

SLOVENSKI STANDARD SIST EN 13126-14:2022

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Building hardware - Hardware for windows and door height windows - Requirements and test methods - Part 14: Sash fasteners

Baubeschläge - Beschläge für Fenster und Fenstertüren - Anforderungen und Prüfverfahren - Teil 14: Einreiberverschlüsse für Schlebefenster

Quincaillerie pour le bâtiment Ferrures de fenêtres et portes-fenêtres - Exigences et méthodes d'essais - Partie 14 : Verrouillages à came

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Building hardware - Hardware for windows and door height windows - Requirements and test methods - Part 14: Sash fasteners

Quincaillerie pour le bâtiment - Ferrures de fenêtres et portes-fenêtres - Exigences et méthodes d'essais -Partie 14 : Verrouillages à came Baubeschläge - Beschläge für Fenster und Fenstertüren - Anforderungen und Prüfverfahren - Teil 14: Einreiberverschlüsse für Schiebefenster

This European Standard was approved by CEN on 19 December 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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 13126-14:2022) 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of an identical text or by endorsement, at the latest by July 2022, and conflicting national standards shall be withdrawn at the latest by July 2022.

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.

The performance tests incorporated in this document 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.

This document supersedes EN 13126-14:2012.

With regard to EN 13126-14:2012, the following significant changes were made:

- EN 13126-14 now is independent from EN 13126-1; all 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 3.3 (sash width) and 3.4 (sash height);
- under 4.1 classification system changed completely:
 - former digit 1 (Category of use) changed into box 1 (Durability);
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 - former digit 2 (Durability) Thanged into box/2 (Mass); 3126-14-2022
 - former digits 3, 4 and 5 deleted;
 - former digit 6 (Corrosion resistance) changed into box 3 (Corrosion resistance);
 - former digits 7 and 8 deleted;
 - former digit 9 (Test sizes test limitations) 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);
- under 4.6 new example of classification added in accordance with the new classification system; two alternative ways (table or alphanumerical) to show the classification defined;
- under 5.2 information regarding new grades for durability added;
- under 5.6 information regarding corrosion resistance added;
- under Clause 6 "Test equipment and preparation for the test" additional information added;
- 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, Building 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; 1 ac 218f-
- 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 door height windows Requirements and test methods Part 14: Sash fasteners;
- EN 13126-15, Building hardware Hardware for windows and door height windows Requirements and test methods Part 15: Rollers for sliding and hardware for sliding folding windows;
- EN 13126-16, Building hardware Hardware for windows and door height windows Requirements and test methods Part 16: Hardware for Lift and Slide windows;

- EN 13126-17, Building hardware Hardware for windows and door height windows 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

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

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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.

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1 Scope

This document specifies requirements and test methods for durability, strength, security, and function of sash fasteners for windows and door height windows.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes 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 https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1

sash fastener

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device to secure, in the closed position, the sashes of a double or single hung vertically sliding window and the sashes of a horizontally sliding window

3.2 pull-in

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distance the sashes are moved towards each other during operation of a sash fastener from a fully open to a fully closed position

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3.3

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sash width

total horizontal outer dimension of the sash

3.4

sash height

total vertical outer dimension of the sash

4 Classification

4.1 General

Sash fasteners shall be classified in accordance with the four-box classification system (see Table 1).

Table 1 — Classification system of hardware

box	1	2	3	4	
characteristic	Durability	Mass	Corrosion resistance	Test sizes	

4.2 Durability (1 - first box)

The first box shall display the grade applied to the durability test in accordance with 5.2:

grade H1: 5 000 cyclesgrade H2: 10 000 cyclesgrade H3: 20 000 cycles

4.3 Mass (2 – second box)

The second box shall display the maximum tested sash-mass (weight).

The mass range starts from 10 kg and varies in steps of 5 kg up to 50 kg. After that the mass varies unlimited in steps of 10 kg. An unlimited number of grades are identified, whereby 010 is the lowest (see Table 2).

Table 2 — Tested sash-mass

Grade	010	015	020	025	030	035	040	045	050	060	070	080	
Mass (kg)	10	15	20	25	30	35	40	45	50	60	70	80	

The mass of the test sash shall be determined in accordance with the claims made by the hardware manufacturer.

4.4 Corrosion resistance (3 – third box)

The third box shall display the grade regarding corrosion resistance in accordance with 5.6.

4.5 Test sizes (4 - fourth box)

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The fourth box shall display the test sizes which were used for testing the sash fastener.

SW = sash width in min / SH = sash height in min 377/sist-en-13126-14-2022

EXAMPLE 600 SW x 1 200 SH

NOTE The specified sizes are test sizes only. They do not relate to the maximum sizes to which a window with this hardware may be fabricated.

4.6 Example of classification for sash fasteners

a) Alternative 1: Table with boxes

Ctandand	Box						
Standard	1	2	3	4			
EN 13126-14:YYYY	Н2	040	3	600/1 200			

In accordance with Clause 8 the information regarding the classification by using a table with boxes shall always be shown together with the number of this document, EN 13126-14.

Alternative 2: Alphanumerical

EN 13126-14:20XX H2-040-3-600 × 1 200

This denotes sash fasteners, which have:

box 1 durability grade H2 (10 000 cycles)

box 2 mass 40 kg

box 3 grade 3 corrosion resistance

box 4 SW = 600 mm, SH = 1200 mmtest sizes

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 Durability

The test specified in 7.2 shall be carried out to ensure the sash fastener is capable of continued operation after cycling in accordance with the grades specified in 7.2, with regard given to normal maintenance.

Upon completion of the durability test in accordance with 7.2 the sash fastener shall continue to function normally.

The manufacturer specifies one of the following 3 grades for the number of cycles, with which the durability test shall be carried out:

grade H1: 5 000 (+1 %) cycles; SIST EN 13126-14:2022

10 000 (+11%)/cycles/ards.iteh.ai/catalog/standards/sist/61ae218fgrade H3: 20 000 (+1%) cycles. 20 000 (+1%) cycles.

5.3 Static force tests

5.3.1 General

The tests specified in 7.3.1, 7.3.2 and 7.3.3 shall be used to ensure the hardware is capable of withstanding both normal operations and excessive forces with minimal deformation.

5.3.2 Operating force test

Upon completion of the operating force test in accordance with 7.3.1, the operating force shall not exceed 5 Nm nor an applied force of 50 N.

5.3.3 Excessive horizontal force test

Upon completion of the excessive horizontal force test in accordance with 7.3.2, the maximum deformation shall not exceed 1 mm.

5.3.4 Excessive vertical force test

Upon completion of the excessive vertical force test in accordance with 7.3.3, the maximum deformation shall not exceed 1 mm.