INTERNATIONAL STANDARD

ISO 10077-1

Third edition
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Thermal performance of windows, doors and shutters — Calculation of thermal transmittance —

Part 1: General

Performance thermique des fenêtres, portes et fermetures — Calcul du coefficient de transmission thermique —

Partie 1: Généralités

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Foreword

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ISO 10077-1 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 89, *Thermal performance of buildings and building components*, in collaboration with ISO Technical Committee TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 2, *Calculation methods*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 10077-1:2006), of which it constitutes a minor revision. The necessary editorial revisions were made to comply with the requirements for the EPB set of standards.

In addition, the following clauses and subclauses of the previous version have been revised.

— In Clause 6 (previous edition), the boundary condition "determined with the glazing replaced with a material of thermal conductivity not exceeding 0,04 W/(m^2·K)" was deleted, because the rules are defined in EN 12412-2.

— In Clause 6 (previous edition), the measurement according to EN 12412-2 for the determination of Ψ_g and/or Ψ_p was deleted. It is not within the scope of EN 12412-2 to determine Ψ values.

— In Clause 6 (previous edition), the second paragraph was deleted. It is not necessary to give further possibilities. Determination of the input data in unambiguous is defined.

— In 5.2.2 (previous edition), the formula was deleted. Determination of U_g is according to ISO 10292.[1)]

— Formulae (1) and (2) were extended for the consideration of glazing bars.

— Tabulated values were added for the linear thermal transmittance of glazing bars.

— Status of Annex C (previous edition) was changed to normative; some values were revised to give the values to two significant figures.

1) See Table C.1 for alternative regional references in line with ISO Global Relevance Policy.

— Table C.2 (previous edition) was moved to ISO/TR 52022-2:2017.

— Annex E (previous edition) was moved to the main body of the document.

— Annex G and Annex H (previous edition) were moved to ISO/TR 52022-2:2017.

It also incorporates the Technical Corrigendum ISO 10077-1:2006/Cor. 1:2009.

A list of all parts in the ISO 10077 series can be found on the ISO website.