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Chair – BSI Technical Committee B/538  
Doors, windows, shutters, hardware and curtain walling

Member – European Technical Committee CEN/TC 33

Member – BSI Technical Committee FSH/22/-/5  
Fire resistance tests on doors

Member – European Technical Committee CEN/TC 127 WG3

Chair – Construction Products Association (CPA) Technical Committee



## Updated contact information supporting video.


BWF-CERTIFIRE has become the Fire Door Alliance (FDA)

Information on the FDA is available at <https://firedoors.bwf.org.uk/>

# The Building Regulations

[https://assets.publishing.service.gov.uk/media/639ae7e98fa8f5069839c7d7/Approved Document B\\_fire\\_safety\\_volume\\_1\\_-\\_Dwellings\\_2019\\_edition\\_incorporating\\_2020\\_and\\_2022\\_amendments.pdf](https://assets.publishing.service.gov.uk/media/639ae7e98fa8f5069839c7d7/Approved Document B_fire_safety_volume_1_-_Dwellings_2019_edition_incorporating_2020_and_2022_amendments.pdf)

ONLINE VERSION

 HM Government

The Building Regulations 2010

**Fire safety**

**B**

APPROVED DOCUMENT

**Volume 1: Dwellings**

- Requirement B1: Means of warning and escape
- Requirement B2: Internal fire spread (linings)
- Requirement B3: Internal fire spread (structure)
- Requirement B4: External fire spread
- Requirement B5: Access and facilities for the fire service

Regulations: 6(3), 7(2) and 38

2019 edition incorporating 2020 and 2022 amendments – for use in England

ONLINE VERSION

# The Building Regulations

## Requirement B1

### Means of warning and escape

B1. The building shall be designed and constructed so that there are appropriate provisions for the early warning of fire, and appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times.

# The Building Regulations

In the Secretary of State's view, requirement B1 is met by achieving all of the following.

- a. There are sufficient means for giving early warning of fire to people in the building.
- b. All people can escape to a place of safety without external assistance.
- c. Escape routes are suitably located, sufficient in number and of adequate capacity.
- d. Where necessary, escape routes are sufficiently protected from the effects of fire and smoke.
- e. Escape routes are adequately lit and exits are suitably signed.

# The Building Regulations

In the Secretary of State's view, requirement B1 is met by achieving all of the following.

- f. There are appropriate provisions to limit the ingress of smoke to the escape routes, or to restrict the spread of fire and remove smoke.
- g. For buildings containing flats, there are appropriate provisions to support a stay put evacuation strategy.

The extent to which any of these measures are necessary is dependent on the use of the building, its size and its height.

Building work and material changes of use subject to requirement B1 include both new and existing buildings.

# Fire Safety Legislation

[https://assets.publishing.service.gov.uk/media/651567fe7c2c4a001395e180/14.310\\_HO\\_How\\_To\\_Guide\\_FINAL\\_RX\\_v04\\_.pdf](https://assets.publishing.service.gov.uk/media/651567fe7c2c4a001395e180/14.310_HO_How_To_Guide_FINAL_RX_v04_.pdf)



The cover of the guide features the Home Office logo at the top left. The title is centered in bold black text. Below the title is a large circular graphic containing an illustration of an open book with gears above it, a checkmark icon to the left, and three checkmarks on the right page. At the bottom left of the cover is the Fire Safety Order logo, and at the bottom right is the text: "This guidance is issued by the Secretary of State in accordance with Article 50 of the Regulatory Reform (Fire Safety) Order 2005".





# Fire Safety Legislation

<https://assets.publishing.service.gov.uk/media/6538e73fd10f3500139a68d0/Fire+safety+responsibilities+under+Section+156+of+the+Building+Safety+Act+2022.pdf>



The cover of a guidance document from the Home Office. At the top left is the Home Office crest and the text "Home Office". The main title is "Check your fire safety responsibilities under Section 156 of the Building Safety Act 2022" in bold black text. Below the title is the text "Applies to England and Wales". The central illustration shows a stylized building with a central tower and two side wings, set against a light purple circular background. There are two trees on either side of the building. At the bottom left is the YSO logo and the text "This guidance is issued by the Secretary of State in accordance with Article 50 of the Regulatory Reform (Fire Safety) Order 2005".



