

Geogrid/nonwoven composite

Combigrid® PP

New Zealand



Product description:

Composite of a laid geogrid made of stretched, monolithic polypropylene (PP) flat bars with welded junctions and a mechanically bonded and calendered filter geotextile welded within the geogrid structure, used for stabilisation and reinforcement of soils in many fields of infrastructure, environmental protection and hydraulic engineering applications

Property	Test method*	Unit	30/30 Q1 GRK 4 C	40/40 Q1 GRK 4 C	60/60 Q1 GRK 4 C	80/80 Q1 GRK 4 C
Geogrid						
Raw material	-	-	polypropylene (PP), white			
Mass per unit area	EN ISO 9864	g/m ²	200	240	360	440
Tensile strength, md / cmd**	EN ISO 10319	kN/m	≥ 30 / ≥ 30	≥ 40 / ≥ 40	≥ 60 / ≥ 60	≥ 80 / ≥ 80
Elongation at nominal strength, md / cmd**	EN ISO 10319	%	≤ 7 / ≤ 7			
Tensile strength at 1% elongation, md / cmd**	EN ISO 10319	kN/m	6 / 6	8 / 8	12 / 12	16 / 16
Tensile strength at 2% elongation, md / cmd**	EN ISO 10319	kN/m	12 / 12	16 / 16	22 / 22	25 / 25
Tensile strength at 5% elongation, md / cmd**	EN ISO 10319	kN/m	24 / 24	32 / 32	48 / 48	50 / 50
Radial stiffness @0.5% strain***	EN ISO 10319	kN/m	≥ 418	≥ 440	≥ 458	≥ 1,008
Aperture size, md x cmd**	-	mm x mm	approx. 32 x 32	approx. 31 x 31	approx. 31 x 31	approx. 31 x 30
Production specific elongation	-	%	0			
Geotextile						
Raw material	-	-	polypropylene (PP), white			
Mass per unit area	EN ISO 9864	g/m ²	≥ 150			
Characteristic opening size	EN ISO 12956	µm	90			
Water permeability	EN ISO 11058	m/s	9,0 x 10 ⁻²			
- V _{H50} -Index - Flow rate _{H50}		l/(m ² s)	90			
Detector tested	-	-	yes			
Roll dimensions, width x length	-	m x m	4.75 x 100			

*based on, **md = machine direction, cmd = cross machine direction; ***this test is performed by external laboratories and is not part of our regular quality control

The listed technical values are guiding values, achieved in our laboratories and/or independent testing institutes. Our products are subject to changes without prior notice.