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Core System Specification

Core System Build Up Specification

Consisting of: Protective Fleece, Drainage Layer, Growing Medium and Pre Grown Sedum Blanket

Drainage Layer

Uses:
Drainage Layer is used as a drainage, protection, filter layer for extensive green roof systems on flat roofs.

Characteristics / Advantages

- 4 in 1 product (drainage, protection, filter and root expansion layer)
- Light and easy to cut
- Suitable for low pitch roofs
- High porosity and very high water transmissibility
- Drainage Layer does not rot
- Compressive strength
- Recyclable

Tests Approvals / Standards
Quality management system EN ISO 9001/14001
Reaction to fire according to EN 13501-1, class E

Product Data:
Appearance Surface: structured
Colour Drainage layer: coloured Filter fleece: light grey Packaging,
Packing unit: 40 pieces per pallet (90 m2)
Storage Conditions Drainage Layer shall be stored at dry conditions.
Shelf-Life Drainage Layer does not expire during correct storage.

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Core System Drain Technical Data :

Geocomposite Properties

Thickness at 2kPa (mm)	12mm	EN ISO 9863-1
Mass per unit area (g/m²)	1 040 approx	EN ISO 9864
Tensile strength MD / CMD (kN/m)	24 / 24 -10%	EN ISO 10319
Elongation at peak MD / CMD (%)	45 / 45 nominal	EN ISO 10319
CBR puncture resistance (N)	3 900 -20%	EN ISO 12236
Perpendicular Water Inflow Dimple Side Flat side		
Water flow at 50mm head (l/m²·s) 103 2.5 ±30% EN ISO 11058	103 2.5 ±30%	EN ISO 11058
At 2kPa permeability (coefficient) (m/s) 2.5 X 10-3 ±30% EN ISO 11058	2.5 X 10-3 ±30%	EN ISO 11058
Breakthrough head (mm) 0 nominal		
In-plane water flow MD and CMD HG = 1.0 HG = 0.1 Hydraulic gradient		
at 20kPa confining pressure (l/m·s)	2.40 ±0.40 0.67 ±0.13	EN ISO 12958
at 100kPa confining pressure (l/m·s)	1.95 ±0.33 0.53 ±0.11	EN ISO 12958
at 100kPa confining pressure (l/m·s)	1.45 ±0.24 0.37 ±0.07	EN ISO 12958

with soft foam contact surfaces to simulate textile intrusion		
Resistance to weathering to be covered in 28 days		EN 12224
Resistance to chemicals EN 14030	Excellent	EN 14030
Design life 120 years (manufacturer's declaration)		

Geotextile Properties

Thickness at 2kPa (mm) 1.2 ±20% EN ISO 9863-1	1.2 ±20%	EN ISO 9863-1
CBR puncture resistance (N) 1 600 -20% EN ISO 12236	9.5 / 9.5 -13%	EN ISO 10319
Pore size 090 (µm) 120 ±30% EN ISO 12956	120 ±30%	EN ISO 12956
Tensile strength MD/CMD (kN/m) 9.5 / 9.5 -13% EN ISO 10319	1 600 -20%	EN ISO 12236
Dynamic perforation cone drop (mm) 32 +20% EN ISO 13433	32 +20% EN	EN ISO 13433
Type and material Non-woven needle-punched and heat-treated		

Product Dimensions

Standard roll dimensions 1.1 m x 50 m		

Growing Medium:

Install	50mm multi-layer extensive roof substrate composed of mineral bulk mixture with a proportion of mineral and organic matter.
Total pore volume	> 60-70 Vol %
Max water capacity	≥ 35% Vol
Key data	
Dry weight approx.	≤ .75 g/cm3
Water saturated	≤ 1.4g/cm3
Organic content	≥65 g/L
pH value	5.8-7.9
Water permeability	≥ 0.6 mm/min
Compression factor	1,2

Vegetation Layer:

Please see data sheet for information

Ecology, Health and Safety Information	The product does not fall within the EC-regulation of hazardous goods. As a result, a material safety data sheet following EC-Guideline 91/155 EWG is not needed to bring the product to the market, transport or use it. The product does not damage the environment when used as specified.

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Sedum Blanket Datasheet:

Carrier	Predominately rottable Cocomat with geo textile weave
Substate	Locally produced mix containing at least 25% recycled green waste
Vegetation compostion	Sedum Acre Aureum, Sedum Album Coral Carpet, Sedum Album mini, Sedum Album Athoum, Sedum Hispanicum, Sedum Summer Glory, Sedum Reflexum, Sedum Weihenstephaner Gold, Sedum Voodoo
Vegetation coverage	Vegetation coverage
Thickness	2.5cm -4.5cm
Water saturation weight	18-22 kg /m²
Standard Size	1 m x 1.5 m