

# SLOVENSKI STANDARD kSIST prEN 13126-10:2008

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

Baubeschläge - Anforderungen und Prüfverfahren für Fenster und Fenstertüren - Teil 10: Senkklappflügelsysteme

Quincaillerie pour le bâtiment - Exigences et méthodes d'essai des ferrures de fenêtres et portes-fenêtres - Partie 10: Compas â projection

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### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# FINAL DRAFT prEN 13126-10

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#### **English Version**

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

Quincaillerie pour le bâtiment - Exigences et méthodes d'essai des ferrures de fenêtres et portes-fenêtres - Partie 10: Compas â projection Baubeschläge - Anforderungen und Prüfverfahren für Fenster und Fenstertüren - Teil 10: Senkklappflügelsysteme

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 33.

If this draft becomes a European Standard, 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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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#### **Foreword**

This document (prEN 13126-10:2008) 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 document is currently submitted to the Unique Acceptance Procedure.

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 handles<sup>1)</sup>

Part 3: Manoeuvring fittings for espagnolette bolts/sliding button<sup>1)</sup>

Part 4: Espagnolette bolts<sup>1)</sup>

Part 5: Devices that restrict the opening of windows<sup>1)</sup>

Part 6: Variable geometry stay hinges (with or without a friction system)<sup>1)</sup>

Part 7: Finger catches

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

Part 9: Pivot hinges<sup>1)</sup>

Part 10: Arm balancing systems<sup>1)</sup>

Part 11: Top hung projecting reversible hardware<sup>1)</sup>

Part 12: Side hung projecting reversible hardware<sup>1)</sup>

Part 13: Sash balances<sup>1)</sup>

Part 14: Sash fasteners<sup>1)</sup>

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

Part 16: Hardware for Lift&Slide windows and doors

Part 17: Hardware for Tilt&Slide windows and doors

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

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

#### prEN 13126-10:2008 (E)

Normative 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 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.

#### 1 Scope

This part of EN 13126 specifies requirements and test methods for durability, strength, security and function of arm-balancing systems for windows and door height windows.

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

EN 12519:2004, Windows and pedestrian doors — Terminology

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

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

#### 3 Terms and definitions

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 and door height windows made of wood, PVC-u, aluminium or steel and their appropriate material combinations.

#### 3.1

#### hinge assembly

assembly connecting sash and frame to limit movement of sash during opening

#### 3.2

#### support arm

arm connecting sash and frame to control direction of opening

#### 4 Classification

#### 4.1 General

The classification for arm-balancing systems 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: The hardware shall conform to the requirements of EN 13126-1 and EN 13126-10.

#### 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-eigth digit)

The eighth digit shows "10/1", "10/2" or "10/3" indicating the part of the standard which was used for testing the arm-balancing systems and their common application for top hung or bottom hung windows in accordance with 4.9 of EN 13126-1:2006. Three grades are identified:

- grade 10/1: for use only on projecting top hung windows (type H);
- grade 10/2: for use only on projecting bottom-hung windows (type J);
- grade 10/3: for use on both projecting top-hung and bottom hung windows (type H and / or J).

#### 4.10 Test sizes (9 - ninth digit)

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

S.W. <sup>2)</sup> in mm / S.H. <sup>3)</sup> in mm.

EXAMPLE 1 200 mm S.W. × 900 mm S.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 an arm-balancing system is available in a range of 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.

3) S.H. = sash height

<sup>2)</sup> S.W. = sash width