SLOVENSKI STANDARD
oSIST prEN 13126-19:2009

01-september-2009

Stavbno okovje - Zahteve in preskusne metode za okna in zastekljena vrata - 19. del: Drsna zapiralna naprava

Building hardware - Requirements and test methods for windows and door height windows - Part 19: Sliding Closing Devices

Beschäge - Anforderungen und Prüfvfahren für Fenster und Fenstertüren - Teil 19: SCD

Qincaillerie pour le bâtiment - Prescription et methods d´essais de fenêtres et portes-fenêtres - Partie 19: SCD

Ta slovenski standard je istoveten z: **prEN 13126-19**

ICS:

91.190	Stavbna oprema	Building accessories

oSIST prEN 13126-19:2009 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 13126-19

June 2009

ICS 91.190

English Version

Building hardware - Requirements and test methods for windows and door height windows - Part 19: Sliding Closing Devices

Qincaillerie pour le bâtiment - Prescription et methods d´essais de fenêtres et portes-fenêtres - Partie 19: SCD

Beschäge - Anforderungen und Prüfvfahren für Fenster und Fenstertüren - Teil 19: SCD

This draft European Standard is submitted to CEN members for enquiry. 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.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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: Avenue Marnix 17, B-1000 Brussels

Ref. No. prEN 13126-19:2009: E

Contents

Page

Foreword

This document (prEN 13126-19:2009) 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 CEN Enquiry.

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.

1 Scope

This part of EN 13126 specifies requirements and test methods for durability, strength, security and functionality of Sliding Closing Devices (SCDs) for windows and door height windows.

This standard does not specifically cover the handles used in handle-operated SCDs or the sash fasteners used in cam-operated SCDs, requirements and test methods for which are given in EN 13126-3 and EN 13126-14, respectively.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. 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 4520:1981, *Chromate conversion coatings on electroplated zinc and cadmium coatings*

3 Terms and definitions

For the purposes of this European Standard the definitions given in EN 13126-1:2006 and EN 12519 and the following apply.

3.1
sliding Closing Device (SCD)
device allowing the users to opens and locks sliding windows and balcony doors

3.2
SCD Manually action
the sliding closing device is actuated under the “finger operated” or “hand operated” action

3.3
SCD Automatic action
the SCD lock the sash when the sash is closed without any action more

3.4
PRD Position of Reference for Distance between sash and frame
see Annex A Figure A.1

4 Classification

4.1 General

Sliding closing devices shall be classified in accordance with EN 13126-1:2006, Clause 4.

4.2 Category of use (1 – first digit)

The category of use shall be classified in accordance with EN 13126-1:2006, 4.2, with no marking.

4.3 Durability (2 – second digit)

Durability shall be classified in accordance with EN 13126-1:2006, 4.3.

4.4 Mass (3 – third digit)

Mass shall be classified in accordance with EN 13126-1:2006, 4.4.

4.5 Fire resistance (4 – fourth digit)

One grade of fire resistance shall be identified in accordance with EN 13126-1:2006, 4.5:

— grade 0: no requirements.

4.6 Safety in use (5 – fifth digit)

One grade of safety in use shall be identified in accordance with EN 13126-1:2006, 4.6:

— grade 1: The hardware shall conform to EN 13126-19.

4.7 Corrosion resistance (6 – sixth digit)

The corrosion resistance shall be classified in accordance with EN 13126-1:2006, 4.7.

4.8 Security (7 – seventh digit)

The security shall be classified in accordance with EN 13126-1:2006, 4.8, with no marking.

4.9 Applicable part (8 – eighth digit)

The eighth digit shall indicate the applicable part of the standard that was used for testing the SCD, in accordance with EN 13126-1:2006, 4.9. One of two grades shall be allocated:

grade 19/1: for use as SCD manually action;

grade 19/2: for use as SCD automatic action.

4.10 Test sizes – Size limitations (9 – ninth digit)

The ninth digit shall indicate the test size in accordance with EN 13126-1:2006, 4.10 for example as follows:
S.R.W.[1] in mm / S.R.H.[2] in mm – tolerance ± 5 mm.

Example: S.R.W =700/S.R.H=1200

NOTE 1 No test size is required for this category (Window type N).

The specimen size shall be identified in the test, to full fill the ninth digit.

NOTE 2 The specified sizes are test sizes only. They do not relate to the maximum or minimum sizes to which a window could be fabricated.

