

# FIRE STATEMENT



PROJECT NAME:	47a, 47 & 49 Lower Mortlake Road	CLIENT:	Westlake Property Limited
PROJECT No:	FE00998	FAO:	Westlake Property Limited
DATE	February 2022	REVISION	2.0
PREPARED BY	Obo Wanogho BEng (Hons) AIFireE AIFSM Fire engineer	CHECKED BY	James Lee MEng (Hons) CEng MIFireE Director

## 1. INTRODUCTION

CHPK Fire Engineering (CHPKFE) has been appointed by “Westlake Property Limited (“The Applicant”)” to produce a fire statement to the Proposed Development at 47a, 47 & 49 Lower Mortlake Road, Richmond, TW9 2LW (The Site) in London in terms of the London Plan Policy D12 – Fire Safety and D5 Inclusive Design.

The Site is divided into three properties (47a, 47 and 49). Each is separate from each other (in the existing and proposed states) and do not connect with each other on the upper floor levels.

The Proposed Development comprises the construction of a part 1/2/3 storey building (plus lower ground) to provide 14 co-living units (sui generis) and associated internal amenity space at lower ground floor level, with new lower ground level amenity space to neighbouring buildings, and alongside external communal space at ground and lower ground level

In the proposed scheme there is an external connection between buildings 47 and 49 at lower ground and ground floor level via the garden. All properties are served by a single stair with a topmost occupied storey approximately 6.3m above fire access level. There is an accommodation stair that can be accessed from the garden on lower ground floor level that terminates at ground floor level.

The lower ground floors of 47 and 49 consist of shared accommodation space, comprising of a kitchen, multi-use rooms (i.e., gym and yoga), workspace, lounge, washing room and plant room. The lower ground floor of 47a comprises two co-living bedroom units, a kitchen, multi-use rooms (i.e., gym and yoga), workspace, lounge, washing room, plant room and a bin store for recycling only.

Ground floor level and the upper floor levels consist of co-living accommodation with ‘ancillary (including storage)’ accommodation located within the stair lobby.



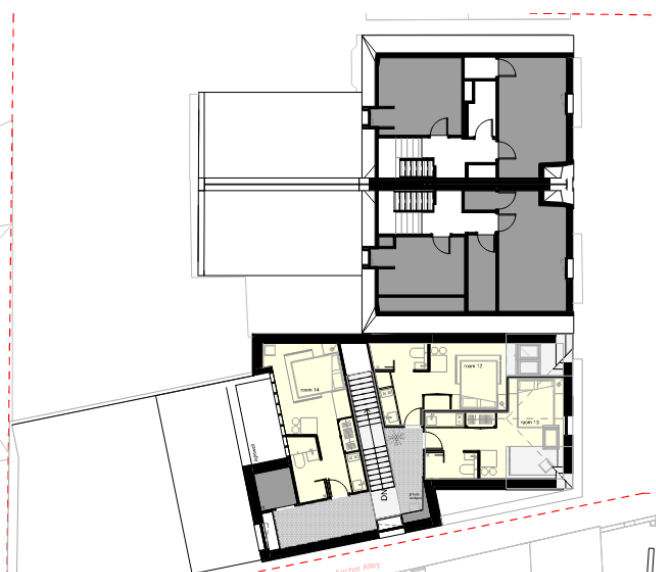
**Lower Ground Floor - Plan**



**Ground Floor - Plan**



**First Floor Plan Layout**



**Second Floor Plan Layout**

Figure 1: Typical Floor plan layout

## 2. FIRE STRATEGY

The fire strategy for this development will be developed as the design progresses and designed in accordance with the recommendations in Approved Document B Volume 1 (ADB), the Local Authorities Coordinators of Regulatory Services (LACORS) guidance on fire safety provisions for certain types of existing housing (2008), and the relevant British Standards. The fire safety design elements are:

**Table 1 Fire strategy summary**

FIRE SAFETY DESIGN ELEMENT	DESCRIPTION
Evacuation philosophy	Means of escape in the buildings 47a, 47 and 49 will be based on simultaneous evacuation strategy
Fire detection and alarm system	The fire detection and warning system (Grade D1 Category LD1) will be installed and designed in accordance with BS 5839 Part 6.
Fire- fighting equipment	Fire blanket to be provided in the shared kitchen on lower ground floor level, multipurpose fire extinguisher to be provided at each landing level

Means of escape	Horizontal and vertical means of escape will comply with Approved Document B Volume 1 and LACORS Fire Safety Guide.
Fire Compartmentation	Fire compartmentation is provided in accordance with Approved Document B Volume 1 and LACORS Fire Safety Guide.
Structural Fire Protection	The height of the buildings are approximately 6.3m, so the loadbearing elements of structure will be required to achieve 60 minutes fire resistance in accordance with Approved Document B Volume 1.

