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.

Designation: D3885 – 07a (Reapproved 2019)$^{\varepsilon 1}$

Standard Test Method for Abrasion Resistance of Textile Fabrics (Flexing and Abrasion Method)[1]

This standard is issued under the fixed designation D3885; 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.

ε^1 NOTE—In 6.2, the last unit in parentheses was corrected from ± 7⁄16 in. to ± 1⁄16 in. editorially in May 2021.

1. Scope

1.1 This test method[2] covers the determination of the abrasion resistance of woven or nonwoven textile fabrics using the flexing and abrasion tester.

1.2 This test method applies to most woven and nonwoven fabrics providing they do not stretch excessively. It is not applicable to floor coverings.

1.3 The values stated in either SI units or inch-pound units are to be regarded separately as the standard. Within the text, the inch-pound units are shown in parentheses. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with this test method.

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.*

NOTE 1—For other test methods for abrasion resistance of textiles refer to Test Methods D3884, D3886, D4157, D4158, D4966, and AATCC93.

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:*[3]

D76 Specification for Tensile Testing Machines for Textiles
D123 Terminology Relating to Textiles
D1776 Practice for Conditioning and Testing Textiles
D2904 Practice for Interlaboratory Testing of a Textile Test Method that Produces Normally Distributed Data (Withdrawn 2008)[4]
D2906 Practice for Statements on Precision and Bias for Textiles (Withdrawn 2008)[4]
D3884 Guide for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method)
D3886 Test Method for Abrasion Resistance of Textile Fabrics (Inflated Diaphragm Apparatus)
D4157 Test Method for Abrasion Resistance of Textile Fabrics (Oscillatory Cylinder Method)
D4158 Guide for Abrasion Resistance of Textile Fabrics (Uniform Abrasion)
D4850 Terminology Relating to Fabrics and Fabric Test Methods
D4966 Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)
D5035 Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)

2.2 *AATCC Test Method:*

AATCC 93 Abrasion Resistance of Fabrics: Accelerotor Method[5]

[1] This test method is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.60 on Fabric Test Methods, Specific.

Current edition approved July 1, 2019. Published July 2019. Originally approved in 1980. Last previous edition approved in 2015 as D3885 – 07a(2015). DOI: 10.1520/D3885-07AR19E01.

[2] This test method is based upon the development described by Stoll, R.G.," Improved Multipurpose Abrasion Tester and its Application for the Evaluation of the Wear Resistance of Textiles," *Textile Research Journal*, July, 1949, p. 394.

[3] 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.

[4] The last approved version of this historical standard is referenced on www.astm.org.

[5] Available from American Association of Textile Chemists and Colorists (AATCC), P.O. Box 12215, Research Triangle Park, NC 27709-2215, http://www.aatcc.org.

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