



EROSION CONTROL BLANKET SUPPLIERS

*Costs below are fall 2010 prices.

COMPANY	LOCATION	EOB# <small>(net on both sides of straw)</small>	COST/ROLL/Lin. Ft.	SIZE/ROLL	STAPLES	DELIVERY
ADS 800-733-9554	London	S2	\$0.39 (\$47/roll) call for pricing	7.5' x 120' (100 sq. yd.) 16' roll also available	11 ga (6"x1") 1000 = \$35.50	for cost
Cedar Hill Blankets 740-969-4295 <small>(wattles also available, call for price)</small>	Amanda		\$0.39 (\$44/roll) \$0.39 (\$195/roll)	8' x 112.5' (100 sq. yd.) 8' x 500' (444 sq. yd.)	1000 = \$55 G pins install tool \$25 deposit full refund when return	depends on purchase
JMD 614-866-0452	Whitehall	S150	call for pricing call for pricing	6.67' x 108 (80 sq. yd.) 8' x 112.5 (100 sq. yd.) 16' x 112.5 (200 sq. yd.)	call for pricing will do 9-10 rolls	call for pricing
Meredith Brothers Inc 614-258-4991	Columbus	S2000 (Enviroscape)	\$0.39 (\$44/roll)	8' x 113' (100 sq. yd.)	1000 = \$35	for cost
Mile Tree Lawn & Garden 740-993-4769	Clarksburg		\$0.40 (\$225/roll) call for pricing	8' x 562' (500 sq. yd.) 16' x 450' available	1000 = \$50-\$60	depends on distance and quantity purchased
Nancy's Blankets 740-852-5607 nancysblankets@aol.com <small>(will do installation, call for pricing)</small>	Mt. Sterling	S32	\$0.65* (\$73/roll) \$0.65* (\$365/roll)	16' x 112' (200 sq. yd.) 16' x 562.5' (1000 sq. yd.)	circle top pins 1000 = \$35	for cost depends on distance will install for \$.11-.115/sq. ft. in 24 hours
Ruff Seed Farms 740-969-2600	Amanda		\$0.45-\$0.54 (\$50-\$60/roll)	8.5' x 112' (106 sq. yd.)	1000 = \$40-\$50	give a few days notice
Site Supply Inc 614-443-4545	Columbus		\$2 (\$40/roll)	8' x 112.5' (100 sq. yd.)	1000 = \$38	depends on purchase

This list compiled by Fairfield SWCD is provided as a means for individuals to be aware of matting availability. **FSWCD makes no claims as to product quality. The double net products are recommended over the single nets. Cost-share amounts differ.** Other suppliers interested may be added to the list by calling 740-653-8154.



Natural Resources Conservation Service CONSTRUCTION AND MATERIAL SPECIFICATION

OH-95 GEOTEXTILE

GENERAL

This specification consists of the design and construction requirements for the furnishing and installation of geotextile as shown on the drawings.

SITE PREPARATION

Clear the work area of all timber, roots, vegetation, trash, stones and other items that may puncture the geotextile. Grade the area to the neat lines and grades shown on the drawings. The subgrade must be reasonably uniform without abrupt changes from hard to soft. The upper 12" of the subgrade shall be of uniform material and compacted to a uniform density throughout. All fill material used in the preparation of the subgrade shall be similar to the in-situ material and shall be compacted to the density of the in-situ material (refer to NRCS Ohio Earthfill Construction Specification).

The surface shall be free of muddy conditions and standing or flowing water (unless otherwise shown on the drawings).

MATERIAL QUALITY

Geotextile shall be manufactured from synthetic long chain or continuous polymeric filaments or yarns, having a composition of at least 85 percent by weight of polypropylenes, polyesters or polyamides, polyethylene, polyolefins, or polyvinylidene-chlorides. The geotextile shall be formed into a stable network of filaments or yarns that retain dimensional stability relative to each other.

