

# **ALERT**

**Changes to Geotextiles & Geosynthetics  
New requirements as of January 1st, 2016**

**See Specifications below**

## **QPL 36 GEOTEXTILES & GEOSYNTHETICS**

### **SECTION A: GEOTEXTILES & GEOSYNTHETICS (TYPE I, II, III & IV)**

#### **PROCEDURES**

##### **GENERAL**

This evaluation procedure outlines the Department's approval process for Geotextiles and Geosynthetics. See Section B for Geotextiles and Geosynthetics used for Standard Drawings.

##### **SPECIFICATIONS**

740.00 Geosynthetics  
921.12 Geotextile and Geosynthetic Material  
M 288 Geotextile Specification for Highway Applications  
GTX-01 NTPEP Work Plan for Evaluation of Geotextiles

##### **PROCEDURES**

The Tennessee Department of Transportation will use the National Transportation Product Evaluation Program's (NTPEP) National Audit Program (NAP) in its approval process. Manufacturers and Private Labelers will be required to submit to the GTX audit program every year.

TDOT will use the audit results to determine approval status. NTPEP Compliance with M 288, a review of Corrective Action Reports, and product conformance test results will be considered in the evaluation.

TDOT has four classifications of Geotextile covered by this QPL:

<b><u>Classification</u></b>	<b><u>Specification</u></b>
<b>Geotextile (Type I)</b>	AASHTO M 288 Subsurface Drainage, Tables 1 and 2, Class 2 with 15% to 50% of in situ soil passing 0.075 mm.
<b>Geotextile (Type II)</b>	AASHTO M 288 Temporary Silt Fence Property, Table 7, Unsupported Silt Fence
<b>Geotextile (Type III)</b>	AASHTO M 288 Erosion Control, Tables 1 and 6 with 15% to 50% of in situ soil passing 0.075 mm.
<b>Geotextile (Type IV)</b>	AASHTO M 288 Stabilization, Table 1 and 5, Class 1 with an elongation less than 50%.

TDOT Classification will be based on NTPEP reported MARV values. These MARV values will be verified by product conformance testing conducted by NTPEP every 3 years.

**LIST 36. SECTION A: GEOTEXTILES & GEOSYNTHETICS (TYPE I, II, III & IV)**  
**PROCEDURES CONT.**

Classification for Private Labeler products will be based on the Prime Manufacturer's MARV values. Private Label product lines will also be verified by product conformance testing of the lightest weight and two other products within the line, every three years.

TDOT reserves the right to perform the same conformance testing on any product supplied to a TDOT project and will make NTPEP aware of the results of this testing.

Approval for this list will be re-examined every year and if a Prime Manufacturer is removed from this list all Private Label products supplied by the Prime Manufacturer will also be removed.

Every Manufacturer and Supplier will be required to send in a sample for each product with their printed manufacturing plant or manufacturing plant ID code

**GEOTEXTILES & GEOSYNTHETICS (TYPE I)**

**LIST 36: GOETEXTILES & GEOSYNTHETICS (TYPE I)**  
**MATERIAL CODE: 918.27.043**

\* Legend: SF- Slit film; MF – Monofilament; C – Combination; HB – Heatbonded; NP – Needleponched; W – Woven; NW – Nonwoven

**GEOTEXTILES & GEOSYNTHETICS (TYPE II)**

**LIST 36: GOETEXTILES & GEOSYNTHETICS (TYPE II)**  
**MATERIAL CODE: 918.27.044**

\* Legend: SF- Slit film; MF – Monofilament; C – Combination; HB – Heatbonded; NP – Needleponched; W – Woven; NW - Nonwoven

**GEOTEXTILES & GEOSYNTHETICS (TYPE III)**

**LIST 36: GOETEXTILES & GEOSYNTHETICS (TYPE III)**  
**MATERIAL CODE: 918.27.045**

\* Legend: SF- Slit film; MF – Monofilament; C – Combination; HB – Heatbonded; NP – Needleponched; W – Woven; NW - Nonwoven

**GEOTEXTILES & GEOSYNTHETICS (TYPE IV)**

**LIST 36: GOETEXTILES & GEOSYNTHETICS (TYPE IV)**  
**MATERIAL CODE: 918.27.046**

\* Legend: SF- Slit film; MF – Monofilament; C – Combination; HB – Heatbonded; NP – Needleponched; W – Woven; NW - Nonwoven

## **SECTION B: GEOTEXTILES & GEOSYNTHETICS FOR USE IN STANDARD DRAWINGS**

### **PROCEDURES**

#### **GENERAL**

This evaluation procedure outlines the Department's approval process for Geotextiles and Geosynthetics used for Standard Drawings.

