



Application Guide for Profile® Engineered Fiber Matrix™

Engineered Fiber Matrix is mixed at a rate of 60 pounds per 100 gallons of water

Engineered Fiber Matrix™ (EFM)™ has been specially designed to be mixed in a low ratio of water to product. Follow the EFM Loading Chart and Application Guide closely. Not mixing enough EFM will water-down the slurry and compromise coverage during application and the performance of the formulation.

Application / Loading Procedures

- A.** Strictly comply with equipment 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 from opposing directions to assure 100% soil surface coverage. Slope interruption devices or water diversion techniques are recommended when slope lengths exceed the maximum recommendations as shown in the Slope Application and Slope Interruption Limits tables on the back page of these guidelines.
- B.** To ensure proper application rates, measure and stake area. For maximum performance, apply EFM in a two-step process:
 - 1.** Apply fertilizer with specified prescriptive solutions and typically 50% of specified seed mix with a small amount of EFM for visual metering. Do not leave seeded surfaces unprotected, especially if precipitation is imminent.
 - 2.** Mix balance of seed and **apply EFM at a rate of 60 pounds per 100 gallons (27 kg/379 liters) of water** over freshly seeded surfaces. See loading chart on the back and confirm loading rates with equipment manufacturer.²
- C.** Fill 1/3 of mechanically agitated hydroseeder with water. Turn pump on for 15 seconds and purge and pre-wet lines. Turn pump off.
- D.** Turn agitator on, open recirculation valve and load low density materials first (i.e. seed).³
- E.** Continue slowly filling tank with water while loading fiber matrix into tank.
- F.** Consult loading chart on the back to determine the number of bags to be added for desired area and application rate.
- G.** EFM should be completely loaded before water level reaches 75% of the top of tank.
- H.** Top off with water and mix until all fiber is fully broken apart and hydrated (minimum of 10 minutes – increase mixing time when applying in cold conditions). This is very important in order to fully activate the bonding additives and to obtain proper viscosity.
- I.** Add fertilizer and any other remaining amendments.
- J.** Shut off recirculation valve to minimize potential for air entrainment within the slurry.
- K.** Slow down agitator and start applying with a 50-degree fan tip nozzle.
- L.** Spray in opposing directions for maximum soil coverage.
- M.** Upon completion of application, return to water source to repeat mixing and application sequence or to flush equipment.⁴ Thoroughly purge pump and all lines of residual materials from previous load. Monitor residual material in tank after purging; excess material may reduce number of bales to be mixed in subsequent loads.

¹ Depending upon site conditions, EFM may be applied in a one-step process where all components may be mixed together in a single tank load. Consult with manufacturer for further details.

² 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, and windy conditions with product applied on dry soils.

³ Do not add additional tackifiers or polymers to this pre-mixed formulation.

⁴ Always flush residual slurry from hydraulic seeding/mulching equipment immediately following each application, at the end of each work period or when equipment will be left unattended; compounds containing Urea, Nitrogen, Phosphorus, Potassium and macro/micronutrients may form and can be hazardous to human health and equipment.

Loading Chart for Profile's Engineered Fiber Matrix

Tank Size (gal)	# of 50-lb bales	(lb)	Displacement (gal)	2,500 lb/ac		3,000 lb/ac		3,500 lb/ac		4,000 lb/ac	
				Sq ft	Acres	Sq ft	Acres	Sq ft	Acres	Sq ft	Acres
250	3	150	280	2,614	0.060	2,178	0.050	1,867	0.043	1,634	0.038
500	6	300	560	5,227	0.120	4,356	0.100	3,734	0.086	3,267	0.075
750	9	450	840	7,841	0.180	6,534	0.150	5,601	0.129	4,901	0.113
1,000	12	600	1,120	10,454	0.240	8,712	0.200	7,467	0.171	6,534	0.150
1,500	18	900	1,680	15,682	0.360	13,068	0.300	11,201	0.257	9,801	0.225
2,000	24	1,200	2,240	20,909	0.480	17,424	0.400	14,935	0.343	13,068	0.300
2,500	30	1,500	2,800	26,136	0.600	21,780	0.500	18,669	0.429	16,335	0.375
3,000	36	1,800	3,360	31,363	0.720	26,136	0.600	22,402	0.514	19,602	0.450
3,500	42	2,100	3,920	36,590	0.840	30,492	0.700	26,136	0.600	22,869	0.525
4,000	48	2,400	4,480	41,818	0.960	34,848	0.800	29,870	0.686	26,136	0.600

Additional Notes:

- Rough surfaces (rocky terrain, cat tracks, ripped soils, etc.) may require additional product to achieve 100% coverage.
- Be sure to allow for residual material in tank on subsequent applications.

