

Curlex® HD Blankets

Heavy Duty Excelsior Erosion Control Blankets



Heavy Duty Curlex Blankets, for long-term protection against wind and water erosion, are a natural choice in place of stone or riprap in swales, ditch bottoms, and on long, steep slopes.

Typical Applications

Channel bottoms, swales, steep slopes, let down structures, drop structures, and other areas associated with concentrated water flow exceeding the performance capability and service life of a standard biodegradable blanket.



Material Characteristics

Curlex III

0.98 lb/yd² of Great Lakes Aspen Excelsior Wood Fibers and two layers of netting designed to provide protection for grass seed and topsoil from wind and water erosion for up to 36 months, while simultaneously promoting ideal growing conditions.

Curlex Enforcer

1.25 lb/yd² of Great Lakes Aspen Excelsior Wood Fibers and two layers of extra heavy duty UV stabilized netting designed to provide permanent service life and reinforcement between established vegetation and root systems on slopes and in channel bottoms. Curlex Enforcer is a biocomposite turf reinforcement mat (TRM).

Curlex High Velocity

1.62 lb/yd² of Great Lakes Aspen Excelsior Wood Fibers and two layers of heavy duty netting designed to provide extended protection for grass seed and topsoil from wind and water erosion for approximately 36+ months, while simultaneously promoting ideal growing conditions on steep, long slopes and/or in channel applications.

Curlex heavy duty blankets are available individually wrapped or in master packs to allow for mechanical unloading and stacking

Performance Capabilities

Curlex heavy duty blankets can handle wind and water shear even on steep slopes. These heavy duty blankets provide long-term protection in critical areas where vegetation requires additional time and protection to develop.

Product	Slopes	Shear Stress Rating
Curlex III	Up to 1H: 1V	120 Pa (2.5 lb/ft ²) Unvegetated
Curlex Enforcer	Up to .5H: 1V	156 Pa (3.25 lb/ft ²) Unvegetated 480 Pa (10.0 lb/ft ²) Vegetated
Curlex High Velocity (HV)	Up to .75H: 1V	156 Pa (3.5 lb/ft ²) Unvegetated

Suggested Specifications

Heavy Duty Excelsior Blankets are available in various fiber weights and netting combinations to match the appropriate job site requirements. Eighty percent of the Curlex fibers are six-inches or longer with consistent thickness and are evenly distributed over its entire area. Both the top and bottom side of the blankets are covered with black, extruded plastic mesh designed to provide strength beyond the service life of standard blankets. Curlex Excelsior blankets are naturally seed free and do not contain any chemical additives or foreign matter.

Curlex III Specifications

Recommended Use:	Slopes to 1H:1V, channel bottom applications, Shear stress 120 Pa (2.5 lb/ft ²) (unvegetated)
Roll Sizes:	40 yd ² (4ft x90ft), 80 yd ² (8ft x90ft), 160 yd ² (16ft x90ft)
Weight ^a :	0.98 lb/yd ²
Netting:	Black or FibreNet™, top and bottom
Color:	Natural Aspen or QuickGRASS® Green



Curlex Enforcer Specifications

Recommended Use:	Slopes to .5H:1V, channel bottom applications, Shear stress 156 Pa (3.25 lb/ft ²) (unvegetated), 480 Pa (10.0 lb/ft ²) (vegetated)
Roll Sizes:	60 yd ² (8ft x 67.5ft)
Weight ^a :	1.25 lb/yd ²
Netting:	Extra Heavy Duty Black, top and bottom
Color:	Natural Aspen or QuickGRASS Green



Curlex HV Specifications

Recommended Use:	Slopes to .75H:1V, channel bottom applications, Shear stress 156 Pa (3.25 lb/ft ²) (unvegetated), 44.4 yd ² (8ft x 50ft)
Roll Sizes:	1.62 lb/yd ²
Weight ^a :	Heavy Duty Black or FibreNet, top and bottom
Color:	Natural Aspen or QuickGRASS Green

^aWeight is based on a dry fiber weight basis at time of manufacture. 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.

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 slope 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 HV, III, and Enforcer 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, 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.

