

PRODUCT INFORMATION

SB-AW Erosion Control Mattress



SB-AW Erosion Control Mattress provide immediate erosion protection and long-term site armoring. SB-AW Erosion Control Mattress assist in the establishment of vegetation while permanently reinforcing vegetation for applications where the forces exerted by water exceed the shear limits of unreinforced vegetation. Typical applications include high flow channels, streambanks, shorelines and other areas where rock riprap have typically been used. SB-AW Erosion Control Mattress provide significant cost savings over rock riprap. SB-AW Erosion Control Mattress can eliminate the need to quarry, process and haul rock providing significant environmental and aesthetics benefits to any project.

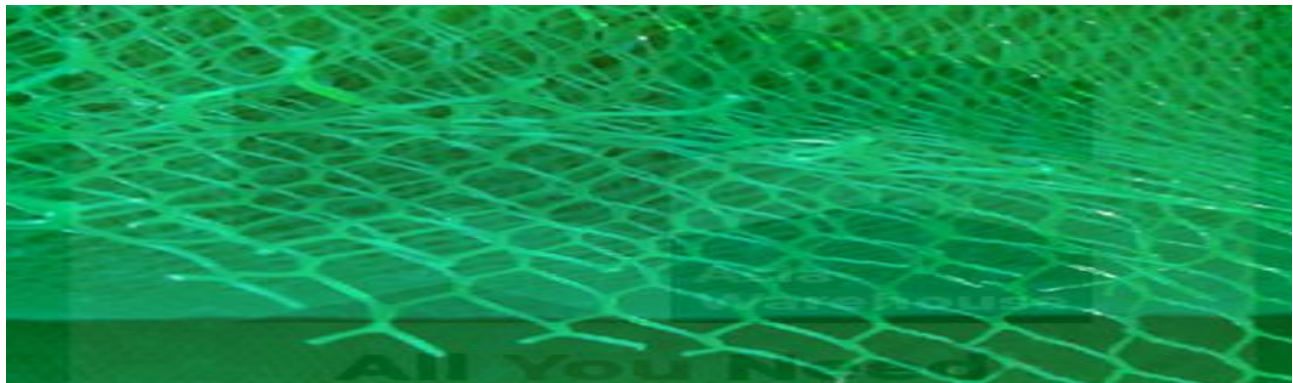
SB-AW Erosion Control Mattress include the combination of a permanent, non-degradable, three-dimensional net structure and matrix material components of either synthetic or biodegradable material. SB-AW Erosion Control Mattress provide excellent protection from precipitation impact, sheet flow and wind. Furthermore, they create a microenvironment which assists germination and early plant development optimizing well-developed vegetation. Then during both the plant development and maturity growth stages, the permanent net structure supports and reinforces plant roots, stems and leaves, enabling their ability to withstand high wind and water shear stresses.



SB - AW Erosion Control Mattress (SKU: AWSWZHECM01)

Installation Instructions

- 1) **Site Preparation:** Whether slope or channel, the site must be shaped to the design specifications (grade, geometry, density of soil, etc.) and then dressed to be free of soil clods, clumps, rocks, or vehicle imprints of any significant size that would prevent the SB-AW Erosion Control Mattress from lying flush to surface contours.
- 2) **Anchor Trench:** Anchor trenches are required to securely fasten the SB-AW Erosion Control Mattress to the ground surface. In channel applications, the initial anchor trench is installed at the beginning of the channel and intermediate check slots are spaced at approximately 25 feet* intervals downstream depending on flow conditions and whether you soil fill or not. SB-AW Erosion Control Mattress is installed into the bottom of the trench and fastened with pins spaced 3 feet apart. The anchor trench / intermediate check slots are then backfilled and compacted in a manner as to not damage the SB-AW Erosion Control Mattress.
* In lieu of excavated check slots, a double row of pins [or a number 1 or 2 rebar pinned across the mat] may be used at 25-foot intervals.
- 3) **SB-AW Erosion Control Mattress Installation:** Roll the SB-AW Erosion Control Mattress down the slope or channel. The overlap between rolls is 3 to 4 inches. The splice between rolls is between 2 and 3 feet. Shingle the roll in the direction of water flow. Install pins down the center of each mat (mat is 3.25 feet wide) staggering them between the outside pins with a spacing interval of 3 to 5 feet. Pins patterns will vary depending upon application, soil type, slope or channel slope, geometry, etc.
- 4) **Anchoring Devices:** Typically, 11-8 gauge of a 6" x 1" x 6" metal pins are used. When surface soil conditions are loose, use 8" x 1" x 8" or 12" x 1.5" x 12" metal pins, 8"- 18" pin s with 1.5" diameter washer, or 12-30"- J Shape pins (bent rebar) having a ¼" diameter. Drive pins or pins flush with the ground surface.
- 5) **Soil Filling:** Soil filling SB-AW Erosion Control Mattress accelerates performance because the SB-AW Erosion Control Mattress, soil and the new vegetation interact together to resist shear forces when water is flowing through the channel or on top of a slope. If soil filling is utilized spread ½ to ¾ inches of fine soil into the mat to completely fill it.
- 6) **Seeding:** Seed before and after soil filling to create a better-established root structure and increase vegetation strength. Check with your local seeding consultant to verify appropriate seed and fertilizer mixture.



Specifications

Model	Weight (g/m ³)	Thickness (mm)	Width (m)	Length (m)
ECM 7.5	180	7.5	2	50
ECM 10	220	10	2	50
ECM 19	430	19	2	50

*Note: Custom-made order for thickness SB-AW Erosion Control Mattress is available and please contact us for more information.



All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the preceding is made in lieu of all warranties, expressed or implied.

Project References

