## INTERNATIONAL STANDARD

ISO 12567-2

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# Thermal performance of windows and doors — Determination of thermal transmittance by hot box method —

#### Part 2:

Roof windows and other projecting windows

Isolation thermique des fenêtres et portes — Détermination de la transmission thermique par la méthode à la boîte chaude —

Partie 2: Fenêtres de toit et autres fenêtres en saillie



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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 Maison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical control tees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires applying by at least 75 % of the member bodies casting a vote.

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.

ISO 12567-2 was prepared by Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 1, *Test and measurement methods*.

tows. ISO 12567 consists of the following parts, under the general title *Thermal performance of windows and doors* — *Determination of thermal transmittance by hor box method*:

- Part 1: Complete windows and doors
- Part 2: Roof windows and other projecting windows.

#### Introduction

This part of ISO 12567 should be read together with ISO 12567-1:2000 *Thermal performance of windows and doors* — *Determination of thermal transmittance by hot box method* — *Part 1: Complete windows and doors*. These two parts were jointly developed by ISO and CEN. They are designed to provide standardised thermal transmittance test values, to enable product comparisons to be made. ISO 12567-1:2000 specifies standardised specimen sizes and applied test criteria.

It is recognised that the thermal performance of products will vary with heat flow direction and so it is preferable to test these products at the orientation in which they will be installed. However, as there are only a few hot boxes capable of carrying out such measurements, this measurement procedure specifies that it is acceptable to measure the thermal transmittance of roof windows mounted vertically to facilitate the fair comparison of products.

It should be noted that measurements with the specimen mounted vertically will generally produce U-values lower than those measured at other orientations with heat flow up. An alternative to measuring at the actual orientation that will be used in practice is to carry out calculations of convective and radiant heat transfer using the procedures specified in ISO 15099, ISO 10077-1, ISO 10077-2 and EN 673.

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### Thermal performance of windows and doors — Determination of thermal transmittance by hot box method —

#### Part 2:

#### Roof windows and other projecting windows

#### 1 Scope

This part of ISO 12567 specifies a method to measure the thermal transmittance of roof windows and projecting windows.

It does not include:

- edge effects occurring outside the perimeter of the specimen;
- energy transfer due to solar radiation the specimen;
- effects of air leakage through the specimer

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undate references, the latest edition of the referenced document (including any amendments) applies.

ISO 7345:1987, Thermal insulation — Physical quantities and definitions

ISO 8990:1994, Thermal insulation — Determination of steady-state thermal transmission properties — Calibrated and guarded hot box

ISO 12567-1:2000, Thermal performance of windows and doors — Determination of thermal transmittance by hot box method — Part 1: Complete windows and doors

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 7345 and ISO 12567-1 and the following apply.

#### 3.1

#### projecting windows

product, where any glazing layer projects beyond the outside surface of the building envelope

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