PLANNING FIRE SAFETY STRATEGY IN LINE WITH LONDON D12A, REV 1.0

Rear Land to 224 St Leonard's Road, East Sheen, SW14 7BN

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Author Credentials

Nadim has a first-class honors MEng in Aerospace Engineering, an international Diploma in Risk Management including having studied at Oxford University (Exploring the Universe) and Imperial College Business School (Business Economics).

Nadim is ex Technical Director of Arcadis and ex Associate Director of Arup (both global engineering design firms) where he headed up the Safety Risk and Human Factors teams. Nadim is dual Chartered through the Institute of Mechanical Engineers (IMechE) and Chartered Institute of Building Service Engineers (CIBSE).

Nadim became a Chartered Engineer in an unprecedented three years and then followed this up by becoming one of IMechE's youngest Fellows. Nadim is a full member of the Institute of Fire Engineers (IFE) and has specialist experience in Safety, Reliability, Fire and Risk having worked in this field for over 15 years. His experience covers a range of industries including rail, nuclear, defence and the built environment. Nadim has established himself as a technical risk leader and has won numerous industry awards (4-won, 8 finalist positions) testifying to this including being nominated for the prestigious, Royal Academy of Engineering (RAE) Silver Medal Prize.

Nadim has served as a Non-Executive Director on 2 separate Risk and Audit boards, written numerous technical publications and has frequently spoken at international conferences including being invited on to expert panels. Nadim currently sits on the Institute of Fire Engineers working group for fires in electric vehicles.

Revisions

Revision	Date	Prepared By	Comments	Signature
1.0	12.05.2024	Nadim Choudhary	Issued for Comment	

This report has been prepared for the sole benefit, use and information of the client named in this report only and the liability of Rockland Safety Services Ltd, its directors, and Employees in respect of the information contained in the report will not extend to any third party.

This report is formulated based on information and experience available at the time of preparation. It is applicable to the above-mentioned project only in accordance with the client's instructions. It is only valid provided no other modifications are made other than those for which a formal opinion has been sought and given by Rockland Safety Services Ltd.

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1. Purpose of Document

Fire Safety Services trading under Rockland Safety Services Ltd have been instructed to develop a Planning Fire Safety Strategy (this document) in line with Policy D12A.

1. Identify suitably positioned unobstructed outside space:
    - For fire appliances to be positioned on
    - Appropriate for use as an evacuation assembly point
2. Be 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.
3. Be 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 which all building users can have confidence in
6. Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

To demonstrate the development proposed has met the highest standards of fire safety, proportionate to the development, the following information has been provided and addressed in line with Policy D12 part A.

The details provided within this document are based at the early planning stage, and the fire safety provisions will need to be revisited at later stages. This should be captured in a full fire safety strategy, which will detail the specific provisions covering B1-B5 of the Building Regulations.

2. Introduction

2.1. Description

1. The property address is rear land to 224 St Leonard's Road, East Sheen, SW14 7BN.
2. The works proposed are for 2 two storey residence with a top floor when measured against the lowest adjoining ground being less than 7.5m. The proposed ground floor is a living/ kitchen area, whilst the other floors are occupied as sleeping spaces.
3. The building will have a ground floor and one additional storey.
4. The building will have a stairway for the habitable areas connecting the ground floor with the first floor.

