



Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture¹

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1. Scope*

1.1 This is a fire-test-response standard.

1.2 These test methods are designed for the assessment of the resistance of upholstered furniture component assemblies to combustion after exposure to smoldering cigarettes under specified conditions.

1.3 The tests apply to upholstered furniture components—cover fabrics, interior fabrics, welt cords, decking materials, barrier materials, and filling or padding materials including but not limited to: battings of natural or man-made fibers, foamed or cellular filling materials, resilient pads of natural or man-made fibers, and loose particulate filling materials (such as shredded polyurethane or feathers and down).

1.4 The individual test methods and the materials to which they apply are as follows:

1.4.1 *Cover Fabric Test*—Applies to outer cover fabrics (see Sections 10 and 11).

1.4.2 *Interior Fabric Test*—Applies to interior fabrics used in intimate contact with outer fabrics (see Sections 12 and 13).

1.4.3 *Welt Cord Test*—Applies to welt cord (see Sections 14 and 15).

1.4.4 *Filling/Padding Component Test*—Applies to resilient materials used under the cover fabric in seats or in inside vertical walls (inside arm and inside backs) (see Sections 16 and 17).

1.4.5 *Decking Materials Test*—Applies to resilient materials used in the deck under loose cushions (see Sections 18 and 19).

1.4.6 *Barrier Materials Test*—Applies to materials that are intended to serve as a barrier between cover fabric and conventional polyurethane foam (see Sections 20 and 21).

1.5 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.6 *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.*

1.7 *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. For specific hazard statements, see Section 7.*

2. Referenced Documents

2.1 *ASTM Standards*:²

E176 Terminology of Fire Standards

E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

2.2 *Federal Specifications*:³

Fed.Spec. CCC-C-436-D, Cloth, Ticking, Twill, Cotton; Type I

2.3 *NFPA Standard*:⁴

NFPA 260 Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture

3. Terminology

3.1 *Definitions*: For definitions of terms used in these test methods, refer to Terminology E176.

3.2 *Definitions of Terms Specific to This Standard*:

3.2.1 *deck*—in upholstered furniture, the upholstered support under the seat cushion in a loose seat construction.

3.2.2 *obvious ignition*—pronounced continuous and self-sustaining combustion of the test system accompanied by rapid

¹ These test methods are under the jurisdiction of ASTM Committee E05 on Fire Standards and are the direct responsibility of Subcommittee E05.15 on Furnishings and Contents.

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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 Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

⁴ Available from National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02169-7471, <http://www.nfpa.org>.