# Hydro-Blanket® BFM

## **Bonded Fiber Matrix**







# The Best Slope Protection at the Lowest Overall Cost

HYDRO-BLANKET® BFM BONDED FIBER MATRIX CONTROLS EROSION ON STEEP SLOPES IN A QUICK, SAFE, EASY HYDRAULIC APPLICATION.

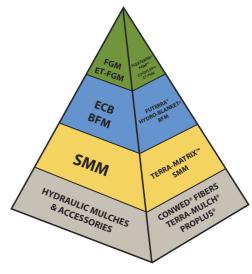
It is less expensive and faster to install than blankets or sod and more effective than blankets, competitive BFMs and conventional hydraulic mulches. Extensive testing proves that Hydro-Blanket BFM controls erosion more completely than competitive BFMs on steep slopes subjected to heavy rains. The combination of Thermally Refined® wood fibers and multi-dimensional tackifiers provides greater water holding capacity for more complete germination and faster vegetation establishment. Proprietary cross-linked, hydro-colloidal tackifiers and activators anchor the fiber mulch matrix to the soil surface.

### **HYDRO-BLANKET® BFM**

- Dries to form a breathable, built-in-place blanket
- Contours with the surface to maintain intimate soil contact
- Less expensive and faster to install versus blankets or sod
- Non-toxic, environmentally safe and biodegradable
- Greater coverage than other BFMs for more cost-efficient application

### YOUR TRUSTED PARTNER IN SOIL SOLUTIONS™

By creating products using Green Design Engineering,™ Profile Products has become the world's largest combined supplier of hydraulically applied erosion control products, hydraulic mulch and agronomic accessories, turf reinforcement mats and erosion control blankets. We are a leader in erosion control and revegetation science and many of today's industry standards were innovations introduced by Profile. Our leadership continues through on-site consultative services, aggressive research and development, active support of trade associations and educational forums designed to advance the industry's effectiveness and professionalism.



THE PROFILE PERFORMANCE PYRAMID
Hydro-Blanket is the industry's most effective BFM.

# Hydro-Blanket® BFM Specification

The Bonded Fiber Matrix (BFM) shall be a hydraulically applied flexible erosion control blanket composed of long strand, thermally processed wood fibers and a proprietary crosslinked, hydro-colloid tackifier. The BFM may require a 24-48 hour curing period to achieve maximum performance. Once cured, the BFM forms an intimate bond with the soil surface to create a continuous, absorbent, flexible and biodegradable erosion resistant blanket that allows for rapid germination and accelerated plant growth.

The BFM shall be Hydro-Blanket® 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.

	TEST METHOD	ENGLISH	SI
PHYSICAL			
Mass Per Unit Area	ASTM D65661	11.5 oz/yd <sup>2</sup>	390 g/m <sup>2</sup>
Thickness	ASTM D65251	0.12 in	3 mm
% Ground Cover	ASTM D65671	99%	99%
Water Holding Capacity	ASTM D7367	1350%	1350%
Cure Time	Observed	24-48 hr	24-48 hr
Color (fugitive dye)	Observed	Green	Green
ENDURANCE			
Functional Longevity <sup>2</sup>	Observed	≤ 12 months	≤ 12 months
PERFORMANCE			
Cover Factor3 (6 in/hr event)	ASTM D71011	0.10	0.10
% Effectiveness4	ASTM D71011	90%	90%
Cover Factor <sup>3</sup> (5 in/hr event)	Large Scale <sup>5</sup>	0.10	0.10
% Effectiveness4	Large Scale <sup>5</sup>	90%	90%
Vegetation Establishment	ASTM D73221	600%	600%

- ASTM test methods developed for Rolled Erosion Control Products and have been modified to accommodate hydraulically applied erosion control products.
- Functional longevity depends on moisture, light and environmental conditions.
- 3. Cover Factor is calculated as soil loss ratio of treated surface versus an untreated control surface.
- 4. % Effectiveness = One minus Cover Factor multiplied by 100%.
- 5. Large scale testing conducted at Utah Water Research facility using rainfall simulator on 2.5H:1V slope, sandy-loam soil, at a rate of 5" per hour for a duration of 60 minutes.

#### COMPOSITION

All components of the BFM shall be pre-packaged by the Manufacturer to assure both material performance, and compliance with the following values. **Under no circumstances will field mixing of additives or components be accepted.** 

Thermally Processed Wood Fibers –  $79.5\% \pm 2.5\%$ 

Proprietary Crosslinked Hydro-Colloidal Tackifier – 10% ± 1%

Moisture Content – 10.5% ± 1.5%

#### **INSTALLATION**

Strictly comply with Manufacturer's installation instructions and recommendations. Use approved hydro-spraying machines with fan-type nozzle (50-degree tip) whenever possible to achieve best soil coverage. Apply BFM from opposing directions to assure 95% soil surface coverage. Slope interruption devices or water diversion techniques are recommended when slope lengths exceed 70 ft (21m).

Erosion Control and Revegetation:

For maximum performance, apply BFM in a two-step process:

Step One: Apply fertilizer, other soil amendments and 50% of seed with a small amount of BFM for visual metering.

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.

SLOPE GRADIENT/CONDITION	ENGLISH	SI
≤ 3H to 1V	3000 lb/ac	3400 kg/ha
> 3H to 1V and ≤ 2H to 1V	3500 lb/ac	3900 kg/ha
> 2H to 1V and ≤ 1H to 1V	4000 lb/ac	4500 kg/ha
Below ECB or TRM	1500 lb/ac	1700 kg/ha
As infill for TRM	3500 lb/ac	3900 kg/ha

Consult comprehensive CSI formatted BFM specification for additional details.

#### **PACKAGING**

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

Pallets: Weather-proof, stretch-wrapped with UV resistant pallet cover, 40 bags/pallet, 1 ton/pallet.





