

Fire resistance tests for door and shutter assemblies —

Part 3: Smoke control doors and shutters

The European Standard EN 1634-3:2001 has the status of a
British Standard

ICS 13.220.50

National foreword

This British Standard is the official English language version of EN 1634-3:2001.

The UK participation in its preparation was entrusted by Technical Committee FSH/22, Fire resistance tests, to Subcommittee FSH/22/5, Test procedures for doors, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Additional information

As specified in the UK Building Regulations [1][2][3] the current UK requirement for smoke leakage is 3 m³/m/hour (head and jambs of the doorset only) when tested at 25 Pa in accordance with BS 476-31.1. The classification S_a, smoke leakage at ambient temperature, identified in the Commission Decision of 3 May 2000 [4] and defined in the classification draft classification standard prEN 13501-2, is intended to reflect the UK regulatory requirement [1][2][3]. It also excludes leakage at the threshold.

The UK has submitted a negative vote on EN 1634-3 for the following reasons.

- a) This test method does not indicate with adequate clarity that it is possible to achieve classification S_a without the tests being part of a sequence of tests leading to S_m (smoke leakage rate at medium temperature, 200 °C temperature rise, 50 Pa). In particular, it is felt that clause 11 requires two separate tables demonstrating the presentation of results, one for completion of testing at an ambient temperature and one for testing at a medium temperature.
- b) BS 476-31.1, called up in the UK Building Regulations [1][2][3], allows the test to be completed with the bottom of the door-to-floor gap taped up. This method of test is not permitted in EN 1634-3 under the specifications of clause 7.
- c) The UK Building Regulations [1][2][3] provide for the test results for ambient smoke leakage to be declared in units of m³/m/hour. The test method in EN 1634-3 does not align with the UK requirement. As specified in clause 11 this test method provides only for total loss declaration of smoke leakage, as required by other countries for S_m classification.

This information has been reported to CEN in a proposal to amend the text of the European Standard.

Amendments issued since publication

Amd. No.	Date	Comments

This British Standard, having been prepared under the direction of the Health and Environment Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 June 2001

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Standards publications referred to in this National foreword

BS 476-31.1, *Fire tests on building materials and structures — Methods for measuring smoke penetration through doorsets and shutter assemblies — Section 31.1: Method of measurement under ambient temperature conditions.*

prEN 13501-2, *Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services*

Other publications referred to in this National foreword

[1] GREAT BRITAIN. The Building Regulations (England and Wales) 1991 Approved Document B. London: The Stationery Office.

[2] GREAT BRITAIN. The Building Standards (Scotland) Regulations 1990 Technical Standard D. London: The Stationery Office.

[3] GREAT BRITAIN. The Building Regulations (Northern Ireland) 1994 Technical Booklet E. London: The Stationery Office.

[4] EUROPEAN COMMUNITIES. Official Journal reference L133/26. Luxembourg: Office for Official Publications of the European Communities, May 2000.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 16, an inside back cover and a back cover.

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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 pare-fumées

Feuerwiderstandsprüfungen für Tür- und
Abschlusseinrichtungen — Teil 3: Rauchschutzabschlüsse

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

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 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 Management Centre has the same status as the official versions.

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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 shutters

Part 2: Fire door hardware (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 implement 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 identified and provided. Written safety instructions should be issued. Appropriate training should be given to relevant personnel. Laboratory personnel should ensure that they follow written safety instructions at all times.

The annexes A and B are informative.