# Fire Safety Legislation

[https://assets.publishing.service.gov.uk/media/6662d2f8e8be9a012ca94cb/9281\\_Sleeping\\_Accommodation\\_v2.pdf](https://assets.publishing.service.gov.uk/media/6662d2f8e8be9a012ca94cb/9281_Sleeping_Accommodation_v2.pdf)



# Fire Safety Legislation

<https://assets.publishing.service.gov.uk/media/6538e381e6c9680014aa9a58/Fire+Safety+England+Regulations+2022+fire+door+guidance.pdf>



The cover of the guidance document "Fire Safety (England) Regulations 2022". At the top left is the Home Office logo and the text "Home Office". The title "Fire Safety (England) Regulations 2022" is prominently displayed in bold black text. Below the title is a subtitle: "A simple guide to fire doors for Responsible Persons: how to conduct routine checks and provide information to residents". The central illustration shows a fire door with a "Fire door keep shut" sign pointing to the door handle. To the right of the door is a fire alarm pull station. At the bottom left is the Fire Safety Order logo and the text: "This guidance is issued by the Secretary of State in accordance with Article 50 of the Regulatory Reform (Fire Safety) Order 2005". At the bottom right is the logo for the British Woodworking Federation (bWf) and the text "BRITISH WOODWORKING FEDERATION".



# Fire Safety Legislation

## Fire Safety (England) Regulations 2022 – Regulation 10

(1) The responsible person, in relation to a building which contains two or more sets of domestic premises and which contains common parts through which residents would need to evacuate in the case of an emergency, must provide the required information about fire doors to the residents of the building.

(2) The required information referred to in paragraph (1) is information to the effect that

(a) fire doors should be kept shut when not in use;

(b) residents or their guests should not tamper with the self-closing devices; and

(c) residents should report any faults or damages with doors immediately to the responsible person;

# Fire Safety Legislation

## Fire Safety (England) Regulations 2022 – Regulation 10

(3) The required information must be provided by the responsible person—

(a) to a new resident of domestic premises in the building, as soon as reasonably practicable after that resident moves into the premises; and

(b) to all residents of domestic premises within the building, within each period of 12 months beginning with the date these Regulations come into force. [23<sup>rd</sup> January 2023]

(4) The responsible person, in relation to a building which contains two or more sets of domestic premises and which is above 11 metres in height, must use best endeavours to undertake checks of fire doors at the entrances of individual domestic premises in the building at least every 12 months.

# Fire Safety Legislation

## Fire Safety (England) Regulations 2022 – Regulation 10

(5) The responsible person must keep a record of the steps taken to comply with the obligation in paragraph (4) including in any case where access to the domestic premises was not granted during any 12 month period, the steps taken by the responsible person to try and gain access.

(6) The responsible person in relation to a building which contains two or more sets of domestic premises and which is above 11 metres in height, must undertake checks of any fire doors in communal areas of the building at least every 3 months.

(7) The checks required by paragraphs (4) and (6) must include ensuring that the self-closing devices for the doors are working.

(8) For the purposes of this regulation, height measurement of a building is to be calculated to the height to the top storey in accordance with regulation 3(2)(a).

# Housing Legislation



## Housing Health and Safety Rating System

Operating Guidance

Housing Act 2004  
Guidance about inspections  
and assessment of hazards  
given under Section 9

<https://assets.publishing.service.gov.uk/media/5a78d3d940f0b62b22cbd1d6/142631.pdf>

housing

# Housing Legislation

## Housing Health and Safety Rating System

The assessment should include both the likelihood of a fire starting, and, once started, how likely it is the fire will go undetected and spread.

The severity of harm suffered will depend on how quickly a fire can spread, and how soon it is detected and occupiers made aware of it. If a fire goes undetected, and spreads quickly, then the severity of harm will be worse. The majority of fires are detected and extinguished without injury being incurred.

The means of escape from fire is particularly relevant to the spread of harm. If the means of escape allows quick and easy exit from the accommodation, then there will probably be less severe harm, than if the escape from fire is more difficult. Travel distance from the accommodation to the final exit is relevant, as is the compartmentalisation of the means of escape to prevent ingress of smoke and flame.

Emergency lighting will increase the speed of exit, whereas a steep and awkward staircase will impede it.



# Housing Legislation

## Housing Health and Safety Rating System

For dwellings in multi-occupied buildings, the assessment is made for each individual dwelling (including the associated shared rooms and areas, if any). This means that different hazard ratings can be expected for dwellings within the same building depending on the location of the dwelling unit within the building, and any deficiencies to the individual dwelling. For example, a bedsit on the ground floor close to the final exit from the building would not be assessed the same as a bedsit on the third floor, where the means of escape is the internal staircase, and both bedsitting rooms are identical apart from location – the spread of harms would be more severe for a victim in the third storey bedsit because there will be a greater distance of travel to safety than from the ground floor bedsit. Similarly, differences may be because 90% of fires do not spread beyond the room in which they start.

