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OMADUSED. OSA 1: AKNAD JA VÄLISUKSED

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14351-1:2006+A2:2016 sisaldab Euroopa standardi EN 14351-1:2006+A2:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 14351-1:2006+A2:2016 consists of the English text of the European standard EN 14351-1:2006+A2:2016.
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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 European Standard was approved by CEN on 3 February 2006 and includes Amendment 1 approved by CEN on 31 January 2010 and Amendment 2 approved by CEN on 11 July 2016.

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European foreword

This document (EN 14351-1:2006+A2:2016) 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of an identical text or by endorsement, at the latest by March 2017, and conflicting national standards shall be withdrawn at the latest by June 2018.

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 includes Amendment 1, approved by CEN on 2010-01-31 and Amendment 2, approved by CEN on 2016-07-11.

This document supersedes EN 14351-1:2006+A1:2010.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 and A2.

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

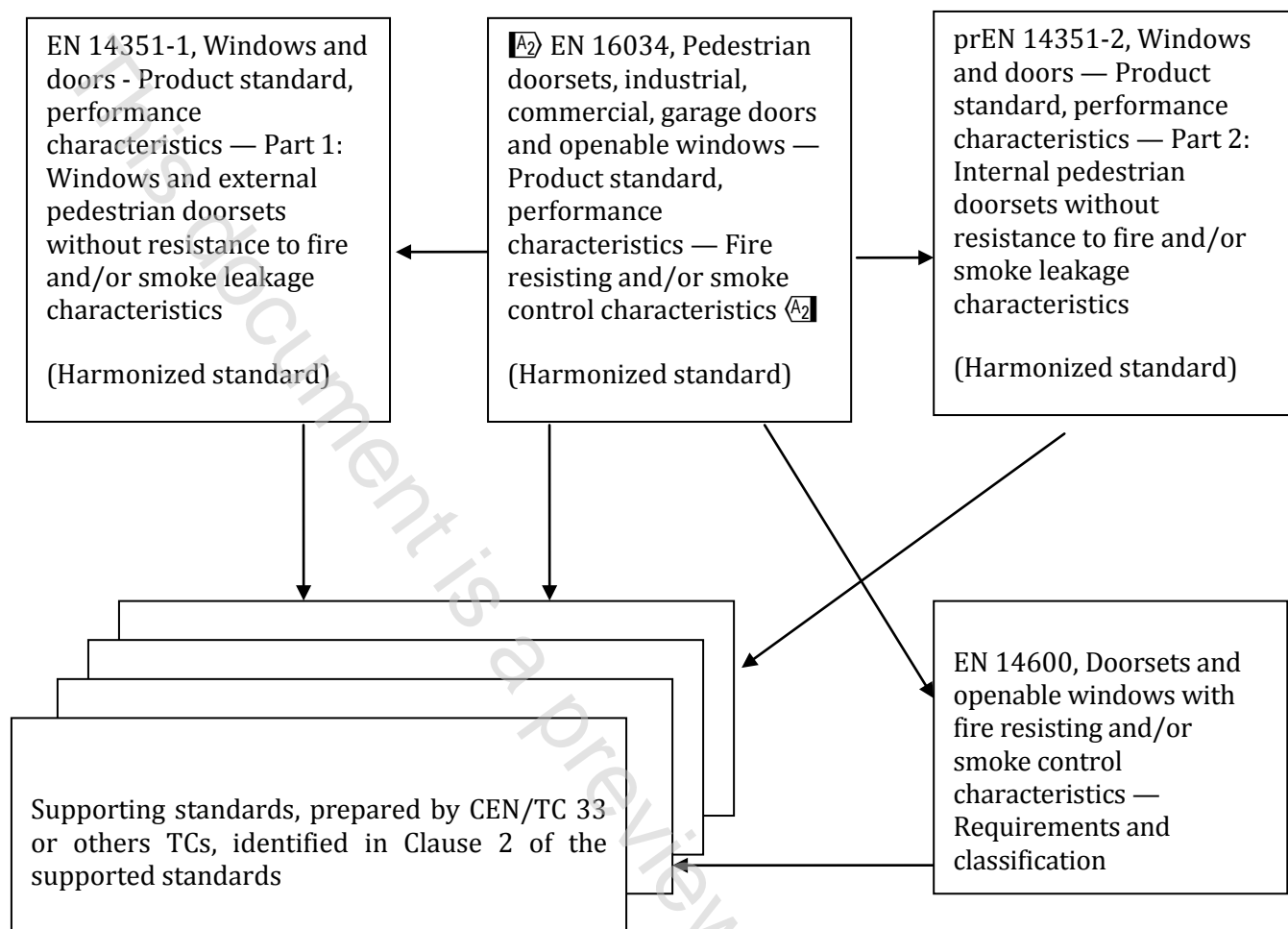


Figure 1 — Relationship between various standards

^{A1} This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annexes ZA, ZB, ZC and ZD which are integral parts of this document. ^{A1}

^{A1}

NOTE Annex ZB was applicable until December 28th, 2009 and Annex ZD is applicable since December 29th, 2009. ^{A1}

^{A2} The main changes introduced by the 2nd Amendment to this new edition of EN 14351-1 concern the title and the scope according to the EC's request and the decisions of CEN/TC 33 D1010 (April 2014), D1065 and D1089 (April 2015). ^{A2}

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.

A1 Introduction

The 1st amendment primarily adds details to previous clauses dealing with evaluation of conformity but without making any fundamental changes. The intention is to facilitate consistent interpretation particularly when addressing the possibilities of cascading ITT. The concept of shared ITT results is not excluded, but will be clarified later.

Furthermore, due to lack of updated supporting standards for powered pedestrian doors, these products have been excluded from the scope.

The opportunity has also been taken in this amendment to amend several technical issues that were under query. A1

1 Scope

A2 This European Standard 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 (and their assemblies, including unframed glass doorsets, escape route doorsets) and screens.

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

This European Standard applies to:

- a) fixed windows or fixed lights, manually or power operated windows and door height windows, and screens for installation in vertical wall apertures and roof windows for installation in roofs, complete with:
 - 1) related hardware, if any;
