
**Fire resistance tests — Door and
shutter assemblies —**

Part 4:

**Linear joint fire seal materials used to
seal the gap between a fire door frame
and the supporting construction**



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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Test equipment	2
4.1 Reduced-scale furnace	2
4.2 Furnace internal dimensions	2
4.3 Vertical furnace dimensions	2
5 Test specimen	2
5.1 General	2
5.2 Specimen size	3
5.3 Specimen design	3
5.4 Timber door frame sections	3
5.5 Splices	3
5.6 Supporting construction	3
5.7 Packers and fixings	4
5.7.1 Packers	4
5.7.2 Fixings	4
6 Test conditions	5
6.1 Heating conditions	5
6.2 Pressure	5
7 Specimen preparation	5
7.1 Supporting construction	5
7.2 Joint seal	5
7.3 Splice location	6
7.4 Conditioning	6
7.5 Information and test specimen verification	6
8 Instrumentation	6
8.1 Temperature	6
8.1.1 Furnace thermocouples (Plate thermometers)	6
8.1.2 Unexposed-surface thermocouples	7
8.1.3 Roving thermocouples	7
8.2 Pressure	7
8.3 Deformation	7
8.4 Integrity	8
9 Test procedure	8
9.1 General test procedure	8
9.2 Termination of test	8
10 General performance criteria	8
10.1 Insulation	8
10.2 Integrity	9
11 Expression of test results	9
12 Test report	9
13 Field of application	9
Annex A (normative) Field of application	10
Bibliography	11

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 2, *Fire containment*.

A list of all parts in the ISO 3008 series can be found on the ISO website.

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

This fire test method provides a methodology for testing linear joint fire seal materials intended to be used to seal the 'linear joint gap' between a fire door frame and the supporting construction.

This test methodology is only appropriate for the evaluation of alternate linear joint fire seal materials used to seal the gap between a fire door frame and the supporting construction, if:

- a) the fire door frame, doors and supporting construction have already been successfully tested according to ISO 3008-1 and the gap between the door frame and the supporting construction does not exceed 6 mm, provided the door and frame assembly does not permit the penetration of a gap gauge, as specified in ISO 834-1:1999, 8.4.2; or
- b) the fire door frame, doors and supporting construction have already been successfully tested according to ISO 3008-1 and during the full-scale fire resistance test, deflection of the supporting construction and the fire door frame was found to be less than 100 mm.

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CAUTION — The attention of all persons concerned with managing and carrying out this fire-resistance test is drawn to the fact that fire testing can be hazardous and that there is a possibility of toxic and/or harmful smoke and gases evolving during the test. Mechanical and operational hazards can also arise during the construction of the test elements or structures, their testing and the disposal of test residues.

An assessment of all potential hazards and risks to health shall be made and safety precautions shall be identified and provided. Written safety instructions shall be issued. Appropriate training shall be given to relevant personnel. Laboratory personnel shall ensure that they follow written safety instructions at all times.

1 Scope

This document specifies a standard test methodology and resulting field of direct application which are applicable to linear joint fire seal materials used to seal around fire door sets which have been tested in accordance with ISO 3008-1.

The test methodology described in this document uses a smaller-scale fire resistance furnace than that prescribed in ISO 3008-1.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 834-8, *Fire-resistance tests — Elements of building construction — Part 8: Specific requirements for non-loadbearing vertical separating elements*

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

ISO 10295-1, *Fire tests for building elements and components — Fire testing of service installations — Part 1: Penetration seals*

ISO 10295-2, *Fire tests for building elements and components — Fire testing of service installations — Part 2: Linear joint (gap) seals*

ISO/TR 10295-3, *Fire tests for building elements and components — Fire testing of service installations — Part 3: Single component penetration seals — Guidance on the construction and use of test configurations and simulated services to characterise sealing materials*

ISO 13943, *Fire safety — Vocabulary*