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Building hardware - Mechanically operated locks and locking plates - Requirements and test methods

Táto norma obsahuje anglickú verziu európskej normy.
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Building hardware - Mechanically operated locks and locking plates - Requirements and test methods

Quincaillerie pour le bâtiment - Serrures mécaniques et gâches - Exigences et méthodes d'essai

Schlösseer und Baubeschläge - Mechanisch betätigte Schlösser und Schließbleche - Anforderungen und Prüfverfahren

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European foreword

This document (EN 12209:2016) 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 supersedes EN 12209:2003.

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of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by December 2017.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This European Standard is one of a series of European Standards dedicated to building hardware products.

European standards for electromechanically operated locks and locking plates (EN 14846) and for mechanically operated multi-point locks (prEN 15685) are also available.

The performance tests incorporated in this standard are considered to be reproducible and as such provide a consistent and objective assessment of the performance of these products throughout CEN Members.

The major changes in this revision are as follows:

a) the type of lock that has been named latch is now integrated in the definition of locks;

b) the number of classification has been reduced

    1) field of door application have been integrated in product information;

    2) type of key operation and locking is moved to Security and drill resistance;

    3) type of spindle operation have been integrated in product information;

c) suitability for use on fire resistance and/or smoke control doorset introduces new classification. Grade 0, A, B and N is shown in Annex A;

d) temperature range changed to –10 °C to +60 °C;

e) requirements, test methods, forces, torques, figures and tables have been renumbered;

f) new requirement for product information have been added;

g) grades for durability with 10 N side force is deleted;

h) the document EN 12209:2003/AC:2005 has been integrated in this issue;

i) assessment and verification of constancy of performance – AVCP have replaced Evaluation of conformity

   1) Annex ZA has been rewritten to include CPR format.

NOTE A lock conforming to this European Standard can at the same time be part of an exit device in accordance with EN 179 or EN 1125.

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.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Mechanically operated locks and their locking plates used in fire resistant and/or smoke control door assemblies require additional attributes in order to conform to the Essential Requirement “Safety in case of fire” as a part of a complete assembly. Additional requirements for locks and their locking plates used on fire resistant and/or smoke control door assemblies are specified in Annex A.

This European Standard for mechanically operated locks and their locking plates specifies requirements and test methods for durability, strength, security, and functionality and they are

— for use on doors, in buildings;

— for use on fire and smoke compartmentation doors fitted with door closing devices, to enable such doors to close reliably and thus achieve self-closing in the event of fire; and

— for use on locked fire doors to maintain the fire integrity of the door assembly.

This standard specifies locks and locking systems intended for use in different environmental and security conditions, thus necessitating different grades.

This European Standard specifies the dimensions and properties required for security and for the assessment of fire resistance and/or smoke control door suitability.

This European Standard does not specify any particular design or installation.

1 Scope

This European Standard specifies requirements and test methods for durability, strength, security and functionality of mechanically operated locks and their locking plates:

a) for use in doors in buildings;

b) for use on fire and smoke compartmentation doors fitted with door closing devices, to enable such doors to close reliably and thus achieve self-closing in the event of fire; and

c) for use on locked fire doors to maintain the fire integrity of the door assembly.

This European Standard covers locks and their locking plates which are either manufactured and placed on the market in their entirety by one producer or produced by more than one producer, or assembled from sub-assemblies produced by more than one producer and designed to be used in combination.

This European Standard specifies mechanically operated locks and locking systems intended for use in different environmental and security conditions, thus necessitating different grades.

This European Standard does not specify Multipoint locks or their locking plates which are specified by prEN 15685.

This European Standard specifies the dimensions and properties required for security.

Assessment of the contribution of the product to the fire resistance of specific fire resistance and/or smoke control doorset assemblies is beyond the scope of this European Standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1303, *Building hardware - Cylinders for locks - Requirements and test methods*

EN 1634-1, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 1: Fire resistance test for door and shutter assemblies and openable windows*

EN 1634-2, *Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware - Part 2: Fire resistance characterisation test for elements of building hardware*

EN 1634-3, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 3: Smoke control test for door and shutter assemblies*

EN 1670:2007, *Building hardware - Corrosion resistance - Requirements and test methods*

EN 16035, *Hardware performance sheet (HPS) - Identification and summary of test evidence to facilitate the inter-changeability of building hardware for application to fire resisting and/or smoke control doorsets and/or openable windows*