



# Enviro-Matrix™ FRM

## Fiber Reinforced Matrix



**GREEN DESIGN  
ENGINEERING™**  
EARTH-FRIENDLY SOLUTIONS  
FOR SUSTAINABLE RESULTS™

Solutions for your Environment™

### Description

Enviro-Matrix™ FRM is a fully biodegradable, Fiber Reinforced Matrix (FRM) composed of 100% recycled and Thermally Refined™ wood fibers, crimped interlocking biodegradable fibers, naturally derived cross-linked biopolymers and water absorbents. The FRM is phytosanitized, free from weed seeds, free from plastic netting, requires no curing period and upon application 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.

### Recommended Applications

- Erosion control for slopes ranging from mild to severe ( $\leq 0.25H:1V$ )
- Rough graded slopes
- Superior performance over rolled erosion control blankets
- Enhancement of vegetation establishment

### Technical Data

Physical Properties*	Test Method	Units	Tested Value
Mass/Unit Area	ASTM D6566 <sup>1</sup>	g/m <sup>2</sup> (oz/yd <sup>2</sup> )	≥ 390 (11.6)
Thickness	ASTM D6525 <sup>1</sup>	mm (in)	≥ 4.6 (0.18)
Ground Cover	ASTM D6567 <sup>1</sup>	%	≥ 99
Water Holding Capacity	ASTM D7367	%	≥ 1,500
Material Color	Observed	n/a	Green
Performance Properties*	Test Method	Units	Tested Value
Cover Factor <sup>2</sup>	Large Scale <sup>4</sup>	n/a	≤ 0.02
Percent Effectiveness <sup>3</sup>	Large Scale <sup>4</sup>	%	≥ 98
Cure Time	Observed	hours	0 - 2
Vegetation Establishment	ASTM D7322 <sup>1</sup>	%	≥ 425
Functional Longevity <sup>5</sup>	ASTM D5338	months	≤ 18
Environmental Properties*	Test Method	Units	Tested Value
Ecotoxicity	EPA 2021.0	%	48-hr LC <sub>50</sub> > 100%
Biodegradability	ASTM D5338	n/a	Yes
Product Composition			Typical Value
Thermally Processed Wood Fiber <sup>6</sup> (within a pressurized vessel)			81 %
Wetting Agents-including high-viscosity colloidal polysaccharides, cross-linked biopolymers, and water absorbents			14 %
Crimped, Biodegradable Interlocking Fibers			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. For specific testing information please contact a Profile technical service representative at 866-325-6262 or +1-847-215-1144. 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 phyto-sanitization.

### 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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