PART B

Sheldon House

Planning Fire Statement

Design | Analyse | Assure

Quality Control

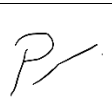
	Issue 01	Issue 02	Issue 03
Reason of Issue	Initial Issue	-	-
Date	13/01/2021	-	-
Document Author	Sam McGarvey	-	-
Signature		-	-
Technical Quality Control	Pete Wise	-	-
Signature		-	-

Fire Engineer Details

Name:	Pete Wise BEng (Hons) BA (Hons) CEng MIFireE
Position:	Technical Director
Number of years of relevant experience:	39 years' experience fire safety engineering, fire risk management and operational firefighting
Technical qualifications:	BEng (Hons) Fire Engineering CEng - Chartered Engineer specialising in fire.

Professional memberships:	Member of the Institution of Fire Engineers (MIFireE) Fire Industry Association's Fire Engineering Council member Fire Risk Assessment Council member

Career summary:	• 30 years' firefighting & command experience at a senior level with London Fire Brigade, including attendance at many high-rise fire incidents. • 25 years' experience as a fire inspecting officer & fire engineer with the London Fire Brigade. • Four years in the office of the chief fire and rescue advisor, providing advice to ministers and the civil service on fire service, fire safety and national resilience situations. This included managing and technical advice for the crown premises inspection team, responsible for fire safety across the government estate. • Eight years' experience at director level, with three leading national fire engineering companies, BB7 Ltd., the Fire Protection Association and PartB Group Ltd.
Relevant experience:	Pete, a chartered fire engineer with 39 years' experience, has developed extensive skills to understand fire safety design in residential buildings. Pete spent three decades as an operational firefighter. During this time, he fought many high-rise fires. Through promotion he moved into positions where he was the incident commander at large incidents. He also carried out fire investigations. He helped develop operational guidance that gave him the skillset to understand firefighting in residential buildings. In the fire service, Pete worked in fire safety as an inspecting officer, team leader, fire engineer and finally, head of fire safety policy at London Fire Brigade. He also took a role in government as a ministerial advisor. These roles gave him an excellent understanding of the regulatory environment and associated guidance. He led the initial BS 9991 and BS 9999 committees, was lead author on the government's guide to disabled means of escape and technical advisor for the fire risk assessment guide to purpose-built flats. As a commercial fire engineer, Pete has worked on many residential buildings, served as shadow expert on the Grenfell inquiry, and serves on the Fire Industry Association's Fire engineering and Fire risk Assessment Councils.

Signature:		Date:	13.1.23

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1 Application Information

This fire statement has been prepared by PartB Group Ltd. on behalf of Airey Miller Limited. The fire statement is in accordance with the guidance set out in the Greater London Authority publication 'London Plan Guidance Sheet Policy D12(B)' and UK Government fire statement guidance available at draft_guidance_sheet_fire_statements_d12_b_070720_web.pdf (london.gov.uk)

1.1 Development Details

Site Address	Site address line 1	Sheldon House
	Site address line 2	Cromwell Road
	Site address line 3	
	Town	Teddington
	County	Borough of Richmond upon Thames, Greater London
	Site postcode	TW11 9EJ

Description of proposed development including any change of use (as stated on the application form):	The building known as 1-9 Sheldon House will be a new build, five storey residential development consisting of a total of 27 units. The building will consist of a mix of flat types to include for a range of needs and abilities across the population. A total of three wheelchair accessible units will be provided at ground floor level along with a mix of studios, one-bed, two-bed and three-bed apartments provided at the upper floor levels. There is presently a residential building at this site, however it is to be demolished in order to erect this new block of flats Access will be provided by a single stair to the building. Firefighting operations will be carried out internally using the means of escape

	communal stairs and corridors. This may be supplemented by handheld firefighting jets from external ground floor level if required A railway line is provided approximately 40 metres to the rear of the building behind the communal garden. No buildings are directly adjacent to the proposed new build with the closest existing building a single storey garage to the southeast side of the building approximately 1.95 metres away.
State what, if any, consultation has been undertaken on issues relating to the fire safety of the development, and what account has been taken of this:	As this is a new build there has been no previous consultation undertaken related to the fire safety of the development. PartB Group Ltd. has been consulted by the another in order to provide fire safety guidance for this project.
Site layout plan with block numbering as per building schedule referred to In Section 2. (Consistent with other plans drawings and Information submitted in connection with the application).	

1.2 Site Layout Plan

Figure 1: proposed site layout and ground floor plan of Sheldon House (Source: Clive Chapman Architects Drawing SH-03)

2 Building Schedule

The principles, concepts and approach relating to fire safety that have been applied to the development									
Site Information				Building Information			Resident Safety Information		
a) Block no. as per site layout plan above	b) Block height (m) Number of another (including/excluding basement)	c) Proposed use (one per line)	d) Location of use within block by floor level	e) Standards relating to fire safety/ approach applied	f) Balconies	g) External wall systems	h) Approach to evacuation	I) Automatic suppression	j) Accessible housing provided
A	14.5	residential flats, maisonettes, studios	All Floors (GF-5th)	Approved Document B Vol 1	Balconies - Class A2-s3, d2 or better	Class A2-s3, d2 or better	stay put *2	yes-residential sprinklers, partial *3	M4(3)

Explain any specific technical complexities in terms of fire safety (for example green walls) and/or departures from information in building schedule above	*2 See Section 5 for more information on the evacuation strategy, stay put is assumed as per Approved Document B Volume 1 (ADBV1). In case of a fire, the only people who are expected to leave the building, are those who inhabit the flat containing the fire. Other occupants will be protected by high level compartmentation measures and smoke control which means that they should remain safe whilst the fire is extinguished. Activation of a detector within a single flat will initiate sounders in that flat only evacuating the flat. *3 An AWFSS (Automatic Water Fire Suppression System) will be provided within the flats. This could take the form of a water mist system or sprinklers. If sprinklers are chosen, there will be no sprinklers within the common parts in line with current guidance within BS 9251:2021, as the stair is not combustible and to prevent malicious activation of the system. Similarly, a water mist system will cover the flats only. . As part of the development, the standard of compartmentation will be 60 minutes, as per the requirements of table A2 in ADBV1. This work will be carried out throughout the development.

