

Featured Products & Services

Products and Services

Manufacturing quality erosion control products is our main focus. Our products are designed to meet a complex variety of erosion control and vegetation problems. For slope protection, channel lining, reclamation, turf reinforcement and specialized landscaping, Greenfix America has a product that provides the solutions. Optimum performance of all Greenfix America blankets can be expected when installed according to recommended specifications.

Fiber Products

Our straw products contain California's highest quality straw, certified by the USDA to be free of Canadian Thistle and other noxious weeds. All straw blankets are made of high performance straw fiber with a longer fiber length that ensures a nutrient rich mulch. Coir (coconut fiber) fiber products contain 100 % high quality coconut fiber.

Organic Net Products

The Greenfix America Organic Net blankets use the same fiber composition as our standard blankets with a natural reinforcement matrix in place of polypropylene netting. The bio-degradability of the blanket is an advantageous feature in ecologically sensitive areas. Additional features include, added water absorption, a woven net matrix that allows the strands to float independently of each other, reducing the risk of tenting and wildlife endangerment, making these blankets an environmentally friendly solution.

Custom Manufactured Products

Greenfix America will design and manufacture a blanket to meet your specific project application. Our goal is to meet your unique challenges by providing effective solutions for different erosion and sediment control applications. We will maximize the dollars you spend by producing a blanket to meet your specification.

Greenfix America can provide independent laboratory testing for your custom manufactured products. Minimal charges apply depending upon the number of parameters tested. Please allow 3 to 4 days for analysis processing.



NEW

Innovative Packaging

The Greenfix America 20 roll unit provides easier product shipping, handling, and storage. The unit can be handled easily with standard warehousing equipment in a variety of locations. The packages are durable and can be stored outdoors when covered with a Greenfix America bundle bag. Our specialized packaging style minimizes packaging waste.

Quality Control Program

Prior to every production season, recurrent testing is performed on the entire product line. To ensure the minimum performance standards are being met, all products are tested annually for the following parameters ASTM D5261 Mass Per Unit Area, ASTM D5199 Thickness, ASTM D5035 Tensile and ASTM D5035 Elongation. This ensures quality standards are not affected by straw variations due to climate, growing, and harvest conditions.

Greenfix America's product quality standards are measured against advanced physical performance tolerances realized by natural environmental events. The quality assured erosion control products made available by Greenfix America set a standard that makes the conditional industry accepted standards environmentally nonconforming.

The performance qualification program accurately provides design performance values qualifying the selected materials for your project application. The design values are compiled from proven federally accepted large-scale laboratory tests intended to replicate actual field conditions, providing definitive engineering design values. Our product qualification program does not subscribe to Bench Scale material testing to interpret design values.

Diverse TRM Products

Greenfix America offers a variety of TRM materials specifically configured to satisfy the many different approaches to slope and channel designing and marketing practices. Our TRM product development and material qualification program emphasizes the pre-vegetated life cycle of a project application.



Green Spec

Greenfix Erosion Control Blanket Specification C/D
Product Specifications (Word Processor Ready in CSI Format)
Physical Property Compliance Certificates
Installation Diagrams & Instructions
Test Data Tables
Product Comparison Tables
Photo Galleries
Product Selection Guidelines



Online Services

Log on to greenfix.com for fast easy access to the following links.

- Place An Order
- Request A Quote
- Print Product Information
- Obtain Individual Product Certificates.
- Send us a message. Tell us what you need.



Definition: Slope Interruption Devices (SID) are manufactured from straw that is wrapped in tubular black plastic netting. They are approximately 8 inches (200 mm) in diameter by 20-25 feet (7-8 m) long. Rolls are placed and staked along the contour of newly constructed or disturbed slopes.

Purpose: Slope Interruption Devices (SID) are intended to capture and keep sediment on the slopes. Straw wattles (SIDs) are useful to temporarily stabilize slopes by reducing soil creep and sheet and rill erosion until permanent vegetation can get established. Installed, **straw wattles shorten the slope length**, thereby interrupting the raveling and rilling processes, **and reduce the slope steepness**. They catch soil material that moves down the slope by the freeze/thaw processes. Organic matter and native seeds are trapped behind the wattles, which provide a stable medium for germination, logs trap fertile topsoil and retain moisture from rainfall, which aids in growth of tree seedlings planted along the upslope side of the wattles.

