SLOVENSKI STANDARD
oSIST prEN 14351-1:2019

01-november-2019

Okna in vrata - Standard za proizvod, zahtevane lastnosti - 1. del: Okna in zunanja vrata

Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets

Fenster und Türen - Produktnorm, Leistungseigenschaften - Teil 1: Fenster und Außentüren

Fenêtres et portes - Norme produit, caractéristiques de performance - Partie 1 : Fenêtres et blocs portes extérieurs pour piétons

Ta slovenski standard je istoveten z: **prEN 14351-1**

ICS:

91.060.50	Vrata in okna	Doors and windows

oSIST prEN 14351-1:2019 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 14351-1

August 2019

ICS 91.060.50

Will supersede EN 14351-1:2006+A2:2016

English Version

Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets

Fenêtres et portes - Norme produit, caractéristiques de performance - Partie 1 : Fenêtres et blocs portes extérieurs pour piétons

Fenster und Türen - Produktnorm, Leistungseigenschaften - Teil 1: Fenster und Außentüren

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 33.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword

This document (prEN 14351-1:2019) 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 document is currently submitted to the CEN Enquiry.

This document will supersede EN 14351-1:2006+A2:2016.

Compared with EN 14351-1:2006+A2:2016, the following changes have been made:

a) the scope has been changed and now covers roof windows for installation in inclined roofs and power operated external pedestrian hinged doorsets;

b) normative references were updated;

c) subclause 3.1, new terms and definitions have been added to for French windows (3.1.7), bonded glazing (3.1.8) and direct glazing (3.1.9);

d) subclause 3.2 Symbols has been added;

e) the former Clause 4 has been transformed in two clauses:

   1) Clause 4 Product characteristics;

   2) Clause 5 Testing, assessment and sampling methods;

f) clarifications have been added for fixed windows and windows with incorporated shutters and/or shutter boxes and/or blinds.

g) numerous editorial changes.

h) the following essential characteristics are new:

   1) reaction to fire for windows and doors (was before: only for roof windows);

   2) frame area ratio FF;

   3) child safety (only for risk of falling from height);

   4) operating forces (only for automatic devices and external pedestrian doors for special uses and specific requirements) (4.15);

i) subclause 4.5 Width deleted;

j) subclause 4.7 Ability to release is clarified as “to open” and additional provisions for assessing hinges not covered by EN 1935 were added;

k) subclause 4.9 Resistance to wind load for external shutters and blinds were added;

l) subclause 4.10, 4.12, 4.19, 4.20 Thermal transmittance and radiation properties including shutterbox, shutters, blinds were added (only for windows);

m) subclause 4.13 Load bearing capacity of safety devices specified only for windows;

n) subclause 4.14 Mechanical resistance to snow and permanent load (only for roof windows) has additional provisions for assessing the resistance of the roof window against impact from the outside, if relevant;

o) subclause 4.18 Provisions for assessing the durability of operating forces (only for automatic devices) have been added;

p) subclause 4.24 Bullet resistance, rules of applying results for similar design were added;

q) subclause 4.29 Provisions for assessing bonded glazing have been added;

r) subclause 4.31 Provisions for power operated windows and referenced standards have been updated;

s) subclause 4.32 Requirements on power operated external pedestrian doorsets have been added;

t) Clause 5 has been aligned to the characteristics specified in the Clause 4 and has additional provisions where relevant;

u) Clause 6 Assessment and verification of constancy of performance — AVCP has been revised according to the new template and contains the provisions of the former Clauses 7 and 8;

v) most annexes have been renumbered.

w) Annex A has been amended to new the new elements of Clause 4;

x) Annex B has additional provisions for the interpolation of glazings different than tested;

y) Annex C is amending provisions of the former Annex E;

z) former Annex C (that listed standards for glazings (informative)) has been deleted;

aa) former Annex D (dealing with Examples of performance and requirement profiles of a roof window (informative)) has been deleted;

bb) Annex F (former Annex H) has been updated and amended with provisions for windows and external pedestrian doorsets;

cc) Annex H (new) has application procedures for resistance to wind load on windows and external pedestrian doorsets with framed door leaves with larger sizes than type tested;

dd) Annex J Classifications/values of individual characteristics has been amended to new the new elements of Clause 4;

ee) Annex ZA has been changed significantly to conform with the new template.

This document has been prepared under a standardization request given to CEN and CENELEC by the European Commission and the European Free Trade Association, and supports Basic Work Requirements of EU Regulation and essential requirements of EU Directive(s) and EU Regulations.

For relationship with EU Regulation/Directive(s), see informative Annexes ZA, ZB and ZC, which are an integral part of this document.

This European standard is one of a series of standards for windows and pedestrian doorsets (see Figure 1).

