

<b>STN</b>	<b>Stavebné kovanie</b> <b>Kovanie na okná a balkónové dvere</b> <b>Požiadavky a skúšobné metódy</b> <b>Časť 13: Vyváženie okenných krídel</b>	<b>STN</b> <b>EN 13126-13</b>  16 6015
------------	---	---

Building hardware - Hardware for windows and door height windows - Requirements and test methods - Part 13: Sash balances

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/22

Obsahuje: EN 13126-13:2022

Oznámením tejto normy sa ruší  
STN EN 13126-13 (16 6015) z októbra 2012

**134681**

EUROPEAN STANDARD

EN 13126-13

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2022

ICS 91.190

Supersedes EN 13126-13:2012

English Version

## Building hardware - Hardware for windows and door height windows - Requirements and test methods - Part 13: Sash balances

Quincaillerie pour le bâtiment - Ferrures de fenêtres et portes-fenêtres - Partie 13 : 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 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.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

**EN 13126-13:2022 (E)**

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>3</b>
<b>1 Scope</b> .....	<b>6</b>
<b>2 Normative references</b> .....	<b>6</b>
<b>3 Terms and definitions</b> .....	<b>6</b>
<b>4 Classification</b> .....	<b>6</b>
4.1 <b>General</b> .....	<b>6</b>
4.2 <b>Durability (1 – first box)</b> .....	<b>7</b>
4.3 <b>Mass (2 – second box)</b> .....	<b>7</b>
4.4 <b>Corrosion resistance (3 – third box)</b> .....	<b>7</b>
4.5 <b>Test Sizes (4 – fourth box)</b> .....	<b>7</b>
4.6 <b>Rating (5 – fifth box)</b> .....	<b>7</b>
4.7 <b>Example of classification for sash balances</b> .....	<b>7</b>
<b>5 Requirements</b> .....	<b>8</b>
5.1 <b>Dangerous substances</b> .....	<b>8</b>
5.2 <b>Integrated maximum opening stop</b> .....	<b>8</b>
5.3 <b>Free movement test</b> .....	<b>8</b>
5.4 <b>Durability</b> .....	<b>8</b>
5.5 <b>Rating – Resistance to manually applied load test</b> .....	<b>8</b>
5.6 <b>Corrosion resistance test</b> .....	<b>9</b>
<b>6 Test equipment and preparation for the test</b> .....	<b>9</b>
6.1 <b>Sash balances installed in the test specimen</b> .....	<b>9</b>
6.2 <b>Test specimens from the sash balance manufacturer</b> .....	<b>9</b>
6.3 <b>Test rig</b> .....	<b>9</b>
6.4 <b>Hardware</b> .....	<b>9</b>
<b>7 Test methods</b> .....	<b>10</b>
7.1 <b>Samples</b> .....	<b>10</b>
7.2 <b>Free movement test procedure</b> .....	<b>10</b>
7.3 <b>Durability</b> .....	<b>10</b>
7.3.1 <b>Durability test procedure</b> .....	<b>10</b>
7.3.2 <b>Durability test – acceptance criteria</b> .....	<b>10</b>
7.4 <b>Resistance to manually applied load test procedure</b> .....	<b>11</b>
7.5 <b>Corrosion resistance test</b> .....	<b>11</b>
<b>8 Marking</b> .....	<b>11</b>
<b>Annex A (informative) Test procedures</b> .....	<b>12</b>
<b>Annex B (informative) Flowchart of test procedure</b> .....	<b>14</b>
<b>Bibliography</b> .....	<b>15</b>

## European foreword

This document (EN 13126-13:2022) 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 13126-13:2012.

With regard to EN 13126-13:2012, the following significant changes were made:

- EN 13126-13 is now 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);
  - former digit 2 (Durability) changed into box 2 (Mass);
  - former digits 3, 4 and 5 deleted;
  - former digit 6 (Corrosion resistance) changed into box 3 (Corrosion resistance);
  - former digits 7 deleted;
  - former digit 8 (Application) changed into box 4 (Test sizes);
  - former digit 9 (Test sizes) changed into box 5 (Rating);
- under 4.2 new grades for the number of cycles defined; H1 (5 000), H2 (10 000) and H3 (20 000);
- under 4.7 new example of classification added in accordance with the new classification system; two alternative ways (table or alphanumeric) to show the classification defined;
- under 5.4 information regarding new grades for durability added;
- under 5.5 headline and grades in Table 3 modified;
- under 5.6 the wording changed and information regarding corrosion resistance added;

**EN 13126-13:2022 (E)**

- under Clause 6 headline modified;
- under 6.2 wording modified; new sentence added at the beginning;
- under 7.1 wording modified;
- under 7.3 several changes in the structure and the wording;
- under 7.3.1 headline modified;
- under 7.3.2 new headline added for a new subclause with the acceptance criteria;
- under 7.5 new subclause added with information regarding corrosion resistance;
- 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;*
- 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.

## EN 13126-13:2022 (E)

### 1 Scope

This document specifies requirements and test methods for durability, strength, security and function of sash balances.

### 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*

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*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**