INTERNATIONAL STANDARD

ISO 12543-3

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Glass in building — Laminated glass and laminated safety glass —

Part 3:
Laminated glass

Verre dans la construction — Verre feuilleté et verre feuilleté de sécurité — Partie 3: Verre feuilleté

Reference number
ISO 12543-3:1998(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 12543-3 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 160, *Glass in building*, Subcommittee SC 1, *Product consideration*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 12543 consists of the following parts, under the general title *Glass in building — Laminated glass and laminated safety glass*:

— *Part 1: Definitions and description of component parts*

— *Part 2: Laminated safety glass*

— *Part 3: Laminated glass*

— *Part 4: Test methods for durability*

— *Part 5: Dimensions and edge finishing*

— *Part 6: Appearance*

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Contents

Foreword

The text of EN ISO 12543-3:1998 has been prepared by Technical Committee CEN/TC 129 " Glass in building ", the secretariat of which is held by IBN, in collaboration with Technical Committee ISO/TC 160 "Glass in building".

This part of the standard is one of a series of interrelated parts:

EN ISO 12543-1:	Glass in building - Laminated glass and laminated safety glass - Part 1: Definitions and description of component parts
EN ISO 12543-2:	Glass in building - Laminated glass and laminated safety glass - Part 2: Laminated safety glass
EN ISO 12543-3:	Glass in building - Laminated glass and laminated safety glass - Part 3: Laminated glass
EN ISO 12543-4:	Glass in building - Laminated glass and laminated safety glass - Part 4: Test methods for durability
EN ISO 12543-5:	Glass in building - Laminated glass and laminated safety glass - Part 5: Dimensions and edge finishing
EN ISO 12543-6:	Glass in building - Laminated glass and laminated safety glass - Part 6: Appearance

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 1998, and conflicting national standards shall be withdrawn at the latest by November 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This Standard specifies performance requirements for laminated glass as defined in EN ISO 12543-1.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

EN ISO 12543-1 Glass in building - Laminated glass and laminated safety glass - Part 1: Definitions and description of component parts

EN ISO 12543-4:1998 Glass in building - Laminated glass and laminated safety glass - Part 4: Test methods for durability

EN ISO 12543-5 Glass in building - Laminated glass and laminated safety glass - Part 5: Dimensions and edge finishing

EN ISO 12543-6 Glass in building - Laminated glass and laminated safety glass - Part 6: Appearance

3 Impact resistance

No impact resistance requirements are defined for laminated glass.

4 Durability of laminated glass and laminated glass with fire resistant properties

4.1 High temperature test

When tested in accordance with the method given in clause 4 of EN ISO 12543-4:1998 and evaluated according to 4.4 of EN ISO 12543-4:1998, no faults (bubbles, delamination, cloudiness) shall be found in three test specimens. If faults are found in only one test specimen, a further test may be carried out on three new test specimens, in which case no faults shall be found in any of these test specimens.

4.2 Humidity test

When tested in accordance with the method given in 5.3.1 of EN ISO 12543-4:1998 and evaluated according to 5.4 of EN ISO 12543-4:1998, no faults (bubbles, delamination, cloudiness) shall be found in three test specimens. If faults are found in only one test specimen, a further test may be carried out on three new test specimens, in which case no faults shall be found in any of these test specimens.

4.3 Radiation test

When tested in accordance with the method given in clause 6 of EN ISO 12543-4:1998 and evaluated according to 6.5 of EN ISO 12543-4:1998, the luminous transmittance of the three irradiated samples shall not change by more than ± 10% of their value before exposure for initial light transmittances of > 20% or ± 2% absolute value for initial light transmittances of ≤ 20%. When visually judged, no faults (bubbles, delamination, cloudiness) shall be found in three test specimens.

If one test specimen fails the requirements, then the test may be repeated with three new test specimens which shall all pass.

5 Durability of fire resistant laminated glass

5.1 Subgroup A

Glass which is normally not exposed to direct solar radiation i.e. for indoor use

5.1.1 Humidity test

When tested in accordance with the method given in 5.3.2 of EN ISO 12543-4:1998 and evaluated according to 5.4 of EN ISO 12543-4:1998, no delamination shall be found in the three test specimens. If delamination is found in only one test specimen, a further test may be carried out with three new test specimens, in which case no delamination shall be found in any of these test specimens.

5.2 Subgroup B

Glass which is normally exposed to direct solar radiation i.e. for outdoor use.

5.2.1 Humidity test

When tested in accordance with the method given in 5.3.1 of EN ISO 12543-4:1998 and evaluated according to 5.4 of EN ISO 12543-4:1998, no delamination shall be found in three test specimens. If delamination is found in only one test specimen, a further test may be carried out on three new test specimens, in which case no delamination shall be found in any of these test specimens.

5.2.2 Radiation test

When tested in accordance with the method given in clause 6 of EN ISO 12543-4:1998 and evaluated according to 6.5 of EN ISO 12543-4:1998, the luminous transmittance of the three irradiated samples shall not change by more than ± 10% of their value before exposure for initial light transmittances of > 20% or ± 2%

absolute value for initial light transmittances of ≤ 20%. When visually judged, no faults (bubbles, delamination, cloudiness) shall be found in three test specimens.

If one test specimen fails the requirements, then the test may be repeated with three new test specimens which shall all pass.