



Waterproofing in detail

External strip-shaped joint sealing against pressing water on building components made of solid concrete with the reactive structural waterproofing MB 2K

Tested waterproofing system

Permanently secure concrete joint sealing with the flexible polymer-modified thick coating MB 2K

DIN 18533 regulates the waterproofing of non-watertight building components in contact with the ground. This standard excludes the scope of application of constructions and building components created according to the WI guideline of the German Committee for Reinforced Concrete (DAfStb).

Water-impermeable concrete structures are able to take on the function of waterproofing in addition to load transfer, regardless of whether they are monolithic in-situ concrete components or components made of prefabricated elements.

According to the WI Directive, only construction products that can prove their suitability by a certificate of usability may be used for external joint sealing on impermeable concrete components.

Remmers MB 2K meets this requirement in a special way, as MB 2K combines the properties of flexible, crack-bridging, mineral waterproofing slurries (MDS) and bitumen thick coatings (PMBC).

The general building authority test certificates as MDS, as Flexible Polymer Modified Thick Coating (FPD) and for use as a structural waterproofing for construction joints, predetermined crack cross-sections and in the transition to structural components made of concrete with high water penetration resistance (WI concrete) are available.



Proof of suitability:

Test certificate no.: P-1201/554/18 MPA BS

General test certificate issued by the building authorities as Flexible Polymer Modified Thick Coating (FPD) for the waterproofing of structures according to the PG MDS/FPD

Test certificate no.: P-1202/361/19 MPA BS

General building authority test certificate for use as a structural waterproofing for construction joints, predetermined crack cross-sections and in the transition to structural components made of concrete with high water penetration resistance (WI concrete) according to the PG-FBB Part 1.

Application instructions

Exterior, strip-shaped joint sealing with MB 2K on concrete components with high water penetration resistance to water exposure to pressing water



1 Substrate preparation

Use a suitable grinding machine to smooth edges and outer corners approx. 10 mm wide. Remove the unstable cement sinter layer of the WI concrete base. A load-bearing substrate must be created in the area of the construction joint, the wall/soil connection up to 15 cm above the face of the WI concrete base.



2 Cleaning

Clean the mineral surfaces that are to be waterproofed



3 Priming

Absorbent joint areas to be waterproofed are primed with the special primer Kiesol MB to bind residual dust and consolidate the surface.

Consumption: 0.1 - 0.2 l/m² Kiesol MB



4 Filling defects

Any open joints, defects or broken-out areas > 5 mm must be closed up with WP DKS rapid

Consumption: approx. 1.7 kg/m²/mm layer thickness
WP DKS rapid [basic]
approx. 1.7 kg/m joint sealant
WP DKS rapid [basic]



5 Scratch coat

After the primer has dried, close all cavities and pores < 5 mm with pore-filling scratch filler made of MB 2K, level and remove evenly with the surface.

Consumption: approx. 0.5 kg/m² MB 2K



6 Construction joint waterproofing

Apply Tape VF and MB 2K to the construction joint in the wall/floor connection. Apply MB 2K to the prepared substrate. Then embed the joint tape over its full surface area, making sure not to leave any air bubbles. After the joint waterproofing has reached resistance, two coats of MB 2K are applied in accordance with the regulations. The dry layer thickness must be at least 3 mm. Joint tape bars are bonded with an overlap of > 10 cm with MB 2K.

Consumption: approx. 1 m/m Tape VF 120
 approx. 1.1 kg/m
 MB 2K corresponds to 3.3 kg/m²
 at 32 cm embedding width



A Alternative position: mineral sealing cove

Create a sealing cove with a radius of approx. 5 cm using WP DKS rapid (Basic). The mortar is applied «fresh in fresh» into the WP DKS rapid [basic] adhesive bridge.

Consumption: approx. 1.6 kg/m²/mm layer thickness
 WP DKS rapid [basic] as bonding layer
 approx. 1.7 kg/m²/mm layer thickness
 WP DKS rapid [basic] as joint seal



7 Joint sealing

Vertical joints of the element walls are waterproofed with tape VF 120 and MB 2K in 2 coats. MB 2K is applied to the prepared substrate and the joint tape VF 120 is embedded over the entire surface. The joint seal must cover 15 cm on both sides. Once resistance has been achieved, MB 2K is applied in two layers in accordance with the regulations. The dry layer thickness must be at least 3 mm. Joint tape bars are fully bonded with MB 2K with an overlap > 10 cm.

Consumption: approx. 1 m/m Tape VF 120
 approx. 1.1 kg/m
 MB 2K corresponds to 3.3 kg/m²
 The waterproofing is guided onto the concrete for at least 15 cm on each side.



