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Technical Data Sheet

SANIFIN Waterproof membrane beneath tiles

Art.-No 2 05901

Properties:

- Very low emissions
- Water impermeable
- Crack bridging
- Alkali resistant
- Resistant to chemicals in accordance with building authorities test criteria
- Composite material
- For interiors
- UV stabilised
- Resistant to micro organisms
- Easy to use
- Even thickness
- Building authorities tested





Areas of application:

SANIFIN is used for waterproofing beneath ceramic tile, natural stone and synthetic stone finishes in bathrooms, kitchens, private and public wash rooms (such as e.g. in hotels, sports complexes and old peoples homes and care homes).

SANIFIN is suitable for wet duty classification areas A and C in accordance with building authority test criteria and the damp duty classification areas AO in accordance with the ZDB information sheet "Advice on the installation of bonded waterproofing with tiled finishes in internal and external areas."

Furthermore SANIFIN can be used for waterproofing in buildings with traffic loadings up to 3.5 KN/m², point loads in accordance with DIN 1055-3 up to 2KN. High dynamic loading (such as e.g. continuous vehicular traffic) is excluded.

Fine, non-penetrating hairline cracks on the surface of the substrate of < 0.1 mm are acceptable and can be directly bridged with SANIFIN.

SANIFIN is suitable for use in interiors in accordance with the AgBB evaluation scheme (Committee for Health-related Evaluation of Building Products), the French VOC by-law and GEV-EMICODE.

Technical Data:

Basis: composite material consisting

of a polypropylene fleece on the exterior with an internal polyethylene inlay

Weight: approx. 275 g/m^2 Colour: white with random print

Sd value: Water vapour permeability

in accordance with EN 1931 Thickness: approx. 0.6 mm Storage: frost free, 18 months,

protected from sunlight in the original unopened packaging

Packaging: Rolls: $15 \text{ m} \times 1.00 \text{ m}$ (length x width)

В2

Fire performance to DIN 4102: UV resistance to

DIN ISO 4892-3: Testing:

≥ 450 hours Fulfills the requirements of the

"Testing policy for the assignation of a building authorities test certificate for waterproofing materials in combination with tiled finishes, part 2 sheet form combination waterproofing" for the procurement of an

abP.

MPA Braunschweig, test

certificate No.

P-1201/015/16-MPA BS

System components for wet duty classes A1, A0:

ASO-Unigrund-GE, ASO-Unigrund-K (mix ratio 1:3) or ASO-Unigrund-S, overlap SANIFIN and bond with SOLOFLEX, MONOFLEX-FB. ASO-Joint-Tape-2000 and also available as shapes ASO-Joint-Tape-2000 corners, 90°, internal/external, ASO-Joint-Tape-2000-S corners, 90°, internal/external,

ASO-Joint-Tape-2000-T pieces,
ASO-Joint-Tape-2000-crossover,
ASO-Joint-Sleeve-floor and
ASO-Joint-Sleeve-wall.
SOLOFLEX, MONOFLEX-FB for
bonding the waterproof tape sections and tiles.
ASO-Primer-2000 as an adhesion promoter to
connections/flanges.
AQUAFIN-RS300 for attaching the

ASO-Joint-Sleeve-floor/wall to thin bed flanges pipe

ASO-Fugenbunt/CRISTALLFUGE PLUS/ASO-Flexfuge/ HF05-Brillantfuge/ASODUR-EK98/ASODUR-Design

for grouting the finish.
ESCOSIL-2000, ESCOSIL-2000-ST,

ESCOSIL-2000-UW for sealing movement joints.

Wet duty class C (including the above classifications):

ASO-Unigrund-GE, ASO-Unigrund-K (mix ratio 1:3) or ASO-Unigrund-S

Bond SANIFIN with SOLOFLEX, MONOFLEX-XL, MONOFLEX-FB.

ASO-Joint-Tape-2000-S and also available as shapes ASO-Joint-Tape-2000-S corners, 90°, internal/external, ASO-Joint-Tape-2000-T pieces,

ASO-Joint-Tape-2000-crossover,

ASO-Joint-Sleeve-floor and

ASO-Joint-Sleeve-wall.

ASOFLEX-AKB-wall for bonding the joint tape sections, ASO-Joint-Sleeve-floor/wall to thin bed flanges, pipe penetrations, overlapping and straight cut joint tape between the membrane sheets.

ASO-Primer-2000 as an adhesion promoter to connections/flanges.

ASODUR Design, ASODUR-EK98 for installing the tiles. HF05-Brillantfuge/ASODUR-EK98/ASODUR-Design for grouting the finish.

INDUFLEX-VK6060, ESCOSIL-2000, ESCOSIL-2000-ST, ESCOSIL-2000-UW for movement joints.

