

## Technical data sheet

# DELTA-XX PLUS® UNIVERSAL

Durable, universally applicable, diffusion-open multi-layer soft sheathing and sarking sheet for the protection of pitched roofs with roofing against moisture and harmful environmental influences.

**Start: 01.01.2023**



Characteristics	Methods	Values/Description
<b>Description</b>		
<b>Application</b>	–	For fully insulated pitched roofs with and without formwork. Corresponds to the ZVDH product data sheets UDB-A and USB-A. Suitable as temporary roofing and as pre-roofing under metal roofing, slate, fibre cement boards or shingles. Also applicable as a façade membrane behind ventilated claddings with closed joints.
<b>Material</b>	–	Multi-layer, pitched roof membrane made of a tear-resistant, diffusion-open combination of PP spunbonded fleece and PU functional film. With integrated self-adhesive edges.
<b>Weight</b>	EN 1849-2	approx. 150 g/m <sup>2</sup>
<b>Thickness</b>	–	approx. 0.7 mm
<b>Straightness (≤ 30 mm / 10 m)</b>	EN 1848-2	passed
<b>Watertightness</b>		
<b>Resistance to water penetration before and after ageing (336 h UV)</b>	EN 1928	W1
<b>Watertightness after long-term exposure (448 d at 5±2 m/s; 70 °C)</b>	EAD 030218-01-0402	W1
<b>Driving rain test</b>	Test University of Berlin	watertight
<b>Water vapour transmission</b>		
<b>S<sub>d</sub>-value</b>	EN ISO 12572	approx. 0.08 m
<b>Diffusion resistance factor μ</b>	–	approx. 114
<b>Water vapour transmission</b>	EN ISO 12572	approx. 2.17 · 10 <sup>-9</sup> kg/m <sup>2</sup> · s · Pa
<b>Mechanical properties</b>		
<b>Tensile strength MD/CD</b>	EN 12311-1	approx. 340/270 N/5 cm
<b>Tensile strength after ageing (336 h UV) MD/CD</b>	EN 12311-1	approx. 340/270 N/5 cm
<b>Elongation at break MD/CD</b>	EN 12311-1	approx. 80 % / 80 %
<b>Tear resistance MD/CD</b>	EN 12310-1	approx. 180/200 N
<b>Dimensional stability</b>	EN 1107-2	<1.5 %
<b>Flexibility at low temperature</b>	EN 1109	-45 °C
<b>Miscellaneous characteristics</b>		
<b>Fire resistance</b>	EN 13501-1	E
<b>Fire code number</b>	VKF	5.2
<b>Air permeability</b>	EN 12114	< 0.1 m <sup>3</sup> /h · m <sup>2</sup>
<b>Service temperature range</b>	–	-40 °C bis +80 °C
<b>Short-term maximum temperature load of the material (&lt; 8 h/day)</b>	–	+100 °C
<b>UV-related outdoor exposure time</b>	–	12 weeks
<b>Temporary roofing function</b>	–	4 weeks
<b>Dimension</b>	–	50 m × 1.50 m
<b>Weight of one roll</b>	–	approx. 11 kg
<b>Packaging unit</b>	–	22 rolls/pallet
<b>CE-conformity</b>	EAD 030218-01-0402, EN 13859-2, EN 13859-1	yes
<b>Certificates</b>	–	UDB-A / USB-A in accordance to ZVDH rules. Increased ageing requirement: passed, ZVDH-Product data sheet, table 1 European Technical Assessment ETA-22/0389 (service life ≥ 25 years)
<b>External test reports</b>	–	2,000 h QUV

The content of this data sheet describes the current state of knowledge at the time of publication and make no claim to be complete. The information listed does not release from self-dependent behaviour. With publication of this sheet all previous versions are not valid any longer. Errors and typing errors reserved.



## Accessories

- **DELTA®-MULTI-BAND:**

Single-sided high-performance adhesive tape to seal and repair all DELTA® sheets (applied to the printed upper side) as well as to join them to any similar surfaces and surfaces made of plastic (rigid), metal, smooth wood, and wood-based materials. Suitable for inside and outside application.

Material: special reinforced UV-stabilized polyethylene (PE) film and highly aggressive solvent-free acrylic adhesive with an easily removed paper release liner. Meets the requirements of the norm DIN 4108-11.

Dimension: 60 mm / 100 mm\* / 150 mm\* (\*with slit paper release liner).

- **DELTA®-FLEXX-BAND FG 80 / FG 150:**

Sealing and connecting tape suitable for outside and inside details such as skylights, flue pipes, cables. Thickness approx. 2 mm.

Material: solvent-free butyl rubber adhesive on special PE film with siliconized PE cover foil, slit in the middle.

Dimension: 6 m × 80 mm / 10 m × 150 mm.

Also available as DELTA®-FLEXX BAND F 100 with geotextile surface: 10 m × 100 mm.

- **DELTA®-THAN:**

Permanently elastic cartridge adhesive made of special rubber for outside application, for bonding and joining DELTA® membranes.

Filling weight: 310 ml per cartridge / 600 ml per tubular bag.

Consumption: approx. 7 running metres / cartridge or 14 running metres / tubular bag

- **DELTA®-SCHAUM-BAND:**

VPE foam nail-sealing tape off the roll. For sealing nail penetrations. Single-faced. Apply to sheet surfaces or counterbattens.

Dimension: 40 mm × 30 m (DELTA®-SB 40) / 50 mm × 30 m (DELTA®-SB 50) / 60 mm × 30 m (DELTA®-SB 60) / 70 mm × 30 m (DELTA®-SB 70) / 80 mm × 30 m (DELTA®-SB 80)

- **DELTA®-HF PRIMER:**

Solvent-free adhesion primer for porous substrates. Serves to significantly improve the adhesion properties of surfaces to be bonded, e.g. wood fibre boards, sanding masonry and concrete. Also suitable for preparing the surface of DELTA-XX PLUS® types before bonding DELTA®-FLEXX-BAND.

Drying time: approx. 15 to 60 min.

Filling weight: 1000 g bottle.

Consumption: Strongly dependent on the absorbency of the substrate. Ex. stone / concrete: approx. 12 m<sup>2</sup>/1000 g; Ex. wood fibre boards: approx. 6 m<sup>2</sup>/1000 g