DMS - 6200
FILTER FABRIC

EFFECTIVE DATE: MAY 2010

6200.1. Description. This Specification governs the sampling, testing, and material requirements of filter fabrics.

6200.2. Units of Measurements. The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.

6200.3. Definitions.

A. Filter Fabric—a special fabric usually used in drainage applications to allow water flow without clogging or binding by soil particles.

1. Type 1—Type 1 is a standard weight fabric for retaining walls and soil separation.

2. Type 2—Type 2 is a high strength fabric for rock riprap or other severe use.

6200.4. Material Producer List. The Materials and Pavements Section of the Construction Division (CST/M&P) maintains a material producer list (MPL) of products conforming to this Specification. Materials on the MPL, entitled “Silt Fence, Filter Fabric, and Fabric Underseal,” require no further testing unless deemed necessary by the Project Engineer or CST/M&P. Refer to DMS-6320 for further details on qualifying for the Quality Monitoring Program and obtaining a place on the MPL.

6200.5. Sampling and Testing. Sample in accordance with Tex-735-I. Perform testing in accordance with the test methods listed in Table 1.

6200.6. Material Requirements.

A. General Requirements. Both types of filter fabric have the following qualities:

- The fabric consists exclusively of manmade thermoplastic fibers, is a non-woven geotextile fabric, and forms a mat of uniform quality.

- Fabric fibers are continuous and random throughout the fabric.

- The fabric is mildew resistant and rot-proof, and it is satisfactory for use in a wet soil and aggregate environment.

B. Physical Requirements. The fabric must conform to the requirements listed in Table 1 when tested in accordance with the test methods specified.
Table 1  
Filter Fabric Requirements

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Test Method</th>
<th>Type 1</th>
<th>Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Weight, on an ambient...</td>
<td>Tex-616-J</td>
<td>136.0 g/m² (4 oz/yd²), minimum</td>
<td>203.0 g/m² (6 oz/yd²), minimum</td>
</tr>
<tr>
<td>Permittivity 1/sec.</td>
<td>ASTM D 4491</td>
<td>1.0, min</td>
<td>0.5, min</td>
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<tr>
<td>Tensile Strength, N</td>
<td>ASTM D 4632</td>
<td>445 N (100 lbs.) minimum</td>
<td>890 N (200 lbs.) minimum</td>
</tr>
<tr>
<td>Apparent Opening Size</td>
<td>ASTM D 4751</td>
<td>70-100</td>
<td>80-120</td>
</tr>
<tr>
<td>Elongation at yield, %</td>
<td>ASTM D 4632</td>
<td>20-100</td>
<td>20-100</td>
</tr>
<tr>
<td>Trapezoidal Tear, N</td>
<td>ASTM D 4533</td>
<td>156 N (35 lbs.) minimum</td>
<td>334 N (75 lbs.) minimum</td>
</tr>
</tbody>
</table>

6200.7. **Packaging.** Provide fabric in the length and width specified on the plans, specified in the purchase order awarded by the State or as approved.

Wind fabric onto suitable cylindrical forms or cores to aid in handling and unrolling.

Package fabric individually in a suitable container to protect the geotextile from damage due to ultraviolet light and moisture during normal storage and handling.

6200.8. **Identification.** Identify each roll with a tag or label affixed to the outside of the roll on one end. List the following information on the tag or label:

- Unique roll number, serially designated;
- Lot number or control numbers, if any;
- Name of fabric producer;
- Style or catalog designation of the fabric, if any;
- Roll width in meters (inches); and
- Roll length in meters (yards).

6200.9. **Archived Versions.** Archived versions are available.