

SECTION 228 NYLON EROSION CONTROL MAT

228.01. DESCRIPTION.

This work shall consist of furnishing and installing a nylon erosion control mat for ditch lining and slope protection in accordance with these Specifications and within reasonably close conformity with the lines and dimensions shown on the Plans or established by the Engineer.

228.02. MATERIALS.

Materials shall meet the requirements specified in the following Subsections of Section 700 Materials:

Nylon Erosion Control Mat	735.05(g)
Seed	735.04
Mat Fasteners	735.06 (b)

228.03. EQUIPMENT.

Furnish equipment required for satisfactory progress and completion of acceptable work in accordance with Subsection 108.06.

228.04. CONSTRUCTION METHODS

(a) Placing Mat.

- (1) **General.** Before protecting surfaces with nylon erosion control mat, grade, shape, and finish them so that the surfaces are stable, firm, and free of rocks or obstructions which would prevent the mat from lying in direct contact with the soil surface.
- (2) **Ditches.**
 - 2.1 Use three widths of mat for the standard ditch placement. Place the center width first, then the two side widths, using lap joints of 3 inches (75 mm).
 - 2.2 At the terminal ends of the ditch, bury the mat at least 12 inches (300 mm) vertically in an anchor slot dug into the soil. Secure the mat in the anchor slot by fasteners before backfilling the slot. Then compact the backfilled soil firmly in the anchor slot.
 - 2.3 On ditches with grades exceeding 6 percent, install a 6 inch (150 mm) deep check slot every 25 feet (7.6 m) and secure the mat in the check slots by fasteners.
 - 2.4 Seeding, Ditches Only. When mats are to be installed and approved during the normal "out of planting season," uniformly seed common Bermuda grass seed at the rate of 6 pounds per acre (6.7 kg per hectare) on the exposed areas of soil beneath the mat. During the "planting season," complete application of the specified plant material (sodding, sprigging, or seeding) prior to placing the mat in the ditches.
- (3) **Slopes.**
 - 3.1 When placing mat on slopes, bury the top end at least 12 inches (300 mm) vertically in an upper anchor slot and the bottom end at least 6 inches (150 mm) in the lower anchor slot. Secure the mat in the anchor slots by fasteners before backfilling the slot. Firmly compact the backfill soil in the anchor slots.

NOTE: Lower anchor slots cannot be secured when the ditch is lined with concrete or other types of materials.

- 3.2 Install the mat in a manner that will allow the downgrade edge to overlap the previously laid strip. Use lap joints of 3 inches (75 mm).
- 3.3 On slopes exceeding 60 feet (18 m) in slope length, install a 6 inch (150 mm) deep check slot every 40 feet (12 m), and secure the mat in the check slot by fasteners.
- 3.4 During the “planting season,” complete application of the specified plant material before placing the mat on the slopes. During the “out of planting season,” place the mat as temporary protection until the specified plant material can be applied during the proper season.

(4) End of Roll. Overlap the ends of the roll of the mat 3 feet (0.9 m) with the upslope end on top.

- (b) **Fastening the Mat.** The mat must be held firmly in place with fasteners, which must be pressed firmly against the mat and securely driven into the underlying soil. The normal spacing for fastening the mat shall be 3 feet (0.9 m) along the edge lap joint and down the center of each width of mat. The mat shall also be fastened across the width in anchor slots, check slots, and end overlaps on 18 inches (450 mm) centers. Offset the center fasteners 18 inches (450 mm) from the edge fasteners.
- (c) **Seeding.** When seeding is required in ditches due to work being done during the “out of planting season,” use either seeding method ‘A’ to apply it, as specified in Subsection 232.04(b), or use hand broadcasting.
- (d) **Maintenance.** Maintain the area properly until the entire project has been completed—including the refilling of washed out areas, reseeding, and replacing mat.

228.05. METHOD OF MEASUREMENT.

Nylon erosion control mat installed in place, including the seeding, shall be measured by the square yard (square meter) of the area covered.

228.06. BASIS OF PAYMENT.

Accepted quantities, measured as provided above, will be paid for at the contract unit price as follows:

NYLON EROSION CONTROL MAT SQUARE YARD (SQUARE METER)

Such payment shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.