Fire resistance tests for door and shutter assemblies - Part 3: Smoke control doors and shutters



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1634-3:2001 sisaldab Euroopa standardi EN 1634-3:2001 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 19.12.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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Standard on kättesaada

standardiorganisatsioonist

This Estonian standard EVS-EN 1634-3:2001 consists of the English text of the European standard EN 1634-3:2001.

This standard is ratified with the order of Estonian Centre for Standardisation dated 19.12.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

ICS 13.220.50

one-wing type, radiative heat transfer, roll-up doors, sliding doors, smoke control doors, smoke control shutter, smoke funnel, smoke-tight, specification (approval), structural fire protection, surface spread of flame, swing doors, test specimens, testing, wall

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# EN 1634-3

April 2001

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English version

Fire resistance tests for door and shutter assemblies - Part 3:

Smoke control doors and shutters

Essais de résistance au feu des portes et fermetures -Partie 3: Portes et volets par fumées Feuerwiderstandsprüfungen für Tür- und Abschlusseinrichtungen - Teil 3: Rauchschutzabschlüsse

This European Standard was approved by CEN on 7 March 2001.

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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 Management Centre has the same status as the official versions.

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

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#### Foreword

This European Standard has been prepared by Technical Committee CEN/TC 127 "Fire safety in buildings", the secretariat of which is held by BSI.

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 October 2001, and conflicting national standards shall be withdrawn at the latest by October 2001.

EN 1634 'Fire resistance tests for door and shutter assemblies' consists of the following

Part 1: Fire doors and shuders

Part 2: Fire door hardward (in course of preparation)

Part 3: Smoke control doors.

According to the CEN/CENELEC internal Regulations, the national standards organizations of the following countries are bound to imprepent this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

#### Caution

The attention of all persons concerned with managing and carrying out this test is drawn to the following. Mechanical and operation hazards may arise during the construction of the test elements or structures, their testing and disposal of test residues. An assessment of all potential hazards and risks to health should be made and safety precautions should be dentified and provided. Written safety instructions should be issued. Appropriate training should be given to relevant personnel. ons. Sons. S Laboratory personnel should ensure that they follow written safety instructions at all times.

The annexes A and B are informative.

# 1 Scope

This Part of EN 1634 specifies a method for determining the leakage of cold and warm smoke from one side of a door assembly to the other under the specified test conditions. The test can be applied to door and shutter assemblies of different types intended for purposes of controlling the passage of smoke in case of fire. This test can also be applied to lift landing doors and conveyor system doors and shutters. The principle of the test is explained briefly in annex A.

# 2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed har inafter. For dated references, subsequent amendments to or revisions of any of these publications apply to the European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1363-1 Fire resistance tests - Part 1 General requirements EN 1634-1 Fire resistance tests for door and shutter assemblies - Part 1 Fire doors and shutters EN ISO 13943 Fire safety - Vocabulary (ISO 13943:1999)

# 3 Definitions, symbols and designations

#### 3.1 Terms and definitions

For the purposes of this Part of EN 1634, the terms and definitions given in EN 1363-1, EN 1634-1 and EN ISO 13943, together with the following, apply:

### 3.1.1

# smoke control door

A door assembly which has the function of restricting the passage of smoke, when in a closed position, to prescribed limits.

#### 3.1.2

#### ambient temperature

For the purpose of this standard ambient temperature is an air temperature of  $(20 \pm 10)$   $^{\circ}$ C

# 3.1.3

#### medium temperature

For the purpose of this standard medium temperature is an air temperature of (200  $\pm 20$ )

#### 3.1.4

#### test specimen

A door or shutter assembly on which leakage measurements are to be made. It includes all the components necessary for the use of the door when installed in a building e.g. side panels and over panels.

# 3.1.5

#### associated construction

A specific form of construction in which the test specimen is mounted which is identical to that into which the door or shutter assembly is designed to be installed in practice. The method of sealing the joint between the test specimen and the associated construction is specific to that construction and forms part of the construction being evaluated by the test.