

HR2K

2K Hybrid reactive waterproofing

quick-mix
A trademark of **sievert**



2-component, high-yield hybrid waterproofing

- Tested as a flexible, polymer-modified thick coating (abP FPD)
- tested as a flexible mineral sealing slurry (abP MDS)
- tested in accordance with DIN EN 15814 (PMBC)
- very low-emission (GEV-EMICODE EC1Plus and French VOC regulation A+)
- radon proofing
- for sealing under time pressure (loadable after 16 hours)



APPLICATIONS

- Waterproofing of building components in contact with the ground
- Renovation of old bitumen waterproofing
- Base sealing
- Sealing the wall-sole connection
- Strip sealing of structural joints
- Sealing of level thresholds, doors and window elements
- Base point sealing of the facing brick shell
- Floor slab waterproofing
- Horizontal sealing under wall contact surfaces
- Bonding of insulation boards
- Sealing of tanks and basins in accordance with DIN 18535
- Carbonation brake on concrete (to protect the foundation)

PROPERTIES

- Highly crack-bridging
- Flexible at low temperatures
- UV-resistant
- extremely pressure-resistant
- frost and de-icing salt-resistant
- can be levelled, painted and sprayed
- very low emission
- solvent-free
- bitumen-free
- can be plastered over
- Can be painted over

COMPOSITION

- Binder basis: Polymer dispersion
- cement-based powder component
- Additives

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SUBSTRATE

Suitable substrates

- masonry according to DIN EN 1996 such as B. from bricks, hollow blocks and solid blocks / blocks made of lightweight concrete and concrete, smelting blocks, sand-lime blocks, aerated concrete blocks, formwork blocks made of concrete, mixed masonry
- concrete / reinforced concrete according to EN 206-1 combined with DIN 1045-2
- Plasters in category CS III or CS IV according to DIN EN 998-1
- Existing bitumen-based paints and coatings
- Cement screeds
- old, tightly adhering tile coverings

Properties/tests

- The substrate must be frost-free, dry on the surface, sustainable, clean, and free from contamination and separating layers of all kinds (e.g. paint coatings, formwork oils).
- The substrate must be dry on the surface.
- Plasters must be hardened.
- Concrete must be at least 3 months old in accordance with DIN 18535 – Sealing of tanks and basins in solid construction.
- Substrates containing tar are not suitable and must be completely removed

Pretreatment

- Sintered layers or adhering contaminants must be removed mechanically (diamond grinding).
- On the surfaces to be sealed, external corners must be bevelled and internal corners must be provided with a sealing fillet or sealing tape (in accordance with the regulations).
- For masonry according to DIN 1053, butt joints wider than 5 mm must be sealed with mortar on the outside, e.g. for bricks that are not laid “crisply”.
- Depressions larger than 5 mm, such as mortar pockets or break-outs, must be quickly sealed in advance, e.g. with LM 5/21 lightweight masonry mortar / K01 masonry and render mortar / MHK-S mineral coving mortar.
- Special measures are required to close the pores (e.g. scratch levelling with quick-mix HR2K) in the case of masonry made of lightweight or concrete blocks with porous structure. The levelling compound must be dried/set for approx. 2 hours before the next work step.
- Concrete must also be checked. Existing defects and mould ridges must be removed as with masonry.
- Pores, open or concealed, can lead to blistering in the fresh coating, e.g. when exposed to sunlight. To minimise the risk of blistering, a scratch coat of quick-mix HR2K should be applied. The levelling coat must be dried/set for approx. 2 hours before the next work step.
- Before applying quick-mix HR2K, the surface to be sealed must be thoroughly cleaned (e.g. by vacuuming) and primed with quick-mix BGR Primer.
- Clean existing bitumen-based paints and coatings (e.g. with a high-pressure cleaner) and apply a scratch coat of quick-mix HR2K after drying.
- EPS and XPS boards must be provided in advance with a suitable reinforcing mortar (e.g. akurit SK grey) and fabric inlay.
- In transition areas between the building structure and installation elements such as windows or doors, these must be roughly sanded and then quick-mix UHV universal adhesion promoter is applied.

