SLOVENSKI STANDARD
SIST EN 13126-2:2021

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Nadomešča:
SIST EN 13126-2:2011

Stavbno okovje - Okovje za okna in zastekljena vrata - Zahteve in preskusne metode - 2. del: Okenska zapirala

Building hardware - Hardware for windows and door height windows - Requirements and test methods - Part 2: Window fastener handles

Baubeschläge - Beschläge für Fenster und Fenstertüren - Anforderungen und Prüfverfahren - Teil 2: Einreiberverschlüsse

Quincaillerie pour le bâtiment - Ferrures de fenêtres et portes-fenêtres - Exigences et méthodes d'essai - Partie 2 : Poignées à ergot de verrouillage

Ta slovenski standard je istoveten z: **EN 13126-2:2021**

ICS:

91.190	Stavbna oprema	Building accessories

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EUROPEAN STANDARD

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English Version

Building hardware - Hardware for windows and door height windows - Requirements and test methods - Part 2: Window fastener handles

Quincaillerie pour le bâtiment - Ferrures de fenêtres et portes-fenêtres - Exigences et méthodes d'essai - Partie 2 : Poignées à ergot de verrouillage

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This European Standard was approved by CEN on 8 February 2021.

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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European foreword

This document (EN 13126-2:2021) 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 September 2021, and conflicting national standards shall be withdrawn at the latest by September 2021.

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 13126-2:2011.

With regard to EN 13126-2:2011, the following significant changes were made:

— EN 13126-2 now is independent from EN 13126-1; all necessary information are included without the need of any further information from EN 13126-1;

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

— terms under 3.4 'locking mechanism”, 3.10 'sample', 3.11 'specimen' and 3.12 'test-rig' added; term under 3.6 'key operated locking mechanism' modified for better understanding;

— under 4.1 classification system changed completely; former digits 1 (Category of use), 4 (Fire resistance), 5 (Safety in use) and 8 (Application) 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), former digit 9 changed into box 4 (Test sizes); former digit 7 changed into box 5 (Security against burglar attack), new box 6 (Key related security);

— under 4.2 new grades for the number of cycles defined; H1 (5 000), H2 (10 000) and H3 (20 000); see also 5.7;

— under 4.8 new example added for the new classification;

— under 5.7 new grades for the number of cycles defined; H1 (5 000), H2 (10 000) and H3 (20 000) in accordance with 4.2 established;

— under 5.8.1 former Table 2 deleted; all values are listed unchanged in the corresponding clauses and subclauses;

— under 5.8.2 the number of cycles adapted to the newly defined grades for the durability;

— under 5.8.4 and 5.8.5 grade 3 added with 200 Nm;

— under 5.8.6 subclause for locking variations regarding key related security added;

— under 5.9 subclause for corrosion resistance added;

— under 6 headline modified with “…and preparation for the test”;

— under 7.8 sublause for security added with new structure;

— under Clause 8 new clause added regarding marking with information from the current version of EN 13126-1.

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

EN 13126 consists of the following parts:

— EN 13126-1, *Building hardware — Hardware for windows and door height windows — Requirements and test methods — Part 1: Requirements common to all types of hardware;*

— EN 13126-2, *Building hardware — Hardware for windows and door height windows — Requirements and test methods — Part 2: Window fastener handles;*

— EN 13126-3, *Building hardware — Hardware for windows and door-height windows — Requirements and test methods — Part 3: Handles, primarily for Tilt and Turn, Tilt-First and Turn-Only hardware;*

— EN 13126-4, *Building hardware — Requirements and test methods for windows and door height windows — Part 4: Espagnolettes;*

— EN 13126-5, *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;*

— EN 13126-6, Bu*ilding hardware — Hardware for windows and door height windows — Requirements and test methods — Part 6: Variable geometry stay hinges (with or without a friction stay);*

— EN 13126-7, *Building hardware — Requirements and test methods for windows and door height windows — Part 7: Finger catches;*

— EN 13126-8, *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;*

— EN 13126-9, *Building hardware — Requirements and test methods for windows and door height windows — Part 9: Hardware for horizontal and vertical pivot windows;*

— EN 13126-10, *Building hardware — Requirements and test methods for windows and door height windows — Part 10: Arm-balancing systems;*

— EN 13126-11, *Building hardware — Requirements and test methods for windows and door height windows — Part 11: Top hung projecting reversible hardware*;

— EN 13126-12, *Building hardware — Requirements and test methods for windows and door height windows — Part 12: Side hung projecting reversible hardware*;

— EN 13126-13, *Building hardware — Hardware for windows and balcony door — Requirements and test methods — Part 13: Sash balances*;

— EN 13126-14, *Building hardware — Hardware for windows and balcony door — Requirements and test methods — Part 14: Sash fasteners*;

— EN 13126-15, *Building hardware — Hardware for windows and balcony door — Requirements and test methods — Part 15: Rollers for sliding and hardware for sliding folding windows;*

— EN 13126-16, *Building hardware — Hardware for windows and balcony door — Requirements and test methods — Part 16: Hardware for Lift and Slide windows;*

— EN 13126-17, *Building hardware — Hardware for windows and balcony door — Requirements and test methods — Part 17: Hardware for Tilt and Slide windows;*

— EN 13126-19, *Building hardware — Requirements and test methods for windows and door height windows — Part 19: Sliding Closing Devices*

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies requirements and test methods for durability, strength, security and functionality of window fastener handles.

