

Product Evaluation

RE: Review of Erosion Control Blankets – Landlok 450

PRODUCT

Turf Reinforcement Mats (TRMs) by Propex – Landlok 450. This product is distributed by Brock White Geotechnical located in Calgary, Alberta.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Landlok Turf Reinforcement Mats (TRMs) are the industry's most advanced solutions for applications requiring immediate, long-term erosion protection, vegetative reinforcement and water quality enhancement capabilities. Propex's first generation TRMs are constructed of a dense web of 100% polypropylene fibres positioned between 2 biaxially oriented nets. When vegetated, they provide twice the erosion protection of vegetation alone. Now we've taken the same woven technology in our High Performance TRMs and used it to design the next generation of TRMs. All Landlok TRMs feature patented X3 fiber technology, which provides 40% greater surface area for trapping and protecting seed and soil.

DESCRIPTION:

These netless, composite-free 3-dimensional second generation TRMs feature a rugged material construction that combines superior tensile strength, flexibility and UV stability. This allows them to deliver better, long-term performance over traditional methods like rock riprap and concrete paving and increased design life over first generation netted, fused, glued or stitch-bonded TRMs.

POTENTIAL USAGE:

Can be used in ditches and storm channels. As a soft armour it can be used as an alternative solution to ripraps.

STANDARDS:

Propex provides staple patterns and roll width, length and weight for this product. Water flow velocities, shear stresses and Manning's N values are provided.

ASTM D6818 Tensile Strength and Elongation	ASTM D6525 Thickness
ASTM D6566 Mass per unit area	ASTM D6567 Light penetration
ASTM D6524 Resiliency	ASTM D6675 Flexibility
ASTM D4355 UV Resistance	

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has used this products in its projects

APPLICATION STANDARDS:

Alberta Transportation have a performance standard for Rolled Erosion Control Products.

RECOMMENDATIONS:

Landlok 450 for erosion control be listed as a Proven Product under Alberta Transportation Product List, Erosion Control Systems, Rolled Erosion Control Blanket – Permanent RECPs – Turf Reinforced Mats (TRM) – TRM Type B - Erosion Control Mats or Blankets – Proprietary, based on the information provided.

TRIAL PROJECTS

H658:02 – Bull Creek Culvert
H676:02 – Little Puskwaskau Creek Culvert

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