

# EarthGuard Fiber Matrix Erosion Control. University tested. Worksite proven.

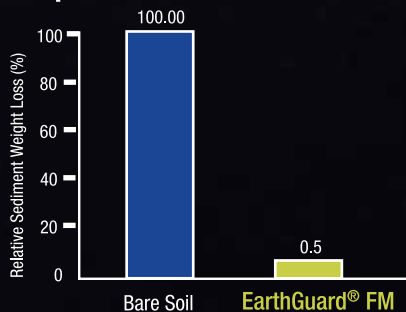
EarthGuard® Fiber Matrix

EarthGuard® Fiber Matrix from Terra Novo is the economical solution more and more erosion specialists are turning to. It's the perfect short to mid-term erosion application comparable to the most expensive BMPs.

Check it out for yourself — EarthGuard® Fiber Matrix is simple to apply, safe to use and as effective as any comprehensive BFM/FRM system on the market. Call or visit us on the web to learn more about EarthGuard®.

## Results from Caltrans Study of EarthGuard FM

### Comparison of Relative Sediment Weight



The data from this series of tests appear to support the use of EarthGuard® Fiber Matrix (EGFM) to reduce soil erosion and off-site delivery of sediment from steep slopes. A 99.5% reduction in sediment delivery/weight is a high level of performance comparable to the best performing best management practices such as some rolled erosion control products (RECPs) and bonded fiber matrices (BFMs/FRMs). The EarthGuard® Fiber Matrix manufacturer, Terra Novo, Inc. claims an installed cost of \$0.025-\$0.06 per square foot compared to \$0.085-\$0.15 for BFMs and RECPs.



EarthGuard®  
Fiber Matrix



Terra Novo  
(888) 843 1029

LOCAL DISTRIBUTOR



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# EarthGuard® Fiber Matrix Erosion Control

EarthGuard® is a soil stabilizing emulsion specifically formulated to reduce erosion and sediment runoff. It is non-toxic, 100% biodegradable, and conforms to the State of California Department of Transportation Standard Specifications Sections 07-382 E A03-21-08 and 20-047 E A07-30-10 for “Polymer Stabilized Fiber Matrix (PSFM).” EarthGuard® FM is a one-step spray application, combining EarthGuard® and wood/cellulose fiber. It is applied as an aqueous slurry by itself or in combination with seed. EarthGuard® FM is chemically engineered to be effective at low rates while absorbing the impact of raindrops, and providing immediate dust control, erosion control, and soil stabilization until permanent vegetation is established or construction has resumed. EarthGuard® FM’s versatility allows it to be highly effective in many applications: erosion control, slope stabilization, dust abatement, landscape design, storm water runoff, fire burn rehabilitation, land development, and golf course construction.

## APPLICATION RATES AND METHODS

EarthGuard® FM application rates depend upon field conditions and desired benefits. The following charts can be used as general rate guidelines for seasonal erosion control (loamy soils that are balanced in organic matter and nutrients). Track-walking or some other soil imprinting device is recommended to roughen the slope to slow water flows during a storm event. For optimum performance, slope interrupting devices such as fiber rolls are recommended and placed 25' (7.6 m) on-center, perpendicular to the flow of water.

### NORMAL CONDITIONS\*

	Slope	6:1	5:1	4:1	3:1	2:1	1.5:1	1:1
1	Gals/Acre	4	5	6	7	8	9	10
	(lbs) Mulch/Acre	1,500	1,500	1,500	1,800	2,000	2,500	3,000

### SEVERE CONDITIONS\*\*

	Slope	≤5:1	4:1	≥3:1
2	Gals/Acre	6	8	10
	(lbs) Mulch/Acre	2,000	2,500	3,000

\*Maximum Rainfall of ≤20" (480 mm) before adequate vegetative establishment.

\*\*Maximum Rainfall of ≥20" (480 mm) before adequate vegetative establishment.

## RE-VEGETATION/RECLAMATION

For re-vegetation/reclamation purposes, follow the above charts. Add seed mixes as recommended to achieve long-term erosion control. This can be applied via a one-step hydroseeding process. However, some may prefer a two-step application (hydroseed and fertilizer first, and then EarthGuard® and mulch over the top). Consider increasing mulch rates to a minimum of 2,000 lbs. per acre when seeding.

If slopes are ready for permanent landscape (plants, trees, etc.), use the EarthGuard® rates from the above charts without adding mulch. Apply the mixture to all exposed soil after planting is completed. This will provide temporary erosion control while the plants establish their root mass.

**FOR PARTIAL SEASON OR EXTENDED PROTECTION, CONTACT TERRA NOVO FOR RECOMMENDATIONS**

## WINTER PROTECTION FOR PADS

Use 3–4 gallons of EarthGuard® and 1,500 lbs. of mulch per acre. Pads should be “roughened” prior to application. For water truck application, use 8–10 gallons of EarthGuard® per acre.

## RAIN EVENT ACTION PLAN (REAP) BMP

For impending rain events on active construction areas and stockpiles, apply EarthGuard® at 3–10 gallons per acre prior to a storm event with an on-site water truck or spray rig. EarthGuard® is active immediately and will help reduce erosion and turbidity. After the rain has stopped, continue with grading.

## DUST CONTROL

On grading jobs, haul roads, etc. add 2 quarts of EarthGuard® to each 1,000 gallons of water. Apply with a water truck as normal. Number of passes can be reduced up to 75%.

If the desired result is more of a “Dust Cap” (longer lasting effect yet still temporary) usually 8–10 gallons per acre will be required.

## APPLICATION & MIXING GUIDELINES

Spray all mixtures at a minimum rate of 3,000 gallons of water/acre (higher rates may be required) evenly over the area to be treated. Be careful not to spray too fast, creating puddles or run-off—they damage the soil structure before EarthGuard® products can work. Application should be sprayed from

multiple directions and angles to insure complete and proper coverage. Do not disturb treated areas after EarthGuard® products are applied. Although EarthGuard® is active immediately, it is recommended that all hydraulic applications using fiber mulch have a 24-hour window without rain.

Some situations with sandy – sandy loam soils, very little organic matter in the soil, poorly compacted slopes, heavy rainfall locations (over 20 inches per year), very intense rain storms (2–3 inches at a time), high wind exposure, etc. may require increasing the EarthGuard® and/or mulch by 1.25 – 1.50 times. When SWPPPs, BMPs or other plans are being written, contact Terra Novo, Inc., or your local dealer for more specific rate recommendations.

Many types of equipment can be used to apply EarthGuard® (hydroseeders, water trucks, spray rigs, aerial applicators, and irrigation systems). When mixing, fill the vessel 1/3 full of water prior to adding any EarthGuard®. As the tank continues to fill and agitators are running, slowly add the recommended amount of EarthGuard®. If the tank doesn’t have agitators, it is important to add the EarthGuard® directly to the fill water flow. Mix or circulate the tank for a minimum of 10 minutes prior to application. A hydroseeder is required for applications of EarthGuard® FM.

Always thoroughly mix EarthGuard® before using. Always close or seal containers after use. Store in a dry, insulated location to avoid moisture and freezing. Frozen product, once thawed, can and should be completely remixed.



For technical services or to locate your nearest EarthGuard® dealer, call 1-888-843-1029.  
Terra Novo, Inc., P.O. Box 81916, Bakersfield, CA 93380 [www.earthguard.com](http://www.earthguard.com)

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