

MATERIAL PROPERTIES AND DIMENSIONS



Specifications

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

Each roll of PP5-Heavy Duty 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-Heavy Duty 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-Heavy Duty is twenty-five 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	2500 lb/ft (36 kN/m) x 2250 lb/ft (33 kN/m)
Elongation (MD) x (TD)	ASTM D6818	25 % x 20 %
Tensile Strength @15% Strain	ASTM D6818	2250 lb/ft (44 kN/m) - (MD &TD)
Initial Tangent Modulus (MD)	ASTM D6818	8.0 kip/ft (9.7 kN/m)
Initial Tangent Modulus (TD)	ASTM D6818	13.0 kip/ft (15.8 kN/m)
Mass Per Unit Area	ASTM D6566	9.2 oz/yd ² (312 g/m ²)
Thickness	ASTM D6525	0.30 in (8 mm)
Light Penetration	ASTM D6567	30 % open
Water Absorption	ASTM D1117	N/A %
Resiliency	ASTM D 6524	70 %
Porosity	Computed	96 %
UV Stability	ASTM D 4355	100% (500hr) / 90% (3000hr)

*Value specified as Minimum Average Roll Value (MARV)

Table 2 - Netting

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

PP5-Heavy Duty 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-Heavy Duty is manufactured in the USA with 100% of component materials derived from domestic sources.

Document # WE_EXCEL_PP5HD_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 4/14/2014.