

This is a preview of "ISO 12567-1:2010". [Click here to purchase the full version from the ANSI store.](#)

Second edition  
2010-07-01

---

---

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

## Part 1: Complete windows and doors

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

*Partie 1: Fenêtres et portes complètes*



Reference number  
ISO 12567-1:2010(E)

© ISO 2010

This is a preview of "ISO 12567-1:2010". [Click here to purchase the full version from the ANSI store.](#)

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2010

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of "ISO 12567-1:2010". Click here to purchase the full version from the ANSI store.

## Contents

Page

Foreword .....	iv
Introduction.....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms, definitions and symbols .....	2
3.1 Terms and definitions .....	2
3.2 Symbols.....	2
4 Principle.....	4
5 Requirements for test specimens and apparatus .....	10
5.1 General .....	10
5.2 Surround panels .....	10
5.3 Test specimens.....	10
5.4 Calibration panels .....	12
5.5 Temperature measurements and baffle positions .....	12
5.6 Air flow measurement.....	12
6 Test procedure.....	13
6.1 General .....	13
6.2 Calibration measurements .....	14
6.3 Measurement procedure for test specimens.....	17
6.4 Expression of results for standardized test applications .....	17
7 Test report.....	18
Annex A (normative) Environmental temperatures.....	19
Annex B (normative) Linear thermal transmittance of the edge zone .....	23
Annex C (informative) Design of calibration transfer standard .....	26
Annex D (informative) Example of calibration test and measurement of window specimen .....	30
Annex E (informative) Analytical calibration procedure using heat balance equations .....	39
Annex F (informative) Uncertainty analysis for hot boxes .....	41
Bibliography.....	52

## 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.

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

The main task of technical committees 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 approval 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 12567-1 was prepared by Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 1, *Test and measurement methods*.

This second edition cancels and replaces the first edition (ISO 12567-1:2000), which has been technically revised.

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

- *Part 1: Complete windows and doors*
- *Part 2: Roof windows and other projecting windows<sup>1)</sup>*

---

1) It is intended that, upon revision, the main element of the title of Part 2 will be aligned with the main element of the title of Part 1.

This is a preview of "ISO 12567-1:2010". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

The method specified in this part of ISO 12567 is based on ISO 8990. It is designed to provide both standardized tests, which enable a fair comparison of different products to be made, and specific tests on products for practical application purposes. The former specifies standardized specimen sizes and applied test criteria.

The determination of the aggregate thermal transmittance is performed for conditions which are similar to the actual situation of the window and door in practice.