

PROPOSED DRAFT
AUGUST 2014

713.12 Rolled Erosion Control Products

Furnish rolled erosion control products, listed on the Department's QPL, as specified in the contract and meeting the requirements of this Subsection. If required, furnish natural fiber netting consisting of woven 100% biodegradable natural fibers such as coir, jute or sisal. Furnish blankets designed to stabilize and hold previously applied mulch or compost on slopes as well as newly constructed stream banks and slopes.

Natural fiber netting is available in various fiber types, strengths, weights and mesh-opening sizes.

A. Erosion Control Blankets. Furnish double netted products for all types.

1. **Short Term Blanket.** An erosion control blanket composed of 100% straw or 100% excelsior.
2. **Long Term Blanket.** An erosion control blanket composed of 70% straw and 30% coconut or 100% excelsior.
3. **High Performance Blanket.** An erosion control blanket composed of 100% coconut or 100% excelsior.

B. Permanent Turf Reinforcement Mat.

1. **Synthetic Fiber Matrix.** Furnish a web of mechanically bonded synthetic fibers that are entangled to form a strong and dimensionally stable mat. Place fibers between 2 or 3 high-strength, biaxially oriented nets mechanically bound together by stitching with polyolefin thread. The netting material must be resistant to biological, chemical, and ultra-violet degradation.
2. **Natural Fiber Matrix.** Furnish a natural fiber matrix constructed of two or three nets of heavy-duty polypropylene, polyethylene or nylon. The internal matrix fiber is composed of a natural fiber such as curled wood, straw or coconut.

**TABLE 713-4
ROLLED EROSION CONTROL**

Type	Mass ¹ (lbs/Yd)	Tensile Strength – MD ² (lbs/ft)	Min. Shear Strength (lbs/ft ²)
Short term	0.5	190	1.70 ³
Long term	0.5	190	2.0 ³
High performance	0.6	190	2.25 ³
TRM – natural fiber matrix	0.8	500	10.0 ⁴
TRM – synthetic fiber matrix	0.5	300	12.0 ⁴

Notes:

1. Combined fiber matrix and netting
2. Machine direct

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Deleted: An erosion control blanket composed of processed natural fibers mechanically bound together with 100% biodegradable threading and natural fiber nettings to form a continuous matrix. The fiber matrix can be composed of straw, coir, cotton, wool, curled wood or other approved product. Thread and netting material must be non-synthetic, generally of plied coir, jute or cotton. Meet the requirements for Type II blankets as specified in Table 713-4.

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<#>Processed slow degrading natural or polymer fibers mechanically-bound together between two slow degrading synthetic or natural fiber nettings to form a continuous matrix.¶
An open weave textile composed of processed slow degrading natural or polymer yarns or twines woven into a continuous matrix. Meet the requirements for Type III-B blanket as specified in Table 713-4.

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TEMPORARY ROLLED EROSION CONTROL¶
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3. Minimum shear stress the rolled erosion control product (un-vegetated) can sustain without physical damage or excess erosion (>1/2-inch soil loss) during a 30-minute flow event per ASTM D6460.
4. Minimum shear stress the TRM (fully vegetated) can sustain without physical damage or excess erosion (>1/2-inch soil loss) during a 30-minute flow event per ASTM D6460.

NO COMMENTS RECEIVED

FINAL DRAFT
EFFECTIVE DECEMBER 11, 2014

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- B. Permanent Turf Reinforcement Mat.**
 1. **Synthetic Fiber Matrix.** Furnish a web of mechanically bonded synthetic fibers that are entangled to form a strong and dimensionally stable mat. Place fibers between 2 or 3 high-strength, biaxially oriented nets mechanically bound together by stitching with polyolefin thread. The netting material must be resistant to biological, chemical, and ultra-violet degradation.
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ROLLED EROSION CONTROL**

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4. Minimum shear stress the TRM (fully vegetated) can sustain without physical damage or excess erosion (>1/2-inch soil loss) during a 30-minute flow event per ASTM D6460.