Design Considerations:

Sites appropriate for straw wattles are:

- Slopes susceptible to sheet and rill erosion;
- Slopes producing dry ravel;
- Slopes susceptible to freeze/thaw activity; or slopes difficult to vegetate because of soil movement. Straw logs are not intended for use in concentrated flow situations.

Disadvantages:

- Wattles only function for one or two seasons.
- If not installed properly with a sufficient trench, wattles may fail.
- Straw wattles may require maintenance to ensure that the stakes are holding and the wattles are still in contact with the soil. This is especially true on steep slopes in sandy soil.

Advantages:

- Straw wattles are a relatively low-cost solution to sheet and rill erosion problems.
- They can replace silt fences or straw bales on steep slopes.
- Rolls are a short-term solution to help establish native vegetation.
- Rolls store moisture for vegetation planted immediately upslope.

- Plastic netting will eventually photodegrade, eliminating the need for retrieval of materials after the straw has broken down.
- Straw becomes incorporated into the soil with time, adding organic material to the soil and retaining moisture for vegetation.

Straw wattles will last an average of one to two years. This is an important factor when planning the optimum length of time the slope will need mechanical stabilization.

Straw wattles can be staked with willow stakes if site conditions warrant and the moisture retained by the straw log will encourage willow establishment.

Construction Specifications:

Consult Your Local Qualified Distributor or Engineer
(Construction Recommendation Available Upon Request)

Inspection and Maintenance:

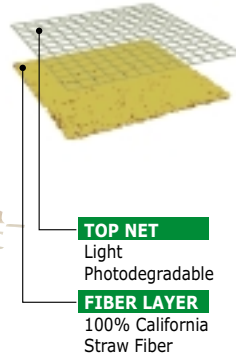
See Complete Product Specifications



Products

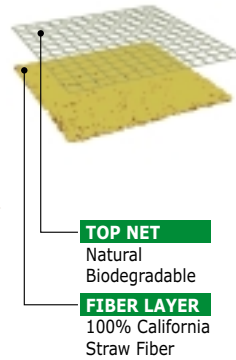
Temporary Slope Protection

Straw - Photodegradable



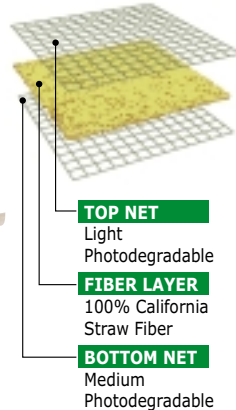
For Optimum performance this product should be installed with net up.

Straw - Biodegradable

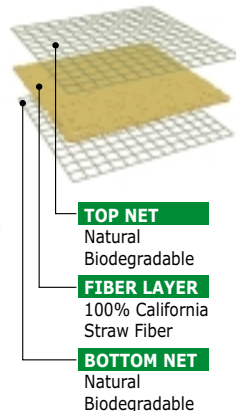


For Optimum performance this product should be installed with net up.


Straw - Photodegradable




Straw - Biodegradable




WS05 Single Net Straw

Fiber	Straw
Fiber Content	100%
Width (Feet/Meters)	8 / 2.4
Length (Feet/Meters)	67.5 / 20.5
Area (Square Yards / Square Meters)	60 / 50
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)	0.50 / .271
Weight per Blanket (Pounds/Kilograms)	30 / 13.6
Functional Longevity (Months)	10
Top Netting Type (Photodegradable)	Light
Bottom Netting Type	N/A
Product Color Code	


WS05B Single Organic Net Straw

Fiber	Straw
Fiber Content	100%
Width (Feet/Meters)	8 / 2.4
Length (Feet/Meters)	67.5 / 20.5
Area (Square Yards / Square Meters)	60 / 50
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)	0.50 / .271
Weight per Blanket (Pounds/Kilograms)	30 / 13.6
Functional Longevity (Months)	10
Top Netting Type (Biodegradable)	Natural
Bottom Netting Type	N/A
Product Color Code	

WS072 Double Net Straw

Fiber	Straw
Fiber Content	100%
Width (Feet/Meters)	8 / 2.4
Length (Feet/Meters)	67.5 / 20.5
Area (Square Yards / Square Meters)	60 / 50
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)	0.70 / .379
Weight per Blanket (Pounds/Kilograms)	42 / 19.0
Functional Longevity (Months)	10-12
Top Netting Type (Photodegradable)	Light
Bottom Netting Type (Photodegradable)	Medium
Product Color Code	

