Fire Statement compliant with Policy D12(A)

Site: 72 Meadlands Drive

Address: 72 Meadlands Drive, Richmond, London TW10 7EE

Client: Mr & Mrs Ivancan

Date	Status	Version	Subject	Author
18/11/2024	Final	1.0	Fire Statement	Gary Ferrand MA EngTech FIFireE MIFSM Principal Fire Consultant

Table of Contents

Section 1 – Executive Summary

This document relates to the proposed development at 72 Meadlands Drive. The proposal seeks to extend the existing dwelling by adding one habitable room at the rear elevation.

The London Plan Guidance Sheet Policy D12 defines a major development by virtue of it meeting the following criteria;

- For dwellings: where 10 or more are to be constructed (or if number not given, area is more than 0.5 hectares).
- For all other uses: where the floor space will be 1,000m^2 or more (or the site area is 1 hectare or more). The site area is that directly involved in some aspect of the development. Floor space is defined as the sum of floor area within the building measured externally to the external wall faces at each level. Basement car parks, rooftop plant rooms, caretakers' flats etc. should be included in the floor space figure.

This proposed site is not a major development, the Planning Authority (London Borough of Richmond upon Thames) has requested that the proposal should demonstrate how it responds to, and contains information on, the requirements of Part A of London Plan Policy D12 (Fire Safety).

Policy D12 and its associated guidance specify that the highest standards of Fire Safety are expected for major developments, and the guidance explains how to clearly demonstrate that such expectations have been achieved in support of a planning application. The Guidance Sheet in support of the Policy states;

"A Fire Statement is a standalone document which defines the fire safety objectives and performance requirements of a development, and the methods by which these objectives will be provided/ satisfied. The Fire Statement should evidence the provisions made for the safety of occupants and protection of property as well as the provision of suitable access and equipment for firefighting in light of London Plan fire safety policy guidance and the justification for these measures."

This document is not a design fire strategy and is intended only to summarise the standard of Fire Safety provisions for the application in accordance with Policy D12A and the associated guidance.

1.1 Name of Contacts

Iolanda Fortunato – Architect – Iolanda Fortunato Design Studio.

1.2 Documents Reviewed

The following documents were provided by the Architect in support of this Fire Statement;

Document description	Dwg No./ Rev No.	Date	Provided by
Proposed Site Plan	A-MD-S / Rev 00	23/03/2024	Iolanda Fortunato Design Studio
Proposed Ground & Roof Plan	A-MD-P-GF-&R / Rev 05	23/03/2024	Iolanda Fortunato Design Studio
Proposed Elevations & Section	Ask230923_2	23/03/2024	Iolanda Fortunato Design Studio
Site pictures	-	-	Iolanda Fortunato Design Studio
First Floor Plan - Basic Plan	2294_03	Oct 2022	Cura Surveys Limited
Second Floor Plan - Basic Plan	2294_04	Oct 2022	Cura Surveys Limited
Proposed Elevations and Section	A-MD-E-S Rev 04	23/03/2024	Iolanda Fortunato Design Studio
Existing Ground & Roof Plan	A-MD-ex-P-GF&R / Rev 01	23/03/2024	Iolanda Fortunato Design Studio

Section 2 – Property Description

2.1 Description

The proposal is to construct a rear extension attached to an existing single dwellinghouse. The proposal will result in the following additional room;

- Ground floor – 1 x Kitchen/Dining Room.

There will be car parking provision on the public highway at the front of the property (unchanged). There will be stepped access to this development at the main entrance of the building.

The Purpose Group as designated by the Approved Document; Volume 1 (2019 edition incorporating the 2020 and 2022 amendments) is;

Residential (Dwellings) 1(b) – a dwellinghouse that contains a habitable storey with a floor level a minimum of 4.5m above ground level up to a maximum of 18m.

