

This is a preview of "ISO 3008-1:2019". [Click here to purchase the full version from the ANSI store.](#)

First edition  
2019-01

---

---

# Fire resistance tests — Door and shutter assemblies —

## Part 1: General requirements

*Essais de résistance au feu — Assemblages de portes et volets —  
Partie 1: Exigences générales*



Reference number  
ISO 3008-1:2019(E)

© ISO 2019

This is a preview of "ISO 3008-1:2019". Click [here](#) to purchase the full version from the ANSI store.



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Fax: +41 22 749 09 47  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of "ISO 3008-1:2019". [Click here to purchase the full version from the ANSI store.](#)

## Contents

	Page
<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
<b>4 Test equipment</b> .....	<b>4</b>
<b>5 Test conditions</b> .....	<b>4</b>
<b>6 Test specimen</b> .....	<b>4</b>
6.1 Size of specimen.....	4
6.2 Number of specimens.....	4
6.3 Design of specimen.....	4
6.4 Construction.....	5
6.5 Verification.....	5
<b>7 Installation of test specimen</b> .....	<b>5</b>
7.1 General.....	5
7.2 Supporting construction.....	5
7.3 Test construction.....	6
7.3.1 Associated and supporting construction.....	6
7.3.2 Associated construction.....	6
7.3.3 Supporting construction.....	6
7.3.4 Restraint on supporting construction.....	14
7.4 Gaps.....	15
<b>8 Conditioning</b> .....	<b>19</b>
8.1 Moisture content.....	19
8.2 Mechanical.....	19
<b>9 Application of instrumentation</b> .....	<b>20</b>
9.1 Temperature measurements.....	20
9.1.1 Furnace-temperature measuring instrument.....	20
9.1.2 Unexposed-face thermocouples.....	21
9.2 Maximum temperature.....	37
9.3 Temperature of door frame.....	38
9.4 Pressure measurements.....	38
9.5 Heat-flux measurement.....	39
9.5.1 General.....	39
9.5.2 Apparatus.....	39
9.5.3 Procedure.....	39
9.5.4 Measurement.....	40
9.6 Deflection.....	40
<b>10 Test procedure</b> .....	<b>44</b>
10.1.1 Gap measurements.....	44
10.1.2 Retention force measurements.....	45
10.1.3 Final setting.....	45
<b>11 Performance criteria</b> .....	<b>45</b>
11.1 Integrity.....	45
11.2 Insulation.....	46
<b>12 Test report</b> .....	<b>46</b>
<b>13 Field of direct application of test results</b> .....	<b>46</b>
13.1 General.....	46
13.2 Timber constructions.....	47

This is a preview of "ISO 3008-1:2019". [Click here to purchase the full version from the ANSI store.](#)

13.3	Steel constructions .....	47
13.4	Glazed constructions .....	47
13.5	Fixings/hardware .....	48
<b>Annex A (normative) Conditioning requirements for supporting constructions.....</b>		<b>49</b>
<b>Annex B (informative) Estimation of radiant heat flux using measured surface temperature and the Stefan-Boltzmann law .....</b>		<b>50</b>
<b>Bibliography .....</b>		<b>52</b>

This is a preview of "ISO 3008-1:2019". [Click here to purchase the full version from the ANSI store.](#)

## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 2, *Fire containment*.

This first edition of ISO 3008-1 cancels and replaces the third edition of ISO 3008:2007, which has been technically revised.

The following main changes have been made:

- air transfer grilles and openable windows are included in the Scope;
- revisions have been made to locations and measuring techniques for unexposed surface temperature measurements and preconditioning requirements for door and shutter assemblies.

A list of all the parts in the ISO 3008 series can be found on the ISO website.

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](http://www.iso.org/members.html).

This is a preview of "ISO 3008-1:2019". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

This document contains specific requirements for fire-resistance testing which are unique to the elements of building construction described as doors and shutters. The requirements for these doors and shutters are intended to be applied in appropriate conjunction with the detailed and general requirements contained in ISO 834-1.