Substrate:

All flat, load bearing surfaces that are capable of taking a tiled finish are suitable and that are suited to accept a tiled combination waterproof membrane (see ZDB information sheet [*1]).

The substrate must be load bearing, suitably flat, free from penetrating cracks and free from separating substances (such as e.g. oil, paint, laitance and loose debris). The substrate must have a largely closed tight surface and have a surface condition and strength appropriate for its type. With regard to the substrate, substrate preparation and application to DIN 18 157, part 1 is overriding. Separating cracks are to be professionally appraised and if necessary sealed with an adhesive seal (e.g. with ASODUR-K900) before further work.

Renders to EN 998-1 of strength classification CS I to CS IV must have a minimum compressive strength of 2.0 N/mm² and be suitable for taking tiles in the relevant dampness/wet duty classification. The surface should remain rough and not felted or smoothed.

Prime porous and lightly porous substrates with ASO-Unigrund. Steps in the substrate and dampness penetration from the rear are to be eliminated.

Irregularities are to be appropriately evened out prior to the installation of SANIFIN. This levelling can be carried out with e.g. the levelling compound SOLOPLAN-30, SOLOCRET-50 or SOLOCRET-15.

In damp/wet duty areas a fall of minimum 1.5% is to be constructed towards the drain outlet.

Floor drain outlets should be furnished with a circumferential thin bed flange of a minimum width of 5 cm and consist of a material suitable for bonding (such as e.g. stainless steel, gunmetal, PVC-U).

Heated screeds must be commissioned prior to the installation of floor finishes in accordance with recognised technical regulations. To determine the readiness of substrates to receive finishes carry out

moisture measurements with a CM device. The CM moisture content may not exceed:

- CT ≤ 2.0 CM% for screeds on insulation or separating layers
- CA without underfloor heating ≤ 0.5 CM%
- CA with underfloor heating ≤ 0.3 CM% The CM measurement is to be carried out in accordance with current work instructions FBH-AD from the technical information "Coordination of cut out areas for heated floor construction".

Calcium sulphate screeds are acceptable in housing construction with floor drains. They must be abraded, vacuumed and as with all calcium sulphate based substrates, primed with ASO-Unigrund.

Application:

Construction in wet duty classification areas A1

Wall and floor areas with lower to higher levels of wet use (such as e.g. private bathrooms, WCs and kitchens, communal showers in sports complexes, care homes, health centres, swimming pool surrounds etc.)

- 1) Assess the substrate, clean and prepare appropriately. Roughen edging profiles, thin bed flanges as necessary, clean and degrease with Universal cleaner. Prime porous and lightly porous substrates with ASO-Unigrund-GE or ASO-Unigrund-K (mix ratio 1:3 with water).
- 2) Place SOLOFLEX, MONOFLEX-XL, or for use on floors, MONOFLEX-FB, into a clean mixing bucket and mix to a homogenous consistency with a drill and paddle (approx. 300–700 rpm). Use a smooth, free flowing consistency to install the waterproof membrane in order to achieve good wetting out of the SANIFIN. Follow the technical data sheet for the selected thin bed adhesive!
- 3) Cut the SANIFIN to fit using a knife or scissors.

 Comb the thin-bed adhesive onto the prepared substrate using a 4 mm notched trowel approx. 10 cm wider than the SANIFIN membrane. Subsequently lay the membrane into the adhesive bed and press firmly into the adhesive bed, without voids or folds,

- with a plasterers trowel or a roller. Ensure that there is void free bedding and good wetting between the fleece and the adhesive. The cut membrane should be overlapped a minimum of 5 to 10 cm. Bonding of the membrane in the overlapped areas is also to be carried out with the water repellent ADF-Systemkleber. The membrane should be laid in shingle fashion in the direction of the drainage.
- 4) Joints / junctions are to be carried out on the top surface of the SANIFIN with ASO-Joint-Tape-2000 as well as formed pieces ASO-Joint-Tape-2000-corners, 90°, internal/external, ASO-Joint-Tape-2000-S corners, 90°, internal/external, ASO-Joint-Tape-2000-T pieces, ASO-Joint-Tape-2000-crossover.
- 5) Bond ASO-Joint-Tape-2000 or ASO-Joint-Tape-2000-corners (internal and external) in the corners, at the transition between wall and floor as well as over connection joints, with AQUAFIN-RS300 (or on bonded screeds with the thin bed adhesive used) without voids or folds on the SANIFIN and on the prepared wall surface. The pre-formed sections ASO-Joint-Tape-T pieces or ASO-Joint-Tape crossovers are available for crossing structural or general movement joints, that when folded into the joint in a loop makes this possible. Straight joints are always to be overlapped between 5 and 10 cm. Ensure that a watertight connection between the wall and the floor waterproofing is produced.
- 6) Floor drains are to be prepared as described in 1 and must be furnished with a suitable thin bed flange. With a clean cloth, thinly wipe ASO-Primer-2000 adhesion promoter on to the stainless steel, red brass, PVC-U thin bed flange. After 30 minutes and up to a maximum of 4 hours continue with the following steps. Trowel AQUAFIN-RS300 using a 6 mm notched trowel onto the thin bed flange and in overlapped areas onto the SANIFIN. Before this coat forms a skin bed in ASO-Joint-Sleeve-floor with no voids or folds so that a watertight connection to the SANIFIN is produced.
- 7) For waterproofing pipe penetrations in wall areas either ASO-Joint-Sleeve-floor or ASO-Joint-Sleeve-wall is used dependent on the nominal diameter. Roughen pipe penetrations, clean and degrease with a suitable cleaner. Then thinly wipe with

