



FIRNTEC
BUILDING COMPLIANCE

Unit 4a, Darklake View
Estover
Plymouth
PL6 7TL

Document Version 5

Survey Date 23/08/2024

Suggested Review Date 23/08/2025

PAS 9980 STEP 2-5 (FRAEW)

LISSIMORE HOUSE

Lissimore House
Maria Street
West Brom
B70 6DR

This report must be retained on the premises for inspection by statutory authorities.
Management is responsible for actions required in this report and should brief all staff on the report's findings.

Enforcement Officers are requested to note that this document is designed to inform the Lessee Tenant Manager of the existing Fire Safety Arrangements and any Significant Findings. Issues relating to the control and management of fire safety management for fire safety measures can be found in in-house documents such as:

Fire Policy and Testing and Maintenance records

Table of Contents

Cover Page	1
Table of Contents	2
Summary	4
Abbreviation/ Term Definition	6
Statement of Competency	7
Terms of Reference	8
Executive Summary	10
Fire Strategy	13
Wall Constructions	16
Wall Construction: Wall Type 1 brickwork over mineral wool insulation (RQE7DJ)	17
Wall Construction: Wall Type 2 - render over mineral wool insulation (LF373E)	21
Wall Construction: Wall Type 3 - HPL panels (6J8ZZM)	25
Façade Configuration: JBCFR9	29
Façade Configuration: ICNQTP	32
Façade Configuration: N3C21P	35
Appendix	38
Asset Information	39
Aerial Perspective: Showing Aerial view of Lissimore House and the surrounding area	44
Elevations	45
Inspections	46
Inspection: 2KY19W	48
Inspection: Z6JHAR	50
Inspection: ZPERLY	52
Inspection: 4QF4VX	53
Inspection: VK4ENM	55
Inspection: XG7F4Y	56
Inspection: L8E7Z1	58
Inspection: AHXSF6	60
Inspection: J7JTM8	61
Inspection: MWYFX2	62
Attachments & Balconies	63

Table of Contents Continued

Attachment: Cantilever Balcony (DKQZFE)	64
Penetrations	65
Penetration: Flue (1MD21F)	66
External Windows	67
External Window: Top, Mid, Side Hung Casements (QKY2GS)	68
External Doors	69
External Door: Single Leaf Entrance Doors (4AYFPR)	70
External Door: Aluminium (V9R2SP)	71
Plans & Elevations	72
Photos	75

Summary

PAS 9980 Step 2-5 (FRAEW)

Assessment and Certificate Reference

RB-7NJZYU

Assessed On, By

23/08/2024, Douglas Murray (Building Safety Consultant)

(BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA)

Produced For the Responsible Person

Sandwell Metropolitan Borough Council

Specification Conforms To

Our own internal quality system.

Assessment Scope

Assessment applies only to the building specified.

Recommended Review Date

23/08/2025

Assessed Property

Property Name

Lissimore House

Property Reference

RB-7SKZ3F

Address

Lissimore House

Maria Street

West Brom

B70 6DR

Assessing Organisation

Firntec Ltd

4a Darklake View, Estover, Plymouth, Devon, PL6 7TL

0345 646 1566 — www.firntec.com

Assessor Remarks

Lissimore House is a 17 storey tower block in a wider complex of high rise multi occupancy buildings in West Bromwich. The block was completed circa 1967 and it is considered to be approximately 45 metres tall. The block now contains 132 individual flats, after a recent modernisation programme. There are eight flats per floor, plus four flats on the ground floor. Each floor from 1st to 16th comprises 8 flats, 4 two bedroom (one at each corner) and 4 one bedroom flats (centre building), a stairway is situated at the end of each landing. There are two lifts in the block and these serve alternate floor levels.

Each flat has its own balcony, except the ground floor and on even numbered floors the two bedroom balcony's are physically separate from the single bedroom balcony's. On odd numbered floors the balconies are separated by a small metal partition.

The structure appears to be of reinforced concrete frame with reinforced staircores, lift core, floor slabs and foundations. The external walls are formed from a hand laid brick outer leaf and an internal leaf of concrete blockwork with projecting balconies on all occupied floors.

Improvement works were carried out 2010 planning reference DC/10/52440 which comprised of external insulated cladding, replacement windows, new front entrance porch, replacement balcony panels and addition of 2 flats at ground floor.

This report has been prepared for Sandwell Metropolitan Borough Council by Firntec Ltd Building Compliance. This survey has included consideration of the following pieces of legislation and other guidance relevant at the time of reporting:

The RRO (FSO) 2005

The Fire Safety Act 2021

The Building Safety Act 2022

Approved Document B of building regulations 2006

This report was prepared by Douglas Murray (BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA) who is a Building Surveyor with 25 years of fire related and construction experience in both new build and refurbishment projects on behalf of Firntec Ltd. Douglas is a member of the Royal Institute of Chartered Surveyors, the Institute of Fire Engineers, the Fire Protection Association, and an ABBE qualified Fire Risk Assessor. Douglas has specialised within Fire Safety and cladding investigations for eight years and has held senior posts with London and nationally based Registered Social Landlords. Douglas advises on and produces Building Safety Case Reports and has taken the lead for various clients securing, quality checking and completing Type 1-4 Fire Risk Assessments, completing Fire Risk Assessments of External Walls (FRAEW), leading on Intrusive investigative surveys, and preparing fire strategy documents. Part of the work Douglas completes, supports and evidence claims brought forward under the Defective Premises Act in the context of non-compliance and fire safety defects within multi occupancy buildings.

Abbreviation/ Term Definition

- **ACM** Aluminium Composite Material
- **ADB** Approved Document B
- **AOV** Automatic Opening Vent
- **BSA** Building Safety Act 2022
- **Cavity Barrier** Product used to close or separate a concealed space to restrict fire and smoke
- **Close State Cavity Barrier** Cavity Barrier designed to be fitted under compression/friction between inner and outer surfaces of a cavity to seal it
- **Open State Cavity Barrier** Cavity Barrier that is open to allow ventilation/drainage of cavity in open state but closes when a developing fire occurs (e.g., intumescent strip)
- **Combustible** Not classified as A1 OR A2 in accordance with BS EN 13501-1: 2018, and not meeting definitions of non-combustible or limited combustibility
- **Compartmentation** Subdivision of building by fire resisting walls and/or floors for limiting fire spread
- **EPS** Expanded Polystyrene
- **EWS1** External Wall System Fire Valuation Form
- **FB** Fire Barrier - Separating element with fire integrity for a specific time
- **Fire Stop** Barrier seal to close an imperfect fit in design between elements of components to stop the spread of fire
- **FRAEW** Fire Risk Appraisal of External Walls
- **FRA** Fire Risk Assessment
- **FRS** Fire and Rescue Services
- **FSA** Fire Safety Act 2021
- **HPL** High Pressure Laminate
- **HRR** Heat Release Rate
- **MDF** Medium Density Fibre Board (a type of manufactured timber)
- **PIR** Polyisocyanurate Rigid Foam
- **PUR** Polyurethane Foam
- **RP** Responsible Person
- **RRFSO** Regulatory Reform (Fire Safety) Order 2005
- **SFS** Steel Framing System
- **SIB** Secure Information Box

Statement of Competency

Statement of Competency to Carry out a Fire Risk Appraisal of External Wall Construction

Within PAS 9980:2022 it requires that a person conducting the FRAEW are competent to do so in accordance with Annex H and to demonstrate the expected skill sets of competent external wall assessors.

This is our Statement of Competence to carry out a Fire Risk Appraisal of External Wall construction.