PROCESSING

Temperature

- Processable at air, material and substrate temperatures from +5 °C to +25 °C.

Mixing / Preparation / Processing

- Place Comp. A (liquid) in the mixing vessel and add Comp. B (powder).
- Mix homogeneously with a suitable stirrer (e.g. Collomix DLX stirrer) for at least 2 minutes.

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PROCESSING

Processing

- The quick-mix HR2K can be levelled, brushed and sprayed.
- It is applied in at least two coats.
- Depending on the load case, the second layer can be applied either fresh-in-fresh or when the first waterproofing layer is no longer damaged by the application of the second waterproofing layer.
- Apply the compound to the prepared substrate using a suitable tool (e.g. layer thickness trowel). Any grooves or unevenness must be closed or smoothed.
- When using the reinforcement insert, this is embedded in the fresh first waterproofing layer.

Processing / Working time

- The mixed product can be worked for about 30 minutes.
- Timings relate to +20°C and 60% relative humidity.

Drying / Hardening

- After approx. 2 hours, it can be reworked.
- The waterproofing is rainproof after approx. 3 hours.
- The waterproofing can be loaded and filled after approx. 16 hours.
- Time specifications refer to +20°C and 60 % relative humidity.

Subsequent coating / Suitability for coating

- The waterproofing is to be protected against damage by means of protective/wear layers according to DIN 4095 or DIN 18533 / DIN 18535.
- For plastering the quick-mix HR2K, the akurit MH grey universal bonding bridge is applied with a notched trowel with a 6 mm V toothing at the earliest 1 day after the HR2K application. After a drying time of at least 1 day, the akurit SLP light wall base plaster or akurit ZMP cement plaster can be applied. Two layers of plaster are usually applied. The first plaster layer is applied with an average application thickness of 10 mm.
- The surface must then be drawn off perpendicular and flush and roughened vigorously. Depending on the weather and temperature, the second layer follows after about 2 days at the earliest (white dry). The total application thickness is 15 – 20 mm on the outside and 10 – 15 mm in one layer. After the last layer has dried, a coat of paint with akurit FDI dispersion finish can be applied.
- Direct coat of paint on quick-mix reactive waterproofing: After the quick-mix reactive waterproofing has dried, it can be coated with AKURIT FDI Dispersionsfinish

Cleaning the tools

- Clean all tools and equipment with water immediately after use.

Notes

- Premature skin formation is to be expected in the event of sunlight, high temperatures and wind movement. Shading precautions are recommended.
- Only use on dry or matt damp substrates.
- Avoid coarse trowel marks on the surface.
- The rules of the respective processing guidelines must be observed.
- If there is a risk of moisture penetration from the rear, apply quick-mix MHK-S quick mineral cover mortar, quick-mix MSP mineral barrier plaster or quick-mix MDS mineral sealing slurry rigid.
- When applying and processing system products, the relevant technical data sheets must be observed.
- Can be sprayed with peristaltic and screw pumps (e.g. BMP 6 / BMP 7).
- Component A (liquid) and component B (powder) are matched to each other for each batch. The compatibility of two components from different batches can therefore not be guaranteed and must be ruled out.
- Mixed, workable material from different batches can be processed on a continuous surface.
- Only use loam-free filling material to fill the excavation pit, as the recompaction and swelling of cohesive soils can create the risk of unpermitted shear forces. Do not use debris and building rubble to backfill the excavation pit. Point loading of the seal must be avoided.

PACKAGING

- 26 kg/combination container (liquid component: 2 x 6.5 kg tubular bag / powder component: 2 x 6.5 kg paper sack)



STORAGE

- Store in the original, unopened packaging in dry, frost-free conditions.
- We recommend that the product be used within 12 months of the date of manufacture.

