

# International Standard

**ISO 5925** 

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

Third edition 2025-12

(https://standards.iteh.ai)
Document Preview

ISO 5925-2025

https://standards.iteh.ai/catalog/standards/iso/80a5ae19-e809-42bf-afc0-dafeb78e4ba6/iso-5925-2025

# iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 5925:2025

https://standards.iteh.ai/catalog/standards/iso/80a5ae19-e809-42bf-afc0-dafeb78e4ba6/iso-5925-2025



#### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Introduction	Contents		Page
1       Scope       1         2       Normative references       1         3       Terms and definitions       1         4       Symbols       3         5       Test apparatus       3         6       Instrumentation       4         6.1       Differential pressure       4         6.2       Air temperature       4         6.3       Air flow       4         7       Test specimen       4         7.1       Number       4         7.2       Size       4         7.3       Construction       5         7.4       Conditioning       5         7.5       Pre-test analysis       5         8       Test procedure       5         8.1       Setting-up procedure       5         8.2       Air leakage test       6         9       Observations       7         10       Expression of results       7         11       Test report       8         12       Field of direct application       8         Annex B (informative)       Test apparatus       10         Annex B (informative)       Test apparatus	Fore	eword	iv
2       Normative references       1         3       Terms and definitions       1         4       Symbols       3         5       Test apparatus       3         6       Instrumentation       4         6.1       Differential pressure       4         6.2       Air temperature       4         6.3       Air flow       4         7       Test specimen       4         7.1       Number       4         7.2       Size       4         7.3       Construction       5         7.4       Conditioning       5         7.5       Pre-test analysis       5         8       Test procedure       5         8.1       Setting-up procedure       5         8.2       Air leakage test       6         9       Observations       7         10       Expression of results       7         11       Test report       8         12       Field of direct application       8         Annex B (informative)       Test apparatus       11         Annex B (informative)       Test apparatus       12         Annex B (informative)	Intro	oduction	v
3       Terms and definitions       1         4       Symbols       3         5       Test apparatus       3         6       Instrumentation       4         6.1       Differential pressure       4         6.2       Air temperature       4         6.3       Air flow       4         7       Test specimen       4         7.1       Number       4         7.2       Size       4         7.3       Construction       5         7.4       Conditioning       5         7.5       Pre-test analysis       5         8       Test procedure       5         8.1       Setting-up procedure       5         8.2       Air leakage test       5         9       Observations       7         10       Expression of results       7         11       Test report       8         12       Field of direct application       8         Annex A (informative)       Test apparatus       10         Annex B (informative)       Test apparatus       11         Annex C (informative)       Commentary on test method and the applicability of test conditions and the use of	1	Scope	1
4       Symbols       3         5       Test apparatus       3         6       Instrumentation       4         6.1       Differential pressure       4         6.2       Air temperature       4         6.3       Air flow       4         7       Test specimen       4         7.1       Number       4         7.2       Size       4         7.3       Construction       5         7.4       Conditioning       5         7.5       Pre-test analysis       5         8       Test procedure       5         8.1       Setting-up procedure       5         8.2       Air leakage test       5         9       Observations       7         10       Expression of results       7         11       Test report       8         12       Field of direct application       8         Annex A (informative)       Test apparatus       10         Annex B (informative)       Test apparatus       10         Annex B (informative)       Test apparatus       11         Annex C (informative)       Commentary on test method and the applicability of test conditions	2	Normative references	1
5       Test apparatus       3         6       Instrumentation       4         6.1       Differential pressure       4         6.2       Air temperature       4         6.3       Air flow       4         7       Test specimen       4         7.1       Number       4         7.2       Size       4         7.3       Construction       5         7.4       Conditioning       5         7.5       Pre-test analysis       5         8       Test procedure       5         8.1       Setting-up procedure       5         8.2       Air leakage test       5         9       Observations       7         10       Expression of results       7         11       Test report       8         12       Field of direct application       8         Annex A (informative)       Test apparatus       10         Annex B (informative)       Test apparatus       10         Annex C (informative)       Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy       13	3	Terms and definitions	1
