

BS EN 1191:2012



BSI Standards Publication

# Windows and doors — Resistance to repeated opening and closing — Test method

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### National foreword

This British Standard is the UK implementation of EN 1191:2012. It supersedes BS EN 1191:2000 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee B/538, Doors, windows, shutters, hardware and curtain walling, to Subcommittee B/538/1, Windows and doors.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

BSI, as a member of CEN, is obliged to publish EN 1191 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval as a European Standard.

The reason for this vote by the UK committee B/538, Doors, windows, shutters, hardware and curtain walling, is due to concerns regarding the Test order in clause H.4.1. It is not clear whether the door should be returned to the closed position (H.2.7), closed and fastened position (H.2.8) or closed, fastened and locked position (H.2.9) at the end of each cycle. Therefore, it is of the opinion of the UK committee that the relevant closed condition in the Test order in clause H.4.1 could be clarified.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Published by BSI Standards Limited 2013

ISBN 978 0 580 73952 1

ICS 91.060.50

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2013.

### Amendments/corrigenda issued since publication

Date	Text affected
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EUROPEAN STANDARD

**EN 1191**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2012

ICS 91.060.50

Supersedes EN 1191:2000

English Version

## Windows and doors - Resistance to repeated opening and closing - Test method

Fenêtres et portes - Résistance à l'ouverture et fermeture répétée - Méthode d'essai

Fenster und Türen - Dauerfunktionsprüfung - Prüfverfahren

This European Standard was approved by CEN on 27 October 2012.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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## Foreword

This document (EN 1191:2012) has been prepared by Technical Committee CEN/TC 33 “Doors, windows, shutters, building hardware and curtain walling”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1191:2000.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

The most important changes compared with the previous version EN 1191:2000 are:

- reference velocities for manually operation scaled according to weight;
- different velocities for translatory, rotatory and tilt movement;
- force level for operation of fastening system clearly described;
- more precise description of the testing cycles;
- minor mode of operation and cleaning and maintenance mode of operation defined;
- termination criteria incorporated;
- new normative Annexes A to I integrated (see Scope).

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Introduction**

This European Standard describes one of the test methods that are called up in the product standards for windows and pedestrian doorsets.

The Annexes of this European Standard are to be in line with the relevant hardware standards but they are not direct copies of them.

## 1 Scope

This European Standard specifies the method to be used to determine the resistance to repeated opening and closing of windows and pedestrian doorsets when subjected to repeated opening and closing.

It applies to all construction materials and operating systems for any window or pedestrian doorset, including gaskets and building hardware, in normal operating conditions.

The parts concerned in the testing are the frame, the opening component (including any additional moving components e.g. an inactive sash/leaf) and all essential and directly involved building hardware, including operating devices, for example, the handle.

The testing does not include any hardware whose operation is not directly involved in the opening and closing of the moving components: added-on fastening systems such as peg-stays or cabin hooks or bolts, nor, unless specified, any independently installed stops (not connected to the complete assembly) such as a wall or ground-mounted stop.

NOTE 1 The Annexes provide more details on the testing procedures that may differ from the main part of this European Standard and are mandatory:

- Annex A applies to Tilt and Turn, Tilt-First, Turn-Only, or Tilt-Only windows and door-height windows;
- Annex B applies to Sliding, Lift and Slide or Lift and Slide and Tilt windows and door-height windows;
- Annex C applies to Tilt and Slide windows and door-height windows;
- Annex D applies to Fold and Slide windows and door-height windows;
- Annex E applies to horizontal and vertical pivot windows and door-height windows;
- Annex F applies to Vertical Sliding windows;
- Annex G applies to side-hung casements and top-hung windows, opening outwards (including reversible windows);
- Annex H applies to side-hung single and double action pedestrian doorsets excluding power operated doors;
- Annex I applies to power-operated (automatic) side-hung single action pedestrian doorsets.

NOTE 2 In this European Standard the term door-height window is used for windows that are used for the passage of pedestrians, i.e. as a pedestrian doorset.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 179, *Building hardware — Emergency exit devices operated by a lever handle or push pad, for use on escape routes — Requirements and test methods*

EN 1125, *Building hardware — Panic exit devices operated by a horizontal bar, for use on escape routes — Requirements and test methods*