



Designation: D4153 – 22

Standard Performance Specification for Men's, Women's, and Children's Woven Handkerchief Fabrics¹

This standard is issued under the fixed designation D4153; 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 to be used in the manufacture of men's, women's, and children's handkerchiefs, both utilitarian and decorative.

1.2 This performance specification is not applicable to open-work fabrics such as lace which is used primarily to decorate handkerchiefs, or woven fabrics used for the manufacture of scarves.

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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

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

D1424 Test Method for Tearing Strength of Fabrics by Falling-Pendulum (Elmendorf-Type) Apparatus

D2261 Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine)

D2262 Test Method for Tearing Strength of Woven Fabrics by the Tongue (Single Rip) Method (Constant-Rate-of-Traverse Tensile Testing Machine) (Withdrawn 1995)³

D2905 Practice for Statements on Number of Specimens for Textiles (Withdrawn 2008)³

D5034 Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)

2.2 AATCC Test Methods:⁴

TM8 Colorfastness to Crocking: Crockmeter

TM15 Colorfastness to Perspiration

TM16.3 Colorfastness to Light: Xenon-Arc

TM23 Colorfastness to Burnt Gas Fumes

TM61 Colorfastness to Laundering: Accelerated

TM96 Dimensional Changes in Laundering of Woven and Knitted Textiles Except Wool

TM116 Colorfastness to Crocking: Rotary Vertical Crockmeter Method

TM124 Smoothness Appearance of Fabrics after Home Launderings

TM135 Dimensional Changes of Fabrics after Home Laundering

TM172 Colorfastness to Powdered Non-chlorine Bleach in Home Laundering

TM188 Colorfastness to Sodium Hypochlorite Bleach in Home Laundering

2.3 Federal Standard:

16CFR—Code of Federal Regulations, Chapter II—Consumer Product Safety Commission, Subchapter D—Flammable Fabrics Act Regulations⁵

2.4 Military Standard:

MIL-STD—105 Sampling Procedures and Tables for Inspection by Attributes⁶

NOTE 1—Reference to test methods in this performance specification

¹ This performance 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 Nov. 1, 2022. Published November 2022. Originally approved in 1982. Last previous edition approved in 2014 as D4153 – 14. DOI: 10.1520/D4153-22.

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.

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

⁵ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.

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