



Technical Data Sheet

ADF[®]-Balkonfolie

Waterproofing and decoupling membrane

Art.-Nr. 2 05964 (15 m²)

Art.-Nr. 2 05965 (7,5 m²)

Properties:

- Water impermeable
- Vapour pressure equalising
- High elasticity
- Crack bridging
- Alkali resistant
- For interior and exterior use
- UV stabilized
- Resistant to micro-organisms
- Easy to install
- Even thickness

Areas of application:

The ADF-Balkonfolie is used for waterproofing and decoupling ceramic tiled finishes, natural and synthetic stone in interior and exterior areas. ADF-Balkonfolie is suitable for wet duty classes O, A01, A02 and B0 in accordance with the ZDF data sheet [* 1].

In particular, balconies and terraces can be waterproofed with ADF-Balkonfolie as soon as they can take foot traffic – as a rule after 3 to 7 days - and subsequently and without delay covered with tiles. Due to the fleece on the rear, air channels remain beneath that act to equalise vapour pressure and so lead trapped moisture away.

Furthermore ADF-Balkonfolie can be used for decoupling in residential dwellings – with vehicular traffic up to 3.5 N/mm² and point loads in accordance with DIN 1055-3 to 2kN. Greater dynamic loads such as e.g. continuous vehicular traffic is excluded.

Cracks near to the surface can be directly bridged and decoupled with ADF-Balkonfolie.

Technical Data:

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|------------|---------------------------------------------------------------|
| Basis: | composite material consisting of fleece-sheet membrane-fleece |
| Weight: | approx. 0.6 kg/m ² |
| Colour: | grey |
| Thickness: | approx. 1.5 mm |

Packaging:

rolls

Length: 15 m / width: 1 m

Length: 7.5 m / width: 1 m

Substrate preparation:

Suitable substrates are all that are flat and load-bearing and capable of receiving tiles and that are suited to accommodating a bonded waterproof membrane (see ZDB data sheet [* 1]).

The substrate must be load-bearing, adequately flat, free from penetrating cracks and be free from separating substances such as oil, paint, laitance layers and loose parts. The substrate must have a largely closed textured surface with a condition and strength appropriate to its type. When installing tiles DIN 18157 is decisive regarding the substrate, substrate preparation and workmanship. Penetrating cracks must be professionally assessed and as necessary closed by adhesively pre-sealing.

Prime porous and slightly sanded substrates with ASO-Unigrund-K. Height misalignments in the substrate and penetrating moisture from the rear are to be eliminated.

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

Appropriately level out unevenness prior to installing ADF-Balkonfolie. The levelling may be carried out with SOLOPLAN-30 in interior and exterior areas, NIVELLIERMASSE NM-14-ÖKO, ASO-NM15 or HOLZBODENSPACHTELMASSE HSM-11 in interior areas. Heated screeds must be commissioned to recognised technical regulations before commencing the installation of the floor finish. Calcium sulphate screeds must be abraded, vacuumed and, as with all calcium sulphate based screeds, primed with ASO-Unigrund-K diluted 1:3 with water.

Product preparation:

1. Test, clean and prepare the substrate appropriate to the requirements. Edging termination profiles and

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- floor outlets should be cleaned by roughening and degreased with universal cleaner as necessary.
- Place clean water into a clean mixing bucket, add ADF-Systemkleber or ADF-Systemkleber-FB and mix with a stirrer (approx. 300 – 700 rpm) to a homogenous consistency. When laying the waterproof membrane, use a smooth, easy to handle consistency in order to achieve good wetting of the ADF-Balkonfolie.
Mixing ratio:
Approx. 8.5 litres water : 25 kg ADF-Systemkleber
4.8 – 5.3 litres water : 25 kg ADF-Systemkleber-FB.
 - Cut the ADF-Balkonfolie to size with a knife or scissors. Using either a 4 mm or 6 mm notched trowel, comb ADF-Systemkleber or ADF-Systemkleber-FB onto the substrate to an area approx. 10 cm wider than the ADF-Balkonfolie. Subsequently lay the membrane into the adhesive bed and press in with a smooth trowel or roller ensuring that there are no voids or folds. Bond the ADF-Balkonfolie to the substrate with the darker side (thick fleece) on the roll facing outwards. The SCHOMBURG text is then visible. Ensure that the fleece is completely bedded with full transfer of adhesive. Cut membrane sections are to be butt jointed flush against each other.
 - Due to the fleece laminate on the rear, jointing with waterproof tapes and pre-formed sections is always carried out on the top (thin fleece) of the ADF-Balkonfolie so that capillary water transportation is prevented. The butt joints between the sections of membrane are to be covered either with the balcony joint tape contained within the delivery or, as an alternative, with ASO-Dichtband-2000. To achieve this a coating of adhesive is applied to both sides of the butt joint using a 4 mm notched trowel and the balcony joint tape carefully pressed into it with a smooth trowel, without voids or folds.
 - Using ADF-Systemkleber or ADF-Systemkleber-FB, bond, without voids or folds, ASO-Dichtband-2000 or ASO-Dichtband-2000 'internal or external angles' to the corners, the junction between wall and floor as well as over connecting joints, to the ADF-Balkonfolie

