

PAS 79-1:2020

Fire risk assessment – Part 1: Premises other than housing Code of practice



This is a preview. [Click here to purchase the full publication.](#)

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© The British Standards Institution 2020. Published by BSI Standards Limited 2020.

ISBN 978 0 539 06259 5

ICS 13.220.20

No copying without BSI permission except as permitted by copyright law.

Publication history

First published as PAS 79, February 2005

Second edition June 2007

Third edition August 2012

Fourth (present) edition as PAS 79-1, December 2020

This is a preview. [Click here to purchase the full publication.](#)

Contents

Foreword	iii
Introduction	vi
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 The concepts of fire risk and fire hazard	10
5 Principles and scope of fire risk assessments	11
6 Responsibility for adequacy of the fire risk assessment	15
7 Competence of fire risk assessors	17
8 Benchmark standards for assessment of fire precautions	19
9 Assessment of premises design and fire precautions that do not conform to current standards	22
10 Documentation of fire risk assessments	25
11 Nine steps to fire risk assessment	27
12 Information about the premises, the occupants and the processes	29
13 Identification of fire hazards and means for their elimination or control	32
14 Assessment of the likelihood of fire	35
15 Assessment of fire protection measures	36
16 Assessment of fire safety management	49
17 Assessment of likely consequences of fire	54
18 Assessment of fire risk	56
19 Formulation of an action plan	57
20 Periodic review of fire risk assessments	60
Annexes	
Annex A (informative)	
Model pro forma for documentation of a fire risk assessment	62
Annex B (informative)	
Fire hazard prompt-list	86
Annex C (normative)	
Key factors to consider in assessment of means of escape	89
Annex D (informative)	
Model pro forma for documentation of a review of an existing fire risk assessment	92
Annex E (informative)	
Exemplar of a completed fire risk assessment.....	102
Bibliography	128
List of figures	
Figure 1 – Schematic of fire risk assessment process	13
Figure 2 – Decision tree for action plan when existing premises do not conform to current standards	24
Figure 3 – Example of timeline comparison between ASET and RSET ...	55
List of tables	
Table 1 – An example of a simple risk level estimator	56
Table B.1 – Fire hazards, elimination or control measures and relevant codes of practice	87
Table C.1 – Key factors and specific issues to consider in means of escape	90

This page is deliberately left blank

Foreword

Publishing information

The development of this PAS was facilitated by BSI Standards Limited and published under licence from The British Standards Institution. It came into effect on 31 December 2020.

Acknowledgement is given to Colin Todd, as the technical author, and the following organizations that were involved in the development of this PAS as members of the steering group:

- CBRE PMFM UK
- Consumer and Public Interest Network
- Fire Industry Association
- Institution of Fire Engineers
- Lendlease
- Metro Safety Ltd
- National Fire Chiefs Council
- National Residential Landlords Association
- National Security Inspectorate
- National Social Housing Fire Strategy Group
- NHS England/NHS Improvements
- Savills (UK) Limited
- Scottish Fire and Rescue Service
- University College London

Acknowledgement is also given to the members of a wider review panel who were consulted in the development of this PAS.

This PAS has been developed and published by BSI, which retains its ownership and copyright, except for Annex A, Annex D and Annex E (see *Use of this document*). BSI Standards Limited as the publisher of the PAS reserves the right to withdraw or amend this PAS on receipt of authoritative advice that it is appropriate to do so. This PAS will be reviewed at intervals not exceeding two years.

This PAS is not to be regarded as a British Standard. It will be withdrawn upon publication of its content in, or as, a British Standard.

The PAS process enables a code of practice to be rapidly developed in order to fulfil an immediate need in industry. A PAS can be considered for further development as a British Standard, or constitute part of the UK input into the development of a European or International Standard.

At the time of publication of this PAS, there are, potentially, certain restrictions in the measures that can be taken by a fire risk assessor to comply with the recommendations of this PAS, arising from the COVID-19 pandemic. For example, in a hospital, health and safety considerations might take precedence over fire risk assessment, such as to preclude the level of inspection of certain areas of the hospital recommended in this PAS.

Supersession

Together with PAS 79-2, this part of PAS 79 supersedes PAS 79:2012, which is withdrawn.

