TDS: HYDRA FLEECE MEMBRAN

**REV: 1.0** 

DATUM: September 2023

PAGE: 1/2



## TECHNICAL DATASHEET - HYDRA FLEECE MEMBRAN



## PROPERTIES

HyDra Fleece membrane is a high quality non-woven seal fleece with a robust LDPE-foil cover with an exceptional flexibility. The high flexibility of the membrane results in a very high crack bridging capability at places where cracks will occur within the concrete. HyDra Fleece membrane is a preapplied waterproofing membrane which is installed on the substrate before the concrete is poured. The installation is fast and safe. During the concrete pour the fleece absorbs parts of the cement water mix. Once the concrete cures this results in a very high integral bond of the membrane to the concrete which will effectively prevent any penetration of water in between the membrane and the concrete at places where the membrane is locally damaged.



## APPLICATION

HyDra Fleece membrane is applied as linear or full surface external seal for all kinds of reinforced concrete structures. HyDra Fleece membrane is part of the HyDra-system which does not only includes innovative system components but also a detailed planning, an installation by qualified workmanship and eventually survey for the correct installation, incl. documentation. HyDra Fleece membrane can be used for bonding to fresh concrete as a pre-applied waterproofing membrane, therefore HyDra Fleece membrane is laid out on the substrate with its coated side facing the blinding layer or it will be fixed with its coated side towards the formwork in wall constructions. The position of the reinforcement is directly onto the uncoated side of the seal fleece, concrete is then poured on to this uncoated side of HyDra Fleece membrane which will absorb a part of the concrete water. By doing so it integrally bonds to the concrete from which a high peel adhesion will occur. This function prevents any undergo of water between sealing membrane and concrete effectively which means that there will be no water migration even if damaged. Alternatively HyDra Fleece membrane can be post applied to existing structures. To ensure the sealing of existing buildings the fleece side faces in the direction of the construction HyDra Fleece membrane is installed with 2-C Sealing & adhesive compound on the concrete surface. On the surface of HyDra Fleece membrane isolation boards can easily be installed with solvent free adhesives by simply gluing the boards on the PP-fleece concealed surface.

| TECHNICAL DATA   |                    |                                    |                |                       |
|--|--------------------|------------------------------------|----------------|-----------------------|
| Dimensions   | length             | 20,0 m                             | ± 5,0 cm; MDV* | DIN EN 1848-2         |
|  | width              | 1,0 m                              | ± 3,0 cm; MDV* | DIN EN 1849-2         |
|  | thickness          | 1,21 mm                            | ± 5,0 %; MDV*  | DIN EN 1849-2         |
|  | mass per unit area | 730 g/m²                           | ± 10,0 %; MDV* |                       |
| Watertightness   |                    | pass                               |                | DIN EN 1928           |
| method: water tightness 2,0 bar 24h (tested to 5 bar = watertight) |                    |                                    |                | (in accordance with)  |
| Tensile properties   | lengthwise         | ≥ 250 N/50mm**                     |                | DIN EN 12311-2        |
|  | across             | ≥ 200 N/50mm**                     |                | DIN EN 12311-2        |
| Elongation at break  | lengthwise         | ≥ 20,0 % <b>*</b> *                |                | DIN EN 12311-2        |
|  | across             | ≥ 50,0 %**                         |                | DIN EN 12311-2        |
| Joint strength   | glued seam         | ≥ 100 N/50mm**                     |                | DIN EN 12317-2        |
| Resistance to tearing  | lengthwise         | ≥ 150 N**                          |                | DIN EN 12310-1        |
| (nail shank)   | across             | ≥ 150 N**                          |                | DIN EN 12310-1        |
| Adhesion to concrete   |                    | 0,55 N/mm <sup>2</sup>             |                | DIN 1048              |
| Radon diffusion coefficient  |                    | D = 0.39 * 10-12 m <sup>2</sup> /s |                | ISO/TS 11665-13, 2017 |
| Radon diffusion length   |                    | L = 0.43 mm                        |                | ISO/TS 11665-13, 2017 |
| Resistance to temperature  |                    | -40 °C / +100 °C                   |                |                       |
| Color  |                    | white / grey                       |                |                       |

<sup>\*</sup>MDV: Manufacturer's declared value (Herstellerangabe mit Toleranz)

<sup>\*\*</sup>MLV: Manufacturer's limiting value (Grenzwert des Herstellers)

TDS: HYDRA FLEECE MEMBRAN

**REV: 1.0** 

DATE: September 2023

PAGE: 2/2



# TECHNICAL DATASHEET - HYDRA FLEECE MEMBRAN



#### PACKAGING & STORAGE

20 m/roll; width = 1,0 m 20 rolls á 20 m² pallet: 400 m² 20 m/roll; width = 2,0m 20 rolls á 40 m² pallet: 800 m²

HyDra Fleece membrane can be stored in the original unopened containers for at least 12 months at temperatures between +5°C and +25°C.

#### INSTALLATION

Installation of HyDra Fleece membrane in fresh concrete (pre-application)

Underneath a basement slab HyDra Fleece membrane is laid out with its coated side facing the binding layer or it will be fixed with its coated side towards the formwork in wall constructions. The position of the reinforcement is directly onto the uncoated side of the seal fleece, concrete is then poured on to this uncoated side of HyDra Fleece membrane, which will suck up a part of the concrete water. By doing so the concrete adheres closely to the fleece. The self-adhesive edge strip at the long side of HyDra Fleece membrane functions as an overlap joint (remove protective film). It must be complied with a specific striking time of minimum 48 hours. No welding, no open flames, no priming is required.

Installation of HyDra Fleece membrane in existing buildings (post-application)

HyDra Fleece membrane is bonded directly on the concrete surface. The surfaces where the seal fleece is installed on, must be firm, sustainable, clean and free of dust or loose particles. First, the 2-C Sealing & adhesive compound is installed onto the concrete sub-surface, then the fleece side of HyDra Fleece membrane is gently pushed into the humid adhesive. The selfadhesive edge strip at the long side of HyDra Fleece membrane functions as an overlap joint (remove protective film).

Storing and working with HyDra Fleece membrane is trouble free, as it is neither combustible nor toxic.

The working temperature of HyDra Fleece membrane is from -10 °C to +40 °C (-5 °C/+30 °C construction device). HyDra Fleece membrane must be stored in a dry place.

## MEMBRANE & ACCESSORIES

| Artikel nr. 1324005 | HyDra Fleece membrane 1 x 20 m        | 20 m   |
|---------------------|---------------------------------------|--------|
| Artikel nr. 1324006 | HyDra Fleece membrane 2 x 20 m        | 20 m   |
| Artikel nr. 1324020 | Skarvtape Polyfleece dubbelhäft 75 mm | 20 m   |
| Artikel nr. 1324021 | Skarvtape Polyfleece Fleece 80 mm     | 20 m   |
| Artikel nr. 1313003 | Svällpasta HyDra SX 100 290ml         | 290 ml |
| Artikel nr. 1314001 | FlexproofX 1 290 ml                   | 290 ml |
| Artikel nr. 1314002 | FlexproofX 1 600 ml                   | 600 ml |

We reserve the right for printing errors and refer to the fact that the current version of the data is always available at www.hydratec.se or can be requested by contacting our office. Current revision number is in the top left corner.