



Standard Specification for Bent Glass¹

This standard is issued under the fixed designation C1464; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This specification covers the requirements for bent glass used in general building construction, furniture, display, and various other non-automotive applications.

1.2 The dimensional values, stated in SI units are to be regarded as the standard. The values given in parentheses are provided for information only.

1.3 The following safety hazards caveat pertains only to the test method portion, Section 7, of 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 Documents²

2.1 ASTM Standards:³

C162 Terminology of Glass and Glass Products

C1036 Specification for Flat Glass

C1048 Specification for Heat-Strengthened and Fully Tempered Flat Glass

C1172 Specification for Laminated Architectural Flat Glass

C1376 Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass

C1422 Specification for Chemically Strengthened Flat Glass

2.2 ANSI Standard

ANSI Z-97.1 Safety Glazing Materials Used in Buildings—Safety Performance Specifications and Methods of Test

2.3 Federal Document:⁴

CPSC 16 CFR 1201 Consumer Product Safety Commission Safety Standard for Architectural Glazing Material

¹ This specification is under the jurisdiction of ASTM Committee C14 on Glass and Glass Products and is the direct responsibility of Subcommittee C14.08 on Flat Glass.

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² Reference to these standards shall be the latest revision unless otherwise specified by the authority applying this specification.

³ 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.

⁴ Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

3. Terminology

3.1 Definitions:

3.1.1 Refer to Terminology C162, Specifications C1036, C1422, C1376, and C1172, as appropriate.

3.1.2 *Blemishes in Flat Glass*—Refer to Specifications C1036, C1048, C1422, C1376, and C1172, as appropriate.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *bent glass*—flat glass that has been shaped while hot into a body having curved surfaces.

3.2.2 *chord*—a straight line segment that joins two points of an arc.

3.2.3 *complex bend*—a profile shape composed of curvature not easily defined by multiple radii that can result in a bent shape on one or more axis, typically defined by model or mold.

3.2.4 *compound bend*—a profile shape composed of curvature of more than one radii, curved on two or more axes.

3.2.5 *crossbend*—deviation from a straight edge along a line perpendicular to the curvature measured on the concave side.

3.2.6 *cylindrical bend*—a profile shape composed of a single curvature with a constant radius and no straight sections, all curved on a single axis.

3.2.7 *degree of angle*—the angular measurement of a segment of a curve.

3.2.8 *depth*—on a circular bend, the distance from the midpoint of a chord to the arc measured along its radius perpendicular to the circumference.

3.2.9 *elliptical bend*—a curved profile shape composed of two or more tangential radii on a single axis.

3.2.10 *girth*—the distance around the concave or convex surface measured perpendicular to the height including any flats.

3.2.11 *height*—the length measurement of the edge perpendicular to the horizontal arc or girth.

3.2.12 *multiple bend*—a profile shape composed of a curvature of two or more radii, all curved on a single axis, with at least two of the curvatures possibly separated by a flat (plane) area, and with or without one or more additional flat (plane) areas tangent to the curvatures.

3.2.13 *pock marks*—process surface blemishes that consist of small, shallow areas, circular in shape, on the surface of the glass.