Irish Standard
I.S. EN 13126-8:2017

Building hardware - Hardware for windows and door height windows - Part 8: Requirements and test methods for Tilt and Turn, Tilt-First and Turn-Only hardware

I.S. EN 13126-8:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 13126-8:2017 is the adopted Irish version of the European Document EN 13126-8:2017, Building hardware - Hardware for windows and door height windows - Part 8: Requirements and test methods for Tilt and Turn, Tilt-First and Turn-Only hardware

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13126-8

November 2017

ICS 91.190

Supersedes EN 13126-8:2006

English Version

Building hardware - Hardware for windows and door height windows - Part 8: Requirements and test methods for Tilt and Turn, Tilt-First and Turn-Only hardware

Quincaillerie pour le bâtiment - Ferrures de fenêtres et portes-fenêtres - Partie 8 : Exigences et méthodes d'essai pour les ferrures d'oscillo-battant, de battant-oscillant et d'ouvrant pivotant

Baubeschläge - Beschläge für Fenster und Fenstertüren - Teil 8: Anforderungen und Prüfverfahren für Drehkipp-, Kippdreh- und Drehbeschläge

This European Standard was approved by CEN on 16 July 2017.

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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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 13126-8:2017) 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 May 2018, and conflicting national standards shall be withdrawn at the latest by May 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13126-8:2006.

With regard to EN 13126-8:2006, the following significant changes were made:

— EN 13126-8 now is independent from EN 13126-1; all the necessary information is included without the need of any further information from EN 13126-1;

— several editorial changes in the wording for a better understanding;

— new terms and definitions added under 3.4 - 3.12;

— under 4.1 classification system changed completely; former digits 1 (Category of use), 4 (Fire resistance), 5 (Safety in use), 7 (Security) and 8 (Applicable part) deleted; former digit 2 changed into box 1 (Durability), former digit 3 changed into box 2 (Mass), former digit 6 changed into box 3 (Corrosion resistance) and former digit 9 changed into box 4 (Test sizes);

— under 4.2 new grades for the number of cycles defined; H1 (5 000), H2 (10 000) and H3 (20 000) with the same number of cycles for the tilt and the turn cycles; refer also to 5.3;

— under 4.5 new optional test size (1 400 mm × 1 550 mm) defined for hardware for max. sash mass > 130 kg (option 2);

— under 4.6 new example of classification for Tilt and Turn hardware added in accordance with the new classification system; 2 alternative ways (table or alphanumerical) to show the classification defined;

— former Table 1 “Test sizes and minimum number of locking points” deleted;

— under 5.2.2 new values for the tractive and the compressive force added for the new test size 1 400 mm × 1 550 mm; also a formula added to calculate values not stated into the tables;

— under 5.4.1 the requirement for the horizontal force in the vicinity of the sash support-component in order to close the sash from the turn-position changed from former 120 N to 100 N;

— under Clause 6 “Test equipment and preparation for the test” additional information added for the test rig (6.1), the specimen (6.2), the mounting of the specimen (6.3), the profile and material of specimen (6.4);

— under 7.3 “General” additional information added for the testing procedure;

— under 7.4 “Adjusting the sash-mass” information added, mainly from the current version of part 1;

— under 7.6 “Durability test” new procedure defined for the test analogue the test procedure described in EN 1191:2012; former movement into the 100 mm turn position deleted completely; same number of cycles for the tilt cycles and the turn cycles.

This European Standard is one of a series of European Standards for building hardware products for windows and door height windows. This European Standard is independent of EN 13126-1.

EN 13126 consists of the following parts:

— *Building hardware — Hardware for windows and door height windows — Requirements and test methods — Part 1: Requirements common to all types of hardware*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 2: Window fastener handles*;

— *Building hardware — Hardware for windows and door-height windows — Requirements and test methods — Part 3: Handles, primarily for Tilt&Turn, Tilt-First and Turn-Only hardware*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 4: Espagnolettes*;

— *Building hardware — Hardware for windows and door height windows — Requirements and test methods — Part 5: Devices that restrict the opening of windows and door height windows*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 6: Variable geometry stay hinges (with or without a friction stay)*;

— *Building hardware — Requirements and test methods for windows and door height windows — Part 7: Finger catches*;

— *Building hardware — Hardware for windows and door height windows — Part 8: Requirements and test methods for Tilt and Turn, Tilt-First and Turn-Only hardware*;

— *Building hardware — Requirements and test methods for windows and door height windows — Part 9: Hardware for horizontal and vertical pivot windows*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 10: Arm-balancing systems*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 11: Top hung projecting reversible hardware*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 12: Side hung projecting reversible hardware*;

— *Building hardware — Hardware for windows and balcony doors — Requirements and test methods — Part 13: Sash balances*;

— *Building hardware — Hardware for windows and balcony doors — Requirements and test methods — Part 14: Sash fasteners*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 15: Rollers for horizontal sliding and sliding folding windows and doors*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 16: Hardware for Lift&Slide windows and doors*;

— *Building hardware — Requirements and test methods for windows and doors height windows — Part 17: Hardware for Tilt&Slide windows and doors*;

— *Building hardware — Requirements and test methods for windows and door height windows — Part 19: Sliding Closing Devices*.

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 products throughout CEN Member States.

A full contribution to the preparation of this European Standard has been made by the European manufacturers´ organization 'ARGE' and national standards bodies.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the requirements and test procedures for durability, strength, security and function of Tilt and Turn, Tilt-First and Turn-Only hardware components or sets for windows and door height windows in accordance with common application as shown in informative Annex C.

NOTE To maintain the guaranteed characteristics during the utilization period, the manufacturers' product information and the manufacturers' maintenance and service instructions will be complied with in a manner that can be proven.

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.

NOTE The following terms and definitions apply to windows and door height windows made of wood, PVC-U, aluminium or steel and their appropriate material combinations.

3.1
Tilt and Turn
operating mode where the hardware is used to enable windows and door height windows initially into the turning position (side-hung), and then into the tilting position by operating the handle

Note 1 to entry: Tilt and Turn hardware in the sense of this European Standard is a one-hand-operation hardware for windows and door height windows for structural engineering.

3.2
Tilt-First
operating mode where the hardware is used to enable windows and door height windows initially into the tilting position, and then into the turning position (side-hung) by operating the handle

Note 1 to entry: Tilt-First hardware in the sense of this European Standard is a one-hand-operation hardware for windows and door height windows for structural engineering.

3.3
Turn-Only
operating mode where the hardware is used to enable windows and door height windows into a turning position (side-hung) by operating the handle

Note 1 to entry: Turn-Only hardware in the sense of this European Standard is a one-hand-operation hardware for windows and door height windows for structural engineering.

3.4
sample
actual hardware components which are due to be tested

3.5
specimen
window to accommodate hardware components (samples) for testing