Relationship with other publications

PAS 79 is published in two parts:

- Part 1: *Premises other than housing – Code of practice;*
- Part 2: *Housing – Code of practice.*

PAS 9980, which is in the course of preparation at the time of publication of this current PAS, will give recommendations for fire risk appraisal and assessment of external wall construction and cladding of blocks of flats.

Information about this document

PAS 79 was first prepared, in 2005, by BSI in association with C.S. Todd & Associates Ltd, with the support and encouragement of the Institution of Fire Engineers and the Northern Ireland Fire Safety Panel, the latter of which represents building control and licensing authorities in Northern Ireland and the Northern Ireland Fire & Rescue Service. It was subsequently revised in 2007 and 2012. Those revisions and this current revision were, again, drafted by C.S. Todd & Associates Ltd.

This is a full revision of the document, and introduces the following principal changes.

- PAS 79 has been split into two parts, with PAS 79-1 dealing with non-housing premises and PAS 79-2 dealing with housing premises.
- The scope of this new Part 1 of PAS 79 excludes blocks of flats, sheltered housing, extra care housing, supported housing and certain houses in multiple occupation (i.e. those falling within the scope of the relevant fire safety legislation), all of which are addressed in a new Part 2 of PAS 79.
- PAS 79-1 is a code of practice, whereas PAS 79:2012 was a guide. PAS 79:2012 was already written in the form of a code of practice, and the change in status is simply to recognize this, noting that guides are not usually of such a nature as to sustain a reliable claim of compliance.
- The technical content has been subject to amendment in the light of experience in the use of PAS 79:2012.
- There is new guidance on the consideration to be given to external wall construction and cladding, which takes into account knowledge, current at the time of publication, arising from the fire disaster at Grenfell Tower, a high-rise block of flats in London, in 2017.
- There is recognition of pre-occupation fire safety assessments, a term now defined in this PAS, and a clarification to avoid confusion between those assessments and the fire risk assessment to which this PAS refers.
- There is even greater emphasis on competence of fire risk assessors and reference to future competence standards in consequence of the Hackitt Review of building regulations and fire safety, which was ordered by the Government following the fire at Grenfell Tower. It is also noted in this PAS that fire safety specialists with experience only in the design of new buildings might not possess an appreciation of standards against which older buildings were designed and the possible continued acceptability of such standards.
- Changes to, and publication of relevant new, British Standards have been taken into account.

This publication can be withdrawn, revised, partially superseded or superseded. Information regarding the status of this publication can be found in the Standards Catalogue on the BSI website at bsigroup.com/standards, or by contacting the Customer Services team.

Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

Use of this document

As a code of practice, this PAS takes the form of guidance and recommendations. It should not be quoted as if it were a specification, and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this PAS is expected to be able to justify any course of action that deviates from its recommendations.

It has been assumed in the drafting of this PAS that the execution of its provisions will be entrusted to appropriately qualified and competent people, for whose use it has been produced.

The copyright for Annex A, Annex D and Annex E of this PAS, and for the electronic copies of the separately available pro formas (including the modified versions for use in Scotland and Northern Ireland), is owned by C.S. Todd & Associates Ltd. Purchasers of this PAS are authorized to use the pro formas contained within Annex A and Annex D, and the separately available electronic copies, and to make an unlimited number of copies for their own use, without infringement of copyright. However, following the recommendations given in this PAS does not necessitate use of these pro formas.

This PAS is not intended to constitute a textbook on fire safety, and it is not to be regarded as a substitute for knowledge of fire safety principles and the practical use and application of fire protection measures or an understanding of the premises, their features, usage and occupancy. In carrying out the fire risk assessment, there is likely to be a need for reference to other codes of practice and guidance documents on specific aspects of fire prevention, fire protection and management of fire safety, a number of which are listed in the Bibliography. Moreover, this PAS is not intended to provide guidance on the detailed requirements of the relevant fire safety legislation. Such guidance can be found in the relevant government guidance documents listed in the Bibliography.

Presentational conventions

The provisions of this PAS are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

The word “should” is used to express recommendations of this PAS. The word “may” is used in the text to express permissibility, e.g. as an alternative to the primary recommendation of the clause. The word “can” is used to express possibility, e.g. a consequence of an action or an event.