Explain other issues which might affect the fire safety of the development have been addressed.	**All floors**: The protected stair will be provided with a 1m^2 Automatic Opening Vent (AOV) at the head of the stair. This vent is to be designed and installed in accordance with the guidance set out in BS EN 12101-1:2017. This vent should open automatically upon the activation of a site wide fire alarm. There should be an override switch installed for use by the Fire and Rescue Service. Any further issues identified during the design process will be addressed by design team consultation and/or fire engineering analysis.
Explain how any policies relating to fire safety in relevant local development document have been taken into account.	This fire statement has combined central government guidance with Greater London Authority guidance (London Plan Guidance Sheet Policy D12(B)) to fully satisfy the requirements of a fire statement and provide a full view of the fire safety design at this stage. The London policy asks applicants to exceed the minimum fire safety provisions. Therefore, this report highlights where fire safety requirements are exceeded.

3 Building Construction

3.1 Fire Resistance of Building Products

In order to comply with requirements of ADB, where the highest occupied floor level is more than 11 metres and less than 18 metres above ground level, the structural fire resistance requirements for load bearing elements is 60 minutes provided that the building is fitted with a fire suppression system.

4 Fire Protection Measures

4.1 Active Fire Protection

1. Automatically Opening Vent (AOV) will be provided at the head of the stair, with a geometric free area of ≥1.0m^2.
2. Fire alarm systems:
   - Grade D2 Category LD3 (or better) within the apartments in accordance with BS 5839-6.
   - No communal alarm system within the common stair core. Smoke detection is to be provided within the communal stair core to activate ventilation to top of stair.
3. Emergency lighting conforming to the recommendations and requirements of relevant parts of BS 5266:2016 will be provided within the communal areas.
4. An Automatic Water Fire Suppression System (AWFSS) designed and installed in accordance with the appropriate standard for the risk in these residential apartments. This can be either a Residential sprinkler system conforming to BS 9251:2021.Or a water mist system conforming to BS 8458:2015.

4.2 Passive Fire Protection

5. All floors and walls separating residential apartments from all other areas of the building will provide a minimum of 60 minutes' fire resistance.
6. All apartment front doors will be FD30 fire doors with smoke seals and self-closers.
7. All apartments will be provided with a protected entrance hall providing 30 minutes' (REI) fire resistance with at least FD20 Doors.
8. Stairs to be constructed as protected shafts to provide a minimum of 60 minutes' (REI) fire resistance with FD30 fire doors with smoke seals and self-closers.

4.3 Management and Maintenance of Fire Protection Measures

The management and maintenance of fire protection measures will be developed as the design of the building progresses. The inspection / testing / maintenance intervals are advised to be as follows in order to be in compliant:

- Alarm Tests - monthly - should be tested in-line with recommendations in BS 5839-6:2019 Fire detection and fire alarm systems for buildings.
- Alarm system servicing - should be serviced in-line with manufacturer's instructions and recommendations in BS 5839-6:2019 Fire detection and fire alarm systems for buildings.
- AWFSS - sprinklers should be tested in line with BS 9251:2021, Section 7 including an annual visual inspection and hydraulic and alarm tests annually. After 25 years, the sprinklers and pipework should be fully tested in accordance with Annex F of BS 9251:2021.

- Emergency Lighting - should be tested in line with the recommendations of BS 5266-1:2016, functional operation to be tested monthly, full backup power duration tests and visual inspection annually.

- AOV - the AOV should be inspected and maintained as per manufacturers guidance and BS EN 12101-2: 2017.

- Fire Mains - should be tested annually in line with BS 9990:2015.
- Fire Risk Assessment - fire risk assessments should be carried out regularly as per the Fire Safety Order - as a minimum once every four years with a review every two years, or each time the FRA (Fire Risk Assessment) is deemed out-of-date. The FRA will help monitor fire safety management and identify any fire safety issues which will be rectified in line with the recommendations of the assessor.

- Fire Door Surveys - the client should inspect the doors as per manufacturer's recommendations and seek to comply with the fire safety order. In practice, fire risk assessments are likely to highlight issues.

In the event of any test failures, or identification of weaknesses in the fire safety systems, a competent person should repair or update the relevant systems.

5 Means of Escape & Evacuation Strategy

The proposed evacuation strategy for Sheldon House is 'Stay Put' and designed in accordance with Approved Document B Vol 1.

5.1 Evacuation Plan

The total maximum occupancy is 41-70 persons: 41 persons is based on the assumption that there will be one person per bedroom unit, however the client has confirmed that they expect the maximum occupancy to be 70 persons. Per Section 3.60 of ADB *'A stair of acceptable width for everyday use will be sufficient for escape purposes'*. The stair width is 1.2 metres consistent throughout the building. This is a protected stair core with lifts provided within the stair.

The furthest travel distance from a flat entrance door to the stair core is less than 7.5 metres. The travel distance is less than 9 metres within the protected hallway in apartments from furthest room door to front flat entrance door.

Grade D2 Category LD3 (or better) within the apartments in accordance with BS 5839-6. No communal alarm system within the common stair core. Detection to be provided within the communal stair core to activate ventilation to top of stair.

5.2 Disabled Means of Escape, Accessibility and Evacuation

Within the fire safety aspects of the Building Regulations, it is aimed that a reasonable standard of health and safety for people in and around buildings should be achieved. All persons, regardless of the physical ability, age, gender, or other characteristics should be able to use and access a building as well as its facilities. The fire safety measures which are implemented into a building should take account of the needs of anyone who may be in the building, in this case either as visitors or as occupants.