2.2 Site Plan

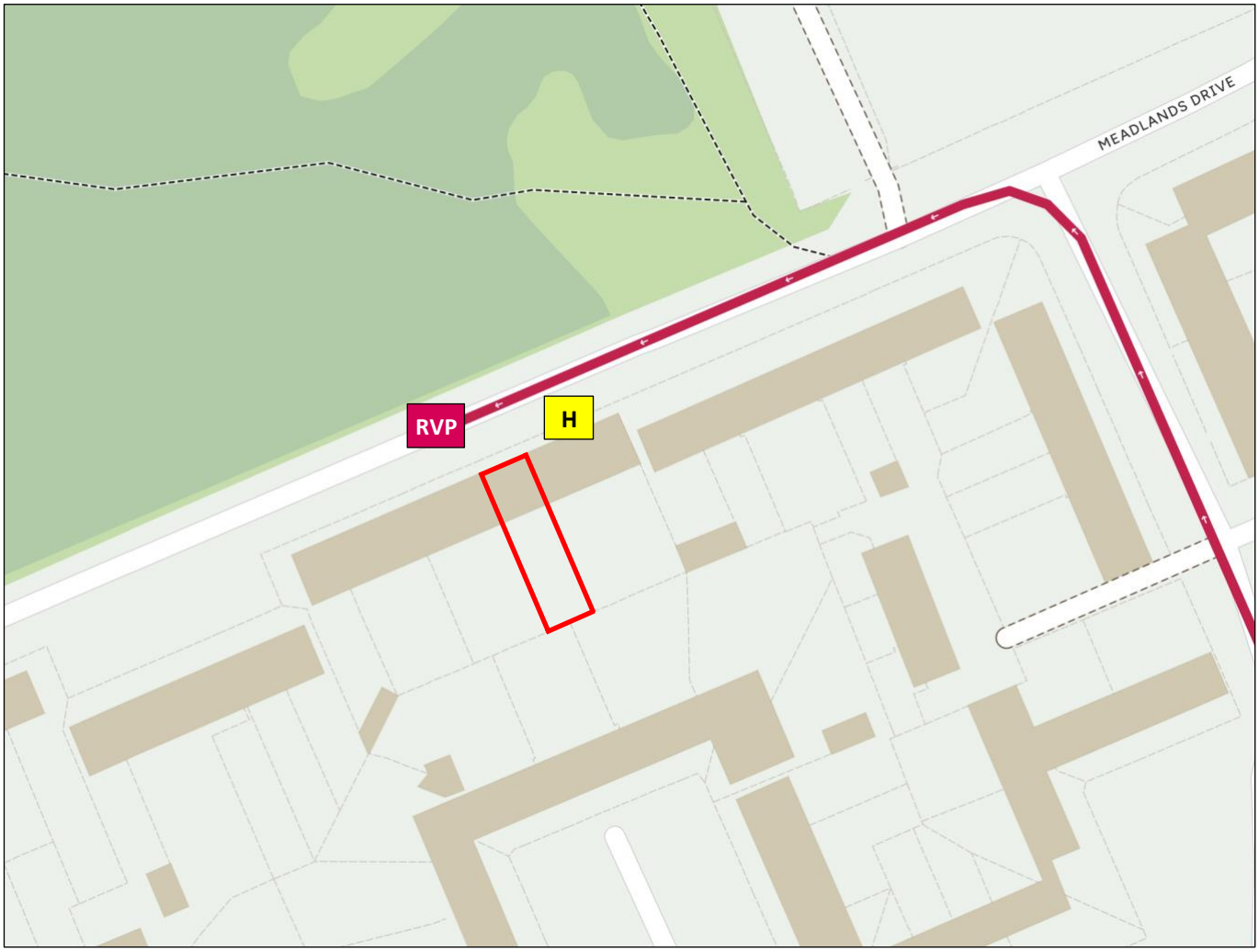

Figure 1 - Site Plan showing the footprint of the property in red, the likely FRS RVP and route from nearest fire station, and the location of the nearest public hydrant.

Section 3 – Policy D12(A)

The headings within this Section respond to Part D12(A) of the London Plan. The guidance gives this part the title of 'Planning Fire Safety Strategy' (PFSS). All building developments in London must produce a PFSS for their planning applications and all development proposals must achieve the highest standards of fire safety.

