

Irish Standard I.S. EN 179:2008

Building hardware - Emergency exit devices operated by a lever handle or push pad, for use on escape routes -Requirements and test methods

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This document is based on: EN 179:2008 EN 179:1997 *Published:* 23 January, 2008 20 August, 1997

This document was published under the authority of the NSAI and comes into effect on: 4 April, 2008 ICS number:

91.190

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Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD NORME EUROPÉENNE

EN 179

EUROPÄISCHE NORM

ICS 91.190

January 2008

Supersedes EN 179:1997

English Version

Building hardware - Emergency exit devices operated by a lever handle or push pad, for use on escape routes - Requirements and test methods

Quincaillerie pour le bâtiment - Fermetures d'urgence pour issues de secours manœuvrées par une béquille ou une plaque de poussée, destinées à être utilisées sur des voies d'évacuation - Exigences et méthodes d'essai Schlösser und Baubeschläge - Notausgangsverschlüsse mit Drücker oder Stoßplatte für Türen in Rettungswegen -Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 30 November 2007.

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EN 179:2008 (E)

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Foreword

This document (EN 179:2008) 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of an identical text or by endorsement, at the latest by July 2008, and conflicting national standards shall be withdrawn at the latest by July 2008.

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 EN 179:1997.

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 89/106/EEC, see informative Annex ZA which is an integral part of this document.

It has been revised to incorporate clarification of the definitions, safety requirements and test procedures, in particular for emergency exit devices intended for use on double leaf doorsets, in order to allow for more reproducible test methods.

It incorporates extension of the classification to avoid misuse of the products, extension of the limits of door mass and dimensions as well as extension of the field of application to cover products already available on the market, which were not covered by the 1997 edition of this European Standard.

It incorporates additional requirements for emergency exit devices intended for use on inwardly opening single leaf exit doors, which are required by the market. However, no other modifications have been made to the original concept and main requirements.

A full contribution to the preparation of this European Standard has been made by The European Federation of Associations of Lock and Builders Hardware Manufacturers (ARGE).

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 exit systems developed by Technical Committee CEN/TC 33.

Wherever reference is made to classes, they are considered to be technical classes and not classes according to Article 3(2) of the Construction Products Directive (89/106/EEC).

Verification or tests performed by mechanical test laboratory and fire test laboratory are listed in Table 1 summarizing performance characteristics and compliance criteria.

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.

Introduction

Experience relating to escape from buildings, 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 emergency exit devices to common European Standard specifications.

The main purpose of the performance requirements contained in this European Standard is to give safe and effective escape through a doorway with one single operation to release the emergency exit device, although this might require prior knowledge of the door situation (e.g. inwardly opening).

The performance tests incorporated in this European Standard are considered to be reproducible and, as such, will provide a consistent and objective assessment of the performance of these emergency exit devices.

Where panic situations are foreseen, reference should be made to EN 1125, covering panic exit devices operated by a horizontal bar. See definition **3.18**.

Where additional security is required for exit doors, reference should be made to prEN 13633 covering electrically controlled panic exit systems, or to prEN 13637 covering electrically controlled exit systems for use on escape routes. See Bibliography.

Due to the wide range of emergency exit devices, the reader is advised to refer to the scope and the detailed contents of this European Standard for coverage but, for information and general guide, this revised European Standard now deals with:

- emergency exit devices designed to be used in emergency situations, where people are familiar with the exit and its hardware and therefore a panic situation is most unlikely to develop;
- emergency exit devices for use on hinged or pivoted door leaves only;
- range of emergency exit devices including those for use on double doorsets (see 7.10);
- two specific types of operation: emergency exit devices with "lever handle" operation, type A (see 3.9, see Figures 1 and 3) and emergency exit devices with "push pad" operation, type B (see 3.15, see Figures 2 and 4);
- two categories of emergency exit device projection in order to maximize the width of the escape route, and minimize the projection from the door face where either or both of these criteria are of importance (see 4.1.12);
- exceptional case of emergency exit devices intended for use on single leaf inwardly opening exit doors. It is assumed throughout this European Standard that emergency exit doors generally open towards the outside in order to assure safe escape. However, there are cases such as hospital or hotel bedroom doors, classroom doors, etc. where local building regulations allow, by way of exception, the exit door to open against the direction of exit;
- double doorset emergency exit devices of which the first opening leaf is equipped with a panic exit device conforming to EN 1125 and the second opening leaf is equipped with an emergency exit device conforming to EN 179. It is essential that this combination undergoes an additional test for approval (see 4.2.4).

This European Standard does not cover the following:

- any particular design of emergency exit devices and only such dimensions as are required for safety reasons are specified;
- specific emergency exit devices intended for use on inwardly opening double doorsets;
- specific emergency exit devices intended for use by the severely disabled (due to the wide range
 of disabilities, such emergency exit devices and their performances should be agreed between
 specifier and producer);
- panic exit devices operated by a horizontal bar (see EN 1125) or electrically controlled panic exit systems or electrically controlled exit systems (see prEN 13633 and prEN 13637).

1 Scope

This European Standard specifies requirements for the manufacture, performance and testing of emergency exit devices mechanically operated by either a lever handle or a push pad for the purpose of achieving a safe exit under an emergency situation on escape routes.

The suitability of an emergency exit device for use on smoke/fire-resisting door assemblies is determined by fire performance tests conducted in addition to the performance tests required by this European Standard. Annex B indicates additional requirements for these products.

This European Standard covers emergency exit devices, which are either manufactured and placed on the market in their entirety by one producer, or produced by more than one producer and subsequently placed on the market as a kit in a single transaction.

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 1125, Building hardware - Panic exit devices operated by a horizontal bar, for use on escape routes - 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 doors and shutter assemblies and openable windows

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 1670:2007, Building hardware - Corrosion resistance - Requirements and test methods

EN ISO 9001:2000, Quality management systems - Requirements (ISO 9001:2000)

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

active leaf

first opening and last closing leaf of a rebated single swing double doorset

3.2

automatic relatching device

part of an emergency exit device to enable the automatic securing of a door in the closed position, after it has been operated

NOTE For example, a spring loaded latch bolt or an automatically thrown bolt head.

3.3

bolt head

portion of an emergency exit device that engages with the keeper to secure the door in the closed position



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