

Hampton Wick RCC Pavilion, Hampton Wick RCC Bushy Park, Park Road, Hampton Wick, Kingston upon Thames, KT1 4AZ

London Plan Fire Safety Report

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1 Executive Summary

Sweco Fire Safety have been appointed to provide a fire statement report to enable compliance with the Building Regulations applicable to the proposed works.

This fire statement report will support the consideration of information on fire safety matters as they relate to land use planning matters. The information provided within this fire statement is focussed and concise, specific and relevant to the development, and proportionate to the scale, type and complexity of the proposal. This fire statement will evidence that fire safety matters, as they relate to planning, have been incorporated into the planning application.

This statement should be used for planning permission purposes only and is not a detailed fire strategy document. A further detailed Fire Strategy may be required at RIBA design stages 3 and 4 depending on the complexity of the project and to justify any departures from the general guidance contained in Approved Document B.

The project relates to the rebuild of the sport pavilion following the demolition of the existing pavilion due to fire damage at Hampton Wick RCC Bushy Park, Park Road, Hampton Wick2, Kingston upon Thames, KT1 4AZ.

2 London Policy D12 (A) Compliance Statement

To demonstrate developments have met the highest standards of fire safety, proportionate to the development, the following information should be addressed:

- A. Identify suitably positioned unobstructed outside space for:**
 - i. fire appliances to be positioned on.**
Sweco- yes. See section 6.5 - B5 below. The fire service access route for fire appliances remain as existing.
 - ii. appropriate for use as an evacuation assembly point**
Sweco: yes. See section 6.5 below – B5 below.
- B. 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 measures.**
Sweco- Yes. See Section 6 Fire Safety Comments.
- C. Are constructed in an appropriate way to minimise the risk of fire spread.**
Sweco- yes see section 6 Fire Safety Comments
- D. Provide suitable and convenient means of escape, and associated evacuation strategy for all building users.**
Sweco- yes see section 6 Fire Safety Comments
- E. Develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.**
Sweco- yes see section 6 Fire Safety Comments
- F. Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.**
Sweco- yes - see section 6.5

3 Name of Person Completing the Statement

Robert Benney, chartered member of CABE. 13+ years of relevant experience within the building control and fire safety sector. Principal Building Safety Surveyor at Sweco – Fire Safety Consultancy.

4 The Site

The project relates to Hampton Wick RCC Bushy Park, Park Road, Hampton Wick, Kingston upon Thames, KT1 4AZ.

The previous pavilion building was subject to a suspected arson attack and was destroyed by a fire. The proposal is to construct a new pavilion, in the same location as the existing building. The new building is to be two storeys with a total floor area of 500m² GIA split across the ground and first floor.

The ground floor will consist of an entrance foyer, four changing rooms, official changing rooms, guest toilets, storage, plant room and cellar. Access to the first floor will be via two staircases and a lift to a flexible bar/club room/function space that can be divided by a retractable screen, kitchen facilities towards the rear and access provided from function space to an external balcony.

The vehicular access to the club will remain as per the existing arrangement, i.e., via a priority junction with Park Road and a 200m long access road within the site that leads to the car park. The car park is located on the side of the proposed pavilion.



5 Consultations Undertaken at this Stage

None

6 Fire Safety Comments

The detailed design at RIBA Stages 3 and 4 will apply the guidance in Approved Document B Volume 2 2019 edition incorporating 2020 and 2022 amendments.

6.1 B1 – Means of Warning and Escape

6.1.1 Purpose Group

The building falls within the 'Assembly and recreation' purpose group (5), for the purposes of Part B 'fire safety' and Approved Document B guidance.

6.1.2 Evacuation Strategy

The means of escape is to be based on a simultaneous evacuation strategy whereby all occupants will evacuate in the event of a fire and on activation of the fire detection and alarm system. No investigation period is anticipated.

6.1.3 Means of Warning

The premises will incorporate a fire alarm and smoke detection system to BS5839-1:2017, to provide early warning to occupants in the event of a fire and to cover any hazard areas. Visual and audible warning of activation of the fire alarm system is to be provided within all new sanitary accommodation, all balconies, and any areas with higher ambient noise levels.

6.1.4 Occupancy Numbers

On match days there are expected to be 66 players, 15 spectators and 3 staff, totalling 84.

There may be occasional events or functions for up to 120 occupants.

6.1.5 Number of exits required

The minimum number of escape routes and exits from a room, tier or storey will be in accordance with Approved Document B volume 2, Table 2.2, as replicated below.

Table 2.2 Minimum number of escape routes and exits from a room, tier or storey

Maximum number of people	Minimum number of escape routes/exits
60	1
600	2
More than 600	3

When the retractable screen is in position to sub-divide the first floor each half will be limited to 60 occupants due the single escape routes available.

6.1.6 Width of escape routes and exits

The clear opening width of the escape routes and exits will comply with the guidance in Approved Document B volume 2, Table 2.3 (as well as complying with the guidance contained in Approved Document M ‘access to and use of buildings’).

