

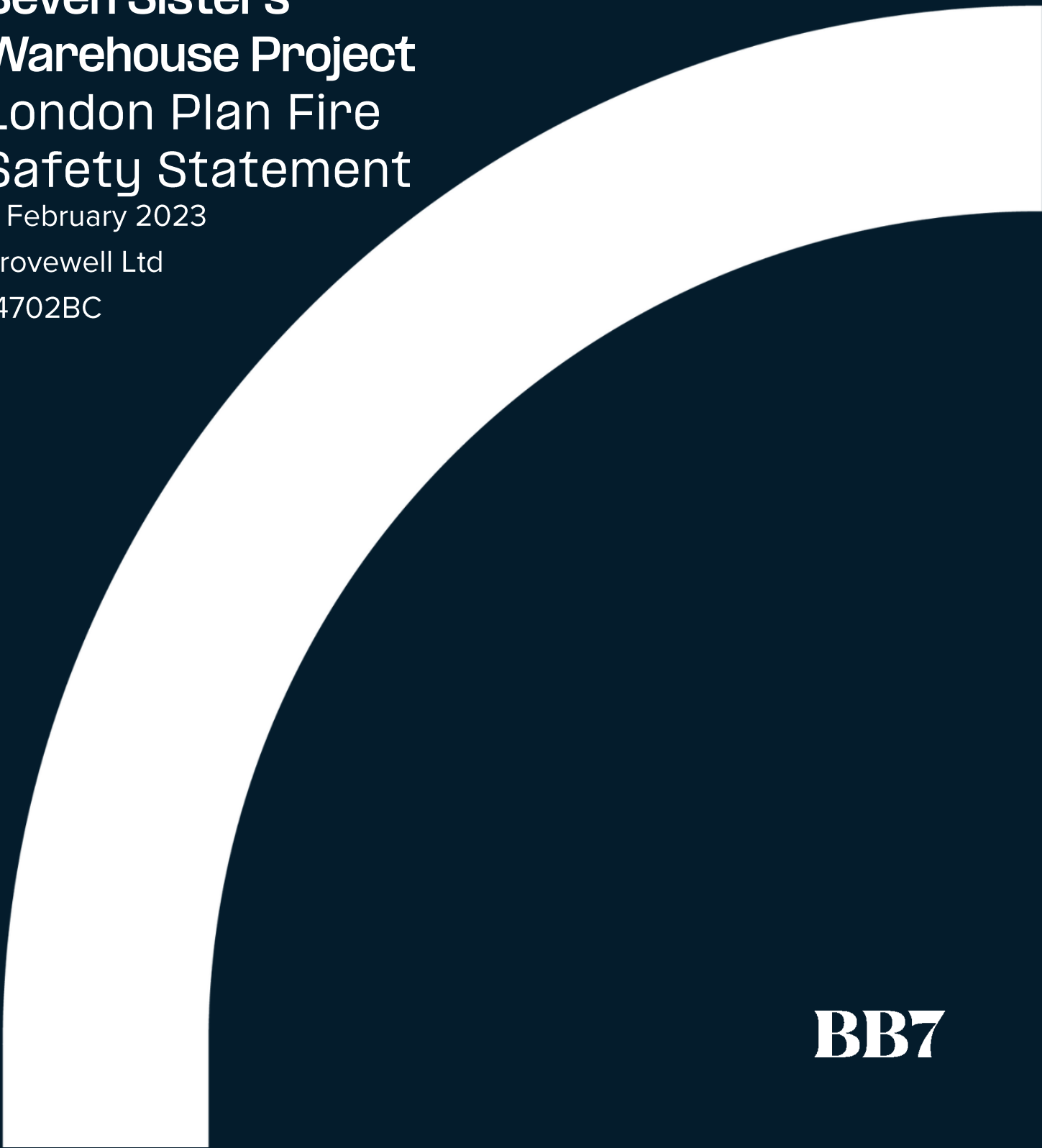


Seven Sisters Warehouse Project London Plan Fire Safety Statement

3 February 2023

Provewell Ltd

14702BC



BB7

Revision History

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1. Introduction

1.1 Limitations

The London Plan 2021 [1] requires that the design and construction of specific building types achieve the highest fire safety standards, considered at an early stage of the project development. This report aims to provide the Planning Fire Safety Statement for the Seven Sisters development and informs the design team of the recommended measures to support a planning application. Whilst fire safety measures introduced are primarily for life safety, they will also have a beneficial effect on reducing potential fire losses and the extent of any consequential damage. It cannot be guaranteed, however, that a fire will not start on the premises. Given this, the opinion of the nominated insurance company and any other interested stakeholders should be sought.

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Systems and measures described establishing a principle on which reliance may be placed by other parts of the fire strategy. This is done on the assumption that all work will be done using appropriate materials and in a workmanlike manner, as per Building Regulations 2010 [2].

Whilst this document details the fundamental strategy for a safe building, there is an ongoing management obligation to ensure that the active and passive fire protection facilities are correctly maintained and that there are appropriate management procedures in place to facilitate a safe evacuation in the event of a fire. This is a fundamental life safety requirement and is enforceable under the Regulatory Reform (Fire Safety) Order 2005 [3].

1.2 The objective of this fire statement

The objective of this Fire Statement is to summarise the fire strategy proposals for the planning application.

Policy D12 of the London Plan states that:

- A. In the interests of fire safety and to ensure the safety of all building users, all development proposals must achieve the highest standards of fire safety and ensure that they:
 - 1. Identify suitably positioned unobstructed outside space:
 - a. for fire appliances to be positioned on
 - b. appropriate for use as an evacuation assembly point.
 - 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 safety measures.
 - 3. Are constructed in an appropriate way to minimise the risk of fire spread.
 - 4. Provide suitable and convenient means of escape and associated evacuation strategy for all building users.
 - 5. Develop a robust strategy for evacuation which can be periodically updated and published, and all building users can have confidence in.
 - 6. Provide suitable access and equipment for firefighting that is appropriate for the size and use of the development.