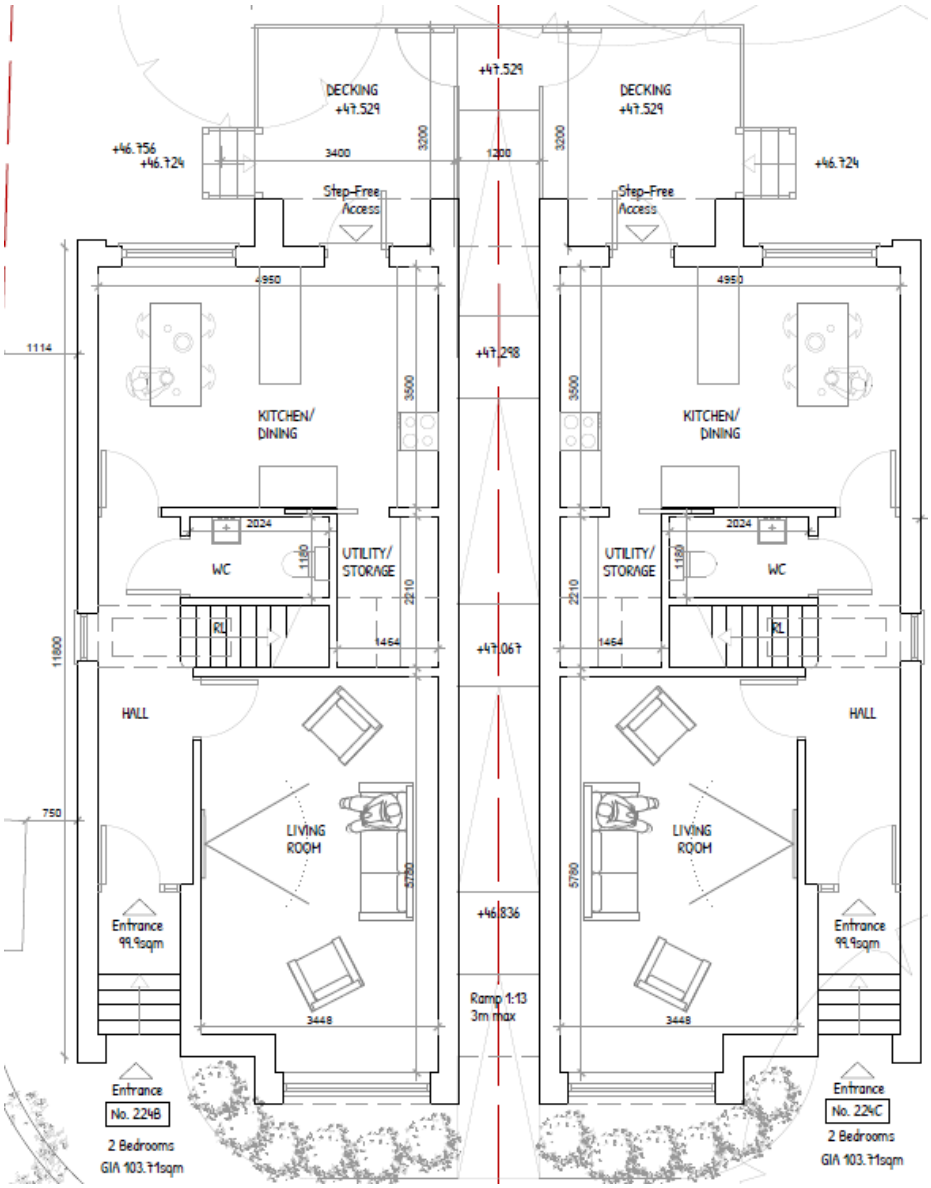


Figure 1 - Proposed Ground Floor Plan

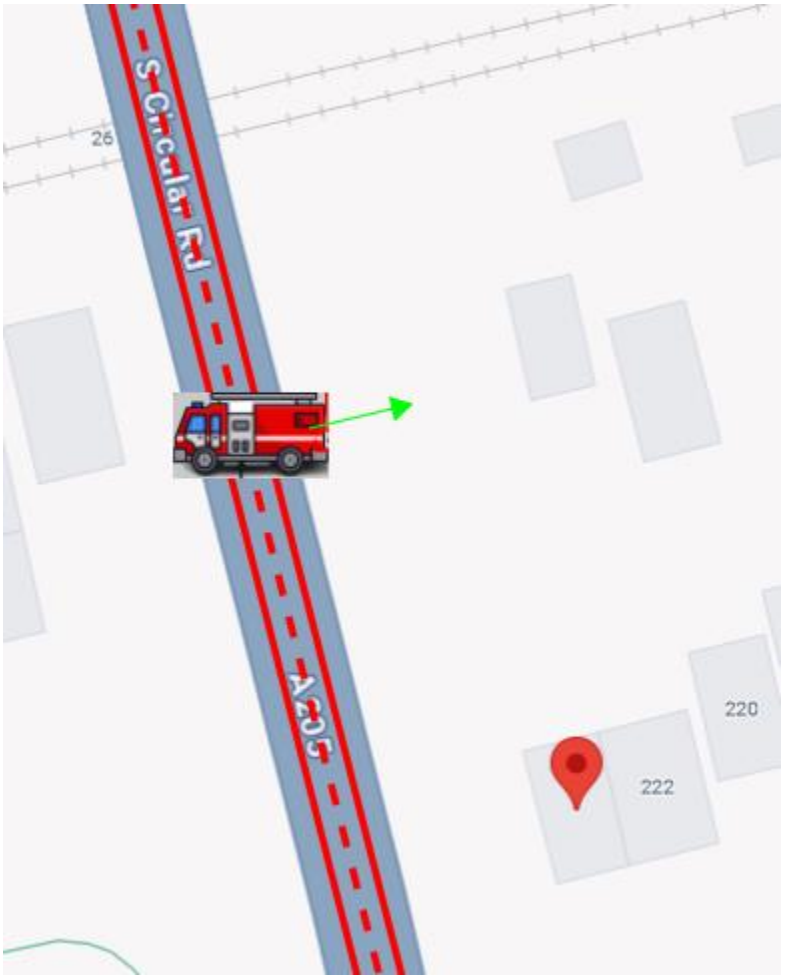
Figure 2 - Proposed First Floor Plan

3. Policy D12A Provisions

3.1. Unobstructed External Space

Identify suitably positioned unobstructed outside space for fire appliances to be positioned on.

The property is located at rear land to 224 St Leonard's Road, East Sheen, SW14 7BN, which is served by existing road Clifford Avenue and as per the figure below, demonstrates that emergency vehicles in the event of a fire can park near the property to fight the fire.



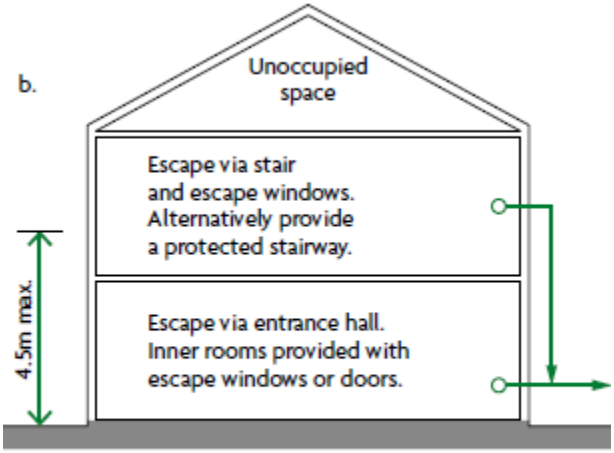
Identify suitably positioned unobstructed outside space appropriate for use as an evacuation assembly point.

There is ample space at the front of the property to act as an evacuation assembly point. This is applicable for both the construction and occupation phases of the project.

3.2. Reduce the Risk to Life

The development is 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.

The last occupied floor (first floor) has a distance from the ground floor less than 4.5m. As a result, the building can be categorised as a "dwellinghouse with upper storeys a maximum storey of 4.5m above ground level" (sec. 2.2/ 2.3, see Diagram 2.1b, as extracted). Consequently, escape from the units on ground level needs to be via a protected entrance hall leading to a final exit. Escape from the first, needs to via a protected stairway.



