DS-23017 (New)



DEVELOPMENTAL SPECIFICATIONS FOR PAVEMENT INTERLAYER GEOTEXTILE FOR PCC OVERLAYS

Effective Date October 17, 2023

THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

23017.01 DESCRIPTION.

Place pavement interlayer geotextile as shown on the plans.

23017.02 MATERIALS.

A. Pavement Interlayer Geotextile.

Provide a pavement interlayer meeting AASHTO M 288, except as modified below:

Table DS-23017.02-1: Pavement Interlayer Geotextile Properties		
Property	Requirement	Test Method
Fabric Type	Non-woven Geotextile, no thermal treatment	EN 13249, Annex F
Mass per unit area	≥13.3 oz/sq.yd and ≤16.2 oz/sq.yd	ASTM D 5261
Thickness under load (pressure)	0.29 psi: ≥ 0.12 inches 2.9 psi: ≥ 0.10 inches 29 psi: ≥ 0.04 inches	ASTM D 5199, modified under loads of 0.29, 2.9, and 29 psi
Tensile strength	≥ 685 lb/ft	ASTM D 4595
Maximum elongation	≤ 130%	ASTM D 4595
Water permeability in normal direction under load (pressure)	≥ 3.3×10 ⁻⁴ ft/s[under pressure of 2.9 psi]	ASTM D 5493
Water permeability in the plane direction of the fabric (transmittivity) under load (pressure)	 ≥ 1.6×10⁻³ ft/s [under pressure of 2.9 psi] ≥ 6.6×10⁻⁴ ft/s [under pressure of 29 psi] 	ASTM D 6574
Weather resistance	Resistance ≥ 60%	EN 12224
Alkali resistance	≥ 96% Polypropylene/Polyethylene	EN 13249, Annex B

Table DS-23017.02-1: Pavement Interlayer Geotextile Properties

Note: EN is European Standard

B. For each lot of material, furnish manufacturer's certification statement to Engineer stating name of manufacturer, chemical composition of filaments or yarns, and compliance with this specification. Include test results from specific lots for all specification requirements.

23017.03 CONSTRUCTION.

- A. Sweep pavement to remove loose debris before applying pavement interlayer geotextile.
- B. Ensure geotextile is tight without excess wrinkles and folds.
- **C.** Do not place more than 650 feet of geotextile in front of paver if construction traffic is expected on the grade in front of the paver. Limit driving on geotextile to a minimum. Delay installation on areas subject to excess traffic, such as crossovers, until immediately before concrete placement.
- **D.** Use one of the following methods to secure the geotextile:
 - 1. Secure geotextile with pins or nails punched through 2 to 2.75 inch galvanized washers or disks every 6 feet or less. Place additional fasteners as needed to ensure geotextile does not shift or fold during concrete placement.
 - 2. Secure geotextile with 3M HoldFast 70 Cylinder Spray Adhesive or approved alternate. Apply to all edges of the fabric and as needed to prevent shifting or folding of the fabric during concrete placement.
 - 3. Other anchoring methods approved by the Engineer.
- **E.** Do not allow more than three layers of the geotextile to overlap in any location. Overlap edges of geotextile by 8 inches ± 2 inches. Sequence rolling out geotextile to ensure good lapping practice and prevent folding or tearing by construction traffic.
- **F.** Extend free edge of geotextile interlayer a minimum of 4 inches beyond edge of pavement. Terminate interlayer in a drainable layer. Do not impair free drainage within the geotextile.
- G. Keep geotextile clean and free of loose debris before concrete placement.

23017.04 METHOD OF MEASUREMENT.

The quantity of Pavement Interlayer Geotextile will be the quantity in square yards shown in the contract documents.

23017.05 BASIS OF PAYMENT.

Payment for Pavement Interlayer Geotextile will be at the contract unit price per square yard. Payment is full compensation for furnishing materials, labor and equipment necessary to install the pavement interlayer geotextile.