6	4	Symbols	3
6.1       Differential pressure       4         6.2       Air temperature       4         6.3       Air flow       4         7       Test specimen       4         7.1       Number       4         7.2       Size       4         7.3       Construction       5         7.4       Conditioning       5         7.5       Pre-test analysis       5         8       Test procedure       5         8.1       Setting-up procedure       5         8.2       Air leakage test       6         9       Observations       7         10       Expression of results       7         11       Test report       8         12       Field of direct application       8         Annex A (informative)       Test principle       10         Annex B (informative)       Test apparatus       11         Annex C (informative)       Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy       13	5	Test apparatus	3
7.1       Number       4         7.2       Size       4         7.3       Construction       5         7.4       Conditioning       5         7.5       Pre-test analysis       5         8       Test procedure       5         8.1       Setting-up procedure       5         8.2       Air leakage test       6         9       Observations       7         10       Expression of results       7         11       Test report       8         12       Field of direct application       8         Annex A (informative)       Test apparatus       10         Annex B (informative)       Test apparatus       11         Annex C (informative)       Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy       13	6	6.1 Differential pressure 6.2 Air temperature	4 4
8.1 Setting-up procedure 5 8.2 Air leakage test 6  9 Observations 7  10 Expression of results 7  11 Test report 8  12 Field of direct application 8  Annex A (informative) Test principle 150.5925.2025 10  Annex B (informative) Test apparatus 11  Annex C (informative) Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy 13	7	7.1 Number	4 5 5
11 Test report Document Preview 8 12 Field of direct application 8 Annex A (informative) Test principle 150.5925.2025 10 Annex B (informative) Test apparatus 11 Annex C (informative) Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy 13	8	8.1 Setting-up procedure	5
11 Test report Document Preview 8 12 Field of direct application 8 Annex A (informative) Test principle 150.5925.2025 10 Annex B (informative) Test apparatus 11 Annex C (informative) Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy 13	9	Observations	7
11 Test report Document Preview 8 12 Field of direct application 8 Annex A (informative) Test principle 150.5925.2025 10 Annex B (informative) Test apparatus 11 Annex C (informative) Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy 13	10	Expression of results	7
Annex A (informative) Test principle ISO 5925 2025 10  Annex B (informative) Test apparatus 11  Annex C (informative) Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy 13	11	Test report <u>Document Preview</u>	8
Annex B (informative) Test apparatus 11  Annex C (informative) Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy 13	12	Field of direct application	8
Annex C (informative) Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy13	Ann	ex A (informative) Test principle ISO.5925:2025	10
Annex C (informative) Commentary on test method and the applicability of test conditions and the use of test data in a smoke containment strategy13	Ann	ex B (informative) Test apparatus and siso/80a5ae19-e809-42bf-afc0-dafeb78e4ba6/iso-59	<sup>9</sup> 25-2025 <b>11</b>
		ex C (informative) Commentary on test method and the applicability of test conditions	and
	Rihli		

#### 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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <a href="https://www.iso.org/patents">www.iso.org/patents</a>. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

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. It also incorporates ISO/TR 5925-2:2006 and the Amendment ISO 5925-1:2007/Amd 1:2015.

The main changes are as follows:

- ISO 5925:2025
- the content of ISO/TR 5925-2 has been included as a new informative Annex C;
- a tolerance for average air temperature in the medium-temperature test has been added;
- self-closing operable glazed elements have been added to the Scope;
- the option to conduct both medium-temperature tests on the same specimen has been added;
- requirements to reduce the effects of water evaporating from walls containing moisture have been added;
- a requirement to determine whether the door can be opened without tools after the test has been added;
- a requirement for an outlet valve to be opened during the heat up and stabilization period has been added.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Introduction

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

<u>Annex A</u> includes a brief explanation of the test and <u>Annex B</u> describes the test apparatus.

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

# iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 5925:2025

https://standards.iteh.ai/catalog/standards/iso/80a5ae19-e809-42hf-afc0-dafeh78e4ha6/iso-5925-2025