

9 NESTLES AVENUE, HAYES PLANNING FIRE STRATEGY STATEMENT

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THE SCHEME

The scheme is a new residential building on a former factory site in Hayes. The building will be divided into two cores, with residents each having access to a single core. Residential apartments will be provided up to tenth floor above ground in the north core (top floor height approximately 30.1m), and ground plus five floors in the south core (top floor approximately 15.3m above ground). Access to communal terraces will be provided to each core.

This technical note summarises the key fire strategy principles for the building and is intended to identify the main fire safety features, fire fighter access facilities and fire strategy principles in accordance with Policy D12(B) of the London Plan - Intend to Publish Version. The design, specification and construction of each fire safety measure will be in accordance with the relevant British Standards and other applicable design codes of practice.

ACTIVE FIRE SAFETY MEASURES

Active fire safety systems will be provided throughout the development as required to comply with Building Regulations guidance, including:

Sprinklers

The residential apartments will be provided throughout with life safety sprinklers. Sprinkler design will be in accordance with the relevant codes of practice for the use they serve.

Smoke Detection

Every apartment will be provided with a minimum LD3 standard of smoke detection. Where open plan apartments are proposed, detection will be to an LD1 standard.

Smoke detection will be provided in the common areas to an L5.

Smoke Venting

Smoke venting will be provided to both the common areas outside the flats, and at the head of both residential escape stairs.

Smoke venting in the corridors will be provided via mechanically assisted smoke shafts. A 1m² automatically opening vent will be provided at the head of both stairs.

PASSIVE FIRE SAFETY MEASURES

Compartmentation

The building will be provided with compartment walls and floors throughout the development including in all areas required to comply with Building Regulations guidance, including:

- All floors
- Walls between apartments
- Walls between apartments and common areas.

Structural Fire Resistance

Structure will achieve 1 hour fire resistance in the South Core and 2 hours fire resistance in the North Core.

Materials Used

Construction materials, products and methods of construction have not been identified at this early stage of the project. However they will be developed in due course and will be supported by all necessary information.

Materials used in the external wall build up will achieve European Class A2-s1, d0 or Class A1, with the list of exemptions listed in Regulation 7(3).

FIREFIGHTING FACILITIES

Fire Appliance Access

The main access to the site is via Nestles Avenue, with a service mews running along the north west elevation to provide access for servicing and a small undercroft parking area. However, access for a fire vehicle will be available to the entire perimeter of the site in the event of an emergency. This has been confirmed by an initial tracking analysis.

Fire appliances will be able to park within 18m and in sight of the dry fire main inlet into each core. The parking positions also provide hose coverage to within 45m of all areas of the duplex units which are accessed externally at ground floor.

It will be ensured that there is a fire hydrant in the road within 90m of each dry riser inlet.

Internal Fire Fighting Facilities

The south core is less than 18m in height, but will be provided with a dry fire main within the stair enclosure. This will provide adequate hose coverage to all areas of this core.

The north core is more than 18m in height so will be constructed as a fire fighting core to include the following:

- 2 hour fire resisting enclosure
- Fire fighting lift
- Dry fire main within the stair enclosure at every level
- 1m² automatically opening vent at the head of the stair.
- The residential corridors will act as a smoke vented lobby at each floor.

MEANS OF ESCAPE

Apartments

The apartments will have sprinklers and have flexibility to be designed as open-plan, with bedrooms that are accessed direct from the living areas.

All apartments will be designed in accordance with the relevant guidance documents, including any additional requirements for dedicated wheelchair accessible etc apartments.

Evacuation Strategy

The residential element will operate a 'defend in place' fire strategy, where only the apartment on fire evacuates initially. This is as per any other residential building in the UK. Wheelchair refuges are not needed to comply with Building Regulations guidance. However, provisions to provide a dignified means of escape for all occupants of the building will be provided in line with Policy D5(B5) of the London Plan – Intend to Publish Version. This may include the provision of an evacuation / fire fighting lift in each core.

Common Areas

Both stairs discharge to outside at Ground floor, where there will be a choice of escape routes, either via the main reception, or to the rear onto the Mews.

Escape distances will be limited to no more than 15m in a single direction measured from the furthest apartment door to the door into the stair. Where longer corridors are proposed, these will be supported by fire engineering analysis including the use of Computational Fluid Dynamics smoke modelling as necessary.

There is a single storey basement level beneath the north block. Access and escape will be via a single stair which exits direct to outside at ground floor with no interface with the residential escape stair.

Escape routes including exit widths, stair design, emergency lighting, signage etc will be designed to comply with standard Building Regulations guidance.

ELEVATIONS

Glazing

The extent of glazing and non-fire resisting construction to the elevations will be determined through calculation to comply with the relevant Building Regulations guidance documents. These will take into account the provision of sprinklers where necessary.

Materials Used in External Wall Build Up

As discussed above, products which form part of the external wall construction (including balconies) will achieve European Class A2-s1, d0 or Class A1, with the exception of sealants, gaskets, doors and windows (including frames); (see regulation 7(3) for the full list of exemptions).

MANAGEMENT

Management procedures have not been developed at this early stage of the project. However, any areas requiring a level of management and a management strategy will be provided as necessary. This will be developed at a later stage.

The building will have a fire strategy document which will form part of the building regulations application. This will also be used to inform any future alterations to the building to ensure that the fire safety measures and strategy is not compromised.