



Erosion Control Product Selection Tool



BEST PRACTICES



EROSION & SEDIMENT CONTROL

Successful projects start with evaluating the erosion potential on a project site, and then selecting the proper product based on those parameters. Western Green wants you to be successful, and this Erosion Control Product Selection Tool is designed to assist in the appropriate selection and use of temporary Erosion Control Blankets (ECBs) and permanent Turf Reinforcement Mats (TRMs). Reference this simplified Erosion Control Product selection summary to ensure effective erosion prevention, slope stabilization, vegetation establishment, and environmental compliance in various land management and construction scenarios. And if you need more help, try our free, online design software or contact us directly for design guidance. Visit www.westerngreen.com for more information.

WHY EROSION CONTROL BLANKETS?

Erosion control blankets encompass a wide range of temporary, degradable soil covering designed to protect soil and seed during the establishment of vegetation. ECBs provide necessary longevity and performance properties to effectively control erosion and assist in vegetation establishment in areas where natural vegetation alone will provide sufficient permanent erosion protection. Once the vegetation is established, the ECB will degrade.

What ECBs Do	How ECBs Work
Nutrient/Topsoil Protection	ECBs shield soil from the erosive forces of wind and water, preventing soil loss and degradation. Keeping the most fertile and productive soil on site is paramount to long term success of the site.
Vegetation Establishment	ECBs create an ideal environment for seed germination and plant growth by providing moisture retention and protection against harsh weather conditions.
Slope Stability	ECBs help stabilize slopes by promoting infiltration and root penetration and preventing surface runoff, reducing the risk of erosion and saturation-induced landslides.
Regulatory Compliance	Environmental regulations mandate erosion control measures on many construction sites, and ECBs are an effective and often required solution.

WHY TURF REINFORCEMENT MATS?

A turf reinforcement mat (TRM) is a permanent RECP composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a permanent, three-dimensional matrix of sufficient thickness to reinforce the vegetation. TRMs may be supplemented with degradable components leading to uniquely useful configurations. TRMs are designed for applications where natural vegetation alone would not provide sufficient long-term erosion protection.

What TRMs Do	How TRMs Work
Enhanced Stability	TRMs provide reinforcement for vegetation and soil, particularly in areas with high traffic or hydraulic forces, such as stream banks, slopes, and shorelines.
Vegetation Support	They promote the establishment of dense and robust vegetation cover, which further reinforces the soil matrix and enhances erosion resistance.
Durability	TRMs are designed to withstand heavy loads, erosion, and environmental stressors, offering long-term protection and stability.
Environmental Benefits	TRMs facilitate ecological restoration by fostering habitat creation, biodiversity, and natural ecosystem functions, making them a sustainable choice for erosion control projects, while reducing the carbon footprint.

TECHNICAL BULLETIN

Erosion Control Product Selection Tool cont.

All product selections below assume site stability or stabilization that has been achieved through a design means with the use of geogrid, geocells, or stabilization matting materials. All selection below require an ability to grow some level of vegetation. For greater product selection guidance and project specific stability calculations, please consider designing in our free, online software tool found at www.westerngreen.com.

Project Requirements	Examples	Recommended Product Category	Recommended Products
<ul style="list-style-type: none"> Low-traffic Low risk Low Erosion Potential Long-term Vegetation is stable 	Sloped Residential Yards	Straw Fiber ECBs	North American Green: S75/S75BN/S150/S150BN Western Excelsior: SR-1/SR-1NN/SS-2/SS-2NN
	Landscape/Steeper Slopes	Straw/Coconut Fiber or Coconut Fiber ECBs	North American Green: SC150/SC150BN/C125/C125BN Western Excelsior: CS-3/CS-3NN/CC-4/CC-4NN
	Small Drainage Channels	Coconut Fiber ECBs	North American Green: C125/C125BN/C700BN Western Excelsior: CC-4/CC-4NN
<ul style="list-style-type: none"> High-traffic Higher Risk Severe Erosion Potential Permanent support for Vegetation Needed 	Larger Channels/Steeper Slopes	Basic Turf Reinforcement Mats (TRMs)	North American Green: P300LW/P300/P550 Western Excelsior: PP5 Series (8,10,12 oz)/ECP-3
	Embankments/Levees/Steepened Slopes/Stream-banks/Shorelines	Specialty Turf Reinforcement Mats (TRMs)	North American Green: P300LW/P300/SC250/C350/P550/TMAX-3K Western Excelsior: PP5 Series (8,10,12 oz)/PP5-PRO/
	Any application above /Human or Wildlife interaction	Transitions Mats	North American Green & Western Excelsior: ShoreMax
<ul style="list-style-type: none"> Shallow Geo-technical Issues 	Steepened Slopes/ Large Civil Projects	High-Performance TRMS	North American Green: TMAX/TMAX-3K Western Excelsior: PP5-PRO/PP5-Xtreme

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