A.1 Identify suitably positioned unobstructed outside space: a) for fire appliances to be positioned on b) appropriate for use as an evacuation assembly point.

On approaching the property, the likely FRS access will be gained to Meadlands Drive from Clifford Road (the initial attendance is likely to be an appliance from Kingston Fire Station – 1.1 miles from the property). The road and pavement immediately outside 72 Meadlands Drive will be the likely Rendezvous Point (RVP) for the Fire & Rescue Service.

The location of the property will allow vehicle access to 100% of the front (North) elevation. Approved Document B, Volume 1) recommends that single dwellings should allow access for a pumping appliance to all points inside the dwelling within 45m. The 45m distance (measured along a route suitable for laying hose) is achieved to all points within the property.

The route to the main entrance has 4 steps and is non-complicated. This access will be suitable for firefighters proceeding on foot

Accordingly, there is no requirement for additional firefighting facilities at this property.

Having evacuated from the dwelling, the occupants can remain in a place of safety at Meadlands Drive. Such that their location will not impede the firefighters from accessing the main entrance of the property in preparation for tackling the fire.

As this is a single private dwelling, there will be no designated assembly point. However, the residents should be aware that the creation of a simple escape plan is recommended. The following should be included;

- The best route in and out of the dwellinghouse
- A second route in case the first one is blocked, considering windows as a potential escape
- Practising the escape plan regularly
- Keeping door and window keys where they can be found
- Ensuring all occupants understand the plan

A.2 Are designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire; including appropriate fire alarm systems and passive and active fire safety measures.

The stairway enclosure will be protected at the ground floor. The existing enclosure will not be affected by this extension and should comprise partitions achieving a minimum of 30 minutes fire resistance. The connecting door serving the Lounge is a swing door should provide a minimum of 20 minutes fire resistance. This enclosure will provide a route to safety for those evacuating from the upper floors (see Section A5 below).

The front habitable room (lounge) will form the same room as the Kitchen/Dining Room as there will be no separating door.

The proposed development will result in a single fire compartment with an enclosed stairway and suspended timber floors (loadbearing); these elements cannot be confirmed as providing a minimum fire resistance of REI30 but would be substantial in their construction to allow rapid evacuation from the property.

The dwellinghouse will be provided with fire detection and alarm system (meeting the Grade D2, Category LD3 standard), a system incorporating detection in the circulation areas, and will meet the requirements of; BS 5839-6:2019 – *'Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic buildings'*. It is recommended that this is supplemented with heat detection within the open-plan kitchen/dining room.

As there will be no common area there will be no requirement for an emergency lighting system. Similarly, the entrance door to the dwelling will not be required to be fire-resisting, self-closing or outward opening.

It is essential that the fire protection measures integrated into the building functions correctly in a fire situation. Consequently, the provided fire protection measures will be inspected on a regular basis to ensure that they are available and functional at all times. Inspections will include, but not necessarily be limited to, the following;

a) the escape route will be kept clear at all times;
b) the doors protecting the stair enclosure; and
c) all fire safety equipment (notably the fire alarm system) will be maintained and tested in accordance with the relevant standards by a competent person.

The ongoing control over the repair, maintenance and replacement of the alarm system will be effectively planned, monitored and reviewed by the owner of the dwelling.

Any changes, additions or adaptations to the active or passive measures at this development should not be undertaken without the prior involvement of a competent person.

A.3 Are constructed in an appropriate way to minimise the risk of fire spread.

The design and construction of this development will meet the requirements of the Building Regulations 2010 and the supporting guidance.

The proposed walls (notably the walls adjacent to 70 and 74 Meadlands Drive) will be formed with two leaves comprising brick (outer) and a concrete block inner leaf, each will be a minimum of 100mm thick. Consequently, the materials used to close the cavity in this arrangement do not need to achieve a specific performance in relation to fire resistance (reported insulation will be 'Celotex PIR' in the cavity.

The construction of the proposed parts of this dwelling will not adversely impact on the fire safety of any neighbouring site.

