

ADVANTAGES

- Long lasting ⇒ resistant to acids and alkalis
- High load capacity, high tensile strength ⇒ due to good elasticity it takes spot loads well
- Excellent permeable capacity
- Simple installation, few tools are needed, easy to cut and drill

APPLICATION

The VL-type geotextiles have several functions on green roofs, but filtration and mechanical protection makes up approx. 80 % of their application.

VLF geotextile is a filter layer with very low clogging indicator, allowing the water to flow away freely from the growing medium, preventing particles wash out thus assuring the flow of redundant water into the drainage system.

VLU products protect the roof insulation boards against damage during the installation and future maintenance work serving as a protecting layer.

The VLS materials are suitable to absorb larger quantities of water due to their mixed fibers, thus we recommend their use especially when higher water storing capacity is required due to the climate or the projects' characteristics demand it.

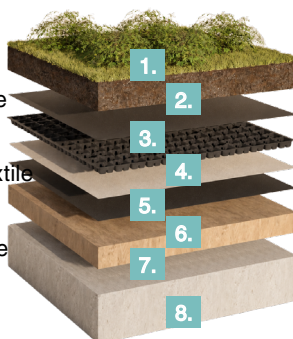


SPECIFICATION

The items of the VL-product family are geotextiles made of synthetic material suitable for fabric formation, made by needle-felting procedure and upon the mechanical features, they are excellent for separating, filtering and water retaining tasks on green roofs.

DIADEM® BUILD-UP

1. intensive vegetation
2. intensive substrate
3. VLF-200 separation and filter geotextile
4. DiaDrain-60H drainage board
5. VLU-500 mechanical protection geotextile
6. root resistant waterproofing
7. root-resistant waterproofing membrane
8. additional layers



1. intensive vegetation
2. intensive substrate
3. VLF-200 separation and filter geotextile
4. DiaDrain-60H drainage board
5. VLF-110 separation and filter geotextile
6. closed cell thermal insulation
7. VLU-500 mechanical protection geotextile
8. root-resistant waterproofing membrane
9. additional layers



TECHNICAL DATA

	VLF-110	VLF-150	VLF-200	VLU-300	VLU-500	VLS-300*	VLS-500	VLS-800*
Product number:	320203	320204	320205	320416	320302	320405	320402	320426
Surface weight [g / m²]:	110	150	200	300	500	300	500	800
Thickness [mm]:	0.8	1.2	1.9	1.8	2.5	3	4	6
Tensile strength in longitudinal direction [kN / m]:	8	12	16	6	10	5.6	9	13
Tensile strength in cross direction [kN / m]:	8	12	16	7	15	6	11	16
Elongation in longitudinal direction [%]:	90	90	95	45	45	70	70	70
Elongation in transverse direction [%]:	75	75	46	40	40	60	60	60
CBR-test, penetration force [kN]:	1.24	1.8	2.35	1.5	3	1.1	2.4	3.5
Dynamic penetration (cone tilt) [mm]:	26	20	22	12	1.8	3	-	-
Characteristic opening size [mm]:	0.13	0.10	0.10	0.078	0.079	0.079	0.080	0.065
Water retention capacity [l / m²]:	-	-	-	1.57	2.1	2.7	3.44	5.54
Water permeability [V ₁₅₀ [mm / s]:	140	105	115	80	80	62	60	52
Robustness class:	GRK 2	GRK 3	GRK 3	GRK 3	GRK 4	GRK 3	GRK 4	GRK 5
Weatherproof [must be buried]:	within 14 days after installation			within a day after installation				
Heat treatment:	no			yes		no		
Material:	PP			min. 70% PES, max. 30% PP				
Roll width [m]:	2							
Roll length [m]:	100	100	175	50	50	50	50	25
Roll size [m²]:	200	200	350	100	100	100	100	50
Roll weight [kg]:	26	36	80	30	50	30	50	40
Roll diameter [cm]:	ca. 30	ca. 45	ca. 60	ca. 40	ca. 45	ca. 45	ca. 55	ca. 50
Colour:	gray			colourful				

* can be ordered



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