- ASO-Primer-2000 as an adhesion promoter using a clean cloth. After 30 minutes and up to a maximum of 4 hours thoroughly apply AQUAFIN-RS300 and subsequently position the ASO-Joint-Sleeve. The hole diameter of the gasket must be considerably smaller than the diameter of the pipe so that via a "memory effect" the ASO-Joint-Sleeve applies pressure to the pipe penetration.
- 8) The tiles for the floor finish must have a minimum surface area of 100 cm² and a minimum of 1500 N breaking load. As far as possible, install the tiles or slabs in a void free bed with the selected thin bed adhesive within the open time. Produce a scratch coat on the SANIFIN and subsequently comb out the adhesive evenly with a suitable notch size dependent on the size of the tile. The installation of tiles can be carried out directly onto the freshly laid SANIFIN, if the waterproofing is adequately protected and any load spread (e.g. protective boards).
- 9) The grouting of the tiled finish can be carried out with ASO-Fugenbunt, ASO-Flexfuge, the high strength HF05-Brillantfuge or the epoxy resin grout ASODUR-EK98/ASODUR-Design. For grouting natural stone we recommend CRISTALLFUGE PLUS with rapid crystalline water binding. Leave movement joints free for elastic sealing.
- Sealing of connection and movement joints is carried out with ESCOSIL-2000 or ESCOSIL-2000-T with natural stone.

Construction in wet duty classification areas C Wall and floor areas with higher levels of wet use and limited chemical contact, (such as e.g. commercial kitchens, dairies, breweries, slaughter houses, car washes etc.)

- 1) Assess the substrate, clean and prepare appropriately. Roughen edging profiles and thin bed flanges, clean and degrease with a suitable cleanser. Prime porous and lightly porous substrates with ASO-Unigrund.
- 2) Place SOLOFLEX, MONOFLEX-XL, or for use on floors, MONOFLEX-FB, into a clean mixing bucket and mix to a homogenous consistency with a drill and paddle (approx. 300–700 rpm). Use a smooth,

- free flowing consistency to install the waterproof membrane in order to achieve good wetting out of the SANIFIN. Follow the technical data sheet for the selected thin bed adhesive!
- 3) Cut the SANIFIN to fit using a knife or scissors. Using a 4 mm notched trowel, comb out the selected thin bed adhesive on to the prepared substrate approx. 10 cm wider than the width of the SANIFIN membrane. Subsequently lay the membrane into the adhesive bed and press firmly into the adhesive bed, without voids or folds, with a plasterers trowel or a roller. Ensure that there is void free bedding and good wetting between the fleece and the adhesive.

The watertightness between the individual components of the SANIFIN membrane within waterproof class C can be achieved in the following two variations:

- 3a) The cut membrane should be overlapped a minimum of 5 to 10 cm. Bonding the membrane in overlap areas is carried out with the PU waterproofing material ASOFLEX-AKB-Wall, once the thin bed adhesive has hardened. The membrane should be laid in shingle fashion in the direction of the drainage.
- 3b) The cut membrane is laid butt jointed with no overlap. In the middle of the butt joint after the ADF-Systemkleber had hardened ASO-Joint-Tape-2000-S is positioned with the PU waterproofing material ASOFLEX-AKB-wall.
- 4) Joints / junctions are to be carried out on the top surface of the SANIFIN with ASO-Joint-Tape-2000-S as well as formed pieces ASO-Joint-Tape-2000-S-corners, 90°, internal/external, ASO-Joint-Tape-2000-T pieces, ASO-Joint-Tape-2000-crossover.
- 5) Bond ASO-Joint-Tape-2000-S and ASO-Joint-Tape-2000 corners (internal and external) in the corners, at junctions between wall and floor as well as over connection joints, free from voids and folds with ASOFLEX-AKB-wall to the SANIFIN membrane and the prepared wall surface. The pre-formed sections ASO-Joint-Tape-T pieces or ASO-Joint-Tape crossovers are available for crossing structural or general movement joints, that when folded into the joint in a loop makes this possible. Straight joints are always to be overlapped between 5 and 10 cm.

