



Technical Data Sheet

ASOFLEX-AKB-floor ASOFLEX-AKB-wall

Art.-No. 5 50149

Art.-No. 5 50150

Waterproofing beneath tile and slab finishes

Properties:

- Solvent free, pigmented two component polyurethane resin.
- Elastic with good crack-bridging properties.
- Good chemical resistance.

Areas of application:

ASOFLEX-AKB-floor/ASOFLEX-AKB-wall are system components of combined waterproofing for the SYSTEM DENSARE 2002.

An official technical certificate is available P 2738/02-137. Test institute: Polymer-Institute.

They are used as system components in accordance with the test principles for liquid applied waterproofing materials in combination with tiled finishes for the following areas of application/wet duty classification:

- A1/A2: heavy duty from service water and cleaning water to walls (A1) and floors (A2) in wet areas such as swimming pool surrounds and communal showers.
- B: Wall and floor surfaces in swimming pool tanks in interiors and exteriors.
- C: Wall and floor surfaces in industrial areas also against chemicals. Exceptions being

areas associated with materials hazardous to water in terms of section 19 paragraph (1) of the WHG (water resources act).

Cleaning of working tools:

Tools must be thoroughly cleaned immediately after use with AQUAFIN-Reiniger (cleanser).

Packaging:

ASOFLEX-AKB-Floor is available in 5 kg, 10 kg, 15 kg and 30 kg containers and ASOFLEX-AKB-Wall is available in 5 kg, 10 kg, 15 kg and 30 kg containers. Components A and B are delivered in a predetermined mixing ratio.

Shelf life:

12 months when stored dry in the original unopened containers at +10 °C. For longer storage periods the efficiency of reaction can dwindle. Storage should follow in accordance with the regulations for storing materials hazardous to watercourses.

Please observe a current EU material safety data sheet.

Technical Data:

	ASOFLEX-AKB-floor	ASOFLEX-AKB-wall
Basis:	2 comp. polyurethane resin	2 comp. polyurethane resin
Colours:	Blue approx. RAL 5013 Grey approx. RAL 7038	Blue approx. RAL 5013 Grey approx. RAL 7038
Density:	approx. 1,34 g/cm ³	approx. 1,29 g/cm ³
Mixing ratio:	100 : 20 parts by weight	100 : 19 parts by weight
Traffic after:	approx. 16 hours	approx. 16 hours
Overcoat after:	approx. 16 hrs, max. 24 hrs	approx. 16 hrs, max. 24 hrs
Mechanical/chemical loading:	After 7 days	After 7 days
Crack bridging:	≥ 0,40 mm	≥ 0,40 mm
Fire classification:	B 2	B 2

All values quoted relate to +23 °C.

ASOFLEX-AKB-floor

ASOFLEX-AKB-wall

Surface preparation:

The area to be treated must be

- dry, solid, load bearing and have a good profile
- free from separating and adhesion inhibiting substances such as dust, laitance, grease, rubber marks, paint residues etc.
- protected against moisture penetration from the rear.

Dependant on its condition the following suitable methods can be used to prepare the substrate to be treated; sweeping, vacuuming, brushing, planing, scabbling, sand blasting, high pressure water jetting, shot blasting. The following criteria also need to be fulfilled dependant on the particular background:

Cement-based surfaces:

- Concrete quality: min. B 25
- Age: min. 3 months
- Tensile adhesion strength: $\geq 1.5 \text{ N/mm}^2$
- Screed quality: min. ZE 20
- Age: min. 28 days
- Tensile adhesion strength: $\geq 1.0 \text{ N/mm}^2$
- Residual moisture: < 4%
(carbide hygrometer method)
For substrates that are installed over a separating layer, the residual moisture is to be determined over the whole cross section of the background.
Value: 2 %.

The quality of the concrete in swimming pool tanks must conform to the guidelines (e.g. DIN 1045). Keep to a waiting time of minimum 3 months for concrete swimming pool tanks before waterproofing.

Advice: Containers that are to be clad in a rigid material (e.g. tiles) after waterproofing must be subjected to the expected loading before waterproofing or laying the tiles; a pool tank test is to be carried out.

Substantiation: Deformation that appears later can consequently act upon the tiled finish.

Product preparation:

Components A and B are delivered in a predetermined mixing ratio. During the mixing process the material temperature should be +15 °C. Tip component B into component A. Ensure that the hardener completely drains from its container. Blending of both components is to be carried out using a suitable mixer at approx. 300 rpm (e.g. drill with mixing paddle). It is important also to stir from the sides and the bottom so that the hardener is evenly dispersed. Mix until the mixture is homogenous (free from striations): mix time approx. 3 minutes. Do not use the mixed material directly from the packaging. Pour the mix into a clean vessel and stir through once again thoroughly.

Method of application / consumption:

Waterproofing:

Priming:

Apply two coats of ASODUR-GBM wet in wet to close the surface pores. (see technical data sheet for ASODUR-GBM).

Consumption: approx. 300 – 500 g/m² per coat.
Broadcast quartz sand (0.2 – 0.7 mm) into the wet primer.

Consumption: approx. 1.000 g/m².

Advice: Broadcasting should blind the surface but not be excessively applied to avoid penetrating the primer.

Job requirements: (levelling compound)

Composition/production of the levelling compound:

ASODUR-GBM	1.0 part by weight
Quartz sand (0.2 – 0.7 mm)	1.0 part by weight
ASO-Faserfüllstoff	2 – 3 % (for floor areas)
	4 – 5 % (for wall areas)

(Advice: addition rates are temperature dependant)

Waterproofing:(after a minimum waiting time of 16 hours up to a maximum of 24 hours).

