

# Geogrid/nonwoven composite

## Combigrid® 40/40 Q1 GRK 4 C USA



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### Product description:

Composite of a laid geogrid made of stretched, monolithic polypropylene (PP) flat bars with welded junctions and a mechanical bonded filter geotextile welded within the geogrid structure, used for the reinforcement in many fields of civil engineering including road construction, landfill and hydraulic engineering

Property	Test method*	Unit	40/40 Q1 GRK 4 C
<b>Geogrid</b>			<b>40/40 Q1</b>
Raw material	-	-	polypropylene (PP), white
Max. tensile strength, md / cmd**	ASTM D4595	kN/m	≥ 40 / ≥ 40
Elongation at nominal strength, md / cmd**	ASTM D4632	%	≤ 8 / ≤ 8
Tensile strength at 1% elongation, md / cmd**	ASTM D4632	kN/m	8 / 8
Tensile strength at 2% elongation, md / cmd**	ASTM D4632	kN/m	16 / 16
Tensile strength at 5% elongation, md / cmd**	ASTM D 4632	kN/m	32 / 32
Aperture size, md x cmd**	-	mm x mm	approx. 32 x 32
Production specific elongation	-	%	0
<b>Geotextile</b>			<b>GRK 4 C</b>
Raw material	-	-	polypropylene (PP), white
Mass per unit area	ASTM D5261	g/m <sup>2</sup>	≥ 150
Thickness	ASTM D5199	mm	1.0
Max. tensile strength, md / cmd**	ASTM D4595	kN/m	7.5 / 11.0
Elongation at max. tensile strength, md / cmd**	ASTM D4632	%	70
Grab tensile strength***, md**	ASTM D4632	N	550
Trapezoidal tear strength***	ASTM D4533	N	260
Puncture force	EN ISO 12236	N	1,670
Index puncture***	ASTM D4833	N	260
Displacement at static puncture	EN ISO 12236	mm	30
Characteristic opening size	ASTM D4751	µm	90
Detector tested for broken needles	-	-	Yes
<b>Durability</b>			
UV Resistance	EN ISO 12224		95
Resistance to Long Term Degradation***	EPA 9090 Immersion Testing	%	100 / 100

\*based on, \*\*md = machine direction, cmd = cross machine direction, \*\*\* both Geogrid & Geotextile tested.

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.