
**Glass in building — Laminated glass
and laminated safety glass —**

**Part 5:
Dimensions and edge finishing**

*Verre dans la construction — Verre feuilleté et verre feuilleté de
sécurité —*

Partie 5: Dimensions et façonnage des bords

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 160, *Glass in building* Subcommittee SC 1, *Product considerations*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 129, *Glass in building*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 12543-5:2011), which has been technically revised.

The main changes compared to the previous edition are editorial changes.

A list of all parts in the ISO 12543 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Glass in building — Laminated glass and laminated safety glass —

Part 5: Dimensions and edge finishing

1 Scope

This document specifies dimensions, limit deviations and edge finishes of laminated glass and laminated safety glass for use in building.

This document is not applicable to panes having an area less than 0,05 m².

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12543-1, *Glass in building — Laminated glass and laminated safety glass — Part 1: Definitions and description of component parts* (<https://standards.iteh.ai>)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12543-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

offset

d

misalignment at any one edge of the constituent glass panes or plastic glazing sheet material making up the laminated glass

Note 1 to entry: See [Figure 2](#).

Note 2 to entry: In the previous edition of this document the term “displacement” was used instead.

4 Dimensions and limit deviations

4.1 Thickness

4.1.1 Nominal thickness

The nominal thickness of laminated glass shall be the sum of the nominal thicknesses of the constituent panes of glass, plastic glazing sheet material and the interlayers.

4.1.2 Limit deviation on thickness

4.1.2.1 Limit deviation on thickness of folio laminated products

The limit deviations on thickness of laminated glass shall not exceed the sum of the limit deviations of the constituent glass panes specified in the basic products standards.

NOTE For the appropriate CEN and ISO standards, see ISO 12543-1:2021, Bibliography.

If the total interlayer thickness is less than or equal to 2 mm, an additional limit deviation of $\pm 0,1$ mm applies. If the total interlayer thickness is greater than 2 mm, an additional limit deviation of $\pm 0,2$ mm shall apply.

If the plastic glazing sheet material is covered by a standard, the limit deviations on thickness given in the standard shall be used. If the plastic glazing sheet material is not covered by a standard the producer of any plastic glazing sheet material shall indicate the limit deviation on thickness.

EXAMPLE A laminated glass made from two sheets of float glass of 3 mm nominal thickness and a folio interlayer of 0,5 mm. The limit deviation of 3 mm float glass is given as $\pm 0,2$ mm and the limit deviation of the folio interlayer is $\pm 0,1$ mm. Therefore, the nominal thickness is 6,5 mm and the limit deviation is $\pm 0,5$ mm.

4.1.2.2 Limit deviations on thickness of cast-in-place products

The limit deviations on the thickness of cast-in-place laminated glass shall not exceed the sum of the limit deviations of the constituent glass panes specified in the basic products standards and the limit deviations of the cast-in-place interlayers.

The thickness limit deviation for plastic glazing sheet material shall be assumed to be the same as a float glass of the same nominal thickness.

NOTE If the plastic glazing sheet material is covered by a standard, the actual limit deviations on thickness can be used.

The thickness limit deviations of cast-in-place interlayers shall be in accordance with [Table 1](#).

Table 1 — Limit deviations on the thickness of cast-in-place interlayers

Dimensions in millimetres

Interlayer thickness	Limit deviation
<1	$\pm 0,4$
≥ 1 to <2	$\pm 0,5$
≥ 2 to <3	$\pm 0,6$
≥ 3	$\pm 0,7$

EXAMPLE A laminated glass made from two sheets of float glass of 3 mm nominal thickness and a cast-in-place interlayer of 1,5 mm. The limit deviation of 3 mm float glass is given as $\pm 0,2$ mm and from [Table 1](#) the interlayer tolerance is $\pm 0,5$ mm. Therefore, the nominal thickness is 7,5 mm and the limit deviation is $\pm 0,9$ mm.

4.1.2.3 Limit deviations on thickness of fire-resistant laminated glass

The limit deviations on thickness of fire-resistant laminated glass shall not exceed the sum of the limit deviations of the constituent glass panes specified in the basic products standards and the limit deviations of the fire-resistant interlayers.

The thickness limit deviation for plastic glazing sheet material shall be assumed to be the same as a float glass of the same nominal thickness.

NOTE If the plastic glazing sheet material is covered by a standard, the actual limit deviations on thickness can be used.