

DIADEM® Geotextiles

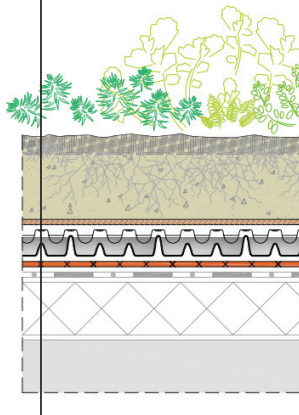
ADVANTAGES

- 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

DIADEM® BUILD-UP

Warm

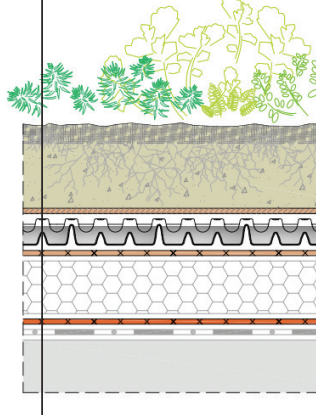
- substrate
- VLF-150/200 filter geotextile
- drainage board
- VLU-300/500 mechanical protection layer geotextile or VLS-300/500
- water retaining and protecting geotextile
- root resistant waterproofing
- thermal insulation
- structure / further layer build-up



DIADEM® BUILD-UP

Inverted

- substrate
- VLF-150/200 filter geotextile
- drainage board
- VLF-110 separation and filter geotextile
- closed cell insulation
- VLU-300/500 mechanical protection geotextile
- root-resistant waterproofing
- structure / further build up



APPLICATION

- The VL-type geotextile has 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 its 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

PRODUCT DESCRIPTION

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

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/m ²]	105	150	200	300	500	300	500	800
Thickness [mm]	0,8	1,2	1,9	1,8	2,5	3,0	4,0	6,2
Tensile strength in longitudinal direction [kN/m]	8	12	16	2,7	5,4	2,6	4,4	6,8
Tensile strength in cross direction [kN/m]	8	12	16	3,7	7,2	3,6	6,0	9,0
Elongation in longitudinal direction [%]	90	90	95	75-90	75-90	100-120	100-120	90-110
Elongation in transverse direction [%]	75	75	46	65-85	65-85	95-110	95-110	95-110
CBR-test, penetration force [kN]	1,2	1,8	2	1	2,3	1	3,3	4,5
Dynamic penetration (cone tilt) [mm]	26	20	22	-	-	-	-	-
Characteristic opening size [mm]	0,13	0,10	0,10	0,13	0,085	0,123	0,086	-
Water retention capacity [l/m ²]	-	-	-	1,56	2,09	2,7	3,6	5,5
Water permeability [V ₁₅₀ [mm/s]	140	105	115	95	48	90	50	-
Robustness class	GRK 2	GRK3	GRK 3	GRK 2	GRK 3	GRK 2	GRK 4	GRK 5
Weatherproof [must be buried]	within 14 days after installation				within a day after installation			
Heat treatment	yes	no		yes		no		
Material	PP			min. 70% PES, max. 30% PP				
Roll width [m]	2	2	2	2	2	2	2	2
Roll length [m]	100	100	100	50	50	50	50	25
Roll size [m ²]	200	200	200	100	100	100	100	50
Roll weight [kg]	26	36	40	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	black			colourful				

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Green Up the Roof!