Ship geotextiles in rolls wrapped with a protective covering to keep out mud, dirt, dust, debris and direct sunlight. Each roll of geotextile shall be clearly marked to identify the brand, type and production run.

The geotextile shall be free of defects, such as holes, tears, and abrasions. The geotextile shall be free of any chemical treatment or coating that significantly reduces its porosity. Fibers shall contain stabilizers, inhibitors, or both to enhance resistance to ultraviolet light. Thread shall be as resistant to ultraviolet light as the geotextile being sewn. Thread used for factory or field sewing shall be of contrasting color to the fabric and made of high strength polypropylene, polyester, or polyamide thread. The fabric shall be inert to commonly encountered chemicals and are resistant to ultraviolet light, heat, hydrocarbons, mildew, rodents and insects.

CLASSIFICATION

Geotextiles are divided into two groups; woven (Table-1) and nonwoven (Table-2). Slit film woven geotextile may not be used except for *temporary* silt fence. Geotextiles for temporary silt fence shall conform to the requirements in Table 3.

Woven Geotextile shall conform to the physical properties listed in Table-1. The woven geotextile shall be manufactured from monofilament yarns that are woven into a uniform pattern with distinct and measurable openings. The geotextile shall be manufactured so that the yarns will retain their relative position with regard to each other. The edges of the fabric shall be hemmed or otherwise finished to prevent the outer yarn from unraveling.

Construction and material specifications are reviewed periodically and updated if needed. To obtain the current version of this specification, contact your Natural Resources Conservation Service State office or visit the Field Office Technical Guide.
USDA is an equal opportunity provider, employer, and lender.

Table 1- Requirements for Woven Geotextiles ^{1/}

Material Property	Requirement
Grab Tensile Strength (ASTM D4632)	180 lb. (min.)
Elongation at Failure (ASTM D4632)	50% (max.)
Trapezoidal Tearing Strength (ASTM D4533)	60 lb. (min.)
Ultraviolet Stability (retained strength) (ASTM D4355)	70% (min.)
Puncture Strength (ASTM D6241)	371 lb. (min.)
Apparent Opening Size (AOS) (ASTM D4751) ^{2/}	#100 (0.15 mm) min. to #40 (0.42 mm) max.
Permittivity (ASTM D4491)	0.05 sec ⁻¹ (min.)

^{1/} All values are minimum average roll values (MARV) in the weakest principal direction, unless otherwise noted.

^{2/} Maximum average roll value.

Nonwoven Geotextile shall conform to the physical properties listed in Table-2. Nonwoven geotextile shall be manufactured from randomly oriented fibers that have been mechanically bonded together by the needle-punched process. In addition, one side may be slightly heat bonded.

Table 2- Requirements for Nonwoven Geotextiles ^{1/}

Material Property	Requirement
Grab Tensile Strength (ASTM D4632)	120 lb. (min.)
Elongation at Failure (ASTM D4632)	50% (min.)
Trapezoidal Tearing Strength (ASTM D4533)	50 lb. (min.)
Ultraviolet Stability (retained strength) (ASTM D4355)	70% (min.)
Puncture Strength (ASTM D6241)	309 lb. (min.)
Apparent Opening Size (AOS) (ASTM D4751) ^{2/}	#100 (0.15 mm) min. to #40 (0.42 mm) max.
Permittivity (ASTM D4491)	0.70 sec ⁻¹ (min.)

^{1/} All values are minimum average roll values (MARV) in the weakest principal direction, unless otherwise noted.

^{2/} Maximum average roll value.

Table 3- Requirements for Temporary Silt Fence ^{1/}

Material Property			Requirement		
Property	Test Method (ASTM)	Units	Supported Silt Fence ^{2/}	Unsupported Silt Fence ^{2/}	
				Woven Geotextile (Elongation < 50%) ^{3/}	Nonwoven Geotextile (Elongation ≥ 50%) ^{3/}
Maximum Post Spacing		ft	4	6.5	4
Grab Tensile Strength:					
Machine Direction	D4632	lbs	90		124
X-Machine Direction	D4632	lbs	90		101
Permittivity	D4491	sec ⁻¹	0.05		0.05
Apparent Opening Size (AOS) ^{4/}	D4751	mm	0.60		0.60
Ultraviolet Stability (retained strength)	D4335	%	70% after 500 hours of exposure		70% after 500 hours of exposure

^{1/} All values are minimum average roll values (MARV) in the weakest principal direction, unless otherwise noted.