- B. All major development proposals should be submitted with a Fire Statement, an independent fire strategy, produced by a third party suitably qualified assessor.

The statement should detail how the development proposal will function in terms of:

1. The building's construction: methods, products and materials used, including manufacturers' details.
2. The means of escape for all building users: suitably designed stair cores, escape for building users who are disabled or require level access, and associated evacuation strategy approach.
3. Features that reduce the risk to life include fire alarm systems, passive and active fire safety measures, and associated management and maintenance plans.
4. Access for fire service personnel and equipment: how this will be achieved in an evacuation situation, water supplies, provision and positioning of the equipment, firefighting lifts, stairs and lobbies, fire suppression and smoke ventilation systems proposed, and the ongoing maintenance and monitoring of these.
5. How provisions will be made within the curtilage of the site to enable fire appliances to gain access to the building.
6. Ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures.

Policy D5: Inclusive design requires the development to incorporate safe and dignified emergency evacuation for all building users, which is as independent as possible. In all developments where lifts are installed, Policy D5: Inclusive design requires at least one lift per core to be suitable as an evacuation lift for people who require level access from the building.

1.3 Guidance

This fire statement has been based on the recommendations set out in Approved Document B, Volume 2 2019 incorporating amendments of 2020+2022 (AD B) [4].

Responsibility for deciding if the planning requirements have been met rests with the planning authority. A major development is defined by reference to part 1 of the Town and Country Planning Order 2015 as having ten or more dwellings or occupying an area of 0.5 ha or more. For non-residential sites the definition is based on a minimum area of 1,000 m² (1 ha).

The proposed Seven Sisters Warehouse development will be classified as a major development as there will be more than ten dwellings.

2. Building Description

This development consists of two multistorey buildings (referred to as ‘Block A’ and ‘Block B’) which are connected by a walkway on every floor above, and including, the first floor until Block B’s highest storey. The plan for the ground floor of both blocks is shown in Figure 2.1. In addition to the accommodation, both blocks have internal commercial areas. There are also external commercial units at lower levels.



Figure 2.1 Ground floor layout of both blocks.

2.1 Overview

This project consists of constructing two blocks that will be primarily used for ‘warehouse living’ residential style accommodation. This type of living is typically close quarters, communal and community based. BB7 advise that the dwellings are best characterised as Houses in Multiple Occupation (HMO). In addition to the accommodation, both blocks have internal commercial areas. There are also external commercial units at lower levels.

Altogether, there are 101 bedrooms on the proposed site. Both blocks are classified as Residential: other (2b), which is similar to student residential units. Despite this development featuring two blocks of clusters, the way in which the occupants are expected to use them (warehouse living) aligns with this purpose group more closely than a standard block of residential flats. Table 2.1 details an overview of each block.

Table 2.1 Overview of each block

Items	Block A	Block B
Number of clusters	10	3
Number of storeys	8 (ground + 7) 2 lower ground levels	4 (ground + 3)
Number of bedrooms	83	18
Number of escape stairs	2	1 (2 nd means of escape via a link bridge to Block A)

2.2 Building Height

When measured from ground finished floor level, Block A and Block B have a topmost finished floor heights of 25.825 m and 11.35 m respectively, see Figure 2.2.

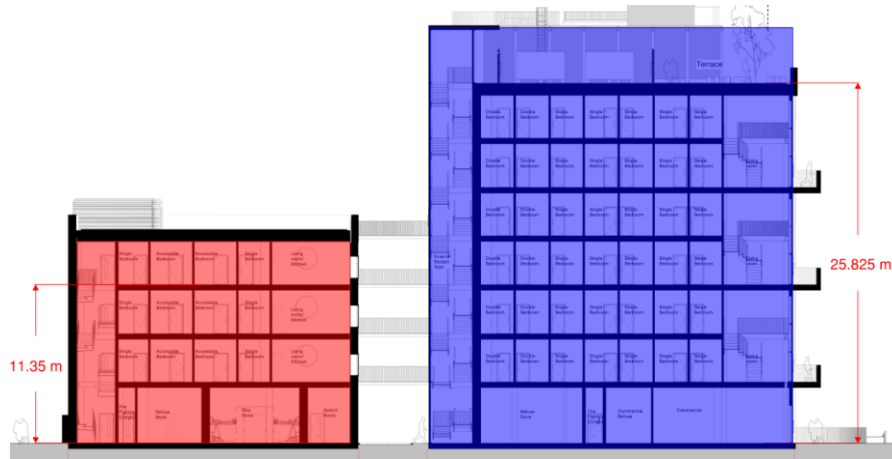


Figure 2.2 Building heights from Eade road

2.3 Vertical Circulation

Each block has at least one escape stair, these have been highlighted, in green, in the following figures. Block A (the taller building) has two escape stairs.



Figure 2.3 Stair location (Block A)



Figure 2.4 Stair location (Block B)

3. Building Construction Methods

3.1 Test standards

Fire resisting elements selected should meet the performance standards recommended by the relevant part of BS EN 1363, BS EN 1364, BS EN 1365 or BS EN 1366.

3.2 Elements of structure

Based on the height of the buildings, periods of fire resistance will be provided, and the requirements have been outlined below:

Table 3.1 Structural Fire Resistance

Building	Structural Fire Resistance
Block A	90 minutes
Block B	60 minutes

3.3 Applications to elements of structure

Elements of structure that are subject to protection, as mentioned in Section 3.2, include:

- Beams.
- Columns.
- Floors (whether compartment floors or not).
- Compartment walls.
- Loadbearing walls (from both sides).
- An external wall structure supporting fire-resisting elements for the prevention of external fire spread.

