



SLOVENSKI STANDARD
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SIST-TS CEN/TS 13126-11:2005

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

Baubeschläge - Anforderungen und Prüfverfahren für Fenster und Fenstertüren - Teil 11:
Umkehrbeschläge für auskragende Schwing-Klappflügel Fenster
(standards.itel.ai)

Quincaillerie pour le bâtiment - Exigences et méthodes d'essai des ferrures de fenêtres
et portes-fenêtres - Partie 11: Ferrures pour ouvrants à l'italienne réversibles à axe
horizontal supérieur
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EUROPEAN STANDARD
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EUROPÄISCHE NORM

EN 13126-11

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English Version

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

Quincaillerie pour le bâtiment - Exigences et méthodes
d'essai des ferrures de fenêtres et portes-fenêtres - Partie
11: Ferrures pour ouvrants à l'italienne réversibles à axe
horizontal supérieur

Baubeschläge - Beschläge für Fenster und Fenstertüren -
Anforderungen und Prüfverfahren - Teil 11:
Umkehrbeschläge für auskragende Schwing-
Klappflügel Fenster

This European Standard was approved by CEN on 5 October 2008.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 13126-11:2008) 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 May 2009, and conflicting national standards shall be withdrawn at the latest by May 2009.

This document supersedes CEN/TS 13126-11:2004.

This European Standard is one of a series of European Standards dedicated to building hardware products.

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

EN 13126 *Building hardware — Requirements and test methods for windows and doors height windows* consists of the following parts:

Part 1: Requirements common to all types of hardware

Part 2: Casement fastener handles¹⁾

Part 3: Manoeuvring fittings for espagnolette bolts/sliding button¹⁾

Part 4: Espagnolette bolts¹⁾

Part 5: Devices that restrict the opening of windows¹⁾

Part 6: Variable geometry stay hinges (with or without a friction system)

Part 7: Finger catches

Part 8: Tilt&Turn, Tilt-First and Turn-Only hardware

Part 9: Pivot hinges¹⁾

Part 10: Arm balancing systems

Part 11: Top hung projecting reversible hardware

Part 12: Side hung projecting reversible hardware

Part 13: Sash balances¹⁾

Part 14: Sash fasteners¹⁾

Part 15: Rollers for horizontal sliding and sliding folding windows and doors

¹⁾ To be revised, for the time being CEN/TS.

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Part 16: Hardware for Lift&Slide windows and doors

Part 17: Hardware for Tilt&Slide windows and doors

Part 18: Fan light openers for windows and door height windows

Part 19: Sliding Closing Devices (SCD) for windows and door height windows

Informative Annex A of EN 13126-1:2006 gives detailed schedules of the elements of components of the 17 first parts of this European Standard.

Informative Annex B of EN 13126-1:2006 gives schedules of the elements of components used on the 21 types of window opening functions.

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.

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 United Kingdom.

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1 Scope

This part of EN 13126 specifies the requirements and test methods for durability, strength, security and function of top hung projecting reversible hardware for windows.

NOTE This European Standard is applicable to top hung projecting reversible hardware whether fitted with integral restrictors or not.

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 12519:2004, *Windows and pedestrian doors — Terminology*

EN 13126-1:2006, *Building hardware — Requirements and test methods for windows and doors height windows — Part 1: Requirements common to all types of hardware*

CEN/TS 13126-5, *Building hardware, fittings for windows and door height windows — Requirements and test methods — Part 5: Devices that restrict the opening of windows*

EN 1670, *Building hardware — Corrosion resistance — Requirements and test methods*

ISO 4520:1981, *Chromate conversion coatings on electroplated zinc and cadmium coatings*

3 Terms and definitions

[SIST EN 13126-11:2009](https://standards.iteh.ai/catalog/standards/sist/2a0aeb32-de53-45c8-b9e2-897fe11b442/sist-en-13126-11-2009)

[https://standards.iteh.ai/catalog/standards/sist/2a0aeb32-de53-45c8-b9e2-](https://standards.iteh.ai/catalog/standards/sist/2a0aeb32-de53-45c8-b9e2-897fe11b442/sist-en-13126-11-2009)

For the purposes of this document, the terms and definitions given in EN 13126-1:2006 and EN 12519:2004 and the following apply.

