

Standard Specification for Glass Used as a Horizontal Surface in Desks and Tables¹

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INTRODUCTION

This specification addresses serious human injury and fatality incidents involving breakage of glass used in unenclosed horizontal surfaces in desks and tables. This specification is intended to minimize the likelihood of serious cutting and piercing injuries that may occur due to the breakage of glass used as a horizontal surface in desks and dining, coffee, end, display, mobile, outdoor, and other types of tables.

1. Scope

- 1.1 This specification covers performance requirements to ensure the use of safety glass when used as an unenclosed horizontal surface under 44 in. (1118 mm) in height in a desk or table.
- 1.2 *Units*—The values stated in inch pound units are to be regarded as the standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.
- 1.3 The following safety hazards caveat pertains only to the test methods referenced in this specification: 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

C162 Terminology of Glass and Glass Products

2.2 ANSI Standards:³

ANSI Z97.1-2009 Safety Glazing Materials Used in Buildings—Safety Performance Specifications and Methods of Test

ANSI Z-535.4-2007 Product Safety Signs and Labels

3. Terminology

- 3.1 *Definitions*—For definitions of general terms related to glass and glass products used in this specification, refer to Terminology C162.
 - 3.2 Definitions of Terms Specific to This Standard:
- 3.2.1 *fully supported*—the condition in which the lower surface of a glass plate is supported by a structure (1) that is capable of withstanding a 250-lb static load applied to a 12-in. diameter disk in any location for 1 h; (2) through which a 3-in. diameter sphere would not pass and; (3) with no overhanging glass surface(s).
- 3.2.2 *unenclosed*—open on at least one side to the extent that a three inch diameter sphere would pass through the opening.

4. General Requirements

- 4.1 Glass shall be laminated safety glass or tempered safety glass that complies with the following:
 - 4.1.1 Performance criteria of ANSI Z97.1-2009.
- 4.1.1.1 Glass equal to or greater in area than 9 ft² (0.84 m²) shall comply with Class A performance.
- 4.1.1.2 Glass less than 9 ft² (0.84 m²) shall comply with a minimum of Class B performance.
- 4.2 The use of monolithic annealed, monolithic chemically strengthened or monolithic wired glass shall not be permitted.
 - 4.3 Exceptions:
- 4.3.1 Glass fully-supported by and bonded to a non-glass material shall not be subject to the requirements of 4.1 and Section 5.
- 4.3.2 Glass surfaces incorporating or constituting display screens shall not be subject to the requirements of 4.1 and Section 5.

 $^{^{1}}$ This test method is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.42 on Furniture Safety.

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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 American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.



5. Product Marking

- 5.1 All glass panels under the scope of this standard shall be marked. The marking may be either the marking specified in ANSI Z97.1, or it may be as specified in 5.2-5.5.
 - 5.2 The marking shall contain the following information:
- 5.2.1 The term "Safety Glass," "Safety Tempered Glass," or "Laminated Safety Glass" as appropriate.
 - 5.2.2 The words "Meets ASTM F2813-12."
- 5.3 The marking may be in the form of a label that is removable by the consumer or a marking permanently applied to the glass.
- 5.4 The marking shall be printed using sans serif font, at least 11-point font size, in accordance with ANSI Z-535.4.

5.5 The marking is applied by the fabricator of the glass component or the furniture manufacturer.

6. Precision and Bias

6.1 Precision and bias of the tests referenced in this standard are those stated in the standards cited relative to the tests.

7. Keywords

7.1 flat glass; furniture glass; glass; glass breakage; glass furniture; glass tabletops; laminated glass; laminated safety glass; primary surface; secondary surface; tempered glass; tempered safety glass

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