



# Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials<sup>1</sup>

This standard is issued under the fixed designation D 2859; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

*This standard has been approved for use by agencies of the Department of Defense.*

## 1. Scope

1.1 This fire-test-response standard describes a test method for the determination of the flammability of finished textile floor covering materials when exposed to an ignition source under controlled laboratory conditions.

1.2 This test method is applicable to all types of textile floor coverings, regardless of the method of fabrication or whether they are made from natural or man-made fibers. It is possible to apply this test method to unfinished material; however, the results of such a test shall not be considered a satisfactory evaluation of a textile floor covering material for ultimate consumer use.

1.3 The values stated in SI units are to be regarded as the standard. The values given in brackets are for information only.

1.4 *This standard is used to measure and describe the response of materials, products, or assemblies to heat and flame under controlled conditions, but does not by itself incorporate all factors required for fire hazard or fire risk assessment of the materials, products, or assemblies under actual fire conditions.*

1.5 Fire testing of products and materials is inherently hazardous, and adequate safeguards for personnel and property shall be employed in conducting these tests

1.6 The text of this standard references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.7 *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:*<sup>2</sup>

**C 1186** Specification for Flat Non-Asbestos Fiber-Cement Sheets

**D 123** Terminology Relating to Textiles

**D 1776** Practice for Conditioning and Testing Textiles

**D 5684** Terminology Relating to Pile Floor Covering

**E 136** Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C

**E 176** Terminology of Fire Standards

2.2 *AATCC Standard:*

**Method 138-1972**, Shampooing: Washing of Textile Floor Coverings<sup>3</sup>

2.3 *U.S. Consumer Product Safety Commission:*<sup>4</sup>

16 CFR Part 1630 Standard for the surface flammability of carpets and rugs (FF 1-70)

16 CFR Part 1631 Standard for the surface flammability of small carpets and rugs (FF 2-70)

## 3. Terminology

3.1 *Definitions:*<sup>1</sup>

3.1.1 For definitions of terms contained in this test method associated with fire issues refer to Terminology **E 176**. For definitions of terms contained in this test method and associated with textile issues refer to Terminology **D 123**. For definitions of terms contained in this test method and associated with pile floor covering issues refer to Terminology **D 5684**.

3.1.2 *flame retardant, n*—a chemical used to impart flame resistance.

3.1.3 *flame-retardant treatment, n*—a process for incorporating or adding flame retardant(s) to a material or product.

<sup>2</sup> 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.

<sup>3</sup> Technical Manual of the American Association of Textile Chemists and Colorists, P. O. Box 12215, Research Triangle Park, NC 27709.

<sup>4</sup> Can be found in Title 16, Volume 2 of the Code of Federal Regulations. Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee E05 on Fire Standards and is direct responsibility of Subcommittee E05.22 on Surface Burning.

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