

# PRODUCT DATA SHEET

## GEOTEX® 451

**GEOTEX 451** is a polypropylene, staple fiber, needlepunched nonwoven geotextile produced by Propex, and will meet the following Minimum Average Roll Values (MARV) when tested in accordance with the methods listed below. The fibers are needled to form a stable network that retains dimensional stability relative to each other. The geotextile is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils.

**GEOTEX 451** conforms to the property values listed below.<sup>1</sup> Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

PROPERTY	TEST METHOD	MARV <sup>2</sup>	
		ENGLISH	METRIC
<b>Mechanical</b>			
Tensile Strength (Grab)	ASTM D-4632	120 lbs	534 N
Elongation	ASTM D-4632	50%	50%
Puncture	ASTM D-4833	65 lbs	289 N
Mullen Burst	ASTM D-3786	230 psi	1586 kPa
Trapezoidal Tear	ASTM D-4533	50 lbs	222 N
<b>Endurance</b>			
UV Resistance	ASTM D-4355	70%	70%
<b>Hydraulic</b>			
Apparent Opening Size (AOS) <sup>3</sup>	ASTM D-4751	70 US Std. Sieve	0.212 mm
Permittivity	ASTM D-4491	1.50 sec <sup>-1</sup>	1.50 sec <sup>-1</sup>
Water Flow Rate	ASTM D-4491	120 gpm/ft <sup>2</sup>	4889 l/min/m <sup>2</sup>
<b>Roll Sizes</b>		12.5 ft x 360 ft	3.81 m x 109.8 m
		15 ft x 360 ft	4.57 m x 109.8 m

#### NOTES:

1. The property values listed above are effective 08/2006 and are subject to change without notice.
2. Values shown are in weaker principal direction. Minimum average roll values (MARV) are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
3. Maximum average roll value.



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