Structural elements that are self-supporting or only provide support for a roof need not have any applied fire protection unless any of the following apply:

- a. They also perform the function of a floor
- b. They support life safety plant equipment
- c. They are essential for the stability of an external wall requiring fire-resisting construction.

Where the stability of one element relies on the stability of another element with a lesser fire-resisting period, the higher of the two periods will be applied to both elements.

3.4 Compartmentation

Passive fire safety measures in terms of compartmentation will be provided throughout the development. A summary of the compartmentation requirements is provided in Table 3.2.

The fire resistance will be provided in accordance with BS EN 13501-2:2016 [5]. Where walls and floors are provided for fire compartmentation and act as elements of structure, the higher fire rating takes precedent.

Table 3.2 Compartmentation

Area	Block A	Block B	Comments	Fire doors
Compartment floors	REI 90	REI 60	From underside	Same as floor in which it is fitted.
General compartment walls	REI 90	REI 60	Each side separately	Same as for the wall in which it is fitted.
Firefighting shaft	REI 120 (REI 60 within the shaft)	N/A	From remote side of shaft	E 60 S _a (E 30 S _a within the shaft)
Walls separating clusters from adjacent areas (e.g., kitchens) of the same building.	REI 60	REI 60	Each side separately	E 30 S _a
Risers/ Protected Shafts	REI 90	REI 60	Each side separately	Half the period of fire resistance of the wall in which it is fitted, but 30 minutes minimum and with suffix S _a
Bin stores, post rooms, plant rooms, cycle stores, other ancillary rooms	REI 60 (120 REI for life safety plant)	REI 60 (120 REI for life safety plant)	Each side separately	Same as for the wall in which it is fitted.
Protected lobbies/ corridors	REI 30	REI 30	Each side separately	E 30 S _a
Encloses place of special fire hazard	REI 90	REI 60	Each side separately	Same as for the wall in which it is fitted.

3.4.2 Fire Curtain

Block A has communal areas that spread across two storeys at various levels. A fire curtain / shutter is proposed to separate these areas in the event of a fire, as the communal area staircase penetrates through a compartment floor.

The proposed location of the fire curtain / shutter is shown in Figure 3.1. This fire curtain should be employed upon the triggering of the alarm. The details of this will be developed at the next stage of design when the management plan has been further developed. A fire shutter should also be positioned between the reception area and the firefighting shaft in Block A, to maintain the compartmentation.

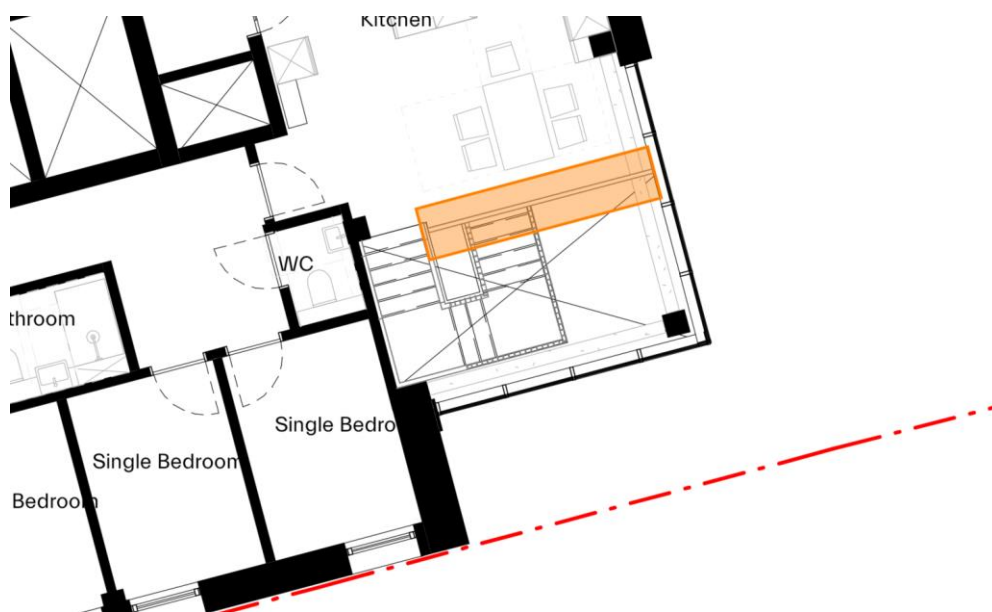


Figure 3.1 Location of fire curtain / shutter, highlighted in orange.

3.5 Linings

The surface linings of walls and ceilings should meet the classifications in Table 3.3.

Table 3.3 Classification of linings

Location	Classification in accordance with BS EN 13501-1: 2018
Small rooms of maximum internal floor area: a. 4 m ² in residential accommodation b. 30 m ² in non-residential accommodation	D-s3, d2
Other rooms (including garages)	C-s3, d2
Other circulation spaces	B-s3, d2 ⁽¹⁾

Source: Table 6.1 of AD B [4]

(1) Wallcoverings which conform to BS EN 15102: 2019 [6], achieving at least class C-s3, d2 and bonded to a class A2-s3, d2 substrate, will also be acceptable.

3.6 Construction of External Walls

Block A is a relevant building. Hence, all materials within the external wall including any specified attachments must achieve a classification of Class A2-s1, d0 or better, as per Regulation 7(2).

