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Standard Specification for Glass Fabrics (Woven and Treated) for Roofing and Waterproofing[1]

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This standard has been approved for use by agencies of the Department of Defense. This specification replaces Federal Specification HH-C-466.

1. Scope

1.1 This specification covers finished treated (coated) woven-glass fabrics coated with either asphalt, coal-tar pitch or an organic resin compatible with the roofing, waterproofing, or other usage as specified by the purchaser.

1.2 The values stated within this document are in inch-pound units with the metre equivalent in parentheses. The values given in parentheses are for information only.

2. Referenced Documents

2.1 *ASTM Standards:*

D 123 Terminology Relating to Textiles[2]

D 146 Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing[3]

D 579 Specification for Greige Woven Glass Fabrics[2]

D 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials[3]

D 3775 Test Method for Fabric Count of Woven Fabric[4]

D 3776 Test Methods for Mass per Unit Area (Weight) of Woven Fabric[4]

3. Terminology

3.1 *Definitions*—For definitions of terms used in this specification, refer to Terminology D 123 or D 1079.

4. Classification of Fabric Treatments with Generally Applicable Usage

4.1 *Type I, Asphalt Treated*—Type I is suitable for use with all asphalts and asphalt based compounds.

4.2 *Type II, Coal Tar Pitch Treated*—Type II is suitable for use with all coal tar pitches and coal tar pitch based compounds (Note 1).

4.3 *Type III, Organic Resin Treated*—The purchaser and supplier shall agree on an organic resin that is compatible with or is suitable for, or both, the plying liquid plying materials either specified or to be used. This organic resin shall not be water soluble.

NOTE 1—In some instances the purchaser may specify the use of Types I or II for systems using other than coal tar bitumens or asphalt.

5. Materials and Manufacture

5.1 The untreated (greige) scrim (open basket weave) or leno (locked weave) fabrics shall conform to the requirements as specified in Table 1.

5.2 In the process of manufacture, the fibers of the untreated glass fabric shall be thoroughly and uniformly coated using equipment which, in combination, handles the fabric and uses a machine speed in a total process that will not injure or distort the weave of the fabric.

5.3 Glass fabric is usually woven in nominal widths of 36, 72 and 108 in. (0.91, 1.83 and 2.74 m) by the weaving mills. Extra warp (the length of the fabric) threads are included in 72 and 108–in. (1.83 and 2.74–m) wide fabrics to obtain incremental fabric roll widths of 36 in. (0.91m). These extra warp threads with a slitting space between each set (a set of two) of bunched warp threads create a duplicate or "dupe" selvedge with a "brush" edge created by the cut fill threads instead of the usually wrapped fill threads seen in a smooth selvedge. This type of fabric selvedge edge is, and has been, an acceptable fabric design (pattern) in both the weaving and construction industry.

5.4 Brush edge of the "dupe" selvedge is not to be included in the measurement of the finished roll width.

5.5 The purchaser may specify widths of more than or less than 36 in. (0.91 m). These widths can be furnished at the manufacturer's option.

[1] This specification is under the jurisdiction of ASTM Committee D-8 on Roofing, Waterproofing and Bituminous Materials and is the direct responsibility of Subcommittee D08.04 on Felts and Fabrics.

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[2] *Annual Book of ASTM Standards*, Vol 07.01.

[3] *Annual Book of ASTM Standards*, Vol 04.04.

[4] *Annual Book of ASTM Standards*, Vol 07.02.