
International Standard



5925/1

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Fire tests — Evaluation of performance of smoke control door assemblies — Part 1 : Ambient temperature test

Essais au feu — Évaluation de performance des ensembles-portes pare-fumée — Partie 1 : Essai à la température ambiante

First edition — 1981-11-01

UDC 69.028.1 : 699.81 : 620.1

Ref. No. ISO 5925/1-1981 (E)

Descriptors : construction materials, fire tests, fire-stop doors, results, specimens.

Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 5925/1 was developed by Technical Committee ISO/TC 92, *Fire tests on building materials, components and structures*, and was circulated to the member bodies in February 1980.

It has been approved by the member bodies of the following countries :

Australia	Ireland	Romania
Belgium	Israel	South Africa, Rep. of
Brazil	Italy	Spain
Czechoslovakia	Japan	Sweden
Denmark	Korea, Rep. of	Switzerland
Egypt, Arab Rep. of	Netherlands	United Kingdom
Finland	New Zealand	
Germany, F. R.	Norway	

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Austria
France
Hungary
USA

Fire tests — Evaluation of performance of smoke control door assemblies —

Part 1 : Ambient temperature test

0 Introduction

This method of test is one of a series for the assessment and evaluation of performance of door and shutter assemblies intended to act as barriers to smoke in a fire. The severity of the heat exposure conditions governs the smoke control performance of doors and this has led to the preparation of a series of test methods. Further explanation and guidance on this and other considerations will form the subject of ISO 5925/0.

Further tests in the series will form the subjects of :

ISO 5925/2, *Fire tests — Evaluation of performance of smoke control door assemblies — Part 2 : Medium temperature test.*

ISO 5925/3, *Fire tests — Evaluation of performance of smoke control door assemblies — Part 3 : High temperature test.*

1 Scope and field of application

This International Standard specifies a method of testing and evaluating the performance of door assemblies and shutters, intended to control the passage of smoke in ambient conditions.

2 References

ISO 1804, *Doors — Terminology.*

ISO 3008, *Fire resistance tests — Door and shutter assemblies.*

ISO 3261, *Fire tests — Vocabulary.*

3 Definitions

For the purpose of this International Standard, the definitions given in ISO 1804 and ISO 3261, together with the following, apply.

3.1 door assembly; doorset : An assembly consisting of a fixed part (the door frame), one or more movable parts (the door leaves), and their hardware, the function of which is to allow or to prevent access.

3.2 smoke control door : A door assembly whose primary function is to resist the passage of smoke.

3.3 ambient temperature : A temperature of 25 ± 15 °C, representative of that normally found in buildings.

4 Principle

Determination of the rate of flow of air from the high to the low pressure side of a door assembly.

When smoke from a fire starts to spread, a pressure difference can develop between the two sides of a door assembly. Leakage of smoke can occur through the clearance between the door leaf and the frame and other openings. This test simulates the conditions which may be experienced in practice by doors during the very early stages of fire development, or by doors remote from the seat of a fire.