WS072B Double Organic Net Straw

Fiber	Straw
Fiber Content	100%
Width (Feet/Meters)	8 / 2.4
Length (Feet/Meters)	67.5 / 20.5
Area (Square Yards / Square Meters)	60 / 50
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)	0.70 / .379
Weight per Blanket (Pounds/Kilograms)	42 / 19.0
Functional Longevity (Months)	10-12
Top Netting Type (Biodegradable)	Natural
Bottom Netting Type (Biodegradable)	Natural
Product Color Code	

Supplement To General Installation Guidelines/ Slopes And Channels

Subgrade / Slopes & Channels: On slopes and channels, the site must be shaped to the design specifications (Slope gradient, Density of soil & etc.) The site must be groomed to be free of soil clods, clumps, rocks or equipment imprints of any kind that would prevent the blanket from lying flush against the surface contour.

Seeding / Slopes & Channels: For non soil filled applications on slopes and channels, hydro-seed, board cast or drill seed over prepared soil before blanket is deployed. Make sure to hydro-mulch after seeding and before the blanket is installed to ensure the seed is in direct contact with the soil. Seed mixes with adequate pure live seed ratios must be used to ensure proper germination ratios and successful vegetation establishment. Consult your local distributor or seed supplier to obtain a proper seed mix.

Anchor Trench & Check Slots / Slopes & Channels: Anchor trenches are required to securely fasten the blanket to the subgrade surface. Anchor trenches and intermediate check slots are typically 6-9 inches wide and 6-9 inches deep. The blanket is installed in the trench and fastened to the bottom with staples spaced 1-3 ft. apart. The anchor trenches and checks slots are then back filled and compacted in such a manner not to damage the blanket. (See Slope & Channel Isometric View)

Anchor Trench / Slopes: Anchor trenches should be installed at least 1 ft. beyond the crest of the slope. (See Longitudinal Anchor Trench Fig. 2)

Anchor Trench / Channels: In a channel anchor trenches are installed at the beginning of the channel. (See Initial Channel Anchor Trench Fig. 1 & Longitudinal Anchor Trench Fig. 2)

Check Slots / Slopes: For maximum performance of your product, an intermediate check slot may be required on long slopes that exceed one roll length. Intermediate check slots should be spaced approximately 20 – 60 ft. intervals down the slope depending on the blanket type, slope length and soil conditions. Consult your local distributor or blanket manufacturer directly to confirm the check slot installation procedure. (See Intermediate Check Slot Fig. 3)

Check Slots / Channels: In a channel, check slots are spaced approximately 25 – 60 ft. intervals down stream depending on flow conditions, channel gradient and time to vegetate. (See Intermediate Check Slot Fig. 3 & Channel Isometric View) Field Joining And Anchoring: The blanket is rolled down the slope or channel loosely to maintain contact with the soil at all times. Side to side overlap between rolls are 3-4 inches minimum and anchored on 2-3 ft. intervals minimum. End to end splice overlap between rolls are 1-3 ft. minimum and anchored with two rows of staples on 1 ft. intervals minimum. Overlaps are shingled in the direction of flow.

Staple patterns will vary depending on application, soil type, slope or channel gradient and etc. (See Staple Pattern Guidelines) A rule of thumb for estimating the amount of staples required for a project is as follows:

Steep Slopes / 1:1 and greater2-4 staples per sq. yd.
High Flow Channel3-4 staples per sq. yd.
Low Flow Channel2-3 staples per sq. yd.

Install additional staples as required to ensure the blanket is always in contact with the soil, regardless of suggested staple patterns.

Anchoring Devices: Use a 6 inch x 1 inch 11 gauge minimum metal staple in heavy compacted soil. In loose soil conditions use a 8 inch x 1 inch 11 gauge minimum metal staple. Other approved anchoring devices in loose soil conditions are as follows:

12 inch x 1.5 inch metal staples.
18 inch pins with 1.5 inch diameter washer.
12-30 inch J-Shape pins made from bent 1/4 inch wire or rebar.

Install staples or pins so that the top of the anchor is flush with the soil surface.

Special Installation & Conditions: The installation guidelines are recommendations only. You should always confirm the installation procedure with your local distributor or blanket manufacturer to ensure maximum performance of the product. All design specifications prepared by a qualified design consultant or engineer supersede these recommended guidelines.


