

Technical data sheet

## **DELTA®-TERRAXX**

High-performance protection and drainage system with very high water flow capacity for horizontal and vertical applications. With integrated self-adhesive edge.











Characteristics Methods Values

## Description

Geocomposite combining a pressure-resistant dimpled structure, a filter-stable heat-welded geotextile and a integrated self-adhesive edge

#### Function

DELTA®-TERRAXX serves as a drainage layer and effectively protects pressure-stable substrates against mechanical impacts (the full field of application is shown on the following page).

Characteristics of the dimpled sheet				
Material		Viscia DE HD (cilvar)	ith laminated goatavtile	
Material Thickness	EN ISO 9863-1	Virgin PE-HD (silver) with laminated geotextile		
	EIN 13O 9003-1	approx. 0.6mm		
Height of dimples	_	approx. 10 mm		
Flat edge / integrated self-adhesive edge for overlappings	-	Yes / yes		
Number of dimples per m²	-	2,500 pieces/m²		
Contact area dimples/surface	-	8,000 cm²/m²		
Air gap between the dimples	-	7.9 l/m²		
Characteristics of the geotextile				
Material	-	Virgin Polypropylen (light grey), thermal bonded		
Surface weight	EN ISO 9864	approx. 110 g/m²		
Resistance to static puncture (CBR-test)	EN ISO 12236	approx. 1.0 kN		
Class of robustness	-	GRK2		
Characteristic opening size	EN ISO 12956	approx. 140 µm		
Water permeability	EN ISO 11058	approx. 0.07 m/s		
Dynamic perforation resistance (cone drop test)	EN ISO 13433	approx. 35 mm		
Tensile strength MD/CMD	EN ISO 10319	approx. 7.0 kN/m		
Resistance to weathering	EN 12224	To be covered within two weeks after installation		
Characteristics of the composite				
Surface weight	EN ISO 9864	approx. 710 g/m²		
Compressive strength (short-term compression behaviour)	EN ISO 25619-2	approx. 400 kN/m²		
Strain at compressive loading 1,008 h (compressive creep)	EN ISO 25619-1	< 4 % (at 100 kPa)		
Endurance and fatigue test	ANTEA	400,000 cycles at 190 kPa load		
Maximum installation depth	-	10 m		
Tensile strength MD/CMD	EN ISO 10319	approx. 15.7 kN/m / 14.9 kN/m		
Elongation at maximum tensile strength MD/CMD	EN ISO 10319	approx. 52% / 47%		
Durability	EN ISO 13438	Durable for 100 years in natural soil with $4 \le pH \le 9$ and soil temperature $\le 25$ °C		
Radon diffusion coefficient	-	approx. 5,0 - 10 <sup>-12</sup> m <sup>2</sup> /s		
Water flow capacity in the plane				
Compressive stress Hydraulic gradient:		i = 0.02	i = 0.10	i = 1.00
20 kPa	EN ISO 12958	0.36 l/(s·m)	0.89 l/(s·m)	3.17 l/(s·m)
50 kPa	LIN 130 12958	0.31l/(s·m)	0.79 l/(s·m)	2.871/(s·m)
100 kPa		0.271/(s·m)	0.671/(s·m)	2.51l/(s·m)

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# **DELTA®-TERRAXX**



Characteristics	Methods	Values	
Miscellaneous			
Reduction of impact sound	Hochschule RheinMain	up to 32 dB	
Temperature resistance	-	-30 to +80 °C	
Dimension	-	12.50 m × 2.40 m and stripes à 12.50 m × 0.75 m	
Weight of one roll	-	21.3 kg (12.50 m × 2.40 m) and 6.7 kg (12.50 m × 0.75 m)	
Packaging unit	-	17 rolls/pallet (12.50 m $\times$ 2.40 m) and 12 rolls/pallet (12.50 m $\times$ 0.75 m)	
CE-conformity	-	EN 13252	
Conformity rules and standards	-	DIN 18531, DIN 18533, DIN 4095	
Certificates	-	Asqual (Geotextile)	

## Accessories

- DELTA®-FIXING SCREW: Special screw to fix DELTA®-Protection and drainage sheets (e.g. DELTA®-TERRAXX) on perimeter insulation made of XPS/EPS with a thickness of minimum 60 mm. Each box contains a TORX BIT TX40 for easy screwing.
- DELTA\*-DIMPLED SHEET PROFILE: End profile for the application to cover the upper edge of DELTA\*-Dimpled/drainage sheets.
- DELTA®-TERRAXX-PROFILE: End profile with stamped rabbets for the application to cover the upper edge of DELTA®-Dimpled/drainage sheets and perimeter insulation up to 100 mm.
- DELTA®-ADHESIVE NAIL: Special fastener for DELTA®-Dimpled und drainage sheets with self-adhesive, quadratic baseplate for safe and non-penetrative adhesion on the waterproofing.

Applications		Functions	
	Applicable under areas with intensive greening.	Protection, filter and drainage layer to prevent backwater.	
<u> </u>	Applicable under walkable areas with flagging and additional base course or rather levelling layer.	For fast drainage wihin the structure.  Prevention of frost damages and efflorescences at the flagging.  Optimal protection for the underlying waterproofing.	
	Applicable under drivable areas.		
<b>10 m</b>	For vertical application in civil and underground engineering with installation depth up to 10 m.	Protection, filter and drainage layer to prevent backwater.	
	Application as drainage layer under concrete slab	<ul> <li>Limitation of hydrostatic pressures that may occur under the concrete slab, collecting and guiding seepage by gravity over the entire surface of the subgrade surface.</li> <li>Also suitable as radon gas drainage / radontight layer in association with adhesive accessories (DELTA®-THENE-BAND T 150, DELTA®-FLEXX-BAND FG 80 / FG 150)</li> </ul>	