

# SYNTEC PRODUCT SPECIFICATION

## SYNTEC, LLC

4800 Pulaski Highway  
 Baltimore, Maryland 21224 • USA  
 Phone: 410-327-1070 • Toll Free: 1-800-874-7437 Fax: 410-327-1078  
 www.synteccorp.com



**SYNTEC**  
 GEOSYNTHETICS EVOLVED

## TENDRAIN 5100-2 Double-Sided Geocomposite

The drainage geonet is comprised of a tri-planar structure consisting of middle ribs that provide direct channelized flow, with diagonally placed top and bottom ribs to limit geotextile intrusion. This geonet structure provides high transmissivity in soil environments under high and low loads. Tendrain has properties conforming to the values and test methods listed below:

PROPERTY	TEST METHODS	UNITS	VALUE	QUALIFIER	FREQUENCY
<b>TRI-PLANAR GEONET<sup>1</sup></b>					
Thickness	ASTM D 5199	mil (mm)	300 (7.6)	±10%	100,000 sf
Density	ASTM D 792	g/cm <sup>3</sup>	0.94 – 0.96	Range	100,000 sf
Melt Flow Index	ASTM D 1238	g/10 min	1.0	MAX	100,000 sf
Carbon Black	ASTM D 4218	%	2-3	Range	100,000 sf
Thickness Retained From 10,000 hour creep test under 10,000 psf, and 20°C temperature	GRI-GC8	%	80	-	-
Creep Reduction Factor From 10,000 hour creep test under 10,000 psf, and 20°C temperature	GRI-GC8	-	1.2	-	-
<b>GEOTEXTILE<sup>1</sup></b>					
U.V. Resistance (500 hrs)	ASTM D 4355	%	70	MARV	Per formula
Grab Tensile	ASTM D 4632	lbs (N)	203 (902)	MARV	100,000 sf
Grab Elongation	ASTM D 4632	%	50	MARV	100,000 sf
Tear Strength	ASTM D 4533	lbs (N)	80 (356)	MARV	100,000 sf
CBR Puncture	ASTM D 6241	lbs (N)	500 (2,223)	MARV	100,000 sf
AOS	ASTM D 4751	US Std Sieve(mm)	80 (0.18)	MaxARV	500,000 sf
Permittivity	ASTM D 4491	sec <sup>-1</sup>	1.1	MARV	500,000 sf
Water Flow Rate	ASTM D 4491	gpm/ft <sup>2</sup> (l/min/m <sup>2</sup> )	90 (3675)	MARV	500,000 sf
<b>GEOCOMPOSITE</b>					
<b>Bond Strength (Ply Adhesion) - MD</b>					
Peak	ASTM D 7005	lbs/in	1.0	MAV	100,000 sf
Average			0.5		
<b>Transmissivity - MD</b>					
Plate/Ottawa Sand/Geocomposite/ Geomembrane/Plate Gradient = 0.02 @ 7,500 psf 100 hour seating period	ASTM D 4716	m <sup>2</sup> /sec	4.0*10 <sup>-3</sup>	MAV	500,000 sf
<b>DIMENSIONS AND DELIVERY</b>					
The geocomposite shall be delivered to the jobsite in roll form with each identified and nominally measuring 12.75 feet (3.89 meters) in width and 200 feet (61 meters) in length.					

Qualifiers: MARV=Minimum Average Roll Value (MARV), MAV=Minimum Average Value, MAX=Maximum Value, MaxARV=Maximum average roll value, MD=Machine Direction.

NOTES: 1. Geotextile and geonet properties listed are prior to lamination.