



**SLOVENSKI STANDARD**  
**SIST EN 1630:2012/kFprA1:2015**  
**01-september-2015**

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**Vrata, okna, obešene fasade, mreže in polkna - Protivlomna odpornost - Preskusna metoda ugotavljanja odpornosti proti poskusu ročnega vloma**

Pedestrian doorsets, windows, curtain walling, grilles and shutters - Burglar resistance - Test method for the determination of resistance to manual burglary attempts

Türen, Fenster, Vorhangfassaden, Gitterelemente und Abschlüsse - Einbruchhemmung - Prüfverfahren für die Ermittlung der Widerstandsfähigkeit gegen manuelle Einbruchversuche

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Blocs-portes pour piétons, fenêtres, façades rideaux, grilles et fermetures - Résistance à l'effraction - Méthode d'essai pour la détermination de la résistance aux tentatives manuelles d'effraction

**Ta slovenski standard je istoveten z: EN 1630:2011/FprA1**

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**ICS:**

13.310	Varstvo pred kriminalom	Protection against crime
91.060.50	Vrata in okna	Doors and windows

**SIST EN 1630:2012/kFprA1:2015**      **en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**EN 1630:2011**

**FprA1**

July 2015

ICS 13.310; 91.060.50

English Version

## Pedestrian doorsets, windows, curtain walling, grilles and shutters - Burglar resistance - Test method for the determination of resistance to manual burglary attempts

Blocs-portes pour piétons, fenêtres, façades rideaux, grilles et fermetures - Résistance à l'effraction - Méthode d'essai pour la détermination de la résistance aux tentatives manuelles d'effraction

Türen, Fenster, Vorhangfassaden, Gitterelemente und Abschlüsse - Einbruchhemmung - Prüfverfahren für die Ermittlung der Widerstandsfähigkeit gegen manuelle Einbruchversuche

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 33.

This draft amendment A1, if approved, will modify the European Standard EN 1630:2011. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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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.

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

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## Foreword

This document (EN 1630:2011/FprA1:2015) 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.

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**EN 1630:2011/FprA1:2015 (E)****1 Modifications to Clause 3, Terms and definitions**

Delete 3.1.

Delete 3.6.

**2 Modifications to 4.1, Test rig**

Replace the first sentence with:

"The test rig shall consist of a rigid frame into which test specimens can be mounted with its subframe. Annex C, Figure C.1 shows an example of a test rig."

Replace the second sentence with:

"The stiffness of the rig shall be such that a 15 kN force applied to any of the defined points shall not cause a deflection of more than 5 mm. The test rig shall support the subframe."

At the end of 4.1, add as a separate paragraph:

"For products intended to be installed in orientations other than vertical (e.g. roof lights) the test specimen shall be tested in the orientation of its intended use. When a range of intended orientations is considered, the test shall be performed in the most vulnerable orientation for the test specimen."

**3 Modification to 4.3.2, Video recording**

In the first paragraph, replace "The videotape and any copies of it shall not be published nor shown publicly."

with:

<https://standards.iteh.ai/catalog/standards/sist/c05afca2-3c8d-4463-bc28-f8c204c33c25/sist-en-1630-2012-kfpra1-2015>

"The videotape and any copies of it shall not be published nor shown publicly without permission from the applicant."

**4 Modifications to 5.1, General**

In the second paragraph, at the end, add:

"The test specimen shall be installed in the subframe and test rig as close to the tester as possible to give maximum access to the test specimen."

Delete the third paragraph ("At least two specimens shall be provided for testing, one for the pre-test and one for the main test.").

After the second paragraph, add the following two paragraphs:

"For products intended to be installed in orientations other than vertical (e.g. roof lights) the test specimen shall be tested in the orientation of its intended use. When a range of intended orientations is considered, the test shall be performed in the most vulnerable orientation for the test specimen.

The number of test specimens needed is described in EN 1627:2011, Clause 11."

After Table 1, add the following NOTE:

"NOTE 3 If a higher grade of glass is used in the test specimen, it may not be possible to assess the use of lower grade glass within those products without conducting further tests. This is because higher grades of glass may increase the rigidity of the product."