Whilst Block B is not a relevant building, BB7 recommend that it is designed to achieve the requirements of Regulation 7(2); whereby all materials within the external wall including any specified attachments achieve Class A2-s1,d0 or better.

There are permitted exemptions, as per Regulation 7(3).

3.7 Construction of roof coverings

The roofs should be designed to achieve B_{ROOF} (t4) in accordance with BS EN 13501-5: 2016 [7].

3.8 Boundary Distance

The unprotected openings and fire-resistance rating of exterior walls depends on the distance of the wall to the boundary and on the items enclosed by the wall. Additionally, there are stricter regulations for walls less than 1 m from the site boundary, compared to those more than 1 m away. The only allowable unprotected openings are shown below, see Figure 3.2.

An analysis of the unprotected areas of this site is currently beyond the scope of this report but will be outlined in the detailed fire strategy report.

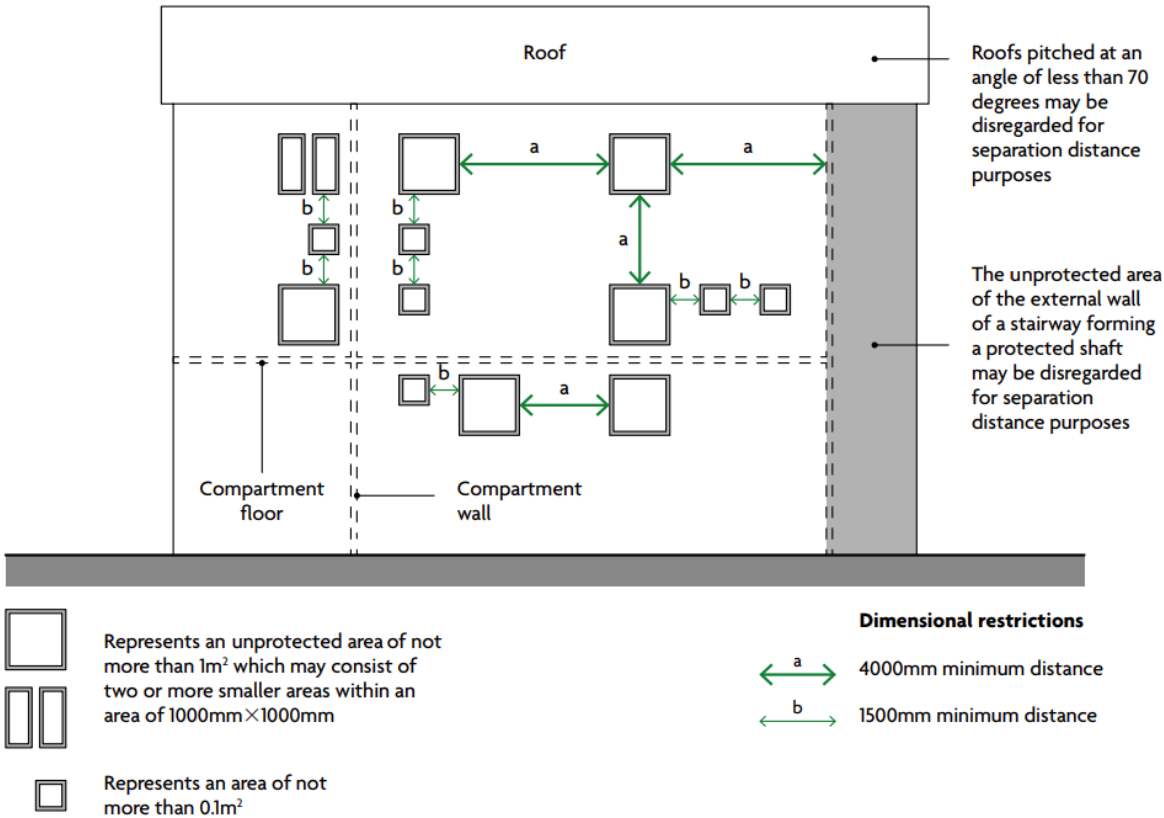


Figure 3.2 The exclusions from the unprotected area calculations.

Source: Diagram 13.5 of AD B

4. Means of Escape

4.1 Evacuation strategy

Both buildings will adopt a 'simultaneous' evacuation strategy. All occupants evacuate the entire building upon alarm. For example, if a fire started in Block B; Block A should also fully evacuate.

4.2 Assembly Points

Evacuation assembly points are required (D12 A1b of the London Plan [1]) and should be confirmed as soon as possible. Assembly points should be sufficiently far from the premises to minimize interference with the Fire and Rescue Service or danger from falling debris but should be accessible and not so far away as to discourage people from assembling. The final locations of the assembly points will be determined by building management; however, BB7 suggest the following locations:

- Across the street from the main building (Eade Road level)
- Located away from the building and the route used by the Fire and Rescue Service (Tewkesbury Road level)

4.3 Travel Distances

The maximum travel distances are outlined in Table 4.1. Appendix 1 (A 1) shows the measured direct distances, which are used to compute the travel distances.

Table 4.1 Limitations on travel distance (actual)

Use of premises	One direction only (m)	More than one direction (m)
In bedrooms ⁽¹⁾	9	18
In bedroom corridors	9	35
Elsewhere	18	35
Plant room (within room)	9	35
Escape route in open air	60	100
Substation/switch room/ bin store	9	18
Commercial units	18	45

Source: Table 2.1 of AD B [4]

(1) Maximum part of travel distance within the room. This limit applies within the bedroom and any associated dressing room, bathroom or sitting room, etc. The distance is measured to the door to the protected corridor that serves the room or suite. Travel distance in the bedroom corridor applies from that point along the bedroom corridor to a storey exit.