We confirm that they have:

- a) Read and understood the commentary and provisions relating to the competence of external wall assessors set out in Section 8 and Annex H of PAS 9980:2022;
- b) Adequate and relevant competence to undertake the FRAEW;
- c) Sufficient knowledge, skills and experience in relation to fire safety of external walls to be able to complete an assessment at the level required;
- d) The relevant skill, knowledge, and experience to manage and interpret the results of intrusive inspections; and
- e) The competence to appraise and assess the nature of external wall construction in terms of fire performance and provide an opinion on the risk.
- f) No conflicts of interest of any kind, other than any which are disclosed in the report.
- g) The conclusions of the report are the author's independent assessment of the risks and remedial actions and have not been influenced in any way by the opinions or actions of others except where stated.

Terms of Reference

Particulars

This FRAEW report follows the guidance in accordance and reference to PAS9980:2022 Fire Risk Appraisal of External Walls construction and cladding of existing blocks of flats – Code of Practice.

Limitations

The FRAEW addresses life safety only in relation to the appraisal of the external walls of the building; and in considering risk, this is only in relation to the threat to the occupants in the building and not in terms of property damage or other potential objectives, such as safety of firefighters.

The FRAEW is not aimed at confirming compliance with building regulations, either at the time of construction, or currently.

The FRAEW cannot provide certainty and being risk-based report, it is, therefore, to a degree, reliant on professional judgement in its assessment and in the conclusions drawn within the report.

The FRAEW report is to be reviewed:

- a) if significant changes/repairs have been made to the external wall; and/or
- b) in the event of a fire incident, if the fire involved the external wall construction; and/or
- c) if there are any circumstances, depending upon the nature of the construction, the extent of available knowledge in relation to the particular materials, components and systems used on the building or the degree of uncertainty over the findings, which suggest review is appropriate. In these cases, the report will include a clear explanation as to why periodic review is necessary and include a suggested review date."

If more definitive information becomes available subsequent to the FRAEW on how particular external wall materials, components and systems behave in fire, or there are changes in the fire performance data relied upon in an FRAEW, such information will be expected to take precedence.

Assumptions

It is understood that the absence of evidence, is not evidence of the absence; therefore, within the FRAEW report suitable caveats or assumptions may be applied in arriving at a risk rating, for example, in relation to:

- a) the extent of sampling carried out.
- b) the accuracy of information upon which it has been necessary to rely, especially where it has not been possible to verify the information through site survey and inspection.
- c) the extent of the content and detail within the report; and
- d) the limitations at the time of the FRAEW of available knowledge on the fire performance of the materials, products and systems forming the external walls of the building.

Any caveats or assumptions made within the report are based on the most onerous and worst-case scenarios.

Statement of Intent

The investigation and writing of this FRAEW report has been commissioned at the clients request in line with PAS9980: 2022, which covers residential buildings of all heights with 2 or more dwellings, including hotels, with the aim to make sure that residents of multi-occupancy buildings are safe.

The Fire Safety Act 2021 also puts a legal responsibility on the responsible person where a building contains two or more sets of domestic premises to identify the building's structure and external walls and any common parts including doors or windows in those walls, and anything attached to the exterior of those walls (including balconies).

Executive Summary

External Wall Systems and Attachments on the Building

10 areas were inspected to gain data about the building's wall constructions. See the Inspections section of this report for full inspection details.

The table below outlines the ratings of the various wall systems and constructions to the property. Each element is explained in more detail further within this report.

8 Items	Effect	Risk
Wall Construction Wall Type 1 brickwork over mineral wool insulation (RQE7DJ)	Positive	Low
Wall Construction Wall Type 2 - render over mineral wool insulation (LF373E)	Positive	Low
Wall Construction Wall Type 3 - HPL panels (6J8ZZM)	Neutral	Medium
Attachment Cantilever Balcony (DKQZFE)	Neutral	Medium
Penetration Flue (1MD21F)		
External Window Top, Mid, Side Hung Casements (QKY2GS)	Positive	Low
External Door Single Leaf Entrance Doors (4AYFPR)	Positive	Low
External Door Aluminium (V9R2SP)	Positive	Low

In accordance with the PAS 9980 Guidance, any items of construction which are considered as "Medium Risk" should be subject to periodic review, to ensure that conditions do not change, such that the risk may be upgraded to high, prompting the requirement for remediation.

Risk Factor Analysis

The risk factor analysis is a three-stage process; rating the wall construction fire performance **(1)**, façade configuration **(2)**, and fire strategy/fire hazards **(3)** on a sliding risk scale. The risk scale is expressed as "high", "medium" and "low" in a continuum, left to right, from "high" risk to "low" risk. At the furthest left end of the "high" risk band, the risk is deemed to be the highest, reducing as the risk is positioned to the right of this.

Starting with high as a base line, **Stage 1** rates the fire performance risk factors of the wall construction.

Once fire performance factors have been taken into account, **Stage 2** overlays the risk factors of the façade configuration to determine the effect this has on where the risk now lies on the scale.

The final **Stage 3** overlays the risk factors arising from consideration of the fire strategy and fire hazards (including limitations of fire and rescue service intervention).

Risk Factor Analysis 1

This analysis looks at façade configuration **JBCFR9** which includes wall construction **RQE7DJ**.

1) Impact of Risk from Fire Performance: Brickwork over mineral wool is non combustible and therefore surface flame spread would be inhibited

2) Impact of Risk from Façade Configuration: Brickwork over mineral wool is non combustible and therefore surface flame spread would be inhibited

3) Impact of Risk from Fire Strategy / Fire Hazards: Brickwork over mineral wool is non combustible and therefore surface flame spread would be inhibited

Conclusion: In the event of a fire, fire spread is likely to be at a lower rate within expectations for a building of this height, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or

a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.

b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.



Risk Factor Analysis 2

This analysis looks at façade configuration **ICNQTP** which includes wall construction **LF373E**.

1) Impact of Risk from Fire Performance: Render over mineral wool is non combustible and therefore surface flame spread would be inhibited

2) Impact of Risk from Façade Configuration: Render over mineral wool is non combustible and therefore surface flame spread would be inhibited

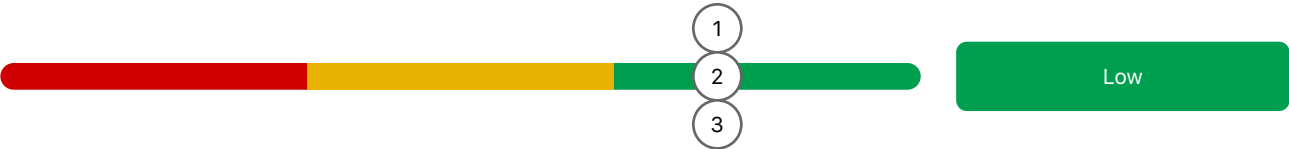
3) Impact of Risk from Fire Strategy / Fire Hazards: Render over mineral wool is non combustible and therefore surface flame spread would be inhibited

Conclusion: In the event of a fire, fire spread is likely to be at a lower rate within expectations for a building of this height, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or

a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.

b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before

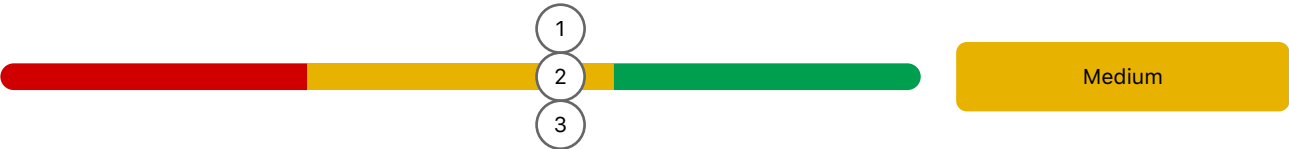
occupants can safely use them to escape.



