



ISO 10292

Glass in building — Determination of thermal transmittance (U value) — Calculation method

*Verre dans la construction — Détermination du coefficient de
transmission thermique (valeur U) — Méthode de calcul*

**Second edition
2026-07**

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Published in Switzerland

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This document was prepared by Technical Committee ISO/TC 160, *Glass in building*.

This second edition cancels and replaces the first edition (ISO 10292:1994), which has been technically revised.

The main changes are as follows:

- changes to some of the gas properties;
- introduction of a linear approximation for determining gas properties at different temperatures;
- modification of the calculation of the internal heat transfer coefficient for vertical glazing for consistency with ISO 6946;
- provision of more details on heat transfer coefficients for glazing at angles other than vertical, for consistency with ISO 6946 and ISO 10077-1;
- additional clarification provided on the iteration procedure for an insulating glass unit with more than one gas space.

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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For the purposes of this document, the term glass has been used in the context of a material or surface property, whereas the term glazing has been adopted to refer to either monolithic glass or an insulating glass unit.

The primary purpose of this document is product comparison, for which a vertical position of the glazing is specified. In addition, U values are calculated using the same procedure for other purposes, in particular for predicting:

- heat loss through glass;
- conduction heat gains in summer;
- condensation on glass surfaces;
- the effect of the absorbed solar radiation in determining the solar factor (see ISO 9050).

Reference can be made to ISO 6946, ISO 52016-1 and ISO 10211 or other European Standards dealing with heat loss calculations for the application of glazing U values determined by this document.

Reference can be made to ISO 15099 for detailed calculations of U values of glazing, including shading devices.

A procedure for the determination of emissivity is given in ISO 20589.

The rules have been made as simple as possible consistent with accuracy.