

## Product Evaluation

### RE: Review of HY-C3 High Performance Straw & Cotton Plant Material Hydraulically – Applied Mulch

#### **PRODUCT**

HY-C3 High Performance Straw & Cotton Plant Material Hydraulically – Applied Mulch. This product is manufactured by East Coast Erosion Blankets and supplier is Layfield Geosynthetics & Industrial Fabrics, Edmonton.

#### **VENDOR CLAIMS AND INFORMATION**

**CLAIMS:** HY-C3 mulch fiber matrix creates a flexible layer that protects the bare soil from raindrop splash energy erosion and that absorbs rainfall and then releases the moisture to provide optimal conditions for seed germination and vegetative establishment on 1:1 or flatter slopes with an estimated functional longevity of 6 months. Product web link

<http://www.eastcoasterosion.com/documents/products/HY-C3%20Material%20specification.pdf>

**DESCRIPTION:** HY-C3 is hydraulically applied mulch composed of mechanically processed straw fibers, reclaimed cotton plant materials and performance enhanced tackifiers.

**POTENTIAL USAGE:** Erosion Control for the slopes 1:1 or flatter where vegetation growth is expected. It should not be applied in channels, swales or areas of concentrated flow unless accompanied with a Rolled Erosion Control Products.

**STANDARDS:** ASTM D6459 (modified) - Large-scale testing completed  
East Coast Erosion Blankets provides mixing and application rate instructions  
Slope of  $\leq 4:1$ , Application Rate of 2800 kg/ha - Slope of  $\geq 4:1 < 3:1$ , Application Rate of 3400 kg/ha  
Slope of  $\geq 3:1 < 2:1$ , Application Rate of 3900 kg/ha – Slope of  $\geq 2:1 < 1:1$ , Application Rate of 4500 kg/ha  
Slope of 1:1, Application Rate of 5000 kg/ha

#### **ALBERTA TRANSPORTATION COMMENTS**

**EXPERIENCE:** Alberta Transportation has no experience with this product.

#### **APPLICATION STANDARDS:**

Alberta Transportation has standard specifications for seeding and fertilizing - Erosion and Sediment Control Manual 2011 BMPs 22 Seeding, 23 Mulching, 24a Hydro-seeding and 24b Hydro-mulching.

#### **RECOMMENDATIONS:**

HY - C3 to be listed as a Potential Product under Alberta Transportation Products List, Erosion Control – Hydraulic Erosion Control Product – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

#### **TRIAL PROJECTS**

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