



Technical Data Sheet Art. No. 3014

Multi-Tight 2K

Combines the properties of a solvent-free, flexible waterproofing grout (MWG) and a bituminous thick coating for waterproofing buildings (PMBC)



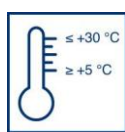
Floor/wall
indoors and
outdoors



Mixing ratio 2-
components



Mixing time



Working
temperature



Mortar cover /
filling knife /
trowel applica-
tion/spray
application



Total applica-
tion rate per
mm
thick layer



Shelf-life



Store frost-free
and cool
protected from
/ moisture in
closed containers

Range of use

- For fast waterproofing of building elements, tanks, reservoirs and basements
- Against ground damp, non-standing seepage water, in wet rooms, standing seepage water and external water pressure in accordance with DIN 18195
- As a horizontal barrier against rising damp in masonry work.
- For waterproofing under ceramic tiles in indoor and outdoor areas (load class A0/B0)
- For attaching perimeter insulation panels
- Plinth waterproofing, also combined with plinth render and bonded thermal insulation systems
- Render waterproofing

Property profile

Remmers Multi-Tight 2K is a reactive waterproofing material that combines the properties of a flexible, mineral waterproofing grout and a polymer modified bitumen thick coating:

- Solvent-free
- Low emissions

Characteristic data of the product

Base:	polymer binder, cement, additives, special fillers
Bulk density of fresh mortar:	approx. 1.1 kg/dm ³ .
Consistence:	paste
Working time:	30 - 60 min.
Water impermeability:	up to a 10 m water column
Time until thoroughly dry:	approx. 18 h (5°C/70% relative humidity)*
Cross-slit pressure test:	passed without a layer of reinforcement
Crack-bridging:	≤ 3 mm (with a dry layer ≤ 3 mm thick)
Layer thickness:	a 1.1 mm thick wet layer produces an approx. 1 mm thick dry layer
Water vapour diffusion resistance coefficient μ :	approx. 6600

*Depending on weather conditions and the thickness of the fresh layer, the drying time given may be shorter or longer. Applies for a layer 2 mm thick.

- Bitumen-free
- Highly flexible and crack-bridging
- Fast thorough drying and cross-linking after just 18 hours
- Can be applied as a grout, filler or sprayed
- High compressive strength
- Rain tight after approx. 2 hours
- Visible control of thorough drying
- High tensile adhesion strength on mineral substrates and old bitumen
- Can be used on vertical and horizontal surfaces as well as beneath screeds

- Can be coated over
- Resistant to de-icing salt
- Frost and age resistant
- Can be quickly subjected to foot traffic and covered (≥ 4 h)

Substrate

Suitable substrates are:

- Gypsum-free, mineral substrates,
- Old bitumen, metal (e.g. stainless steel and aluminium), lacquered wood and plastic window frames

The substrate must be clean, load-bearing and free of substances that could interfere with adhesion. Matt damp surfaces are permitted. The substrate must be solidly filled and plane.

Close indentations > 5 mm such as joints, holes or broken out areas with a suitable filler, (e.g. Remmers Waterproofing Filler) or use Multi-Tight 2 K mixed with Selectmix 25 (quartz sand 0.2 - 2.0 mm) in a mixing ratio of 1 : 1 to 1 : 3.

Beak off or slope corners and edges. Remove projecting seams and the remains of mortar. Close coarse-pore substrates (e.g. inherently porous, light-weight concrete blocks) first by applying a filler (e.g. Remmers Waterproofing Filler). Pre-wet highly absorbent substrates. Prime all mineral substrates with Kiesol diluted 1 : 1 with water, using an application rate of approx. 100 g/m².

To avoid blisters, a scratch coat of Multi-Tight 2 K is applied to the air-dry surface with an application rate of approx. 800 g/m². Kiesol should not be sprayed between the subsequently applied layers of waterproofing nor on the surface afterwards.

Application

■ Horizontal waterproofing in and beneath walls

Prime the cleaned concrete floor slab in the wall positioning area approx. 50 mm wider than the width of the wall with Kiesol (diluted 1:1 with water) and waterproof with two layers of Multi-Tight 2K as a grout. The second layer is applied as soon

as the first will not be damaged when worked over. Lay the first course of masonry on the last fresh layer of grout with mortar.

■ Sealing cove:

Produce a sealing cove in the clean wall position area with a radius of 5 cm. To improve adhesion and to provide protection against the penetration of moisture from behind, apply a basic silicification treatment consisting of Kiesol (diluted 1:1 in water) and Remmers Waterproofing Grout, starting 15 cm below the upper edge of the slab and leading over the 2nd horizontal joint (but at least 20 cm high). Wet-on-wet, place a sealing cove made of Waterproofing Filler. As an alternative, the sealing cove can be executed with Multi-Tight 2K to which Selectmix 25 (Art. No. 4047) (mixing ratio 1:2) has been added. This material is also applied wet-on-wet over the basic silicification treatment.

■ Vertical surface waterproofing:

Apply at least two uniform layers of Multi-Tight 2K, pore-free. The second layer is applied as soon as the first will not be damaged when worked over. The minimum application rates and total thickness of the layers should be observed, checked in the fresh state with a layer thickness gauge and documented, if necessary.

■ Horizontal surface waterproofing:

When waterproofing against ground damp and non-standing seepage water, execute as described above for waterproofing vertical surfaces. After the waterproofing has thoroughly dried, place two layers of PE sheet over the waterproofing as a parting plane and for protection before the screed is placed.

Waterproofing against standing seepage water or water pressure is carried out on the reinforced sub-layer of concrete beneath the floor slab. When waterproofing balconies, terraces and wet cells, Multi-Tight 2K is applied up to the upper edge of the floor or the horizontal barrier.

