



Designation: E 1822 – 02ab

An American National Standard

Standard Test Method for Fire Testing of Stacked Chairs¹

This standard is issued under the fixed designation E 1822; 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 is a fire-test-response standard.

1.2 This test method provides a means of determining the burning behavior of stacking chairs used in public occupancies by measuring specific fire-test responses when a stack of chairs is subjected to a specified flaming ignition source under well ventilated conditions.

1.3 This test method is limited to stacked chairs.

1.4 Test data are obtained describing the burning behavior following application of a specific ignition source, from ignition until all burning has ceased, a period of 1 h has elapsed, or flashover under test conditions appears inevitable.

1.5 This test method does not provide information on the fire performance of stacked chairs under fire conditions other than those conditions specified in this test method. In particular, this test method does not apply to smoldering ignition by cigarettes. See 5.11 for further information.

1.6 The rate of heat release of the burning test specimen is measured by an oxygen consumption method. See 5.11.4 for further information.

1.7 Other measurements are the production of light-obscuring smoke and the concentrations of certain toxic gas species in the combustion gases. See 5.11.5 for further information.

1.8 The burning behavior is documented visually by photographic or video recordings.

1.9 *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..*

1.10 Fire testing of products and materials is inherently hazardous, and adequate safeguards for personnel and property shall be employed in conducting these tests. This test method may involve hazardous materials, operations, and equipment.

1.11 Use the SI system of units in referee decisions; see Practice E 380. The units given in parentheses are for information only.

1.12 *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:*

D 123 Terminology Relating to Textiles²

¹ This test method is under the jurisdiction of ASTM Committee E05 on Fire Standards and is the direct responsibility of Subcommittee E05.15 on Furnishings and Contents.

Current edition approved Feb. Sept. 10, 2002. Published May November 2002. Originally published as E 1822 – 96. Last previous edition E 1822 – 02a.