

Geogrid/nonwoven composite



Combigrid® 40/40 Q1 GRK 4 C

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	
Geogrid			
Raw material	-	-	polypropylene (PP), white
Mass per unit area	EN ISO 9864	g/m ²	240
Max. tensile strength, md / cmd**	EN ISO 10319	kN/m	≥ 40 / ≥ 40
Elongation at nominal strength, md / cmd**	EN ISO 10319	%	≤ 7 / ≤ 7
Tensile strength at 1% elongation, md / cmd**	EN ISO 10319	kN/m	8 / 8
Tensile strength at 2% elongation, md / cmd**	EN ISO 10319	kN/m	16 / 16
Tensile strength at 5% elongation, md / cmd**	EN ISO 10319	kN/m	32 / 32
Radial stiffness @0.5% strain***	EN ISO 10319	kN/m	≥ 572
Aperture size, md x cmd**	-	mm x mm	approx. 31 x 31
Production specific elongation	-	%	0
Geotextile			
Raw material	-	-	polypropylene (PP), white
Mass per unit area	EN ISO 9864	g/m ²	≥ 150
Max. tensile strength, md / cmd**	EN ISO 10319	kN/m	7.5 / 11.0
Elongation at max. tensile strength, md / cmd**	EN ISO 10319	%	40 / 30
Puncture force	EN ISO 12236	N	≥ 1500
Characteristic opening size	EN ISO 12956	µm	90
Water permeability			
- V _{H50} -Index	EN ISO 11058	m/s	9,0 x 10 ⁻²
- 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.