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Stavbno okovje - Okovje za okna in zastekljena vrata - Zahteve in preskusne metode - 4. del: Gonilni zapahi

Building hardware - Hardware for windows and door height windows - Requirements and test methods - Part 4: Espagnolettes

Baubeschläge - Beschläge für Fenster und Fenstertüren - Teil 4: Kantenverschlüsse

Quincaillerie pour le bâtiment - Ferrures de fenêtres et portes-fenêtres - Prescription et méthodes d'essais - Partie 4 : Crémones-verrous

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ICS:

91.190

Stavbna oprema

Building accessories

SIST EN 13126-4:2010

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13126-4

October 2008

ICS 91.190

Supersedes CEN/TS 13126-4:2004

English Version

**Building hardware - Requirements and test methods for windows
and doors height windows - Part 4: Espagnolettes**

Quincaillerie pour le bâtiment - Exigences et méthodes
d'essai des ferrures de fenêtres et portes-fenêtres - Partie 4
: Crémones-verrous

Baubeschläge - Beschläge für Fenster und Fenstertüren -
Teil 4: Kantenverschlüsse

This European Standard was approved by CEN on 15 August 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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN 13126-4:2008) 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 April 2009, and conflicting national standards shall be withdrawn at the latest by April 2009.

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 13126-4:2004.

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

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

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 the United Kingdom.

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EN 13126-4:2008 (E)**1 Scope**

This part of prEN 13126 specifies requirements and test methods for durability, strength, security and function of espagnolettes and their striker plates for use on windows and door height windows.

NOTE Espagnolettes are defined as a locking mechanism for windows and door height windows that usually have a maximum handle movement of 90°.

This European Standard does not include door bolts within the scope of EN 12051, or multi-point locks with latch and/or dead bolt within the scope of EN 12209.

2 Normative reference

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 — Part 1: Requirements common to all types of hardware*

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

3 Terms and definitions

[SIST EN 13126-4:2010](https://standards.iteh.ai/catalog/standards/sist/85a70b6d-e6f3-4cb5-bb8b-17d593cd7723/sist-en-13126-4-2010)

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

3.1**espagnolette**

locking mechanism for windows and door height windows that usually have a maximum handle movement of 90°

4 Classification**4.1 General**

The classification for espagnolettes shall be in accordance with the requirements of Clause 4 of 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)

Three grades shall be identified in accordance with 5.2 of this European Standard and 4.3 of EN 13126-1:2006:

- grade 3: 10 000;
- grade 4: 15 000;
- grade 5: 25 000.

4.4 Mass (3 – third digit)

No marking is required for the mass 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 parts 1 and 4 of this European Standard.

4.7 Corrosion resistance (6 – sixth digit)

Grades shall be in accordance with 4.7 of EN 13126-1:2006 to the grades listed in EN 1670, whereby grade 3 is the minimum requirement.

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 “4” indicating the part of the European Standard which was used for testing the espagnolettes in accordance with 4.9 of EN 13126-1:2006.

4.10 Test Sizes (9 – ninth digit)

The ninth digit indicates the test sizes which were used for testing the espagnolettes in accordance with 4.10 of EN 13126-1:2006.

All sizes are stated in mm, S.R.W. = Sash Rebate Width, S.R.H. = Sash Rebate Height:

- 600 mm wide × 1 200 mm high for windows;
- 900 mm wide × 2 300 mm high for door height windows.

NOTE 1 In the case of availability of the espagnolette in different sizes for windows and door height windows, the espagnolette should be tested in the size for door height windows only.

NOTE 2 The stated sizes are test sizes only. They do not relate to the maximum sizes to which a window may be fabricated.

NOTE 3 The espagnolette and the striker plates should be installed in the upright side of the specimen, in accordance with the respective Sash Rebate Height of 1 200 (window) or 2 300 mm (door height window).

EN 13126-4:2008 (E)

4.11 Example of classification for espagnolettes (EN 13126-4)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|-------------|
| — | 4 | — | 0 | 1 | 3 | — | 4 | 600 / 1 200 |

This denotes espagnolettes for windows and door height windows, which has:

- Digit 1 category of use - (no requirements);
- Digit 2 durability grade 4 (15 000 cycles);
- Digit 3 mass - (no requirements);
- 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 this European Standard;
- Digit 9 test sizes S.R.W¹⁾ = 800 mm, S.R.H²⁾ = 1 200 mm

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5 Requirements

5.1 General

The requirements of espagnolettes shall be in accordance with Clause 5 of EN 13126-1:2006.

5.2 Durability

Three grades are established:

- grade 3: 10 000;
- grade 4: 15 000;
- grade 5: 25 000.

¹⁾ S.R.W. = sash rebate width

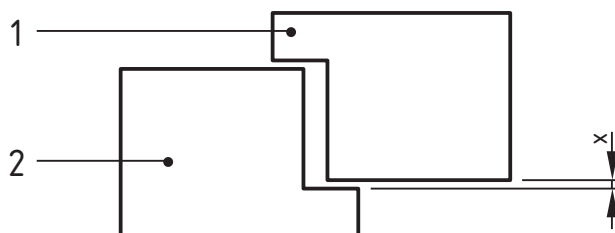
²⁾ S.R.H. = sash rebate height

Before and after the durability test the operating forces shall not exceed a maximum of 10 Nm. The espagnolette shall operate through its normal full range of travel to engage into the striker plates.

5.3 Locking point variable tolerance

Before and after the durability test, the distance “X” between the frame surface and the sash-overlap-edge shall be measured in conjunction with a counteracting force of 20^{+1}_0 N per locking point. The results shall not differ by more than 1 mm (see Figure 1).

NOTE This requirement does not apply to espagnolettes for sliding windows and door height windows.



Key

- 1 Frame
- 2 Sash
- X Distance X

Figure 1 — Measurement of locking point variable tolerance

5.4 Minimum closing device resistance

The espagnolette shall withstand a minimum torque of 25 Nm. Upon completion of this exerted torque, the espagnolette shall operate.

5.5 Corrosion resistance

Espagnolettes and striker plates shall conform to the grades listed in EN 1670, whereby grade 3 is the minimum requirement.

For zinc galvanized surfaces on iron or steel the specified thickness of 12 µm (class 3) or 16 µm (class 4) is not necessary if other surface protection methods are used to conform to the requirements (minimum time to formation of white corrosion products) of ISO 4520 (µm = micrometre).

Unless a test report can be provided by the manufacturer, the hardware shall be tested in accordance with EN 1670.

NOTE The evaluation of the corrosion resistance is limited to the essential areas (as a rule, the visible surfaces of the installed hardware).

The following are exempt from corrosion resistance evaluation:

- rivet locations;
- locations of later processing (for example: cleaved surfaces that result from cropping the hardware components, millings, etc.);
- non-surface-treated parts/surfaces, provided they are not in the visible vicinity of the hardware (for example: screw guide-holes made of zinc die-cast, etc.);