#### **SPECIFICATIONS**

740.01 Geotextiles and Geosynthetics

FILTER BARRIER (EC-STR-3A) & TEMPORARY SILT FENCE (EC-STR-3B)

TEMPORARY SILT FENCE WITH BACKING (EC-STR-3C)

ENHANCED SILT FABRIC (EC-STR-3D)

#### **PROCEDURES**

The products for each of the sections have been pre qualified for use. The products on this list must meet the material requirements set forth in the standard drawings. Upon any change of the product the manufacturer must submit the changes for approval and placement on the Qualified Products List.

### **SECTION B: TEMPORARY FILTER BARRIER (EC-STR-3A) & TEMPORARY SILT FENCE (EC-STR-3B)**

#### **LIST 36. SECTION B: TEMPORARY FILTER BARRIER (EC-STR-3A) & TEMPORARY SILT FENCE (EC-STR-3B)**

\* Legend: SF- Slit film; MF – Monofilament; C – Combination; HB – Heatbonded; NP – Needlepunched; W – Woven; NW - Nonwoven

### **. SECTION: B: TEMPORARY SILT FENCE WITH BACKING (EC-STR- 3C)**

## **LIST 36. SECTION B: TEMPORARY SILT FENCE WITH BACKING (EC-STR-3C)**

\* Legend: SF- Slit film; MF – Monofilament; C – Combination; HB – Heatbonded; NP – Needlepunched; W – Woven; NW – Nonwoven

### **SECTION: B: ENHANCED SILT FABRIC (EC-STR-3D)**

## **LIST 36. SECTION B: ENHANCED SILT FABRIC (EC-STR-3D)**

\* Legend: SF- Slit film; MF – Monofilament; C – Combination; HB – Heatbonded; NP – Needlepunched; W – Woven; NW – Nonwoven

### **SECTION B: TEMPORARY SEDIMENT FILTER BAGS (EC-STR-2)**

## **LIST 36. SECTION B: TEMPORARY SEDIMENT FILTER BAGS (EC-STR-2)**

\* Legend: SF- Slit film; MF – Monofilament; C – Combination; HB – Heatbonded; NP – Needlepunched; W – Woven; NW – Nonwoven

### **SECTION C: GEOGRIDS FOR REINFORCED SOIL SLOPES**

#### **PROCEDURES**

##### **GENERAL**

This evaluation procedure outlines the Department's approval process for Geotextiles and Geosynthetics for use with Reinforced Soil Slopes (RSS)

##### **SPECIFICATIONS**

740.00 Geosynthetics

921.12 Geotextile and Geosynthetic Material

SP205RSS Special Provision Regarding Reinforced Soil Slopes

Contract Plans Soils Sheets for Reinforced Soil Slopes

AASHTO R-69 Standard Practice for Determination of Long-Term Strength for Geosynthetic Reinforcement

NTPEP REGEO Workplan for Evaluation of Geosynthetic Reinforcement for Walls and Fills

##### **PROCEDURES**

The Tennessee Department of Transportation will use the National Transportation Product Evaluation Program's (NTPEP) Evaluation of Geosynthetic Reinforcement for Walls and Fills (REGEO) in its approval process.

Manufacturers and Private Labelers will be required to submit to the REGEO evaluation before being considered for inclusion on this list.

TDOT will use the NTPEP evaluation results to classify Geogrids by their Long-Term Design Strength.

TDOT has four classifications of Geogrids as specified in SP205RSS.

## **Item Numbers**

### **GEOGRIDS FOR REINFORCED SOIL SLOPES**

<b>740-07.03</b>	<b>GEOGRID REINFORCEMENT TYPE 1</b>	<b>S.Y.</b>
<b>740-07.04</b>	<b>GEOGRID REINFORCEMENT TYPE 2</b>	<b>S.Y.</b>
<b>740-07.05</b>	<b>GEOGRID REINFORCEMENT TYPE 3</b>	<b>S.Y.</b>
<b>740-07.06</b>	<b>GEOGRID REINFORCEMENT TYPE 4</b>	<b>S.Y.</b>