Risk Factor Analysis 3

This analysis looks at façade configuration **N3C21P** which includes wall construction **6J8ZZM**.

- 1) **Impact of Risk from Fire Performance:** The HPL panels are stated have a reaction to fire class of B
 - 2) **Impact of Risk from Façade Configuration:** The HPL panels are stated have a reaction to fire class of B
 - 3) **Impact of Risk from Fire Strategy / Fire Hazards:** The HPL panels are stated have a reaction to fire class of B
- Conclusion:** In the event of a fire, fire spread is likely to be at a higher rate within expectations for a building of this height given the circumstances at the building in question; and/or
- a) fire spread is likely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.
 - b) fire is likely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.



Overall Building Risk Rating



Our professional opinion is that overall this Building represents a Neutral PAS9980:2022 Outcome.

Recommended Remediations

No recommended remediations identified.

Recommended Interim Measures

No recommended interim measures identified.

Fire Strategy

Fire Strategy & Hazard Risk Factors

F.1 Occupancy

General needs housing

Neutral

F.2 Evacuation

Stay put

A 'stay put' policy is adopted for the flats. That is, in the event of a fire in a flat, the occupants of that dwelling will evacuate, having been alerted by their own domestic fire detection and alarm system, and request fire service attendance. All other occupants will remain in their flat unless they are threatened by fire and smoke or are advised to evacuate by the fire service. The 'stay put' evacuation policy relies heavily on adequate compartmentation being provided; fire should not spread from one dwelling to another, including by means of the external fabric of the building

Positive

Photo Ref. 1

F.3 Escape Route Design

Single staircase, with lobby approach

Photo Ref. 2, 3, 4, 5, 6, 7

Negative

F.4 Compartmentation

Adequate compartmentation in line with the expectations for a block of flats. Sandwell operate a regime of fire stopping and compartmentation checks to ensure compartmentation is satisfactory

Neutral

F.5 Smoke Control

Arrangements in which openable windows, AOVs or inlets and outlets of mechanical systems are of a satisfactory proximity away from combustible cladding; or that fire and smoke spread from the external envelope would be unlikely to compromise the effectiveness of the smoke control system or allow a route for fire spread back into the building

Positive

Photo Ref. 8

F.6 Fire Alarm & Detection

Domestic smoke and heat alarms within flats, Category LD2 or LD3 and LD1 within the lift shaft

Positive

F.7 Fire Suppression

a deluge system has been installed in the bin store only

Positive

F.8 - Firefighting Facilities

Adequate access for firefighting vehicles
NOTE This is where access is possible in line with benchmark guidance on access for firefighting vehicles, taking into account the size of the building (floor area), height of the building and whether fire mains are present in the building.

Positive

F.9 Rising Mains

Suitable rising main present

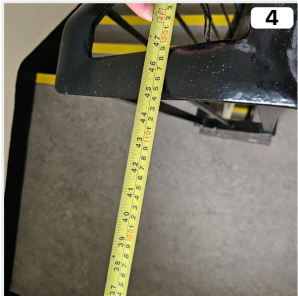
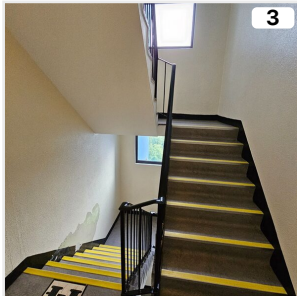
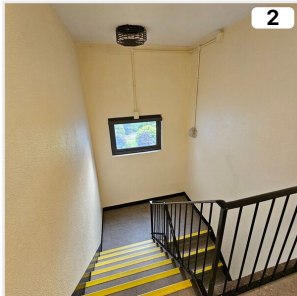
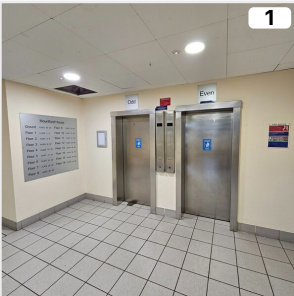
Positive

F.10 Lifts Used By Firefighters

The building has two passenger lifts that serve alternating floors.
There are no designated firefighting lifts or firefighting shafts.
The lift motor room is located on the roof, accessed via a trap door and zip ladder on the 16th floor.
Firefighters do not have a dedicated firefighting lift for emergency use.

Neutral

Photos





Fire Service Intervention

Event	Seconds	Minutes & Seconds
Initiation to fire detection	30 Seconds	30 Seconds
Actuation Of Fire Detector To Transmission Of Alarm	30 Seconds	30 Seconds
Processing By Central Monitoring Station	90 Seconds	1 Minute 30 Seconds
Receipt of call by fire service mobilising control	90 Seconds	1 Minute 30 Seconds
Transmission To Fire Station And Response	60 Seconds	1 Minute
Travelling Time Of Fire Service	240 Seconds	4 Minutes
Arrival Protocol And Entry Preparation Time	240 Seconds	4 Minutes
Firefighting Travel In Firefighting Lift	120 Seconds	2 Minutes
Firefighter travel to operational bridgehead	300 Seconds	5 Minutes
Firefighter Travel Walking Up Two Flights Of Stairs To Fire Floor (75 Seconds)	75 Seconds	1 Minute 15 Seconds
Total Time	1,275 Seconds	21 Minutes 15 Seconds

Nearest Fire Station

The nearest fire and rescue service is found at Hargate lane West Bromwich B71 1PD and approximately 1.8 miles away or 4 minutes in peak hours traffic.

Wall Constructions

Wall Construction	Build-up
Wall Type 1 brickwork over mineral wool insulation (RQE7DJ)	• Surface Finish (Brickwork) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
Wall Type 2 - render over mineral wool insulation (LF373E)	No elements identified
Wall Type 3 - HPL panels (6J8ZZM)	• Surface Finish • Inner Leaf Support (Backing Wall) (Reinforced concrete)

Wall Construction: Wall Type 1 brickwork over mineral wool insulation

Construction Reference
RQE7DJ

This wall construction was identified by wall inspections 2KY19W, XG7F4Y, and L8E7Z1. The build-up, cavity barrier, and floor slab information is taken directly from inspection 2KY19W. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 1 brickwork over mineral wool insulation (RQE7DJ)	Positive	Low

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	102mm	Brickwork	A1 - Non-Combustible
Brickwork sections have a full fill mineral wool insulation, the internal leaf forms part of the original external masonry wall			
Insulation	100mm	Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork	A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Fire Performance

K.1 General

Materials with a calorific value (gross heat of combustion) of ≤ 3 MJ/kg

Positive

K.2 External Surfaces

Class A1/A2

Positive

K.3 Facings/Cladding Panels

Mechanically fixed

Positive

K.4 Panel Construction

No gaps between panels

Positive

K.5 Cavities

Facings into the cavity at least Class A2

Neutral

K.6 Insulation

Mineral/glass insulation

Positive

K.7 Substrate

Masonry, >75 mm thick

Positive

PAS Standard Benchmark

L1 Benchmark

The Construction benchmark is outlined in section L1 of the PAS 9980 Guidance Document -

Masonry (brickwork, blockwork, reinforced concrete)

Loadbearing masonry, provided it is in good condition, can generally be regarded as providing a substrate which is both non-combustible and fire-resisting to a standard of at least 30 min (60 min if 100 mm thick or more). Non-loadbearing masonry might, or might not, have the same properties.

