



Designation: D4231 – 22

Standard Practice for Evaluation of Launderable Woven Dress Shirts and Sports Shirts¹

This standard is issued under the fixed designation D4231; 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 practice covers the evaluation of specific characteristics of importance in launderable woven dress shirts and sport shirts.

1.2 Any launderable woven dress shirt or sport shirt may be evaluated using this practice, but it shall not be construed to be a standard of performance.

1.3 This practice may be used by mutual agreement between the purchaser and supplier to establish purchasing specifications.

1.4 This practice is not intended to be used in the evaluation of woven dress shirts or sport shirts when drycleaned or hand-washed.

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

D123 Terminology Relating to Textiles

D1683 Test Method for Failure in Sewn Seams of Woven Fabrics

D1776 Practice for Conditioning and Testing Textiles

D3136 Terminology Relating to Care Labeling for Apparel, Textile, Home Furnishing, and Leather Products

D3477 Performance Specification for Men's and Boys' Woven Dress Shirt Fabrics (Withdrawn 2005)³

¹ This practice is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.61 on Apparel.

Current edition approved Nov. 1, 2022. Published December 2022. Originally approved in 1989. Last previous edition approved in 2014 as D4231 – 14. DOI: 10.1520/D4231-22.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ The last approved version of this historical standard is referenced on www.astm.org.

D4154 Performance Specification for Men's and Boys' Knitted and Woven Beachwear and Sports Shirt Fabrics

D7022 Terminology Relating to Apparel (Withdrawn 2022)³

2.2 AATCC Test Methods:

TM88B Smoothness of Seams in Fabrics After Repeated Home Laundering⁴

TM143 Appearance of Apparel and Other Textile End Products After Repeated Home Launderings⁴

TM150 Dimensional Changes of Garments after Home Laundering⁴

TM172 Colorfastness to Powdered Non-Chlorine Bleach in Home Laundering⁴

TM188 Colorfastness to Sodium Hypochlorite Bleach in Home Laundering⁴

EP1⁴ Gray Scale for Color Change

2.3 ASTM Adjuncts:⁵

Shirt Components- 15 Photographs

3. Terminology

3.1 *Definitions*—For definitions of textile terms used in this practice, refer to the individual ASTM Standards, AATCC Test Methods, Terminology D123 and Terminology related to Apparel D7022.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *dress shirt, n*—a shirt designed to be worn with a tie and jacket and made with a specific collar size or numerical designation.

3.2.1.1 *Discussion*—For men's dress shirts, an additional size designation may be used to identify the sleeve length.

3.2.2 *sport shirt, n*—a shirt designed to be worn either informally or with a jacket, and which uses an alphabetical, numerical, or alphanumerical size designator.

4. Significance and Use

4.1 This practice may be used to evaluate pertinent performance characteristics of men's and boys' launderable woven dress shirts and sport shirts.

⁴ AATCC Technical Manual, available from American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709, <http://www.aatcc.org>.

⁵ Photographic standards for evaluating shirt components are available from ASTM International Headquarters. Order Adjunct NO. : ADJD4231.