



# Technical Data Sheet

## TGC-30S-140

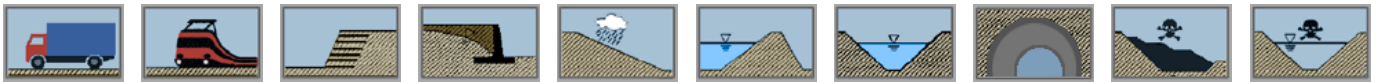


Certificate No: 0338-CPR-0930

Notified Body

**TGC-30S-140** is a geo-composite consist of a polypropylene extruded biaxial geogrid welded with a UV stabilized polypropylene needle punched nonwoven geotextile. It is manufactured at one of THRACE NWs & GEOs S.A. facilities that have achieved **ISO 9001:2008** certification for its systematic approach to quality. The construction of the geocomposite makes it ideal for reinforcement, road construction, landfill applications and in many field of civil engineering.

### Applications and intended uses of Geocomposite



EN 13249	EN 13250	EN 13251	EN 13252	EN 13253	EN 13254	EN 13255	EN 13256	EN 13257	EN 13265
F, R	F, R	F, R	F, D	F, R	F, R	F, R		F, R	F, R
F+S	F+S	F+S	F+S	F+S	F+S	F+S		F+S	F+R
R+S	R+S	R+S	F+D	R+S	R+S	R+S		R+S	
F+R	F+R	F+R	F+S+D	F+R	F+R	F+R		F+R	
F+R+S	F+R+S	F+R+S		F+R+S	F+R+S	F+R+S		F+R+S	

PROPERTY	TEST METHOD	VALUE	METRIC UNITS	TOLERANCE	
<b>TG3030S</b>					
Rib Strength (MD/CD)	GRI GG1	Average	kN/m	29/29 -2.9/-2.9	
Junction Strength (MD/CD)	GRI GG2	Average	kN/m	27/27 -2.7/-2.7	
Weathering Resistance (MD/CD)	EN 12224	Average	%retain strength	100/100 ±10/±10	
Resistance to Liquids – Acid, Alkaline (MD/CD)	EN 14030	Average	%retain strength	100/100 ±10/±10	
Resistance to oxidation (140days @ 110 °C) (MD/CD)	EN ISO 13438	Average	%retain strength	100/100 ±10/±10	
Resistance to Soil Burial (MD/CD)	EN 12225	Average	%retain strength	100/100 ±10/±10	
Grid Opening Size (MD/CD)	Measured	Average	mm	40/40 ±4/±4	
Carbon Black	ASTM D1603	Average	%	2 +0.2	
<b>140NW</b>					
Resistance to static puncture	EN ISO 12236	Average	N	1600 -160	
Dynamic Perforation resistance	EN ISO 13433	Average	mm	30 +6	
Characteristic Opening Size (O <sub>90</sub> )	EN ISO 12956	Average	µm	100 ±30	
Water permeability V <sub>IH50</sub>	EN ISO 11058	Average	m/sec*10 <sup>-3</sup>	90 -27	
Water flow rate	EN ISO 11058	Average	l/m <sup>2</sup> /sec	90 -27	
Water flow capacity in the plane (MD/CD)	HG 1.0 at 20kPa	EN ISO 12958	Average	l/m/sec*10 <sup>-4</sup>	3.51/3.45 -30%
	HG 1.0 at 100kPa				1.33/1.25 -30%
	HG 1.0 at 200kPa				0.63/0.48 -30%
Weathering Resistance (MD/CD)	EN 12224	Average	%retain strength	90/90 -	
Resistance to Liquids – Acid, Alkaline (MD/CD)	EN 14030	Average	%retain strength	90/90 -	
Oxidation Resistance (MD/CD)	EN ISO 13438	Average	%retain strength	90/90 -	
Resistance to Soil Burial (MD/CD)	EN 12225	Average	%retain strength	90/90 -	
Mass/Unit Area	EN ISO 9864	Average	gr/m <sup>2</sup>	135 ±14.0	
Thickness (2kPa)	EN ISO 9863-1	Average	mm	1.1 ±0.22	
<b>TGC-30S-140</b>					
Tensile Strength (MD/CD)	EN ISO 10319	Average	kN/m	32/32 -3.2/-3.2	
Elongation at Maximum Load (MD/CD)	EN ISO 10319	Average	%	10/10 ±1.0/±1.0	
Tensile Strength at 2% Strain (MD/CD)	EN ISO 10319	Average	kN/m	9/10 -1/-1.2	
Tensile Strength at 5% Strain (MD/CD)	EN ISO 10319	Average	kN/m	22/24 -2/-2.4	
Mass/Unit Area	EN ISO 9864	Average	gr/m <sup>2</sup>	495 ±50	
<b>STANDARD PACKAGING</b>					
Roll Width/ Length	Measured	Typical	m	3.95/30 ±0.02/±1	

#### NOTES:

- THRACE NWs&GEOs S.A. Technical Fabrics reserve the right to alter product specifications at any time without prior notice. It is the responsibility of all users to satisfy themselves that the above data are current.
- Polypropylene is the constituent polymer used in the production of the geocomposite series.
- To be covered within one month after installation. The above geocomposite is predicted to be durable for more than 25 years in soil temperatures >25°C and are resistant to highly acid and alkaline environments on the basis of a durability assessment.
- F = Filtration, R = Reinforcement, S = Separation, D = Drainage

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