



Designation: D 2859 – 01

Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials¹

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 (ϵ) indicates an editorial change since the last revision or reapproval.

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. It 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. Although this test method may be applied to unfinished material, such a test is not considered satisfactory for the evaluation of a textile floor covering material for ultimate consumer use.

1.2 *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.*

NOTE 1—For other standards on flammability of textiles, refer to: Test Methods D 1230 and D 3411. For methods of measuring other properties of floor coverings and components thereof, refer to: Test Methods D 418, D 1116, D 1335, D 2401, and D 2406.

1.3 *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.*

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

1.5 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.

2. Referenced Documents

2.1 ASTM Standards:

D 123 Terminology Relating to Textiles Materials²

D 418 Methods of Testing Pile Yarn Floor Covering Construction²

D 1116 Test Method for Resistance of Pile Floor Coverings to Attack by Black Carpet Beetle Larvae³

D 1230 Test Method for Flammability of Apparel Textiles²

D 1335 Test Method for Tuft Bind of Pile Floor Coverings⁴

D 1776 Practice for Conditioning Textiles for Testing²

D 2401 Test Method for Service Change of Appearance of Pile Floor Coverings⁵

D 2646 Test Methods for Backing Fabrics²

D 3411 Test Method for Flammability of Textile Materials⁶

2.2 AATCC Standard:

Method 138-1972, Shampooing: Washing of Textile Floor Coverings⁷

3. Terminology

3.1 Definitions:

3.1.1 *finished, adj*—in textile floor covering materials, the completion of all manufacturing operations.

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.

3.1.3.1 *Discussion*—The term “flame-retardant treatment” does not apply to textiles that are inherently-flame-resistant due to the intrinsic properties of the material or the fiber-forming polymer.

3.1.4 *flame resistance, n*—the property of a material whereby flaming combustion is prevented, terminated, or inhibited following application of a flaming or nonflaming source of ignition, with or without subsequent removal of the ignition source.

3.1.4.1 *Discussion*—Flame resistance can be an inherent property of the basic material or product, or it may be imparted by specific treatment. The degree of flame resistance exhibited by a specific material during testing may vary with different test conditions.

³ Discontinued, see 1979 Annual Book of ASTM Standards, Part 22.

⁴ Discontinued, see 1994 Annual Book of ASTM Standards, Vol 07.01.

⁵ Discontinued, see 1991 Annual Book of ASTM Standards, Vol 07.01.

⁶ Discontinued, see 1980 Annual Book of ASTM Standards, Part 32.

⁷ Technical Manual of the American Association of Textile Chemists and Colorists, P. O. Box 12215, Research Triangle Park, NC 27709.

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² Annual Book of ASTM Standards, Vol 07.01.