The following two minor variances which have been addressed via alternative technical solutions:

The client has followed the recommendations to include fire-resisting lobbies, but an alternative solution to justify the layout without a lobby would be to do the following:

- Have enhanced detection (A Grade D Category LD1 fire and alarm system is recommended)
- Have an alternative means of escape from the lower ground level (from buildings 47 and 49 , occupants can access the accommodation stair in the garden)
- FD30S doors to all the inner rooms and FD60S doors to all the plant rooms should be provided.

On the lower ground level for buildings 47 and 49 the access rooms are the shared community kitchen. The LACORS fire safety guide does not normally permit access rooms to be places of fire risk. Per Clause 12.4 of the LACORS fire safety guide where it is impracticable to not have an outer room which is not a place of fire risk, the layout can be justified on the basis that:

- There will be enhanced automatic fire detection in the building (Grade D1 Category LD1 fire alarm system is recommended).
- There are alternative means of escape. (For two of the units, there is an alternative means of escape into the accommodation stair which is located in the garden).
- FD30S doors to all the inner rooms and FD60S doors to all the plant rooms should be provided.
- Escape windows to all habitable rooms on ground floor level should be provided (this should comply with Clause 14 of the LACORS Fire Safety guide)

These variances are expected to be agreed as part of the Building Control supervision and sign off process.

### 3. LONDON PLAN POLICY D12 - FIRE SAFETY

The Proposed Development meets the requirements of London Plan Policy D12 – Fire Safety as detailed in Table 2.

**Table 2 London Plan Policy D12**

POLICY D12 REQUIREMENT	PROPOSED DESIGN	COMPLIANT WITH POLICY D12
D12.A.1.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 identify suitably positioned unobstructed outside space for fire appliance to be positioned on.”	The site is served by public road. The proposed vehicle access complies with the requirements set out in guidance to meet the functional requirements of the Building Regulations B5 (Access and Facilities for Fire Service).	Yes
D12.A.1.b – 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 identify suitably positioned unobstructed outside space appropriate for use as an evacuation assembly point.”	The locations of the assembly point will be outlined in the fire risk assessment. Management policies and procedures to be developed by the building operator in accordance with their duties in terms of the Regulatory Reform (Fire Safety) Order 2005.	Yes

POLICY D12 REQUIREMENT	PROPOSED DESIGN	COMPLIANT WITH POLICY D12
D12.A.2 – 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 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 features.	Appropriate fire alarm systems, passive and active fire safety features will be provided to meet the functional requirements of the Building Regulations B1 (Means of Warning and Escape), B2 (Internal Fire Spread – Linings) and B3 (Internal Fire Spread - Structure).	Yes
D12.A.3 – 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 are constructed in an appropriate way to minimise the risk of fire spread.	External fire spread analysis meets BR 187 recommendations and there will not be any external fire spread issues to neighbouring buildings.  Where the external wall within 1 m distance of a relevant boundary on the east elevation, there are no openings (only solid wall construction). Therefore, the external wall surface will meet Building Regulations as set out in the functional requirements of the Building Regulations B4 (External Fire Spread)	Yes
D12.A.4 – 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 provide suitable and convenient means of escape, and associated evacuation strategy for all building users.	The evacuation strategy for each residential unit is based on simultaneous evacuation where in the event of a fire the occupants of the unit/house will be warned to evacuate. There will be no requirement for occupants of adjacent dwellings to evacuate.	Yes
D12.A.5 – 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 develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.	Regulation 38 of the Building Regulations require that fire safety information such as the fire strategy report be brought to the attention of building management and incorporated into the fire risk assessment. This will enable building owner/operator to develop relevant evacuation procedures and related documentation in accordance with their duties in terms of the Regulatory Reform (Fire Safety) Order 2005.	Yes
D12.A.6 – 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 provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.	Facilities for fire service will comply with the requirements set out in guidance to meet the functional requirements of the Building Regulations B5 (Access and Facilities for Fire Service).	Yes
D12.B.1 – All major development proposals should be submitted with a Fire Statement, which is an independent fire strategy, produced by a third party, suitably qualified assessor.	It is expected that the construction of materials used in the building will be:	Yes