- and onto the prepared wall surface. Where structural or other movement joints cross, the pre-formed sections ASO-Dichtband-2000-T-section or ASO-Dichtband-2000-T-crosspiece are available which permits them to be looped in the crossover area. Butt joints are to be formed with a 5 cm overlap. Ensure that a watertight bond is produced between the wall and the surface membrane.
- Thin section drains must have a suitable loose/fixed flange piece. Trowel out AQUAFIN-2K/M with a 6 mm notched trowel. Without voids or folds, bed the ASO-Dichtmanschette-floor into the trowelled product, so that a watertight connection to the ADF-Balkonfolie is produced.
 - Sealing to doors, windows, edge sections and drains is carried out with the self-adhesive ASO-Dichtband-2000-Sanitär. Remove the protective strip from the ASO-Dichtband-2000-Sanitär and bond the suitable section. Subsequently fully bond to the ADF-Balkonfolie without folds with ADF-Systemkleber or ADF-Systemkleber-FB.
 - Tiles must have a minimum surface area of 100 cm² and a minimum breaking strength of 1500 N. Bond the frost resistant tiles within the adhesive open time in a void free bed, as far as possible, of ADF-Systemkleber or ADF-Systemkleber-FB. Apply an initial key coat to the ADF-Balkonfolie followed by an even combed application using a trowel size appropriate to the tile format. The installation of tiles can be carried out onto freshly laid ADF-Balkonfolie provided that there is adequate protection to the waterproofing and there is means to spread load e.g. with walking boards.
 - Grouting of the tiled finish can be carried out with ASO-Flexfuge, the high strength HF05-Brillanfuge or the epoxy resin grout ASODUR-EK98. When grouting natural stone we recommend CRISTALLFUGE with rapid crystalline water binding. Leave movement joints free for elastic sealing.
 - Seal connection and movement joints with ESCOSIL-2000 or ESCOSIL-2000-ST with natural stone.
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Advice:

- ADF-Balkonfolie concerns a special type of construction. Therefore we recommend a contractual agreement.
- To the existing load-bearing substrate to receive tiles, initially apply a key coat of 25 kg of ADF-Systemkleber or ADF-Systemkleber-FB modified with 4.17 kg UNIFLEX-B. Subsequently bond the ADF-Balkonfolie with the same material to the substrate, prepared as described previously or bond the ADF-Balkonfolie to the hardened key coat using ADF-Systemkleber or ADF-Systemkleber-FB without additional modification.
- See also sample specification No. 3.85 "Balcony waterproofing with ADF-Balkonfolie including tile installation" and the brochure for ADF-Balkonfolie.
- Waterproofing to doors, windows, edging and drainage sections can alternatively be achieved with ADF-Systemkleber or ADF-Systemkleber-FB. The substrate is to be prepared by suitable means e.g.: direct contact with metals like copper, zinc and aluminium is to be prevented by a pore-deep primer. This is produced by a two coat application of ASODUR-GBM. The first coat is applied liberally to the substrate, which has been cleaned with universal cleaner, and carefully brushed in. As soon as this coat has cured sufficiently so that it is not disturbed (approx. 3 hours), a further coat of ASODUR-GBM is brushed on and broadcast with 0.2 – 0.7 mm quartz sand. Consumption: approx. 800 – 1000 g/m² ASODUR-GBM.
- For decoupling on timber substrates we recommend ASODUR-LE-lightweight screed or STEPBOARD decoupling boards.
- Perimeter, bay, structural and other movement joints are to be carried through or inserted in the designed position and blocked off with suitable media e.g. RD SK50 edging strip. Saw cut joints are to be adhesively sealed or secured against height misalignment and constructed as a movement joint in the floor finish.
- Prime calcium sulphate based substrates with ASO-Unigrund-GE or ASO-Unigrund-K (mix ratio 1:3 with water). To avoid the formation of ettringite with calcium sulphate based substrates UNIFIX-AEK is suited for use on these substrates up to a residual moisture content of 1.0% with heated constructions or 1.5% with unheated.
- As additional protection against ettringite formation with calcium sulphate based substrates, the special adhesive UNIFIX-AEK is recommended for installing the ADF-Balkonfolie to these substrates.
- Always follow valid technical data sheets for the products named.
- Whilst using ADF-Systemkleber or ADF-Systemkleber-FB protect areas that are not to be treated.
- ADF-Balkonfolie may not be bedded in or coated with solvent-based products.
- Follow relevant current regulations. For e.g.
 - DIN 18157
 - DIN 18352
 - DIN 18560
 - DIN EN 13813
 - DIN 18202
 - DIN 1055The BEB-information sheets distributed by the Bundesverband Estrich und Belag e.V.
The technical information "Coordinating cut-out areas in heated floor construction"
The ZDB data sheets distributed by the Fachverband des deutschen Fliesengewerbes:
 - [*1] "Information on the installation of waterproofing in combination with ceramic wall and floor tiling in internal and external areas"
 - [*2] "Floor finishes on calcium sulphate screeds."
 - [*3] "Movement joints in ceramic wall and floor tiling"
 - [*5] "Ceramic tiles, natural stone and concrete blocks on cementitious floor constructions with insulation layers."
 - [*6] "Ceramic tiles, natural stone and concrete blocks on heated cementitious floor constructions."
 - [*7] "Cladding construction with tiles external to buildings."