Application Rates		
Slope Condition	English	SI
≤ 3H to 1V	3,000 lb/ac	3,360 kg/ha
> 3H to 1V and ≤ 2H to 1V	3,500 lb/ac	3,920 kg/ha
> 2H to 1V and ≤ 1H to 1V ¹	4,000 lb/ac	4,480 kg/ha
Slope Interruption Limits*		
Product Category	Length (ft)	Length (m)
EFM	50	15




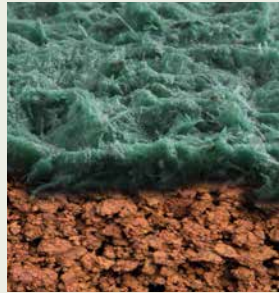




For conversions:

1 lb = 0.454 kg
 1 ac = 0.41 ha
 lb/ac x 1.12 = kg/ha
 1 kg = 2.20 lb
 1 ha = 2.47 ac

¹EFM not recommended for slopes greater than 1H:1V.

*Listed slope interruption limits are for product applications on a 3H:1V slope. For application on steeper slopes, slope interruption lengths may need to be decreased.

Visual Key for Proper Application

Proper Application	Improper Application	3,000 lb/ac	3,500 lb/ac	4,000 lb/ac
				
				



Solutions for your Environment™

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U.S. Patent #'s: 5,741,832; 5,779,782; 5,942,029; 6,158,167; 6,360,478; 7,752,804 and Patents Pending

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PROFILE'S ENGINEERED FIBER MATRIX PRODUCTS:





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SOLUTIONS WE SUPPLY

GEOSYNTHETICS

Filter Fabrics
Stabilization Fabrics
Geogrids

- Road Grids
- Wall Grids
- Slope Stabilization

Specialty Fabrics

Composite Geomembranes

- GCLs, PVC, HDPE, LLDPE, EPDM, Granular Bentonite

SEDIMENT CONTROL

Inlet Protection

- Grated Inlet, Curb Inlet, Area Inlet Protection

Ditch Checks

- Triangle Silt Dike
- GeoRidge

Perimeter Protection

- High and Low-Porosity Silt Fence, Straw Wattles, Silt Socks
- Safety Fence

Flocculants & Water Treatment

- Polymer-Based & Natural Flocculants

Sediment Basin Skimmers

Dewatering Bags

Trackout Control

- FODS
- Rumble Grates

Turbidity Curtains

EROSION CONTROL

Basic Hydraulically Applied Mulches

- Wood
- Paper
- Blends
- Straw

High-Performance Hydraulically Applied Products

- BFM
- FGM
- Additives & Tackifiers

Temporary Erosion Control Blankets

- Coir & Jute Mat/Nettings
- Short-Term ECBs
- Extended-Term ECBs

Permanent Erosion Control Blankets

- Turf Reinforcement Mats
- HP-TRMs
- Anchor Reinforced Vegetation System

Structural BMPs

- Transition Mats
- Geoweb Cellular Confinement
- Composite Vegetated Armor System
- Flex MSE Vegetated Wall System
- Articulated Concrete Block
- Gabions
- Grout-Filled Geotextile Mats

Vegetation Establishment

- Native Seed & Turf Seed
- Fertilizers
- Organic Soil Additives
- Stratavault Soil Cells

STORMWATER MANAGEMENT

Water Quality

- Inlet Filter Boxes
- Pre-Treatment Chamber
- Nutrient Separating Baffle Boxes
- High-Flow Biofiltration Media
- Hydrodynamic Separators
- Stratavault

Water Quantity

- Modular Underground Storage Systems
- Chamber Detention Systems

Drainage

- HDPE Swale Liner
- Pipe & Fittings
- Drainage Composites
- Strip Drain

Inlet Structures

- PVC
- Drain Basis, In-Line Drains
- Landscape

Permeable Pavers

- Permeable Articulating Concrete Block
- Grass Pavers
- Gravel Pavers
- Concrete Pavers

SPECIALTY

Natural & Synthetic Coir Fiber Logs

Vegetated Reinforced Soil Slopes

Soil Anchors

Root Barrier System

AquaBlok

Muscle Wall

We are full line distributors of construction materials for all project types. Contact us for assistance with a project. From specification and development to installation and completion, we're here to help with all of your site solution needs.

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