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

3.1

pivot retainer

device (may be integrated onto hinge arm system) fitted to the sash to hold it during rotation on hinge mechanism

3.2

integrated restrictor

mechanism that is an integral part of the top hung projecting reversible hardware that limits the initial opening of the window and may or may not also hold an opening light firmly in the reverse position

3.3

top glider

assembly consisting of plate and swivel bracket fitted to the sash, which guides movement in the vertical plane

3.4

top hung projecting reversible hinge

mechanism consisting of sliding rails and moving arms fitted into the frame sides of the window, to support the sash allowing it to open outward, without projecting into the room, and be reversed for cleaning from the inside

EN 13126-11:2008 (E)**4 Classification****4.1 General**

The classification for top hung projecting reversible hardware shall be in accordance with the requirements of Clause 4 EN 13126-1:2006.

4.2 Category of use (1 – first digit)

No marking is required for the category of use in accordance with 4.2 of EN 13126-1:2006.

4.3 Durability (2 – second digit)

Grades shall be in accordance with 4.3 of EN 13126-1:2006.

4.4 Mass (3 – third digit)

Grades shall be in accordance with 4.4 of EN 13126-1:2006.

4.5 Fire resistance (4 – fourth digit)

One grade shall be identified in accordance with 4.5 of EN 13126-1:2006.

— grade 0: no requirements.

4.6 Safety in use (5 – fifth digit)

One grade shall be identified in accordance with 4.6 of EN 13126-1:2006.

— grade 1: hardware shall conform to the requirements of EN 13126-1 and EN 13126-11.

4.7 Corrosion resistance (6 – sixth digit)

Grades shall be in accordance with 4.7 of EN 13126-1:2006.

4.8 Security (7 – seventh digit)

No marking is required for the category of security in accordance with 4.8 of EN 13126-1:2006.

4.9 Application (8 – eighth digit)

The eighth digit shows “11” indicating the part of the standard which was used for testing the top turn projecting reversible hardware in accordance with 4.9 of EN 13126-1:2006.

4.10 Test sizes – Size limitations (9 – ninth digit)

The ninth digit shows the test sizes in accordance with 4.10 of EN 13126-1:2006 as follows:

S.R.W. ²⁾ in mm / S.R.H. ³⁾ in mm.

²⁾ S.R.W. = sash rebate width

³⁾ S.R.H. = sash rebate height

EXAMPLE 1 500 S.R.W. × 1 500 S.R.H.

The specified size is a test size only. It does not relate to the maximum size to which a window may be fabricated.

For instances where the top hung projecting reversible hardware is available in a range of module sizes to suit differing window sizes it shall be tested at the size which gives the most severe impact on the hardware, as recommended by the hardware manufacturer. This size is then recorded as the ninth digit.

4.11 Example of classification for top hung projecting reversible hardware

Table 1 — Example of classification for top hung projecting reversible hardware

1	2	3	4	5	6	7	8	9
-	5	060	0	1	3	-	11	1 500/1 500

This denotes Top Hung Projecting Reversible hardware, which has the following:

Digit 1	category of use	- (no requirements);
Digit 2	durability	grade 5 (25 000 cycles);
Digit 3	mass	60 kg;
Digit 4	fire resistance	grade 0 (no requirements);
Digit 5	safety in use	grade 1;
Digit 6	corrosion resistance	grade 3;
Digit 7	security	- (no requirements);
Digit 8	applicable part	tested in accordance with Part 11 of this standard;
Digit 9	test sizes	S.R.W. ¹⁾ = 1 500 mm, S.R.H. ²⁾ = 1 500 mm

5 Requirements

5.1 General

The requirements for top hung projecting reversible hardware shall be in accordance with Clause 5 of EN 13126-1:2006.

5.2 Integrated restrictors

Where top hung projecting reversible hardware is fitted with an integrated restrictor the hardware shall be tested in accordance with CEN/TS 13126-5.

5.3 Ease of sash movement test

The test specified in 7.2 shall be used to determine the forces required to operate the hardware is appropriate for the intended use.

On completion of the ease of sash movement test in accordance with 7.2.