Space separation

The proposed construction will result in no new openings created at the East or West elevation (facing the neighbouring properties).

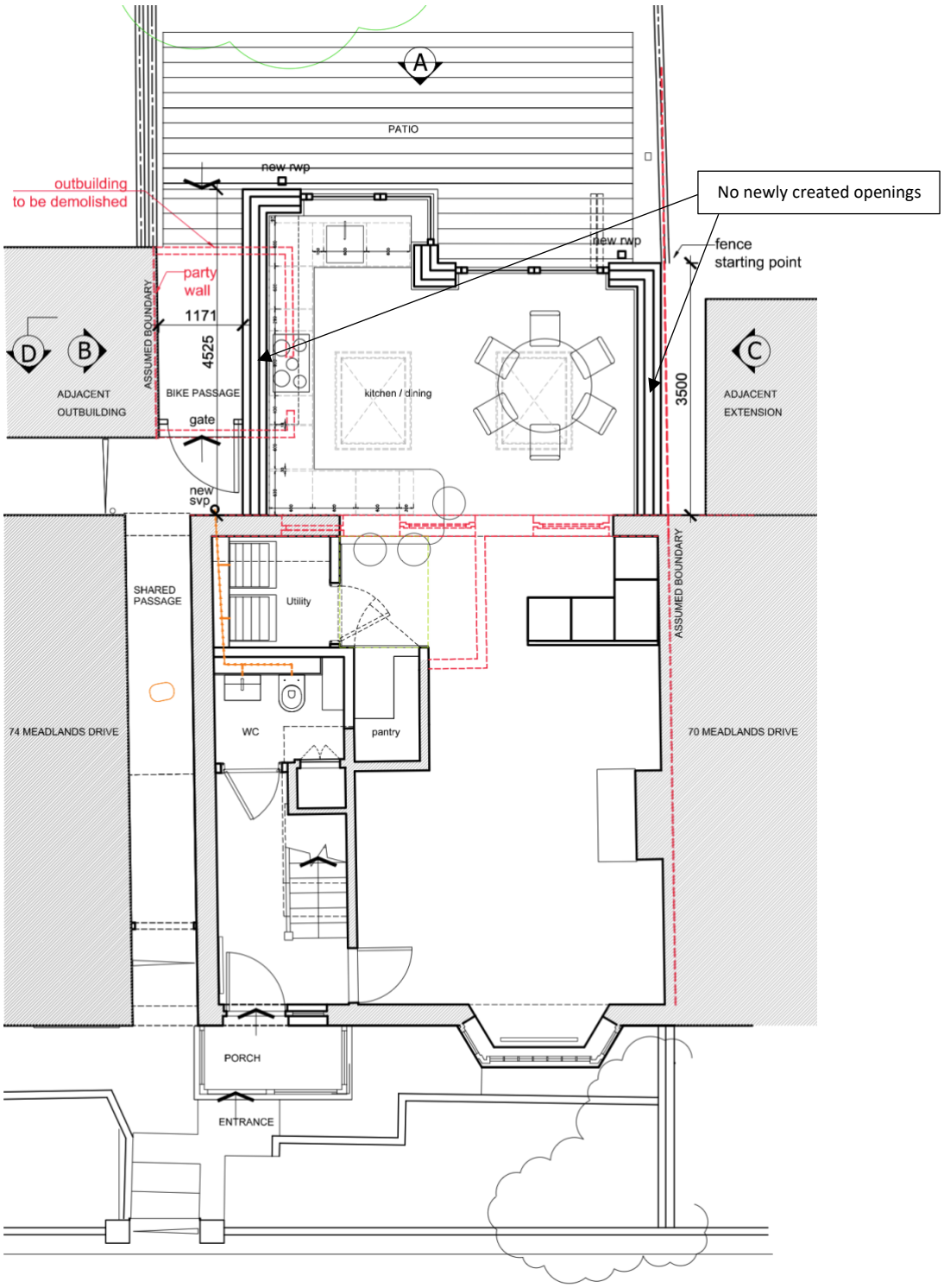

Figure 2 - image showing brick façade walls facing neighbouring properties (no openings)

The wall materials used in the construction of the East and West façades will achieve the minimum fire performance rating of Class B-s3,d2 thereby minimising any risk of external fire spread to neighbouring properties (brick façade).