Product selection software, which some manufactures claim to be design software, use versions of the universal soil loss equation, national rainfall and soil survey charts to fabricate a formula that will make a mathematical blanket type selection.

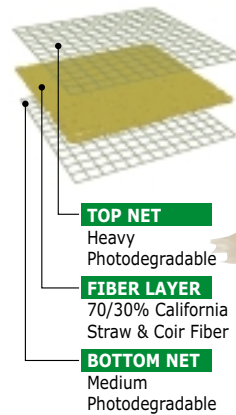
This approach to computerize product selection should never be used to select a blanket type for a specific project application because it circumvents the base line data collection process that all project specifiers regardless of scope are required to do if any hope of success is expected. This type of evaluation does not allow the specifiers to use site specific project data that is directly relevant to the application design and product performance.

The USLE is designed to calculate total tons of potential soil erosion from a site using historical regional data as factors in the equation. These assumptions do not and cannot quantify or guarantee product performance. Design software may be useful in channel design to determine or limit the potential shear stress forces the channel lining materials are subjected to.

Long Term Slope and Channel Protection

CFSO72R Double Net Straw Coconut


Fiber		Straw / Coir	
Fiber Content		70%-30%	
Width (Feet/Meters)		8 / 2.4	
Length (Feet/Meters)		67.5 / 20.5	
Area (Square Yards / Square Meters)		60 / 50	
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)		0.70 / .379	
Weight per Blanket (Pounds/Kilograms)		42 / 19.0	
Functional Longevity (Months)		18-24	
Top Netting Type (Photodegradable)		Heavy	
Bottom Netting Type (Photodegradable)		Medium	
Product Color Code			

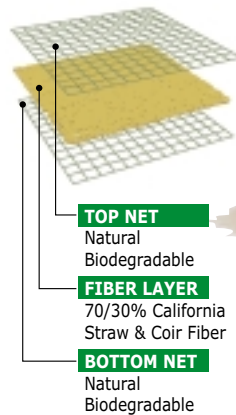


Straw/Coir - Photodegradable



CFSO72B Double Organic Net Straw Coconut


Fiber		Straw / Coir	
Fiber Content		70%-30%	
Width (Feet/Meters)		8 / 2.4	
Length (Feet/Meters)		67.5 / 20.5	
Area (Square Yards / Square Meters)		60 / 50	
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)		0.70 / .379	
Weight per Blanket (Pounds/Kilograms)		42 / 19.0	
Functional Longevity (Months)		18	
Top Netting Type (Biodegradable)		Natural	
Bottom Netting Type (Biodegradable)		Natural	
Product Color Code			

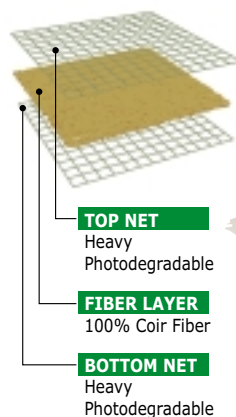


Straw/Coir - Biodegradable



CFO72RR Double Net Coconut


Fiber		Coir	
Fiber Content		100%	
Width (Feet/Meters)		8 / 2.4	
Length (Feet/Meters)		67.5 / 20.5	
Area (Square Yards / Square Meters)		60 / 50	
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)		0.70 / .379	
Weight per Blanket (Pounds/Kilograms)		42 / 19.0	
Functional Longevity (Months)		36	
Top Netting Type (Photodegradable)		Heavy	
Bottom Netting Type (Photodegradable)		Heavy	
Product Color Code			

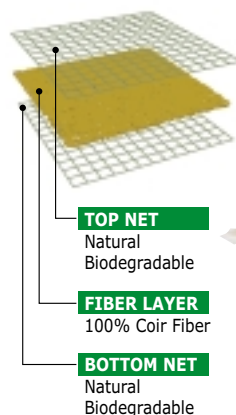


Coir - Photodegradable



CFO72B Double Organic Net Coconut

Fiber		Coir	
Fiber Content		100%	
Width (Feet/Meters)		8 / 2.4	
Length (Feet/Meters)		67.5 / 20.5	
Area (Square Yards / Square Meters)		60 / 50	
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)		0.70 / .379	
Weight per Blanket (Pounds/Kilograms)		42 / 19.0	
Functional Longevity (Months)		24	
Top Netting Type (Biodegradable)		Natural	
Bottom Netting Type (Biodegradable)		Natural	
Product Color Code			



