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**Fire tests — Smoke-control door and  
shutter assemblies —**

**Part 1:  
Ambient- and medium-temperature  
leakage tests**

*Essais au feu — Assemblages porte et volet pare-fumée —  
Partie 1: Essais de fuite à température ambiante et moyenne*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 5925-1 was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 2, *Fire containment*.

This second edition cancels and replaces the first edition (ISO 5925-1:1981), which has been technically revised.

ISO 5925 consists of the following parts, under the general title *Fire tests — Smoke-control door and shutter assemblies*:

- *Part 1: Ambient- and medium-temperature leakage tests*
- *Part 2: Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy*

## Introduction

This part of 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 second edition of ISO 5925-1 combines the procedure published in the first edition and the proposed revisions to it on medium-temperature testing. A further test procedure planned as Part 3 for high-temperature testing is currently in abeyance. Additional requirements for the installation and use of smoke-control door and shutter assemblies can be found in other International Standards and national regulations.

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# Fire tests — Smoke-control door and shutter assemblies —

## Part 1:

## Ambient- and medium-temperature leakage tests

### 1 Scope

The test described in this part of ISO 5925 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. The test is applicable to door and shutter assemblies of different configurations intended for purposes of controlling the passage of smoke in case of fire.

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.

The principle of the test is explained briefly in Annex A.

### 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*

### 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** 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

##### **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

#### 3.3

##### **ambient temperature**

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