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

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NATIONAL FOREWORD

See Eesti standard EVS-EN 13126-13:2012 sisaldab Euroopa standardi EN 13126-13:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 13126-13:2012 consists of the English text of the European standard EN 13126-13:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 02.05.2012.	Date of Availability of the European standard is 02.05.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

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

Quincaillerie pour le bâtiment - Ferrures de fenêtres et portes-fenêtres - Exigences et méthodes d'essai - Partie 13 : Contrepoids pour mécanismes à guillotine

Baubeschläge - Beschläge für Fenster und Fenstertüren - Anforderungen und Prüfverfahren - Teil 13: Ausgleichgewichte für Vertikal-Schiebefenster

This European Standard was approved by CEN on 23 March 2012.

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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
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Foreword

This document (EN 13126-13:2012) 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 November 2012, and conflicting national standards shall be withdrawn at the latest by November 2012.

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

This document supersedes CEN/TS 13126-13:2004.

The following is a list of the technical changes made since the previous edition of this standard, organised according to their relevant clauses:

a) Clause 3, Terms and definitions:

1) Reduced to two definitions, 3.1 and 3.2;

b) Clause 4, Classification:

1) Three new grades added as per Table 2 in 4.9;

2) Window test sizes specified within EN 13126-13 as per Table 1 in 4.10;

3) Example of classification added in 4.11;

c) Clause 5, Requirements:

1) Requirements in the whole of Clause 5: completely revised;

2) New test procedures added:

i) Integrated maximum opening stop in 5.2;

ii) Free movement test in 5.3;

iii) Durability test in 5.4;

iv) Resistance to manually applied load test in 5.5 and 3 new grades added;

v) Corrosion resistance test in 5.6;

d) Clause 6, Test apparatus:

1) Requirements in the whole of Clause 6: completely revised;

e) Clause 7, Test methods:

1) Test methods in the whole of Clause 7: completely revised;

2) Reduction in the number of test samples in 7.1.

A full contribution to the preparation of this European Standard has been made by the European manufacturers´ organisation ‘ARGE’ and National Standards institutions.

This European Standard is one of a series of European Standards for building hardware products. It is divided into seventeen parts to incorporate all types of windows and balcony doors:

— 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 — Requirements and test methods for windows and doors height windows — 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&Turn, Tilt-First and Turn-Only hardware*;

— EN 13126-4, *Building hardware — Requirements and test methods for windows and doors 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 — Requirements and test methods for windows and doors height windows — 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 — Requirements and test methods for windows and doors height windows — Part 8: Tilt&Turn, Tilt-First and Turn-Only hardware*;

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

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

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

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

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

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

— EN 13126-15, *Building hardware — Requirements and test methods for windows and doors height windows — Part 15: Rollers for horizontal sliding and sliding folding windows and doors*;

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

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

— prEN 13126-18, *Building hardware — Specifications for the fittings for the operation of windows and door height windows — Part 18: Requirements and test procedures for durability, strength, security and functionality of Fan light openers for windows and door height windows*;

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

Informative Annex A of EN 13126-1:2011 gives detailed schedules of the elements of components of the seventeen parts of this European Standard.

Informative Annex B of EN 13126-1:2011 details, in connection with Annex A of the same standard, the concerned parts and their reference to the relevant widow types.

Normative and informative annexes to all parts of this European Standard are indicated in the contents of the seventeen parts.

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-CENELEC 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, Croatia, 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, Turkey and the United Kingdom.

1 Scope

This European Standard specifies requirements and test methods for durability, strength, security and functionality of sash balances.

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*

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

EN 13126-1:2011, *Building hardware — Hardware for windows and door height windows — Requirements and test methods — Part 1: Requirements common to all types of hardware*

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*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13126-1:2011, EN 12519:2004 and the following apply.

3.1
sash balance
device, generally fitted in a pair and used to counter-balance the mass of a vertically moving sash throughout its full travel

3.2
manually applied force
externally applied vertical force required to cause movement of the sliding sash when the sash balances are mounted in the test specimen

4 Classification

4.1 General

The classification for sash balances shall be in accordance with the requirements of Clause 4 of EN 13126-1:2011.

4.2 Category of use (1 – first digit)

No marking is required for the category of use in accordance with 4.2 of EN 13126-1:2011.

4.3 Durability (2 – second digit)

Grades shall be in accordance with 4.3 of EN 13126-1:2011.