

# Fire statement form

Application information	
1. Site address line 1	Units 1-7 Squirrels Trading Estate
Site address line 2	Viveash Close
Site address line 3	
Town	Hayes
County	Greater London
Site postcode (optional)	UB3 4RZ
2. Description of proposed development including any change of use (as stated on the application form):	Erection of part 11 storey, part 10 storey mixed use building comprising 116 residential dwellings and ground level commercial premises along with public realm delivery of Green Super Highway with associated landscaping, access, and parking, following demolition of existing buildings.
3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience.  Guide: no more than 200 words	<p><b>Dian Coetzee – Fire Engineer</b> Dian Coetzee is a Fire Engineer with detailed knowledge of Approved Document B (ADB) and BS9991 and a good understanding and experience of mixed-use residential developments including early stage and construction design stages. He has worked on many similar schemes in the past, incorporating elements such as smoke control and firefighting facilities into designs, as well as experience working on buildings of various heights.</p> <p><b>Simon Burch – Associate Fire Engineer</b> Simon is an Associate Fire Engineer at Elementa registered with the Engineering Council and a Member of the Institution of Fire Engineers (MiFireE) with a wealth of experience on a variety of high-rise residential developments for major housing clients across London and the South East. He is the lead author of fire strategies and responsible for all stages of the fire engineering design from the initial client contact through the tendering phase, across construction and the ongoing management and maintenance of fire safety systems and passive fire protection.</p>
4. 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.	Internal consultation has been completed between the design team. External consultation will be carried out as the design progresses.

Guide: no more than 200 words									
<b>5. Site layout plan with block numbering as per building schedule referred to in 6.</b> (consistent with other plans drawings and information submitted in connection with the application)									
Site layout plan is: provided as a separate plan									
<b>The principles, concepts and approach relating to fire safety that have been applied to the development</b>									
<b>6. Building schedule</b>									
Site information				Building information			Resident safety information		
a) block no. as per site layout plan above	b) • block height (m) • number of storeys excluding those below ground level • number of storeys including those below ground level	c) proposed use (one per line)	d) location of use within block by storey	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
Squirrels Estate	30.8m – Top Storey Ground + 10 Storeys + Basement	residential flats, maisonettes, studios	Level 00-10	Approved document B vol 1	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes-residential sprinklers, full	M4(2) & M4(3)
Squirrels Estate	30.8m – Top Storey Ground + 10 Storeys + Basement	flexible use	Level 00-01	Approved document B vol 2	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi

NA	NA	NA	NA	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
NA	NA	NA	NA	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
NA	NA	NA	NA	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
NA	NA	NA	NA	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

### 7. Specific technical complexities

Explain any specific technical complexities in terms of fire safety (for example green walls) and/or departures from information in building schedule above

Guide: no more than 500 words

- The residential cores contain travel distances within the common corridors that are within the recommendations of Approved Document B. At a later stage of design, a Computational Fluid Dynamics (CFD) assessment will be required to validate the smoke venting strategy for this building in accordance with the guidance from the Smoke Control Association: (SCA) Guidance on Smoke Control to Common Escape Routes in Apartment Buildings (July 2020).
- The apartments will be designed as open plan and as such they will be designed taking into account the guidance given in BS9991 as Approved Document B Volume 1 does not detail how to design these apartment types.
- Where risers are accessible from the ground floor final escape route, they will be enclosed in 120 minutes fire resistance with upgraded FD 120S doors.
- A fire curtain is provided to separate the furnished entrance lobby from the escape route of Core A.
- A communal terrace is provided which allows both cores to have access to another in the event of a fire.

### 8. Issues which might affect the fire safety of the development

Explain how any issues which might affect the fire safety of the development have been addressed.

Guide: no more than 500 words

- Residential apartments will adopt a stay put evacuation procedure in that only the apartment that has a fire in it is immediately evacuated. The Fire Service will carry out evacuation of the other apartments if necessary.
- The commercial unit will operate a simultaneous evacuation procedure.
- The ancillary accommodation, storage and plant facilities on site will be considered completely independent of the residential elements. These areas will adopt independent simultaneous evacuation procedures.
- The residential common corridors at the upper levels will be provided with smoke ventilation in accordance with Approved Document B to provide tenable conditions for means of escape and firefighting operations
- The residential building is over 18m in height and will be provided with a firefighting shaft in both cores.