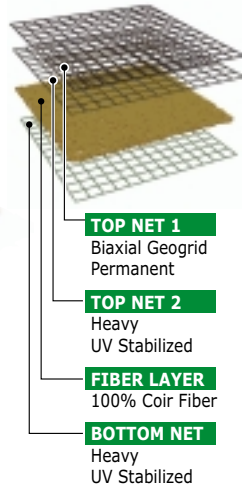
Coir - Biodegradable



Products

Permanent Turf Reinforcement Mats / Slopes and Channels

Coir - Permanent

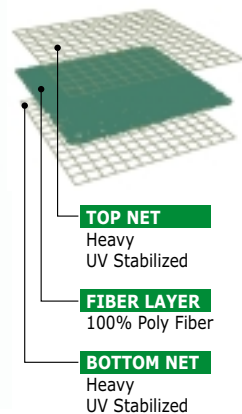


CFG2000 Geogrid Reinforced Coconut (Patent Pending)

Fiber	Coir
Fiber Content	100%
Width (Feet/Meters)	7.5 / 2.3
Length (Feet/Meters)	72.0 / 21.9
Area (Square Yards / Square Meters)	60 / 50
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)	.95 / .514
Weight per Blanket (Pounds/Kilograms)	57 / 25.9
Functional Longevity (Months)	36+
Top Net Type 1 (Permanent)	Biaxial Geogrid
Type 2 (UV Stabilized Polypropylene)	Heavy
Bottom Netting Type (UV Stabilized Polypropylene)	Heavy
Product Color Code	

Applications:
 Vegetation Establishment With Composite TRM Construction
 Green Engineering Embankment Reinforcement
 High Velocity / High Shear Channel Designing
 Steep Slope Stabilization

Synthetic - Permanent

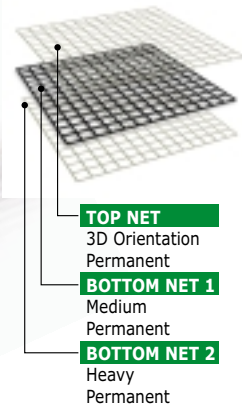
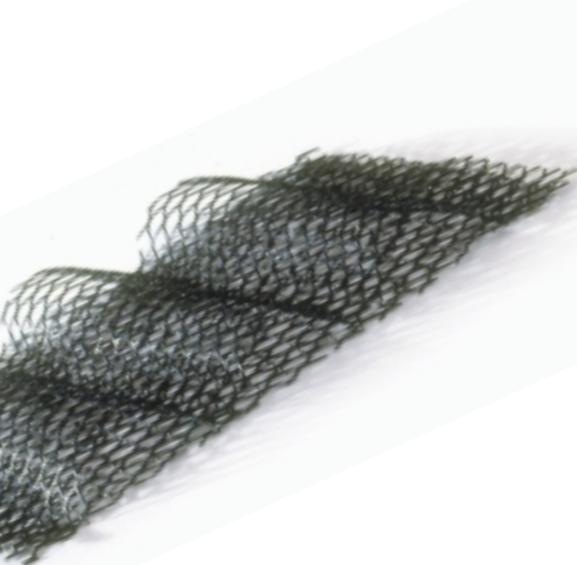


GFP-12 Double Net Synthetic Fiber

Fiber	Polypropylene
Fiber Content	100%
Width (Feet/Meters)	8 / 2.4
Length (Feet/Meters)	67.5 / 20.5
Area (Square Yards / Square Meters)	60 / 50
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)	0.75 / .406
Weight per Blanket (Pounds/Kilograms)	45 / 20.4
Functional Longevity (Months)	Permanent
Top Netting Type (UV Stabilized Polypropylene)	Heavy
Bottom Netting Type (UV Stabilized Polypropylene)	Heavy
Product Color Code	

Applications:
 Permanent Erosion Control of Slopes and Channels
 Erosion Protection of Poorly Vegetated Surfaces
 Turf Reinforcement of Properly Vegetated Surfaces

