Tööstus-, kommerts ning garaaziuksed ja -väravad. Tootestandard. Osa 1: Tooted, millele ei esitata tulepüsivus- või suitsutõkestusnõudeid KONSOLIDEERITUD TEKST

Industrial, commercial and garage doors and gates - Product standard - Part 1: Products without fire resistance or smoke control characteristics CONSOLIDATED TEXT

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13241-1:2003+A1:2011 sisaldab Euroopa standardi EN 13241-1:2003+A1:2011 ingliskeelset teksti.	This Estonian standard EVS-EN 13241-1:2003+A1:2011 consists of the English text of the European standard EN 13241-1:2003+A1:2011.
Standard on kinnitatud Eesti Standardikeskuse 30.04.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 06.04.2011.	Date of Availability of the European standard text 06.04.2011.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 91.090

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13241-1:2003+A1

April 2011

ICS 91.090

Supersedes EN 13241-1:2003

English Version

Industrial, commercial and garage doors and gates - Product standard - Part 1: Products without fire resistance or smoke control characteristics

Portes et portails industriels, commerciaux et de garage - Norme de produit - Partie 1: Produits sans caractéristiques coupe-feu, ni pare-fumée

Tore - Produktnorm - Teil 1: Produkte ohne Feuer- und Rauchschutzeigenschaften

This European Standard was approved by CEN on 12 June 2003 and includes Amendment 1 approved by CEN on 22 February 2011.

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, 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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 13241-1:2003+A1:2011: E

Contents

Page

Foreword

This document (EN 13241-1:2003+A1:2011) 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 October 2011, and conflicting national standards shall be withdrawn at the latest by October 2011.

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 22 February 2011.

This document supersedes EN 13241-1:2003.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ⟨A1⟩ ⟨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 and ZC, which are integral parts of this document.

⟨A1⟩ Annex ZB is revised taking into account the “new” Machinery Directive. ⟨A1⟩

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

This document includes a Bibliography.

This European Standard is part of a series of product standards for industrial, commercial and garage doors and gates with or without fire resistance or smoke control characteristics (see 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, Croatia, 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.

Introduction

With the aim of clarifying the intentions of this European Standard and avoiding doubts when reading it, the following assumptions were made when producing it:

a) components without specific requirements are:

- designed in accordance with the usual engineering practice and calculation codes, including all failure modes;
- of sound mechanical and electrical construction;
- made of materials with adequate strength and of suitable quality;
- general electrical hazards are dealt with according to electrical safety standards such as EN 60204–1.

b) components are kept in good repair and working order, so that the required characteristics remain during the economical working life despite wear;

c) with the exception of the items listed below, a mechanical device is built according to good practice and the requirements of this European Standard:

- negotiations occur between the manufacturer and the purchaser concerning particular conditions for the use and places of use for the door related to health and safety;
- the place of use/installation to be adequately lit;
- the place of use/installation to allow safe use of the door.

These assumptions do not restrict the need for adequate information for use in this European Standard.

1 Scope

1.1 General

This European Standard specifies the safety and performance requirements for doors, gates and barriers, intended for 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 in industrial, commercial or residential premises.

This European Standard also covers commercial doors such as rolling shutters and rolling grilles used in retail premises which are mainly provided for the access of persons rather than vehicles or goods.

These doors can include pass doors incorporated in the door leaf which are also covered by this European Standard.

These devices can be manually or power operated.

This European Standard does not cover operation in environments where the electromagnetic disturbances are outside the range of those specified in EN 61000-6-3.

1.2 Exclusions

This European Standard does not apply to the following which are intended for a different use:

— lock gates and dock gates;

— doors on lifts;

— doors on vehicles;

— armoured doors;

— doors mainly for the retention of animals;

— theatre textile curtains;

— horizontally moving manually operated pedestrian doors with a leaf size less than 6,25 m²;

— horizontally moving power operated doors less than 2,5 m wide and 6,25 m² area, designed principally for pedestrian use in accordance with prEN 12650-1;

— revolving doors of any size;

— railway barriers;

— barriers used solely for vehicles.

This European Standard does not cover the radio part of doors. If a radio operating device is used, the relevant ETSI standards should be applied in addition.