QUANTITY REQUIRED / YIELD

■ Scratch coat	Consumption (kg/m ²)	Dry layer- thickness (mm)	Wet layer- thickness (mm)	Fabric	Wait for the first layer to dry
	1,1	1,0	1,1	no	no
■ Surface sealing FPD according to FPD-RL					
W1-E: Soil moisture and non-pressing water	3,3	3,0	3,3	no	no
W2-E: moderate impact of pressing water ≤ 3 m	4,4	4,0	4,4	yes	yes
W3-E: Non-pressing water on earth-covered ceilings	3,3	3,0	3,3	yes	yes
W4-E: Splash water at the wall base and capillary water in and under walls	2,2	2	2,2	no	no
■ Surface sealing MDS according to DIN 18533					
W1-E: Soil moisture and non-pressing water	2,2	2	2,2	no	no
W2-E: moderate impact of pressing water ≤ 3 m	-	-	-	-	-
W3-E: Non-pressing water on earth-covered ceilings	-	-	-	-	-
W3-E: Non-pressing water on earth-covered ceilings	2,2	2	2,2	no	no
■ Basins and tanks FPD according to FPD-RL					
W1-B: Water tank filling height ≤ 5 m, crack width ≤ 1.0 mm (R0-B to R3-B)	4,4	4,0	4,4	no	no
W2-B: Water tank filling height ≤ 10 m, crack width ≤ 1.0 mm (R0-B to R3-B)	4,4	4,0	4,4	no	no
■ Basin and tank MDS according to DIN 18535					
W1-B: Water tank filling height ≤ 5 m, crack width ≤ 0.2 mm (R0-B to R1-B)	2,2	2	2,2	no	no
W2-B: Water tank filling height ≤ 10 m, crack width ≤ 0.2 mm (R0-B to R1-B)	2,2	2	2,2	no	no
■ Board adhesive					
W1-E: spot bonding	approx. 2.5	-	-	no	no
W1-E: gluing over the entire surface	approx. 3.5	-	-	no	no
W2-E: gluing over the entire surface incl. butt bonding	approx. 4.4	-	-	no	no



TECHNICAL DATA

Mixing ratio	1 : 1
Density ready for use	approx. 0.98 kg/l
Processing temperature	+5°C to + 25°C
Processing time	approx. 30 minutes
Rain resistance [EN 15817]	after approx. 2 hours
Revisability	after approx. 3 hours
Load-bearing capacity	after approx. 24 hours
Crack bridging class	RÜ3-E
Breaking elongation	approx. 80 %
Tensile strength	approx. 2.2 N/mm ²
Compressive strength	> 1 MN/m ²
Tightness	3 bar / 28 days
Diffusion equivalent air layer thickness (s_d-value)	3,83 m
Storage	at least 12 months, frost-free, dry and originally sealed
Water vapour diffusion resistance μ	≥ 2207
Storage	min. 12 months, frost-free, dry and originally sealed

All data are average values that were determined under laboratory conditions according to relevant test standards and application tests. Deviations are possible under practical conditions.

SAFETY AND DISPOSAL INSTRUCTIONS

Safety	<ul style="list-style-type: none">■ The powder component contains cement and reacts strongly alkaline with moisture / water. Therefore protect eyes and skin. In case of contact, always rinse with water. In the event of contact with the eyes, consult a doctor immediately■ Follow further instructions in the safety data sheet.
Disposal	<ul style="list-style-type: none">■ Completely empty and recycle the packaging.■ Dispose of the material in accordance with the official regulations.■ Cured product residues can be found under the waste code in accordance with the Waste Catalog Ordinance 08 04 10 (waste adhesives and sealants with the exception of those mentioned in 08 04 09).

GENERAL INFORMATION

This information sheet provides only general recommendations. Should you have any queries relating to a specific application, please contact our technical sales advisor or call our hotline: +49 541 601-601. The technical data refer to + 20 ° C and 60% relative humidity. All of the details given are based on our current knowledge and experience and on the assumption that the materials are professionally applied and used for their normal purpose. All of the details are non-binding and do not release users from their duty to undertake their own tests to ensure suitability for the intended application. Due to the effects of different weather, processing and construction site conditions, no guarantee can be given for the general validity of all details. We reserve the right to make changes as a result of further development of the product and applications engineering. The general rules for construction engineering, the valid standards and guidelines, and the technical working guidelines must be observed. The publication of this technical data sheet renders all previous editions of this data sheet void. Please obtain the latest information from our website.