

Curlex® Excelsior

Curlex Features and Benefits

Erosion Control
Sediment Control
Revegetation
Stormwater / Turbidity Control

Curlex excelsior blankets promote ideal growing conditions for vegetation 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 exclusively manufactured from renewable Great Lakes aspen trees provided by members of sustainable forestry programs.
- Curlex excelsior fibers are naturally 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 aspen Curlex are solid, curled interlocking fibers as compared to straight, hollow straw fibers. This correlates to a stronger fiber matrix and blanket that provides 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% \geq 6 inches), 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, meaning the blanket does not bridge over changes in grade or direction.
- Curled interlocking multi-directional matrix allows for a netting design that has the industry's largest environmentally friendly openings. The unique properties of Curlex fibers even allow for the innovative Curlex® NetFree™, which does not contain any netting material.
- 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 "greenhouse effect" between the Curlex fiber matrix and seed bed.

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- Curlex excelsior blankets train water flow to follow the 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 blankets break up rainfall impact upon fiber contact.
- Curlex excelsior blankets do not float in water, unlike blankets made with other natural fibers commonly used for erosion control and/or sediment control.
- Curlex excelsior blankets break up direct sunlight burnout.
- Curlex excelsior blankets 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, or altitude to 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, the longevity, or service life, of the biodegradable Curlex excelsior fibers ranges from 12 months up to 3-4 years.
- Curlex .50 lb/yd² blankets contain over 4,800 engineered curled excelsior fibers per square yard to provide protection from wind and water erosion while simultaneously promoting ideal growing conditions for seed.
- Curlex .73 lb/yd² blankets contain over 7,000 engineered curled excelsior fibers per square yard.
- Curlex .98 lb/yd² blankets contain approximately 9,400 engineered curled excelsior fibers per square yard.
- Curlex 1.25 lb/yd² blankets contain approximately 12,000 engineered curled excelsior fibers per square yard.
- Curlex 1.62 lb/yd² 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.