POLICY D12 REQUIREMENT	PROPOSED DESIGN	COMPLIANT WITH POLICY D12
<p>The statement should detail how the development proposal will function in terms of the building's construction: methods, products and materials used, including manufacturers' details.</p>	<p>Wall construction:            Brick 102.5mm            Air gap 35mm            'Rockwool' Non-combustible 'duo slab'            150mm            (Metal wall ties)            Blockwork 100mm            Airtight membrane            15mm Plasterboard on metal rails.            Seamed Zinc Metal sheet            Metal deck, galvanised.            Stainless Steel sub structure            'Rockwool' Non-combustible 'duo slab'            150mm            Blockwork 130mm            Airtight membrane            15mm Plasterboard on metal rails.            Windows/ Curtain walling:            Double glazed Powder Coated            Aluminium frames.</p> <p>Flat Roof construction:            Balast/ green roof build up            Single Ply membrane            'Foamglass' Insulation            250mm Concrete slab            2no. 15mm Plasterboard on MF            suspended ceiling</p>	
<p>D11.B.2 – All major development proposals should be submitted with a Fire Statement, which is 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 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.</p>	<p>Means of escape for able and mobility impaired persons will meet the functional requirements of the Building Regulations B1 (Means of warning and escape). The horizontal and vertical means of escape have been designed for simultaneous evacuation strategy in accordance with Approved Document B Volume 1 and the LACORS Fire Safety guide.</p>	Yes
<p>D12.B.3 – All major development proposals should be submitted with a Fire Statement, which is 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 features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans.</p>	<p>Appropriate active and passive fire safety measures to be put in place in accordance with guidance to meet the functional requirements of the Building Regulations B1, B2, B3 and Regulation 38.</p>	Yes
<p>D12.B.4 – All major development proposals should be submitted with a Fire Statement, which is an independent fire strategy, produced by a third party, suitably qualified assessor. The statement should detail how the</p>	<p>The fire strategy report and fire strategy drawings will address these aspects. The documents will meet the functional requirements of the Building</p>	Yes

POLICY D12 REQUIREMENT	PROPOSED DESIGN	COMPLIANT WITH POLICY D12
development proposal will function in terms of access for fire service personnel and equipment: how this will be achieved in an evacuation situation, water supplies, provision and positioning of equipment, firefighting lifts, stairs and lobbies, any fire suppression and smoke ventilation systems proposed, and the ongoing maintenance and monitoring of these	Regulations. The fire safety systems installed will be designed and installed in accordance with relevant British Standards and manufacturer's specification. This package will form part of the information supplied at handover in terms of Regulation 38 of Building Regulations.	
D12.B.5 – All major development proposals should be submitted with a Fire Statement, which is 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 how provision will be made within the curtilage of the site to enable fire appliances to gain access to the building.	The site is served by public road. The proposed vehicle access complies with the requirements set out in guidance to meet the functional requirements of the Building Regulations B5 (Access and Facilities for Fire Service).	Yes
D12.B.6 – All major development proposals should be submitted with a Fire Statement, which is 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 ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures.	Any potential future modifications will need to meet the Building Regulations applicable at that time. A risk register has been produced to outline potential Building Regulation changes.	Yes

#### 4. LONDON PLAN POLICY D5 - INCLUSIVE DESIGN

It should be noted that the policy requirement D5 (Inclusive Design) requires as a minimum at least one lift per core (or more subject to capacity assessments) to be a suitably sized fire evacuation lift. The fire evacuation lift needs to be suitable for people evacuation and allow people who require level access from the building. The fire evacuation lifts should be constructed and designed to include suitable and necessary controls.

#### 5. CONCLUSION

CHPK Fire Engineering (CHPKFE) has been appointed by Westlake Property Limited to produce a fire statement to the Proposed Development at 47a, 47 & 49 Lower Mortlake Road, Richmond, TW9 2LW (The Site) in London in terms of the London Plan Policy D12 – Fire Safety and D5 Inclusive Design.

It should be noted that the policy requirement D5 (Inclusive Design) requires as a minimum at least one lift per core (or more subject to capacity assessments) to be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building. The fire evacuation lifts should be constructed and designed to include suitable and necessary controls. There is no requirement in current Building Regulations to install firefighting/evacuation lifts due to the building being less than 18m in height.

#### 6. REFERENCES

1. The Local Authorities Coordinators of Regulatory Services (LACORS) guidance on fire safety provisions for certain types of existing housing (2008)
2. Building Regulations, Approved Document B – Volume 1, 2019, Fire Safety: Dwellings

3. BS 5839 Part 6: 2019, Fire detection and fire alarm systems for buildings. Code of practice for system design, installation, commissioning and maintenance, BSI
4. BR 187, External fire spread: building separation and boundary distances, 2014, BRE
5. BS 8519, Selection and installation of fire-resistant power and control cable systems for life safety, fire-fighting and other critical applications. Code of practice, 2020, BSI
6. The London Plan, The Spatial Development Strategy for Greater London, Mayor of London, March 2021

## 7. LIMITATIONS

Our advice is strictly limited to the scope of our current brief, i.e. technical note. Complying with the recommendations of this document will not guarantee that a fire will not occur. This document is based on the drawings and supporting information issued to CHPK Fire Engineering by Westlake Property Limited.

CHPK Fire Engineering Ltd have not reviewed any other issues within the project other than those identified in our report. We offer no comment on the adequacy or otherwise of any other aspects of the development (whether related to fire safety or any other issue) and any absence of comment on such issues should not be regarded as any form of approval. The advice should not be used for buildings other than that named in the title.