



**SLOVENSKI STANDARD**  
**kSIST prEN 13126-11:2008**  
**01-junij-2008**

---

GHUj Vbc`c\_cj ^Y!`NU hYj Y]b`dfYg\_i gbY`a YfcXY`nUc\_bU]b`nUghY\_`^YbUj fUHJ!`%%  
XY.`CVfb^Ybc`c\_cj ^Y`nU]nVc YbUc\_bUg`g`cdb]a ]`f]]

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-Klappflügelfenster

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

**Ta slovenski standard je istoveten z: prEN 13126-11**

---

**ICS:**

91.190            Stavbna oprema            Building accessories

**kSIST prEN 13126-11:2008**            **en,fr**



April 2008

ICS 91.190

Will supersede CEN/TS 13126-11:2004

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

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.

This draft European Standard was established by CEN 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.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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

## Contents

Page

<b>Foreword</b> .....	<b>3</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>5</b>
<b>4 Classification</b> .....	<b>6</b>
4.1 <b>General</b> .....	<b>6</b>
4.2 <b>Category of use (1 – first digit)</b> .....	<b>6</b>
4.3 <b>Durability (2 – second digit)</b> .....	<b>6</b>
4.4 <b>Mass (3 – third digit)</b> .....	<b>6</b>
4.5 <b>Fire resistance (4 – fourth digit)</b> .....	<b>6</b>
4.6 <b>Safety in use (5 – fifth digit)</b> .....	<b>6</b>
4.7 <b>Corrosion resistance (6 – sixth digit)</b> .....	<b>6</b>
4.8 <b>Security (7 – seventh digit)</b> .....	<b>6</b>
4.9 <b>Application (8 – eighth digit)</b> .....	<b>6</b>
4.10 <b>Test sizes – Size limitations (9 – ninth digit)</b> .....	<b>6</b>
4.11 <b>Example of classification for top hung projecting reversible hardware</b> .....	<b>7</b>
<b>5 Requirements</b> .....	<b>7</b>
5.1 <b>General</b> .....	<b>7</b>
5.2 <b>Integrated restrictors</b> .....	<b>7</b>
5.3 <b>Ease of sash movement test</b> .....	<b>7</b>
5.4 <b>Durability test</b> .....	<b>8</b>
5.5 <b>Static load test</b> .....	<b>8</b>
<b>6 Test equipment</b> .....	<b>8</b>
<b>7 Test methods</b> .....	<b>8</b>
7.1 <b>Samples</b> .....	<b>8</b>
7.2 <b>Ease of sash movement test procedure</b> .....	<b>9</b>
7.3 <b>Durability test procedure</b> .....	<b>9</b>
7.4 <b>Static load test procedure</b> .....	<b>10</b>
7.5 <b>Corrosion resistance</b> .....	<b>10</b>
<b>Annex A (informative) Test method diagrams</b> .....	<b>11</b>
<b>Annex B (normative) Flow chart of test procedure</b> .....	<b>12</b>

## Foreword

This document (prEN 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 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 13126-11:2008 (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 prEN 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

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

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

---

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

<sup>3)</sup> S.H. = sash height