(2) If the internal layout of partitions, fittings, etc. is not known, direct distances, rather than travel distances, should be assessed. The direct distance should be assumed to be two-thirds of the actual travel distance.

4.4 Escape from the bedrooms

There is a mixture of bedroom types throughout the development, comprising of accessible rooms, double rooms and single rooms. However, all the bedrooms throughout both blocks are single storey. These bedrooms are then arranged in clusters, which share common amenities such as a kitchen and a bathroom.

It is noted that a raised bed is typical of 'warehouse living' and is expected throughout this building. However, the design of these will remain unknown until the fitout stage and are therefore not considered in this report. The fitout, and any implications on travel distances and escape, should be considered upon install.

4.5 Vertical Circulation

Block A has a dedicated fire-fighting stair as well as a secondary external escape stair. Block B has an internal stair, with access to Block A’s escape stairs via a bridge link. The escape stairs are shown in Figure 4.1 and Figure 4.2.



Figure 4.1 Stair locations (Block A)

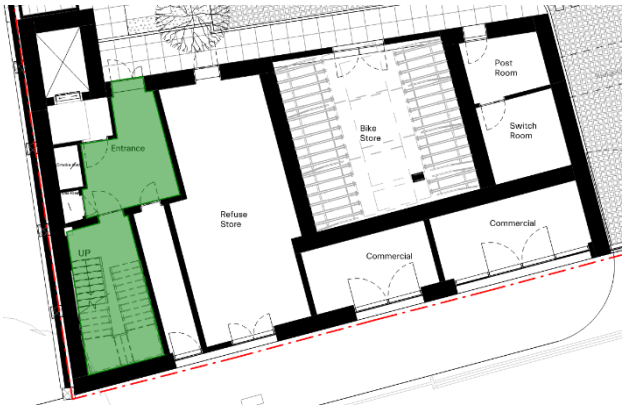


Figure 4.2 Stair location (Block B)

4.6 Stair Widths

The minimum stairs widths are shown in Table 4.2. The final exits from these stairs should not narrow and should be at least the same minimum width as the respective stair.

Table 4.2 Stair Widths

Stair	Minimum Width
Block A (Internal) – Firefighting Stair	1,100 mm
Block A (External)	1,000 mm
Block B	1,000 mm

4.7 Escape from common areas

4.7.1 Block A

4.7.1.1 Ground floor

There is one proposed cluster at the ground level of Block A. This cluster has its own independent entrance, as well as a route through the reception area. Both exits routes are remote from each other.

4.7.1.2 Other Floors

The clusters are accessed through a common stair or lift. Escape is via either the internal stair, external stair or the evacuation lift.

4.7.1.3 Block B

Block B has its own internal escape stair and evacuation lift. Furthermore, occupants from Block B can also access the escape stairs in Block A via a link bridge.

4.8 External Stairs

As detailed above, Block A has a secondary external escape stair which will be covered by a mesh screening but will be open to the elements. AD B permits external egress stairs where there is more than one escape route available. Any external escape stair should meet all of the following conditions:

- Doors to the stair should be fire resisting (minimum E 30) and be fitted with a self-closing device, except for a single exit door from the building to the top landing of a downward leading external stair, provided it is the only door onto the landing.
- Fire resisting construction (minimum RE 30) is required for the building envelope within the following zones, measured from the flights and landings of the external stair.
 - 1,800 mm above and horizontally.
 - 9 m vertically below.
 - 1,100 mm above the top landing of the stair (except where the stair leads from basement to ground level).
- Fire resisting construction (minimum RE 30) should be provided for any part of the building (including doors) within 1800mm of the escape route from the foot of the stair to a place of safety. This does not apply if there are alternative escape routes from the foot of the external escape stair.
- Stairs more than 6m in height should be protected from adverse weather. Protection should prevent the build-up of snow or ice but does not require full enclosure.

Further details can be found in Diagram 3.4 of AD B.

4.9 Door Widths

Based on bed numbers, no more than 60 people will need to exit each storey at any time. Therefore, all doors except the final exits, will have a minimum width requirement of 750 mm. These minimum requirements may be superseded by other requirements, for example, those linked to accessibility.

4.10 Escape from ancillary accommodation

4.10.1 Internal

The internal ancillary accommodation on this site includes the bike store and the refuse stores. These specific areas will have sufficient means of escape as both areas are accessed externally. Both commercial areas, in each block, are also accessed externally.

4.10.2 Roof

The lower roof is split into terrace and plant areas.

The upper roof will have an array of photovoltaic panels installed. The access for this is provided by a ladder from the lower roof level. The maximum travel distance on this level is c. 28 m; and is therefore within the 60 m limit for an open-air escape route.

4.10.3 Tewkesbury level

The external ancillary accommodation at the Tewkesbury level is split into commercial units, a substation, a switch room and a bin store.

The external escape route should comply with Sections 2.30-2.32 of AD B and the stair should follow Sections 3.31-3.33 of AD B.

4.11 Escape Lighting

All escape routes should have adequate artificial lighting. If the mains electricity power supply fails, escape lighting should illuminate the routes. Escape stair lighting should be on a separate circuit from the electricity supply to any other part of the escape route.

Escape lighting should conform to BS 5266-1: 2016 [8].

4.12 Escape Signage

Every doorway or other exit providing access to a means of escape, other than exits in ordinary use (e.g., main entrances), should be distinctively and conspicuously marked by an exit sign in accordance with BS ISO 3864-1:2011 [9] and BS 5499-4:2013 [10].

4.13 Disabled evacuation

The high level of compartmentation in this development should allow disabled occupants to reach a place of safety, where they may have to wait before evacuating. It is the responsibility of the premises management to assess the needs of all potential evacuees when formulating safe evacuation plans.

