



# WESTERN EXCELSIOR WEBSITE UPDATED EXCEL PRODUCTS FLEXIBLE CHANNEL LINER APPLICATION GUIDE

Release Date: 2/26/07

A critical component to maintaining clean, beneficial waterways is the stabilization of channelized waterways. As water flows through streams, rivers and man-made channels, the potential for erosion is continuously present. Urbanization and growth compound the issue by increasing runoff and flow into channels and disturbing stable, natural channels.

Western Excelsior manufactures a full line of Rolled Erosion Control Products (RECPs) specifically designed to reduce and minimize erosion in channels caused by the forces of flowing water. Each Western Excelsior material serves as a specialized tool in erosion prevention.

Proper selection of a flexible channel liner includes determination of the necessary longevity and performance required.



WESTERN EXCELSIOR CORPORATION				ROLLED EROSION CONTROL PRODUCT APPLICATION SUMMARY CHANNEL INSTALLATIONS		UNVEGETATED CONDITIONS		
EXCEL EROSION CONTROL BLANKETS	CC-4 All Natural	SD-3 Regular	PPS-12	≤ 2.8 psf	≤ 9.0 ft/s	<b>General Installation Summary</b> Excel ECBs and PPS TRMs are secured to a channel using steel staples or biodegradable stakes. Upstream edges of an installation are secured utilizing an anchor trench. Seams are single-overlapped three inches and secured with staples or stakes. Each material is secured with a product specific stapling pattern. Products should be installed on a smooth, prepared ground surface after seed has been applied. Product specific installation recommendations are provided within Western Excelsior literature.		
PPS TURF REINFORCEMENT MATS	CC-4 Regular	CC-4 All Natural	SD-3 Regular	PPS-10	≤ 2.3 psf			≤ 8.0 ft/s
ENGINEERED ENVIRONMENTAL STEWARDSHIP BY BLANKETING NATURE WITH NATURE	S-2 Rapid Go	S-2 Regular	CC-4 Regular	CC-4 All Natural	SD-3 Regular	PPS-10	≤ 2.0 psf	≤ 7.0 ft/s
	SS-2 Rapid Go	SS-2 Regular	CC-4 Regular	CC-4 All Natural	SD-3 Regular	PPS-10	≤ 1.8 psf	≤ 6.0 ft/s
	SR-1 Rapid Go	SR-1 All Natural	R-1 Regular	R-1 All Natural	CS-3 Regular	PPS-8	≤ 1.5 psf	≤ 5.0 ft/s

**Installation Schematic**

**Netting Applications**

Western Excelsior ECBs and TRMs are constructed utilizing a variety of netting to meet longevity and performance requirements. Regular, Rapid Go and All Natural netting provide UV stable, ultra short term and biodegradable options.

Regular netting consists of synthetic materials, stabilized to resist UV degradation and maintain the design longevity. Each Western Excelsior RECP is provided with Regular netting.

Rapid Go netting is a photodegradable, synthetic net utilizing an accelerator to reduce the degradation time. Rapid Go netting is ideal for applications that must be maintained shortly after installation or requires the netting to degrade in 45 to 90 days.

All Natural netting consists of biodegradable jute/skins strands incorporated into a Leno Weave pattern. All Natural netting is ideal for environmentally sensitive installations where animal entrapment is of concern.

In order to simplify the process of selection and provide an overview of the selection and installation process, Western Excelsior has developed a quick reference application guide. The Channel Application Guide provides approximate performance thresholds and expected longevity values for each Excel RECP.

The Channel Application Guide is provided in \*.pdf format and is downloadable at [www.westernexcelsior.com](http://www.westernexcelsior.com). In addition to the Channel Application Guide, Western Excelsior has developed a Slope Application Guide and a Summary of Product Properties. These documents are also available at [www.westernexcelsior.com](http://www.westernexcelsior.com) and in the Western Excelsior Technical Guidance Manual.

