AQUAFIN®-RS300

Rapid hybrid waterproofing



Material number	Package type	Colour	Units / pallet	Pc/package
204208001	20 kg, combination container	light grey	18,000	1,000
204208003	10 kg, combination container	light grey	24,000	1,000
204208010	36 kg, set (2 component)	light grey	48,000	1,000
	A-component: 18 kg, bag		48,000	1,000
	B-component 18 kg, can		24,000	1,000

Areas of use/bonded waterproofing

- as bonded waterproofing under tiles and boards
- as bonded waterproofing for water impact class W0-I to W3-I in accordance with DIN 18534
- as bonded waterproofing for balconies, loggias, arcades in accordance with DIN 18531 and terraces
- as bonded waterproofing underwater and for swimming pool building
- in conjunction with the SCHOMBURG joint tape systems

Product features

- 2 component, cementitious waterproofing slurry
- Reactive setting
- Highly flexible and crack bridging
- Rainproof, can be walked on and overcoated after just ca. 3 hours

Advantages

- Tested system product
- Reliable flexibility and drying - even if weather conditions are unfavourable
- Convenient compaction properties

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Existing test certificates

- Reaction to fire classification report
- General building approval test certificate for producing liquid bonded waterproofing with tiles and boards in accordance with WTB seq. no. C 3.27
- French cert. VOC
- EMICODE licence
- Impermeability to water after storage in concrete-damaging water in accordance with DIN EN 4030-1
- Test report in accordance with DIN EN 12004
- General building approval test certificate in accordance with Hessian WTB, June 2018, seq. no. C.3.26
- General building approval test certificate for use as waterproofing in transitions on building components made of concrete with high water penetration resistance in accordance with building rules list A, part 2, seq. no. 2.48
- Impermeability to water against water pressure that acts on the rear of the coating
- Crack bridging test at low temperatures (-5 °C)
- Impermeability to water in accordance with DIN EN 14891

Technical Data

Material properties

Product components	2 component system
Base material	Pre-blended dry mortar Polymer dispersion
Density (spec. weight)	approx. 1.3 kg/dm³
Grain size max	< 1 mm
Crack classes DIN 18533	R1-I
Crack bridging ability DIN EN 14891 (at normal and low temperatures)	> 0.75 mm
Tensile adhesion strength DIN EN 1542	≥ 1 N/mm²
Crack bridging DIN EN 1062-7	Passed
Sd value DIN EN ISO 7783 (H2O) per mm dry layer thickness	approx. 1.1 m
Vapour diffusion behaviour	Vapour diffusion inhibiting
Water vapour diffusion resistance μ (DIN EN ISO 7783)	approx. 1100
Watertightness when installed in accordance with PG MDS/AIV	to 1,5 bar
Permissible tank depth in accordance with DIN 18535	6 m
Classification of the reaction to fire in accordance with DIN EN 13501-1	E

Mixing

Mix ratio, component A	1 weight proportion
Mix ratio, component B	1 weight proportion
Mixing time	approx. 2 - 4 minutes
Maturing time	approx. 5 minutes

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Application

Substrate temperature	approx. 5 - 30 °C
Pot life	approx. 45 minutes
Method of application, max. layer thickness per application step	up to 1.5 mm
Wet film thickness (yields 1 mm dry film thickness)	approx. 1.1 mm
Consumption pro m² and mm layer thickness	approx. 1.5 kg/m²
Second application step after waiting time	approx. 3 hours
Foot traffic after	approx. 3 hours
Ready for covering with tiles	approx. 3 hours
Application temperature	approx. 5 - 30 °C
Overcoat after	approx. 3 hours
Withstands pressurised water after	≥ 3 days
Hardening time / light resilience	approx. 3 days

System components in accordance with AbP AIV

Primer	ASO-Unigrund-GE ASO-Unigrund-K, blue ASO-Unigrund-S
Joint Sealing tape	ASO-Dichtband-2000 ASO-Dichtband-2000-Ecken (Innen und Aussen) ASO-Dichtband-2000-S ASO-Dichtband-2000-S-Ecken ASO-Dichtmanschette-Boden ASO-Dichtmanschette-Wand ASO-Dichtband-120 ASO-Dichtecke-A ASO-Dichtecke-I ASO-Dichtmanschette-W ASO-Dichtmanschette-B
Tile adhesive	AK7P CRISTALLIT-FLEX LIGHTFLEX MONOFLEX MONOFLEX-fast MONOFLEX-FB MONOFLEX-white MONOFLEX-white 3:1 with UNIFLEX-F MONOFLEX-XL SOLOFLEX UNIFIX-S3 UNIFIX-S3-fast ASODUR-EKF