Construction materials

The detail and type of construction of the newly formed external walls was available at the time of writing, the brick façade walls are confirmed to be;

- 100mm facing bricks to match existing
- cavity maximum 125mm with 115mm 'Celotex ThermaClass Cavity Wall 21' (maximum 10mm void)
- 100mm blockwork inner leaf

This will achieve REI60 as a minimum. The outer leaf component forming the external surface of the proposed wall will achieve the fire performance rating of Class B-s3,d2 or better. This is required as there will be a relevant boundary within 1m of the rear extension (the wall facing 70 Meadlands Drive).

There will be no 'specified attachments' at this property.

NOTE: all construction detail and materials will be retained digitally by the client, and this will form the O&M manual which will be stored and shared digitally in order to satisfy the principles of the 'Golden Thread'.

A.4 Provide suitable and convenient means of escape, and associated evacuation strategy for all building users.

The dwellinghouse will be designed to operate a 'simultaneous' evacuation procedure.

The guidance recommends that the final exits at ground floor level are supplemented with an enclosed stair enclosure serving the upper floors.

The simultaneous strategy is considered to be an appropriate strategy for people with disabilities including mobility, sensory and/or cognitive disabilities. However, the upper floors may not be suitable for those with mobility impairments, consequently, the owners are advised to develop a personal emergency evacuation plan (PEEP) for any occupant who is known to be unable to self-evacuate.

Where security or privacy fencing is used to landscape any areas within the curtilage of the site then these will be open or provided with an access/egress gate which will be designed and constructed so that they will not hinder occupants escaping the building or Fire & Rescue Service operational personnel entering the building (via the shared passage between 72 and 74) whilst attending an incident.

A.5 Develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.

The evacuation strategy as described above is Simultaneous, meaning all occupants will evacuate on the first alert of fire.

For those within the dwelling, where they have discovered a fire or where the fire alarm system has activated, will commence evacuation immediately to a place of ultimate safety (fresh air). The route to the final exit does not need to be indicated with signage.

The upper floor will be served by a fire-resisting stairway or escape windows from habitable rooms.

