

Designation: E 2573 - 07

An American National Standard

## Standard Practice for Specimen Preparation and Mounting of Site-Fabricated Stretch Systems to Assess Surface Burning Characteristics<sup>1</sup>

This standard is issued under the fixed designation E 2573; 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.

## 1. Scope

- 1.1 This practice describes procedures for specimen preparation and mounting when testing a site-fabricated stretch system to assess flame spread and smoke developed as surface-burning characteristics using Test Method E 84.
  - 1.2 Testing is conducted with Test Method E 84.
- 1.3 This practice does not provide pass/fail criteria that can be used as a regulatory tool.
- 1.4 Use the values stated in inch-pound units as the standard, in referee decisions. The values in the SI system of units are given in parentheses, for information only; see IEEE/ASTM SI-10 for further details.
- 1.5 This fire standard cannot be used to provide quantitative measures.
- 1.6 Fire testing of products and materials is inherently hazardous, and adequate safeguards for personnel and property shall be employed in conducting these tests. Fire testing involves hazardous materials, operations, and equipment. This standard gives instructions on specimen preparation and mounting, but the fire-test-response method is given in Test Method E 84. See also Section 10.
- 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.
- 1.8 The text of this standard references notes and footnotes which provide explanatory material. These notes and footnotes shall not be considered requirements of the standard.

## 2. Referenced Documents

2.1 ASTM Standards: <sup>2</sup>

- E 84 Test Method for Surface Burning Characteristics of Building Materials
- E 176 Terminology of Fire Standards
- IEEE/ASTM SI-10 International System of Units (SI): The Modern Metric System

## 3. Terminology

- 3.1 *Definitions*—For definitions of terms used in this practice refer to Terminology E 176.
  - 3.2 Definitions of Terms Specific to This Standard:
- 3.2.1 *frame*, *n*—an item (plastic extrusion, wood, metal or other material) that is mounted to an existing substrate via mechanical fasteners or adhesive, that has a mechanism for holding an outer layer (fabric or vinyl) by tension.
- 3.2.2 *joining material*, *n*—the frame piece used to join two or more site fabricated stretch panels together, to create a midseam.
- 3.2.3 *longitudinal midseam*, *n*—a seam made from the joining material used in the stretch system, which is centered on the test specimen and runs the entire length of the test specimen.
- 3.2.4 *self-supporting specimen*, *n*—a specimen that remains in place by its own structural characteristics both before and during the fire test or is burnt or pyrolyzed prior to falling away from its original position.
- 3.2.5 site-fabricated stretch system, n—a system, fabricated on site and intended for acoustical, tackable or aesthetic purposes, that is comprised of three elements: (a) a frame (constructed of plastic, wood, metal or other material) used to hold fabric in place, (b) a core material (infill, with the correct properties for the application), and (c) an outside layer, comprised of a textile, fabric or vinyl, that is stretched taut and held in place by tension or mechanical fasteners via the frame.
- 3.2.6 *wide span system*, *n*—a system that employs a wide span fabric or vinyl, from 10 ft or more in width and minimizes the use of a midseam or "joining" material.

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

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<sup>&</sup>lt;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.