
Special Specification 2005

Filter Fabric



1. DESCRIPTION

Furnish and place filter fabric (geotextiles) consisting of a single layer of approved fabric, in accordance with the details shown on the plans and this specification. This item is intended to be placed on top of a subgrade in order to separate the fine-graded or clayey subgrade from a much coarser base material.

2. MATERIALS

Provide fabric meeting the requirements of Departmental Material Specification DMS-6200, "Filter Fabric," of the type shown on the plans.

3. CONSTRUCTION

Prepare the existing subgrade and embankment as indicated on the plans or as directed. Set string lines for alignment if directed. Install geotextiles in accordance with the lines and grades as shown on the plans. Any defects, rips, holes, flaws, or damage to the material may be cause for rejection. Roll the geotextile onto the prepared existing subgrade and pull taut to remove wrinkles. Place geotextile in one sheet to the greatest extent possible or as directed by the Engineer. Overlap geotextile panels on all exposed edges 8 ± 2 in. Place a minimum of 200 sq. ft. of geotextile at locations requiring odd shapes. Cut the geotextile to fit around utility castings and when contouring for other penetrations and gradual curvatures. Keep the fabric material free from tension, stress, folds, wrinkles, or creases.

Free edge of the geotextile should extend 4 in. or more beyond the base course and into a location that facilitates drainage. Secure edges by staking or pinning at 6-ft. intervals if the geotextile edges are displaced because of natural or induced wind forces. Use geotextile manufacturer's recommendation for securing edges. Exposure of geotextiles to the elements between laydown and cover shall be kept to a minimum. In any case, exposure shall not exceed 15 days.

Store the geotextiles in accordance with manufacturer's recommendations. Do not remove it from its protective wrapping until ready for use.

Do not allow traffic to be in direct contact with the geotextiles except for the equipment used to place, spread, and grade the new embankment material. Turn equipment gradually and keep turning movements to a minimum to avoid damage to geotextiles.

Repair any wind damage, traffic damage, or damage caused by any type precipitation at no additional cost to the Department.

The Engineer may suspend work if attempts at securing the geotextile are unsuccessful. Remove and replace damaged or excessively deformed areas. For punctured, torn, or damaged geotextile, provide a minimum area of 200 sq. ft. of replacement material.

Lap repair areas a minimum of 18 in. in all directions. Repair excessively deformed materials underlying the geotextile as directed.

For construction procedures not addressed, install geotextile using the manufacturer's recommended installation procedures or as directed.

4. MEASUREMENT

This Item will be measured by the square yard based on the calculated quantity shown on the plans with no allowance made for overlapping at joints or for material overlaps resulting from material repair operations.

This is a plans quantity measurement Item. The quantity to be paid for is shown in the proposal unless modified by Article 9.2, "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Filter Fabric" of the type specified. This price is full compensation for furnishing, preparing, hauling, and placing materials including labor, materials, freight, tools, equipment, and incidentals.