To comply with policies D5(B5) of the London Plan 2021, a safe and dignified emergency evacuation for all building users should be incorporated. In the interests of fire safety and to ensure the safety of all building users, the highest standards of fire safety will be provided.

An evacuation lift will be provided for each block. In accordance with Policy D5 of the London Plan, where lifts are installed, at least one lift per core should be a suitably sized fire evacuation lift to evacuate people who require level access from the building. These evacuation lifts should be accessed via a ventilated lobby, and the ventilated lobby should not give direct access to any clusters or ancillary accommodation. As drawn, this requirement will be adhered to, as shown in Figure 4.3 and Figure 4.4 (highlighted in green). The lower ground areas require disabled occupants to use the lift to the lowest of the sub-ground floors as the exit on the higher floor goes out onto stairs. The escape route for disabled occupants should be clearly marked.

The refuge areas within this development should be of sufficient size to accommodate a wheelchair and to allow the user to manoeuvre into the wheelchair space, without undue difficulty. The space provided for a wheelchair in a refuge area should not be less than 900 mm x 1400 mm with access doors being at least 850 mm wide.

Manual call points should be provided to the refuge areas to alert management of people waiting in the refuges. These call points should also be in accordance with BS EN 54-11:2001+A1:2006 [11].

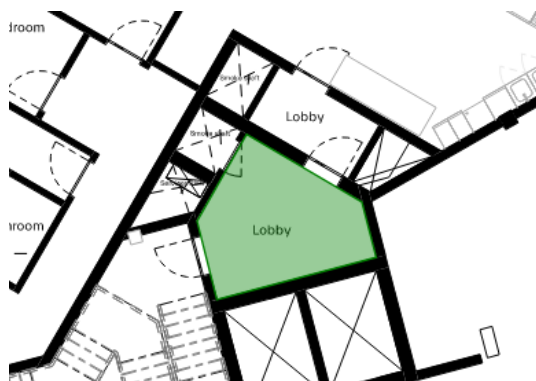


Figure 4.3 Block A evacuation lift lobby



Figure 4.4 Block B evacuation lift lobby

4.13.1 Evacuation Lifts

Both blocks will be provided with an evacuation lift. In addition, a disabled refuge area will be provided to both blocks. These areas will act as a place of relative safety while they wait for the lift to evacuate.

4.13.2 General recommendations

A management policy should be implemented which addresses the evacuation of the development. This will need to be developed with the client during later stages of the project. Those responsible for evacuation planning need to consider a flexible plan depending on the need for evacuation, different possible scenarios and for the actual conditions as the evacuation progresses.

Personal Emergency Egress Plans (PEEPs) can be compiled, performed, reviewed and should be carried out prior to occupation. These may necessitate changes to manage different situations, such as the planned sequence of evacuation. In addition to the management policy, all residents will receive an information pack which will explain the evacuation from their apartment and building, which can be in multiple languages for the end user.

The Fire and Rescue Service may take management of the evacuation on their arrival, but this should not be assumed; the evacuation of the building is the responsibility of the building management. The person responsible for the evacuation will need to pass information to the Fire and Rescue Services.

5. Fire Safety Systems

5.1 Automatic fire detection and alarm systems

Due to the unique nature of the dwellings, a Category L1 system is to be installed throughout this development, as per BS 5839-1: 2017 [12].

The fire curtains (see Section 3.4.2) should be triggered upon local detection.

5.2 Automatic water fire suppression systems

Both Block A and B (including any lower floors) will be protected by an automatic suppression system. It is recommended that a Category 4 sprinkler suppressions system should be designed and installed in accordance with BS 9251: 2021 [13]. The sprinkler system will be extended to all ancillary areas within and below Block A and Block B.

As per BS 9251: 2021, where the area of the compartment exceeds 100 m², BS EN 12845:2019 [14] will need to be applied in full. The commercial unit in Block A exceeds the 100 m² limit; therefore, will need to be protected with a sprinkler system to BS EN 12845:2019. Alternatively, the unit could be sub-divided into smaller units, where each individual unit is less than 100 m².

It is proposed that the Tewkesbury Yard commercial units (stand-alone units, not part of the residential Block A or Block B) will not be provided with a suppression system.

5.3 Smoke management

Both blocks will be provided with a ventilated lobby, as well as an AOV at the head of the stair.

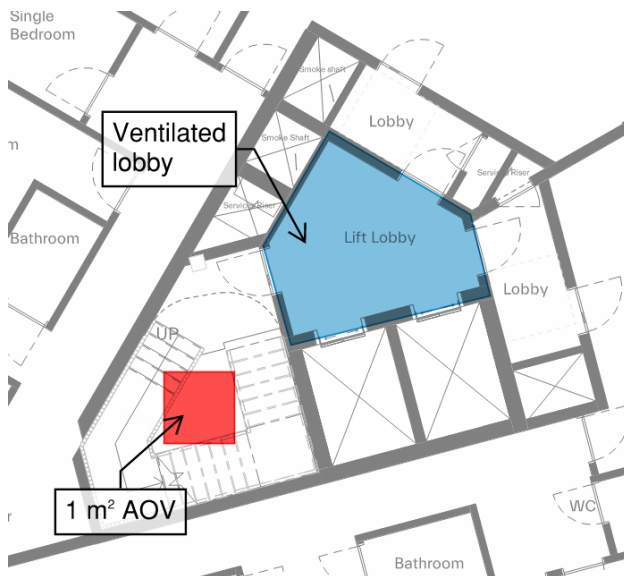


Figure 5.1 Ventilated Lobby (Block A)

