



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 A0 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. 307 g/m ² ± 25 g/m ²
Colour:	white with random print
Sd value:	≥ 85 m
Water vapour permeability in accordance with EN 1931	
Thickness:	approx. 0.5 mm
Storage:	frost free, 18 months, protected from sunlight in the original unopened packaging
Packaging:	Rolls: 15 m x 1.00 m (length x width)
Fire performance to DIN 4102-1:	B2
UV resistance to DIN ISO 4892-3:	≥ 450 hours
Testing:	Fulfills the requirements of the "Testing policy for the assignment 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-5078/818/08-MPA BS

System components for wet duty classes A1, A0:

ASO-Unigrund or ASO-Unigrund-K (mix ratio 1:3) with porous substrates, overlap SANIFIN and bond with ADF-Systemkleber.

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,

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ASO-Joint-Sleeve-floor and
ASO-Joint-Sleeve-wall.

ADF-Systemkleber for bonding the waterproof tape
sections and tiles.

Aceton for degreasing connections.

ASO-Primer as adhesion promoter for metals.

AQUAFIN-2K/M for attaching the
ASO-Joint-Sleeve-floor/wall to thin bed flanges pipe
penetrations.

ASO-Fugenbunt/CRISTALLFUGE PLUS/ASO-Flexfuge/
HF05-Brillanfuge/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 or ASO-Unigrund-K (mix ratio 1:3)
with porous substrates.

Bond SANIFIN with ADF-Systemkleber.

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 and pipe penetrations and straight cut joint
tape between the membrane sheets.

Aceton for degreasing connections.

ASO-Primer as adhesion promoter for metals.

ASODUR-EK98 for installing the tiles.

HF05-Brillanfuge/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-GE or ASO-Unigrund-K (mix ratio 1:3
with water). 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

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substrates, primed with ASO-Unigrund-GE or ASO-Unigrund-K (mix ratio 1:3 with water).

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 clean water into a clean mixing bucket, add the water repellent ADF-Systemkleber and mix until homogenous with a stirrer (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 ADF-Systemkleber data sheet.
Mixing ratio: approx. 8.5 litres water: 25 kg ADF-Systemkleber.
- 3) Cut the SANIFIN to fit using a knife or scissors. Comb ADF-Systemkleber 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 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 ADF-Systemkleber to the SANIFIN 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. Wipe over the stainless steel, gunmetal thin bed flanges with the adhesion promoter for metals ASO-Primer on a clean cloth. After 30 minutes and up to a maximum of 4 hours continue with the following steps. Trowel AQUAFIN-2K/M 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 the pipe penetration, clean and degrease with Universal Cleaner. Subsequently thinly apply the adhesion promoter for metal ASO-Primer with a clean cloth. After 30 minutes and up to a maximum of 4 hours thoroughly apply AQUAFIN-2K/M 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. Install the tiles with ADF-Systemkleber 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

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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.
- 10) 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 Universal cleaner. Prime porous and lightly porous substrates with ASO-Unigrund-GE or ASO-Unigrund-K (mix ratio 1:3 with water).
- 2) Place clean water into a clean mixing bucket, add the water repellent ADF-Systemkleber and mix until homogenous with a stirrer (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 ADF-Systemkleber data sheet.
Mixing ratio: approx. 8.5 litres water: 25 kg ADF-Systemkleber.
- 3) Cut the SANIFIN to fit using a knife or scissors. Comb ADF-Systemkleber 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 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. The overlapped areas are not bonded in this case! Bonding of the membrane is achieved once the ADF-Systemkleber hardens, with the PU waterproofing material ASOFLEX-AKB-wall. 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. Wipe over the stainless steel, gunmetal thin bed flanges with the adhesion promoter for metals ASO-Primer on a clean cloth. 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

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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. We recommend manifold penetrations or cable feeders with a 5 cm wide flange are provided to ensure a faultless, rapid installation. Roughen the pipe penetration, clean and degrease with Universal Cleaner. Subsequently thinly apply the adhesion promoter for metal ASO-Primer with 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-EK98/-Design 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 ADF-Systemkleber with which the SANIFIN membrane was laid has hardened, as a rule on the next day.
- 9) The grouting of the tiled finish can be carried out with the high strength HF05-Brillanfuge or the epoxy resin grout ASODUR-EK98 or ASODUR-Design. Leave movement joints free for elastic sealing.
- 10) Sealing of connection and movement joints is carried out with INDUFLEX-VK6060, ESCOSIL-2000 or ESCOSIL-2000-UW.

Advice:

- SANIFIN may not be bonded, overcoated or come into contact with solvent containing adhesives.
- Apply a contact coat, onto the prepared and cleaned load bearing substrate, consisting of 25 kg ADF-Systemkleber modified with 4.17 kg UNIFLEX-B. Subsequently bond the SANIFIN with this mix to the substrate prepared as described or bond the

SANIFIN membrane to the cured contact coat with ADF-Systemkleber 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. The first coat is applied to saturation to the substrate, firstly cleaned with Universal cleaner, and carefully brushed in. Once this coat has reacted sufficiently so that it can no longer be disturbed (approx. 3 hours), a further coat of ASODUR-GBM is brushed on 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 the formation of ettringite with calcium sulphate based substrates, it is recommended that the special adhesive UNIFIX-AEK be used for installing the SANIFIN on these substrates. In this case modify 25 kg ADF-Systemkleber 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.

