



Designation: D 4847 – 02

Standard Performance Specification for Woven Awning and Canopy Fabrics¹

This standard is issued under the fixed designation D 4847; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This performance specification covers woven awning and canopy fabrics composed of any textile fiber or mixture of fibers.

1.2 These requirements apply to the length and width directions for those properties where fabric direction is pertinent.

1.3 The following safety hazards caveat pertains only to the test methods described in this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

- D 123 Terminology Relating to Textiles²
- D 434 Test Method for Resistance to Slippage of Yarns in Woven Fabrics Using a Standard Seam²
- D 1424 Test Method for Tearing Strength of Fabrics by Falling-Pendulum Type (Elmendorf)²
- D 2261 Test Method for Tearing Strength of Woven Fabrics by the Tongue (Single-Rip) Method (Constant-Rate-of-Extension Tensile Testing Machine)²
- D 2905 Practice for Statements on Number of Specimens for Textiles²
- D 5034 Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)³

2.2 AATCC Test Methods:⁴

- 8 Colorfastness to Crocking: AATCC Crockmeter Method
- 16 Colorfastness to Light
- 22 Water Repellency: Spray Test

- 23 Colorfastness to Burnt Gas Fumes
- 35 Water Resistance: Rain Test
- 116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method
- 129 Colorfastness to Ozone in the Atmosphere under High Humidities
- 138 Shampooing: Washing of Textile Floor Coverings Evaluation Procedure 1 Gray Scale for Color Change Evaluation Procedure 2 Gray Scale for Staining Evaluation Procedure 9 Step Chromatic Transference Scale

NOTE 1—References to test methods in this standard give only the permanent part of the designation of ASTM, AATCC, or other test methods. The current editions of each test method shall prevail.

3. Terminology

3.1 Definitions:

3.1.1 For definitions of textile terms used in this specification, refer to the individual ASTM and AATCC test methods, and to Terminology D 123.

4. Specification Requirements

4.1 The properties of woven awning and canopy fabrics shall conform to the specification requirements listed in Table 1.

5. Significance and Use

5.1 Fabrics intended for this end-use should meet all of the requirements listed in Table 1.

5.2 It should be recognized that fabrics can be produced with an almost infinite number of combinations of construction variables (for example, type of fibers, percentage of fibers, yarn twist, yarn number, warp and pick count, chemical and mechanical finishes.) Additionally, fashion or aesthetics dictate that the ultimate consumer may find acceptable articles made from fabrics that do not conform to all of the requirements in Table 1.

5.2.1 Hence, no single performance specification can possibly apply to all the various fabrics that could be utilized for this end-use.

5.3 The uses and significance of particular properties and test methods are discussed in the appropriate sections of the specified test methods.

¹ This specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.63 on Home Furnishings.

Current edition approved April 10, 2002. Published July 2002. Originally published as D 4847 – 88. Last previous edition D 4847 – 95a(2001).

² Annual Book of ASTM Standards, Vol 07.01.

³ Annual Book of ASTM Standards, Vol 07.02.

⁴ Available from the American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, NC 27709.