

Curlex® Blankets

Excelsior Erosion Control Blankets



American Excelsior Company is the inventor of biodegradable erosion control blankets. Developed in the early 1960s, Curlex excelsior blankets are specifically designed to actually promote ideal growing conditions for grass seed, while simultaneously protecting topsoil from wind and water erosion. Curlex excelsior blankets have long passed the test of time. By design, Curlex blankets have a built-in swell factor — wet curled excelsior fibers slightly expand in thickness and interlock to form a strong, fiber matrix. This allows the fibers to provide intimate contact with local terrain. Water flow is trained to follow the curled fiber matrix. The roughness of the curled excelsior matrix slows the velocity to a point where gravity takes over, which allows moisture to slowly seep into the topsoil to promote ideal growing conditions.

Typical Applications

- Highway embankments, ditch bottoms and slopes, bridges, approaches and medians
- Residential, commercial, and industrial developments
- Urban drainage, stream banks, and waterways
- Golf course fairways, roughs, and waterways
- Landfill caps, side slopes, and let down structures
- Pipeline right-of-ways

Material Characteristics

Curlex blankets consist of unique softly barbed, interlocking, curled, Aspen excelsior fibers. They are naturally weed seed free. Curlex blankets are available with a variety of environmentally sensitive and/or stronger netting types to match job site requirements. We offer a green color-coded plastic netting for applications requiring UV resistance, strength, and longevity. Our photo-degradable Quick Mow™ netting is recommended for urban, golf course, and certain roadside projects. It is color-coded (white) to identify it as a rapid breakdown, polypropylene netting designed for use in areas to be mowed. Also available is our FibreNet™ — 100% biodegradable netting — for use in critical environmentally sensitive areas.

Most straight-line fiber blankets draw the line at 0.270 kg/m² (.50 lb/yd²), but not Curlex. At just under 0.40kg/m² (0.73 lb/yd²). Curlex blankets bring 50% more erosion control fibers to your job site. Curlex blankets are available in natural Aspen or QuickGRASS® (green). Combine that with a roll that is wider than conventional blankets and you have today's most effective and efficient multi-purpose biodegradable erosion control blanket. Curlex excelsior blankets are available individually wrapped or in master packs to allow for mechanical unloading and stacking.

Performance Capabilities

Products	Slopes	Shear Stress Rating
Curlex I	2H:1V and flatter	84 Pa (1.75 lb/ft ²)
Curlex II	1.5H:1V and flatter	108 Pa (2.25 lb/ft ²)

Suggested Specifications

Curlex Single Net (Curlex I)

A specific cut of Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It shall be of a consistent thickness, with fibers evenly distributed throughout the entire area of the blanket. The top of each blanket shall be covered with photodegradable or biodegradable netting. Material is naturally seed-free and does not contain chemical additives.



Recommended Use	Slopes to 2H:1V, Channel to 7 ft/s, shear stress to 1.75 lb/ft ²
Standard Roll Sizes	4ft x 112.5ft (50 yd ²), 8ft x 112.5ft (100 yd ²), 16ft x 112.5ft (200 yd ²)
FibreNet Roll Sizes	4ft x 101.25ft (45 yd ²), 8ft x 101.25ft (90 yd ²), 16ft x 101.25ft (180 yd ²)
Weight ^a	.73 lb/yd ²
Netting Options	Green, QuickMow White (90 day), FibreNet
Color	Natural Aspen or QuickGRASS Green

Curlex Double Net (Curlex II)

A specific cut of Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It shall be of a consistent thickness, with fibers evenly distributed throughout the entire area of the blanket. The top of each blanket shall be covered with photo degradable or biodegradable netting. Material is naturally seed-free and does not contain chemical additives.



Recommended Use	Slopes to 1.5H:1V, Channels to 9 ft/s, shear stress to 2.25 lb/ft ²
Standard Roll Sizes	4ft x 112.5ft (50 yd ²), 8ft x 112.5ft (100 yd ²), 16ft x 112.5ft (200 yd ²)
FibreNet Roll Sizes	4ft x 101.25ft (45 yd ²), 8ft x 101.25ft (90 yd ²), 16ft x 101.25ft (180 yd ²)
Weight ^a	.73 lb/yd ²
Netting Options	Green, QuickMow White (90 day), FibreNet
Color	Natural Aspen or QuickGRASS Green

^aWeight is based on a dry fiber weight at time of manufacturer. Baseline moisture content of Great Lakes Aspen excelsior is 22%.

Installation: Before installing Curlex blankets, the seedbed shall be inspected by the Owner's Representative to ensure it has been properly compacted and fine graded to remove any existing rills. It shall be free of obstructions, such as tree roots, projections such as stones, and other foreign objects. Grass seed shall match soil conditions to allow for maximum germination, dense vegetation, and a structural root system. Contractor shall proceed when satisfactory conditions are present. After the area has been properly shaped, seeded, fertilized, and compacted, locate the start of the roll, making sure the roll is facing toward the area to be covered, and then roll out the blanket. Blankets shall be rolled out flat, even, and smooth without stretching the material then anchored to the subgrade.

Slopes: It is recommended that the blankets be installed in the same direction as the water flow; however, on short slopes it may be more practical to install horizontally across the width of the application. If more than one width is required, simply about the edges together and secure the blankets with a common row of biodegradable staples, steel staples, or stakes. Overlapping of Curlex excelsior blankets is not required or recommended. An exception is waterway slopes. Curlex blankets shall be centered to offset a seam in the middle of the waterway. They shall be installed in the same direction as the water flow. The adjoining blankets shall be installed away from the center of channel and concentrated water flow. They shall be secured by a common row of staples. It is usually not necessary to overlap.

Channels: Curlex blankets shall be centered to offset a seam in the middle of the waterway. They shall be installed in the same direction as the water flow. The adjoining blankets shall be installed away from the center of channel and concentrated water flow. They shall be secured by a common row of staples. It is usually not necessary to overlap Curlex blankets; however, a 2in shingle type installation shall be used in waterway slopes applications. Curlex blanket installation should continue up the side slopes 3ft above the anticipated high water elevation. Flanks exposed to runoff, or sheet flow, must be protected by a check slot or trenched. Curlex blankets shall be trenched at the start of the channel and anchored using a staggered staple pattern at end of roll overlaps and end of roll terminations.

Disclaimer: Curlex is a system for erosion control and re-vegetation on slopes and channels. American Excelsior Company (AEC) believes that the information contained herein to be reliable and accurate for use in erosion control and re-vegetation applications. However, since physical conditions vary from job site to job site and even within a given job site, AEC makes no performance guarantees and assumes no obligation or liability for the reliability or accuracy of information contained herein for the results, safety, or suitability of using Curlex, or for damages occurring in connection with the installation of any erosion control product whether or not made by AEC or its affiliates, except as separately and specifically made in writing by AEC. These specifications are subject to change without notice.