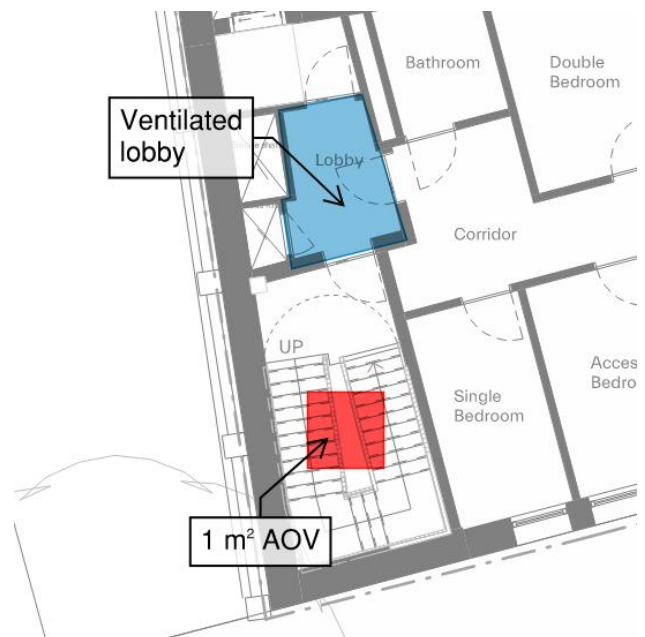


Figure 5.2 Ventilated Lobby (Block B)

6. Fire Service Access and Facilities

6.1 Vehicle access

The fire service will access the site via the surrounding road network, which should meet the requirements outlined in Table 6.1 below. The Fire Service vehicles should not have to reverse more than 20 m from the end of an access road.

Table 6.1 Fire and rescue access route specifications

Appliance	Minimum road width between kerbs (m)	Minimum gateway width (m)	Minimum turning circle between kerbs (m)	Minimum turning circle between walls (m)	Minimum clearance height (m)	Minimum carrying capacity (tonnes)
High Reach	3.7	3.1	26.0	29.0	4.0	17.0

Source: Table 15.2 of AD B [4].

6.2 Personnel access

Following discussions with the Approved Inspector, Fire Service access has been provided directly from the main road. This has been achieved by implementing a firefighting corridor (protected to 120 minutes REI), which leads from the fire appliance parking position on the main road to the protected zone for each block, see Figure 6.1 and Figure 6.2.

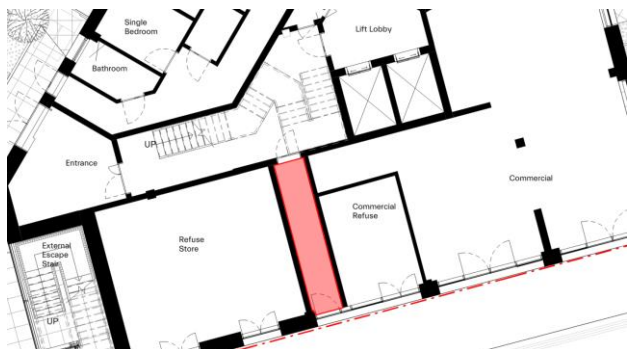


Figure 6.1 The firefighting corridor in Block A, highlighted in red.



Figure 6.2 The firefighting corridor in Block B, highlighted in red.

6.3 Information for the Fire Service

A secure information box provides a secure facility to store information about a building for use by the Fire Service during an incident.

Whilst only blocks of flats (purpose group 1(a)) with a top storey more than 11 m above ground level should be provided with a secure information box; BB7 recommend that the development is provided with a secure information box owing to the unconventional layout of the blocks.

Furthermore, BB7 recommend that wayfinding signage (as per AD B, vol 1) is provided to assist the Fire Service to identify each floor and provide information relating to which clusters are accessed on each storey.

6.4 Firefighting systems

6.4.1 Shafts

Block A has a storey above 18 m; therefore, a firefighting shaft has been provided. This is shown in Figure 6.3.

The firefighting shaft will include:

- 1,100 mm wide firefighting stair, with a 1.0 m² AOV at the head;
- A firefighting lift in accordance with BS EN 81-72:2020 [15] and BS EN 81-20:2020 [16]
- A ventilated firefighting lobby; assumed to be a mechanical smoke ventilation system which should demonstrate equivalent or better conditions in the lobby and stairs than would be provided by a natural shaft and as described in BRE Project Report 79204 [17].
- A dry fire main located within the firefighting lobby in accordance with BS 9990: 2015 [18].

Furthermore, as the firefighting shafts leads into a place of higher fire risk (the kitchen), an additional lobby has been provided to establish an additional level of separation and protection for the fire service.

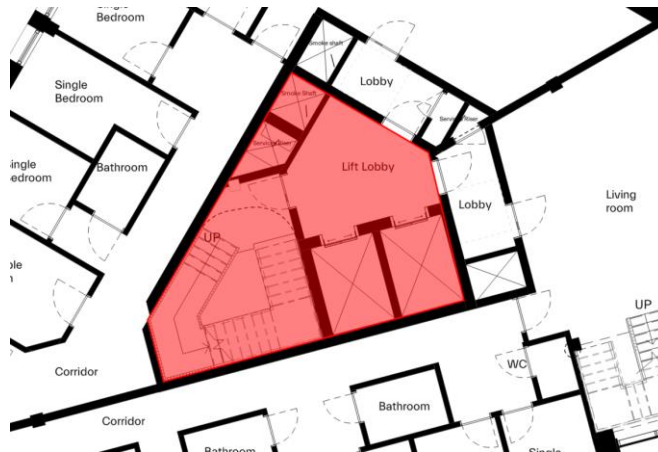


Figure 6.3 The firefighting shaft, highlighted in red.

