WSDOT Test Method SOP 914

Practice for Sampling of Geosynthetic Material for Testing

1. Scope
   a. This practice covers the procedure for sampling Geosynthetic Material for testing.

2. Definitions
   a. Geogrid – A regular network of integrally connected polymer tensile elements with an aperture geometry sufficient to permit mechanical interlock with the surrounding backfill.
   b. Geosynthetic Material – general term which includes all geotextiles, geogrids, and prefabricated drainage mats.
   c. Geotextile – Any permeable textile used with foundation, soil, rock, earth, or any other geotechnical material, as an integral part of a manmade product, structure, or system.
   d. Lot – All geosynthetic material rolls within a consignment (i.e., all rolls sent to the project site) which were manufactured at the same manufacturing plant having the same product name and specifications, style, or physical characteristics of a particular geosynthetic material product.
   e. Lot Sample – Sample(s) from one or more geosynthetic material rolls taken at random to represent an acceptance sampling lot and used as a source of laboratory samples.
   f. Production Unit – As referred to in this practice, it shall be considered to be synonymous with the geosynthetic material roll as shipped by the manufacturer. Two or more geosynthetic material rolls joined together by sewn seams shall be considered as separate rolls.
   g. Minimum Average Roll Value – The test results of any sampled roll in a lot shall meet or exceed the minimum values specified.

3. Significance and Use
   a. Sampling is an important part of testing and the sampler should make every effort to obtain samples that will show the nature and condition of the materials they represent.
   b. This sampling procedure will provide a representation of the lot which is adequate to establish minimum average roll values as defined by this practice.

4. Procedure
   a. Divide the shipment or consignment into lots as defined in 2.d.
   b. Determine the number of rolls in the shipment or consignment to be sampled using Table 1.
### Table 1  Number of Rolls to be Selected as Lot Sample

<table>
<thead>
<tr>
<th>Number of Rolls in Lot</th>
<th>Number of Rolls to be Selected for Lot Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 24</td>
<td>1</td>
</tr>
<tr>
<td>25 to 49</td>
<td>2</td>
</tr>
<tr>
<td>50 to 99</td>
<td>3</td>
</tr>
<tr>
<td>100 to 125</td>
<td>5</td>
</tr>
<tr>
<td>125 to 216</td>
<td>6</td>
</tr>
<tr>
<td>217 to 343</td>
<td>7</td>
</tr>
<tr>
<td>344 to 512</td>
<td>8</td>
</tr>
<tr>
<td>513 to 729</td>
<td>9</td>
</tr>
<tr>
<td>730 to 1,000</td>
<td>10</td>
</tr>
</tbody>
</table>

**c. Laboratory sample selection.**

1. Obtain a laboratory sample from each roll in the Lot Sample. The sample shall be a minimum of 6 feet long by the full width of the geosynthetic material roll with a total area greater than or equal to 6.0 yd².

2. The laboratory sample should not be taken from the outer wrap of the roll nor the inner wrap of the core (i.e., do not take the sample from the very ends of the roll).

3. Protect the sample from exposure to Ultraviolet light.

### 5. Sample Submittal

a. All geotextile samples submitted to the State Material Laboratory are to be prepared and shipped as follows:

   Roll sample around a 4 in diameter minimum, tube such as PCV pipe or cardboard mailing tube and wrap to protect sample from shipping damage and ultraviolet light (UV) exposure.

b. If sample is for Acceptance of Lots used on project, the following information must be submitted with the sample:

1. Manufacturer's name and current address.

2. Full product name.

3. Roll number(s).

4. Proposed use(s).

5. Certified test results from the manufacturer.

6. The Lot Number being submitted for acceptance. In lieu of a manufacturer provided Lot Number, the Bill of Lading Number can be used.

Testing by the State Materials Laboratory will not begin until all of the required information is received.