Notes and commentaries are provided throughout the text of this PAS. Notes give references and additional information that are important but do not form part of the recommendations. Commentaries give background information.

It is envisaged that, when a fire risk assessment is audited for compliance with this PAS, the audit will be based on the recommendations only.

Contractual and legal considerations

This PAS does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a PAS cannot confer immunity from legal obligations.

Attention is drawn to the legislation described in the Introduction to this PAS and to guidance available from the Ministry of Housing, Communities and Local Government, Scottish Government and the Northern Ireland Fire & Rescue Service.

Introduction

Employers and other persons who have control of premises are required by legislation to carry out an assessment of the fire risks to occupants of buildings, and to other people in the vicinity of the buildings. This is to ensure that these people are safe from fire and its effects. This assessment is usually referred to as a “fire risk assessment” or “FRA”. For the purposes of this PAS, a fire risk assessment carried out in the structured manner described herein is referred to as “the fire risk assessment” or “the FRA”.

In England and Wales, the requirement to carry out an FRA is set out in Article 9 of the Regulatory Reform (Fire Safety) Order 2005 (the “Fire Safety Order”) [1], which requires that the responsible person, on whom the Fire Safety Order imposes requirements, make a suitable and sufficient assessment of the risks to which relevant persons are exposed for the purpose of identifying the general fire precautions they need to take to comply with the requirements and prohibitions imposed on them by or under the Fire Safety Order. (For the purpose of the Fire Safety Order, a “relevant person” is any person who is or might be lawfully on the premises, and also any person in the immediate vicinity of the premises who is at risk from a fire on the premises, but not firefighters at the time of a fire.)

The same duty is imposed on every person, other than the responsible person, who has, to any extent, control of the premises so far as the duty relates to matters within their control. (This normally includes, for example, the landlord or managing agents of commercial premises in multiple occupation.)

Guidance on the requirements of the Fire Safety Order, and on the FRA required by it, was produced by the then Department for Communities and Local Government (DCLG) (now the Ministry of Housing, Communities and Local Government) between 2006 and 2008, and remains current ([2] to [15]). The guidance in this PAS is more detailed in respect of the FRA process than that published by DCLG, but does not conflict with that guidance. However, the government guidance documents provide more detailed technical information on the fire safety measures that are needed to meet legislation.

While, in England and Wales, the Fire Safety Order requires that the FRA is “suitable and sufficient”, this requirement is not explicitly stated in the equivalent legislation in Scotland or Northern Ireland, though, clearly, all assessments need to be fit for purpose.

In Scotland, the duty to carry out an FRA is imposed on every employer by section 53(2)(a) of the Fire (Scotland) Act 2005 [16]. The Act requires that the risk assessment identifies any risks to the safety of the employer’s employees in respect of harm caused by fire in the workplace. Section 54(2)(a) of the Act also imposes a duty, on any person who has control to any extent of relevant premises, to carry out an FRA, and this FRA is required to identify any risks to the safety of relevant persons in respect of harm caused by fire in the relevant premises; the term “relevant persons” is defined in much the same manner as it is defined in the Fire Safety Order in England and Wales. As in England and Wales, the guidance in this PAS is more detailed in respect of the FRA process than the guidance in the Scottish Government guidance documents, but does not conflict with them. However, the Scottish Government guidance provides more technical information on the fire safety measures required under the Scottish fire safety legislation.

In Scotland, further requirements in respect of the FRAs required by the Fire (Scotland) Act 2005 [16] are imposed by the Fire Safety (Scotland) Regulations 2006 [17]. Guidance on the requirements of this legislation, and the FRA required by it, is published by Scottish Government ([18] to [21]).

In Northern Ireland, the requirements for FRAs are identical to those in Scotland, but are imposed by Articles 25(2)(a) and 26(2)(a) of the Fire and Rescue Services (Northern Ireland) Order 2006 [22]. Further requirements in respect of the FRAs are imposed by the Fire Safety Regulations (Northern Ireland) 2010 [23]. Guidance on the requirements of this legislation, and the FRA required by it, is published by the Northern Ireland Fire & Rescue Service ([24] to [35]). Again, PAS 79 does not conflict with this guidance, which gives greater technical information on fire safety measures required by legislation.

