

DMS - 6220
FABRIC FOR UNDERSEALS

EFFECTIVE DATE: MAY 2010

6220.1. Description. This Specification governs the sampling, testing, and material requirements of pavement underseal fabrics.

6220.2. 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.

6220.3. Definitions.

A. Fabric for Underseals—a paving fabric saturated with asphalt binder between pavement layers. The function of the fabric is to act as waterproofing within the permanent structure.

6220.4. 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 listed 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.

6220.5. Sampling and Testing. Sample in accordance with Tex-735-I. Perform testing in accordance with the test methods listed in Table 1.

6220.6. Material Requirements.

A. General Requirements. All fabric underseal materials have the following properties:

- The non-woven fabric consists exclusively of man made thermoplastic fibers.
- These fibers are continuous and randomly oriented throughout the fabric.
- The fabric is mildew resistant and rot-proof.
- Fabric seal is satisfactory for use with asphalt cements up to 163°C (325°F).

B. Physical Requirements. A fabric underseal must conform to the requirements listed in Table 1 when tested in accordance with the methods specified.

Table 1
Fabric Underseal Requirements

| Original Physical Properties | Test Method | Requirement Minimum | Requirement Maximum |
|--|-----------------------|----------------------------|----------------------------|
| Fabric Weight, kg/m ² (oz./yd. ²)* | Tex-616-J | 0.14 (4.1) | 0.30 (9.0) |
| “Apparent Elongation” at “Breaking Load” on warp-wise and fill-wise specimens, % | ASTM D 5034, Method G | 50 | 150 |
| “Breaking Load,” on warp-wise and fill-wise specimens, N (lb.) | ASTM D 5034, Method G | 356 (80) | --- |
| Asphalt Retention, L/m ² (gal./yd. ²) | Tex-616-J | 0.68 (0.15) | 2.72 (0.60) |
| Change in Area, % | Tex-616-J | --- | ± 15 |

*Consistency of the fabric is such that no individual weight specimen varies from the average weight by more than 20%. Thin spots make the fabric subject to rejection.

6220.7. Packaging Requirements. Package the fabric in rolls of the length and width specified on the plans, specified in the purchase order awarded by the state, or as approved.

Wind the fabric onto suitable cylindrical forms or cores to aid in handling and unrolling. Package each roll of fabric individually in a suitable container to protect the fabric from damage due to ultraviolet light and moisture during normal storage and handling.

6220.8. Identification. Identify each roll with a tag or label securely affixed to the outside of the roll on one end. List the following information on the label:

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

6220.9. Archived Versions. Archived versions are available.