



Standard Material Certification for Conformance and Delivery - Aspen Turbo Tack™

"Blanketing Nature With Nature"

To Whom it May Concern:

This document has been drafted to certify Western Excelsior manufactures the Rolled Erosion Control Product (RECP) marketed as Aspen Turbo Tack. Each blanket is subjected to Western Excelsior's Quality Assurance Program and is manufactured to the specifications listed in document number WE_EXCEL_ATT_SPEC. Further, Western Excelsior utilizes industry standardized test procedures to develop performance references for Aspen Turbo Tack. Document number WE_EXCEL_ATT_PERF presents the industry standardized testing and results. Installation instructions are provided in document numbers WE_EXCEL_ATT_SII and WE_EXCEL_ATT_CII for hillslope and channel installations, respectively. A copy of document number WE_EXCEL_ATT_SPEC is attached; all other documentation may be obtained by calling Western Excelsior Technical Services at 1-866-540-9810, at www.westernexcelsior.com or by email at wexcotech@westernexcelsior.com.

Since most Western Excelsior products are sold to distributors and stocked, Western Excelsior is typically unable to certify material type or quantity delivered to the project/project site. However, space is provided below for distributor/contractor certification of materials delivered to the project/project site.

Regards,

A handwritten signature in black ink, appearing to read "Chad M. Lipscomb".

Chad M. Lipscomb, PE (CO), CPESC
Director, Technical Services
Western Excelsior Corporation
chad@westernexcelsior.com
866-540-9810

Standard Material Delivery Certification

Material Provided by (Distributor/Contractor): _____

Material Provided to (Contractor/Project): _____

Project Name / Project Number: _____

Rolls/Square Yards Provided: _____

Specification #: _____

Signature: _____

Date: _____

Title: _____



"Blanketing Nature With Nature"

Chad Lipscomb, PE (CO), CPESC
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Effective: 6/27/2017

RE: Certificate of Conformance: Aspen Turbo Tack™

To Whom it May Concern:

This letter is to certify that Western Excelsior manufactures the product marketed as Western Excelsior Aspen Turbo Tack. Each bundle is subjected to Western Excelsior's Quality Assurance Program and is manufactured to the specifications listed in document number WE_EXCEL_ATT_SPEC. A copy of the specification document is attached. If you have any questions regarding the installation, use or properties of the Aspen Turbo Tack, please feel free to contact me.

Regards,

A handwritten signature in black ink, appearing to read "Chad M. Lipscomb".

Chad M. Lipscomb, PE (CO), CPESC
Director, Technical Services
Western Excelsior Corporation



Material Properties and Dimensions

Aspen Turbo Tack™



Specifications

Western Excelsior manufactures Aspen Turbo Tack™ in addition to a full line of Rolled Erosion Control Products (RECPs) and sediment control logs. Aspen Turbo Tack consists of a blend of machine produced, High Altitude Rocky Mountain Aspen Fibers and cellulose material manufactured to be free of weeds and foreign material. Aspen Tack Mulch is packaged with an organic tackifying agent. Once applied, Aspen Turbo Tack provides a mulching layer to enhance vegetation establishment. Aspen Turbo Tack is highly water absorbent and designed for clog-free application.

Each bundle of Aspen Turbo Tack is produced under Western Excelsior's Quality Assurance Program to ensure consistent fiber content. Table 1 presents the nominal properties of Aspen Tack Mulch. Table 2 presents Specified Expected Values and dimensions.

Mulch Property	Value
Bundle Weight	50 lb (Machine Compressed)
Moisture Content	10% ± 3%
Fiber Matrix Components	Aspen Excelsior
Fiber Composition	50% - 70% Aspen Excelsior 30% - 50% Recycled Cellulose
*All measurements performed at the time of manufacture	

Characteristic	Dimension / Value
Fiber Size	100% passing 5mm Sieve 80% retained 0.6 mm Sieve
Fiber Organic Content	97% ± 2%
Fiber Ash Content	3% ± 2%
Fiber pH in Water (ASTM D778)*	6.6
Tackifier by Weight	3% ± 0.5%
Tackifier Type	Natural Guar (polysaccharide colloidal)

The information contained herein may represent product index data, performance ratings, bench scale testing or other material utility quantifications. Each representation may have unique utility and limitations. Every effort has been made to ensure accuracy, however, no warranty is claimed and no liability shall be assumed by Western Excelsior Corporation (WEC) or its affiliates regarding the completeness, accuracy or fitness of these values for any particular application or interpretation. While testing methods are provided for reference, values shown may be derived from interpolation or adjustment to be representative of intended use. For further information, please feel free to contact WEC.