

BS WATERMAT

Waterproofing and decoupling membrane

- Water impermeable Vapour pressure equalising High elasticity Crack bridging
- Alkali resistant
 For interior and exterior use
 UV stabilized
 Easy to install
- Resistant to micro-organisms Even thickness 20 mt of waterproofing tape included



TECHNICAL FEATURES: Waterproofing membrane for balconies and terraces and for bonded waterproofing in combination with tiling in damp areas. Furthermore as a decoupling membrane for difficult substrates which are at risk of cracking.

AREAS OF APPLICATION: The BS WATERMAT is used for waterproofing and decoupling ceramic tiled finishes, natural and synthetic stone in interior and exterior areas. BS WATERMAT is suitable for wet duty classes 0, A01, A02 and B0 in accordance with the ZDF data sheet [*1]. In particular, balconies and terraces can be waterproofed with BS WATERMAT 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 BS WATERMAT 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 BS WATERMAT.









CONTRACT ITEM SPECIFICATIONS:

The waterproofing of substrate will be finalized with a waterproofing and decoupling membrane to lay underneath the tiles. The membrane must be waterproof, alkalis resistant, with a homogeneous thickness, resistant to chemical substances, resistant to micro-organisms, easy to apply, as BS WATERMAT by Benfer.



METHOD OF USE: 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 presealing. Prime porous substrates with BENFERPRIM or STARPRIM. 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 BS WATERMAT. 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 BENFERPRIM or STARPRIM.

PRODUCT APPLICATION:

Test, clean and prepare the substrate appropriate to the requirements. Edging termination profiles and floor outlets should be cleaned by roughening and degreased with universal cleaner as necessary. Place clean water into a clean mixing bucket, add MATADHESIVE or BENFERFLEX+S1 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 BS WATERMAT.

Cut the BS WATERMAT to size with a knife or scissors. Using either a 4 mm or 6 mm notched trowel, comb MATADHESIVE onto the substrate to an area approx. 10 cm wider than the BS WATERMAT.

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 BS WATERMAT to the substrate with the darker side (thick fleece) on the roll facing outwards. The 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 BS WATERMAT 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 BSWTAPE.

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 MATADHESIVE or BENFERFLEX+S1, bond, without voids or folds, BSWTAPE or BSWTAPE CORNER 'internal or external angles' to the corners, the junction between wall and floor as well as over connecting joints, to the BS WATERMAT and onto the prepared wall surface. Where structural or other movement joints cross, the pre-formed sections BSWTAPE T or BSWTAPE 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.



Sealing to doors, windows, edge sections and drains is carried out with the self-adhesive BSWTAPE. Remove the protective strip from the BSWTAPE and bond the suitable section. Subsequently fully bond to the BS WATERMAT without folds with MATADHESIVE or BENFERFLEX+S1.

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. Apply an initial key coat to the BS WATERMAT 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 BS WATERMAT 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 DEKOGROUT-HF 1/30 or the epoxy resin grout EPOXYJOINT or DEKOGROUT-21K. When grouting natural stone we recommend DEKOGROUT+ with rapid crystalline water binding. Leave movement joints free for elastic sealing. Seal connection and movement joints with DEKOSIL and DEKOFLEX-PU.

ADVICE:

- For decoupling on timber substrates we recommend 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. BS-PERIMETRAL edging strip
- Prime calcium sulphate based substrates with BENFERPRIM or STARPRIM.
- Always follow valid technical data sheets for the products named.
- Whilst using MATADHESIVE or BENFERFLEX+S1 protect areas that are not to be treated.
- BS WATERMAT may not be bedded in or coated with solvent-based products.



CONSUMPTION: $1,01 \text{ m}^2/\text{m}^2$.

PACKAGING: • 1 m x 15 m rolls.

• 20 mt of waterproofing tape included

STORAGE: In the original closed package in a cool dry place.

SHELF LIFE: 5 years.

PRODUCT TECHNICAL DATA

Basis: Composite material= felt -membrane - felt

Colour: Yellow (up)/black (under)

 $\begin{array}{lll} \text{Thickness:} & 0,87 \text{ mm} \\ \text{Large:} & 1000 \text{ mm} \\ \text{Weight:} & 365 \text{ g/m}^2 \end{array}$

Storage and durability: 5 years in the original closed package in a cool dry place

Application temperature: From $+ 5^{\circ}$ C to $+ 35^{\circ}$ C

Burst pressure:
4,3 bar
Longitudinal rupture loading:
86,6 N/15 mm
Transversal rupture loading:
58,1 N/15 mm

Longitudinal elongation: 67,8%
Transversal elongation: 134,1%
Impermeability to water: > 3 bar
UV resistance: < 500 h

Chemical Resistance after 7 days at 22°C to the following chemical substances:

Hydrochloric acid 3%:

Sulfuric acid 35%:

Citric acid 100g/lt:

Lactic acid 5%:

Potassium hydroxide 3%:

Sodium hydroxide 0,3 g/lt:

Sea water 20 gr/lt:

Resistant

Resistant

Resistant

Resistant

Resistant

Resistance to temperature: From -30°C to + 90°C

PLEASE NOTE: The information given in this chart is based on our best experience and indicative only. It must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.