At the time of writing, there is an ongoing consulting process in order to help provide practical advice on this matter. This includes the process known as the Emergency Evacuation Information Sharing (EEIS+). As the design develops, it will be more necessary to understand the likely nature of any resident's ability to self-evacuate and the management response available on site, if there is any. This will enable an appropriate process to be implemented. The Governments response to the consultation on Personal Emergency Evacuation Plans (PEEPs) for residential buildings sited difficulties in practicality, proportionality, and safety as the reason that they will not make any legislative requirements for disabled people to be provided with PEEPs, nor any requirements for information on disabled people or their PEEPs to be kept in Premises Information Boxes. This is currently under review and may be changed in the near future.

On the ground floor of the development there are three dedicated wheelchair apartments, which are to be constructed slightly differently to

other flats within the development in order to accommodate those in wheelchairs, with larger lobbies and turning spaces within the flats.

Additionally for any persons who may be less physically abled but not be located on the ground floor, there is a proposed evacuation lift within the building, which they may use during an incident within the building.

The occupier will be required to develop a PEEP for any person requiring assistance during a fire. Generic PEEPs may be developed for any visitors to the building, to ensure their needs are met.

6 Access & Facilities for the Fire Service

In summary, the development relies on existing building footprint. The new build will add 27 flats to this area but will not increase the building footprint significantly from the previous block of lats being demolished. In conclusion, this development will not negatively impact the fire safety of neighbouring sites.

6.1 Emergency Road Vehicle Access & Water Supplies for Firefighting Purposes

A fire service site plan has been produced using Approved Document B, Volume 1 (ADBV1) to inform the requirements of firefighting access, covered in Section B5 of the document. The plan is enclosed as part of Section 6.2 and appended to the fire statement as a separate PDF.

Emergency road vehicle access and water supplies for firefighting purposes	
Explanation of fire service site plan(s) provided. Including what guidance document have informed the proposed arrangements for fire service access and facilities?	Firefighter access is assured by the means of escape. Ingress/egress is possible through the front entrance. Stairs will be protected by an AOV at the head of the stair with windows present to provide additional ventilation, if necessary. Additionally, firefighters can access the rear of the building via the under croft as per the site plan. This development relies on existing hydrants. Information provided from the Water Office confirms that the closest hydrant to the site is provided on Cromwell Road as can be seen below. Main size 100mm. There are no defects in hydrant. The fire service arrangements have not been changed from the previous residential building that existed at this site. The existing access route has not been changed. The fire service will not be able to access all parts of the building within 45 metres from the pumping appliance parking station, as the furthest point away, based on drawings, is the living and dining area in Flat 23, which is approximately 75 metres from a vehicle which would be at the Car park just off Cromwell Road. Whilst the hose laying distance within Sheldon House is over the allowance of ADB, document BS 9991:2015 allows a scenario where sprinklers are fitted in accordance with BS9251:2014 or BS EN 12845 are fitted throughout a block of lats, then the distance between the fire and rescue service

	pumping appliance and any point within the house or flat may be up to 75 metres (in houses or flats having one floor more than 4.5 metres above ground level. 100% of building perimeter is accessible by foot / fire-fighting hose. No firefighting shaft provided - personnel access as outlined above.
Emergency road vehicle access - can emergency road vehicles access the site entrances indicated on the site plan?	The development relies on existing roads, which are deemed suitable for fire appliances under B5 of ADBV1. Please Note: This development is at the junction of Fairfax Road and Cromwell Road, which can be used in either direction so there are multiple ways in which emergency vehicle access may be provided to this property. From the plans provided, the vehicle perimeter is accessible to +60% of building from public roads and the building carpark.
Is the emergency vehicle tracking route to the siting points for appliances clear and unobstructed?	There are multiple access routes to Sheldon House limiting the need for turning. Additionally, there are several junctions close by which allow for turning.
Siting of fire appliances	A dry rising main is not deemed to be necessary for this development, based on the hose laying distances.
Nature of water supply:	Hydrant- public One hydrant provided on Cromwell Road as can be seen below. Main size 100mm. No defects in hydrant.

Does the proposed development rely on existing hydrants?	yes, relies on existing hydrants	If the hydrants are existing, are they currently useable/ operable?	hydrants are useable as per information provided by the Water Office
Suitability of water supply for the scale of development proposed:	One hydrant provided on Cromwell Road as can be seen below. Main size 100mm. No defects in hydrant.		

6.2 Fire Service Site Plan

See next page, full plans appended to this document.


Sheldon House, Teddington
Fire Service
Site Plan
PART B

Key Requirements (from ADB)

PART B

- **Firefighting Access:**

  13.2 For flats, either of the following provisions should be made.
  a. Provide access for a pumping appliance to within 45m of all points inside each flat of a block, measured along the route of the hose.

  15.1 In low rise buildings without deep basements, access for firefighting personnel is typically achieved by providing measures for... means of escape.

