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"Blanketing Nature With Nature"

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Effective: 09/16/2011

RE: Certificate of Conformance: Excel CC-4 All Natural™

To Whom it May Concern:

This letter is to certify that Western Excelsior manufactures the Rolled Erosion Control Product (RECP) marketed as EXCEL CC-4 All Natural. Each blanket is subjected to Western Excelsior's Quality Assurance Program and is manufactured to the specifications listed in document number WE\_EXCEL\_CC4AN\_SPEC. Further, Western Excelsior utilizes industry standardized test procedures to develop performance references for Excel CC-4 All Natural. Document number WE\_EXCEL\_CC4AN\_PERF presents the industry standardized testing and results. Installation instructions are provided in document numbers WE\_EXCEL\_CC4AN\_SII and WE\_EXCEL\_CC4AN\_CII for hillslope and channel installations, respectively. A copy of document number WE\_EXCEL\_CC4AN\_SPEC is attached; all other documentation may be obtained by calling Western Excelsior Technical Services at 1-800-967-4009, at [www.westernexcelsior.com](http://www.westernexcelsior.com) or by email at [wexcotech@westernexcelsior.com](mailto:wexcotech@westernexcelsior.com).

Regards,

A handwritten signature in black ink, appearing to read "Chad M. Lipscomb". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

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

# MATERIAL PROPERTIES AND DIMENSIONS



## EXCEL CC-4 ALL NATURAL™



## Specifications

Western Excelsior manufactures a full line of Rolled Erosion Control Products (RECPs). EXCEL CC-4 All Natural Extended Term Erosion Control Blanket consists entirely of coconut fibers manufactured into a matrix of uniform thickness and coverage. The coconut matrix is confined by a biodegradable, jute/scrim net on top and bottom, mechanically (stitch) bound on two inch centers with a biodegradable, cotton thread. Excel CC-4 All Natural is intended for slope and channel erosion control applications requiring up to thirty-six months of functional longevity. Actual field longevity is dependent on soil and climatic conditions.

Each roll of EXCEL CC-4 All Natural is manufactured under Western Excelsior's Quality Assurance Program to ensure a continuous distribution of fibers and consistent thickness. Verifiable values are provided in Table 1 and product characteristics are provided in Table 2.

Table 1- Specified Expected Values

Tested Property	Test Method	Value
Tensile Strength (MD) x (TD)	ASTM D6818	16.0 lb/in (2.8 kN/m) x 11.0 lb/in (1.9 kN/m)
Elongation (MD) x (TD)	ASTM D6818	20 % x 20 %
Mass Per Unit Area	ASTM D6475	9.5 oz/yd <sup>2</sup> (322 g/m <sup>2</sup> )
Thickness	ASTM D6525	0.26 in (7 mm)
Light Penetration	ASTM D6567	15 % open
Water Absorption	ASTM D1117	250 %

Table 2 - Netting

Top Net Type	Biodegradable, Jute Scrim Leno Weave
Bottom Net Type	Biodegradable, Jute Scrim Leno Weave
Top Net Opening Dimensions	0.5 in (13 mm) x 1.0 in (25 mm)
Bottom Net Opening Dimensions	0.5 in (13 mm) x 1.0 in (25 mm)

Excel CC-4 All Natural is available in multiple roll sizes ranging in width from 8.0 ft to 16.0 ft. and 112.5 ft to 600 ft in length. Standard roll sizes are 100 square yards, measuring 8.0 ft wide by 112.5 ft long. Custom roll sizes are available upon request.

Document # WE\_EXCEL\_CC4AN\_SPEC. This document has been developed to provide the characteristic properties of the product described. For questions, to request performance data or installation recommendations, contact Western Excelsior at 800-967-4009 or wexcotech@westernexcelsior.com. Updated 09/16/2011.