HUESKER in structural engineering

Pos.	quantity	object	Price per unit in €	Total price in €
. . .	. . .		. . .	. . .

Three-layer geosynthetic drainage and ventilation layer for earthworks and foundation works, type **HYDRAIN® WAS7** or equivalent, as a building drainage.
The geocomposite consists of a three-dimensional polypropylene core with a PP-monofilament in parallel HYDRAIN Channel-Structure with thermally bonded polypropylene nonwoven geotextiles on both sides and is suitable for the long-term drainage of leachate and gases under permanent loads.

Product features:

- Area-related mass EN ISO 9864: 500 g/m²
- Thickness EN ISO 9683-1: 5,2 mm
- Tensile strength (MD/CMD) EN ISO 10319: 15 kN/m / 15 kN/m
- Elongation at maximum tensile force (MD/CMD) EN ISO 10319: 40 % / 55 %
- In-plane drainage capacity in l/m*s EN ISO 12958 (tolerance ±25%):

load	hydraulic gradient			
	0,04	0,1	0,3	1,0
contact*	R/S	R/S	R/S	R/S
20 kPa	0,20	0,32	0,55	1,35
50 kPa	0,14	0,22	0,38	0,98
100 kPa	0,11	0,18	0,31	0,84

* R = rigid, S = soft

- Static puncture resistance EN ISO 12236: ≥ 1200 N
- Roll dimensions: 2,45 m x 22 m
- Dynamic perforation resistance (cone drop test) EN ISO 13433: 36 mm
- Water permeability normal to the plane EN ISO 11058: 90 l/(m²/s)
- Characteristic opening size O_{90} EN ISO 12956: 90 µm

Durability / environmental resistance:

Geocomposite made of UV-stabilised polypropylene with carbon black additives. Covering within 30 days after installation. Minimum service life of 50 years in accordance with EN 12224 at 4 < pH < 9 and soil temperatures < 25 °C.
Residual tensile strength after durability test (EN V ISO 13438) ≥ 50%.

Sustainability / recyclability:

Geocomposite made from fully recyclable polypropylene (PP). A valid environmental product declaration (EPD) applicable to the corresponding product group according to DIN EN 15804 must be available for the product. The relevant proof must be provided upon request.

Application / Installation:

Installation as a building drainage to drain water and gases, to reduce hydraulic pressure and provide lateral drainage.

Installation in accordance with manufacturer's instructions and project specifications with sufficient overlap, continuous drainage paths and protection against damage.
Delivered in rolls, 100% recyclable, compliant with relevant European geosynthetic standards.

HUESKER Synthetic GmbH
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E-Mail: vertrieb@HUESKER.de
Internet: www.HUESKER.com

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USt.-IdNr.: DE 123785158
Geschäftsführer:
Dr. F.-Hans Grandin (Vorsitzender)
Sven Schröer

Certificates:

- Self and external monitoring according to DIN 18200
- Quality management system according to DIN EN ISO 9001
- Current CE labeling
- Proof of a product group Environmental Product Declaration (EPD)

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