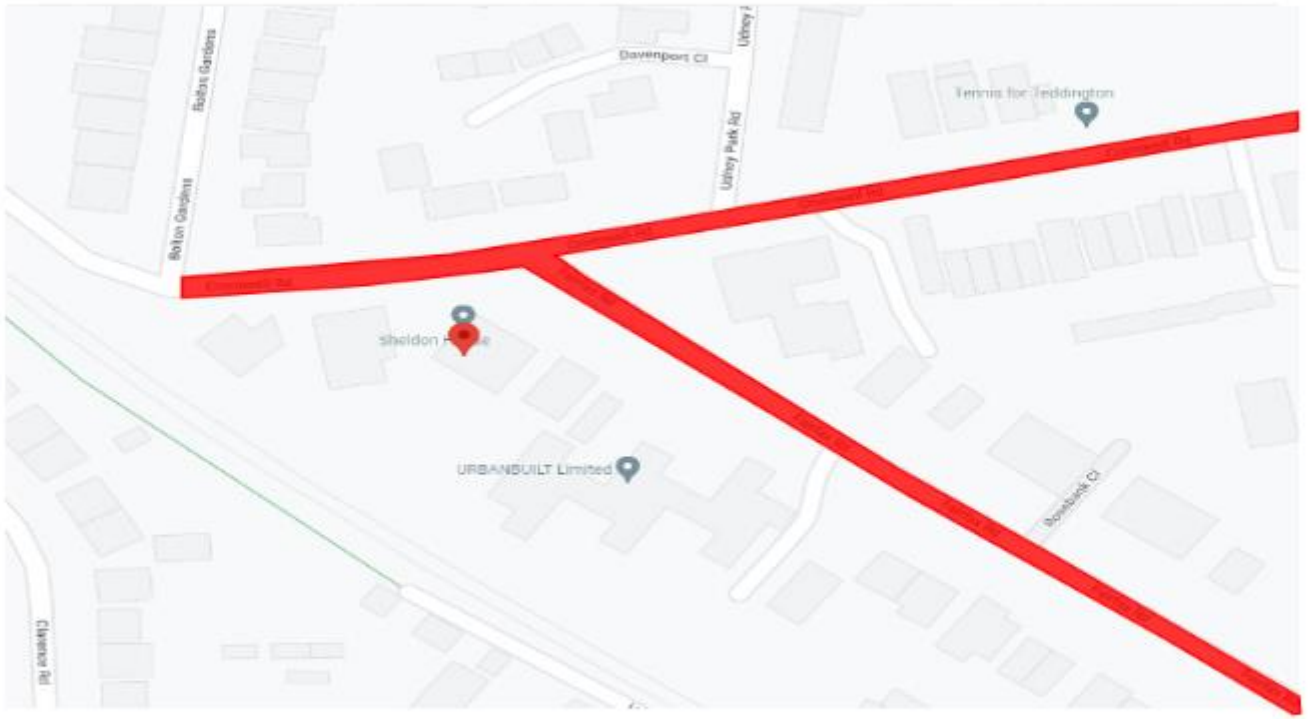
  15.7 In any building, the hose laying distance should
  b. ...be a maximum of 45m from a fire main outlet in a protected stairway (although this does not imply that the protected stairway needs to be designed as a firefighting shaft).

- **Hydrants:**

  14.9 If additional hydrants are required, these should be provided in accordance with the following.
  a. For buildings provided with fire mains – within 90m of dry fire main inlets.
  b. For buildings not provided with fire mains – hydrants should be both of the following.
    i. Within 90m of an entrance to the building.
    ii. A maximum of 90m apart.

Site Layout & Hydrants

Vehicle Access to Site



7 Building Evolution & 'The Golden Thread'

7.1 'The Golden Thread' of Building Safety Information

The main contractor will be responsible for recording pertinent building safety information including a set of record drawings for the Operation and Maintenance Manual. These drawings are a condition of practical completion. In addition, the main contractor will be required to agree a plan for maintaining records in line with the 'golden thread' principle, in addition to offering training for the relevant safety systems. Records of changes to the building, especially those relevant to resident safety, will be documented by the building managers.

A full fire strategy for the development will need to be produced. When incorporating the information contained within this planning fire statement into future fire strategies, the relevance of the information will be assessed, and updated as necessary to maintain a cogent fire safety strategy. The strategy will need to be monitored and updated when significant changes that affect the fire safety of the building are made. This should enable a complete suite of information to be collated for the responsible person, in accordance with Regulation 38 of the Building Regulations. This regulation aims to ensure information critical to the fire safety of people in and around the building is communicated to the owner, occupier and/or end user, ensuring the building can be operated and managed correctly.

Airey Miller Limited and their appointed contractor will comply fully with Regulation 38 of the Building Regulations. This is advised but is not a requirement.

7.2 Fire Engineer's Statement on Critical Safety Features

Critical Safety Features:

- The fire detection system is mains powered. As such, building works or changes to electrical facilities should ensure the fire detection system remains operable.
- An AWFSS designed and installed in accordance with the appropriate standard for the risk in these residential apartments. Residential sprinkler system conforming to BS 9251:2021
- This development is at the junction of Fairfax Road and Cromwell Road, which can be accessed in either direction so there are multiple ways in which emergency vehicle access may be provided to this property. From the plans provided, the vehicle perimeter is accessible to +60% of building from public roads and the building carpark.
- The management plan will ensure persons who cannot self-evacuate will not be at undue risk. It is therefore critical to the safety of mobility impaired residents and must be maintained and disclosed in line with the golden thread principle and Regulation 38 of the Building Regulations.

Fire Engineer Statement:

It is important to note PartB has no design input on this project and is reliant on the information listed in Appendix A.

PartB did not have access to the following information:

- Fire Drawings
- Wall build-up details and cavity barriers designs
- Material specifications, including external wall materials like insulation, and internal linings

As such, PartB has assumed the relevance of the following information in good faith, subject to confirmation at later design stages:

- The compartmentation will be installed to 60 minutes' (REI) resistance.
- Building materials (internal and external) will comply with the Building Regulations and recommendations of ADB. For this report we have referred to the classifications given in the fire strategy.
- The buildings should not pose undue risk to other sites based on the increased fire protection measures, namely the AWFSS. However, full space separation calculations must be included within the fire strategy at the next stage of design.
- ADB assumes 'stay put' evacuation strategy. The next stage fire strategy must confirm this, as 'stay put' is currently assumed.
- A category 2 sprinkler system that will be designed to conform to BS 9251:2021. Otherwise, a water mist system is to conform to BS 8458:2015.

PartB takes no liability if the information shared with us is incorrect or invalid.