3D Synthetic - Permanent



Trinter 3D Permanent Turf Reinforcement Mat

Fiber	N/A
Fiber Content	Open
Width (Feet/Meters)	6.56 / 2.0
Length (Feet/Meters)	83.0 / 25.3
Area (Square Yards / Square Meters)	60 / 50
Weight (Lbs. Sq. Yd. - Kg/Sq. Meters)	0.56 / .340
Weight per Blanket (Pounds/Kilograms)	40 / 18
Functional Longevity (Months)	Permanent
Top Net Type (3D Orientation / Permanent)	Heavy
Bottom Net Type 1 (UV Stabilized Permanent)	Medium
Type 2 (UV Stabilized Permanent)	Heavy
Product Color Code	

Applications:
 90% of the Matrix is Open and Available for Soil Filling and Root Entanglement
 Hydraulic BFM Containment Structure
 Increase Effectiveness of Hydraulically Applied Materials
 Rapid Turf Reinforcement With Hydro-seeding

Recommended Installation Guidelines

Subgrade - The first installation step is to make sure that the subgrade is properly prepared. Once the subgrade has been verified to be properly graded and compacted and generally free of ruts and projecting stones or clods, the blanket can be deployed. Generally, normal construction equipment should not cause significant rutting of the subgrade.

Other Layers - In some systems, another material such as mulch may underlie the blanket and therefore be placed first. When situations require the blanket to be laid on top of another material, care must be taken to prevent disruption of or damage to the underlying materials. Never use normal construction equipment directly on top of blanket.

Seeding - In temporary, degradable systems, seed is generally spread on or drilled or sprigged into the subgrade prior to unrolling of the blanket. Many long-term, nondegradable systems are unrolled, and filled with soil prior to seeding.

Positioning and Anchoring - In all cases, each blanket should be unrolled as close as possible to its intended final position to minimize the need for dragging which can dislocate underlying materials or dig up or disturb the prepared subgrade and/or seeding. Staking, pinning or stapling blankets to secure their position is commonly done with a frequency and at the relative locations required to assure stability on the terrain in question.

Wind - Large panels of blankets can be lifted up by gusts of wind if not properly secured. Deployed materials are most vulnerable prior to anchoring. Wind displacement can cause damage such as tearing or less obvious, but equally as problematic, damage such as loss of fibers. Identified damage should be patched. Liberal use of temporary weights such as dirt mounds or sandbags is the most common strategy to avoid wind pick-up.

Field Joining and Anchoring

Proper installation of blankets is critical. Blanket panels are joined side to side and end to end by overlapping or "shingling" in the direction of flow. Overlaps are typically secured by staking, pinning, or stapling at regular spacings along the overlap. Longitudinal overlaps must be a minimum of 3" along the overlap length. Blanket ends may be spliced by overlapping 1' (in the direction of water flow) with the upstream blanket placed on top of the downstream blanket. This overlap should be anchored at 1' spacing across the width of the blanket.

Typically blankets are anchored with 11 ga. U-shaped staples, 6" or 8" long depending upon the looseness or compaction of the soil. Proper anchoring of rolled blankets also includes the following practices:

- Terminal trenches (typically 6 inches wide by 12 inches

deep) are made at the top and bottom (crest and toe) of all covered slopes and at the end of all lined channels.

- Intermediate trenches, or "check slots" (typically 6 inches wide by 6 inches deep) or two closely spaced rows of anchors may be used transverse to flows at intermittent points down a slope or along a channel to prevent continuous flows beneath the blankets.

- "Patterning" staking, pinning, or stapling of positioned blankets accomplishes uniform anchoring. The pattern depends on the steepness of the slope or channel as shown in staple guidelines.

Penetrations

It is important that at the point of all penetrations through a blanket additional anchorage be provided. The most common penetration involves a pipe or manhole around which the blanket can be easily cut to fit closely and subsequently anchored. Penetrations and other structure interferences are notoriously prone to concentrated erosion. Therefore, special attention to detail is necessary when any of these features are encountered.

Repairs

If a repair is required because the blanket has been accidentally damaged, a patch of the same base blanket type should be cut to fit over and sufficiently beyond the damaged area to permit joining to or anchoring through the parent blanket.

Backfilling

Blankets which are installed prior to seeding must be subsequently seeded and, when directed, backfilled with soil. These blankets must be of the blanket type, meaning they must have an open structure to facilitate soil filling. Typically, once seeded, same day backfilling is preferred. Depending on the system design, the cover soil may be a special topsoil or simply general backfill. In either case, consideration must be made for the proper placement of the soil layer to completely fill the blanket without overfilling (which may prevent germination) or causing construction damage.