L3 Benchmark

Insulation materials previously classified as non-combustible/ limited combustibility (now Class A1 or Class A2)

- Stone wool
- Ceramic fibre
- Glass fibre
- Foamed glass
- Exfoliated vermiculite

Class A1 or Class A2 (non-combustible and limited combustibility) insulators pose negligible risk in external wall construction. Where such insulators fully fill wall construction then this might indicate that they are being relied upon as contributing to a period of fire resistance. However, if fire resistance is required or being relied upon as part of the assessment, it is important that these insulators fully fill the space they are in or are sufficiently rigid or otherwise mechanically retained/supported to provide a continuous barrier through the space (e.g. batts will retain their shape whereas quilt can slump in a cavity).

L5 Benchmark

FRAMES -

The frames of windows and doors can, subject to the materials used in their construction, provide the function of cavity barriers or cavity closers around these openings. Typically, timber and steel frame windows offer the cavity barrier function whereas aluminium and uPVC do not. However, it is advisable to check uPVC frames with a magnet, as steel can be incorporated within the frame, particularly where the doors are required to provide a level of security.

L6 Benchmark

BALCONIES -

Balconies are defined in BS 8579. However, for the purpose of this PAS and the manner in which balconies impact external fire behaviour, balconies fall into one of three categories:

- a) those which fall entirely within the curtilage of the building structure (i.e. they are built on the slab and appear inset into the building when observed from outside). They might be enclosed to an extent and might effectively be made fully enclosed (sometimes referred to as a "winter garden"). The extent of enclosure needs to be considered in light of whether, from a fire perspective, the space can be treated as part of the outside or whether it is in effect a compartment (i.e. subject to compartment fire behaviour);
- b) those which project beyond the main building structure but do so on an extension of the floor slab. They provide an advantage in that their construction matches that of the compartment floor within the building, and can deflect fire/smoke plumes away from the building; and
- c) those which project beyond the main building structure and are fixed to the outside face of the building. They can only be of lightweight construction; their construction needs to be assessed based upon the combustibility and fire resistance of any materials used.

Regardless of balcony type, the materials used to line the balconies (including soffits) need to be assessed in light of their likely contribution to external fire spread.

Storage of materials and other uses by residents also need to be taken into account. Any bulk storage can pose a significant hazard, as can the use of combustion appliances such as barbecues and heaters.

Aside from the above, means of escape external walkways (a form of balcony) are not within the scope of this PAS, as any risk associated with these would need to be considered as part of the overarching FRA.

L7 Benchmark

MASONRY (OUTER SINGLE SKIN ONLY)

When assessing a building which appears to have masonry or concrete external wall construction, the following issues need to be taken into account.

- a) Is the masonry/concrete loadbearing or simply providing a façade?
- b) Is the masonry/concrete traditional (i.e. full bricks laid in courses using sand/cement mortar or concrete exceeding 75 mm thick); or
 - 1) brick slip (tiles) fixed to a substrate; or
 - 2) factory produced (typically panellized) brickwork?If either item 1) or item 2) above, then treat as other form of cladding depending upon underlying construction (most likely rainscreen).
- c) What is the underlying construction? For example:
 - 1) second leaf of masonry/concrete forming a cavity;
 - 2) timber frame;
 - 3) steel structure and frame;
 - 4) concrete structure and SFS;
 - 5) concrete structure and concrete panels; or
 - 6) insulated build-up (this is typically used where historic façades are retained over more modern construction, and can come in a variety of forms).

BR135 Benchmark

We have compared this external wall type to the cladding systems found on the BR135 database and we did find a cladding system with the configuration and components that would constitute an exact match to what our inspections found installed on the Property.

Wall Construction: Wall Type 2 - render over mineral wool insulation

Construction Reference
LF373E

This wall construction was identified by wall inspections Z6JHAR, AHXSF6, and J7JTM8. The build-up, cavity barrier, and floor slab information is taken directly from inspection . See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 2 - render over mineral wool insulation (LF373E)	Positive	Low

Fire Performance

K.1 General

Materials with a calorific value (gross heat of combustion) of ≤ 3 MJ/kg	Positive
---	----------

K.2 External Surfaces

Class A1/A2	Positive
-------------	----------

K.3 Facings/Cladding Panels

Mechanically fixed	Positive
--------------------	----------

K.4 Panel Construction

No gaps between panels	Positive
------------------------	----------

K.5 Cavities

Facings into the cavity at least Class A2	Neutral
---	---------

K.6 Insulation

Mineral/glass insulation

Neutral

K.7 Substrate

Masonry, >75 mm thick

Positive

PAS Standard Benchmark

L1 Benchmark

The Construction benchmark is outlined in section L1 of the PAS 9980 Guidance Document -

Masonry (brickwork, blockwork, reinforced concrete)

Loadbearing masonry, provided it is in good condition, can generally be regarded as providing a substrate which is both non-combustible and fire-resisting to a standard of at least 30 min (60 min if 100 mm thick or more). Non-loadbearing masonry might, or might not, have the same properties.

L3 Benchmark

Insulation materials previously classified as non-combustible/ limited combustibility (now Class A1 or Class A2)

- Stone wool
- Ceramic fibre
- Glass fibre
- Foamed glass
- Exfoliated vermiculite

Class A1 or Class A2 (non-combustible and limited combustibility) insulators pose negligible risk in external wall construction. Where such insulators fully fill wall construction then this might indicate that they are being relied upon as contributing to a period of fire resistance. However, if fire resistance is required or being relied upon as part of the assessment, it is important that these insulators fully fill the space they are in or are sufficiently rigid or otherwise mechanically retained/supported to provide a continuous barrier through the space (e.g. batts will retain their shape whereas quilt can slump in a cavity).

L4 Benchmark

Differentiating cavity barriers, fire stopping and fire barriers -

Cavity barriers are often confused with fire stopping and fire barriers.

Cavity barriers subdivide cavities. In general, any structure within external wall construction that subdivides cavities could be a cavity barrier (subject to whether its construction is capable of providing the function of a cavity barrier). ADB ([8], [9]) recommends that cavity barriers provide 30 min fire-resisting integrity and 15 min insulation unless they are in a stud wall or partition, or around an opening, and constructed from one of the following "deemed to satisfy" materials:

- steel 0.5 mm thick;
- timber 38 mm thick;
- mineral wool provided it is in slab form or sleeved in polythene; and
- calcium silicate, cement-based or gypsum-based (plaster) board at least 12 mm thick.

Cavity barriers need to be fixed in such a way which offers at least as much fire resistance as the cavity barrier itself, so as to avoid failure of the fixing causing premature failure of the cavity barrier. Construction formed of concrete, masonry or any of the "deemed to satisfy" cavity barrier constructions (i.e. stud wall construction lined with minimum 12.5 mm standard plasterboard) can be considered sufficient for this purpose.

Fire barriers are generally used to subdivide sections of combustible construction (usually combustible insulation) that does not have a cavity. Their individual performance is not defined, although they generally need to have been incorporated into a system which has been successfully tested to the relevant part of BS 8414 and classified to BR 135 [15].

Fire stopping is used to complete discontinuities in fire-resisting construction; it needs to provide the same period of fire resistance as the element it is completing. In the context of external wall construction, anything that connects compartment floors onto the inside face of the external walls is fire stopping. Once within the thickness of the external wall, only cavity barriers or fire barriers are required; however, any discontinuities in these might also require fire stopping.

L5 Benchmark

FRAMES -

The frames of windows and doors can, subject to the materials used in their construction, provide the function of cavity barriers or cavity closers around these openings. Typically, timber and steel frame windows offer the cavity barrier function whereas aluminium and uPVC do not. However, it is advisable to check uPVC frames with a magnet, as steel can be incorporated within the frame, particularly where the doors are required to provide a level of security.

L6 Benchmark

FIXING METHODS -

Mechanical fixings are invariably the most reliable means of fixing together the various components of external wall construction.

Metals, depending upon their softening/melting temperature, might remain in situ or might soften, melt, or even rapidly oxidize, exposing the underlying construction to fire.

Adhesives can be simply relied upon where it is clear that they are cementitious in nature and provide a good bond onto their substrate. Where an adhesive is not clearly cementitious, it might need to be identified so that its fire performance can be ascertained, particularly where failure of the adhesive could have direct implications for fire performance (e.g. supporting insulation, rainscreen or cavity/fire barriers).

BR135 Benchmark

We have compared this external wall type to the cladding systems found on the BR135 database and we did find a cladding system with the configuration and components that would constitute an exact match to what our inspections found installed on the Property.

Wall Construction: Wall Type 3 - HPL panels

Construction Reference
6J8ZZM

This wall construction was identified by wall inspections 4QF4VX and MWYFX2. The build-up, cavity barrier, and floor slab information is taken directly from inspection 4QF4VX. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 3 - HPL panels (6J8ZZM)	Neutral	Medium

Build-Up

2 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	6mm		B - Combustible
Inner Leaf Support (Backing Wall)	100mm	Reinforced concrete	A1 - Non-Combustible

Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Fire Performance

K.1 General

Materials with a calorific value (gross heat of combustion) >3 MJ/kg and ≤ 35 MJ/kg

Neutral

K.2 External Surfaces

Class B

Neutral

K.3 Facings/Cladding Panels

Mechanically fixed

Positive

K.4 Panel Construction

Limited size of gaps between panels (Typically <10 mm)

Neutral

K.5 Cavities

Facings into the cavity at least Class A2

Neutral

K.6 Insulation

Mineral/glass insulation

Positive

K.7 Substrate

Masonry, >75 mm thick

Positive

K.8 Sheathing Boards

Not Applicable

K.9 Insulated Core Panels

Not Applicable

K.10 ETICS

Not Applicable

K.11 Infill / Spandrel Panels

Not Applicable

PAS Standard Benchmark

L1 Benchmark

The Construction benchmark is outlined in section L1 of the PAS 9980 Guidance Document -

Masonry (brickwork, blockwork, reinforced concrete)

Loadbearing masonry, provided it is in good condition, can generally be regarded as providing a substrate which is both non-combustible and fire-resisting to a standard of at least 30 min (60 min if 100 mm thick or more). Non-loadbearing masonry might, or might not, have the same properties.

L6 Benchmark

BALCONIES -

Balconies are defined in BS 8579. However, for the purpose of this PAS and the manner in which balconies impact external fire behaviour, balconies fall into one of three categories:

- a) those which fall entirely within the curtilage of the building structure (i.e. they are built on the slab and appear inset into the building when observed from outside). They might be enclosed to an extent and might effectively be made fully enclosed (sometimes referred to as a "winter garden"). The extent of enclosure needs to be considered in light of whether, from a fire perspective, the space can be treated as part of the outside or whether it is in effect a compartment (i.e. subject to compartment fire behaviour);
- b) those which project beyond the main building structure but do so on an extension of the floor slab. They provide an advantage in that their construction matches that of the compartment floor within the building, and can deflect fire/smoke plumes away from the building; and
- c) those which project beyond the main building structure and are fixed to the outside face of the building. They can only be of lightweight construction; their construction needs to be assessed based upon the combustibility and fire resistance of any materials used.

Regardless of balcony type, the materials used to line the balconies (including soffits) need to be assessed in light of their likely contribution to external fire spread.

Storage of materials and other uses by residents also need to be taken into account. Any bulk storage can pose a significant hazard, as can the use of combustion appliances such as barbecues and heaters.

Aside from the above, means of escape external walkways (a form of balcony) are not within the scope of this PAS, as any risk associated with these would need to be considered as part of the overarching FRA.

L9 Benchmark

HPL -

HPLs are most commonly formed of a mixture of cellulose (wood pulp, recycled paper or similar) and combustible polymeric resin, though external wall assessors need to be aware that any combination of materials formed in a press can be termed a "high pressure laminate" and might be difficult to differentiate visually.

HPLs formed of cellulose and resin typically behave in a charring manner analogous to timber, with similar flame spread, energy release and mechanical behaviour (charring until breaking apart). With treatment for enhanced fire performance (usually by additive of chemical fire retardant), these behaviours can potentially be improved, but need to be known on a product-specific basis before they can be relied upon as providing better performance.

BR135 Benchmark

We have compared this external wall type to the cladding systems found on the BR135 database and we did not find a cladding system with the configuration and components that would constitute an exact match to what our inspections found on the Property.

Façade Configuration: JBCFR9

Items in Façade

5 Items

Effect

Risk

Wall Construction
Wall Type 1 brickwork over mineral wool insulation (RQE7DJ)

Positive

Low

Attachment
Cantilever Balcony (DKQZFE)

Neutral

Medium

External Door
Single Leaf Entrance Doors (4AYFPR)

Positive

Low

External Door
Aluminium (V9R2SP)

Positive

Low

External Window
Top, Mid, Side Hung Casements (QKY2GS)

Positive

Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

<11 m

Neutral

N.2 Height of Base of Cladding (Above Ground)

<2 m

NOTE At this height, the likelihood of a fire originating externally (e.g. involving a parked vehicle or waste skip started either accidentally or deliberately) igniting the cladding is highly likely.

Neutral

N.3 Extent of Cladding

No scope for a cladding fire to breach compartment wall and floor boundaries

Positive

N.4 Cavities & Openings

No cavity

Positive

N.8 Proximity to Windows and Other Openings to the Accommodation

Horizontally adjacent to windows and openings, but not vertically in line with such openings, such that fire and smoke spread into the buildings, causing secondary fires, as a result of direct flame impingement, is possible, but only under adverse wind conditions

Neutral

N.9 Presence of vents or other openings for services in the Façade

Where vents pass through a cavity, either:

- the cavity does not include combustible materials; or
- the cavity is faced on either side by brick or concrete at least 75 mm thick and any combustible insulation in the cavity is not thermoplastic

Positive

N10. Proximity of Combustible Elements of a Façade to Escape Route Windows & Other Openings

Remote from windows and openings, such that fire spread into the escape routes to give rise to untenable conditions is remote

Positive

N.12 Proximity of Combustible Elements of a Façade to a Neighbouring Building

There are no buildings within 15 metres of Lissimore House

Risk Factor Analysis

1) Impact of Risk from Fire Performance: Brickwork over mineral wool is non combustible and therefore surface flame spread would be inhibited

2) Impact of Risk from Façade Configuration: Brickwork over mineral wool is non combustible and therefore surface flame spread would be inhibited

3) Impact of Risk from Fire Strategy / Fire Hazards: Brickwork over mineral wool is non combustible and therefore surface flame spread would be inhibited

Conclusion: In the event of a fire, fire spread is likely to be at a lower rate within expectations for a building of this height, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or

a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.

b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.



Façade Configuration: ICNQTP

Items in Façade

5 Items

	Effect	Risk
Wall Construction Wall Type 2 - render over mineral wool insulation (LF373E)	Positive	Low
Attachment Cantilever Balcony (DKQZFE)	Neutral	Medium
External Door Single Leaf Entrance Doors (4AYFPR)	Positive	Low
External Door Aluminium (V9R2SP)	Positive	Low
External Window Top, Mid, Side Hung Casements (QKY2GS)	Positive	Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

18 m to 30 m

Neutral

N.2 Height of Base of Cladding (Above Ground)

2 m to 5 m

NOTE At this height, the scope for a fire originating externally (e.g. involving a parked vehicle or waste skip started either accidentally or deliberately) igniting the cladding is considered possible, but not likely at an early stage in the development of the fire.

Neutral

N.3 Extent of Cladding

No scope for a cladding fire to breach compartment wall and floor boundaries

Positive

N.4 Cavities & Openings

No cavity

Positive

N.8 Proximity to Windows and Other Openings to the Accommodation

Horizontally adjacent to windows and openings, but not vertically in line with such openings, such that fire and smoke spread into the buildings, causing secondary fires, as a result of direct flame impingement, is possible, but only under adverse wind conditions

Neutral

N.9 Presence of vents or other openings for services in the Façade

Where vents pass through a cavity, either:

- the cavity does not include combustible materials; or
- the cavity is faced on either side by brick or concrete at least 75 mm thick and any combustible insulation in the cavity is not thermoplastic

Positive

N10. Proximity of Combustible Elements of a Façade to Escape Route Windows & Other Openings

Remote from windows and openings, such that fire and smoke spread into the escape routes to give rise to untenable conditions is not possible

Positive

N.12 Proximity of Combustible Elements of a Façade to a Neighbouring Building

There are no buildings within 15 metres of Lissimore House

Risk Factor Analysis

1) Impact of Risk from Fire Performance: Render over mineral wool is non combustible and therefore surface flame spread would be inhibited

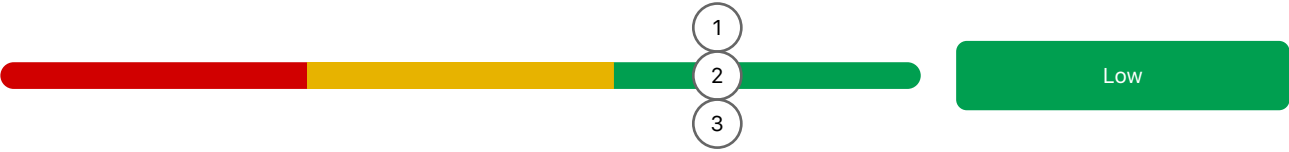
2) Impact of Risk from Façade Configuration: Render over mineral wool is non combustible and therefore surface flame spread would be inhibited

3) Impact of Risk from Fire Strategy / Fire Hazards: Render over mineral wool is non combustible and therefore surface flame spread would be inhibited

Conclusion: In the event of a fire, fire spread is likely to be at a lower rate within expectations for a building of this height, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or

a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.

b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.



Façade Configuration: N3C21P

Items in Façade

5 Items

Effect

Risk

Wall Construction
Wall Type 3 - HPL panels (6J8ZZM)

Neutral

Medium

Attachment
Cantilever Balcony (DKQZFE)

Neutral

Medium

External Door
Single Leaf Entrance Doors (4AYFPR)

Positive

Low

External Door
Aluminium (V9R2SP)

Positive

Low

External Window
Top, Mid, Side Hung Casements (QKY2GS)

Positive

Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

18 m to 30 m

Neutral

N.2 Height of Base of Cladding (Above Ground)

>5 m

NOTE At this height, the likelihood of a fire originating externally (e.g. involving a parked vehicle or waste skip and started either accidentally or deliberately) igniting the cladding is highly unlikely.

Neutral

N.3 Extent of Cladding

Limited in extent such as to delay fire spread over the external walls

Neutral

N.4 Cavities & Openings

Limited or no windows or openings in façade

Positive

N.5 Infill / Spandrel Panels

Not Applicable

N.6 Setbacks - Combustible Cladding Setback from Wall Edge

Not Applicable

N.7 Overhangs & Projections

Not Applicable

N.8 Proximity to Windows and Other Openings to the Accommodation

Horizontally adjacent to windows and openings, but not vertically in line with such openings, such that fire and smoke spread into the buildings, causing secondary fires, as a result of direct flame impingement, is possible, but only under adverse wind conditions

Neutral

N.9 Presence of vents or other openings for services in the Façade

Not Applicable

N10. Proximity of Combustible Elements of a Façade to Escape Route Windows & Other Openings

Remote from windows and openings, such that fire spread into the escape routes to give rise to untenable conditions is remote

Neutral

N.11 Attachments

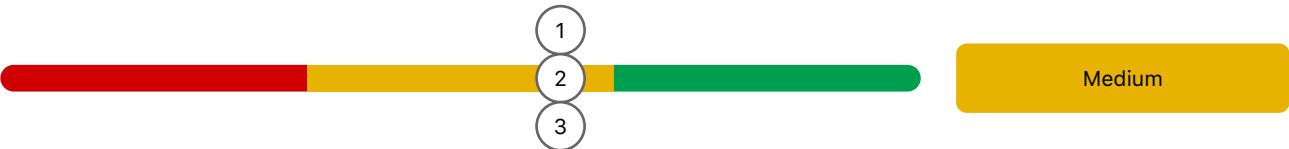
Not Applicable

N.12 Proximity of Combustible Elements of a Façade to a Neighbouring Building

There are no buildings within 15 metres of Lissimore House

Risk Factor Analysis

- 1) Impact of Risk from Fire Performance:** The HPL panels are stated have a reaction to fire class of B
- 2) Impact of Risk from Façade Configuration:** The HPL panels are stated have a reaction to fire class of B
- 3) Impact of Risk from Fire Strategy / Fire Hazards:** The HPL panels are stated have a reaction to fire class of B
- Conclusion:** In the event of a fire, fire spread is likely to be at a higher rate within expectations for a building of this height given the circumstances at the building in question; and/or
- a) fire spread is likely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.
 - b) fire is likely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.



APPENDIX

Asset Information

Client Name

Sandwell Metropolitan Borough Council

Client Address

Sandwell Council House
Freeth Street PO Box 2374
Oldbury
B69 3DE

Responsible Person

Sandwell Metropolitan Borough Council

Safety Assistance

Not Required

Contact Details

As provided by client

Fire Alarm System

Fire detection in flats is limited to hard-wired or battery-operated smoke alarms.

The smoke alarms are installed to a minimum LD3 standard (hallway only).

A sample of flats inspected had LD2 standard detection (smoke detection in the hallway and living room, with heat detection in the kitchen). There is no fire alarm system in communal areas, in line with the "Stay Put Unless" strategy.

Smoke detection is present in communal areas, but it is only used for the activation of the Automatic Opening Vents (AOVs). Sprinkler/deluge system is installed in the bin store

Emergency Lighting

Installed in communal parts

Emergency Lighting

Emergency lighting appears to conform to the requirements of BS5266-1 design standard. The system appears to provide adequate coverage and be in good working order (indicator lights active on luminaires). Luminaires are correctly sited and appear to provide adequate lighting.

Portable Fire Fighting Equipment

Portable Fire Fighting Equipment installed within staff only / Restricted areas of the building

Portable Fire Fighting Equipment

Extinguisher equipment is installed within staff only / Restricted access areas of the building.