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Material rate

Material consumption rate according to the area of application

Exposure	Dry film thickness, mm	Wet film thickness, mm	Consumption, kg/m²
Basement walls and floor slabs	> 2,0	approx. 2,2	3,0
Plinth waterproofing	> 2,0	approx. 2,2	3,0
Transverse waterproofing	> 2,0	approx. 2,2	3,0
In accordance with WTA leaflet 4-6 "Subsequent waterproofing of building components in direct ground contact"			
Soil moisture/non-accumulating seepage water	> 2,0	approx. 2,2	3,0
Non-pressurised water	> 2,0	approx. 2,2	3,0
Standing seepage water /pressure water	> 3,0	approx. 3,3	4,5
Waterproofing of tanks and pools	> 2,0	approx. 2,2	3,0
Bonded with tiles/boards	> 2,0	approx. 2,2	3,0
Levelling layers	1 mm	1,1 mm	1,5
Possible additional consumption in case of uneven substrates and artisanal variations must be considered. Therefore a thickness allowance of at least 25 % must be taken into account in accordance with the standards DIN 18531, DIN 18534, DIN 18535.			

Processing equipment

Aids/tools

- Flat trowel
- Broad paint brush
- Spray equipment
- Serrated or layer-thickness trowel
- Stirrer (approx. 500-700 rpm)
- Trowel

Suitable substrate

- Bonded waterproofing
- Old, firmly adhering bituminous substrates
- Concrete
- Cement-based screed (CT)
- Floor levelling compounds
- Calcium sulphate screeds (CA, CAF)
- Mastic asphalt screeds (AS)
- Magnesia screeds (MA)
- Firmly adhering tiled finishes
- Tile bearing elements
- Gypsum fibre boards
- Gypsum boards
- Raised floors
- Cement and fibre cement boards
- Decoupling mats & boards
- Dry screeds
- Cement plaster
- Gypsum plaster
- Lime-cement plaster
- Light plaster

Preparing the substrate

Requirement for substrate

1. Even
2. Free of adhesion inhibiting substances
3. Sealed in the surface
4. Pore open
5. Load-bearing
6. Extensively fully grouted

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Preparing the details

1. Clean and degrease flanges.
2. Edges are to be chamfered and corners are to be rounded.
3. Depressions > 5 mm and mortar pockets, plaster grooves in brickwork, open butt or bed joints, damaged areas, large pored substrates or uneven masonry work must be levelled in advance with ASOCRET-M30 (cement-based mortar).

Preparing the surface

1. Highly absorbent and slightly sanding substrates must be primed with ASO-Unigrund-GE, ASO-Unigrund-K, ASO-Unigrund-S and ASO-Unigrund-PLUS
2. The primer must be completely dry / must have reacted fully before the subsequent work steps are carried out.
3. Moisture penetration from the rear and intermittent moisture loading from the negative side must be avoided.
4. For waterproofing with moisture penetration from the rear, we recommend pre-sealing with AQUAFIN-1K or ASODUR-SG3-thix.

Base slab-wall transition

1. While still wet, install a sealing cove with an edge height of at least 4 cm made of ASOCRET-M30.
2. Pre-screen with AQUAFIN®-1K or ASOCRET-M30 in a consistency that is able to screen.
3. After drying, carry out the waterproofing with AQUAFIN®-RS300.

Pipe penetrations

1. In water wear class W 2.1-E, suitable loose fixed flange constructions or tested house entry systems must be used.
2. For the watertight formation of pipe penetrations, the system components of the ASO-Dichtmanschetten (Joint sealing tape sleeves) are to be used in accordance with their technical data sheets.

Application

Mixing

1. Fill approx. 50-60% of the liquid component into a clean mixing bucket and mix with the powder component to produce a homogeneous, lump-free mass.
2. Finally, add the rest of the liquid component and mix sufficiently.
3. The mixing time is ca. 2 - 4 minutes.
4. After a settling period of ca. 5 minutes, thoroughly homogenise the compound again.

Waterproofing

1. Apply AQUAFIN®-RS300 in a minimum of two application steps ensuring it is free of pores.
2. The material rate is dependent on the required dry film thickness corresponding to the water impact class (see Material rate table).
3. The second application (and following) step can take place when the first application step can no longer be damaged by reworking. (see “Technical Data > Processing > Second application step after waiting time”)
4. An application thickness of more than 2 kg/m² in one application step can lead to cracking.
5. An even layer thickness is achieved using a coating thickness trowel or notched trowel and then smoothing.

Waterproofing bonded with tiles and boards

1. Floor drains and intersections in the tank area must be provided with suitable flange elements.
2. Tiles or boards are layed with one of the tile adhesives listed in the system components section.
3. The waterproofing layer must be completely hardened at the time of the laying work.
4. Apply the sealing sleeve in accordance with the Technical Data Sheet.

Formation of intersections, movement and connecting joints

Use the ASO-Dichtband 2000 - System or the ASO-Dichtband-System along with the required pre-formed pieces to form movement and connecting joints, as well to integrated intersections and assembly parts. Bond joint sealing tapes, joint-tape edges or connections with the waterproofing material and fill in the overlap area and the edge zone with filler. Check elements such as linear drainage systems for suitability in advance and include them in the bonded waterproofing in accordance with the manufacturer’s specifications.

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Transitions of watertight concrete building components with an immersion depth of up to 3 m (max. opening width 1.0 mm)

1. Finally, overcoat the bonded joint sealing tapes with the waterproofing at least 15 cm on both sides of the joint. Minimum dry film thickness: 2.5 mm.
2. Alternatively, the transitions can also be sealed using the ASO-Dichtband system.
3. Install the selected joint sealing tape in accordance with the technical data sheet.
4. Apply the waterproofing to the prepared substrate to a minimum of 15 cm on both sides of the joint.
5. Guide the waterproofing down approx. 15 cm onto the front surface of the watertight floor slab in the wall/floor transition.
6. Processing takes place in 2 application steps. Total dry film thickness: 4 mm.
7. An even layer thickness is achieved using a 6 to 8 mm notched trowel and then smoothing.

Cleaning tools

Clean tools immediately after use with suitable solvent.

Drainage and protection boards for building components in direct contact with the ground

The waterproofing must be protected against weathering influences and mechanical damage using suitable protective measures in accordance with DIN 18533. 1. The waterproofing must be totally dry. 2. Suitable protection and drainage boards can be fixed in place with COMBIDIC-1K/-S in batches. 3. Perimeter insulation must cover the whole area and be butt jointed with COMBIDIC-2K-CLASSIC or COMBIDIC-2K-PREMIUM. 4. Drainage is carried out in accordance with the specifications of DIN 4095.

Storage conditions

Storage

Store in a frost-free, cool and dry place. At min. 5 - 40 °C for 9 months in the original canister. Promptly use opened container.

Emission behaviour / building certification systems

- Very low emissions in accordance with GEV-EMICODE, which normally results in positive evaluations within the scope of building certification systems in accordance with DGNB, LEED, BREEAM, HQE.
- Maximum quality level 4, lines 7 and 8 in accordance with DGNB criteria "ENV 1.2 Risks to the local environment".

Notes

- When used underwater or in swimming pool surrounds, the pool water must comply with DIN 19643.
- AQUAFIN®-RS300 may be plastered and coated with vapour permeable, solvent-free dispersion facade paints or dispersion silicate paints (not pure silicate paints). Silicon resin paints and acrylate-based paints may also be used.
- On PVC, gunmetal, and stainless steel flanges, ASO®-Dichtmanschetten or alternatively ADF®-Pipe-Gasket must be installed without voids or wrinkles and integrated seamlessly into the waterproofing.
- In case of strong sunlight, work against the movement of the sun in shaded areas.
- Direct contact with metals such as copper, zinc, and aluminium must be avoided by means of a pore sealed primer. A pore-sealed primer is produced via 2 application steps using ASODUR®-GBM (see technical data sheet).
- In rooms with high humidity and/or insufficient ventilation (e.g. water containers), dropping below the dew point (condensation formation) may occur on the surface. This must be avoided by taking suitable measures such as by using condensation dryers. Direct heating or uncontrolled blowing warm air is not permitted.
- Protect surfaces that are not to be treated from the effects of AQUAFIN®-RS300!
- The waterproofing must not be affected by water during binding. The effect of water from behind can lead to spalling in case of frost.
- AQUAFIN®-RS300 can be used to renovate old, firmly adhering substrates containing bitumen, for applications in accordance with WTA datasheet 4-6. The waterproofing must be covered with a scratch coat and, after drying out completely, double-coated with a layer thickness suitable for the load case. In accordance with WTA data sheet 4-6, first remove all loose or poorly bonded layers from the wall footing and the transition to the splash water plinth down to the cementitious substrate.

Relevant regulations

Planning, inspection of substrates and building site circumstances, laying, grouting and subsequent care of the work must be done in accordance with the relevant DIN standards and recognised rules of technology (e.g. the ZDB Data sheets of the Zentralverband Deutsches Baugewerbe e.V.(German construction Association) in the latest version.

Observe applicable safety data sheet!

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Explanations

System components in accordance with PG-AIV-F

System components	Exposure classes in accordance with testing principles of DIBt		
	PG-AIV-F, wear class:		In accordance with PG-MDS
	A	B	Waterproofing of buildings
	Water impact classes in accordance with DIN 18534 part 3 and ZDB data sheet (*1) W0-I to W3-I (without chemical exposure)	Water impact classes in accordance with DIN 18535 part 3, W1-B W2-B	
ASO-Dichtband-2000	x	x	-
ASO-Dichtband-2000-Ecken, (90°, innen/außen)	x	x	-
ASO-Dichtband-2000-S-Ecken, (90°, innen/außen)	x	x	x
ASO-Dichtmanschette-Boden/-Wand	x	x	x
ADF-Rohrmanschette	-	-	x
ADF-Dehnfugenband	-	-	x
ASO-Dichtband-120	x	-	-
ASO-Dichtmanschette-W	x	-	-
ASO-Dichtecke-I/-A	x	-	-
ASO-Gefälleecke	x	-	-
ASO-Dichtmanschette-B	x	-	-
UNIFIX-S3	x	x	-
MONOFLEX-white	x	x	-
MONOFLEX-white modified with UNIFLEX-F in a mass ratio of 3:1	x	x	-
LIGHTFLEX	x	x	-
MONOFLEX	x	x	-
MONOFLEX-XL	x	x	-
MONOFLEX-fast	x	-	-
MONOFLEX-FB	x	x	-
ASODUR-EKF	x	x	-
CRISTALLFUGE-EPOX	x	x	-
SOLOFLEX	x	x	-
AK7P	x	x	-
CRISTALLIT-FLEX	x	-	-
UNIFIX-S3-fast	x	-	-
AQUAFIN-RS300	x	x	x

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Conformity / Declaration / Verification

CE

SCHOMBURG GmbH & Co. KG
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EN 14891
AQUAFIN®-RS300
Watertight cement product to be applied in liquid form for use under ceramic tiles and paving slabs for exterior area

EN 14891: CM

Initial adhesive strength:	≥ 0.5 N/mm²
Tensile adhesion strength	
after contact with water:	≥ 0.5 N/mm²
after heat ageing:	≥ 0.5 N/mm²
After alternating frost/ thaw exposure:	≥ 0.5 N/mm²
after contact with lime water:	≥ 0.5 N/mm²
Water permeability:	no water penetration
Crack bridging:	≥ 0.75 mm

CE

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EN 12004
AQUAFIN®-RS300
Normal hardening, cement-based mortar for interior and exterior areas for tiling and board-laying work

C1

Reaction to fire:	Class E
Bonding strength as	
Tensile adhesion strength	
after dry storage:	≥ 0.5 N/mm²
Durability as	
Tensile adhesion strength	
after water storage:	≥ 0.5 N/mm²
after warm storage:	≥ 0.5 N/mm²
after alternating frost/thaw storage:	≥ 0.5 N/mm²

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