Assessment of each individual dwelling within a multi-occupied building should include consideration of the common parts.

# Grenfell Tower Enquiry

## Phase 2 Report, Volume 3, Part 4

### Chapter 40 The replacement of entrance doors

### Chapter 41 Inspection and maintenance of entrance doors

[https://www.grenfelltowerinquiry.org.uk/sites/default/files/CCS0923434692-004\\_GTI%20Phase%202%20Volume%203\\_BOOK\\_MARKED\\_0.pdf](https://www.grenfelltowerinquiry.org.uk/sites/default/files/CCS0923434692-004_GTI%20Phase%202%20Volume%203_BOOK_MARKED_0.pdf)

## Grenfell Tower Inquiry

### GRENFELL TOWER INQUIRY: PHASE 2 REPORT

REPORT of the PUBLIC INQUIRY into the  
FIRE at GRENFELL TOWER  
on 14 JUNE 2017

#### The Panel:

Chairman: The Rt Hon Sir Martin Moore-Bick  
Ali Akbor OBE  
Thouria Istephan

September 2024

Volume 3

Part 4 - The Tenant Management Organisation  
Part 5 - The management of fire safety at Grenfell Tower

HC 19-III

# Grenfell Tower Enquiry

## Expert Witness Reports

Prof. Luke Bisby  
The University of Edinburgh  
School of Engineering

Dr Barbera Lane  
Ove Arup and Partners Limited

Prof. Jose Torero  
Torero, Abecassis Empis and  
Cowlard Ltd.



The image shows the cover page of an expert witness report. At the top right is the logo of The University of Edinburgh School of Engineering. The main title is "Grenfell Tower Inquiry Phase 1 – Final Expert Report" by Professor Luke Bisby. Below this is a smaller section with the text: "REPORT OF SPECIALIST FIELD ON BEHALF OF DR BARBARA LANE FIRE SAFETY ENGINEERING GRENFELL TOWER INQUIRY". The main body of the report is titled "Grenfell Tower – fire safety investigation: The fire protection measures in place on the night of the fire, and conclusions as to the extent to which they failed to control the spread of fire and smoke; the extent to which they contributed to the speed at which the fire spread." It is a "Phase 1 Report – Master file incorporating Section 1, 2, 3 and 4 & Summary, Conclusions and Next Steps" by "REPORT OF Dr Barbara Lane FREng CEng Fire Safety Engineering 12<sup>th</sup> April 2018". A list of details follows: Specialist Field: Fire Safety Engineering; Assisted by: Dr Susan Decny, Dr Peter Woodburn, Dr Graeme Flint, Mr Tom Parker, Ms Danielle Antonellis, Mr Alfie Chan; On behalf of: Grenfell Tower Inquiry; On instructions of: Cathy Kennedy, Solicitor, Grenfell Tower Inquiry; Subject Matter: To examine the circumstances surrounding the fire at Grenfell Tower on 14 June 2017; Inspection Date(s): 6<sup>th</sup> October, 1<sup>st</sup> November, 7-9<sup>th</sup> November 2017. At the bottom left, it says "Dr Barbara Lane Ove Arup & Partners Limited 13 Fitzroy Street London W1T 4BQ". On the right side, there is a signature of Prof. José L. Torero and the text "GRENFELL TOWER: PHASE 1 REPORT". At the bottom right, it says "23<sup>rd</sup> May 2018" and "JTOR00000001\_0001".



