

PRODUCT INFORMATION

SB-AW Geobag

SB-AW Geobag is a versatile civil engineering system designed for erosion control and earth structures. SB-AW Geobag is also a patented system consisting of modular ecology bags and interlocking plates that create a structure to support the earth forces. In addition, SB-AW Geobag is capable of accepting various forms of planting to create an aesthetically pleasing and eco-friendly vegetated system.

SB-AW Geobag interlocking plate is placed between sand/soil filled SB-AW Geobag to dramatically increase the shear strength of the bag structure. The result is an interlocking soil mass that promotes and sustains vegetation. Interlocking Plates also provides a positive mechanical connection to geogrid in the construction of steep slopes and retaining wall structures where needed.

The modular ecology bag system is constructed with small vertical heights making it easy to build a fairly uniform face. SB-AW Geobag provides mini 'eco-pockets' between each row and each bag where rain water can accumulate and seeds can germinate and thrive on a horizontal surface. SB-AW Geobag allows the root system to penetrate through both the front and back layer of the ecology bag.



Product Benefits

- Environmentally friendly, low carbon technology.
- Anti-Graffiti
- Heat island effect reduction
- Reduction of noise
- Sedimentation & filtration capabilities
- Versatility to use for walls and slopes
- Economical transportation
- Quick installation time
- No leveling, cutting or waste of material
- Flexibility allows to Install where others cannot
- Friendly to many types of vegetation, fish and wildlife.



SB - AW Geobag (SKU: AWSWZHGB01)

Applications

SB-AW Geobag is an engineered system designed specifically to provide an environmentally friendly solution for earth structures. SB-AW Geobag creates a reinforced facing option for slopes and walls. The system protects the surface from erosion and provides a natural bed for vegetation which beautifies the structure. In areas of limited space or access the SB-AW Geobag system can accommodate reinforcement using a 'Tie-Back' method of design which does not require geogrid reinforcement. This solution also minimizes excavation requirements. The applications for SB-AW Geobag included of vegetated slopes and walls, stream or waterway improvements, solution for infrastructure maintenance and more.

Vegetated Slopes

Vegetated reinforced soil slopes provide a significant benefit to highway and commercial construction where there is not enough room for a natural slope. SB-AW Geobag provides speed and efficiency of installation comparable to other modular systems. SB-AW Geobag provides a consistent and high-quality growing medium that allows for healthy, uniform vegetated face. The superior vegetated outcome is due to eco pockets located between each row and each bag where rainwater accumulates and vegetation germinates on a horizontal surface

Vegetated Walls

SB-AW Geobag provides optimal efficiency when designing and constructing vegetated walls. The modular ecology bags and interlocking plates provide the engineered structural strength for highway and commercial surcharge loadings. The patented SB-AW Geobag System locks the modular ecology bags and provides a mechanical connection between the facing and the soil reinforcing materials. SB-AW Geobag allows near vertical walls to be constructed from a few feet tall to structures over 20 feet in height.

Installation Instructions

1) FILLING & CLOSING SB-AW GEOBAG BAGS

Fill the SB-AW Geobag bags with a clean granular soil and material mix. Properties should include approximately 70% - 80% coarse sand and 20% - 30% organic soils. Clay and silt are not recommended for filling the bag. Fill the bags consistently, close bag with a UV resistant zip tie. Sewing, stapling, hog-rings and other method are all acceptable.

2) PREPARATION

Dig a shallow trench 15 inches wide for the length of your desired SB-AW Geobag structure and 3 inches deep. The purpose of the trench is to embed the base of the structure to protect from it being undermined by erosion. Tall structures or water applications will require deeper embedment. Ten percent of the design height is a good rule of thumb. With water applications, a minimum of one foot deep or below the scour line is a good rule of thumb.

3) PLACE SB-AW GEOBAG AND INTERLOCKING PLATE AT BASE

Place the SB-AW Geobag interlocking plate on the ground below the first row of bags. Place the interlocking plate face up, so that you are reading the "This Side Up" label. Space the interlocking plate so that it will lie directly below the middle of each bag, approximately 30 inches to 33 inches apart. Place the first row of bags spacing them with 1 inch to 2 inches between the ends of the bags. Compaction will fill the bag into the open space. Do not overlap the bags.



SB - AW Geobag (SKU: AWSWZHGB01)

Installation Instructions

4) PLACING ADDITIONAL ROWS

Place a SB-AW Geobag interlocking plate over the space between the two base SB-AW Geobag bags. Place another row of bags in a running bond layout over the previous row so that the interlocking plates lie below the middle of each SM-AW Geobag. After placement, walk on top of the bags to lock them onto the interlocking plate. The bag may flatten forward with compaction, so a backward setback should be considered. We recommend using a simple right angle triangle jig with a small level attached to check that the slopes angle consistent with design drawings or specification.

5) FILLING & COMOPACTING THE STRUCTURE

Fill and compact the backfill soils every two layers of bags. Compaction should be done on no more than 8- to 10-inch-thick lifts of fill. Vibratory compaction equipment is preferred. [A clean gravel fill zone behind the bags is not recommended to help keep alignment or for filtration as required by concrete units]. Vegetation will penetrate the SB-AW Geobag bag and grow into the backfill zone, further stabilizing the structure.

6) GEOGRID PLACEMENT

For structure heights where soil reinforcement is needed, place the geogrid reinforcement from the front of the face of the bags toward the back of the fill area. Place the interlocking plate over the geogrid at the joints between the lower SB-AW Geobag bags. Pull the geogrid snug, removing folds and wrinkles. Place the next layer of bags into place over the interlocking plate and geogrid. Then walk on top of the row. Place the fill soil from the front of the structure toward the back, this technique keeps the geogrid flat and tightly connected to the face.

7) TOP ROW

Place the top row of SB-AW Geobag bags at a 90-degree angle to the structure alignment. The deeper embedment will anchor the top of the structure and provide for a more stable structure. Embed the rear portion of the bag so that 50% of the bag will be covered with backfill soil. This may require less fill in the top row of bags.

Specifications

SB-AW Geobag

Model	Weight (g Per Bag)	Thickness (mm)	Width (mm)	Length (mm)
SB-AW Geobag	140	1.5	400	800

*Note: Custom-made order for thicker SB-AW Geobag 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

