

# Material Properties and Dimensions



## Specifications

Western Excelsior manufactures a full line of Rolled Erosion Control Products (RECPs). PP5-Xtreme™ is a fully synthetic, UV stable High Performance Turf Reinforcement Mat (HP-TRM) manufactured by weaving continuous, synthetic thread elements by way of a proprietary (patent pending) process to form a lofty, three-dimensional pattern. PP5-Xtreme is resistant to environmental and climatic conditions and provides high strength, durability and turf reinforcement performance.

Each roll of PP5-Xtreme is made in the USA and manufactured under Western Excelsior's Quality Assurance Program to ensure a consistent distribution of strands and consistent thickness. PP5-Xtreme is constructed of UV stabilized, high strength synthetic yarns to be incorporated into turf and/or the soil matrix. For typical applications, the expected design life of PP5-Xtreme is fifty years, however, may be less or indefinite. Typical manufactured properties are provided in Table 1 and product characteristics are provided in Table 2.

Table 1- Specified Expected Values

Tested Property	Test Method	Value
Tensile Strength (MD) x (TD)*	ASTM D6818	4000 lb/ft (58 kN/m) x 3000 lb/ft (44 kN/m)
Elongation (MD) x (TD)	ASTM D6818	25 % x 20 %
Tensile Strength @15% Strain	ASTM D6818	3000 lb/ft (44 kN/m) - (MD &TD)
Initial Tangent Modulus (MD)	ASTM D6818	10.5 kip/ft (12.8 kN/m)
Initial Tangent Modulus (TD)	ASTM D6818	17.5 kip/ft (21.3 kN/m)
Mass Per Unit Area	ASTM D6566	9.2 oz/yd <sup>2</sup> (312 g/m <sup>2</sup> )
Thickness	ASTM D6525	0.3 in (8 mm)
Light Penetration	ASTM D6567	30 % open
Water Absorption	ASTM D1117	N/A %
Porosity	Computed	96 %
UV Stability	ASTM G154 / D4355 / D7238	100% (500hr) / 90% (6000hr)

\*Value specified as Minimum Average Roll Value (MARV) \*\*Maximum

Table 2 - Netting

PP5-Xtreme is a woven product, thus no netting is utilized in the construction of the material.

PP5-Xtreme is available in multiple roll sizes ranging in width from 8.0 ft to 12.0 ft. and 112.5 ft to 180 ft in length. Standard roll sizes are 100 square yards, measuring 8.0 ft wide by 112.5 ft long. Custom roll sizes are available upon request. Large rolls may require a cardboard core. PP5-Xtreme is manufactured in the USA with 100% of component materials derived from domestic sources.

Document # WE\_EXCEL\_PP5XT\_SPEC. This document has been developed to provide the characteristic properties of the product described. For questions, to request performance data or installation recommendations, contact Western Excelsior at 866-540-9810 or wexcotech@westernexcelsior.com. Updated 8/1/2016.