

RE: Review of Erosion Control Blankets and Mats – North American Green C125

PRODUCT

Erosion control blankets and mats – North American Green C125. This product is distributed by Nilex Inc. of Edmonton.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

The erosion control blankets and mats are used to prevent erosion of soil on side slopes, channels and ditches.

DESCRIPTION:

C125, a semi-permanent erosion control blanket and mat shall be machine-produced mat of 100% coconut fibre with a functional longevity of approximately 36 months. The blanket shall be of consistent thickness with the coconut fibres evenly distributed over the entire area of the mat. The blanket shall be covered on the top and bottom sides with a heavyweight photo-degradable polypropylene netting having an approximately 1.59 x 1.59 cm mesh and be sewn together on 3.81 cm centres (50 stitches/roll width) with UV stable polypropylene thread. The blanket shall be manufactured with a coloured line or thread stitched along both outer edges (5 to 12.5 cm) to ensure proper material overlapping.

POTENTIAL USAGE:

The blankets or mats may replace heavy armour such as rock riprap.

STANDARDS:

North American Green has slope and channel design data and physical specifications for the C125.
ASTM D5199/ECTC Thickness
ECTC Guidelines Resiliency, Swell, Light penetration, Smolder resistance
ASTM D5261 Mass per unit area
ASTM D1117/ECTC Water absorption
ASTM D1388/ECTC Stiffness/Flexibility
ASTM D5035 Tensile strength, Elongation

ALBERTA INFRASTRUCTURE and TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Infrastructure and Transportation have tried a large variety of erosion control mats in the past and might have some experience with this product but there is no documentation of its actual use and performance.

APPLICATION STANDARDS:

Alberta Infrastructure and Transportation have a performance specification for this product.

RECOMMENDATIONS:

North American Green C125 for erosion control be listed as a Proven Product under Alberta Infrastructure and Transportation Product List, Erosion Control Systems – Rolled Erosion Control Blanket – Proprietary, based on the information provided.

TRIAL PROJECTS

H881, Conklin
Fred Cheng