

Product Evaluation

RE: Review of TriNet Recyclax Turf Reinforced Mat (TRM)

PRODUCT

TriNet Recyclax is a Turf Reinforced Mat (TRM) manufactured and distributed in Alberta by American Excelsior Company located in Rice Lake, Wisconsin, USA. Website: <http://americanexcelsior.com/>

VENDOR CLAIMS AND INFORMATION

CLAIMS

TriNet Recyclax TRM is a three dimensional TRM specifically designed to provide permanent structural support for vegetation root systems (root reinforcement) and/or surface support underneath vegetation (stem reinforcement). TriNet Recyclax TRM may be installed, soil filled, and seeded to allow the germination of reinforced vegetation above, and a permanent, structural root system to grow into its matrix below. TriNet Recyclax TRM has a design soil loss ratio (event-based RUSLE C factor) of .015.

DESCRIPTION

TriNet Recyclax TRM, permanent non-degradable Turf Reinforcement Mat (TRM), consists of 100% post-consumer recycled polyester (green bottles) with 80% five-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the TRM. The top, middle, and bottom of each TRM is stitched together with ultra-heavy duty UV stabilized polypropylene nets. Fibers are tightly crimped and curled to allow fiber interlock, and to retain 95% memory of the original shape after loading by hydraulic events. Fibers have a specific gravity greater than 1.0; therefore, the blanket will not float during hydraulic events.

POTENTIAL USAGE

Erosion control at slopes up to 0.5H:1V and channels with flow up to 7.62 m/s and 670 Pa shear stress.

STANDARDS

Thickness	ASTM D 6525,	Light Penetration	ASTM D 6567
Resiliency	ASTM D 6524,	Mass per Unit Area	ASTM D 6566
Tensile Strengths	ASTM D 6818,	Elongation	ASTM D 6818
UV Stability	ASTM D 4355,	Stiffness	ASTM D6575
Bench-Scale Rain Splash	ASTM D 7101,	Bench-Scale Shear	ASTM D 7207
Germination Improvement	ASTM D 7322		

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Transportation has experience with similar products from various manufacturers.

APPLICABLE STANDARDS

Alberta Transportation standard for Rolled Erosion Control Products (RECP) is documented in AT Products List and Erosion and Sediment Control Manual BMP#13.

RECOMMENDATIONS

TriNet Recyclax Turf Reinforced Mat (TRM) be listed as a Potential Product under Alberta Transportation Products List, Erosion and Sediment Control Systems – Permanent RECPS – Turf Reinforcement Mats (TRM) – Type C – Proprietary. Final acceptance as a proven product will be based on field performance.

TRIAL PROJECTS