EN 14351-1 alone, applies to all windows and external pedestrian doorsets except resistance to fire and smoke control characteristics.

For the windows and external pedestrian doorsets having fire resisting and/or smoke control characteristics, EN 16034 applies in conjunction with EN 14351-1.

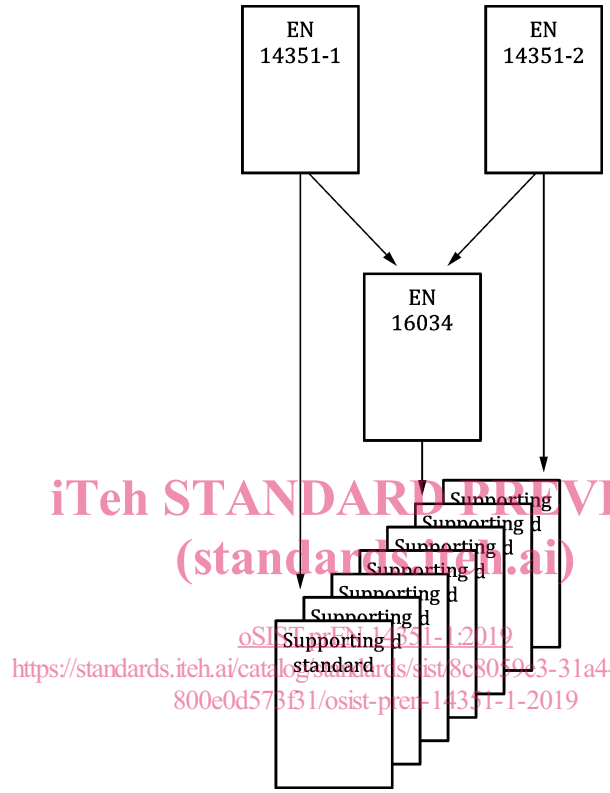

Figure 1 — Relationship between various standard

1 Scope

This document identifies material independent performance characteristics, except resistance to fire and smoke control characteristics, that are applicable to windows (including roof windows, roof windows with external fire resistance and door height windows), external pedestrian doorsets (including unframed glass doorsets, escape route doorsets and their assemblies).

Fire resisting and/or smoke control characteristics for pedestrian doorsets and openable windows are covered by EN 16034.

This document applies to

— fixed windows or fixed lights, manually or power operated windows, French windows and screens for installation in vertical wall apertures and roof windows for installation in inclined roofs, complete with:

  — related hardware, if any;

  — weather stripping, if any;

  — glazed apertures when intended to have glazed apertures;

  — with or without incorporated shutters and/or shutter boxes and/or blinds;

  and manually or power operated windows, roof windows, French windows and screens that are:

  — fully or partially glazed including any non-transparent infill;

  — fixed or partly fixed or openable with one or more casements/sashes (e.g. hinged, projecting, pivoted, sliding);

— manually operated external pedestrian doorsets or power operated external pedestrian hinged doorsets with flush or panelled leaves in construction works, complete with:

  — integral fanlights, if any;

  — adjacent parts that are contained within a single frame for inclusion in a single aperture, if any.

The windows covered by this document are not assessed regarding their ability to release (to open).

The products covered by this document are not assessed for structural applications.

This document does not apply to:

— rooflights according to EN 1873 and EN 14963;

— curtain walling according to EN 13830;

— industrial, commercial and garage doors and gates according to EN 13241;

— internal pedestrian doorsets according to EN 14351-2;

— revolving doorsets;

— power operated pedestrian doorsets according to EN 16361;

— windows intended to be part of internal partition.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

2.1 Classification standards

EN 1192, *Doors — Classification of strength requirements*

EN 1522:1998, *Windows, doors, shutters and blinds — Bullet resistance — Requirements and classification*

EN 1627, *Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Requirements and classification*

EN 12207, *Windows and doors — Air permeability — Classification*

EN 12208, *Windows and doors — Watertightness — Classification*

EN 12210, *Windows and doors — Resistance to wind load — Classification*

EN 12217, *Doors — Operating forces — Requirements and classification*

EN 12219, *Doors — Climatic influences — Requirements and classification*

EN 12400:2002, *Windows and pedestrian doors — Mechanical durability — Requirements and classification*

EN 13049, *Windows — Soft and heavy body impact — Test method, safety requirements and classification*

EN 13115, *Windows — Classification of mechanical properties — Racking, torsion and operating forces*

EN 13123-1, *Windows, doors and shutters — Explosion resistance — Requirements and classification — Part 1: Shock tube*

EN 13123-2, *Windows, doors, and shutters — Explosion resistance — Requirements and classification — Part 2: Range test*