# Grenfell Tower Enquiry

## Expert Witness Reports

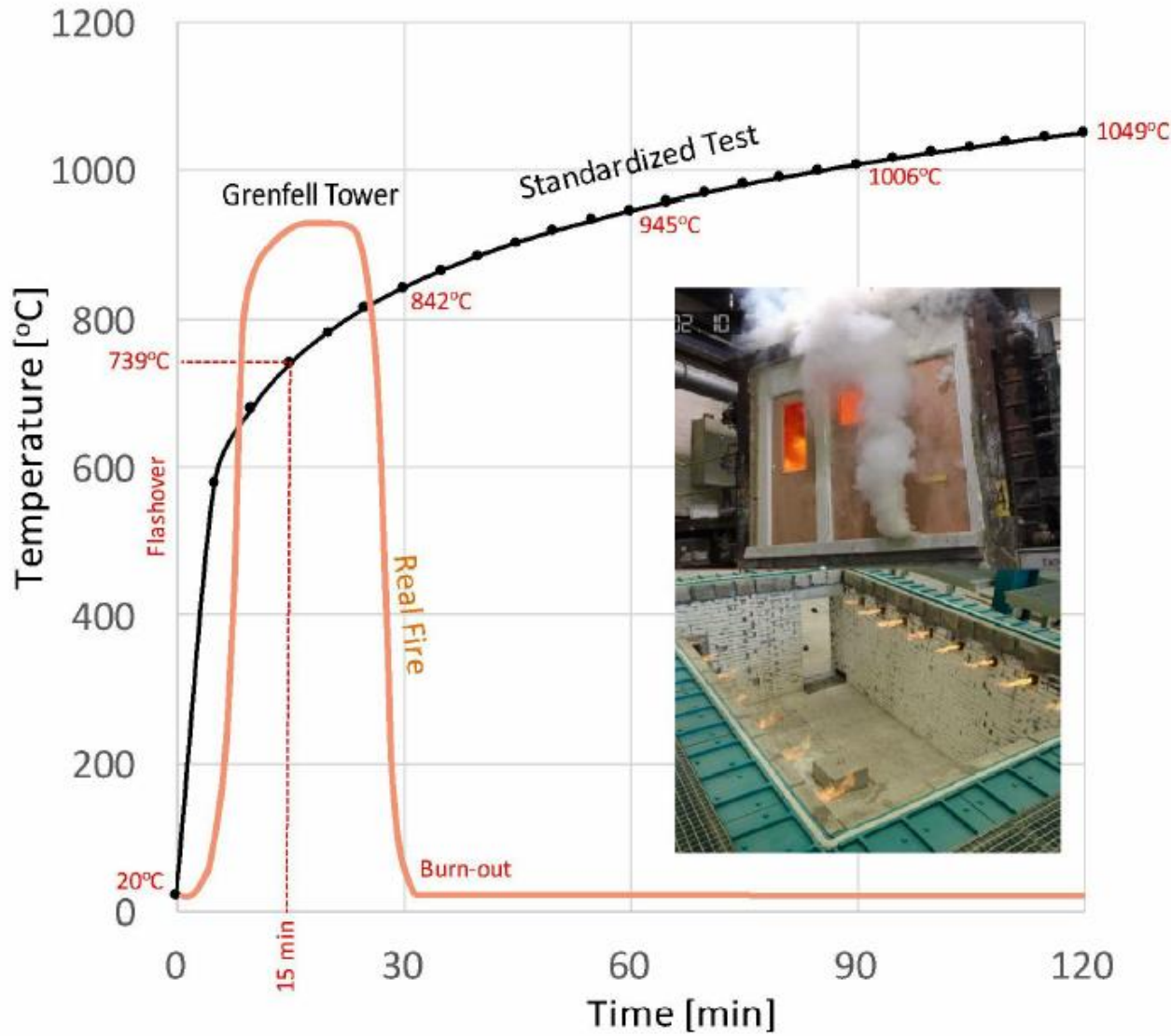
The doors used to replace the flat entrance doors did not match the fire test evidence provided to support them.

No evidence was presented in support of the smoke control of the fire doors

The automatic closing devices (fire door closers) fitted to the flat entrance doors were often damaged or removed.

The assessment of the flat entrance doors under the fire safety risk assessment was inadequate.

# Flash over fire compared to standard test



**TÆC**  
Torero, Abecassis Empis and Cowlard

**Join our FDSW webinars, they're free to attend and open to all**

Mon 23 14:00

Andrew Sayer, Lead Assessor FDIS

**Common Issues Surrounding Fire Doors**

Tue 24 11:00

Kevin Underwood, BWF Technical Director

**Fire doors in the Grenfell Tower Inquiry Phase 2 Report**

Thu 26 11:00

Kevin Underwood, BWF Technical Director

**The draft for public comment of the revised BS 8214**

Fri 27 11:00

Ashley Mather, Senior Fire Engineer – NFCC

**Fire doors – a fire service perspective**

<https://www.firedoorsafetyweek.co.uk/events/>

## Daft for Public Comment – BS 8214

BS 8214 Fire-resisting and smoke control doors – Practical considerations concerning specification, design and performance in use – Code of practice  
BSI Standards Development Portal

<https://standardsdevelopment.bsigroup.com/projects/2023-00987#/section>

**Closing date 28<sup>th</sup> October**

**Thank You**

**Any Questions?**