

**GEOTEXTILE**

1. APPLICABILITY

This specification is applicable for the installation of both woven and nonwoven geotextiles used for purposes of slope protection, subsurface drains and stabilization of soils.

2. MATERIAL SPECIFICATIONS

Material Specification 592 is complementary to Construction Specification 95.

3. ITEMS TO BE INCLUDED IN CONTRACT SPECIFICATIONS AND DRAWINGS

- a. The purpose or use of the geotextile (i.e., slope protection) and the selection of Class I, II, III or IV, as appropriate, woven or nonwoven, (See Design Note 24).
- b. The range of apparent opening size (AOS) for woven geotextiles. Any increase or change from those parameters shown in Tables 1 and 2 that are desired and based on specific design data.
- c. When specified, size and configuration of panels for payment (e.g., Method 2). Note: A panel represents pieces from a roll that have been seamed together to create the specified size and shape.
- d. Details of panel joining and splicing, i.e., seaming, overlap or folding (Method 1 or Method 2 in Section 5).
- e. The required roll width, when necessary.
- f. Details of panel placement, orientation and anchorage, when necessary. Perimeter and toe anchorage details, as necessary. When the use of pins is acceptable as temporary anchorage, so specify.
- g. Requirements of cushioning or bedding materials used to cover the geotextile to protect against damage during placement of surface material, such as rock riprap.
- h. Special installation requirements.
- i. Ultraviolet exposure requirements for conditions where the potential exposure is considered severe (use 500 hours). The 150 hours requirement listed in Tables 1 and 2 are recommended for normal exposure conditions.
- j. In Section 6 for measurement when Method 1 or 2 is selected, note the method of measurement being horizontal or slope measurement in determining surface area of the geotextile for payment purposes.

#### 4. DISCUSSION OF METHODS

##### a. Section 5, Placement.

- (1) Method 1 is intended to be used when the primary use of the geotextile is to function as a filter and holes or "holidays" from anchoring pins might compromise the integrity of the installation.
- (2) Method 2 is intended to be used when the primary use of the geotextile is to function as a bedding and as a separator of materials. Seepage may be present but the potential for piping in the base soil materials is not a concern.

May also need to specify whether a., b., or c applies.

##### b. Section 6, Measurement and Payment.

- (1) Method 1 is intended for use when the geotextile is measured for payment based on the total surface area covered. The additional lap material needed for joining is not measured for payment.
- (2) Method 2 is intended for use when the geotextile is measured for payment based on the roll width and length used to cover the area. The measurement includes that amount needed for overlap and joining panels.
- (3) Method 3 is intended for use when the quantity will not be measured for payment and there is not likely to be any change in quantity.

When specifications are prepared using electronic procedures and all but one method are deleted for use in the contract specification, delete, "All Methods The following provisions apply to all methods of measurement and payment." and left justify the remaining text.