## Välirulood. Toimivus- ja ohutusnõuded **KONSOLIDEERITUD TEKST**

External blinds - Performance requirements including EX. Occurrence of the second o safety CONSOLIDATED TEXT



## **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13561:2004+A1:2008 sisaldab Euroopa standardi EN 13561:2004+A1:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 10.11.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.10.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13561:2004+A1:2008 consists of the English text of the European standard EN 13561:2004+A1:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 10.11.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 01.10.2008.

The standard is available from Estonian standardisation organisation.

ICS 91,060,50

Võtmesõnad:

## Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

## **EUROPEAN STANDARD**

# NORME EUROPÉENNE

## **EUROPÄISCHE NORM**

October 2008

EN 13561:2004+A1

ICS 91.060.50

Supersedes EN 13561:2004

## **English Version**

## External blinds - Performance requirements including safety

Stores extérieurs - Exigences de performance, y compris la sécurité

Markisen - Leistungs- und Sicherheitsanforderungen

This European Standard was approved by CEN on 9 February 2004 and includes Amendment 1 approved by CEN on 18 August 2008.

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 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 Management Centre has the same status as the official versions.

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



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

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## **Foreword**

This document (EN 13561:2004+A1:2008) 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 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

NOTE Annex ZB is applicable until December 28th, 2009 and Annex ZC is applicable from December 29th, 2009.

This document supersedes EN 13561:2004.

This document includes Amendment 1, approved by CEN on 2008-08-18.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

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 and ZC which are integral parts of this document. (A)

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

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

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

The annexes A and B are normative.

This document includes a Bibliography.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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## Introduction

The performances given in this European Standard which illustrate suitability for use, are required for every type of external blind (intrinsic performances).

Other performances are only required as a complement (specific performances) and result in specific products. Some of them are described in European Standards (e.g. EN 1522, EN 1523). Others are described in prEN 14500 and prEN 14501 in the process of preparation and deal with important subjects such as thermal comfort, i.e.:

	solar factor;		
	shading factor;		
	direct solar transmittance;		
	secondary heat transfer factor;		
	secondary near transfer factor,		
	solar radiation reduction factor.		
and visual comfort, i.e.:			
_	light control;		
	night privacy;		
_	visual contact with the outside;		
	glare control;		
_	rendering of colours.		
NOTE	Health and Safety regulations require that the workplace receives as much natural light		

NOTE 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 VDV screens against glare control and reflected light (see EU Directive 87/391/EEC).

The list of these documents is given in the Bibliography.

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

- Negotiations occur between the manufacturer and the purchaser concerning particular conditions for use and places for use such as for nursery schools or for 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 suppose 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).

## 1 Scope

This European Standard specifies the performance requirements which external blinds shall fulfil when fitted to a building. It deals also with the significant hazards for construction, transport, installation, operation and maintenance of the external blinds (see list of significant machine hazards in annex B).

It applies to all external blinds as well as similar products whatever their design and nature of the materials used, as follows and defined in EN 12216:

- folding arm awning, trellis arm awning, pivot arm awning, slide arm awning, vertical roller awning, marquisolette, façade awning, skylight awning, conservatory awning, Dutch awning, insect screen;
- solar screen.

This European Standard does not cover the wind resistance of fixed nor semi-fixed products, e.g. Dutch awnings, fixed or mobile and solar screen. They are not exempt from wind resistance requirements although no test methods have been established at the present time.

The products covered by this European Standard may be operated manually, with or without compensating springs or by means of electric motors (power operated products).

This document is not applicable to external blinds which are manufactured before the date of publication of this document.

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

### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 1932, External blinds and shutters – Resistance to wind loads – Method of testing.

EN 1933, Exterior blinds – Resistance to load due to water accumulation – Test method.

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 13125, Shutters and blinds – Additional thermal resistance – Allocation of a class of air permeability to a product.

EN 13527, Shutters and blinds – Measurement of operating force – Test methods.

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

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

EN 20139, Textiles – Standard atmospheres for conditioning and testing (ISO 139:1973).

EN 20811, Textiles – Determination of resistance to water penetration – Hydrostatic pressure test.

EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements (IEC 60335-1:2001, modified).

EN 60335-2-97, Safety of household and similar electrical appliances – Part 2-97: Particular requirements for drives for rolling shutters, awnings, blinds and similar equipment (IEC 60335-2-97:1998, modified).

EN 61310-1, Safety of machinery – Indication, marking and actuation – Part 1: Requirements for visual, auditory and tactile signals (IEC 61310-1:1995).

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 1421, Rubber- or plastic-coated fabrics – Determination of tensile strength and elongation at break (ISO 1421:1998).

EN ISO 10077-1, Thermal performance of windows, doors and shutters – Calculation of thermal transmittance – Part 1: Simplified method (ISO 10077-1:2000).

EN ISO 12100-2:2003, Safety of machinery – Basic concepts, general principles for design – Part 2: Technical principles (ISO 12100-2:2003).

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 in EN 1070:1998 and EN 12216:2002 and the following apply.

#### 3.1

## intrinsic performance

overall performances of the blind regardless of its application as opposed to specific performance

#### 3.2

#### specific performance

performance which may be additional and complementary to the intrinsic performances and refers to a specific product (for example thermic, etc.)

#### 3.3

## curtain

part of the product which is set in motion by the operating mechanism and ensures its function

#### 3.4

#### extension/retraction

movement of the curtain resulting in an increase/decrease in the surface area covered

#### 3.5

### opening/closing

terms used to describe the increase in light (opening) or reduction of light (closing) in an extended position for products with laths, slats or louvres which can be tilted or adjusted