NOTE 3 The manufacturer's product-documentation should advise that in daily use windows smaller or larger than those tested should not be subjected to stronger forces than those for the specified test size.

1) S.R.W: Sash Rebate Width

2) S.R.H: Sash Rebate Height

4.11 Example of classification for sliding closing devices

1	2	3	4	5	6	7	8	9
-	3	40	0	1	2	-	19/2.	S.R.W =700/ S.R.H=1200

This denotes sliding closing devices, which has:

Digit 1	category of use	- (no requirements)
Digit 2	durability	grade 3 (10 000 cycles)
Digit 3	mass	40 Kg
Digit 4	fire resistance	grade 0 (no requirements)
Digit 5	safety in use	grade 1
Digit 6	corrosion resistance	grade 2
Digit 7	security	- (no requirements)
Digit 8	applicable part	19/2 means SCD Automatic action
Digit 9	test sizes	S.R.W =700/ S.R.H=1200

5 Requirements

5.1 General

Sliding closing devices shall conform to clause 5 of EN 13126-1:2006.

5.2 Additional tests

5.2.1 Mechanical resistance

There shall be no breakage or deformation of any part during the test sufficient to prevent normal operation of the sliding closing device.

5.2.2 Durability

Grades shall conform to EN 13126-1:2006, 4.3.

Before the durability test:

The force/torque F1/M1 to operate the SCD shall be ≤ 20N / 2Nm when it is operated by finger or ≤ 30 N / 5Nm if it is operated by hand.

- The SCD shall function correctly.

After the durability test:

The force/torque F1/M1 to operate the SCD shall be ≤ 20N / 2Nm when it is operated by finger or ≤ 30N / 5Nm if it is operated by hand.

- The SCD shall continue to function correctly.
- The position of reference for Distance between sash and frame (PRD), shall not vary by more than 2mm, in accordance with 7.2.

5.2.3 Static load test

On completion of the static load test in accordance with 7.3, the SCD shall continue to function correctly.

6 Test equipment

The sliding closing devices shall be fitted to a test rig as specified in EN 13126-1:2006, Clause 6, using a simulated casement or sash in accordance with the manufacturer's fixing instructions (see Annex A Figure A.1), with a minimum mass of 15Kg.

If there is no fitting location in the manufacturer's fixing instructions, mount the sample sliding closing device and keep it to the centre of the vertical rail of casement or sash.

Gaskets, brush or others elements shall not be applied to the specimen, in order to assure the free movement of the sash.

7 Test procedures (methods)

7.1 Samples

According to the Annex C, three test samples shall be used for testing, as follows:

sample A – performance tests	(complete set)
sample B – corrosion tests	(fitting set)
sample C – retained for reference control	(fitting set)

NOTE 1 Sample B should only be necessary if no test report can be supplied by the manufacturer regarding the testing of the hardware component or set in accordance with EN 1670.

7.2 Durability test procedure

7.2.1 General

The test shall be carried out according to the following instructions:

Before the durability test shall be applied, firstly the force F_1 / torque M1 necessary to operate the sliding closing device, record this force and check the correct functioning.(see Table 1).

Secondly shall be applied the force F_2 (see fig A2) and measure and record the PRD (Position Reference Distance).

The durability test shall be implemented according to 7.2.1 or 7.2.2.

After the durability test, the force F_1 / torque M1 necessary to operate the sliding closing device shall be applied again, this force shall be recorded and the correct functioning shall be checked. (see Table 1).

Force F_2 (see Annex A Figure A.2) shall be applied again and measure and record the position reference distance (PRD).

The SCD shall be lubricated in accordance with the manufacturer's installation and maintenance instructions unless the hardware is claimed to be maintenance-free.

7.2.2 Implementation test for SCD manual action

NOTE: For the realization of this test, it will not be necessary the displacement (movement) of the sash, for what the test will only validate the correct operation of the mechanism of SCD.

The SCD shall be operated for lock and unlock for the cycles number according the grade to test at a rate of 250 cycles /h $^{+25}_{0}$ cycles / h.

7.2.3 Implementation test for SCD Automatic action

For the realization of this test it will be necessary the displacement (movement) of the sash, a distance of 200mm with a rate of 250 cycles /h $^{+25}_{0}$ cycles / h.

The test cycles on the test specimen shall consist of the following movements: