

**PINE LODGE**

**INITIAL CONSULTATION**

**Produced by**



**February 2021**

## EXECUTIVE SUMMARY

**Mulberry Parade  
West Drayton  
UB7 9AG**

<b>Commissioned by</b>	Antony Atkins		
<b>Number of floors</b>	Three floors		
<b>Proposed use of building</b>	Shared supported-living accommodation units for adults with learning and mental health disabilities.		
<b>General comments</b>	The purpose of this report is to provide initial fire safety information in order to supplement the existing fire strategy proposal for the building works prior to full planning and building regulations application.		
<b>Consultant details</b>	<b>Mr T R Lawes – Anolex Ltd</b>		
<b>Checked</b>	<input checked="" type="checkbox"/>	<b>Date</b>	<b>25.02.21</b>

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## INTRODUCTION

This initial consultation has been completed as a desktop exercise only, no site visits have been carried out. Information and comment are based upon the current submitted fire strategy.

Plans referenced for the purposes of this consultation are as follows.

- PR0113-009 - Site layout
- PR0113-016 - Ground floor plan
- PR0113-017 - First floor plan
- PR0113-017 - Second floor plan
- PR0113-007A-V2      Elevations

## **IMPORTANT INFORMATION**

***This report has been developed in order to assist the 'Responsible Person' to comply with relevant statutory provisions.***

***This report reflects the circumstances found at the time of the survey only and does not absolve the 'Responsible Person(s)' from ensuring effective day-to-day fire safety management within the premises, as required by law.***

***The recommendations contained within this report are supplementary to any requirements relating to other relevant legislation and codes of practice which may apply.***

***The report contains some information provided by others with on site responsibility and no liability can be accepted by Anolex Ltd for the accuracy or otherwise of such information.***

***The recommendations within this report are considered to demonstrate compliance with current fire safety standards. However, acceptance of these recommendations or otherwise, rests with the Local Authority Building Control, who are the enforcing Authority for current Building Regulations.***

## **FIRE DETECTION AND WARNING PROVISION**

It is assumed from the plans provided that a BS5839, category L2 fire detection and alarm system will be installed. The main panel for this will be located at the main entrance.

A simultaneous evacuation strategy should be developed and adopted.

No cause-and-effect matrix for the proposed fire warning system has been incorporated into the current fire strategy. A cause-and-effect matrix should be produced in order to confirm interlinking with building management arrangements as appropriate. i.e., passenger lift and ventilation/smoke control facilities.

## **EMERGENCY LIGHTING PROVISION**

A system of emergency lighting should be installed in accordance with the recommendations contained within British Standard 5266, Part 1.

## **HORIZONTAL EVACUATION**

Horizontal evacuation arrangements do not appear to be compliant. The following should be confirmed/addressed:

- All bedrooms on both the ground and first floor are inner rooms. These rooms appear to be fire separated with FD30(S) doors in place. It should be confirmed that all of these bedrooms will incorporate a fire escape window, designed in accordance with section 2.10 of Approved Document B.

### **Emergency escape windows and external doors**

**2.10** Windows or external doors providing emergency escape should comply with all of the following.

- a. Windows should have an unobstructed openable area that complies with all of the following.
  - i. A minimum area of 0.33m<sup>2</sup>.
  - ii. A minimum height of 450mm and a minimum width of 450mm (the route through the window may be at an angle rather than straight through).
  - iii. The bottom of the openable area is a maximum of 1100mm above the floor.
- b. People escaping should be able to reach a place free from danger from fire. Courtyards or inaccessible back gardens should comply with Diagram 2.5.
- c. Locks (with or without removable keys) and opening stays (with child-resistant release catches) may be fitted to escape windows.
- d. Windows should be capable of remaining open without being held.

➤ All bedrooms on the second floor are inner rooms. Inner rooms serviced by window escapes are not permitted where a floor is over 4.5m above ground level (See item E below). The second-floor layout should be adjusted to ensure that a protected route is available from all habitable rooms onto the protected staircase, in accordance with Approved Document B. This will require a fire separated corridor from the bedrooms within Units 5 and 6, extending to the protected stair.

## Inner rooms

2.11 An **inner room** is permitted when it is one of the following.

- a. A kitchen.
- b. A laundry or utility **room**.
- c. A dressing **room**.
- d. A bathroom, WC or shower **room**.
- e. Any **room** on a **storey** that is a maximum of 4.5m above ground level which is provided with an emergency escape window as described in paragraph 2.10.
- f. A **gallery** that complies with paragraph 2.15.

## VERTICAL EVACUATION

Vertical evacuation is provided by way of one protected staircase serving all floors. Vertical evacuation arrangements as shown in the submitted plans are considered acceptable.

Disabled refuge facilities are shown on the two upper floors, within the protected staircase enclosure. These should be provided with an Emergency Voice Communication system linked to a receiving panel adjacent to the main fire warning panel.

An alternative to provision of refuges and facilities as detailed above, would be to provide an evacuation lift.

## VENTILATION/SMOKE CONTROL

The protected staircase should achieve compliance with section 2.9 of Approved Document B

2.9 All of the following precautions should be taken to avoid the spread of smoke and fire to the protected stairway.

- a. Transfer grilles should not be fitted in any wall, door, floor or ceiling of the stair enclosure.
- b. Any duct passing through the stair enclosure should be rigid steel. Joints between the ductwork and stair enclosure should be fire-stopped.
- c. Ventilation ducts supplying or extracting air directly to or from a protected stairway should not serve other areas as well.
- d. Any system of mechanical ventilation which recirculates air and which serves both the stair and other areas should be designed to shut down on the detection of smoke within the system.
- e. For ducted warm air heating systems, a room thermostat should be sited in the living room. It should be mounted at a height between 1370mm and 1830mm above the floor. The maximum setting should be 27°C.

## FIREFIGHTING EQUIPMENT

A fire blanket should be provided within each kitchen. The fire blankets should be fixed to the wall in a location away from the area of risk.

## SIGNAGE

Directional fire signage and fire door signage should be provided in accordance with the current British Standard.

## RECOMMENDATIONS

FIRE DETECTION AND WARNING PROVISION	A cause-and-effect matrix should be produced in order to confirm interlinking with building management arrangements as appropriate, i.e., passengers lift and ventilation/smoke control facilities.
EMERGENCY LIGHTING PROVISION	A system of emergency lighting should be installed in accordance with the recommendations contained within British Standard 5266, Part 1.
HORIZONTAL MEANS OF ESCAPE	All bedrooms on both the ground and first floor are inner rooms. These rooms appear to be fire separated with FD30(S) doors in place. It should be confirmed that all of these bedrooms will incorporate a fire escape window, designed in accordance with section 2.10 of Approved Document B.
HORIZONTAL MEANS OF ESCAPE	All bedrooms on the second floor are inner rooms. Inner rooms serviced by window escapes are not permitted where a floor is over 4.5m above ground level. The second-floor layout should be adjusted to ensure that a protected route is available from all habitable rooms onto the protected staircase, in accordance with Approved Document B. This will require a fire separated corridor from the bedrooms within Units 5 and 6, extending to the protected stair.
FIREFIGHTING EQUIPMENT	A fire blanket should be provided within each kitchen. The fire blankets should be fixed to the wall in a location away from the area of risk.
FIRE SAFETY SIGNAGE	Directional fire signage and fire door signage should be provided in accordance with the current British Standard.
VENTILATION/SMOKE CONTROL	The protected staircase should achieve compliance with section 2.9 of Approved Document B

## Appendix A...additional works required for compliance as individual flats.

## FIRE DETECTION AND WARNING PROVISION

The currently proposed system is compliant with requirements in relation to provision as individual flats. No additional works are required. However, maintaining the proposed level of provision will require a continuation of the simultaneous evacuation strategy. This means that any activation of smoke detection would require the evacuation of the building. It would be sensible to consider maintaining the Part 1 system in the common areas and linking it to a heat detector in the hallway of each flat. Individual flat provision should then be stand alone British Standard 5839 Part 6 coverage. This will avoid unwanted evacuations due to false alarms.

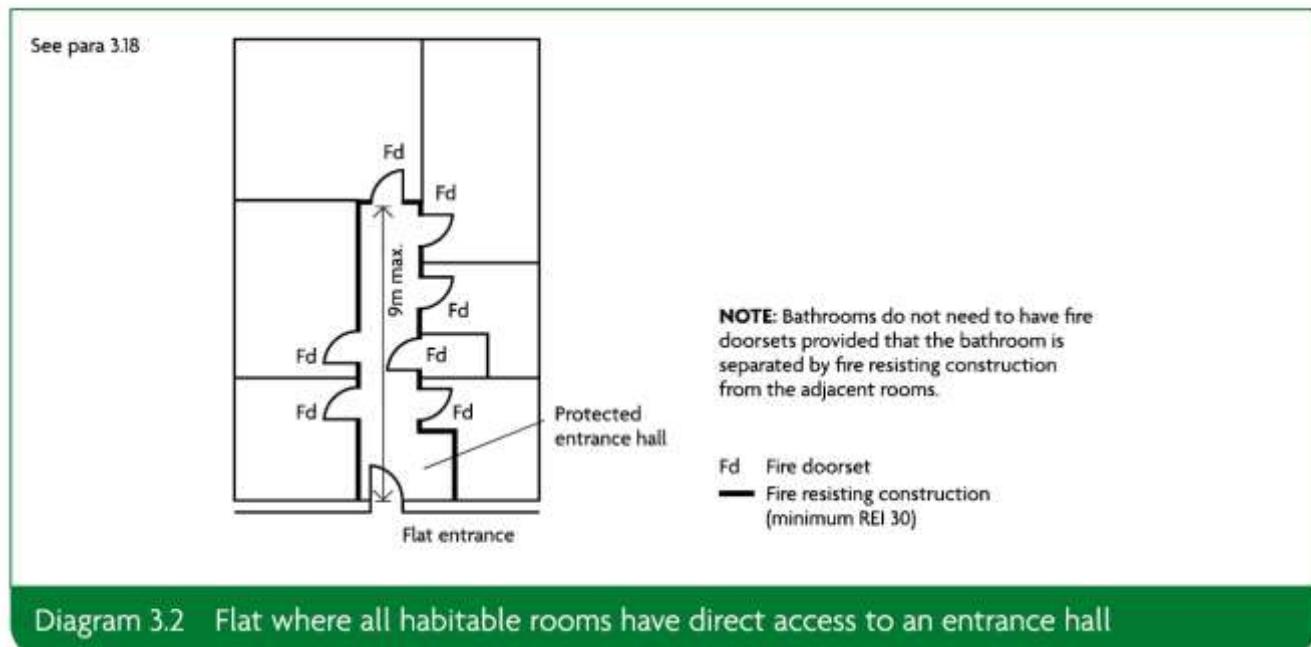
## EMERGENCY LIGHTING PROVISION

The proposed emergency lighting provision, as detailed in the recommendations above, will achieve compliance in relation to provision as individual flats. No additional works required.

## FIRE SEPARATION/HORIZONTAL MEANS OF ESCAPE

Each individual flat should be a one-hour fire resisting enclosure. Each floor should be a one-hour compartment floor.

The requirements for fire separation and travel distances within flats are different from that detailed above, due to having a floor more than 4.5 metres above ground level. In the case of flats, it will be necessary to provide a protected hallway within each flat, able to be accessed from all habitable rooms, on each level of the building. This will also provide the necessary two fire door protection to the staircase.



## **VENTILATION/SMOKE CONTROL**

The detail given above also remains the same for flats with a protected staircase.

## **FIREFIGHTING EQUIPMENT**

As detailed above.

## Appendix B...References

The following is a list of the reference documentation that may be considered as 'Benchmark Standards' and which have, where relevant, been referred to for the purposes of producing this report:

- Building Regulations - Approved Document B
- British Standard 5839 - Fire Alarm Systems and Associated Equipment
- British Standard 5266 - Emergency Lighting Systems
- British Standard EN3 and 5306 - Fire Extinguishing Equipment
- British Standard 5499 - Fire Safety Signs
- British Standard 8214 - Fire Door Assemblies
- British Standard 476 - Fire Testing of Structural Elements
- British Standard 9999: 2017 – Code of Practice for fire safety in the design, management and use of buildings.

### **MAIN LEGISLATION APPLICABLE**

- The Regulatory Reform (Fire Safety) Order 2005
- Health and Safety at Work Act 1974
- Equality Act 2010
- Management of Health and Safety at Work Regulations 1999
- Electricity at Work Regulations 1989
- The Smoke-free (Wales) Regulations 2007