^{2/} Silt fence support shall consist of 14-gage steel wire with a mesh spacing of 6 inches each way or prefabricated polymeric mesh of equivalent strength.

^{3/} As measured in accordance with ASTM D4632.

^{4/} Maximum average roll value.

STORAGE

Prior to use, the geotextile shall be stored in a clean dry place, out of direct sunlight, not subject to extremes of either hot or cold, and with the manufacturer's protective cover in place. Receiving, storage, and handling at the job site shall be in accordance with the requirements in ASTM D4873.

INSTALLATION

Place the geotextile on the approved prepared surface at the locations and in accordance with the details shown on the drawings. Geotextile shall be placed in accordance with the following applicable specification according to the desired use:

Slope Protection— Geotextile shall not be placed until it can be anchored and protected with the specified covering within 48 hours or protected from exposure to ultraviolet light. In no case shall material be dropped on uncovered geotextile from a height of more than 3 feet.

Subsurface Drains— Geotextile shall not be placed until drainfill or other material can be used to provide cover within the same working day. Drainfill material shall be placed in a manner that prevents damage to the geotextile. In no case shall material be dropped on uncovered geotextile from a height of more than 5 feet.

Road Stabilization— Geotextile shall be unrolled in a direction parallel to the roadway centerline in a loose manner permitting conformation to the surface irregularities when the roadway fill material is placed on its surface. In no case shall material be dropped on uncovered geotextile from a height of more than 5 feet. Unless otherwise specified, the minimum overlap of geotextile panels joined without sewing shall be 24 inches. The geotextile may be temporarily secured with pins recommended or provided by the manufacturer, but they shall be removed before the permanent covering material is placed.

Install geotextile according to manufacturer's recommendations. In-lieu of manufacturer's recommendations, use the following placement procedures after a satisfactory site preparation inspection:

- Geotextile shall be unrolled along the placement area and loosely laid (not stretched) in such a manner that it will conform to the surface irregularities when material is placed on or against it. The geotextile may be folded and overlapped to permit proper placement in the designated area.
- Geotextile shall be joined by overlapping a minimum of 18 inches (unless otherwise specified), and secured against the underlying foundation material. Securing pins, when used, shall be approved and provided by the geotextile manufacturer and shall be placed along the edge of the panel or roll material to adequately hold it in place during installation. Pins shall be steel or fiberglass formed as a "U", "L", or "T" shape or contain "ears" to prevent total penetration through the geotextile. Steel washers shall be provided on all but the "U" shaped pins. The upstream or upslope geotextile shall overlap the abutting downslope geotextile. At vertical laps, securing pins shall be inserted through both layers along a line through approximately the midpoint of the overlap. At horizontal laps and across slope laps, securing pins shall be inserted through the bottom layer only. Securing pins shall be placed along a line approximately 2 inches in from the edge of the placed geotextile at intervals not exceeding 12 feet unless otherwise specified. Additional pins shall be installed as necessary and where appropriate to prevent any undue slippage or movement of the geotextile. Use only the minimum number of securing pins necessary. Securing pins are to be left in place unless otherwise specified.
- Should the geotextile be torn or punctured or the overlaps disturbed as evidenced by visible geotextile damage, subgrade pumping, intrusion, or grade distortion, the backfill around the damaged or displaced area shall be removed and restored to the original approved condition. The repair shall consist of a patch of the same type of geotextile being used overlaying the existing geotextile. The patch shall extend a minimum of 2 feet from the edge of any damaged area.