

RE: Review of Curlex Sediment Log

PRODUCT

The Curlex Sediment Logs are versatile excelsior logs comprised of an outside containment fabric and filled with unique Curlex fibres. They are manufactured by American Excelsior Company of Arlington, Texas and distributed in Alberta by EMCO Geosynthetics of Calgary and Brockwhite Geotechnical of Calgary.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Water is filtered through (not underneath) the diameter of the porous, interlocked fibre log matrix. As it does, velocity is naturally reduced and sediment is collected on the upstream side of the excelsior fibre log. Install Sediment Logs over bare soil and/or biodegradable and permanent erosion control blankets or on steep slopes as a wattle.

DESCRIPTION:

The fibre log matrix is made of Great Lakes Aspen excelsior fibres. The fibres are curled with soft interlocking barbs and 80% will be 6" in length or longer. The outside, open weave containment fabric can be degradable or non-degradable depending on project requirements.

POTENTIAL USAGE:

Sediment Logs are extremely flexible and contour to the terrain to maintain intimate contact with the subgrade. Additionally, they come with 6 other benefits: lightweight, no trenching, no weed seeds, no disposal hassles, are re-usable and hold their shape.

Potential Usage:

- ditch bottoms, swales, and waterways
- over bare soils and/or temporary and turf reinforcement blankets
- drop structures and let down structures
- 360 degree protection around catch basins and drop inlet structures
- Curb and drainage outlets
- Project ingress and egress termination points
- Use in place of bales, silt fence, reinforced silt fence and rock checks
- As wattles on steep slopes

STANDARDS:

Property	Type I	Type II
Nominal diameter (+/-10%)	50 cm	30 cm
Length	3.05 m	3.05 m
Weight (+/-10%)	13.6 kg	9.07 kg
Net Opening (triangular shape)	2.5 cm	2.5 cm

Type I: Energy dissipation in heavy duty concentrated flow areas

Type II: Energy dissipation in mild to medium concentrated flow areas

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has no experience with Curlex Sediment Logs.

APPLICATION STANDARDS:

Alberta has a Best Management Practice for Fibre Rolls (BMP #28a) in the Design Guidelines for Erosion and Sediment Control for Highways, March 2003.

RECOMMENDATIONS:

The Curlex Sediment Log be listed as a Proven Product under Alberta Transportation Product List, Erosion Control Systems – Ditch Blocks/Barriers – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

TRIAL PROJECTS

Fred Cheng

cc New Product Evaluation Standing Committee – Roger Skirrow