This European Standard does not contain any specific requirements for fire resistance or smoke control characteristics which are covered in prEN 13241-2.

〚A1〉 *deleted text* 〈A1〛

This European Standard does not contain any specific requirement for doors which are moving because of energy stored by dedicated means from human power such as manually tensioned springs.

This European Standard does not contain any specific requirements for doors on escape routes. The ability to open the door leaf safely and easily cannot normally be achieved by industrial, commercial and garage doors due to size, weight and/or mode of operation.

[A1] The noise emission of powered doors and gates is not considered to be a relevant hazard. Therefore this European Standard does not contain any specific requirements on noise in relation to the Machinery Directive. [A1]

1.3 Specific applications

This European Standard should also apply to power operated doors which have been created by the addition of power operation to an installed manual door in respect of the relevant requirements. Annex ZA does not apply to this kind of door.

It also identifies requirements and classes of performance for additional characteristics considered to be of importance to the trade.

When a door is part of the load carrying structure of the building the requirements of this European Standard can apply on a voluntary basis in addition to the requirements for the load carrying structure, which are not dealt with in this European Standard. Annex ZA does not apply for this kind of doors.

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 418, *Safety of machinery — Emergency stop equipment, functional aspects — Principles for design*

EN 1037, *Safety of machinery — Prevention of unexpected start-up*

ENV 1991-2-4, *Eurocode 1 : Basis of design and actions on structures — Part 2-4 : Actions on structures — Wind actions*

EN 12424:2000, *Industrial, commercial and garage doors and gates — Resistance to wind load — Classification*

EN 12425, *Industrial, commercial and garage doors and gates — Resistance to water penetration — Classification*

EN 12426, *Industrial, commercial and garage doors and gates — Air permeability — Classification*

EN 12427, *Industrial, commercial and garage doors and gates — Air permeability — Test method*

EN 12428, *Industrial, commercial and garage doors and gates — Thermal transmittance — Requirements for the calculation*

EN 12433-1, *Industrial, commercial and garage doors and gates — Terminology — Part 1 : Types of doors*

EN 12433-2, *Industrial, commercial and garage doors and gates — Terminology — Part 2 : Parts of doors*

EN 12444, *Industrial, commercial and garage doors and gates — Resistance to wind load — Testing and calculation*

EN 12445:2000, *Industrial, commercial and garage doors and gates — Safety in use of power operated doors — Test methods*

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

EN 12489, *Industrial, commercial and garage doors and gates — Resistance to water penetration — Test method*

EN 12604:2000, *Industrial, commercial and garage doors and gates — Mechanical aspects — Requirements*

EN 12605:2000, *Industrial, commercial and garage doors and gates — Mechanical aspects — Test methods*

EN 12635:2002, *Industrial, commercial and garage doors and gates — Installation and use*

EN 12978:2003, *Industrial, commercial and garage doors and gates — Safety devices for power operated doors and gates — Requirements and test methods*

EN 60204-1:1997, *Safety of machinery — Electrical equipment of machines — Part 1 : General requirements (IEC 60204-1:1997)*

EN 61000-6-2, A1 *Electromagnetic compatibility (EMC) — Part 6-2: Generic standards — Immunity for industrial environments (IEC 61000-6-2:2005)* A1

EN 61000-6-3, A1 *Electromagnetic compatibility (EMC) — Part 6-3: Generic standards — Emission standard for residential, commercial and light-industrial environments (IEC 61000-6-3:2006)* A1

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 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)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12433-1 and EN 12433-2 and the following apply.

3.1
operating force of the door
force exerted by the power operated door leaf when coming into contact with a person and/or an obstacle

3.2
vertically moving door
any door where the main closing edge remains parallel to the ground or floor during its movement

3.3
horizontally moving door
any door where the main closing edge remains perpendicular to the ground or floor during its movement

4 Requirements

4.1 General

The choice of the door type and its specification needs to be made after taking into account where the door is to be installed and the operating requirements expected from it. Safety in use, ease of use and the amount and frequency of maintenance, its mode of operation, frequency of operation, degree of automation, provision of pass