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

**Part 1:
Vocabulary and description of
component parts**

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

Partie 1: Vocabulaire et description des composants

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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).

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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 12543-1:2011), which has been technically revised.

The main changes compared to the previous edition are as follows:

- editorial changes have been made;
- definitions in [Clause 3](#) has been modified.

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.

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Glass in building — Laminated glass and laminated safety glass —

Part 1: Vocabulary and description of component parts

1 Scope

This document defines terms and describes component parts for laminated glass and laminated safety glass for use in building.

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 12543-2, *Glass in building — Laminated glass and laminated safety glass — Part 2: Laminated safety glass*

ISO 12543-3, *Glass in building — Laminated glass and laminated safety glass — Part 3: Laminated glass*

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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 <http://www.electropedia.org/>

3.1 General

3.1.1

laminated glass

assembly consisting of one sheet of glass with one or more sheets of glass and/or plastic glazing sheet material joined together with one or more *interlayers* (3.2.7)

Note 1 to entry: See ISO 12543-3.

3.1.2

laminated safety glass

laminated glass (3.1.1) classified in accordance with a soft body impact standard where in the case of breakage the *interlayer* (3.2.7) serves to retain the glass fragments, limits the size of opening, offers residual resistance and reduces the risk of cutting or piercing injuries

Note 1 to entry: See ISO 12543-2.

3.2 Laminated glass and laminated safety glass

3.2.1

fire-resistant laminated glass

fire-resistant laminated glass with a fire-resistant interlayer

laminated glass (3.1.1) where at least one *interlayer* (3.2.7) reacts to the high temperature to give the product its fire resistance

Note 1 to entry: A glass product can only have its fire performance determined and classified when used in a fire-resistant glazed assembly.

Note 2 to entry: Laminated glass may achieve fire resistance by means of the performance of one or more of its glass components which are kept after lamination. This laminated glass has to be distinguished from the fire-resistant laminated glass with the fire resistant interlayer as defined above.

3.2.2

laminated glass with acoustic properties

laminated glass (3.1.1) where at least one *interlayer* (3.2.7) increases the sound transmission loss of the product

Note 1 to entry: The interlayer can be evaluated in accordance with ISO 16940, which measures the mechanical impedance of laminated glass.

3.2.3

symmetrical laminated glass

laminated glass (3.1.1) in which, from both outer surfaces, the sequence of glass panes, plastic glazing sheet material and *interlayer(s)* (3.2.7) by type, thickness, finish and general characteristics are the same

3.2.4

asymmetrical laminated glass

laminated glass (3.1.1) in which, from both outer surfaces, the sequence of glass panes, plastic glazing sheet material and *interlayer(s)* (3.2.7) by type, thickness, finish and/or general characteristics is different

3.2.5

flat laminated glass

laminated glass (3.1.1) in which the constituent glass panes and plastic glazing sheet material have not been formed or bent in the course of manufacture

3.2.6

curved laminated glass

laminated glass (3.1.1) in which the constituent glass panes and plastic glazing sheet material have been deliberately shaped by bending prior to lamination

3.2.7

interlayer

one or more layers of material acting as an adhesive between plies of glass and/or plastic glazing sheet material

Note 1 to entry: The interlayer can also give additional performance attributes to the finished product, such as impact resistance, resistance to fire, solar control and acoustic insulation.

Note 2 to entry: The interlayer itself can also encapsulate, for example, non-adhesive films and *plates* (3.2.10), wires, *grids* (3.2.11).

3.2.8

encapsulated material

non-adhesive material that is encapsulated by an *interlayer* (3.2.7) between the glass and/or plastic glazing material

Note 1 to entry: The non-adhesive material can be, for example, a film, *plate* (3.2.10), wire, *grid* (3.2.11).