



Designation: D3885 – 07a (Reapproved 2024)

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.

1. Scope

1.1 This test method² 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 Recom-*

mendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 *ASTM Standards:*³

[D76/D76M Specification for Tensile Testing Machines for Textiles](#)

[D123 Terminology Relating to Textiles](#)

[D1776/D1776M 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[D2904 Practice for Interlaboratory Testing of a Textile Test Method that Produces Normally Distributed Data \(Withdrawn 2008\)](#)⁴

[D2906 Practice for Statements on Precision and Bias for Textiles \(Withdrawn 2008\)](#)⁴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 \(Rotary Platform Abrader Method\)](#)

[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 \(Strip Method\)](#)

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 Physical Test Methods B.

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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 www.astm.org/contact. 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.