6.4.2 Hydrants

Hydrants should be provided within 90 m of the dry riser inlets. Each hydrant should be clearly indicated by a plate and in accordance with BS 3251: 1976 [19].

As the development is located in a populated area of London, it is expected that the existing hydrant provisions are sufficient. This should be confirmed by the architect.

6.4.3 Dry Fire Main

Both Block A (firefighting shaft) and Block B will be provided with a dry fire main.

Inlets will be adjacent to the Fire Service access positions to the buildings, and within 18 m of the appliance parking position.

6.4.4 Hose Coverage

For sprinkler protected buildings, hose coverage can be a maximum of 60 m from the fire main outlet. This is achieved in both Block A and Block B. Figure 7.9, Figure 7.10 and Figure 7.11, all in Appendix 2 (A 2) all show indicative plans for how the Fire Service could access the site. The hose distances that were used to create the green areas, are also detailed in Appendix 2 (A 2).

7. Conclusion

This development can meet the relevant policies of the London Plan subject to the measures outlined in this report being incorporated into the design, and subject to formal approval from Building Control.

The fire strategy for the proposed building will need to be developed further as the building design progresses. Any significant future modifications to the building design will require further assessment, as it may adversely affect the original fire strategy.

A 1. Direct distances



Figure 7.1 Maximum dwelling direct distance on the ground floor (Block A)



Figure 7.2 Maximum dwelling direct distance for floors 1 to 7 (Block A)

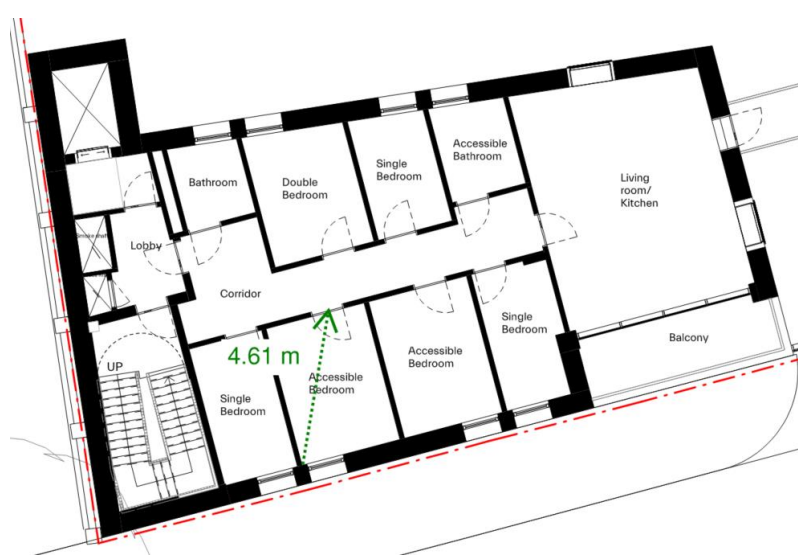


Figure 7.3 Maximum dwelling direct distance for floors 1 to 3 (Block B)

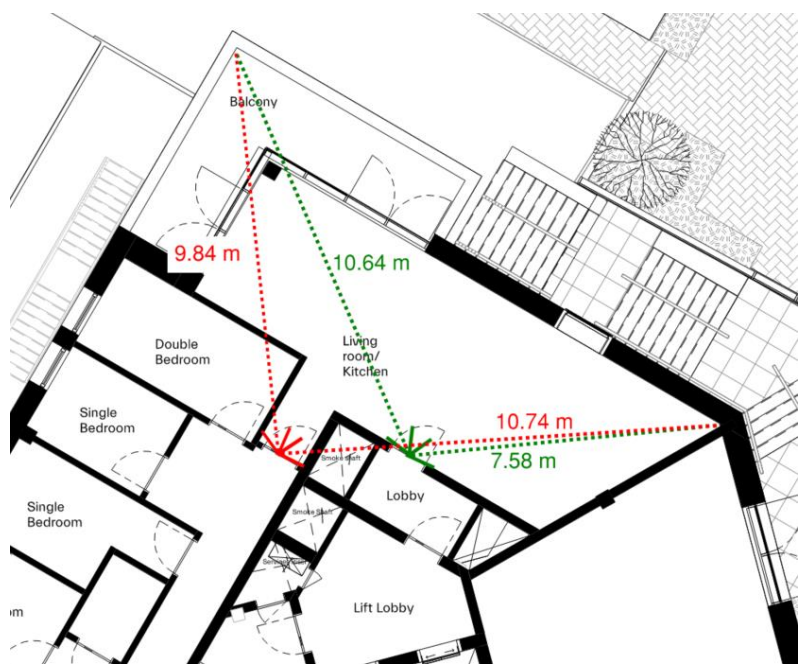


Figure 7.4 Maximum communal area direct distances for ground flat’s communal areas (Block A). Green distances evacuate via the stair and red distances evacuate via the flat entrance.



Figure 7.5 Maximum communal area direct distances for ground flat's corridors (Block A). Green distances evacuate via the stair and red distances evacuate via the flat entrance.



Figure 7.6 Maximum direct distances for general floor of Block A and Block B

A 2. Hose distances and access



Figure 7.7 Hose distances for the Tewkesbury Level



Figure 7.8 Hose distances for the mezzanine at Tewkesbury Level



Figure 7.9 Indicative plans that show Tewkesbury level access



Figure 7.10 Indicative plans that show Tewkesbury mezzanine access



Figure 7.11 Indicative plans that show Eade Road level access

To demonstrate that access and egress is provided to the Tewkesbury Road level for the Fire and Rescue Service, the client has provided some tracking drawings, produced by Velocity, these can be seen in Figure 7.12.



Figure 7.12 Tracking drawings for Tewkesbury Road level

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