

# Technical Data Sheet



# TDC 5B11

Certificate No: 0338-CPR-0958

**TDC 5B11** is a drainage geo-composite composed of a high-density polyethylene (HDPE) geonet drainage core with heat laminated UV stabilized nonwoven Polypropylene (PP) geotextiles on each face. The geonet core is made of two strands overcrossed at sixty degrees thus creating drainage channels that provide high flow capacity under high pressures and with very low slopes. 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.

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

**Functions:** Drainage, Filtration and Separation

It is resistant to commonly encountered soil chemicals, mildew and insects and is non-biodegradable. **TDC 5B11** conforms to the property values listed below. Technical data are based on statistical analysis on 95% confidence limit.

PROPERTY	TEST METHOD	Unit	Average Value	
<b>GEONET</b>				
Polymer		High-density Polyethylene (HDPE)		
Carbon Black	ASTM D1603	%	1.2-2.5	
Density	ASTM D1505	gr/cm <sup>3</sup>	>0.94	
Thickness at 2 kPa / 200kPa	EN ISO 9863-1	mm	5.3/4.9	
<b>FILTER GEOTEXTILE</b>				
Polymer		Polypropylene (PP)		
Mass per Unit Area (nominal)	EN ISO 9864	gr/m <sup>2</sup>	120	
Dynamic perforation resistance	EN ISO 13433	mm	28	
Resistance to static puncture (CBR)	EN ISO 12236	N	1700	
Water permeability normal to plane	EN ISO 11058	l/(m <sup>2</sup> .sec)	110	
Characteristic opening size	EN ISO 12956	µm	90	
<b>DRAINAGE GEOCOMPOSITE</b>				
Thickness at 2 kPa / 200 kPa	EN ISO 9863-1	mm	5.9/5.3	
Tensile strength (MD/CD)	EN 10319	kN/m	20/17	
Tensile elongation (MD/CD)	EN 10319	%	40/50	
Water flow capacity in the plane (MD)	HG 1.0 at 20kPa	EN 12958	l/(m.sec)	1.20
	HG 1.0 at 50kPa		l/(m.sec)	1.10
	HG 1.0 at 200kPa		l/(m.sec)	0.80
	HG 1.0 at 400kPa		l/(m.sec)	0.50
<b>ENDURANCE</b>				
Weathering Resistance (MD/CD)	EN 12224	%retained strength	90/90	
Resistance to Liquids – Acid (MD/CD)	EN 14030	%retained strength	90/90	
Resistance to Liquids – Alkaline (MD/CD)	EN 14030	%retained strength	90/90	
Oxidation Resistance (MD/CD)	EN ISO 13438	%retained strength	90/90	
Microbiological Resistance (MD/CD)	EN 12225	%retained strength	90/90	
<b>STANDARD PACKAGING</b>				
Roll Width	Measured	m	3.8	
Length	Measured	m	Upon request	

**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.
- On either side of the geocomposites on opposite faces, there are 10-cm protrusions of nonwoven geotextile, to allow for overlap with adjacent rolls.
- To be covered within 14 days after installation. The above fabric is predicted to be durable for up to 100 years in soil temperatures ≤25°C and are resistant to highly acid and alkaline environments on the basis of a durability assessment.

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**THRACE NONWOVENS & GEOSYNTHETICS S.A.**

Head Office: 20, Marinou Antypa str., 17455, Alimos (Athens), Greece,  
Production Facilities: Magiko Xanthi, 67100, Xanthi, Greece,  
[www.thracegroup.com](http://www.thracegroup.com)

T +30 210 9875044-9 | F +30 210 9875040  
T +30 25410 45675-6 | F +30 25410 45658