



HydroBlanket Bonded Fiber Matrix (BFM)

Description

HydroBlanket combines the low cost and ease of application of hydroseeding, the protection of a blanket and the advantages of a mulch. Our mat protects seeds and enhances germination; then it slowly decomposes over time into carbon dioxide and organic matter to further aid in plant development. Its protection of seed and soil lasts for a period of 6 to 12 months, giving vegetation time to establish and take hold for long-term slope stabilization. composed of 100% recycled Thermally Refined™ wood fibers and naturally derived biopolymers. The BFM may require a 24-48 hour curing period to achieve maximum performance. The BFM is phytosanitized, free from plastic netting, and when cured forms an intimate bond with the soil surface to create a continuous, porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth. HydroBlanket is highly effective in many applications: erosion control, slope stabilization, dust abatement, landscape design, storm water runoff, fire burn rehabilitation, land development, and golf course construction.

APPLICATION RATES AND METHODS

HydroBlanket application rates are for standard conditions. Designers may need to increase application rates on rough surfaces. Consult application and loading charts to determine number of bags to be added for desired area and application rate. Maximum slope length of 28 feet

Slope	< 4H to 1V	< 3H to 1V	< 2H to 1V	< 1H to 1V
Mulch (Lbs) / Acre	2,500-3,000	3,000-3,500	3,500-3,500	4,000-4,500

Composition

All components of the HM shall be pre-packaged by the Manufacturer to assure both material performance and compliance with the following values. No chemical additives with the exception of fertilizer, liming and biostimulant materials should be added to this product.

Thermally Processed (within a pressure vessel) Wood Fiber– 79.5% ± 2.5%

Proprietary Crosslinked Tackifier – 10% ± 1%

Moisture Content – 10.5% ± 1.5%



Product Values

- A. HydroBlanket BFM and conform to the following property values when uniformly applied at a rate of 3500 pounds per acre (3900 kilograms/hectare) under laboratory conditions.

Property	Test Method	Req. Value (English)	Req. Value (SI)
Physical			
Mass Per Unit Area	ASTM D6566 ¹	11.2 oz/yd ² minimum	380 g/m ² minimum
Thickness	ASTM D6525 ¹	0.12 inch minimum	3.0 mm. minimum
Wet Bond Strength	ASTM D6818 ¹	6 lb/ft	88 N/m
Ground Cover	ASTM D6567 ¹	97% minimum	97% minimum
Water Holding Capacity	ASTM D7367	1400% minimum	1400% minimum
Material Color	Observed	Green	Green
Performance			
Cover Factor ²	Large Scale Testing ⁴	0.05 maximum	0.05 maximum
% Effectiveness ³	Large Scale Testing ⁴	95 % minimum	95 % minimum
Cure time	Observed	24 – 48 hours	24 – 48 hours
Vegetation Establishment	ASTM D7322 ¹	600 % minimum	600 % minimum
Yield ⁵	Calculated	1.3 minimum	1135 minimum
Kinetic Energy Absorption Potential ⁵	Calculated	0.7 minimum	264 minimum
Environmental			
Functional Longevity ⁶	ASTM D5338	Up to 12 months	Up to 12 months
Ecotoxicity	EPA 2021.0	96-hr LC50 > 100%	96-hr LC50 > 100%
Biodegradability	ASTM D5338	100% minimum	100% minimum

1. ASTM test methods developed for Rolled Erosion Control Products and have been modified to accommodate Hydraulically-Applied Erosion Control Products.
2. Cover Factor is calculated as soil loss ratio of treated surface versus an untreated control surface.
2. % Effectiveness = One minus Cover Factor multiplied by 100%.
4. Large scale testing conducted at Utah Water Research Laboratory and Texas Transportation Institute. For specific testing information please contact a Profile technical service representative at 866-325-6262.
5. Contact a Profile technical service representative for calculation details at 866-325-6262.
6. Functional Longevity is the estimated time period, based upon ASTM D5338 testing and field observations, that a material can be anticipated to provide erosion control and agronomic benefits as influenced by composition, as well as site-specific conditions, including; but not limited to – temperature, moisture, light conditions, soils, biological activity, vegetative establishment and other environmental factors.

Bags: Net Weight – 50 lb., UV and weather-resistant plastic film



Installation

- A. Strictly comply with equipment manufacturer's installation instructions and recommendations. Use approved hydro-spraying machines with fan-type nozzle (50-degree tip). To achieve optimum soil surface coverage, apply BFM from opposing directions to soil surface. Rough surfaces (rocky terrain, cat tracks and ripped soils) may require higher application rates to achieve 100% cover. Slope interruption devices or water diversion techniques are recommended when slope lengths exceed 75 feet (23 m). Maximum slope length is for product applications on a 3H:1V slope. For application on steeper slopes, slope interruption lengths may need to be decreased based on actual site conditions. Not recommended for channels or areas with concentrated water flow. No chemical additives with the exception of fertilizer, liming and biostimulant materials should be added to this product.
- B. For Erosion Control and Revegetation: To ensure proper application rates, measure and stake area. For maximum performance, apply BFM in a two-step process*:
1. *Step One: Apply fertilizer with specified prescriptive agronomic formulations and 50% of seed with a small amount of BFM for visual metering.*
 2. *Step Two: Mix balance of seed and apply BFM at a rate of 50 lb per 125 gallons (23 kg/475 liters) of water over freshly seeded surfaces. Confirm loading rates with equipment manufacturer. Do not leave seeded surfaces unprotected, especially if precipitation is imminent.*

**Depending upon site conditions BFM may be applied in a one-step process where all components may be mixed together in single tank loads. Consult with Manufacturer for further details.*

Best results and more rapid curing are achieved at temperatures exceeding 60°F (15°C). Curing times may be accelerated in high temperature, low humidity conditions with product applied on dry soils.

Over-application of product may inhibit germination and plant growth.

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9180 SAN FERNANDO RD • PO Box 1579 • SUN VALLEY, CA 91353
213-626-9668 • 800-621-0315 • FAX 213-626-4920 • www.stoverseed.com