

GEOTEX[®] 451 is a polypropylene, staple fiber, needle-punched 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 needed 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 below¹. Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP). This product is NTPEP approved for AASHTO standards.

PROPERTY	TEST METHOD	MARV ²	
		ENGLISH	METRIC
ORIGIN OF MATERIALS			
% U.S. Manufactured		100%	100%
PHYSICAL			
Mass/Unit Area	ASTM D-5261	4.0 oz/yd ²	136 g/m ²
MECHANICAL			
Grab Tensile Strength	ASTM D-4632	100 lbs	445 N
Grab Elongation	ASTM D-4632	50%	50%
CBR Puncture	ASTM D-6241	300 lbs	1334 N
Trapezoidal Tear	ASTM D-4533	50 lbs	222 N
ENDURANCE			
UV Resistance at 500 hrs	ASTM D-4355	70%	70%
HYDRAULIC			
Apparent Opening Size (AOS) ³	ASTM D-4751	70 US Std. Sieve	0.212 mm
Permittivity	ASTM D-4491	2.0 sec ⁻¹	2.0 sec ⁻¹
Water Flow Rate	ASTM D-4491	140 gpm/ft ²	5704 l/min/m ²
ROLL SIZES⁴		12.5 ft x 360 ft 15 ft x 360 ft	3.81 m x 109.8 m 4.57 m x 109.8 m

NOTES:

- The property values listed above are effective 03/05/2018 and are subject to change without notice.
- 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. Values represent testing at time of manufacture.
- Maximum average roll value.
- Contact your local Territory Business Manager (TBM) for custom widths and colors. Lead times may vary depending on customer requirements and volume requested.



ENGINEERED EARTH SOLUTIONS[™]

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