Fire and rescue authorities can advise on the fire safety legislation that applies to any premises, and on means for compliance. If in doubt regarding the requirements of legislation, consultation with the fire and rescue authority is strongly recommended. Advice can also be obtained from a suitably qualified and experienced fire risk assessor or fire safety practitioner. A number of bodies maintain a register of persons who they consider competent to carry out FRAs. These include relevant professional bodies, and certification bodies accredited by UKAS¹⁾ to provide assessment and certification services. Registration of a fire risk assessor on such a register can give the dutyholder confidence in the education, training and experience of the fire risk assessor if the dutyholder wishes to use the fire risk assessor's services.

Legislation requires "suitable and sufficient" assessments to ensure that organizations comply with health and safety legislation. Accordingly, an organization could choose to carry out, and document, a single combined health, safety and fire risk assessment. In practice, this approach is normally only adopted in the case of very small premises, and most organizations choose to carry out a separate FRA, independent of their health and safety risk assessment. The reason for this is that, for most premises, different skills, experience and expertise are required for each of the two forms of risk assessment.

The term "suitable and sufficient" (as used in the Fire Safety Order) is not defined in legislation. Moreover, throughout the UK, the relevant fire safety legislation (see 3.77) requires that the "significant findings" of the risk assessment, and any group of persons "especially at risk", be recorded if the organization employs five or more people (in the entire organization, and not just in the premises in question), or if legislation requires licensing, registration or certification of the premises, or if an alterations notice (requiring that the relevant enforcing authority is notified of proposals to carry out certain alterations to the premises) is in force. Again, the terms "significant findings" and "especially at risk" are not defined in the relevant legislation. However, the "significant findings" ought to indicate measures taken and measures that will be taken for compliance with the legislation.

Nevertheless, it follows that the adequacy of any FRA is a matter for subjective judgement. This can lead, and has led, to inconsistency in interpretation, creating some difficulties for organizations, their advisers and enforcing authorities. These difficulties have been exacerbated, even for fire safety specialists, by a distinct move, in recent years, towards "risk-proportionate" fire precautions, and away from the more traditional "prescriptive" approach in which there was often a more rigid application of codes of practice without full consideration of fire risk.

This shift was designed to benefit those who own and manage premises, since it provides a better match between risk and precautions, more akin to that found in the field of general health and safety. It therefore precludes unnecessary expenditure in circumstances in which the risk does not justify it. Equally, it ensures adequate protection (possibly to an even higher standard than applied under prescriptive codes) when warranted by the fire risk. Ultimately, the final arbiter as to whether fire precautions satisfy legislation can, however, only be the Courts.

There is, therefore, no single correct or incorrect method of carrying out and recording the significant findings of an FRA. Rather, there are many approaches that can lead to a suitable, and satisfactorily documented, FRA, which, at first sight at least, bear little similarity. Nevertheless, the prerequisites for a suitable and sufficient FRA are implicit in legislation and, accordingly, close scrutiny of most adequate FRAs will reveal consideration of many common factors.

This PAS does not purport to contain a methodology or documentation that is necessarily superior to all others. It takes into account the fire safety legislation that is current at the time of publication. The fire risk assessment methodology is intended to facilitate protection of people from fire. Guidance on fire precautions to protect property, and to protect against interruption to business, from fire can be obtained from property insurers, and many suitably qualified and experienced fire safety consultants can advise on these issues as well as on life safety.

¹⁾ UKAS is the sole national accreditation body recognized by government to assess, against internationally agreed standards, organizations that provide certification, testing, inspection and calibration services.

The objectives of this PAS are:

- to provide organizations and their advisers with a methodology that can assist them in meeting their legislative responsibilities to undertake FRAs;
- to provide a framework for the assessment of fire risk;
- to promote better understanding of fire risks and fire safety by organizations and non-fire specialists;
- to enable common relevant terminology to be adopted by those who carry out FRAs;
- to provide an understanding of the principles and scope of FRAs;
- to establish a pragmatic, holistic and risk-proportionate approach towards assessment of fire prevention measures, fire protection measures and management of fire safety, for the purpose of conducting FRAs, based upon a fundamental understanding of fire safety principles;
- to establish a satisfactory basis for documentation of FRAs;
- to provide a benchmark for a suitable and sufficient FRA;
- to promote a consistent approach to carrying out and documenting an FRA that is likely to be satisfactory to enforcing authorities; and
- to dispel misconceptions as to the nature and scope of an FRA (see Clause 5).