Maximum number of people	Minimum width (mm) ⁽¹⁾⁽²⁾⁽³⁾
60	750 ⁽⁴⁾
110	850
220	1050
More than 220	5 per person ⁽⁵⁾

NOTES:

1. See Appendix D for methods of measurement.
2. Widths may need to be increased to meet guidance in Approved Document M.
3. Widths less than 1050mm should not be interpolated.
4. May be reduced to 530mm for gangways between fixed storage racking, other than in public areas of ‘shop and commercial’ (purpose group 4) buildings.
5. 5mm/person does not apply to an opening serving fewer than 220 people.

Where multiple exits are available from a room or storey, a fire may prevent one from being used. Therefore, the remaining exits will be calculated to be wide enough for all occupants. The widest exit from each room or storey will be discounted.

The first-floor storey exits to be provided with a minimum clear width to be provided with a minimum 1050mm clear opening width. The ground floor final exit from stairs should be at least the width of the stairs.

Wherever doors on escape routes could be used by more than 60 people during an evacuation, the doors will be arranged to open in the direction of escape.

As occupants need to escape through the external gates of the fenced compound to reach the relevant assembly point, then the gates should be readily available for escape.

6.1.7 Horizontal escape

Storey exits and final exits are to be available within the maximum recommended travel distance limits as indicated within Table 2.1 of Approved Document B Volume 2 guidance; for a purpose group 5 assembly and recreation premises 18m in one direction only and 45m where more than one direction of escape is available.

External routes away from the building to the relevant assembly points should be provided with level access.

6.1.8 Vertical escape

The first floor is to be provided with two protected escape stairs, that lead direct to a final exit at ground floor level. It has to be assumed that a fire might prevent the occupants within the vicinity from using one of the exits available to them. Therefore, both stairs will need to be provided with sufficient clear widths in order to allow all the occupants to leave quickly. In accordance with Table 3.1 of Approved Document B Vol 2 for an ‘assembly and recreation’ building a minimum stair width of 1100mm will be suitable for up to 220 people.

A protected lobby should be provided between the escape stair and a place of special fire hazard (plant room) to protected against the ingress of smoke. The lobby should have a minimum 0.4m² of permanent ventilation or be protected by a mechanical smoke control system.

6.1.9 Wheelchair refuges

Both protected stair enclosures are to be provided with refuge spaces at first floor level where wheelchair users can await assistance. Each refuge is to have an emergency voice communication system.

6.1.10 Evacuation lift

Whilst not a requirement of the Approved Document B Volume 2 guidance, the London plan policy D5(B5) requires fire evacuation lifts to be provided as part of all developments where lifts are installed. The proposed lift is to be designed to be suitable for evacuation purposes in accordance with BS 9999 and London Plan Policy D5(B5) guidance.

An evacuation lift should be situated within a protected enclosure consisting of the lift well itself and a protected lobby at each storey served by the lift.

6.1.11 Emergency lighting systems

An emergency lighting system will be provided in accordance with the requirements of BS 5266-1:2016 'Emergency lighting, Code of practice for emergency lighting of premises'. Design, installation, and commissioning certification to be provided to demonstrate compliance.

The guidance within Table 5.1 'Provisions for escape lighting' in Approved Document B Volume 2 will be taken into account. This will include adequate escape lighting to the external escape routes.

6.1.12 Fire exit and door signage

Illuminated escape signage will be provided above all exits routes, storey, and final exit doors where necessary to meet the regulatory requirements. The signage will be in accordance with BS ISO 3864-1 and the Health and Safety (Safety Signs and Signals) Regulations 1996.

Any doors in the lines of fire resistance will be provided with appropriate fire signage.

6.2 B2 – Internal Fire Spread (Linings)

6.2.1 Wall and ceiling linings

The wall and ceiling linings will comply with the recommendations outlined within Approved Document B Volume 2 Table 6.1:

Location	National Class*	European Class #
Small Rooms of area not more than 30m ²	3	D-s3, d2
Other Rooms	1	C-s3, d2
Other circulation spaces	0	B-s3, d2

Note: * = National Classifications are based on tests in BS 476 Part 4, 6 and 7.
= The European classifications are described in BS EN 13501-1:2000.

6.3 B3 – Internal Fire Spread (Structure)

6.3.1 Structural Fire Resistance

The uppermost floor height (G+1) is less than 18m above the lowest adjoining ground level. Therefore, in accordance with AD B V2 guidance, all elements of structure are required to be provided with a minimum of 60-minutes fire resistance, without sprinkler protection.

6.3.2 Compartmentation

A 60-minute compartment floor (see section 6.5.2 below) is to be provided to the first floor and 60-minute compartment walls to create protected shafts (Stairs, lifts, risers) where passing through compartment floors. The guidance in Approved Document B volume 2 on the requirements for provision of compartment walls and compartment floors will be taken into account within the detailed design.

6.3.3 Places of special fire hazard

Every place of special fire hazard should be enclosed with fire resisting construction achieving a minimum REI 30.

