

RE: Review of Propex ArmorMax (Anchored Reinforced Vegetation System)

PRODUCT

Propex ArmorMax system is developed by Propex of Chattanooga, TN and distributed in Alberta by Nilex Inc.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Propex ArmorMax system is a combination of high performance Turf Reinforcement Mat and percussion driven anchors. The system protects soil surfaces from two failure mechanisms: surface erosion and shallow plane instability (sloughing). ArmorMax protects slopes, channels, levees and banks (river, channel and stream). Product website: www.geotextile.com.

DESCRIPTION:

The Turf Reinforcement Mat is a 3-dimensional woven polypropylene geosynthetic specially designed for erosion control applications on levees, steep slopes and vegetated waterways. The matrix is composed of monofilament yarns woven into uniform configuration of resilient pyramid-like projections. The TRM exhibits high interlocking and reinforcement capacity with both soil and root systems. It demonstrates a high tensile modulus.

Percussion anchors are made of corrosion resistant aluminum alloy, gravity die cast and heat treated. It is connected to a stainless steel tendon for the B-1 anchor and to a galvanized threaded steel rod for the B-2 and B-3 anchors.

POTENTIAL USAGE:

Slopes, channels, levees and banks.

STANDARDS:

ASTM standards for the Turf Reinforcement Mat.
Propex installation guidelines.

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has no experience with this system.

APPLICATION STANDARDS:

Alberta Transportation has a performance specification for Rolled Erosion Control Products based on permissible shear and velocity and the ArmorMax Turf Reinforcement Mat must meet this requirement.

RECOMMENDATIONS:

Propex ArmorMax system for erosion control be listed as a Proven Product under Alberta Transportation Product List, Erosion and Sediment Control Systems, Miscellaneous Erosion and Sediment Control, based on the information provided..

TRIAL PROJECTS

H894:02 & H614:06

Fred Cheng

cc New Product Evaluation Standing Committee - Roger Skirrow