Smoke Control

Smoke control installed

Smoke Control

The stairs and/or lobbies are provided with adequate permanent or manually operated ventilation openings for the control of smoke. Manual openable windows within the stairwell and the stairs and lobbies are provided with an automatic smoke ventilation system

Suppression Systems

Partial sprinkler system installed (Detailed in Description)

Suppression System

Sprinkler/deluge system is installed in the bin store

Fire Fighting Facilities

Dry Riser

Fire Fighting Facilities

Dry riser outlets were located on each floor within the firefighting lobby area, ensuring accessible water supply for firefighting operations. This placement allows for efficient connection of firefighting hoses, providing vital water access to emergency services during fire incidents across all floor levels.

Access for fire-fighting vehicles

Adequate access for firefighting vehicles

NOTE This is where access is possible in line with benchmark guidance on access for firefighting vehicles from Approved Document B, taking into account the size of the building (floor area), height of the building and whether fire mains are present in the building.

Fire Hydrant Location/ Water Supply

The fire hydrant at Lissimore House is located at the rear entrance/exit of the building, approximately 1 meter from the door. This information is also recorded on the orientation plan within the Premises Information Box (PIB).

Housekeeping

Good standard. Means of escape clear. Refuse stored appropriately

Secure Information Boxes

Secure information box (SIB) installed

Secure Information Boxes

A proprietary steel SIB is fitted within the main entrance lobby

Signage

Appropriate signage installed throughout premises

Signage

Directional. Wayfinding. Fire Action Notices. No Smoking. Do Not Use Lift in Case of Fire. Final Exit. Fire Door.

Property Type

Apartment Block, Residential Purpose-built

Building Era / Age

Known Build Date

Known Build Date

1967

Building Height

Is approximately 45 metres from lowest point at ground to the upper most enclosed finished floor slab

Approx Floor Area Per Floor

The approximate footprint of Lissimore House is 600m2

Number of Storeys (Ground and above)

There are 17 floors including the ground floor

Number of Basement Levels

None

Number of Flats

67

Flat Types

Single Storey

Structural Wall Material

Brick / Block

Structural Floor Material

Reinforced Concrete

Structural Stairs Material

Concrete

Exterior Cladding

FRAEW Completed on Exterior Cladding

Exterior Cladding (Details)

Improvement works were carried out 2010 planning reference DC/10/52440 which comprised of external insulated cladding that was found to be a mineral wool based external wall insulation with cement based render finish; replacement windows were found to be softwood timber with metal capping; the new front entrance porch was found to be polyester powder coated metal.

Replacement balcony panels are Trespa panels which have been installed on all balconies

Electronic Entrance System

Yes

Carpark

External/Outdoor Carpark

Employees

None

Residents

Yes

Approx number of Residents

134

Residents (Extended)

Assumed to be two residents per flat (Exact numbers not known)

People With Reduced Mobility

Other

People with Reduced Mobility (Extended)

General Needs - No information however, General Needs premises so occupants are typical of the general population

Lone Workers

None

Young Persons Employed in the Premises

None

Escapes & Exits

There are sufficient fire exits from the premises of suitable width and within acceptable travel distances. These will allow all persons in the premises to evacuate safely in the event of fire. Emergency exits open outwards in escape direction.

Number Of Internal Escape Stairs

The building is provided with a single escape stair

Number Of Final Exits

The building is provided with two individual escape exits

External Means Of Escape

None Present

Types Of Lifts Installed

Passenger + Fireman's Control

Evacuation Chairs Installed

No

Refuge Points Present

No

Stairwells Protected / Lobbied

Yes

Flat Doors Open Onto Stairs

No

Current Evacuation Strategy

Stay Put

Current Stay Put Strategy Description

The current evacuation strategy is Stay Put as denoted by the fire action notices displayed in the common area.

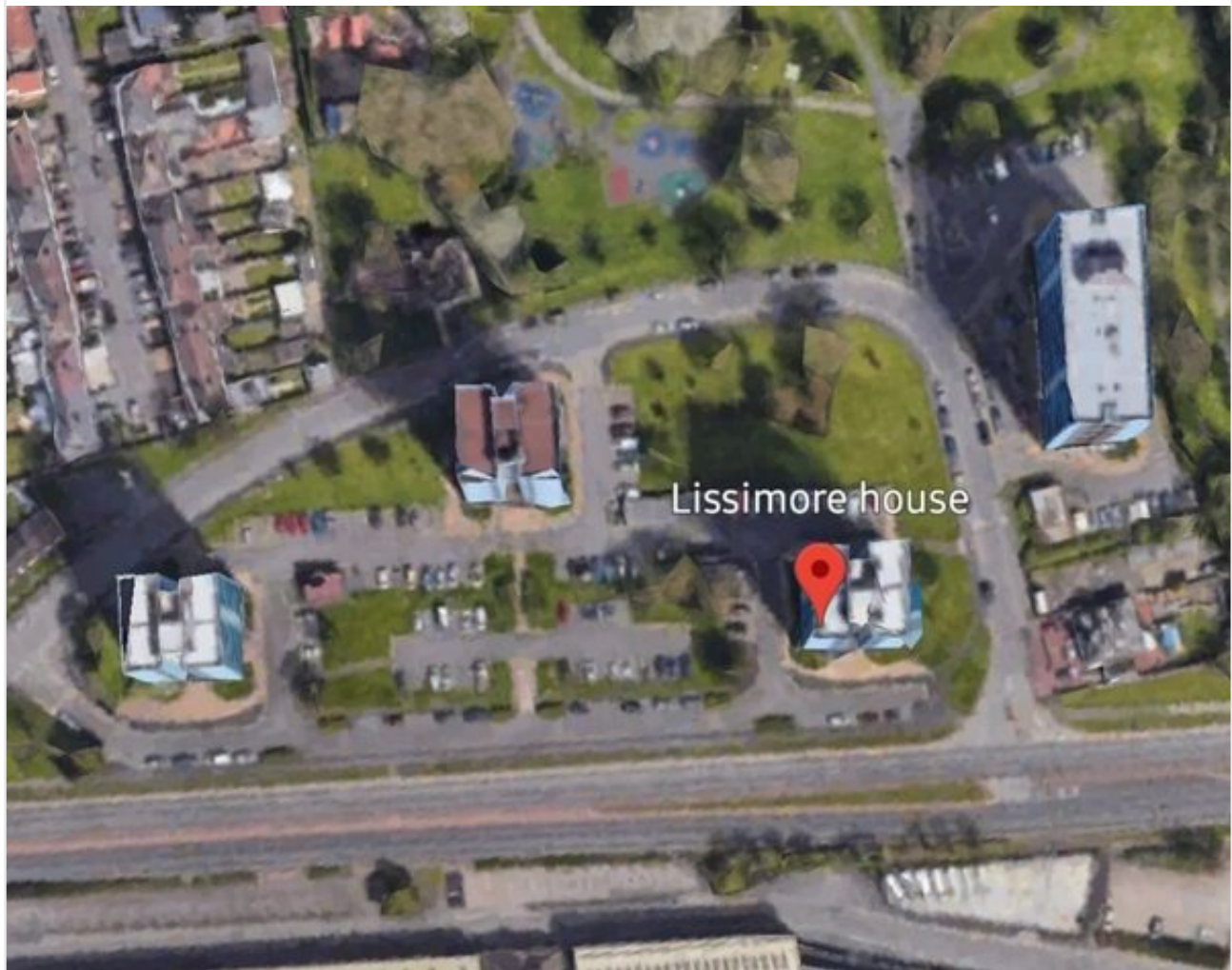
Current Evacuation Strategy for the property considered appropriate?

Yes

What is the recommended evacuation strategy for the property?