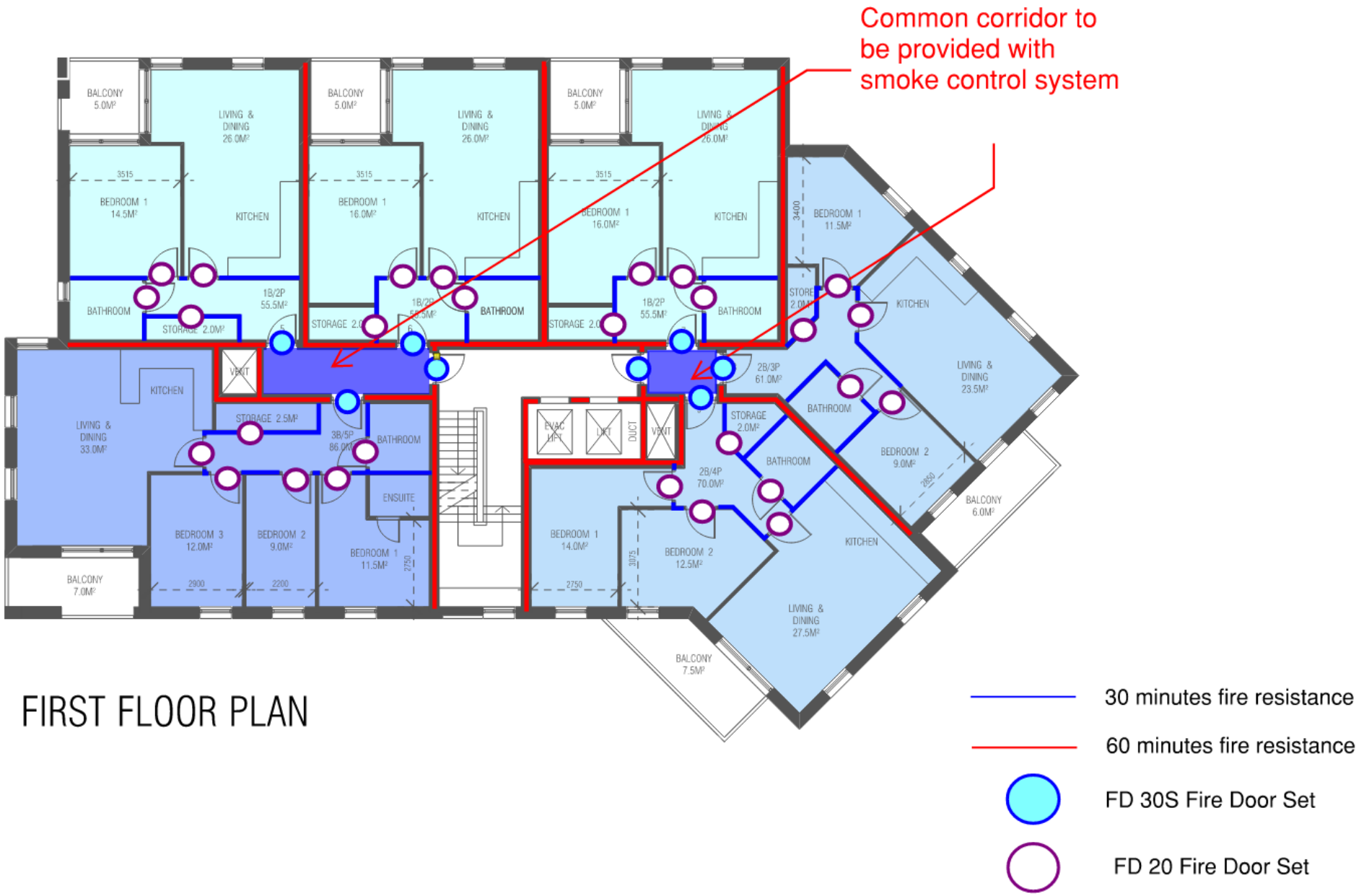
8 Appendix A – References

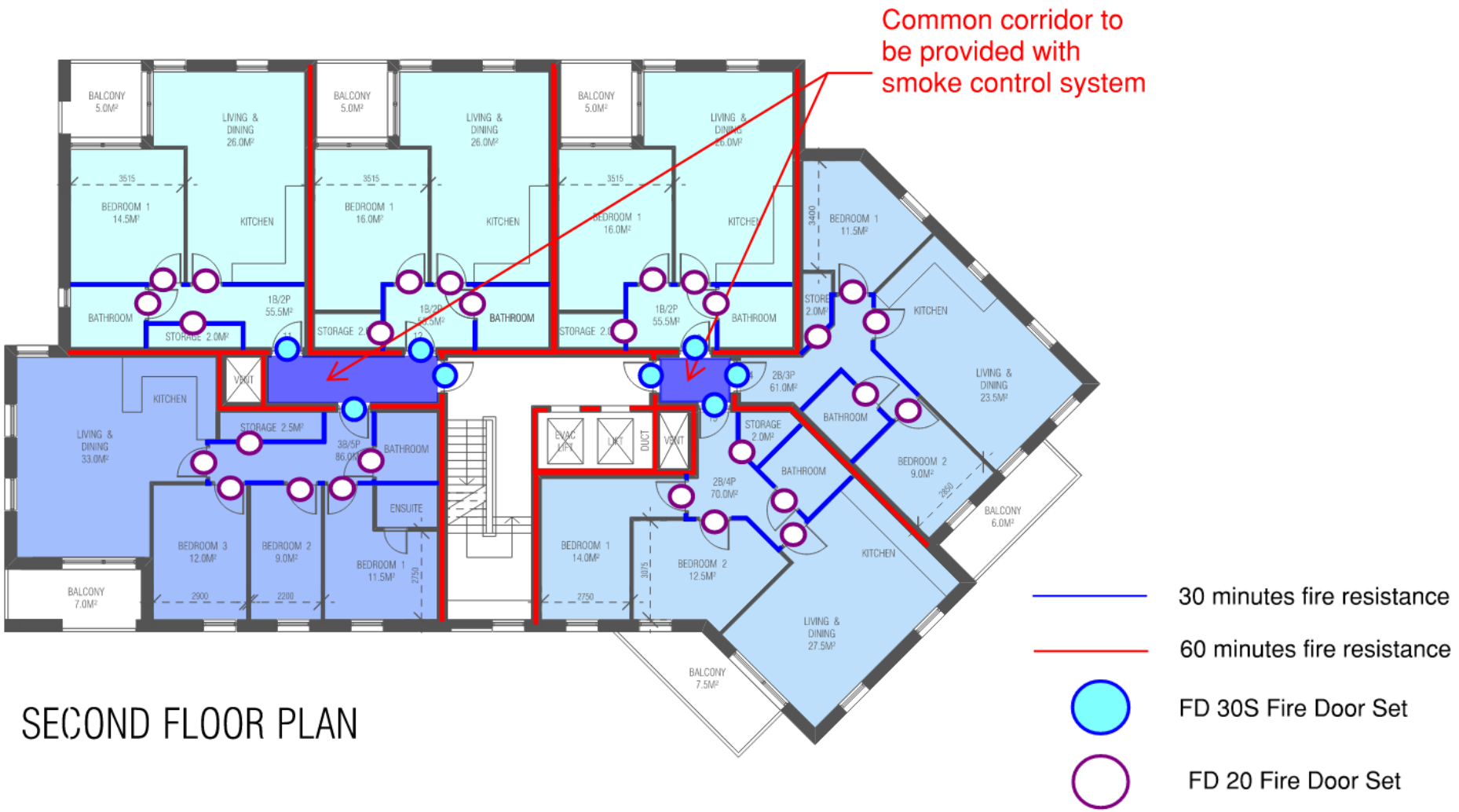
Description	Document No.	Revision	Produced by	Date
Approved Document B 2019 incorporating 2020 amendments	-	-	UK Government	26/11/2020
Greater London Authority London Plan Guidance Sheet Policy D12(B)	-	-	Greater London Authority	2021
BS 5839-6:2019 Fire detection and fire alarm systems for buildings	-	-	British Standards Institution	2019
BS 9251:2021 Fire sprinkler systems for domestic and residential occupancies— Code of practice	-	-	British Standards Institution	2021
BS 5266-1:2016 Part 1: Code of practice for the emergency lighting of premises	-	-	British Standards Institution	2016
BS EN 12101-2: 2017 Smoke and heat control systems Part 2: Natural smoke and heat exhaust ventilators	-	-	British Standards Institution	2017
BS 9990:2015 non-automatic fire-fighting systems in buildings – Code of practice	-	-	British Standards Institution	2015
Fire Strategy	2232450172	X	Part B Group Ltd.	12/09/2022
RIBA Stage 2 Fire Strategy Report	2232450172	X	Kelvin McLaughlin	27/09/2022
Various Planning Drawings: Site Plan, Elevations, Floor Plans & Roof Plan	SH-SK10A	X	Clive Chapman Architects	09/06/2021
Various Planning Drawings: Site Plan, Elevations, Floor Plans & Roof Plan	SH-SK11A	X	Clive Chapman Architects	09/06/2021
Various Planning Drawings: Site Plan, Elevations, Floor Plans & Roof Plan	SH-SK112	X	Clive Chapman Architects	09/06/2021