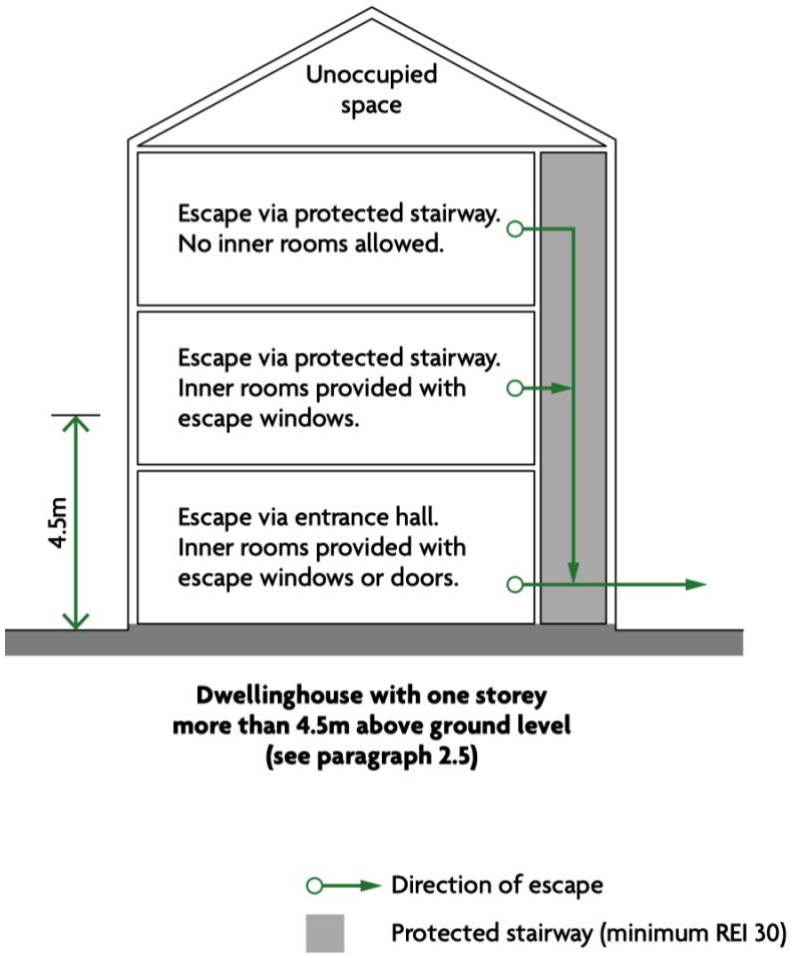

Figure 3 – image from ADB1 illustrating a typical dwelling with one storey more than 4.5m above ground

The upper-floor occupants will escape via the stairway enclosure. Occupants within the ground floor rooms may escape via the front entrance or via the external shared passageway. Both routes will lead to a place of ultimate safety at the front of the property.

A.6 Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

The occupants of the dwellinghouse may wish to supply their own portable extinguishers to tackle small fires within their domestic environment, but this is not required by legislation or the mandatory guidance.

The developer will employ contractors and sub-contractors who may be engaged in hot works or general construction. In this case, they will have a duty under the CDM Regulations 2015 to prevent the risk of fire and fire spread. They will discharge this duty by providing a means to tackle a small fire to prevent it becoming a large or developing fire. An appropriate number of contractors will be trained in the selection and use of fire extinguishers.

If the Fire & Rescue Service arrive on site to tackle a fire, they will be able to augment their water supply from the public fire hydrant outside 80 Meadlands Drive. Figure 1 shows the location of the water supply.

Section A1 above describes the 'access' route and parking location for the fire and rescue service. This route and the parking location will not adversely impact the neighbouring sites and will be made available throughout the period of the construction and throughout the lifespan of the development as it is proposed.

The London Fire Brigade Guidance Note (GN 29) covers the access arrangements needed for fire appliances to get close enough to a building to fight fire. This document details such requirements as minimum road widths, turning circles, road humps and projections from buildings. Taking into account all relevant content of this document, it is confirmed that there will be no matters within this planning proposal that will negatively affect access for fire appliances.

Section 4 – Details of the Author

This Fire Statement has been produced by Gary Ferrand MA EngTech FIFireE MIFSM who is a Principal Fire Safety Consultant and is a "third-party independent and qualified" individual.

He is a competent professional with the demonstrable experience to address the complexity of the design being proposed at this development.

Engineering Council Registration Number – 692986
Institute of Fire Engineers Registration Number – 22284

Membership, Qualifications and Career details:

Grade of IFE membership:
IFE Membership Grade: Fellow – present. 1994-2011
Year of gaining IFE Fire Risk Assessor (Life Safety) accreditation: 2020
Member of the Institute of Fire Safety Managers
Member of the Fire Protection Association

Qualifications:
MA (University of Exeter) 2005
Safety for Executives (IOSH) 2009
NEBOSH Diploma (IOSH) 1998
Modules A-D FSOC Fire Safety Studies (Fire Service College) 2005
Executive Leadership Programme (Warwick Business School) 2010
Incident Command Management – accredited at Level 4, 2011
Incident Command Gold Command 2010-2016
Multi Agency Gold Incident Course (MAGIC) 2012

Career details:
The author has spent 30 years enforcing fire safety legislation in different Fire & Rescue Authorities. As a Principal Officer he led the NFCC Business Safety Group to consistently apply enforcement work across all FRAs in the UK. He has worked privately as a consultant with large and medium-sized clients working on small, medium, large and bespoke complex developments over the previous 6 years. He is a Fellow of the IFE and has been recognised formally by the NFCC (previously CFOA) for his contribution to fire safety.