



**NSAI**  
Standards

Irish Standard  
I.S. EN 16034:2014

Pedestrian doorsets, industrial, commercial,  
garage doors and openable windows -  
Product standard, performance  
characteristics - Fire resisting and/or smoke  
control characteristics

**I.S. EN 16034:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 16034:2014

*Published:*

2014-10-01

*This document was published  
under the authority of the NSAI  
and comes into effect on:*

2014-10-18

ICS number:

13.220.50

91.060.50

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

**EUROPEAN STANDARD**

**EN 16034**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

October 2014

ICS 13.220.50; 91.060.50

English Version

**Pedestrian doorsets, industrial, commercial, garage doors and  
openable windows - Product standard, performance  
characteristics - Fire resisting and/or smoke control  
characteristics**

Blocs-portes pour piétons, portes et fenêtres industrielles,  
commerciales et de garage - Norme de produit,  
caractéristiques de performance - Caractéristiques de  
résistance au feu et/ou d'étanchéité aux fumées

Türen, Tore und Fenster - Produktnorm,  
Leistungseigenschaften - Feuer- und/oder  
Rauchschutzeigenschaften

This European Standard was approved by CEN on 7 August 2014.

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.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Contents

Page

Foreword.....	3
Introduction .....	4
1 Scope .....	6
1.1 General.....	6
1.2 Exclusions .....	7
2 Normative references .....	7
3 Terms and definitions .....	8
4 Products characteristics .....	9
4.1 Resistance to fire (for fire compartmentation uses) .....	9
4.2 Smoke control (only for applications where limitation of smoke spread is required) .....	9
4.3 Ability to release .....	9
4.4 Self-closing (only for self-closing fire resistant and/or smoke control doorsets and/or openable windows).....	9
4.5 Durability .....	9
5 Testing, assessment and sampling methods .....	12
5.1 Resistance to fire (for fire compartmentation uses) .....	12
5.2 Smoke control (only for applications where limitation of smoke spread is required) .....	12
5.3 Ability to release .....	12
5.4 Durability .....	12
6 Assessment and verification of constancy of performance - AVCP .....	12
6.1 General.....	12
6.2 Type testing.....	12
6.3 Factory production control (FPC) .....	15
7 Marking, labelling and packaging .....	19
Annex A (normative) Pre-test conditioning .....	20
A.1 General.....	20
A.2 Before the resistance to fire test.....	20
A.3 Before the smoke control test .....	21
A.4 Self-closing test .....	21
Annex B (informative) Installation provisions .....	23
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation .....	24
ZA.1 Scope and relevant characteristics .....	24
ZA.2 Procedure for AVCP of fire resisting and/or smoke control doorsets and /or openable windows.....	25
ZA.3 CE marking and labelling .....	29
Bibliography .....	32

## **Foreword**

This document (EN 16034:2014) 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 April 2015 and conflicting national standards shall be withdrawn at the latest by October 2019.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports basic work requirements of Regulation (EU) 305/2011.

For relationship with Regulation (EU) 305/2011, see informative Annex ZA which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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.

## **EN 16034:2014 (E)**

### **Introduction**

This European Standard is one of a series of standards covering windows and pedestrian doorsets, industrial, commercial and garage doors and gates.

This European Standard covers only fire resisting and/or smoke control characteristics including the ability to release and self-closing, further product characteristics are covered in the relevant harmonized European Product Standards EN 14351-1, prEN 14351-2, EN 13241-1 and EN 16361.

Figure 1 explains the relation between the standards, where the grey lines show the relationship of other harmonized product standards to EN 16034 (requirements additional to fire resistance and smoke control characteristics) and the black lines explain the relationship to fire resistance and smoke control test, classification and extended application of test results standards.

For the purposes of this European Standard the term 'doorset' and 'openable window' is used as a general term unless clearly stated.

