

DMS - 6210
VERTICAL MOISTURE BARRIER

EFFECTIVE DATE: MARCH 2002

6210.1. Description. This Specification governs the materials, composition, quality, sampling, and testing of vertical moisture barrier. Vertical moisture barrier consists of geomembrane in the form of sheeting, geotextile in the form of coated fabric, or fabric-sheeting laminate.

- Sheeting is of single-layered construction, without seams.
- Geotextiles in the form of coated fabric are made of either woven or non-woven thermoplastic fibers. Such fabrics are furnished precoated on one or both sides or impregnated to make the fabric impermeable to water or moisture.
- Fabric-sheeting laminate consists of fabric fused or heat-sealed to sheeting to form an integral geomembrane.

6210.2. 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.

6210.3. Sampling and Testing Requirements. Sample in accordance with Tex-735-I. Perform testing in accordance with the methods listed in Table 1.

6210.4. Material Requirements.

A. General Requirements. Vertical moisture barrier conforms to the following requirements:

- The moisture barrier is constructed exclusively of man made materials.
- Moisture barrier is able to withstand normal handling and placement at material temperatures from -7– 63°C (20–145°F) without endangering the serviceability of the material in the intended application.
- Any moisture barrier showing delamination is grounds for rejection.
- Moisture barrier is mildew, abrasion, and puncture resistant. It is also suitable for long-term burial in the presence of water and/or moisture in the intended construction application.

B. Physical Requirements. Vertical moisture barrier must meet the requirements listed in Table 1 when sampled and tested in accordance with the methods specified.

Table 1
Moisture Barrier Requirements

Original Physical Properties:	Test Method	Requirement
Fabric Weight, kg/m ² (oz./yd. ²)	Tex-616-J	0.22 (6.5) Min
Water permeability, kg/m ² (oz./yd. ²) of vertical moisture barrier.	Tex-616-J	0.02 (0.6) Max
Abrasion Resistance, kg/m ² (oz./yd. ²) of vertical moisture barrier.	Tex-616-J	0.02 (0.6) Max
Tensile Strength, Newton (lb.)	ASTM D 5034	667 (150) Min
Apparent elongation at break or rupture, %	ASTM D 5034	20% Min
Tear strength, Newton (lb.)	ASTM D 751	67 (15) Min

6210.5. Packaging Requirements. Package the moisture barrier in rolls of the length and width specified on the plans, as directed by the Engineer, or in the purchase order awarded by the State. Furnish material as one piece per roll.

Individual pieces of moisture barrier on a given roll joined together by splicing, lapping, bonding, stapling, etc. are not acceptable.

Uniformly wind the moisture barrier onto suitable cylindrical forms or cores to aid in handling and unrolling.

Package each roll of fabric in a suitable container to protect the fabric from damage due to ultraviolet light and moisture during normal storage and handling.

6210.6. Tagging and Labeling. Identify each roll with a tag or label securely affixed to the outside of the roll on one end. Include the following on the tag or label:

- unique roll number, serially designated;
- producer's lot number or control numbers, if any;
- producer name;
- product brand name;
- producer's style or catalog designation of the fabric, if any;
- roll width in meters (inches); and
- roll length in meters (yards).

6210.7. Basis for Rejection. Should any individual sample selected at random from 100 rolls, or fraction thereof, fail to meet any specification requirement, then that roll will be rejected. Two additional samples will be taken, one from each of two other rolls selected at random from the same 100-roll lot, or fraction thereof.

If either of these two additional samples fails to comply with any portion of the Specification, then the entire quantity of rolls represented by that sample will be rejected.

6210.8. Archived Versions. Archived versions are available.