- **Rollerbügel (4449)**
- **Pro nylon roller (5045)**
- **Heizkörperpinsel (4541)**
- **Smoothing Trowel (4004)**
- **Glättkelle (4117)**
- **Smoothing Trowel Duo (4118)**

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.

Biocidal Products Regulation

Contains a biocidal product (in-can preservative) with the biocidal agents CMIT/MIT (3:1) for protecting the container content from deterioration by microbial organisms (germs, yeast, etc.). Please note the processing guidelines carefully!

Declaration of performance

- **Declaration of performance**
- **Declaration of Performance**

Declaration of conformity

CE UKCA

NB 0761

Remmers GmbH (CE), Bernhard-Remmers-Str. 13, D – 49624 Löningen

Remmers (UK) Limited (UKCA), 1&2 Garden Suites, Coleshill Manor Campus, Birmingham B46 1DL (GB)

18 (CE); 23 (UKCA)

GBI-P 73-3
EN 14891: 2012 + AC: 2012

3014

Liquid applied, water-impermeable product for external installations on walls and floors, beneath ceramic tiling (bonded with Remmers FL Fix C2 adhesives in accordance with EN 12004)

Initial tensile adhesion strength:	≥ 0.5 N/mm²
Tensile adhesion strength after water contact:	≥ 0.5 N/mm²
Tensile adhesion strength after heat ageing:	≥ 0.5 N/mm²
Tensile adhesion strength after freeze-thaw cycles:	≥ 0.5 N/mm²
Tensile adhesion strength after contact with lime water:	≥ 0.5 N/mm²
Waterproofing:	No penetration
Crack bridging ability under normal conditions:	≥ 0.75 mm
Crack bridging ability at low temperatures:	≥ 0.75 mm at -5 °C

Please note that the data and information given above have been calculated as guidelines in the laboratory and from real-life experience and are therefore not binding as a basic principle.

This information is therefore of a general nature only and describes our products and how they are used and worked with. In this respect, it must be borne in mind that the varied and diverse nature of the prevailing working conditions, materials used and construction sites encountered means that not every individual case can be covered. In this respect, we therefore recommend either conducting tests or liaising with us in the event of any doubt. Unless we have provided express written assurance of the products' specific suitability or characteristics in respect of a contractually stipulated intended use, any technical application-related advice or instruction will never be binding, even though it is provided to the best of our knowledge In all other respects, our general terms and conditions of sale and delivery shall apply.

When a new version of this Technical Data Sheet is published, it shall replace the previous version.