Various Planning Drawings: Site Plan, Elevations, Floor Plans & Roof Plan	SH-SK113	X	Clive Chapman Architects	18/11/2021
Location Plan	SH-01	/	Clive Chapman Architects	25/08/2021
Site Layout & Roof Plan	SH-02	/	Clive Chapman Architects	16/03/2022
Site Layout & Ground Floor Plan	SH-03	/	Clive Chapman Architects	16/03/2022
Contextual Elevations & Section	SH-04	/	Clive Chapman Architects	16/05/2022
Floor Plans & Roof Plan	SH-06	/	Clive Chapman Architects	28/02/2022
Block Elevations	SH-07	/	Clive Chapman Architects	20/04/2022
Fire Strategy (Principles)	2232450172	X	Kelvin McLaughlin	27/09/2022

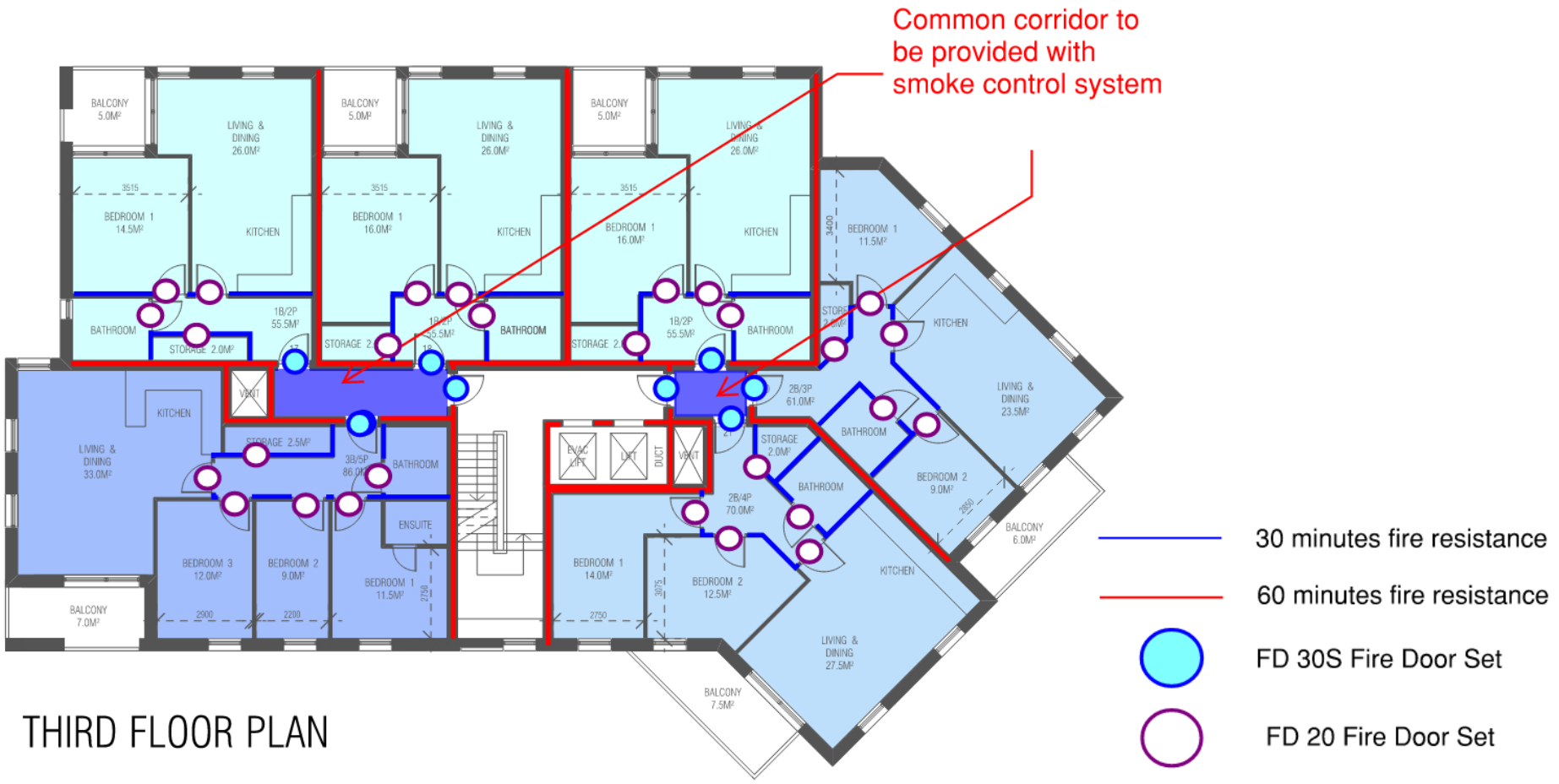
9 Appendix B – Plans and Elevations


Common corridor to be provided with smoke control system
GROUND FLOOR PLAN
30 minutes fire resistance
60 minutes fire resistance
FD 30S Fire Door Set
FD 20 Fire Door Set

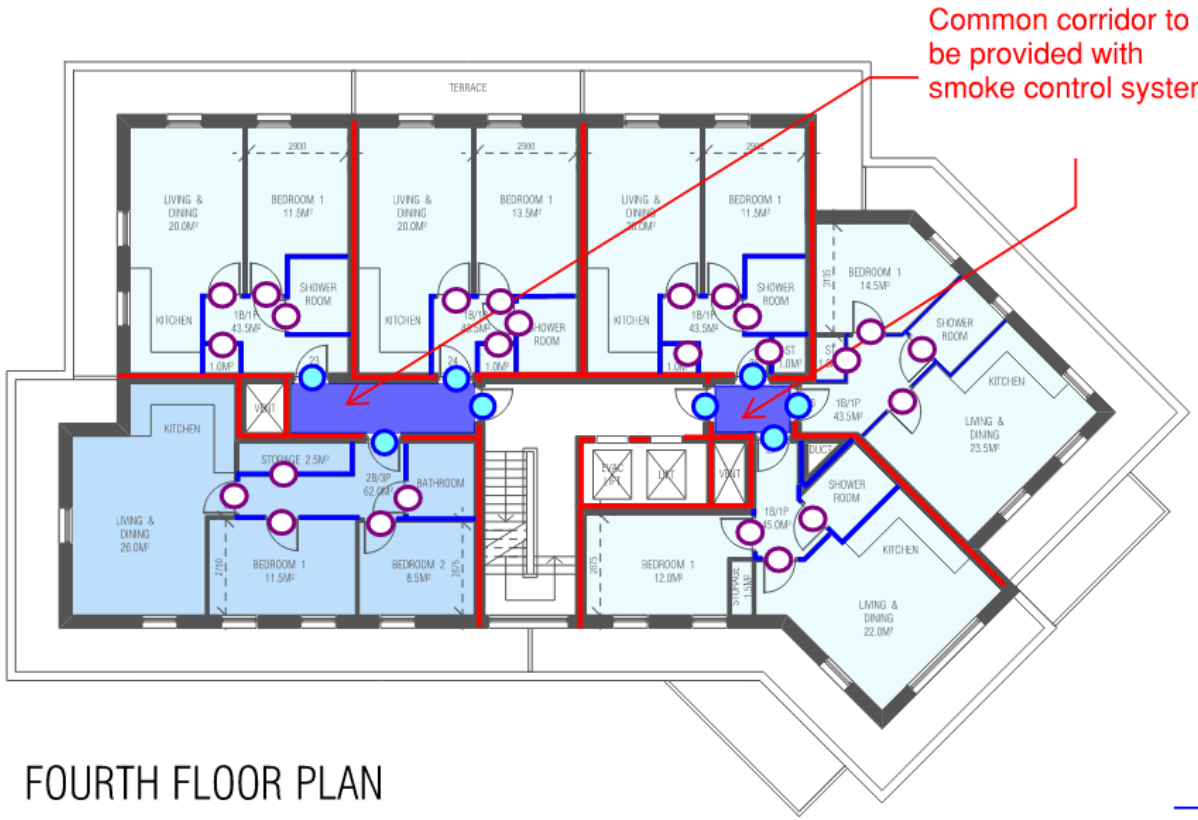

Common corridor to be provided with smoke control system
BALCONY 5.0M²
LIVING & DINING 26.0M²
BEDROOM 1 14.5M²
KITCHEN
BATHROOM
STORAGE 2.0M²
1B/2P 55.5M²
BEDROOM 1 16.0M²
STORAGE 2.5M²
3B/5P 86.0M²
ENSUITE
BEDROOM 3 12.0M²
BEDROOM 2 9.0M²
BEDROOM 1 11.5M²
BALCONY 7.0M²
LIVING & DINING 33.0M²
VENT
EV&C LIFT
LIFT
DUCT
BEDROOM 1 14.0M²
2B/4P 70.0M²
BEDROOM 2 12.5M²
BALCONY 7.5M²
LIVING & DINING 27.5M²
BEDROOM 1 11.5M²
2B/3P 61.0M²
BEDROOM 2 9.0M²
LIVING & DINING 23.5M²
BALCONY 6.0M²
FIRST FLOOR PLAN
30 minutes fire resistance
60 minutes fire resistance
FD 30S Fire Door Set
FD 20 Fire Door Set



