



# ProMatrix™

## Engineered Fiber Matrix



### Description

ProMatrix™ Engineered Fiber Matrix™ (EFM) is a fully biodegradable matrix composed of 100% recycled Thermally Refined™ wood fibers, crimped interlocking man-made biodegradable fibers, and naturally derived biopolymers. ProMatrix is phytosanitized, free from harmful plastic nettings, 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. ProMatrix may require a 24-48 hour curing period to achieve maximum performance.

### Recommended Applications

- Erosion control for slopes ranging from mild to steep (≤2H:1V)
- Rough graded slopes
- Meets or exceeds performance of bonded fiber matrix (BFM) and stabilized mulch matrix (SMM)
- Equivalent performance to most rolled erosion control blankets with plastic nettings
- Enhancement of vegetation establishment

### Technical Data

Physical Properties*	Test Method	Units	Minimum Value
Mass/Unit Area	ASTM D6566 <sup>1</sup>	g/m <sup>2</sup> (oz/yd <sup>2</sup> )	> 393 (11.6)
Thickness	ASTM D6525 <sup>1</sup>	mm (in)	> 4 (0.16)
Ground Cover	ASTM D6567 <sup>1</sup>	%	> 98
Water Holding Capacity	ASTM D7367	%	1100
Material Color	Observed	n/a	Green
Performance Properties*	Test Method	Units	Value
Cover Factor <sup>2</sup>	Large Scale <sup>4</sup>	n/a	< 0.05
Percent Effectiveness <sup>3</sup>	Large Scale <sup>4</sup>	%	> 95
Cure Time	Observed	hours	24 — 48
Vegetation Establishment	ASTM D7322 <sup>1</sup>	%	600 minimum
Environmental Properties*	Test Method	Units	Typical Value
Functional Longevity <sup>5</sup>	Observed	n/a	Up to 12 months
Ecotoxicity	EPA 2021.0	%	96-hr LC50 > 100%
Biodegradability	ASTM D5338	%	100
Product Composition	Typical Value		
Thermally Processed Wood Fiber <sup>6</sup> (within a pressurized vessel)	77 %		
Wetting Agents	18 %		
Crimped, Man-Made Biodegradable Interlocking Fibers	2.5 %		
Proprietary Mineral Activator	2.5 %		

\* When uniformly applied at a rate of 3500 pounds per acre (3900 kilograms/hectare) under laboratory conditions. 1. ASTM test methods developed for Rolled Erosion Control Products that have been modified to accommodate Hydraulic Erosion Control Products. 2. Cover Factor is calculated as soil loss ratio of treated surface versus an untreated control surface. 3. % 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 800-508-8681. 5. Functional Longevity is the estimated time period, based upon 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. 6. Heated to a temperature greater than 380 degrees Fahrenheit (193 degrees Celsius) for 5 minutes at a pressure greater than 50 psi (345 kPa) in order to be Thermally Refined™/Processed and to achieve phytosanitization.

### Packaging Data

Properties	Test Method	Units	Nominal Value
Bag Weight	Scale	kg (lb)	22.7 (50)
Bags per Pallet	Observed	#	40

UV and weather-resistant plastic bags. Pallets are weather-proof stretch wrapped with UV resistant pallet cover.

### Profile Products

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