 - 2) weather stripping, if any;
 - 3) glazed apertures when intended to have glazed apertures;
 - 4) with or without incorporated shutters and/or shutter boxes and/or blinds;
 and manually or power operated windows, roof windows, door height windows and screens that are:
 - 5) fully or partially glazed including any non-transparent infill;
 - 6) fixed or partly fixed or openable with one or more casements/sashes (e.g. hinged, projecting, pivoted, sliding);
- b) manually operated external pedestrian doorsets with flush or panelled leaves, complete with:
 - 1) integral fanlights, if any;
 - 2) adjacent parts that are contained within a single frame for inclusion in a single aperture, if any.

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

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

This European Standard 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 prEN 14351-2;
- revolving doorsets;
- power operated pedestrian doorsets according to EN 16361;

- windows intended to be part of internal partition. A_2

2 Normative references

A_2 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. A_2

2.1 Classification standards

EN 1192, *Doors — Classification of strength requirements*

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

ENV 1627, *Windows, doors, shutters — Burglar resistance — Requirements and classification*

EN 12207:1999, *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, *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*

2.2 Test and calculation standards

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

EN 410, *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 — Water tightness — Test method*
- EN 1121, *Doors — Behaviour between two different climates — Test method*
- EN 1125, *Building hardware — Panic exit devices operated by a horizontal bar — Requirements and test methods*
- ENV 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*
- ENV 1628, *Windows, doors, shutters — Burglar resistance — Test method for the determination of resistance under static loading*
- ENV 1629, *Windows, doors, shutters — Burglar resistance — Test method for the determination of resistance under dynamic loading*
- ENV 1630, *Windows, doors, shutters — Burglar resistance — Test method for the determination of resistance to manual burglary attempts*
- 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 12354-3, *Building acoustics — Estimation of acoustic performance of buildings from the performance of elements — Part 3: Airborne sound insulation against outdoor sound*
- EN 12758:2002, *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 13141-1:2004, *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, *Solar protection devices combined with glazing — Calculation of total solar energy transmittance and light transmittance — Part 2: Detailed calculation method*
- ENV 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 ISO 140-3, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 3: Laboratory measurements of airborne sound insulation of building elements (ISO 140-3:1995)*