SECOND FLOOR PLAN



THIRD FLOOR PLAN


Common corridor to be provided with smoke control system
TERRACE
LIVING & DINING 20.0M²
BEDROOM 1 11.5M²
SHOWER ROOM
KITCHEN
1B/1P 43.5M²
LIVING & DINING 20.0M²
BEDROOM 1 13.5M²
SHOWER ROOM
KITCHEN
1B/1P 43.5M²
LIVING & DINING 20.0M²
BEDROOM 1 11.5M²
SHOWER ROOM
KITCHEN
1B/1P 43.5M²
BEDROOM 1 14.5M²
SHOWER ROOM
KITCHEN
LIVING & DINING 23.5M²
1B/1P 43.5M²
DUCT
SHOWER ROOM
KITCHEN
LIVING & DINING 22.0M²
1B/1P 15.0M²
VENT
KITCHEN
STORAGE 2.5M²
2B/3P 62.0M²
BATHROOM
LIVING & DINING 26.0M²
BEDROOM 1 11.5M²
BEDROOM 2 8.5M²
BEDROOM 1 12.0M²
STORAGE 1.5M²
FOURTH FLOOR PLAN
30 minutes fire resistance
60 minutes fire resistance
FD 30S Fire Door Set
FD 20 Fire Door Set

ELEVATION 1 - FRONT

10 Appendix C – Fire Safety Measures vs Standards

Main Fire Safety Principles Based on Approved Document B 2019 including 2022 amendments

Fire Safety Consideration	Standard Applied	Basic Description of Standard Requirements	Basic Description of Design
Occupancy Numbers	ADB 2019 including 2022 amendments	Floor space factor 8.0 m^2 / person	Rooms designed to accommodate this floor space factor
Management	BS 9991:2015 Fire safety in the design, management, and use of residential buildings. Code of practice		TBC.
Evacuation Approach	ADB 2019 including 2022 amendments	Defend in place 'stay put' strategy	Defend in place 'stay put' strategy to be implemented in accordance with the guidance
Fire Detection and Alarm System	BS 5839-6	Minimum Grade D2 Category LD3 standard	Grade D2 Category LD3 (or better) within the apartments No communal alarm system within the common stair core. Detection to be provided within the communal stair core to activate ventilation to top of stair.

Automatic Fire Suppression	BS 9251:2021 & ADB 2019 including 2022 amendments	Residential sprinkler system required.	Category 2 Sprinkler system to be installed in accordance with BS 9251:2021
Smoke Control Requirements	ADB 2019 including 2022 amendments	In some buildings, detectors in common parts of the building may need to operate smoke control or other fire protection systems but do not usually sound an audible warning.	Common corridors connected to stairs to be provided with ventilation in accordance with 3.5 - 3.54 of ADB. Smoke vents on the storey where the fire is initiated and the vent at the head of the stair to be activated by smoke detectors in the common parts, in accordance with Section 3 of ADB.
Secondary Power Supplies			TBC.
Travel Distances	ADB 2019 including 2022 amendments	Provide a protected entrance hall (minimum REI 30) serving all habitable rooms Plan the flat so that both of the following apply. The travel distance from the flat entrance door to any point in any habitable room is a maximum of 9 metres. Cooking facilities are remote from the main entrance door and do not impede the escape route from anywhere in the flat. Provide an alternative exit from the flat	<7.5m from flat entrance doors to stair <9m within protected hallway in apartments from furthest room door to front flat entrance door
Vertical Escape	ADB 2019 including 2022 amendments	Minimum for less than 60 people is 750mm width	Stair will be sized appropriately; stairs will exceed requirement

Disabled Occupants	ADB 2019 including 2022 amendments	Final exits should not present a barrier for disabled people. Where the route to a final exit does include stairs, a level threshold and, where necessary, a ramp should be provided.	Disabled occupants are assumed to be on ground floor in accessible units
Internal Fire Spread - Linings	ADB 2019 including 2022 amendments	Rooms (including garages) C-s3, d2 Other circulation spaces (including the communal areas of blocks of flats) B-s3, d2	Internal walls will meet the requirement and have 30-minutes' fire resistance
Structural Fire Resistance	ADB 2019 including 2022 amendments	Any structural element should have a minimum of 60 minutes' fire resistance	All structural fire resistance will have a resistance period of 60 minutes
Compartmentation	ADB 2019 including 2022 amendments	Residential block of flats, with height of top floor above ground in a building or separated part of building up to 11 metres will be 60 minutes	All compartments will have a fire resistance period of 60 minutes
Fire Doors	ADB 2019 including 2022 amendments	If it separates a flat from a space in common use - E 30 S_a Enclosing a protected shaft forming a stairway wholly or partly above the adjoining ground in a building used for flats, other residential, assembly and recreation, or office purposes - E 30 S_a Enclosing a protected shaft forming a lift or service shaft - Half the period of fire resistance of the wall in which it is fitted, but 30 minutes minimum	Fire doors (with smoke seals and fire resistance as appropriate) to be located in accordance with Table C1 of Approved Document B 2019 including 2022 amendments.

		Any door that forms part of the enclosure to a protected entrance hall or protected landing in a flat E 20 A protected lobby approach (or protected corridor) to a stairway E 30	
External Fire Spread – External Surfaces	Part B of Schedule 1 to the Building Regulations 2010	The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building. The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building	All external surfaces will have a resistance period of 60 minutes
External Fire Spread - Space Separation	BR 187: 2014	As per calculations which can be found in the RIBA Stage 2 Fire Strategy produced by PartB	Calculations confirm that space separation will meet requirements
Fire Service Access	Part B of Schedule 1 to the Building Regulations 2010	The building shall be designed and constructed so as to provide reasonable facilities to assist fire fighters in the protection of life. Reasonable provision shall be made within the site of the building to enable fire appliances to gain access to the building.	100% of building perimeter accessible by foot / fire-fighting hose. No firefighting shaft provided Vehicle perimeter access to +60% of building from public roads and the building carpark
Fire Hydrants	ADB 2019 including 2022 amendments		TBC.

			Awaiting info from London water office