



Standard Guide for Conducting Wear Tests on Textiles¹

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^{ε1} NOTE—Section 5.1 was revised editorially in October 2015.

1. Scope

1.1 This guide is intended to provide guidance for the design of an experiment for the purpose of developing a prediction of expected wear performance of apparel and textile products when exposed to actual use conditions.

1.2 This guide recommends the use of a product for which a history of its performance is known from laboratory testing and consumer use as the basis for statistical significance of new product's performance, however, other design or experimental approaches may be used.

1.3 The wide variety of textile products and the conditions under which consumers will use products prevents the inclusion of all types of wear trial experiments for research and development, product innovation studies, and special needs such as those for healthcare industry or military.

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:*²

2.1.1 *Fabric and Apparel Tests:*

D2051 Test Method for Durability of Finish of Zippers to Laundering

D2052 Test Method for Colorfastness of Zippers to Dry-cleaning

D2057 Test Method for Colorfastness of Zippers to Laundering

D2058 Test Method for Durability of Finish of Zippers to Drycleaning

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

D2594 Test Method for Stretch Properties of Knitted Fabrics Having Low Power

D3107 Test Methods for Stretch Properties of Fabrics Woven from Stretch Yarns

D3511 Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Brush Pilling Tester

D3512 Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Random Tumble Pilling Tester

D3514 Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Elastomeric Pad

D3884 Guide for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method)

D3885 Test Method for Abrasion Resistance of Textile Fabrics (Flexing and Abrasion Method)

D3886 Test Method for Abrasion Resistance of Textile Fabrics (Inflated Diaphragm Apparatus)

D3938 Guide for Determining or Confirming Care Instructions for Apparel and Other Textile Products

D3939 Test Method for Snagging Resistance of Fabrics (Mace)

D4157 Test Method for Abrasion Resistance of Textile Fabrics (Oscillatory Cylinder Method)

D4231 Practice for Evaluation of Launderable Woven Dress Shirts and Sports Shirts

D4390 Practice for Evaluation of the Performance of Terry Bathroom Products for Household Use (Withdrawn 1994)³

D4966 Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)

D4970 Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Martindale Tester

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

D5035 Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)

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

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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.