This document does not apply to the following hardware:

a) handles - primarily for Tilt and Turn, Tilt-First and Turn-Only hardware, refer to EN 13126-3;

b) sash fasteners, refer to EN 13126-14;

c) sliding closing devices, refer to EN 13126-19.

NOTE The handles covered by this document do not have a spindle and the spur is primarily used to achieve the locked closed position.

2 Normative references

The following documents are referred to in the text in such a way that some of all of their contents constitute requirements 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 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.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

3.1
window fastener handle
operating device to hold the window in a closed position, with or without a locking mechanism (key-operated or a non key operated)

Note 1 to entry: Also known as Cockspur handles.

3.2
spur
part projecting from the handle that interacts with the compression wedge / keeper to close the window to give the desired pull-in

3.3
pull-in
distance the sash is moved towards the frame during operation of a window fastener handle from the initial contact of the handle spur to the fully closed position

3.4
locking mechanism
assembly of components to ensure the locked position of the handle and to prevent the movement of the handle from the locked position

3.5
non-key operated locking mechanism
locking mechanism not operated by a key

Note 1 to entry: For example 'push-to-open', button, thumb turn.

3.6
key operated locking mechanism
locking mechanism operated by appropriate means (e.g. a key)

3.7
compression wedge / keeper
component applied to the window frame in a position, that allow interaction with the handle spur to hold the window in a closed position

3.8
weather seal
compressible gasket between the sash and the frame that prevents air and water ingress

3.9
closing conditions

3.9.1
closed position
situation in which the hardware is not engaged and the active sash is resting up against the frame or weather seal

3.9.2
locked closed position
situation in which the active sash rests up against the frame and the hardware is engaged

3.9.3
secured position
situation in which the active sash rests up against the frame and the hardware is engaged and the locking mechanism of the handle is activated, e.g. by a key

3.10
sample
hardware component which shall be tested

3.11
specimen
window to accommodate hardware components (samples) for testing

3.12
test-rig
testing device onto which the specimen is mounted

4 Classification

4.1 General

Window fastener handles shall be classified in accordance with the six box classification system (see Table 1).

Table 1 — Classification system of hardware

box	1	2	3	4	5	6
characteristic	Durability	Mass	Corrosion resistance	Test sizes	Security against burglar attack	Key related security

4.2 Durability (1 – first box)

The first box shall display the grade applied to the durability test in accordance with 5.7:

— grade H1: 5 000;

— grade H2: 10 000;

— grade H3: 20 000.

4.3 Mass (2 – second box)

No requirements, the second box shall display the digit 0.

4.4 Corrosion resistance (3 – third box)

The third box shall display the grade regarding corrosion resistance in accordance with 5.9.

4.5 Test sizes (4 – fourth box)

No requirements, the fourth box shall display the digit 0.

4.6 Security against burglar attack (5 – fifth box)

The fifth box shall display the grade of the security against burglar attack:

— grade 0: without security against burglar attack;

— grade 1: 35 Nm resistance against twisting-off and forcing-off;

— grade 2: 100 Nm resistance against twisting-off and forcing-off;

— grade 3: 200 Nm resitance against twisting-off and forcing-off.

4.7 Key related security (6 – sixth box)

— grade 0: no locking mechanism;

— grade 1: non-key operated locking mechanism (e.g. ‘PTO’: Push-to-open);

— grade 2: key-operated locking mechanism with ≥ 30 and ≤ 99 locking variations;

— grade 3: key-operated locking mechanism with ≥ 100 locking variations.

4.8 Example of classification for window fastener handles

a) Alternative 1: Table with boxes (see Table 2).

Table 2 — Example of classification

Standard	Box					
	1	2	3	4	5	6
EN 13126-2:2021	H2	0	2	0	1	2

In accordance with Clause 8 the information regarding the classification by using a table with boxes (example is shown with Table 2) shall always be shown together with the number of this document EN 13126-2.

b) Alternative 2: Alphanumerical:

EN 13126-2:2021 H2-0-2-0-1-2

box 1	durability	grade H2 (10 000 cycles)
box 2	mass	0 (no requirements)
box 3	corrosion resistance	grade 2
box 4	test sizes	0 (no requirements)
box 5	security against burglar attack	grade 1 (35 Nm resistance against twisting-off and forcing-off)
box 6	key related security	grade 2 (locking mechanism with ≥ 30 and ≤ 99 locking variations)

5 Requirements

5.1 Dangerous substances

Materials in products should not release any dangerous substances in excess of the maximum levels specified in the European material standards and any National regulations.

5.2 Operating torque

The test specified in 7.2 shall be used to measure the operating torque during normal operation.

The operating torque shall not exceed 10 Nm during the operating torque test in accordance with 7.2.

5.3 Torsion strength

The test specified in 7.3 shall be used to ensure the window fastener handle is capable of withstanding additional force applied once the handle is closed.

Upon completion of the additional torque test in accordance with 7.3, there shall be no cracks or breakages and the measured deformity at the point of the applied load shall not exceed 5 mm.