EN ISO 717-1, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation (ISO 717-1:1996)*

EN ISO 10077-1:2006, *Thermal performance of windows, doors and shutters — Calculation of thermal transmittance — Part 1: General (ISO 10077-1:2006)* ^{A1}

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

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 11925-2:2002)* ^{A1}

EN ISO 12567-1, *Thermal performance of windows and doors — Determination of thermal transmittance by hot box method — Part 1: Complete windows and doors (ISO 12567-1:2000)*

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 12567-2:2005)*

2.3 Other standards

EN 1863-2, *Glass in building — Heat strengthened soda lime silicate glass — Part 2: Evaluation of conformity/Product standard*

EN 1935, *Building hardware — Single-axis hinges — Requirements and test methods* ^{A1}

EN 12150-2, *Glass in building — Thermally toughened soda lime silicate safety glass — Part 2: Evaluation of conformity/Product standard*

EN 12453:2000, *Industrial, commercial and garage doors and gates — Safety in use of power operated doors — Requirements*

EN 12519:2004, *Windows and pedestrian doors — Terminology*

EN ~~12519:2004~~ ^{A1}

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

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

prEN 13633, *Building hardware — Electrically controlled panic exit systems for use on escape routes — Requirements and test methods*

prEN 13637, *Building hardware — Electrically controlled emergency exit systems for use on escape routes — Requirements and test methods*

EN 14179-2, *Glass in building — Heat soaked thermally toughened soda lime silicate safety glass — Part 2: Evaluation of conformity/Product standard*

EN 14321-2, *Glass in building — Thermally toughened alkaline earth silicate safety glass — Part 2: Evaluation of conformity/Product standard*

EN 60335-2-103, *Household and similar electrical appliances — Safety — Part 2-103: Particular requirements for drives for gates, doors and windows (IEC 60335-2-103:2002)*

EN 61000-6-1, *Electromagnetic compatibility (EMC) — Part 6-1: Generic standards; Immunity for residential, commercial and light-industrial environments (IEC 61000-6-1:2005) $\langle A_1 \rangle$*

EN 61000-6-3, *Electromagnetic compatibility (EMC) — Part 6-3: Generic standards; Emission standard for residential, commercial and light-industrial environments (IEC 61000-6-3:2006) $\langle A_1 \rangle$*

EN ISO 9001, *Quality management systems — Requirements (ISO 9001:2008) $\langle A_1 \rangle$*

EN ISO 12543-2, *Glass in building — Laminated glass and laminated safety glass — Part 2: Laminated safety glass (ISO 12543-2:1998)*

ISO 1000:1992, *SI units and recommendations for the use of their multiples and of certain other units*

3 Terms and definitions

For the purposes of this European Standard, units and symbols given in ISO 1000:1992, terms and definitions given in EN 12519:2004 and the following apply.

3.1

external pedestrian doorset

doorset which separates the internal climate from the external climate of a construction for which the main intended use is the passage of pedestrians. External pedestrian door assemblies fulfilling the provisions of this European Standard under the responsibility of one identified manufacturer are considered to be external pedestrian doorsets

3.2

overall area

frame width x frame height

(see EN 12519:2004, 3.4)

3.3

screen

assembly of two or more windows and/or external pedestrian doorsets in one plane with or without separate frames

3.4

similar design

modification by the replacement of components (e.g. glazing, hardware, weather stripping), and/or a change of material specification and/or dimensional change of profile section and/or methods and means of assembly which will not change the classification and/or declared value of a performance characteristic

Note 1 to entry: Certain modifications might cause more favourable values for one or more characteristics, but also more unfavourable values for other characteristics (see Annex A).