

# Terra-Matrix™ SMM

## Stabilized Mulch Matrix



## Superior Site Protection in a Quick, Safe, Easy Hydraulic Application

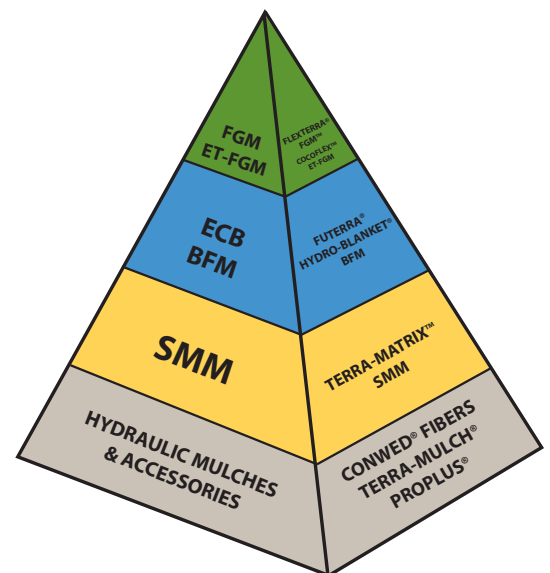
**Terra-Matrix™ SMM** Stabilized Mulch Matrix is specially formulated to provide cost-effective stabilization of soils on active construction and building sites. Unlike polymeric stabilizers comprised of flocculants that need to be blended on site, the pre-blended combination of Thermally Refined® wood fibers, proprietary crosslinked tackifiers and activators anchor the fiber matrix to the soil surface. Hydraulically applied Terra-Matrix creates a non-toxic, erosion resistant blanket that prevents polymer leaching and dispersion of soil particles. The university-tested Terra-Matrix formulation is designed to stand up to multiple rainfall events.

### TERRA-MATRIX™ SMM

- Contours with the surface to insure intimate soil contact
- Forms an erosion resistant, built-in-place blanket
- Non-toxic, environmentally safe and biodegradable
- No fish or wildlife concerns
- No netting, staples or lifting
- Pre-blended for consistent performance
- Provides outstanding erosion protection for 3-6 months
- Ideal for stabilizing moderate slopes and building pads

### 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

Look to Terra-Matrix for cost effective soil stabilization.

# Terra-Matrix™ SMM Specification

This section specifies a hydraulically applied Stabilized Mulch Matrix (SMM) composed of long strand, Thermally Refined™ wood fibers and a proprietary crosslinked, hydro-colloid based polymer tackifier. The SMM may require a 24-48 hour curing period to achieve maximum performance. Once cured, the SMM forms an intimate bond with the soil surface to create a continuous, flexible erosion resistant blanket that provides temporary soil stabilization, rapid germination and accelerated plant growth.

The Stabilized Mulch Matrix shall be Terra-Matrix™ SMM and conform to the following property values when uniformly applied at a rate of 3000 pounds per acre (3400 kilograms/hectare) under laboratory conditions.

	TEST METHOD	ENGLISH	SI
<b>PHYSICAL</b>			
Mass Per Unit Area	ASTM D6566 <sup>1</sup>	9.9 oz/yd <sup>2</sup>	336 g/m <sup>2</sup>
Thickness	ASTM D6525 <sup>1</sup>	0.10 in	2.5 mm
% Ground Cover	ASTM D6567 <sup>1</sup>	95%	95%
Water Holding Capacity	ASTM D7367	1350%	1350%
Cure Time	Observed	24-48 hr	24-48 hr
Color (fugitive dye)	Observed	Green	Green
<b>ENDURANCE</b>			
Functional Longevity <sup>2</sup>	Observed	≤ 6 months	≤ 6 months
<b>PERFORMANCE</b>			
Cover Factor <sup>3</sup> (5 in/hr event)	Large Scale Testing <sup>5</sup>	0.10	0.10
% Effectiveness <sup>4</sup>	Large Scale testing <sup>5</sup>	90%	90%

1. ASTM test methods developed for Rolled Erosion Control Products and have been modified to accommodate hydraulically applied erosion control products.
2. 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 30 minutes.

## COMPOSITION

All components of the SMM 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 – 83% ± 4%
- Proprietary Crosslinked Hydro-Colloidal Based Tackifier – 5% ± 1%
- Moisture Content – 12% ± 3%

## 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 SMM from opposing directions to assure 95% soil surface coverage. Slope interruption devices or water diversion techniques are recommended when slope lengths exceed 50 ft (15 m).

Erosion Control and Revegetation:

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

- Step One: Apply fertilizer, other soil amendments and 50% of seed with a small amount of SMM for visual metering.
- Step Two: Mix balance of seed and apply SMM 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 SMM 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
≤ 4H to 1V	2000 lb/ac	2250 kg/ha
> 4H to 1V and ≤ 3H to 1V	2500 lb/ac	2800 kg/ha
> 3H to 1V and ≤ 2.5H to 1V	3000 lb/ac	3400 kg/ha
> 2.5H to 1V and ≤ 2H to 1V	3500 lb/ac	3900 kg/ha

Consult comprehensive CSI formatted SMM 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.



Your Trusted Partner In Soil Solutions

For technical information call 1-866-325-6262. For distributor location and customer service call 1-800-366-1180.

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750 Lake Cook Road · Suite 440 · Buffalo Grove, IL 60089

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