The person on whom a duty is imposed to carry out the FRA is described in different ways in different legislation across the UK. For example, as noted above, in England and Wales, the Fire Safety Order describes the person as the “responsible person”, whereas this term is not used elsewhere in the UK. Moreover, this duty can be imposed on more than one person within the same premises (e.g. in commercial premises in multiple occupation, the duty might be imposed on every tenant, the landlord and the managing agents). In this PAS, the term “dutyholder” is used to describe any person on whom the relevant fire safety legislation imposes a requirement to carry out an FRA.

This part of PAS 79 is only concerned with non-domestic premises. PAS 79-2 provides recommendations for FRAs in housing premises. Therefore, in the case of mixed use premises (e.g. commercial and residential), it is necessary to refer to the recommendations of both PAS 79-1 and PAS 79-2.

1 Scope

This part of PAS 79 gives recommendations and corresponding examples of documentation for undertaking, and recording the significant findings of, fire risk assessments in non-domestic premises and parts of non-domestic premises for which fire risk assessments are required by legislation.

In the case of mixed-use premises, comprising, for example, shops or offices on lower levels of the building, with flats on the uppermost levels, PAS 79-2 is applicable in relation to the flats.

NOTE 1 *In such mixed-use premises there might be a need for fire protection systems that would not normally be applicable in commercial premises, such as evacuation alert systems for use by the fire and rescue service (see PAS 79-2:2020, 3.22).*

This part of PAS 79 is applicable to peer-to-peer rented accommodation to the extent that such accommodation falls within the scope of the relevant fire safety legislation (see 3.77) and to premises used solely for short-term letting of flats (with letting periods ranging from one day to six months).

This part of PAS 79 is not applicable to premises during the construction phase²⁾, but is applicable to vacant premises, for which a fire risk assessment is required. It is also applicable to residential care homes.

This part of PAS 79 is not applicable to:

- a) a single-family private dwelling;
- b) a shared house or a house in multiple occupation;
- c) the common parts of blocks of flats or maisonettes, sheltered housing and extra care housing; and
- d) supported housing.

NOTE 2 *Recommendations for fire risk assessments for all forms of the housing described above, other than a single-family dwelling, or a shared house in England and Wales, are given in PAS 79-2.*

NOTE 3 *Attention is drawn to Health Technical Memorandum 05-03 Part K [36], which provides guidance, for complex healthcare premises in England and Wales, on fire risk assessments in areas to which patients have access. In Scotland, equivalent guidance is given in Scottish Health Technical Memorandum 86 [37].*

NOTE 4 *For residential care premises in Northern Ireland, attention is drawn to Health Technical Memorandum 84 [38], which provides guidance on fire risk assessment in these premises.*

The methodology in this PAS provides a structured approach to fire risk assessment for people with knowledge of the principles of fire safety; it is not a guide to fire safety.

The recommended approach to carrying out fire risk assessments is intended to determine the risk-proportionate fire precautions required to protect occupants of non-domestic premises, including employees, contractors, visitors and members of the public, and to protect people in the immediate vicinity of the premises. The fire risk assessment is not necessarily sufficient to address the safety of firefighters in the event of a fire on the premises, as firefighters are not “relevant persons” within the meaning of the relevant fire safety legislation.

The recommended methodology is not intended to address protection of property (the premises and their contents) or the environment, or to address protection of a business, process or activity against interruption. Premises with special hazards, with the potential for high risk to life (e.g. chemical or nuclear hazards), require consideration of additional factors associated with these hazards and their means of control, and are beyond the scope of this PAS. However, in all such cases, this part of PAS 79 might form the basis for development of an appropriate fire risk assessment process and the documentation of the significant findings of the process.

²⁾ Fire risk assessments are required for construction sites. Nevertheless, these fire risk assessments are outside the scope of this PAS, as many of the matters relating to management of fire safety, which are addressed in this PAS, are not applicable to a construction site.