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Irish Standard I.S. EN 1527:2013

Building hardware - Hardware for sliding doors and folding doors - Requirements and test methods

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# EUROPEAN STANDARD

# EN 1527

# NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2013

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**English Version** 

# Building hardware - Hardware for sliding doors and folding doors - Requirements and test methods

Quincaillerie pour le bâtiment - Quincaillerie pour portes coulissantes et portes pliantes - Exigences et méthodes d'essai Schlösser und Baubeschläge - Beschläge für Schiebetüren und Falttüren - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 10 November 2012.

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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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EN 1527:2013 (E)

#### I.S. EN 1527:2013

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# Foreword

This document (EN 1527:2013) has been prepared by Technical Committee CEN/TC 33 "Doors, windows, shutters and building hardware", 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of an identical text or by endorsement, at the latest by July 2013, and conflicting national standards shall be withdrawn at the latest by July 2013.

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 1527:1998.

A full contribution to the preparation of this document has been made by the European manufacturer's organisation "ARGE".

This document is part of a group of European Standards dedicated to building hardware products.

The main changes in this draft as compared with EN 1527:1998 are as follows:

- identification of grades for fire resistance (4<sup>th</sup> digit) in 4.5;
- grade identified for the safety (5<sup>th</sup> digit) in 4.6.

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.

## 1 Scope

This European Standard specifies requirements for the manual design system sliding doors and folding doors of the bi-fold type and multi-panel folding doors but excluding doors and panels. Cycle tests, static load, initial friction and corrosion resistance tests are included for fittings and track only.

This document covers door gear for all industrial and residential sliding doors and folding doors.

This document does not cover sliding corner doors and light bottom sliding doors.

### 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 1670, Building hardware — Corrosion resistance — Requirements and test methods

### 3 Terms and definitions

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

#### 3.1

#### aligner

fittings which retain a folding door in a flat and aligned closed position (see Figure 1)

#### 3.2

#### bottom guide

fitting which, with a bottom guide channel, controls the lateral movement of a sliding or folding top hanging door

#### 3.3

#### bottom guide channel

channel section fitted either to the base of a structure or the bottom edge of a door to accommodate the bottom guide

#### 3.4

#### bottom pivot

axis fitted to the bottom of a folding door which turns in a bottom pivot socket (see Figure 1)

#### 3.5

#### bottom pivot socket

fixed component in which the bottom pivot of a folding door is located (see Figure 1)

#### 3.6

#### bottom track

track fixed to the base of a structure or floor, on which bottom rollers run

# 3.7

# bottom roller

fitting attached to the bottom of a door which allows it to run on a bottom rail

#### 3.8

#### folding door, bi-fold type

door formed by two panels connected by hinges and operating on pivots running in a top track with guide

#### 3.9

#### heavy sliding door, bottom rolling

door of mass 100 kg or more with bottom rollers running on a bottom track fixed to the base of the structure or floor, and with a top guide

#### 3.10

#### heavy sliding door, top hanging

door of mass 100 kg or more which is suspended by top hangers running in a top track fixed to an overhead structural component, and with a bottom guide

#### 3.11

#### hinges

fittings connecting two panels of a folding door (see Figure 1)

#### 3.12

#### light sliding door, top hanging

door of mass less than 100 kg which is suspended by top hangers running in a top track fixed to an overhead structural component, and with a bottom guide

#### 3.13

#### multi-panel folding door

door formed by two or more panels connected by hinges and suspended by top hangers running in a top track fixed to an overhead structural component, or running on bottom rollers with a top guide in a top track

#### 3.14

#### stop

fitting used to stop a sliding door at the end of its run

#### 3.15

#### test cycle

all operations from the closed position, to open the test door to the required position and close it again to the closed position

#### 3.16

#### top bracket

support used to carry a top track and secure it to the structure of a building

Note 1 to entry: Brackets can be side-wall fixing or ceiling fixing, adjustable or non-adjustable.

#### 3.17

#### top guide

fitting which, with a top guide track, controls the lateral movement of a bottom rolling sliding door

#### 3.18

#### top guide track

track fixed to the top of the structure in which a top guide runs

#### 3.19

top hanger

roller fixed to a top hanging sliding door which allows it to move laterally

#### 3.20

top pivot

axis fitted to the top of a folding door which turns in a top pivot socket (see Figure 1)

# 3.21

#### top pivot socket

fixed component in which the top pivot is located (see Figure 1)

#### 3.22

#### top track

tubular section which carries the hangers of sliding and folding top hanging doors (see Figure 1)

#### 3.23

#### design system

collection of components from which a "kit" may be created for subsequent installation in the works

Note 1 to entry: A "design system" can, for example, be presented in a supplier's catalogue, from which the purchaser/specifier can make a choice.

Note 2 to entry: A "design system" can give rise to one or many different "kits" (i.e. construction products, defined below). A "design system" cannot be a construction product, because it is possible only to buy one "kit" at a time from the "system"; the "system" itself cannot be bought.



#### Key

- 1 track
- 2 top pivot socket
- 3 sliders
- 4 top pivots
- 5 hinges
- 6 bottom pivots
- 7 bottom pivot sockets
- 8 aligners

Figure 1 — Definitions



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