For Installation Assistance:



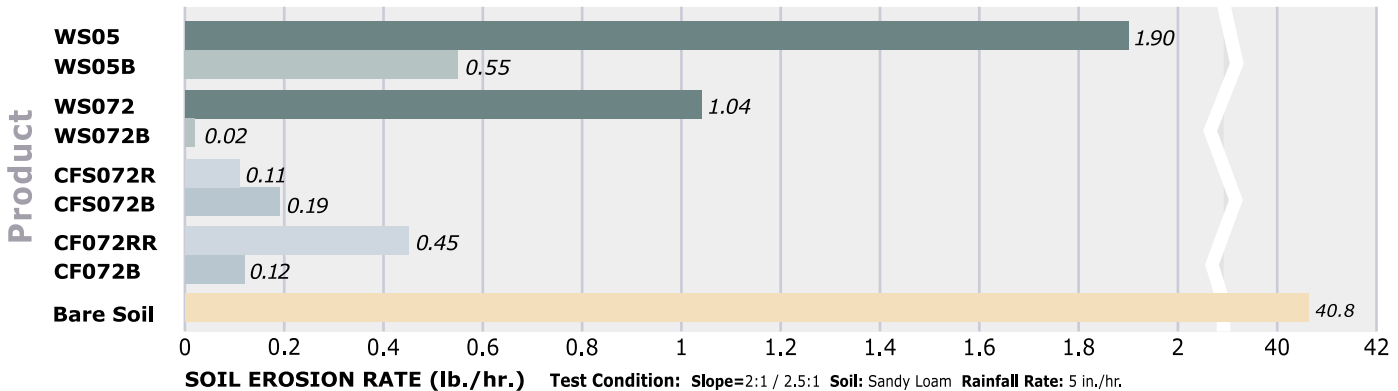
800-929-2184 (760) 348-7600
Fax (760) 348-3097
www.greenfix.com

