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Interested committees:

Title: Draft BS ISO 5925-1 BS ISO 5925 Smoke control door, shutter assemblies and self-closing glazed elements - Ambient- and medium-temperature leakage tests.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 5925

Smoke control door, shutter assemblies and self-closing glazed elements – Ambient- and medium- temperature leakage tests

ICS: 13.220.50; 13.220.20

ISO/TC 92/SC 2

Secretariat: **ANSI**

Voting begins on:
2025-05-19

Voting terminates on:
2025-08-11

This document is circulated as received from the committee secretariat.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 92, Fire Safety, Subcommittee SC 2, Fire Resistance.

This third edition cancels and replaces the second edition (ISO 5925-1:2007), which has been technically revised. The third edition also cancels and replaces ISO 5925, Amd 1:2015 and ISO/TR 5925-2:2006.

The main changes are as follows:

- The inclusion of ISO/TR 5925-2 as a new Informative [Annex C](#) in this Standard.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

ISO 5925 has been prepared to provide a test method for determining the smoke leakage through door and shutter assemblies. It is part of the series of International Standards dealing with fire doors, e.g. ISO 3008.

This third edition of ISO 5925 includes Amd1 to ISO 5925-1:2007 which is identified as Annex [B.3](#), *Methods for measuring leakage rates*. This third edition also includes Informative [Annex C](#), *Commentary on test method and applicability of test conditions and the use of test data in a smoke containment strategy*, which was formally published as ISO/TR 5925-2:2006.

Additional requirements for the installation and use of smoke-control door and shutter assemblies can be found in other International Standards and national regulations.

Smoke control door, shutter assemblies and self-closing glazed elements – Ambient- and medium-temperature leakage tests

1 Scope

The test described determines the rate of leakage of ambient (cold) and medium (warm) temperature smoke from one side of door and shutter assemblies to the other under the specified test conditions. This test method is applicable to door and shutter assemblies and self-closing operable glazed elements of different configurations intended for the purpose of controlling the passage of smoke in case of fire. Wherever door and shutter assemblies are referred to in this document, it also applies to self-closing glazed elements. The fire resistance of glazed elements is determined by tests in compliance with ISO 3009.

The acceptable leakage rates for different situations are not addressed in this part of ISO 5925, but rather are specified by the regulations of the controlling authorities.

[Annex A](#) includes a brief explanation of the test, [Annex B](#) describes the test apparatus and [Annex C](#) provides guidance on the use of the test data.

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.

ISO 834-1, *Fire-resistance tests — Elements of building construction — Part 1: General requirements*

ISO 3008-1, *Fire resistance tests – Door and shutter assemblies – Part 1: General requirements*

ISO 3009, *Fire-resistance tests — Elements of building construction — Glazed elements*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

door and shutter assembly

complete assembly, including any frame or guide, door leaf or leaves, rolling or folding curtain, etc., which is provided for closing of permanent openings in separating elements

Note 1 to entry: This includes all side-panels, vision panels or transom panels, grilles and louvers together with door hardware, and any fire seals, smoke seals, draught seals and acoustic seals which are used in the assembly.

3.2

fire door

door or shutter assembly capable of maintaining for a specified period some, or all of the fire resistance criteria defined in ISO 3008, as appropriate for the door in use

3.3

smoke-control door and shutter assembly

door and shutter assembly that, when in a closed position, has the function of restricting the passage of smoke to prescribed limits

3.4

fire and smoke control door

door or shutter assembly meeting some, or all of the criteria for fire and smoke control as appropriate for the door in use

3.5

ambient temperature

average air temperature of $(20 \pm 10) ^\circ\text{C}$

3.6

medium temperature

average air temperature of $(200 \pm 10) ^\circ\text{C}$

3.7

high temperature

temperature representative of a standardized fully developed fire which is as specified in ISO 834-1

Note 1 to entry: For ease of use, doors are identified by a code letter/number and these are shown in [Figure C.1](#).

3.8

leakage rate

rate of air flow, corrected to standard temperature and pressure conditions, measured under specified differential pressure across a closed door and shutter assembly

Note 1 to entry: Leakage rate is expressed in cubic metres per hour.

3.9

differential pressure

difference in static pressure created during the test between the inside and outside of the test chamber, as measured across a closed door

Note 1 to entry: The symbol for pressure is p and it is expressed in pascals ($1 \text{ Pa} = 1 \text{ N/m}^2$).

3.10

test specimen

door and shutter assembly on which leakage measurements are to be made, including all components necessary for the use of the door when installed in a building, the seal between the frame and the wall and any associated construction which is provided

3.11

associated construction

specific form of construction into which the test specimen can be mounted

Note 1 to entry: If an associated construction is used in the test, it shall be identical to that in which the door and 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.

3.12

supporting construction

impermeable form of construction of adequate strength and stiffness to support the test specimen when an associated construction is not provided and to fill the opening in the test chamber when an associated construction is provided

Note 1 to entry: The seal between the test assembly and the supporting construction is intended to be impermeable and withstand the test temperature, but it is not considered as part of the test construction being evaluated.

3.13

make-up air

air that is made available to dilute the fire gases in order to reduce their temperature