8 Perimeter insulation

After the structural waterproofing has dried, bond the insulation made from rigid extruded polystyrene foam over the entire surface with MB 2K. If necessary, cut/chamfer the insulation board in the area of the sealing cove.

Consumption: approx. 3.5 - 4.5 kg/m² MB 2K



A Alternative position: Insulation board bonding

After the structural waterproofing has dried, bond the insulation made from rigid extruded polystyrene foam with the two-component polymer-modified bitumen thick coating (PMBC) BIT 2K [basic] over the entire surface. Notch the insulation board in the area of the sealing cove.

Consumption: approx. 3.5 - 4.5 l/m² BIT 2K [basic]



A Alternative position: protection layer

Apply the three-layer drainage and anti-filling membrane DS Protect after the waterproofing has dried.

Consumption: 1.05 m²/m² DS Protect
4 pcs./m DS Protect Clip
0.5 pc./m DS Protect AL

> Notes

Product overview

Products used from the tested Remmers
MB 2K joint sealing system



MB 2K

Multifunctional building waterproofing. Combines the properties of flexible, crack-bridging, mineral sealing slurries MDS and bitumen thick coatings PMBC.

Art. no.: 3014



WP DKS rapid [basic]

Quick-setting waterproofing filler

Art. no.: 0423



Kiesol MB

Special primer

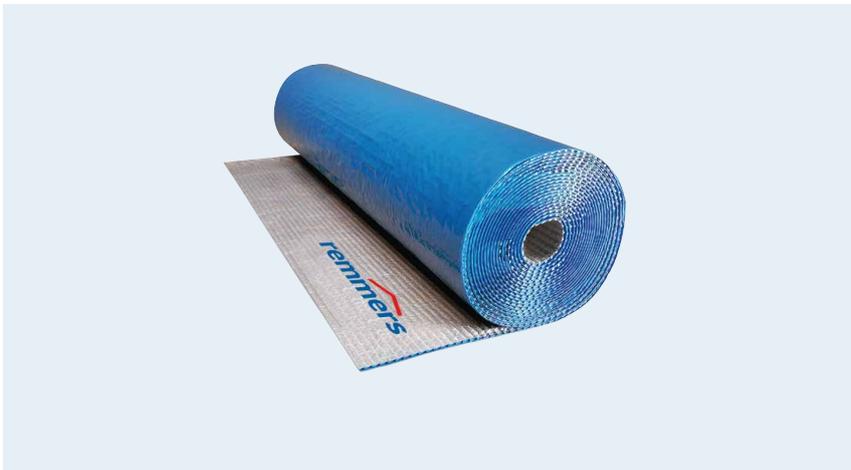
Art. no.: 3008



Tape VF 120

High-quality, fabric-coated premium joint tape made from NBR

Art. no.: 5071



DS Protect

Three-layer protection system with decoupling function

Art. no.: 0823

Tool overview



Collomix® HEXAFIX® retrofit adapter

Art. no.: 4283



Collomix® stirrer

Art. no.: 4286



Pointer

Art. no.: 4113



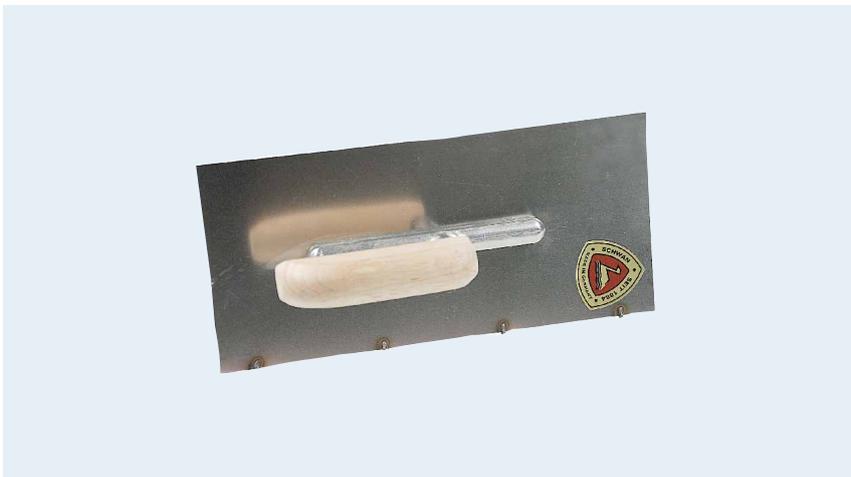
Remmers Quirlex
Cleaning bucket

Art. no.: 4282



Ladle

Art. no.: 4103



Layer Thickness Trowel

Art. no.: 4000



Profile Trowel

Art. no.: 5047



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