## 5 Modifications to 5.2, Preparation and examination of the specimen

At the end of the subclause, after the NOTE, add:

"The client shall supply the specimens pre-fitted in sub-frames (timber, aluminium or steel box section) in accordance with their installation instructions, with the maximum permitted gap between the specimen frame and sub-frame. This should be representative of a typical installation and shall be recorded in the test report. During test the test rig shall not support the joint line between specimen frame and sub-frame."

## 6 Modifications to 6.3.1, General

After the first paragraph, add the following two paragraphs:

"If the glass should break during any tests, the test shall proceed and the test laboratory may apply adhesive film to the exposed area of the glass to improve the protection of the tester for RC 2-RC 4.

For construction products without key unlockable hardware on the non-attack side entry might be gained by penetrating the product (including infillings of glass) and operating the hardware. This vulnerability shall be explored in all resistance classes."

## 7 Modification to 6.7, Failure criteria

After the first paragraph, add:

	<a href="https://standards.iteh.ai/standards/05a6238d25631b28-f8c204c33c25/sist-en-1630-2012-kfpra1-2015">SIST EN 1630:2012/kFprA1:2015</a>	
"-	Template E1:	- a rectangle of 400 mm ± 2 mm x 250 mm ± 2 mm; or
	Template E2:	- an ellipse of 400 mm ± 2 mm x 300 mm ± 2 mm; or
	Template E3:	- a circle of diameter 350 mm ± 2 mm

All templates shall be at least 420 mm long."

## 8 Modifications to Clause 7, Tool sets

Replace Clause 7, including all subclauses, with:

### "7 Tool sets

#### 7.1 General

During the test the operator shall choose any tool or tools from the tool set appropriate to the resistance class of the specimen to be tested, as given in 7.2 to 7.7 and as illustrated in Annex A.

The power rating for electrically powered tools described in the tools sets is the required input power. The tool manufacturer, in the technical literature, normally states the input power.

Prior to commencing each individual forced entry test, the tools should be inspected to ensure they are in a suitably good condition to effectively conduct the test and that cutting tools are sharp. If a tool is broken during a pre-test or a main test the tool may be replaced with a new tool. Each type of tool shall only be changed once during a test.

**EN 1630:2011/FprA1:2015 (E)**

The purpose of the pre-test is to gain as much information as possible on the resistance the product offers to various methods of attack using various tool combinations. If a tool is blunted during a pre-test it may be sharpened. For example, damage sustained to a tool by inefficient use during the pre-test could be negated, and the tester can aim to avoid such damage during the main test. Sharpening of a tool during a main test is not permitted.

**7.2 Tool set A1 resistance class 1 (see Figure A.1) – Application of the tool set A1 in resistance class 1**

Tool set A1 shall be used for the preparation of the test specimen in class 1 before conducting the static loading test (EN 1628:2011) and the dynamic loading test (EN 1629:2011).

Tools set A1 shall also be used during the pre-test and the main manual test in resistance class 2 and higher.

**Table 2 — Tool set A1**

		<b>Tool No.</b>
<b>1</b>	<b>Multiple slip joint gripping pliers;</b> maximum length 260 mm	<b>1.1</b>
<b>1</b>	<b>Screwdriver;</b> Flat blade, total length (260 ± 20) mm, shaft diameter of (8 ± 2.2) mm and blade width (10 ± 1.2) mm	<b>1.2</b>
<b>1</b>	<b>Set of small screwdrivers;</b> maximum length 250 mm, maximum shaft diameter 8 mm. Typical blade forms as shown in Figure A.1.	<b>1.3</b>
	<b>Hexagonal allen keys;</b> maximum length 120 mm. Blade forms as shown in Figure A.1.	<b>1.4</b>
	<b>Spanners;</b> maximum length 180 mm	<b>1.5</b>
<b>1</b>	<b>Pliers;</b> maximum length 200 mm. Typical plier forms are shown in Figure A.1.	<b>1.6</b>
<b>1</b>	<b>Tweezer</b>	<b>1.7</b>
<b>1</b>	<b>Knife;</b> maximum length of blade 120 mm, thickness of blade max. 3 mm. The blade shall not be serrated.	<b>1.8</b>
<b>1</b>	<b>Torch</b>	<b>1.9</b>
	<b>Hooks;</b> Various shapes and sizes, maximum diameter 4 mm. Hooks may be shaped with relevant tool-set.	<b>1.10</b>
	<b>Steel wire;</b> Various diameters up to a maximum diameter of 4 mm, including steel and electrical wire. No restriction on length.	<b>1.11</b>
	<b>Adhesive tape</b>	<b>1.12</b>
	<b>String;</b> Various diameters and types, including rope, cord and laundry line. The material shall not be elasticated. No restriction on length.	<b>1.13</b>
<b>1</b>	<b>Rubber hammer;</b> Hardness (90 ± 10) shore; head weight (100 ± 20) g, total weight (145 ± 20) g, length (260 ± 20) mm	<b>1.14</b>
<b>1</b>	<b>Universal lock key;</b> including cabinet lock and profile cylinder functions. Typical keys are shown in Figure A.1.	<b>1.15</b>