The waterproofing is carried out in alternating colours.

ASOFLEX-AKB-floor

ASOFLEX-AKB-wall

Table:

Horizontal surfaces	Vertical surfaces
<p>a) priming coat</p> <p>ASOFLEX-AKB-floor, colour blue is applied in one coat by trowel and free from pores.</p> <p>Consumption: min 1.800 g/m²</p> <p>After the priming coat has been applied aerate the freshly waterproofed surface with a spiked roller (free from pores). After approx. 15 mins vigorously cross roll.</p>	<p>a) priming coat</p> <p>ASOFLEX-AKB-wall, colour blue is applied in one coat by trowel and free from pores.</p> <p>Consumption: min 1.800 g/m²</p> <p>After the priming coat has been applied aerate the freshly waterproofed surface with a spiked roller (free from pores). After approx. 15 mins vigorously cross roll and smoothen.</p>
<p>b) broadcast coat</p> <p>(after a waiting time of min 16 hours to a max 24 hours)</p> <p>ASOFLEX-AKB-floor: colour grey is applied by roller or trowel.</p> <p>Consumption: min 600 g/m², max 800 g/m²</p>	<p>b) broadcast coat</p> <p>(after a waiting time of min 16 hours to a max 24 hours)</p> <p>ASOFLEX-AKB-wall: colour grey is applied by trowel.</p> <p>Consumption: min 600 g/m², max 800 g/m²</p>
<p>c) broadcasting</p> <p>Evenly cover the coating with quartz sand (grain size: 0.2 – 0.7 mm).</p> <p>Consumption: approx 1.000 – 1.500 g/m²</p> <p>Advice: Broadcasting may not be carried out excessively in order to avoid bridging through.</p>	<p>c) broadcasting</p> <p>Evenly cover the coating with quartz sand (grain size: 0.2 – 0.7 mm).</p> <p>Consumption: approx 600 – 800 g/m²</p> <p>Advice: Broadcasting should be carried out with an air spray gun and may not be excessive in order to avoid bridging through.</p>
<p>Once hardened thoroughly remove all non-bound quartz sand before the bonding of ceramic finishes is carried out.</p> <p>Advice:</p> <p>Use the reaction resin adhesives and grouts ASODUR-EK98 floor and ASODUR-EK98 wall for bonding and grouting ceramic tiles (see technical data sheet).</p>	

ASOFLEX-AKB-floor

ASOFLEX-AKB-wall

Wall and floor junctions:

In these areas lay ASOJoint-Tape-2000-S with ASOFLEX-AKB-wall onto the broadcast primer and embed, then covering completely with the waterproofing. Also bond overlapped areas with this product. Broadcast the wet waterproofing with quartz sand 0.2 – 0.7 mm.

Consumption: approx. 800 – 1.000 g/m².

After waiting for a minimum of 16 hours up to a maximum of 24 hours overcoat the ASOJoint-Tape-2000-S, within the vertical and horizontal surface waterproofing, using ASOFLEX-AKB Wall. Leave expansion joint areas open, e.g. by applying an adhesive strip. Construction and expansion joints are waterproofed in the same manner whereby the waterproofing tape is laid in a loop into the joint profile. When waterproofing cruciform joints or end points use the pre-formed pieces ASOJoint-Tape-2000-S-Cross-Piece and ASOJoint-Tape-2000-S-T-Piece.

Connection to floor inlets and pipe penetrations:

Metal waterproofing flanges:

Prepare metal waterproofing flanges by degreasing and abrading.

Corrosion protection:

Evenly apply ASODUR-ZNP in two coats in alternating colours using a brush.

Consumption: 1st coat: ASODUR-ZNP sand yellow: approx. 200 – 250 g/m²
2nd coat: ASODUR-ZNP red brown: approx. 200 – 250 g/m²

Broadcast the second coat immediately with quartz sand of grain size 0.1 – 0.4 mm.

Consumption: approx. 500 g/m²

Plastic waterproofing flanges (PVC or ABS) or stainless steel:

Prepare plastic waterproofing flanges (PVC or ABS) by degreasing and abrading.

Bonding primer: Apply one coat of ASO-1K-Primer-TKF

with a brush and using a cloth spread thinly and evenly. Consumption: approx. 40 g/m²

The waterproofing of the connections with the above mentioned floor inlets or pipe penetrations is carried out before the main area with ASOFLEX-AKB-floor.

For the purpose of stress alleviation metal or plastic (PVC or ABS) waterproofing flanges are waterproofed using e.g. ASOJoint-Tape-2000-S or ASOJoint-Sleeve with ASOFLEX-AKB-wall.

Health and safety:

Once cured ASOFLEX-AKB-floor/wall is physiologically harmless.

The hardener (component B) is harmful. When working with the product, please observe the government health and safety protective directive, information sheet M 044 and the advice on the packaging.

Important advice:

- The bond between coats can be impeded through the influence of dampness or contamination between the applied coats.
- The background temperature and that of the individual system components must be +3 °C above the prevailing dew point temperature.
- When longer waiting times occur between the individual layers or where the surface already prepared with the synthetic liquid resin needs to be renewed after a long time period, the existing surface must be thoroughly cleaned and abraded, after which a completely new pore-free sealing is to be undertaken. It is not sufficient simply to overcoat.
- Surface protection systems must be protected from damp after application. Dampness can lead to breakdown of the curing process.
- Discoloured and/or sticky surfaces must be removed, e.g. by abrasion or blasting, and renewed.