Dwellinghouse with upper storeys a maximum of 4.5m above ground level (see paragraphs 2.2 and 2.3)

Escape from upper storeys a maximum of 4.5m above ground level

2.2 See Diagram 2.1b. Where served by only one stair, all habitable rooms (excluding kitchens) should have either of the following.

a. An emergency escape window or external door, as described in paragraph 2.10.

b. Direct access to a protected stairway, as described in paragraph 2.5a.

2.3 Two rooms may be served by a single window. A door between the rooms should provide access to the window without passing through the stair enclosure. Both rooms should have their own access to the internal stair.

1. The building protected entrance hall should achieve 30 minutes fire resistance (REI) and FD30S fire doors. The building stairways need to be protected shafts achieving 30 minutes fire resistance (REI) and FD20 fire doors (single family dwellinghouse). The red lines depict 30-minute fire resistance construction.
2. As the building has only a single storey above ground level, a sprinkler system is not required throughout the entire property.

3. The building should be fitted with a minimum Grade D Category LD3 fire detection and alarm system as described in BS 5839-6.
4. All floors require to be compartment floors and achieve 60 minutes fire (REI).
5. Based on the height of the building, there are no fire strategy requirements limiting combustible materials for the cladding and external insulation (i.e., Regulation 7 does not apply to this building).
6. Where a cupboard is located under the internal stair, the underside of the stair will be underdrawn with 30 minutes fire resisting construction, the cupboard will be enclosed with 30 minutes fire resisting construction and fitted with a 30 minutes fire door (FD30).
7. External fire spread requirements should be investigated as the design progresses. All party walls should achieve 60 minutes fire resistance.
8. A utility room is acceptable to be an inner room.

3.3. Minimise the Risk of Fire Spread

The development is constructed in an appropriate way to minimise the risk of fire spread.

The development shall follow the design principles in Approved Document B Vol 1 for the residential areas. The materials used will comply with the requirements of the amendments to Regulation 7 of the Building Regulations.

1. All new electrical wiring will meet current IET National Wiring Regulations to BS 7671.
2. Consumer units/ meters located within the stairway should be enclosed with a secure cupboard which is separated from the escape route with fire resisting construction and intumescent strips where appropriate.
3. The use of combustible materials shall be avoided on the external walls.

3.4. Means of Escape

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

The property should employ a simultaneous evacuation strategy, whereby the entire residential unit of fire origin should evacuate immediately upon activation of the fire alarm therein.

3.5. Strategy for Evacuation

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

In line with the Fire Safety Policy 12D(A) Pre-consultation Draft 2021 Table A1.1, Planning Applications, and Information Requirements for D12 (A) criteria 5 is not applicable for householder or full Planning Applications.

3.6. Equipment for Firefighting

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

1. As this proposed development is a for a new development, which has a top floor less than 7.5m when measured against the lowest adjoining ground, there is a requirement to install sprinklers in line with BS9251 throughout the property.
2. Fire blankets and extinguishers will be used in line with requirements for single family dwellings. It is currently assumed that all locations will be accessible within 45m of the rescue service pumping appliance, and this should be investigated as the design progresses further.
3. Fire Hydrants should be within 90m of the property.

4. Summary

The PFSS is outlined as required by the New London Plan Policy D12A, which requires development proposals to achieve the highest standards of fire safety, embedding these at the earliest possible stage.

The PFSS has evidenced the provisions made for the safety of occupants as well as the provision of suitable access and equipment for firefighting in light of London Plan fire safety policy requirements and the justification for these measures.

Fire Safety Services believe this PFSS meets the requirements of the London Plan Policy D12A. This will be ensured with the development of the RIBA Stage 3 Fire Strategy, where each part of the policy is addressed in more detail within the Part B Functional Requirements. The Fire Strategy will be developed further during the detailed design and other relevant guidance documents will be agreed with the approving authority ahead of submission to the fire service.