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 13501-5, *Fire classification of construction products and building elements — Part 5: Classification using data from external fire exposure to roofs tests*

2.2 Test and calculation standards

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 410:2011, *Glass in building — Determination of luminous and solar characteristics of glazing*

EN 947, *Hinged or pivoted doors — Determination of the resistance to vertical load*

EN 948, *Hinged or pivoted doors — Determination of the resistance to static torsion*

EN 949, *Windows and curtain walling, doors, blinds and shutters — Determination of the resistance to soft and heavy body impact for doors*

EN 950, *Door leaves — Determination of the resistance to hard body impact*

EN 1026, *Windows and doors — Air permeability — Test method*

EN 1027, *Windows and doors — Watertightness — Test method*

EN 1121, *Doors — Behaviour between two different climates — Test method*

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

CEN/TS 1187, *Test methods for external fire exposure to roofs*

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

EN 1523, *Windows, doors, shutters and blinds — Bullet resistance — Test method*

EN 1628, *Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Test method for the determination of resistance under static loading*

EN 1629, *Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Test method for the determination of resistance under dynamic loading*

EN 1630, *Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Test method for the determination of resistance to manual burglary attempts*

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

EN 12046-1, *Operating forces — Test method — Part 1: Windows*

EN 12046-2, *Operating forces — Test method — Part 2: Doors*

EN 12211, *Windows and doors — Resistance to wind load — Test method*

EN ISO 12354-3, *Building acoustics — Estimation of acoustic performance of buildings from the performance of elements — Part 3: Airborne sound insulation against outdoor sound (ISO 12354-3)*

EN 12758:2011, *Glass in building — Glazing and airborne sound insulation — Product descriptions and determination of properties*

EN 13124-1, *Windows, doors and shutters — Explosion resistance — Test method — Part 1: Shock tube*

EN 13124-2, *Windows, doors and shutters — Explosion resistance — Test method — Part 2: Range test*

EN 13126-5:2011+A1:2014, *Building hardware — hardware for windows and door height windows — Requirements and test methods — Part 5: Devices that restrict the opening of windows and door height windows*

EN 13141-1:2019, *Ventilation for buildings — Performance testing of components/products for residential ventilation — Part 1: Externally and internally mounted air transfer devices*

EN 13238, *Reaction to fire tests for building products — Conditioning procedures and general rules for selection of substrates*

EN 13363-1, *Solar protection devices combined with glazing — Calculation of solar and light transmittance — Part 1: Simplified method*

EN 13363-2:2005, *Solar protection devices combined with glazing — Calculation of total solar energy transmittance and light transmittance — Part 2: Detailed calculation method*

EN 13363-2:2005/AC:2006, *Solar protection devices combined with glazing — Calculation of total solar energy transmittance and light transmittance — Part 2: Detailed calculation method*

EN 13420, *Windows — Behaviour between different climates — Test method*

EN 13823, *Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item*

EN 14608, *Windows — Determination of the resistance to racking*

EN 14609, *Windows — Determination of the resistance to static torsion*

EN 16005:2012, *Power operated pedestrian doorsets — Safety in use — Requirements and test methods*

EN 16034, *Pedestrian doorsets, industrial, commercial, garage doors and openable windows — Product standard, performance characteristics — Fire resisting and/or smoke control characteristics*

prEN 16759:2017, *Bonded glazing for doors, windows and curtain walling — Verification of mechanical performance of bonding*

EN ISO 10140-1, *Acoustics — Laboratory measurement of sound insulation of building elements — Part 1: Application rules for specific products (ISO 10140-1)*

EN ISO 10140-2, *Acoustics — Laboratory measurement of sound insulation of building elements — Part 2: Measurement of airborne sound insulation (ISO 10140-2*

EN ISO 717-1:2013, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation (ISO 717-1)*

EN ISO 10077-1:2017, *EN ISO 10077-1:2006 and EN ISO 10077-1:2000* Thermal performance of windows, doors and shutters — Calculation of thermal transmittance — Part 1: General (ISO 10077-1:2017)

EN ISO 10077-2:2017, *EN ISO 10077-2:2012 and EN ISO 10077-2:2003,* Thermal performance of windows, doors and shutters — Calculation of thermal transmittance — Part 2: Numerical method for frames (ISO 10077-2:2017)

EN ISO 11925-2, *Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test (ISO 11925-2:2010)*

EN ISO 12567-1, *Thermal performance of windows and doors — Determination of thermal transmittance by the hot-box method — Part 1: Complete windows and doors (ISO 12567-1)*

EN ISO 12567-2, *Thermal performance of windows and doors — Determination of thermal transmittance by hot box method — Part 2: Roof windows and other projecting windows (ISO 12567-2)*