

**Rulood sisekasutuses. Nõuded jõudlusele ja ohutusele**

**Internal blinds - Performance requirements including safety**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|  |  |
|--|--|
| See Eesti standard EVS-EN 13120:2009+A1:2014 sisaldab Euroopa standardi EN 13120:2009+A1:2014 inglisekeelset teksti. | This Estonian standard EVS-EN 13120:2009+A1:2014 consists of the English text of the European standard EN 13120:2009+A1:2014.      |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.   | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.02.2014.  | Date of Availability of the European standard is 19.02.2014.   |
| Standard on kättesaadav Eesti Standardikeskusest.  | The standard is available from the Estonian Centre for Standardisation.  |

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English Version

## Internal blinds - Performance requirements including safety

Stores intérieurs - Exigences de performance, y compris la  
sécuritéAbschlüsse innen - Leistungs- und  
Sicherheitsanforderungen

This European Standard was approved by CEN on 22 November 2008 and includes Amendment 1 approved by CEN on 27 December 2013.

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

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

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## Foreword

This European Standard (EN 13120:2009+A1:2014) 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of an identical text or by endorsement, at the latest by August 2014, and conflicting national standards shall be withdrawn at the latest by August 2014.

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 <sup>A1</sup> EN 13120:2009. <sup>A1</sup>

This document includes Amendment 1 approved by CEN on 27 December 2013.

The start and finish of text introduced or altered by amendment is indicated in the text by tags <sup>A1</sup> <sup>A1</sup>.

This European Standard 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 <sup>A1</sup> Annex ZA, which is an integral part <sup>A1</sup> of this document.

This European Standard is part of a series of standards dealing with internal blinds and shutters for buildings as defined in EN 12216.

This European Standard specifies the requirements for internal blinds, the levels of performance and, where applicable, the associated classes.

It is completed by test standards as well as by the standards referring to specific performance requirements.

Annex A and C are informative. Annex B is normative.

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, 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

The performances given in this European Standard, which illustrate suitability for use, are required for internal blinds detailed in the scope (intrinsic performances).

Other performances are only required as a complement (specific performances) for specific products and are described in other European Standards. Some important specific performances relating to thermal and visual aspects are described in EN 14501. These standards state classifications and test methods for the following properties:

- for thermal comfort:
  - solar factor (see Clause 11 of the present standard);
  - secondary heat transfer factor;
  - direct solar transmittance;
- for visual comfort:
  - glare control;
  - night privacy;
  - visual contact with the outside;
  - opacity control;
  - daylight utilisation;
  - rendering of colours.

NOTE 1 Health and Safety regulations require that the workplace receives as much natural light as is reasonably practical (see EU Directive 89/654/EEC) and protection of operators working with VDU screens against glare and reflected light (see EU Directive 89/391/EEC).

NOTE 2 Reaction to fire of internal blinds is not covered by this standard. The performance of the products shall be evaluated according to the relevant standards (e.g. EN 13772). Minimal performance may be required by national regulations.

A list of these documents is given in the Bibliography.

This European Standard is a type C standard as stated in EN ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

With the aim of clarifying the intentions of the standard and avoiding doubts on reading, the following assumptions were made related to power operated products:

- negotiations occur between the manufacturer and the purchaser concerning particular conditions for use and places for use such as nursery schools or buildings for disabled people which need specific risk analysis;

- the risk analysis carried out in this European Standard and the significant hazards listed in Annex B presume a normal use or normally predictable use e.g. which excludes deliberate and conscious risks taken by the user (see Interpretative Document “Safety in use” of EU Construction Products Directive).

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## 1 Scope

**A1** This European Standard specifies the requirements which internal blinds shall fulfil when fitted to a building. It deals also with the significant machinery hazards relating to construction, transport, installation, operation and maintenance of internal blinds (see list of significant hazards in Annex B).

It applies to internal blinds, whatever their design and the nature of the materials used, as listed below:

- venetian blind: free hanging, guided, non-retractable;
- roller blind: free hanging, side guided, with tensioned fabric;
- vertical blind: free hanging, with top and bottom track, sloping headrail;
- pleated and honeycomb blind: free hanging, guided, laterally moving, tensioned;
- Roman Shades;
- Austrian / Festoon blinds;
- panel blinds;
- plantation shutters;
- roll-up blinds.

These products may be operated manually, with or without compensating springs, or by means of electric motors (power operated products).

This standard does not apply to draperies and insect screens. It does not apply to blinds in sealed glazed units with the exception of requirements related to protection from strangulation.

**NOTE** Insect screens may be installed either internally or externally. However, because they are always exposed to external conditions in use ( windows/doors opened), insects screens are covered by EN 13561 applying to external blinds and awnings.

Noise aspects are not treated in this standard because this is not considered a safety issue.

This standard is not applicable to internal blinds which are manufactured before the date of publication of this standard. **A1**

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 1050:1996, *Safety of machinery — Principles for risk assessment*

EN 1070:1998, *Safety of machinery — Terminology*

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

EN 12045, *Shutters and blinds power operated - Safety in use - Measurement of the transmitted force*

EN 12194, *Shutters, external and internal blinds - Misuse - Test methods*

EN 12216:2002, *Shutters, external blinds, internal blinds - Terminology, glossary and definitions*

EN 12280-2:2002, *Rubber- or plastic-coated fabrics - Accelerated ageing tests - Part 2: Physical ageing: effect of light or weathering*

EN 13125, *Shutters and blinds - Additional thermal resistance - Allocation of a class of air permeability to a product*

EN 13527, *Shutters and blinds — Measurement of the operating force — Test methods*

EN 14201, *Blinds and shutters - Resistance to repeated operations (mechanical endurance) - Methods of testing*

EN 14500, *Blinds and shutters - Thermal and visual comfort - Test and calculation methods*

EN 14501, *Blinds and shutters - Thermal and visual comfort - Performance characteristics and classification*

EN 16433, *Internal blinds – Protection from strangulation hazards – Test methods*

EN 16434, *Internal blinds – Protection from strangulation hazards – Requirements and Test methods for safety devices*

EN 20105-A02:1994, *Textiles - Tests for colour fastness - Part A02: Grey scale for assessing change in colour (ISO 105-A02:1993)*

EN 60335-1, *Household and similar electrical appliances – Safety — Part 1: General requirements*

EN 60335-2-97, *Household and similar electrical appliances – Safety – Part 2-97: Particular requirements for drives for rolling shutters, awnings, blinds and similar equipment (IEC 60335-2-97)*

EN 61310-1, *Safety of machinery – Indication, marking and actuation – Part 1: Requirements for visual, acoustic and tactile signals (IEC 61310-1)*

EN ISO 1421, *Rubber- or plastics-coated fabrics - Determination of tensile strength and elongation at break (ISO 1421:1998)*

EN ISO 105-B04, *Textiles - Tests for colour fastness - Part B04: Colour fastness to artificial weathering: Xenon arc fading lamp test (ISO 105-B04:1994)*

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

### 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 1070:1998, EN 12216:2002 and the following apply.

**3.1 internal blind**  
blind fitted in front of or on a window or in between non-sealed glazings or anywhere within the internal surface of the building

**3.2 intrinsic performance**  
overall performances of the internal blind regardless of its application as opposed to specific performance