“Blanketing Nature with Nature”

[WWW.WESTERNEXCELSIOR.COM](http://WWW.WESTERNEXCELSIOR.COM)



# ROLLED EROSION CONTROL PRODUCT APPLICATION SUMMARY

## CHANNEL INSTALLATIONS

UNVEGETATED CONDITIONS

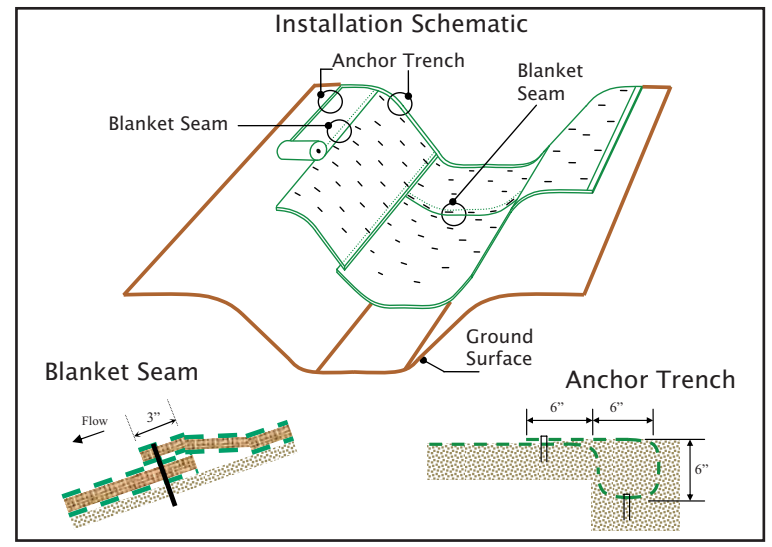
EXCEL EROSION CONTROL BLANKETS		CC-4 All Natural SD-3 Regular	PP5-12	≤ 2.8 psf	≤ 9.0 ft/s
PP5 TURF REINFORCMENT MATS					
ENGINEERED ENVIRONMENTAL STEWARDSHIP BY BLANKETING NATURE WITH NATURE		CC-4 Regular CC-4 All Natural SD-3 Regular S-2 All Natural	PP5-10	≤ 2.3 psf	≤ 8.0 ft/s
S-2 Rapid Go	S-2 Regular S-2 All Natural	CC-4 Regular CC-4 All Natural SD-3 Regular S-2 All Natural	PP5-10	≤ 2.0 psf	≤ 7.0 ft/s
SS-2 Rapid Go S-2 Rapid Go	SS-2 Regular SS-2 All Natural	CC-4 Regular CC-4 All Natural SD-3 Regular S-2 All Natural	PP5-10	≤ 1.8 psf	≤ 6.0 ft/s
SR-1 Rapid Go R-1 Rapid Go	SR-1 Regular SR-1 All Natural R-1 Regular R-1 All Natural	CS-3 Regular CS-3 All Natural	PP5-8	≤ 1.5 psf	≤ 5.0 ft/s

Ultra Short Term 45 - 90 Days	Temporary ≤ 12 Months	Extended Term 12 - 36 Months	Permanent ≥ 36 Months	Shear Stress	Velocity
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Recommendations for application herein are intended for typical field conditions as a guide to determine applicable products. Values shown above may be less than maximum permissible values and represent conditions prior to vegetation establishment. Design values are provided in Western Excelsior technical documentation. Alternate materials may provide variability in vegetation establishment or longevity, subject to field conditions. Contact Western Excelsior technical support for specific product application recommendations.

### General Installation Summary

Excel ECBs and PP5 TRMs are secured to a channel using steel staples or biodegradable stakes. Upstream edges of an installation are secured utilizing an anchor trench. Seams are single-overlapped three inches and secured with staples or stakes. Each material is secured with a product specific stapling pattern. Products should be installed on a smooth, prepared ground surface after seed has been applied. Product specific installation recommendations are provided within Western Excelsior literature.



### Netting Applications

Western Excelsior ECBs and TRMs are constructed utilizing a variety of netting to meet longevity and performance requirements. Regular, Rapid Go and All Natural netting provide UV stable, ultra short term and biodegradable options.

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