**7.3 Tool set A2 resistance class 2 (see Figure A.2) – Application of the tool set A2 in resistance class 2**

For testing glass and retention systems, see 6.3.

The rubber hammer serves for the protection of the tester, they may use the hammer (instead of their hand) for hammering the wedges or screwdrivers. The rubber hammer shall be used only for hammering the wedges or screwdrivers into apertures in the test specimen. It is intended to simulate blows using the hand. The rubber hammer shall not make direct contact with the test specimen.



No other tool shall be used with a hammering action.

The compass saw, hacksaw and pad saw may only be used on grilles and accessible hinges.

The extension tube may only be used on grilles.

**Table 3 — Tool set A2**

	<b>Tool set A1 plus the following</b>	<b>Tool No.</b>
1	<b>1 Screwdriver</b> ; Flat blade, length (365 ± 25) mm, blade width (16 ± 2.2) mm	<b>2.1</b>
1	<b>1 Pipe wrench</b> ; length (240 ± 20) mm	<b>2.2</b>
2	<b>Plastic wedges</b> ; length (200 ± 25) mm, width (80 ± 10) mm, height (40 ± 5) mm	<b>2.3</b>
2	<b>Wood wedges</b> ; length (200 ± 25) mm, width (80 ± 10) mm, height (40 ± 5) mm	<b>2.4</b>
1	<b>Compass saw</b> ; with two bimetal or HSS blades, total length (310 ± 25) mm	<b>2.5</b>
1	<b>Pad saw</b> ; with two bimetal or HSS blades, total length (310 ± 25) mm	<b>2.6</b>
1	<b>Hacksaw</b> , with two bimetal or HSS blades, blade length (330 ± 30) mm	<b>2.7</b>
1	<b>Steel extension tube</b> , length (500 ± 5) mm, outer diameter (30 ± 0.5) mm, maximum wall thickness (3 ± 0.3) mm	<b>2.8</b>

#### 7.4 Tool set A3 resistance class 3 (see Figure A.3) – Application of the tool set A3 in resistance class 3

For testing glass and retention systems, see 6.3.

The locksmiths hammer may only be used together with the pin punches. The locksmiths hammer shall not impact the test sample directly.

The crow bar may be used for levering. The straight end may be plunged into the test specimen to generate assessable opening or access to locking components. It shall not be used like a hammer or an axe to impact the test specimen or other tools.

The compass saw, hacksaw and pad saw may only be used on grilles and accessible hinges.

The extension tube may only be used on grilles.

**Table 4 — Tool set A3**

	<b>Tool set A2 plus the following</b>	<b>Tool No.</b>
1	<b>Screwdriver</b> ; Flat blade, length (365 ± 25) mm, blade width (16 ± 2.2) mm	<b>3.1</b>
1	<b>Crowbar</b> ; length (700 ± 20) mm	<b>3.2</b>
1	<b>Locksmiths hammer</b> ; head weight (200 ± 20) g, length (300 ± 20) mm	<b>3.3</b>
1	<b>Set of pin punches</b> ; diameters between 3 mm and 10 mm	<b>3.4</b>
1	<b>Hand drill</b> ; maximum length 355 mm	<b>3.5</b>
1	<b>Set of drill-bits</b> ; HSS or HS/CO parallel shank twist drills (jobber), Ø 1,0 mm to Ø 6 mm in steps of 0,5 mm. Only one drill bit of each diameter may be used.	<b>3.6</b>