

# Curlex® Excelsior

## *Curlex Features and Benefits*

Erosion Control  
Sediment Control  
Revegetation  
Stormwater / Turbidity Control

Curlex excelsior blankets promote ideal growing conditions for grass or tree seed, while simultaneously providing protection from wind and water erosion. Curlex excelsior blankets enhance performance and promote ideal growing conditions because of the following reasons:



- Curlex excelsior fibers are only manufactured from renewable Great Lakes aspen that are provided by members of sustainable forestry programs.
- Curlex excelsior fibers are seed free.
- Curlex excelsior fibers are clean and do not contain resins (pitch).
- Curlex excelsior fibers are engineered specifically for erosion and sediment control (American Excelsior Company makes over 60 different cuts of excelsior).
- Great Lakes Curlex aspen are solid, curled interlocking fibers as compared to straight, hollow straw fibers and relate to a stronger fiber matrix and blanket that allows superior resistance to wind and water flow velocity.
- Curlex excelsior fibers are curled interlocking, are of specific diameter and length (certified fiber length of 80% ≥ six-inch), and have soft interlocking barbs. Both the curled interlocking fibers and the soft interlocking barbs can be related to excellent hydraulic and re-vegetation performance.
- Curlex interlocking soft barbed fibers create a strong, multi-directional fiber matrix that enables the Curlex blanket to provide intimate subgrade contact and conformation to terrain details, thus they do not bridge over changes in grade or direction.
- Curled interlocking multi-directional matrix allows for netting to be used that contains the industry's largest, environmentally friendly, openings and the unique properties of Curlex fibers even allow for the innovative Curlex® NetFree™, which does not contain any netting material.
- No watering required
- Swell Factor: Curlex fibers expand & contract from wet to dry. Curlex curled excelsior fibers expand when wet and try to straighten out much like spring steel. As they are unable to straighten out they form a strong curled fiber matrix that provides a "Green House Effect" between the Curlex fiber matrix and seedbed.

# Curlex® Excelsior

## *Curlex Features and Benefits*



- Curlex excelsior blankets train water flow to follow its curled fiber matrix. Once the water flow slows, gravity takes over and moisture seeps into the soil to help promote ideal growing conditions.
- Curlex excelsior fibers are hygroscopic and enhance ideal growing conditions as the curled aspen fiber matrix absorbs moisture from the air.
- Curlex fibers are effective at removing Polynuclear Aromatic Hydrocarbons (PAHs) from contaminated stormwater.
- Under normal environmental and ecological conditions Curlex excelsior fibers do not begin to organically biodegrade for approximately 90 days after installation - long after full vegetation in most cases.
- Curlex excelsior blanket break up rainfall impact upon fiber contact.
- Curlex excelsior fibers do not float in water unlike other fibers that are used for erosion control and/or sediment control.
- Curlex excelsior blankets break up direct sunlight burnout.
- Curlex excelsior blanket protect grass seed by providing superior protection from soil temperature fluctuations.
- Curlex excelsior fibers are smolder resistant without the use of chemical additives.
- Curlex curled excelsior fibers provide a superior roughness factor (Manning's n .030 - .035) to slow water flow velocity and resist shear stress.
- Curlex excelsior blankets possess superior shear stress ratings. Ratings will vary with the grade or type of Curlex blanket (See product-specific rating charts).
- Curlex excelsior fiber blankets are backed by complete ASTM large-scale testing (ASTM D6459 and ASTM D6460) and may be used on virtually any grade, soil type, geographic location altitude and provide protection from wind and water erosion, while simultaneously promoting ideal growing conditions for areas requiring re-vegetation .
- Depending on the number of fibers in the blanket and on site conditions, longevity, or service life, of the biodegradable Curlex excelsior fibers ranges from 12 months up to 3-4 years.
- Curlex .50 lb/yd<sup>2</sup> excelsior blankets contain over 4,800 engineered curled fibers per square yard to provide protection from wind and water erosion, while simultaneously promoting ideal growing conditions for seed.
- Curlex .73 lb/yd<sup>2</sup> blankets contain over 7,000 engineered curled excelsior fibers per square yard.
- Curlex .98 lb/yd<sup>2</sup> blankets contain approximately 9,400 engineered curled excelsior fibers per square yard.
- Curlex 1.25 lb/yd<sup>2</sup> blankets contain approximately 12,000 engineered curled excelsior fibers per square yard.
- Curlex 1.62 lb/yd<sup>2</sup> blankets contain over 15,500 engineered curled excelsior fibers per square yard.
- It is an acceptable practice to plug through any Curlex excelsior blanket. Curlex NetFree is ideal for projects where plugging is desired. Blanket service life should be a consideration in a plugging application.