



# Standard Performance Specification for Women's and Girls' Woven Sportswear, Shorts, Slacks, and Suiting Fabrics<sup>1</sup>

This standard is issued under the fixed designation D 4155; 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 reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This performance specification covers woven fabrics comprised of any textile fiber or mixture of fibers used in women's and girls' sportswear, or suittings.

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

1.3 This performance specification is not applicable to woven fabrics used for interlinings, jeans, and dungarees.

1.4 *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 Related to Textiles<sup>2</sup>
- D 434 Test Method for Resistance to Slippage of Yarns in Woven Fabrics Using a Standard Seam<sup>2</sup>
- D 1424 Test Method for Tear Strength of Fabrics by Falling-Pendulum Type (Elmendorf) Apparatus<sup>2</sup>
- D 2261 Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine)<sup>2</sup>
- D 2262 Test Method for Tearing Strength of Woven Fabrics by the Tongue (Single Rip) Method (Constant-Rate-of-Traverse Tensile Testing Machine)<sup>3</sup>
- D 2724 Test Methods for Bonded, Fused, and Laminated Apparel Fabrics<sup>2</sup>
- D 5034 Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)<sup>4</sup>

### 2.2 AATCC Test Methods:<sup>5</sup>

- 8 Colorfastness to Crocking—AATCC Crockmeter Method
- 15 Colorfastness to Perspiration

- 16 Colorfastness to Light
  - 23 Colorfastness to Burnt Gas Fumes
  - 61 Colorfastness to Washing, Domestic and Laundering, Commercial Accelerated
  - 116 Colorfastness to Crocking; Rotary Vertical, Crockmeter Method
  - 119 Color Change Due to Flat Abrasion (Frosting): Screen Wire Method
  - 124 Appearance of Durable Press Fabrics after Repeated Home Laundering
  - 132 Colorfastness to Dry Cleaning
  - 135 Dimensional Changes in Automatic Home Laundering of Durable Press Woven or Knit Fabrics
  - 172 Colorfastness to Non-chlorine Bleach in Home Laundering
  - 188 Colorfastness to Chlorine Bleach in Home Laundering Evaluation Procedure 1 Gray Scale for Color Change Evaluation Procedure 2 Gray Scale for Staining Evaluation Procedure 3 AATCC Chromatic Transference Scale
- ### 2.3 Federal Standard:<sup>6</sup>
- 16 CFR, Chapter II-Consumer Product Safety Commission Subchapter D-Flammable Fabrics Act Regulations
- ### 2.4 Military Standard:<sup>7</sup>
- MIL-STD-105D Sampling Procedures and Tables for Inspection by Attributes

NOTE 1—Reference 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 cited 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.

3.2 Definitions found in a dictionary of common terms are suitable for this specification.

## 4. Specifications Requirements

### 4.1 The properties of woven fabrics for women's and girls'

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.61 on Apparel.

Current edition approved May 10, 2001. Published July 2001. Originally published as D 4155 – 82. Last previous edition D 4155 – 95a.

<sup>2</sup> Annual Book of ASTM Standards, Vol 07.01.

<sup>3</sup> Discontinued; see 1994 Annual Book of ASTM Standards, Vol 07.01.

<sup>4</sup> Annual Book of ASTM Standards, Vol 07.02.

<sup>5</sup> Available from the American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, NC 27709.

<sup>6</sup> Available from Superintendent of Documents, Government Printing Office, Washington, DC 20407.

<sup>7</sup> Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.