



Designation: E2690 – 10

Standard Practice for Specimen Preparation and Mounting of Caulks and Sealants to Assess Surface Burning Characteristics¹

This standard is issued under the fixed designation E2690; 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 procedures for specimen preparation and mounting when testing caulks and sealants up to 8 in. (203.2 mm) in width to assess flame spread and smoke development as surface burning characteristics using Test Method E84. Caulks and sealants in excess of 8 in. (203.2 mm) are to be tested in full coverage as applied to fiber cement board as described in Test Method E84.

1.2 This practice applies to caulks and sealants intended for various uses within buildings. The caulks and sealants addressed in this practice are not able to be supported by their own structural characteristics during the test.

1.3 Testing is conducted in accordance with Test Method E84.

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

1.5 This practice does not apply to materials for which the test specimen does not remain in place before and during the test until maximum flame propagation has occurred.

1.6 This practice is not for system evaluation. It is for the comparison of the materials only.

1.7 The results obtained by using this mounting procedure are confined to the materials themselves as tested and are not comparable to materials that are tested in a full tunnel width application.

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

1.9 Fire testing is inherently hazardous. Adequate safeguards for personnel and property shall be employed in conducting these tests.

1.10 This standard gives instructions on specimen preparation and mounting, but the fire-test-response method is given in Test Method E84. See also Section 9.

1.11 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.

1.12 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.

1.13 *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:*²

C717 Terminology of Building Seals and Sealants

E84 Test Method for Surface Burning Characteristics of Building Materials

E176 Terminology of Fire Standards

IEEE/ASTM SI-10 International System of Units (SI): The Modernized Metric System

3. Terminology

3.1 *Definitions*—For definitions of terms used in this practice associated with fire issues, refer to the terminology contained in Terminology E176. For definitions of terms used in this practice associated with caulks and sealants refer to the terminology contained in Terminology C717.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *bead, n*—in building construction, a strip of applied sealant, glazing compound or putty.

3.2.2 *sealant, n*—in building construction, a material that has the adhesive and cohesive properties to form a seal.

3.2.3 *self-supporting specimen, n*—a specimen that remains in place by its own structural characteristics both before and during the fire test.

4. Summary of Practice

4.1 This practice describes procedures for specimen preparation and mounting when testing caulks and sealants up to and including 8 in. (203.2 mm) in width to assess flame spread and smoke development as surface burning characteristics using Test Method E84. Caulks and sealants in excess of 8 in. (203.2

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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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.