

Product ID: 8133-3-31 Initiation Date: March 6, 2020 Revision Date: May 22, 2020 Expiry Date: May 2023

Product Evaluation

RE: Review of TriNet Coconut Turf Reinforced Mat

PRODUCT

TriNet Coconut is a composite Turf Reinforced Mat (C-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 Coconut has a design soil loss ratio (event-based RUSLE C factor) of 0.031 and is typically suitable for slopes up to 0.5H:1V. TriNet Coconut is rated for channel flows up to 20.0 ft/s (6.1 m/s) and 12 lb/ft² (575 Pa) shear stress..

DESCRIPTION

TriNet Coconut is a three dimensional biocomposite turf reinforcement mat that consists of a coconut fiber matrix. The fibers are evenly distributed throughout the entire area of the TRM. The top, middle, and bottom nets of each TRM are stitched together forming a permanent three dimensional C-TRM. The netting material is made of UV stabilized Polypropylene.

POTENTIAL USAGE

Erosion control at slopes up to 0.5H:1V and channels with flow up to 6.1 m/s and 575 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 Coconut Turf Reinforced Mat 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

Rishi Adhikari

cc Innovations Evaluation Committee – Roger Skirrow,

Classification: Protected A