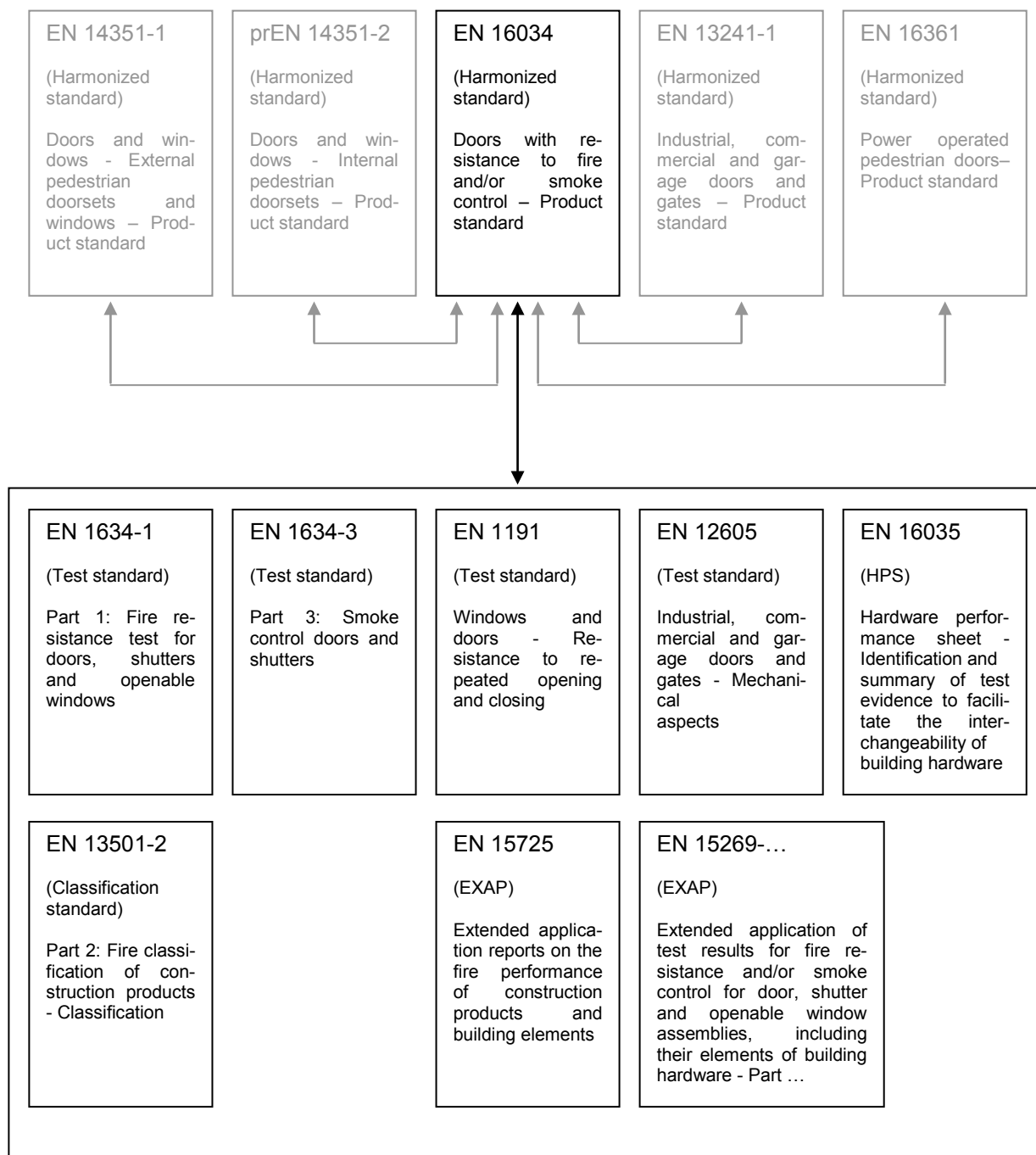


Figure 1 — Relationship between various standards

**EN 16034:2014 (E)****1 Scope****1.1 General**

This European Standard identifies material independent, safety and performance requirements applicable to all fire resisting and/or smoke control products intended to be used in fire and/or smoke compartmentation and/or escape routes, which are either:

- industrial, commercial and/or garage doorsets, rolling shutters or operable fabric curtains intended for the installation in areas in the reach of persons and for which the main intended uses are giving safe access for goods and vehicles accompanied or driven by persons, or
- rolling shutters or operable fabric curtains used in retail premises which are mainly provided for the access of persons rather than vehicles or goods, or
- pedestrian doorsets and/or openable windows and/or inspection hatches which are hinged or sliding, intended for the installation in areas in the reach of persons, and for which the main intended uses are giving safe access for persons

and which are manually or power operated and:

- opening and self closing as a normal mode of operation, or
- normally held open but self closing in case of fire or smoke, or
- normally maintained locked in the closed position (e. g. service access/inspection doorsets),

and completed:

- with building hardware,
- with or without any side panel(s), flush over panel(s) and/or transom panel(s) (with or without glazing) and contained within a single perimeter frame for inclusion in a single aperture,
- with or without any vision panel(s) in the door leaf or leave(s),
- with or without any seals (e.g. for smoke control, fire resistance, draught, acoustic or weather characteristics).

Product characteristics covered in EN 13241-1, EN 14351-1, prEN 14351-2 or EN 16361 will not compromise the fire resistance and/or smoke control characteristics of a fire resisting and/or smoke control product.

NOTE 1 Requirements included in EN 14351-1, prEN 14351-2, EN 13241-1 or EN 16361 might be relevant for the products covered by this standard.

This standard also provides indications on the product modifications not affecting the performances of the concerned products.

NOTE 2 The requirements and rules for variations (regarding the direct and extended field of applications) of fire resistance and/or smoke control doorsets are given in the EN 15269 series and EN 1634-1 and EN 1634-3, supported by, e.g. EN 16035.



## 1.2 Exclusions

This European Standard does not cover:

- fixed windows, glazed side panels and/or overpanels, which are not an integral part of a doorset and/or openable window;
- door assemblies produced with components from several sources where there is no single identified manufacturer or legal entity who will take responsibility for them;
- operation in environments where the electromagnetic disturbances are outside the range of those specified in EN 61000-6-3;
- radio operating devices fitted to doorsets and/or openable windows; where such items are fitted, the relevant ETSI standards should be applied in addition.

## 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 179:2008, *Building hardware — Emergency exit devices operated by a lever handle or push pad, for use on escape routes — Requirements and test methods*

EN 1125:2008, *Building hardware — Panic exit devices operated by a horizontal bar, for use on escape routes — Requirements and test methods*

EN 1154:1996<sup>1)</sup>, *Building hardware — Controlled door closing devices — Requirements and test methods*

EN 1155:1997<sup>2)</sup>, *Building hardware — Electrically powered hold-open devices for swing doors — Requirements and test methods*<sup>3)</sup>

EN 1158:1997<sup>3)</sup>, *Building hardware — Door coordinator devices — Requirements and test methods*

EN 1191, *Windows and doors — Resistance to repeated opening and closing — Test method*

EN 1634-1:2014, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware — Part 1: Fire resistance test for door and shutter assemblies and openable windows*

EN 1634-3:2004, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware — Part 3: Smoke control test for door and shutter assemblies*

EN 1670, *Building hardware — Corrosion resistance — Requirements and test methods*

EN 1935:2002, *Building hardware — Single-axis hinges — Requirements and test methods*

---

1) This document is impacted by the stand-alone amendment EN 1154:1996/A1:2002.

2) This document is impacted by the stand-alone amendment EN 1155:1997/A1:2002.

3) This document is impacted by the stand-alone amendment EN 1158:1997/A1:2002.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-