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STN	**Stavebné kovanie - Elektricky kontrolované únikové systémy na použitie pre únikové cesty - Požiadavky a skúšobné metódy.**	**STN EN 13637** 16 5773

Building hardware - Electrically controlled exit systems for use on escape routes - Requirements and test methods

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Building hardware - Electrically controlled exit systems for use on escape routes - Requirements and test methods

Quicaillerie pour le bâtiment - Systèmes de fermeture contrôlés électriquement destinés à être utilisés sur des voies d'évacuation - Exigences et méthodes d'essai

Schlösser und Baubeschläge - Elektrisch gesteuerte Fluchttüranlagen für Türen in Fluchtwegen - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 7 May 2015.

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.

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

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Contents

Page

Foreword

This document (EN 13637:2015) 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of an identical text or by endorsement, at the latest by December 2015, and conflicting national standards shall be withdrawn at the latest by March 2017.

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 Annex ZA, which is an integral part of this document.

This European Standard is part of a group of Standards dedicated to building hardware products. It is one of a group of standards for exit devices and electrically controlled exit systems developed by Technical Committee CEN/TC 33.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

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.

Introduction

Experience relating to fire and/or smoke hazards and general safety has made it desirable that doors in circulation areas, or those that have to be operated in an emergency situation, be fitted with exit devices.

Increasingly, such exit devices may form a part of the security system of a building and involve the use of electrical locking and controlling elements. This standard provides common European Standard requirements for such electrically controlled exit systems.

This standard offers, in addition to safety, increased security to avoid unsafe means of locking the door, for example additional padlocks and chains.

The performance requirements contained in this European Standard give safe and effective escape through a doorway with a **maximum of two operations** to release the electrically controlled exit system, although this might require prior knowledge of the number of operations (e.g. initiating and/or operating element), and of the door situation (e.g. inwardly opening).

This standard introduces the concept of time delayed exit and denied exit mode, as a means of increasing the security of the building against unauthorised exit, and the concept of central management control. It is the responsibility of the regulatory authorities in each member country to decide whether or not such control methods can be allowed, and if so, to what extent within the limits stated in the standard.

It is intended that the requirements of this standard should apply at all times, regardless of whether or not the building is occupied. For safety reasons, any additional features of the system, such as access control, are required to maintain the principle of fail safe release at all times.

The performance tests incorporated in this standard are considered to be reproducible and, as such, will provide a consistent and objective assessment of the performance of these electrically controlled exit systems throughout CEN Members.

1 Scope

This European Standard specifies requirements for performance and testing of electrically controlled exit systems, specifically designed for use in an emergency or panic situation on escape routes.

This European Standard covers electrically controlled exit systems that are either manufactured and placed on the market in their entirety by one manufacturer or assembled from sub-assemblies produced by more than one manufacturer and subsequently placed on the market as a kit in a single transaction.

These electrically controlled exit systems consist of at least the following elements, separated or combined:

— **initiating element** for requesting the release of electrical locking element in order to exit;

— **electrical locking element** for securing an exit door;

— **electrical controlling element** for supplying, connecting and controlling electrical locking element and initiating element;

— in addition, these electrically controlled exit systems can include **time delay and/or denied exit mode.**

The Products covered by this standard are intended to be used for doors on escape routes, on either fire or non-fire rated door assemblies.

Examples of Products covered by this European Standard:

— electrically controlled exit systems designed to be used in emergency situations, where people are familiar with the exit and its hardware;

— electrically controlled exit systems designed to be used in panic situations, where people are not always familiar with the exit and its hardware;

— electrically controlled exit systems for use on hinged or pivoted door leaves only;

— a range of electrically controlled exit systems including those for use on double doorsets;

— the exceptional case of electrically controlled exit systems intended for use on single leaf inwardly opening exit doors. It is assumed throughout this European Standard that exit doors generally open towards the outside in order to ensure safe escape. However, there are cases such as hospital or hotel bedroom doors, classroom doors, etc. where building authorities allow, by way of exception, the exit door to open against the direction of exit;

Products not covered by this European Standard:

— any particular design of electrically controlled exit systems and only such dimensions as are required for safety reasons are specified;

— any other element of a security system, other than those directly involved in the control of an exit door;

— mechanically operated exit devices containing electrical functions that are not related to release of an electrically locking element. Such devices are within the field of EN 1125 or EN 179;

— electrically controlled exit systems intended for use on inwardly opening double doorsets.

Electrically controlled exit systems intended for use by the severely disabled; due to the wide range of disabilities, such exit systems and their performances should be agreed between specifier and manufacturer.

2 Normative references

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.

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

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

EN 1634-1, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 1: Fire resistance test for door and shutter assemblies and openable windows*

EN 1634-2, *Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware - Part 2: Fire resistance characterisation test for elements of building hardware*

EN 1634-3, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 3: Smoke control test for door and shutter assemblies*

EN 55022, *Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement (CISPR 22)*

EN 60529, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

EN 61000-3-2, *Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase) (IEC 61000-3-2)*

EN 61000-3-3, *Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection (IEC 61000-3-3)*

EN 61000-4-2, *Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test (IEC 61000-4-2)*

EN 61000-4-11, *Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests (IEC 61000-4-11)*

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

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)*

EN 60068-2-1: 2007, *Environmental testing - Part 2-1: Tests - Test A: Cold (IEC 60068-2-1:2007)*

EN 60068-2-2: 2007, *Environmental testing - Part 2-2: Tests - Test B: Dry heat (IEC 60068-2-2:2007)*

EN 60068-2-30:2005, *Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) (IEC 60068-2-30:2005)*

EN 60947-5-5, *Low-voltage switchgear and controlgear - Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function (IEC 60947-5-5)*

EN 61508-1, *Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 1: General requirements (IEC 61508-1)*

EN ISO 7010:2012, *Graphical symbols - Safety colours and safety signs - Registered safety signs (ISO 7010:2011)*

IEC 60050-845, *International Electrotechnical Vocabulary — Lighting*