Building hardware - Cylinders for locks - Requirements and test methods

Building hardware - Cylinders for locks - Requirements and test methods



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1303:2005 sisaldab Euroopa standardi EN 1303:2005 ingliskeelset teksti.

Käesolev dokument on jõustatud 30.03.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1303:2005 consists of the English text of the European standard EN 1303:2005.

This document is endorsed on 30.03.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This European Standard applies to cylinders for locks normally used in buildings, which are designed to be used with cylinders. This European Standard specifies performance and other requirements for the strength, security, durability, performance and corrosion resistance of cylinders and their original keys. It establishes one category of use, three categories of durability, two categories each for fire and corrosion resistance all based on performance tests as well as six grades of key related security based on design requirements and three grades on performance tests that simulate attack.

Scope:

This European Standard applies to cylinders for locks normally used in buildings, which are designed to be used with cylinders. This European Standard specifies performance and other requirements for the strength, security, durability, performance and corrosion resistance of cylinders and their original keys. It establishes one category of use, three categories of durability, two categories each for fire and corrosion resistance all based on performance tests as well as six grades of key related security based on design requirements and three grades on performance tests that simulate attack.

ICS 91.190

Võtmesõnad:

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1303

February 2005

ICS 91.190

Supersedes EN 1303:1998

English version

Building hardware - Cylinders for locks - Requirements and test methods

Quincaillerie pour le bâtiment - Cylindres de serrures -Exigences et méthodes d'essai Baubeschläge - Schließzylinder für Schlösser -Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 10 January 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	P	age
Forewo	ord	4
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Requirements	7
4.1	General	7
4.2	Key strength	
4.3	Durability	
4.4	Door mass	
4.5	Fire resistance	
4.6	Safety	
4.7	Corrosion resistance	
4.7.1	General	
4.7.2	Operation at extremes of temperature	
4.8	Key related security	8
4.8.1	General	
4.8.2	Minimum number of effective differs	
4.8.3	Minimum number of movable detainers	
4.8.4	Maximum number of identical steps	
4.8.5	Direct coding on key	
4.8.6	Operation of security mechanism	
4.8.7	Torque resistance of plug/cylinder relevant to key related security	
4.9	Attack resistance	
4.9.1	Resistance to attack by drilling	
4.9.2	Resistance to attack by chisel	
4.9.3	Resistance to attack by twisting	
4.9.4 4.9.5	Resistance to attack by plug / cylinder extraction Torque resistance of plug/cylinder relevant to attack resistance	
4.9.5		
5	Test methods	13
5.1	General	
5.2	Key strength	13
5.3	Durability tests	14
5.4	Door mass	
5.5	Fire resistance	
5.6	Safety	
5.7	Corrosion resistance (Test of operation at extremes of temperatures)	
5.8	Key related Security	
5.8.1	Minimum numbers of effective differs	
5.8.2	Minimum number of movable detainer	
5.8.3	Maximum number of identical steps	
5.8.4	Direct coding on key	
5.8.5	Operation of the security mechanism	
5.8.6	Torque resistance of plug and/or cylinder	
5.9	Attack resistance	
5.9.1	Resistance to drilling	
5.9.2	Resistance to attack by chisel	
5.9.3	Resistance to attack by twisting	
5.9.4	Resistance to attack by plug/cylinder extraction	17
6	Classification	18

6.1 6.2	General Category of use (1 st digit)	18
6.3 6.4	Durability (2 nd digit)	18
6.4 6.5	Fire resistance (4 th digit)	18
6.6	Safety (5 th digit)	18
6.7	Corrosion resistance and temperature (6 th digit)	18
6.8 6.9	Key related security (7 th digit)	19 19
7	Marking	
Annex	A (normative) Cylinders for use on fire/smoke resistant doors	
Annex	B (normative) Corrosion resistance and temperature	21
Annex	C (normative) Test apparatus illustrations	22
Annex	D (informative) Test sequence to minimise the number of samples to be tested some samples can be reused for several tests.	27
Annex	E (informative) Standard test cycle	28
Bibliog	graphy	29
	graphy	
	<u>_</u> .	
	0 ,	
		()
		3
		J

Foreword

This document (EN 1303:2005) 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 August 2005, and conflicting national standards shall be withdrawn at the latest by August 2005.

This document supersedes EN 1303:1998.

The European Federation of Associations of Lock and Builders Hardware Manufacturers, ARGE, collaborated in the drafting of this European Standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, at plant. Spain, Sweden, Switzerland and United Kingdom.

Introduction

At us im. Countries a protion of the countries a protion of the countries a protion of the countries at the The aim of the test methods described in this document is to keep human influence on the test results to a minimum, thus improving reproducibility.

1 Scope

This document applies to cylinders for locks normally used in buildings, which are designed to be used with cylinders.

This document specifies performance and other requirements for the strength, security, durability, performance and corrosion resistance of cylinders and their original keys. It establishes one category of use, three categories of durability, two categories each for fire and corrosion resistance all based on performance tests as well as six grades of key related security based on design requirements and three grades on performance tests that simulate attack.

This document includes tests of satisfactory operation at temperatures between - 20 °C and + 80 °C. It specifies test methods to be used on cylinders and their protective measures linked with these cylinders and recommended by the manufacturer.

Corrosion resistance is specified by reference to the requirements of the European Standard EN 1670 on the protection of corrosion for locks and building hardware, see annex B.

The suitability of cylinders for use on fire or smoke-door assemblies is determined by fire performance tests conducted in addition to the performance testing required by this standard. Since suitability for use on fire doors is not essential in every situation, the manufacturer has the option to state if the cylinder conforms to these additional requirements or not. Unless otherwise specified cylinders shall conform to the requirements specified in the relevant European Standard EN 1634-1 or prEN 1634-2, see annex A.

Assessment of fire resistance of grade 1 doors is beyond the scope of this document.

On occasions there may be a need for additional functions within the design of the cylinder. Purchasers should satisfy themselves that the products are suitable for their intended use.

2 Normative references

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 1634-1, Fire resistance tests for door and shutter assemblies - Part 1: Fire doors and shutters

prEN 1634-2, Fire resistance tests for door and shutter assemblies - Part 2: Fire door hardware - Building hardware for fire resisting doorsets and openable windows

EN 1670:1998, Building hardware - Corrosion resistance - Requirements and test methods

EN 1906, Building hardware - Lever handles and knob furniture - Requirements and test methods