- Two lifts within each residential building core will be designed as firefighting lifts. In accordance with Approved Document B only one lift is required to be designed for firefighting, however a second lift will be provided which will be suitable for evacuation purposes.
- Open plan apartments will be provided with an upgraded LD1 fire alarm and detection system in accordance with BS5839 Part 6.
- The commercial unit will be provided with a minimum of a manual system in accordance with BS5839 Part 1.
- Floors will be designed as compartment floors and will achieve a fire resistance equal to that of the structure.
- Risers will be enclosed in fire resistant construction equal to that of the structure.
- All apartments will be enclosed in 60 minutes fire resistance with FD30S self-closing doors.
- Residential sprinklers will be provided to all residential plots in accordance with BS9251.
- A commercial sprinkler system will be provided to the commercial unit in accordance with BS EN 12845. Where the residential ancillary spaces are larger than the limits outlined in Table 4 of BS9251, they will be covered with the commercial sprinkler system.
- As the residential building is over 18m in height, all materials within the external wall should achieve European Classification in A2-s1,d0 or Class A1 in accordance with Regulation 7(2).
- Dry riser inlets will be located on the façade of the building and be within 18m of the fire service appliance parking location.
- All parts of the floor plates within the residential building will be covered within 60m when measured along a suitable route for laying a hose from a dry riser outlet in a firefighting shaft.
- Hydrants will be provided within 90m of the dry riser inlets for the building.
- Each life safety system will be provided with a secondary power supply which will activate in the event of failure of the main supply.

#### **9. Local development document policies relating to fire safety**

Explain how any policies relating to fire safety in relevant local development documents have been taken into account.

Guide: no more than 500 words

Consideration has been given to the New London Plan dated March 2021. The recommendations in Policy D5 (Inclusive Design) and Policy D12 (Fire Safety) have been addressed

#### **Emergency road vehicle access and water supplies for firefighting purposes**

#### **10. Fire service site plan**

Explanation of fire service site plan(s) provided in 14. including what guidance documents have informed the proposed arrangements for fire service access and facilities?

Guide: no more than 200 words

Fire Service access has been provided to provide access for fire personnel and a water supply to within reasonable distance of the building entrances in accordance with Approved Document B.

- Fire Tender tracking has been completed to demonstrate access for the fire appliance to within 18m of the dry riser inlets is provided at the building entrances. This is shown on the fire tender tracking plan and ground floor plan referenced in Section 14.
- As the residential accommodations will adopt a stay put policy there is no defined assembly point for residential occupants. However, lobbies have been provided as a waiting space for disabled occupants that require to use a lift for evacuation.
- A firefighting shaft will be provided in both of the residential cores in line with the recommendations of ADB.
- Two lifts within each residential building core will be designed as firefighting lifts. In accordance with Approved Document B only one lift is required to be designed for firefighting, however a second lift will be provided which will be suitable for evacuation purposes.
- A dry riser will be installed within the firefighting shaft.
- The access parameter plan as discussed in Section 14 shows adequate fire tender access to each core.

### **11. Emergency road vehicle access**

Specify emergency road vehicle access to the site entrances indicated on the site plan

Guide: no more than 200 words

As per the drawing referenced in Section 14 adequate fire service access route for all plots will be provided.

Is the emergency vehicle tracking route within the site to the siting points for appliances clear and unobstructed?

yes

### **12. Siting of fire appliances**

Guide: no more than 200 words

The vehicle access route is being designed to meet the requirements for a pump appliance as described in London Fire Brigade – Guidance Note 29.

### **13. Suitability of water supply for the scale of development proposed**

Guide: no more than 200 words

Fire Hydrants will be provided within 90m of the dry riser inlet locations as currently shown on the plans referenced in Section 14.

Nature of water supply:

hydrant- public

Does the proposed development rely on existing hydrants and if so are they currently usable / operable?

yes

**14. Fire service site plan**

Fire service site plan is:  
provided as a separate plan  
2111056-TK03B  
APPENDIX 9\_ Drainage and Water p.9

**Fire statement completed by**

**15. Signature**

**16. Date**

25/10/2022