6.3.4 Cavity barriers and fire-stopping

Cavity barriers and fire-stopping will be provided fully in accordance with Approved Document B Volume 2 sections 9 and 10 requirements and depending on the form(s) of construction encountered. Each product is to be installed fully in accordance with their manufacturers requirements and shall be supported by test certification to demonstrate suitability for the specific situation.

6.4 B4 – External Fire Spread

6.4.1 Unprotected areas

The unprotected areas within the external walls in relation to the boundary distances will be assessed during the detailed design stages of the project, and where necessary the external walls and any unprotected glazed areas, where in excess of those permitted by BRE publication BR 187 'External Fire Spread – Building separation and boundary distances', will be specified to be 60-minute fire-resisting.

6.4.2 External Wall Construction

The external surfaces (i.e., outermost external material) of external walls should comply with the provisions in ADBv2 Table 12.1. The provisions in Table 12.1 apply to each wall individually in relation to its proximity to the relevant boundary. Assembly and recreation building less than 18m in height, more than 1m from the relevant boundary, to be provided with a minimum Class C-s3, d2. Where less than 1m from the relevant boundary to be provided with a minimum Class B-s3,d2 or better.

Due to the close boundary proximity to the rear wall the external surface to this elevation will need to achieve a fire performance of Class B-s3, d2 or better (otherwise it is counted as 50% unprotected area). Note that this section refers to 'fire performance' and not 'fire performance of external surface'. There is no treatment available on the market to our knowledge that can be applied to timber to achieve this.

In relation to buildings of any height or use, consideration is to be given to the choice of materials (including their extent and arrangement) used for external walls, or attachments to the wall, to reduce the risk of fire spread over the wall. The materials within the new or altered external wall build-ups will be determined through RIBA stages 3 and 4 and will take account of the latest Approved Document B requirements.

6.4.3 External Roof Construction

As the relevant boundary is less than 6m, the roof covering will need to meet a roof designation of $B_{ROOF}(t4)$.

The guidance in the DCLG publication 'Fire performance of green roofs and walls', will be taken into account within the design at RIBA Stage 3 and 4. Selection of products will be considered to ensure that they are suitable for their location.

6.5 B5 – Access and Facilities for the Fire Service

6.5.1 Fire Service Vehicular Access

Due to the height of the building being less than 11m and having a total floor area of less than 2000m², access for a pump appliance would be required to either 15% of the perimeter of the building or to within 45m of every point on the projected plan area of the building, whichever is less onerous.

Dead-end access routes longer than 20m require turning facilities, turning facilities should comply with the guidance in Table 15.2 of Approved Document B Volume 2:

Table 15.2 Typical fire and rescue service vehicle access route specification

Appliance type	Minimum width of road between kerbs (m)	Minimum width of gateways (m)	Minimum turning circle between kerbs (m)	Minimum turning circle between walls (m)	Minimum clearance height (m)	Minimum carrying capacity (tonnes)
Pump	3.7	3.1	16.8	19.2	3.7	12.5
High reach	3.7	3.1	26.0	29.0	4.0	17.0

Fire appliances are not standardised. The Building Control body may, in consultation with the local fire and rescue service, use other dimensions.

A turning circle of 16.8m is not achieved within the existing car park, however it is noted that when the former pavilion burnt down the fire appliances attending the incident gained access to the outfield grass area at the front of the pavilion allowing a sufficient turning route.

The clear width of the entrance gateway from Park Road appears to be less than 3.1m wide, however it is noted that appliances have previously accessed the site through this existing gateway.

Access to the building for fire service appliances via the 200m track remains as per the existing access to the previous pavilion.

6.5.2 Water Supplies & Fire Hydrants

The nearest existing fire hydrants are located near the site entrance on Park Road, identified below:

Assess Location Search Water Map ALS/ALS Standard/2024_4980998



Additional fire hydrants are not proposed as the compartment does not exceed 280m² as per AD B Volume 2 Section 16.8 (noting that the ground and first floor are separate compartments).








6.5.3 Possible Evacuation Assembly Points

During construction, the contractor will determine the position of the assembly points based on their site set-up. There is adequate space within the sports field for an assembly point during construction and for a permanent location when the building is complete and in use.

7 **Summary**

A detailed design assessment will be required to ensure building control design compliance within RIBA's stage 3 and 4. However at this early design stage, and on the basis that the comments made within this report are to be taken into account within the detailed design, Sweco confirm the works show suitable compliance with the London Plan.

Appendix A – Document Schedule Assessed

-  24-045 Hampton Wick TS v 1.0
-  6344 (20) 000_Proposed Site Location Plan REV P3
-  6344 (20) 001_Proposed Site Plan REV P3
-  6344 (20) 100_Proposed Ground Floor Plan REV P3
-  6344 (20) 101_Proposed First Floor Plan REV P3
-  6344 (20) 102_Proposed Roof Plan REV P2
-  240507 35569, Hampton Wick Royal CC - Utilities Search