



Designation: D 4154 – 95a

Standard Performance Specification for Men's and Boys' Knitted and Woven Beachwear and Sports Shirt Fabrics¹

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1. Scope

1.1 This performance specification covers knitted and woven fabrics comprised of any textile fiber or mixture of fibers used in men's and boy's beachwear and sports shirts.

1.2 This performance specification is not applicable to knitted and woven fabrics used for interlining and swimwear.

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

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 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 Tear Resistance of Woven Fabrics by Falling Pendulum (Elmendorf) Apparatus²
- D 2262 Test Method for Tearing Strength of Woven Fabrics by the Tongue (Single Rip) Method (Constant Rate-of-Travel Tensile Testing Machine)²
- D 2594 Test Methods for Stretch Properties of Knitted Fabrics Having Low Power²
- D 2724 Test Methods for Bonded, Fused, and Laminated Apparel Fabrics²
- D 2905 Practice for Statements on Number of Specimens for Textiles²
- D 3786 Test Method for Hydraulic Bursting Strength of Knitted Goods and Nonwoven Fabrics—Diaphragm Bursting Strength Tester Method³
- D 3787 Test Method for Bursting Strength of Knitted Goods—Constant-Rate-of-Travel (CRT) Ball Burst Test³

D 5034 Test Method for Breaking Force and Elongation of Textile Fabrics (Grab Test)³

2.2 AATCC Test Methods:⁴

- 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
 - 96 Dimensional Changes in Laundering of Woven and Knitted Textiles Except Wool
 - 116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method
 - 124 Appearance of Durable Press Fabrics After Repeated Home Launderings
 - 132 Colorfastness to Drycleaning
 - 135 Dimensional Changes in Automatic Home Launderings of Durable Press Woven of Knit Fabrics
 - 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:⁵
- 16 CFR, Chapter II—Consumer Product Safety Commission Subchapter D—Flammable Fabrics Act Regulations.
- #### 2.4 Military Standard:⁶
- MIL-STD-105D Sampling Procedures and Tables for Inspection by Attributes

NOTE 1—Reference to test methods in this specification 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 *dimensional change, n—in pressing and finishing of textiles*, the change in dimensions of a fabric caused by pressing and finishing during garment manufacture.

3.2 For definitions of other textile terms used in this

¹ This specification is under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.56 on Performance Standards for Textile Fabrics.

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² Annual Book of ASTM Standards, Vol 07.01.

³ Annual Book of ASTM Standards, Vol 07.02.

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

⁵ Available from Superintendent of Documents, Government Printing Office, Washington, DC 20402.

⁶ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.