■ Pipes passing through walls

For ground damp and non-standing seepage water, waterproof pipes

passing through walls flexibly with Multi-Tight 2K in the form of a cove. Roughen plastic pipes with sandpaper. Clean metal pipes and sand if necessary.

When an adhesive flange or loose/fixed flange is used for pipes passing through walls, they should be bedded into the waterproofing. Remmers Pipe Flange (Art. No. 4349-4351) can be used for all loads.

■ Connection details/building element joints

Corners and connection joints in permanently wet areas should be bridged with the VF Water Stop System. Water Stop VF 120 (Art. No. 5071-5072) is worked into the fresh first layer of Multi-Tight 2K, following the course of the joint.

For pipes passing through walls and floor openings, integrate Floor and Wall Gasket VF.

The connection of building waterproofing that leads to rising building elements (e.g. windows and doors that go down to the floor) is executed with the SK 10/ SK 25 (Art. No. 5017 and 5003) Water Stop System. The self-adhesive water stop is cemented to the grease-free, cleaned, transition area. The water stop is then coated twice with Multi-Tight 2K.

■ Application of render

If render is to be subsequently applied, a layer of grout should additionally be applied to the last layer of waterproofing. Throw Remmers Preparatory Mortar (Art. No. 0400) over the entire surface of the fresh layer of grout and allow to set for 24 - 48 hours. Then apply Remmers Restoration Render.

■ Follow up work and covers

After 4 hours, work can be continued or the waterproofing can be covered with tiles, using a cementing mortar, filling mortar or reinforcement mortar. To increase tensile adhesion strength, a scratch coat can be applied to vertical surfaces first using the same material.

Protection/drainage layer

The thoroughly dry waterproofing must be protected from mechanical damage. To protect the waterproofing system, we recommend Remmers DS System Protection (Art. No. 0823).

Directions

Shake the liquid component well before using. The powder component is added to the liquid component. Remove material that adheres to the side of the bucket with a trowel and mix with a suitable mixing tool until homogeneous, lump-free and the proper consistency for application with a brush or filling knife has been achieved. Mixing time is approx. 3 minutes. If required, smaller quantities can also be mixed in a ratio of 1 part by weight liquid to 1.36 parts by weight powder. The mixing ratio should not be changed. The subsequent working operations are executed as described under Applications in a brushing or filling procedure. The maximum total wet layer thickness should not exceed 5 mm.

Do not use if the temperature of the air, substrate or building material is below +5 °C or above +30 °C. Relative humidity should not exceed 95%. Do not use in direct sunlight; observe the rules for the application of render according to the position the sun, remaining in the shade (pre-wet surfaces that are strongly heated) or work in the morning or evening hours. The waterproofing is sensitive to rain and frost in the fresh state.

Notes

When waterproofing building elements in contact with the ground using Multi-Tight 2K according to VOBIB, make sure that application is clearly stated in detail in the Specification of Works pursuant to ATV DIN 18 336 "Waterproofing Works".

The guideline "Planning and Execution of Waterproofing with Flexible Waterproofing Grouts", published by Deutsche Bauchemie, 2nd edition as per 2006 should also be observed. An agreement must be made with the owner of the building for the use of Multi-Tight 2K in these application areas. Multi-Tight 2K is not suitable for waterproofing under elevated piles

Tools, cleaning

Small anchor mixing tool (Art. No. 4248) with an adjustable drill (1000 watt and 700-900 rpm), smoothing trowel, smoothing float, filling knife, 2 mm layer thickness trowel, tongue trowel.

Spraying equipment: inoBEAM M8. As long as the waterproofing material has not yet dried, tools can be cleaned with water.

Packaging, application rate, shelf-life

Packaging:

25 kg combination container with the polymer and powder components packaged in the proper mixing ratio (the powder is found in the container).

Application rate:

Protection against the penetration of moisture from behind:
Per basic silicification treatment:

0.1 kg/m² Kiesol and 1.6 kg/m² Waterproofing Grout

Primer:

0.1 kg/m² Kiesol

Multi-Tight 2K

1.2 kg/m² corresponds to an approx. 1 mm thick dry layer

Layer thicknesses and application rates when used as crack-bridging MWG in indoor and outdoor areas:

Load group	Dry layer thickness (mm)	Application rate (kg/m ²)
Ground damp and moisture	≥ 2.0	≥ 2.5
Water reservoirs with a water depth < 5 m	≥ 3.0	≥ 3.7

Application rates for levelling and scratch coats must be calculated separately.

When applied by hand, application rates may increase by approx. 1 kg/m².

Shelf-life:

In unopened, original containers stored frost-free, dry and protected from the effect of strong heat, shelf-life is 9 months.

Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology is found in the latest Safety Data Sheet.



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Multi-Tight 2K

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

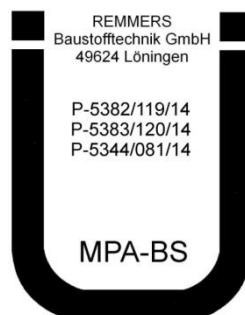
Initial tensile adhesion strength:	≥ 0.5 N/mm ²
Tensile adhesion strength after contact with water:	≥ 0.5 N/mm ²
Tensile adhesion strength after heat ageing:	≥ 0.5 N/mm ²
Tensile adhesion strength after freeze-thaw cycles:	≥ 0.5 N/mm ²
Tensile strength after contact with lime water:	≥ 0.5 N/mm ²
Waterproofing:	No penetration
Crack-bridging ability at normal conditions:	≥ 0.75 mm
Crack-bridging ability at low temperatures:	≥ 0.75 mm at - 5 °C
Release of dangerous substances:	NPD



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