

### Dvere, okná, závesné steny, mreže a uzávery Odolnosť proti vlámaniu Skúšobná metóda na určenie odolnosti proti ručným pokusom o vlámanie

STN EN 1630

74 6176

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

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. 09/21

Obsahuje: EN 1630:2021

Oznámením tejto normy sa ruší STN EN 1630+A1 (74 6176) z mája 2016

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN 1630** 

June 2021

ICS 13.310; 91.060.50

Supersedes EN 1630:2011+A1:2015

#### **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 European Standard was approved by CEN on 19 March 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

Con	Contents		
Europ	oean foreword	4	
1	Scope	5	
2	Normative references	5	
3	Terms and definitions	6	
4	Apparatus and test team	7	
4.1	Test rig	7	
4.2	Test team		
4.2.1	Personnel	7	
4.2.2	Composition of the test team		
4.2.3	Essential capabilities of the test team members		
4.2.4	Training		
4.3	Measurement and recording devices		
4.3.1	Measuring equipment		
4.3.2	Video recording		
4.4 4.5	Tolerances		
4.5 4.6	Sub-frameCylinder plug extraction		
_			
5	Test specimen		
5.1	General		
5.1.1 5.1.2	General		
5.1. <i>Z</i> 5.2	Product with glazingPreparation and examination of the specimen		
	•		
6	Procedure		
6.1	General		
6.2 6.3	Test room climate Areas of attack		
6.3.1	General		
6.3.2	Construction products with moving elements		
6.3.3	Fixed construction products		
6.4	Attack side and attack height		
6.5	Pre-test		
6.6	Main test		
6.7	Failure criteria		
7	Tool sets	13	
7.1	General	13	
7.2	Tool set A1 resistance class 1 (see Figure A.1) – Application of the tool set A1 in resistance class 1	13	
7.3	Tool set A2 resistance class 2 (see Figure A.2) – Application of the tool set A2 in resistance class 2	14	
7.4	Tool set A3 resistance class 3 (see Table 4 and Figure A.3) - Application of the tool		
	set A3 in resistance class 3	15	
7.5	Tool set A4 resistance class 4 (see Table 5 and Figure A.4) – Application of the tool set A4 in resistance class 4	16	

	Tool set A5 resistance class 5 (see Table 6 and Figure A.5) – Application of the tool set A5 in resistance class 5	16
7.7	Tool set A6 resistance class 6 (see Table 7 and Figure A.6) – Application of the tool set A6 in resistance class 6	
8	Test report	18
Annex	x A (normative) Tool sets	19
Annex	x B (normative) Test sequence for manual test	25
Annex	x C (normative) Example of test equipment	26
Annex	x D (informative) Examples of mounting arrangements	27
Annex	x E (normative) Cylinder plug extraction	42
Annex	x F (normative) Tests for building elements with non-key operated lockable hardware	e44
Biblio	graphy	47

### **European foreword**

This document (EN 1630:2021) 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 December 2021, and conflicting national standards shall be withdrawn at the latest by December 2021.

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.

This document supersedes EN 1630:2011+A1:2015.

Significant changes in this revision are:

- a) updated editions of Normative References;
- b) Annex E and Annex F added;
- c) for certain test the template E4 was added in 6.7;
- d) the figures in Annex A have been updated.

This document is one of a series of standards for burglar resistant pedestrian doorsets, windows, curtain walling, grilles and shutters. The other standards in the series are:

- EN 1627:2021 Pedestrian doorsets, windows, curtain walling, grilles and shutters Burglar resistance
   Requirements and classification;
- EN 1628:2021, Pedestrian doorsets, windows, curtain walling, grilles and shutters Burglar resistance — Test method for the determination of resistance under static loading;
- EN 1629:2021, Pedestrian doorsets, windows, curtain walling, grilles and shutters Burglar resistance Test method for the determination of resistance under dynamic loading.

The manual test described in this document covers the areas of vulnerability not suitably assessed by the static loading and dynamic loading tests described in EN 1628:2021 and EN 1629:2021. Certain basic security requirements for the locks, furniture and cylinders are covered by the requirements detailed in EN 1627:2021, Table 3. These security characteristics are not re-assessed in this test standard and the attack methods and test times have been limited to reflect this.

The use of the tools detailed in the various tools sets is described in this document. This has the advantage of improving the reproducibility of the test.

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.

#### 1 Scope

This document specifies a test method for the determination of resistance to manual burglary attempts in order to assess the burglar resistant characteristics of pedestrian doorsets, windows, curtain walling, grilles and shutters. It is applicable to the following opening functions: turning, tilting, folding, turn-tilting, top or bottom hung, sliding (horizontally and vertically), pivoted (horizontally and vertically), projecting, and rolling as well as non-openable constructions.

This document does not directly cover the resistance of locks and cylinders to attack with picking tools. It also does not cover the attack of electric, electronic and electromagnetic operated burglar resistant construction products using surreptitious attack methods that might defeat these characteristics.

It is acknowledged that there are two aspects to the burglar resistance performance of construction products, their normal resistance to forced operation and their ability to remain fixed to the building. This test method does not evaluate the performance of the fixing to the building.

The manufacturer's installation instructions will give guidance on the fixing of the product.

An example for the contents of the manufacturer's installation instructions is given in EN 1627:2021, Annex A.

This document does not apply to walls and roofs, as well as for doors, gates and barriers, intended for installation in areas in the reach of persons, and for which the main intended uses are giving safe access for goods and vehicles accompanied or driven by persons in industrial, commercial or residential premises, as covered by EN 13241:2003+A2:2016.

NOTE It is important that construction products that can be reached or driven through by vehicles are protected by appropriate measures such as barriers, extensible ramps, etc.

#### 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 356:1999, Glass in building — Security glazing — Testing and classification of resistance against manual attack

EN 1303:2015, Building hardware — Cylinders for locks - Requirements and test methods

EN 1627:2021, Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Requirements and classification

EN 1628:2021, Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Test method for the determination of resistance under static loading

EN 1629:2021, Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Test method for the determination of resistance under dynamic loading

EN 12216:2018, Shutters, external blinds, internal blinds — Terminology, glossary and definitions

EN 12519:2018, Windows and pedestrian doors — Terminology

EN 13119:2016, Curtain walling — Terminology

EN ISO 10666:1999, Drilling screws with tapping screw thread — Mechanical and functional properties (ISO 10666:1999)

#### EN 1630:2021 (E)

EN ISO 15480:2019, Fasteners — Hexagon washer head drilling screws with tapping screw thread (ISO 15480:2019)

EN ISO 15481:1999, Cross recessed pan head drilling screws with tapping screw thread (ISO 15481:1999)

EN ISO 15482:1999, Cross recessed countersunk head drilling screws with tapping screw thread (ISO 15482:1999)

EN ISO 15483:1999, Cross recessed raised countersunk head drilling screws with tapping screw thread (ISO 15483:1999)

# koniec náhľadu – text ďalej pokračuje v platenej verzii STN