

Standard Practice for Specimen Preparation and Mounting of Reflective Insulation, Radiant Barrier and Vinyl Stretch Ceiling Materials for Building Applications to Assess Surface Burning Characteristics¹

This standard is issued under the fixed designation E2599; 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 practice describes a procedure for specimen preparation and mounting when testing reflective insulation, radiant barrier and vinyl stretch ceiling materials to assess flame spread and smoke development as surface burning characteristics using Test Method E84.

1.2 This practice is for reflective insulation materials and radiant barrier materials intended for mechanical fastening to substrates or building structural members, or intended to be mounted to a substrate with an adhesive.

1.3 Specimens of reflective insulation materials and radiant barrier materials intended for mechanical fastening shall be prepared and mounted in accordance with 6.1. Specimens of reflective insulation materials and radiant barrier materials intended to be mounted to a substrate with an adhesive shall be prepared and mounted in accordance with 6.2. If the reflective insulation material or sheet radiant barrier material includes manufacturer recommended installation instructions with the option to be installed either by mechanical attachment or adhered, the insulation material shall be tested by both mounting procedures as outlined in 6.1 and 6.2.

1.4 Specimens of vinyl stretch ceiling materials shall be prepared and mounted in accordance with 6.1.

NOTE 1—Vinyl stretch ceiling materials are mechanically fastened.

1.5 This practice shall apply to reflective insulation materials and radiant barrier materials as defined in Section 3.

1.6 This practice shall apply to reflective plastic core insulation materials as defined in 3.2.3. Reflective plastic core insulation materials are one specific type of reflective insulation materials.

1.7 This practice shall apply to vinyl stretch ceiling materials as defined in Section 3.

1.8 This practice shall not apply to rigid foam plastics with or without reflective facers.

1.9 This practice shall not apply to site-fabricated stretch systems covered by Practice E2573.

1.10 Testing is conducted in accordance with Test Method E84.

1.11 This practice does not provide pass/fail criteria that can be used as a regulatory tool.

1.12 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.

1.13 This fire standard cannot be used to provide quantitative measures.

1.14 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 practice gives instructions on specimen preparation and mounting but the fire-test-response method is given in Test Method E84. See also Section 8.

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

1.16 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the*

¹ 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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