- Ensure that a watertight connection between the wall and the floor waterproofing is produced.
- 6) Floor drains are to be prepared as described in 1 and must be furnished with a suitable thin bed flange. With a clean cloth, thinly wipe ASO-Primer-2000 adhesion promoter on to the stainless steel, red brass, PVC-U thin bed flange. After 30 minutes and up to a maximum of 4 hours continue with the following steps. Trowel ASOFLEX-AKB using a 4 mm or 6 mm notched trowel onto the thin bed flange and in overlapped areas onto the SANIFIN. Before this coat forms a skin bed in ASO-Joint-Sleeve-floor with no voids or folds so that a watertight connection to the SANIFIN is produced.
- 7) For waterproofing pipe penetrations in wall areas either ASO-Joint-Sleeve-floor or ASO-loint-Sleeve-wall is used dependent on the nominal diameter. We recommend manifold penetrations or cable feeders with a 5 cm wide flange are provided to ensure a faultless, rapid installation. Roughen pipe penetrations and flanges, clean and degrease with a suitable cleaner. Then thinly wipe with ASO-Primer-2000 as an adhesion promoter using a clean cloth. After 30 minutes and up to a maximum of 4 hours thoroughly apply ASOFLEX-AKB-wall and subsequently position the ASO-Joint-Sleeve. In that no thin bed flange was designed, the hole diameter of the gasket must be considerably smaller than the diameter of the pipe so that via a "memory effect" the ASO-Joint-Sleeve applies pressure to the pipe penetration.
- 8) The tiles for the floor finish must have a minimum surface area of 100 cm² and a minimum of 1500 N breaking load. Install the tiles with ASODUR Design or ASODUR-EK98 within the open time ensuring a void free bed as far as possible. Produce a scratch coat on the SANIFIN and subsequently comb out the adhesive evenly with a suitable notch size dependent on the size of the tile. The installation of tiles can be carried out in the floor area, as soon as the thin-bed adheasvie with which the SANIFIN membrane was laid has hardened, as a rule on the next day. On walls tiles can be fixed to SANIFIN with MONOFLEX-XL, on floors, dependent on the mechanical loading or chemical exposure with

- MONOFLEX-XL as necessary. Information on the type of mechanical stresses and their intensity is to be provided by the planner. The technical service team of SCHOMBURG is on hand to give advice in these situations.
- 9) The grouting of the tiled finish can be carried out with the high strength HFO5-Brillantfuge or the epoxy resin grout ASODUR-EK98 or ASODUR-Design. Leave movement joints free for elastic sealing.
- Sealing of connection and movement joints is carried out with INDUFLEX-VK6060, ESCOSIL-2000 or ESCOSIL-2000-UW.

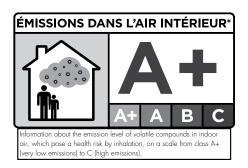
Advice:

- Waterproofing with the SANIFIN system is classed as an extraordinary construction type. We therefore recommend obtaining contractual agreement.
- SANIFIN may not be bonded, overcoated or come into contact with solvent containing adhesives.
- Apply a scratch coat to the prepared load-bearing and cleaned substrate for tiling consisting of 25 kg SOLOFLEX, MONOFLEX-XL or for use in floor areas MONOFLEX-FB, each modified with 4.17 kg UNIFLEX-B. Then using this mix, bond SANIFIN to the substrate for tiling, prepared as previously described, or the SANIFIN membrane to the cured scratch coat with the selected thin bed adhesive without additional modification
- Direct contact with metals such as copper, zinc and aluminium is eliminated by a thorough priming within the pores. A pore free priming is produced in two coats with ASODUR-GBM. Apply the first coat to saturation on the cleaned substrate and thoroughly brush in. Once this coat has sufficiently reacted, that it can no longer be spread (approx 3 hrs), spread on a second coat of ASODUR-GBM and broadcast with 0.1-0.6 mm quartz sand. Consumption: approx. 800-1000 g/m² ASODUR-GBM.
- Bay, intermediate and structural movement joints are
 to be brought through or constructed in the designated
 place and stopped with a suitable material e.g.
 edging strips. Control joints are to be adhesively filled
 or ensured against height offsets and formed as a
 movement joint in the final finish.
- As additional protection against ettringite formation

with calcium sulphate based substrates in wet duty exposure class AO, it is recommended that the special adhesive UNIFIX-AEK is used for the installation of SANIFIN on these substrates. In this case, modify each 25 kg of UNIFIX-AEK with 4.2 kg UNIFLEX-B.

• Follow the current valid technical data sheets for the

- named products.
- Protect areas not to be treated from the effects of the products used.
- Observe the relevant current regulations.



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