

Project Name:
Project Number:

Section 32 01 17

Specification for Interlayer for Bituminous Pavement Overlays

1. GENERAL

1.1 SECTION INCLUDES

- A. Pavement stress relief and waterproofing membrane shall be comprised of a self-adhering rubberized asphalt and durable polypropylene non-woven fabric (peel and stick). A release paper, which is removed prior to placement, covers the self-adhesive mastic.

1.2 RELATED SECTIONS

- A. Section 31 20 00 – Earth Moving
- B. Section 32 12 16 – Asphalt Paving
- C. Section 32 01 16 – Flexible Paving Rehabilitation

1.3 UNIT PRICES

- A. Method of Measurement: By the square yard (or square meter - as indicated in contract documents) including seams, overlaps, and wastage.
- B. Basis of Payment: By the square yard (or square meter - as indicated in contract documents) installed.

1.4 REFERENCES

- A. American Association of State Highway and Transportation Officials (AASHTO), "Standard Specification for Geotextile Specifications for Highway Applications" Designation M288.
- B. American Society for Testing and Materials (ASTM):
 - 1. D123: Standard Terminology Relating to Textiles
 - 2. D276: Test Method for Identification of Fibers in Textiles
 - 3. D4354: Practice for Sampling of Geosynthetics for Testing
 - 4. D4439: Terminology for Geotextiles
 - 5. D4632: Standard Test Method for Grab Breaking Load and Elongation of Geotextiles
 - 6. D5261: Standard Test Method for Measuring Mass per Unit Area of Geotextiles
 - 7. D6140: Standard Method to Determine Asphalt Retention of Paving Fabrics Used in Asphalt Paving for Full-Width Applications

- C. Geosynthetic Accreditation Institute (GAI) - Laboratory Accreditation Program (LAP).
- D. National Transportation Product Evaluation Program (NTPEP)
- E. International Standards Organization (ISO) – 9001:2015

1.5 DEFINITIONS

- A. Minimum Average Roll Value (MARV): Property value calculated as typical minus two standard deviations. Statistically, it yields a 97.7 percent degree of confidence that any sample taken during quality assurance testing will exceed value reported.

1.6 SUBMITTALS

- A. Submit the following:
 - 1. Certification: The contractor shall provide to the Engineer a certificate stating the name of the manufacturer, product name, style number, chemical composition of the filaments or yarns and other pertinent information to fully describe the geotextile. The Certification shall state that the furnished geotextile meets MARV requirements of the specification as evaluated under the Manufacturer's quality control program. The Certification shall be attested to by a person having legal authority to bind the Manufacturer.
 - 2. Quality Standards: The contractor shall provide to the Engineer the Manufacturer's Quality Control Plan along with their current GAI-LAP and ISO 9001:2015 certificates.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. The geotextile Manufacturer shall have all of the following credentials:
 - a. Geosynthetic Accreditation Institute (GAI)- Laboratory Accreditation Program (LAP)
 - b. ISO 9001:2015 Quality Management System

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Geotextiles labeling, shipment, and storage shall follow ASTM D4873. Product labels shall clearly show the manufacturer or supplier name, style name, and roll number.
- B. Each geotextile roll shall be wrapped with a material that will protect the

geotextile from damage due to shipment, water, sunlight, and contaminants.

- C. During storage, geotextile rolls shall be elevated off the ground and adequately covered to protect them from the following: site construction damage, precipitation, extended ultraviolet radiation including sunlight, chemicals that are strong acids or strong bases, flames including welding sparks, excess temperatures, and any other environmental conditions that may damage the physical property values of the geotextile.

2. PRODUCTS

2.1 MANUFACTURERS

- A. TenCate™ Geosynthetics Americas
 365 South Holland Drive
 Pendergrass, GA, USA 30567
 1-800-685-9990
 1-706-693-2226
 1-706-693-4400, fax
 www.tencategeo.us

2.2 MATERIALS

- A. Geotextile:
1. Pavement stress relief and waterproofing membrane shall be comprised of a self-adhering rubberized asphalt and durable polypropylene non-woven fabric (peel and stick). A release paper, which is removed prior to placement, covers the self-adhesive mastic. The membrane shall conform to the following properties

TABLE 1 – PAVEMENT MEMBRANE GEOTEXTILE

Property	Test Method	Units	Minimum Average Roll Value (MARV)
Thickness	ASTM D1777 ¹	mils (mm)	65 (1.6)
Grab Tensile Strength	ASTM D4632	lbs (N)	160 (712)
Grab Elongation	ASTM D4632	%	60
Puncture Strength	ASTM E154	lbs (N)	200 (890)
Permeance	ASTM E96, Method B	perms	0.05 (max)
Strip Tensile	ASTM D882, Modified	lbs/in (kN/m)	50 (8.8)
Pliability	ASTM D146 ¼" Mandrel 180° @ -25° F	No cracks in fabric or rubberized asphalt	

¹ ½" Presser Foot

*Approved geotextiles are as follows:

Mirafi® MTK

2.3 QUALITY CONTROL

- A. Manufacturing Quality Control: Testing shall be performed at a laboratory accredited by GAI-LAP for tests required for the geotextile, at frequency meeting or exceeding ASTM D4354.
- B. Geotextile properties, other than Ultraviolet Stability shall be tested by NTPEP to verify conformance with this specification.
- C. Manufacturer's certifications and testing of quality assurance samples obtained using Procedure B of ASTM D4354. A lot size for conformance or quality assurance sampling shall be considered to be the shipment quantity of the given product or a truckload of the given product, whichever is smaller.

3. EXECUTION

- 3.1 See Manufacturer's Installation guidelines provided in the submittal.

END OF SECTION