PROPERTIES

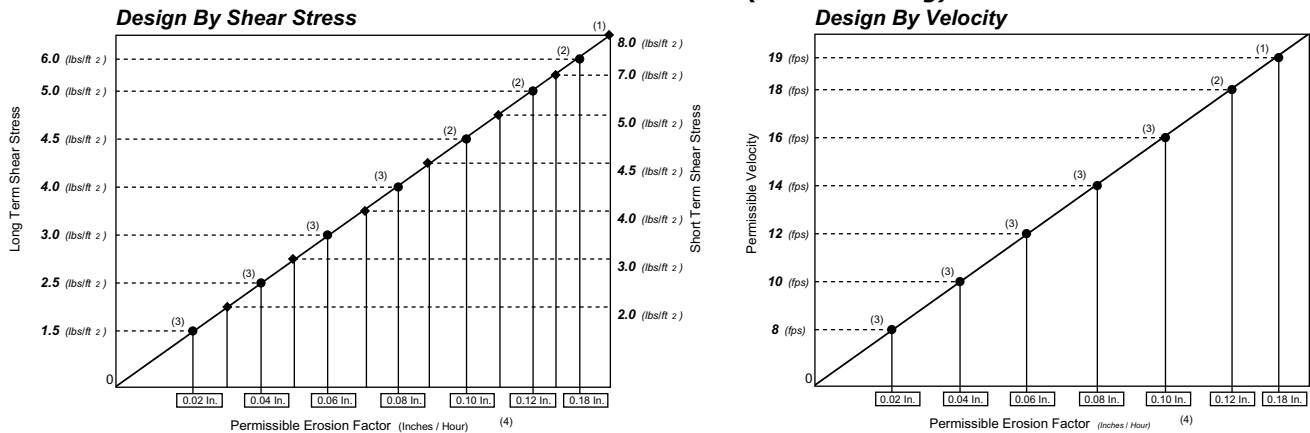
Parameter/Method	WS05	WS05B	WS072	WS072B	CFS072R	CFS072B	CF072RR	CF072B	CFG2000	GFP12	TRINTER
Netting Size (inches sq.) Top	0.625	.50 +/-	0.625	.50 +/-	0.625	.50 +/-	0.625	.50 +/-	.50 X .60	0.625	0.30
Bottom	n/a	n/a	0.625	.50 +/-	0.625	.50 +/-	0.625	.50 +/-	0.625	0.625	0.30
Net Weight (lbs./1000 sq. ft.) Top	1.6	9.3	1.6	9.3	3.0	9.3	3.0	9.3	31.0	3.0	22.5
Bottom	n/a	9.3	1.6	9.3	1.6	9.3	3.0	9.3	3.0	3.0	22.5
Slope Recommendation Derived from lab testing and field applications.	2.5:1or<	2.5:1or<	2:1or<	2:1or<	1:1or<	1:1or<	1:1or> & Channel	1:1or> & Channel	1:1or> & Channel	1:1or> & Channel	1:1or> & Channel
1 ASTM D5199 (mils) Min. Thickness (inches) Min.	350 0.35	350 0.35	430 0.43	430 0.43	380 0.38	430 0.43	300 0.30	300 0.30	320 0.32	280 0.28	500 0.50
1 ASTM 5261 (Avg./lbs./ft. ²) Mass per Unit Area (Avg./grams/m ²)	0.15 735	0.15 722	0.14 690	0.14 690	0.09 476	0.13 676	0.13 662	0.09 440	0.17 833	0.09 690	0.06 340
1 ASTM D5035 (Avg./lbs./ft.) MD Tensile Strength @ Peak TD	73.2 60.0	303.6 339.6	140.4 126	450 555.6	206.4 183.6	496.8 505.2	266.4 234	560.4 548.4	1770 2071	503.2 483.4	314.4 242.4
1 ASTM D5035 (Avg. %) MD Elongation @ Peak TD	10.9 8.7	6.8 2.8	12.4 9.3	3.6 2.7	13.4 9.6	2.1 2.2	13.4 11.1	2.2 2.5	17.1 18.1	25 24	27 20
2 Roughness Coefficient Mannings "n"	0.0165	0.0212	0.0174	0.0173	0.0177	0.0180	0.0159	0.0148	0.026	0.024	0.025
3 Light Penetration ECTC (Avg. %)	35	-	11	-	19	11	8	-	8	5	*
3 Swell - ECTC (Avg. %)	70	-	6	-	25	19	5	-	5	-	-
3 ASTM D1117 (Avg. %) Water Absorption	200	-	365	-	285	81	22	-	22	-	-
3 ASTM D4491 Permittivity (s-1) Permeability (cm/s)	2.0 1.8	- -	4.7 2.5	- -	6.1 2.6	1.8 1.9	5.8 3.6	- -	5.8 3.6	- -	- -
4 Design (C) Factor ASTM D6549 5 Relative (C) Factor - SDSU 10 Yr. Storm Event (ASTM D6549)	0.046 0.03	0.013 0.03	0.025 0.03	0.005 0.03	0.003 0.02	0.005 0.02	0.011 0.001	0.003 0.001	0.011 0.001	0.16 -	* *
4 Max. Permissible Shear (lbs/ft ²) Unvegetated Direct Sheer Value	N/A	N/A	N/A	N/A	3.0	2.5	4.0	3.0	4.5	3.0	6.5

1. Precision Geosynthetic Laboratories 2. Texas Transportation Institute 3. TRI Environmental, Inc. 4. Utah State Water Research Laboratory 5. San Diego State University Soil Erosion Research Laboratory
N/A - Shear stress is a hydraulically applied force not an index property to be used for any type of conformance evaluation of straw fiber blankets.
* Parameter value will vary depending on integrated application (Soil filling, Hydro Mulching, Vegetated, Non-vegetated and Etc.).

SLOPE SOIL EROSION RATE



CFG2000 APPLICATION & DESIGN CHART (Patent Pending)



Test Conditions
2000-2001 Independent University Research Laboratory Testing.
Soil Type - Sandy Loam
High Velocity Flow - Maximum flume velocity & shear.

Legend
● Long Term
◆ Short Term

(1) Max Flume velocity & shear (19.5 fps) - Duration < 2 Hrs.
(2) Long duration test 50 hours minimum - Velocity & shear constant at 18 fps including 2 hour peak flow (19.5 fps).
(3) Short duration test - Velocity & shear increasing every 30 minutes up to 18 fps.
(4) Erosion Factors based on direct measurement of soil loss during 50 hour test - Unvegetated state.