Stay Put

Aerial Perspective: Showing Aerial view of Lissimore House and the surrounding area



Elevations

Photo	Name	No. of Storeys
-------	------	----------------



North and East Elevation

17 Storeys



North and West Elevation

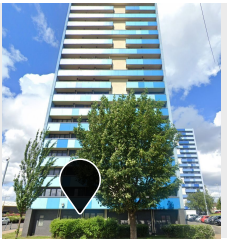
17 Storeys

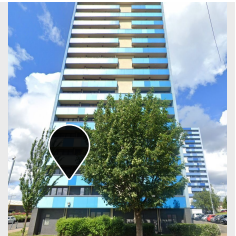


South Elevation

17 Storeys

Inspections

Elevation Location	Inspection	Elements
	Inspection: 2KY19W Survey locations as tagged Accessible wall	• Surface Finish (Brickwork) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	Inspection: Z6JHAR Survey locations as tagged Accessible wall	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	Inspection: ZPERLY	• Surface Finish
	Inspection: 4QF4VX Survey locations as tagged Accessible wall	• Surface Finish • Inner Leaf Support (Backing Wall) (Reinforced concrete)
	Inspection: VK4ENM	• Surface Finish
	Inspection: XG7F4Y Survey locations as tagged Accessible wall	• Surface Finish (Brickwork) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	Inspection: L8E7Z1 Survey locations as tagged Accessible wall	• Surface Finish (Brickwork) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)

Elevation Location	Inspection	Elements
	Inspection: AHXSF6 Survey locations as tagged Accessible wall	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	Inspection: J7JTM8 Survey locations as tagged Accessible wall	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	Inspection: MWYFX2 Survey locations as tagged Accessible wall	• Surface Finish • Inner Leaf Support (Backing Wall) (Reinforced concrete)

Inspection: 2KY19W

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 Brickwork over mineral wool insulation

Description

Brickwork sections have a full fill mineral wool insulation, the internal leaf forms part of the original external masonry wall

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
------------	-----------------	----------	------------	---------------------

Surface Finish	102mm	Brickwork		A1 - Non-Combustible
----------------	-------	-----------	--	----------------------

Brickwork sections have a full fill mineral wool insulation, the internal leaf forms part of the original external masonry wall

Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
------------	-------	-------------------------	--	----------------------

Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible
---	-------	--------------------	--	----------------------

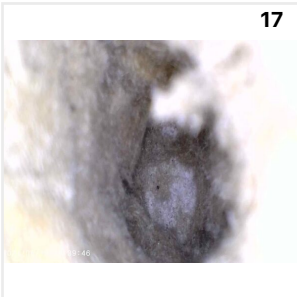
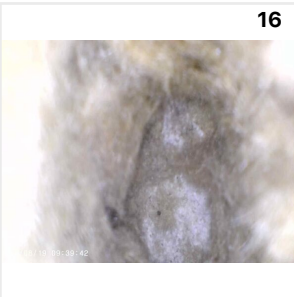
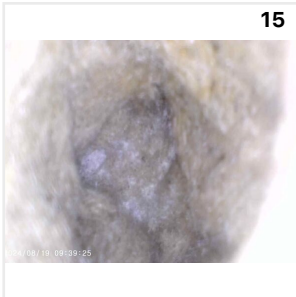
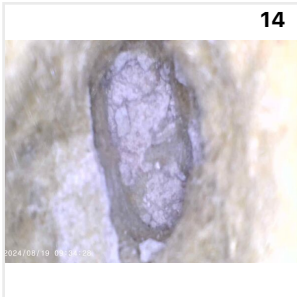
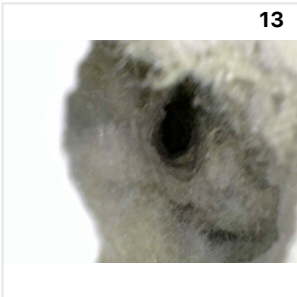
Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: Z6JHAR

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 2 - Render over mineral wool insulation

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

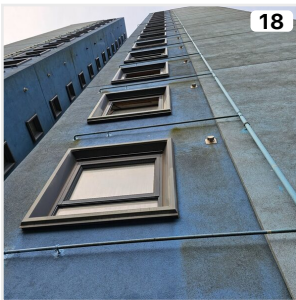
Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



18



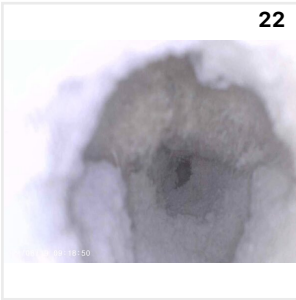
19



20



21



22



23

Inspection: ZPERLY

Name/Summary

Wall Type 2 - mineral wool substrate with cement based render finish

Description

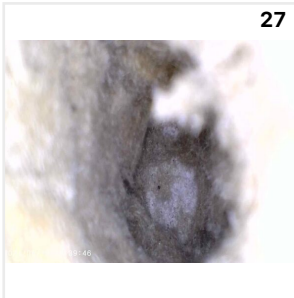
The EWI system is considered to be non-combustible

Build-Up

1 Element	Thickness/Depth	Photo Ref.	Rating (BS EN13501)
-----------	-----------------	------------	---------------------

Surface Finish	100mm		A1 - Non-Combustible
----------------	-------	--	----------------------

Inspection Photos



Inspection: 4QF4VX

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 3 - HPL panels attached to original balustrades

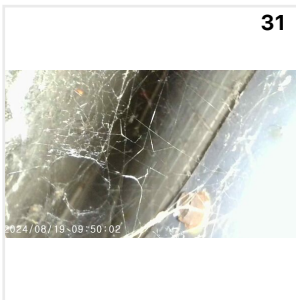
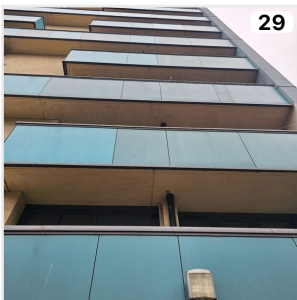
Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm			B - Combustible
Inner Leaf Support (Backing Wall)	100mm	Reinforced concrete		A1 - Non-Combustible

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



32



Inspection: VK4ENM

Name/Summary

Wall Type 4 - render system unknown

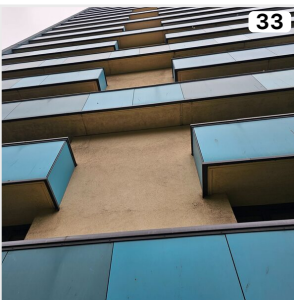
Build-Up

1 Element	Photo Ref.
-----------	------------

Surface Finish	
----------------	--

Render system which has been installed between flats vertically, we would expect these sections to be a mineral wool based EWI render as found on other render sections

Inspection Photos



Inspection: XG7F4Y

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 Brickwork over mineral wool insulation

Description

Brickwork sections have a full fill mineral wool insulation, the internal leaf forms part of the original external masonry wall

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
------------	-----------------	----------	------------	---------------------

Surface Finish	102mm	Brickwork		A1 - Non-Combustible
----------------	-------	-----------	--	----------------------

Brickwork sections have a full fill mineral wool insulation, the internal leaf forms part of the original external masonry wall

Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
------------	-------	-------------------------	--	----------------------

Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible
---	-------	--------------------	--	----------------------

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: L8E7Z1

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 Brickwork over mineral wool insulation

Description

Brickwork sections have a full fill mineral wool insulation, the internal leaf forms part of the original external masonry wall

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
------------	-----------------	----------	------------	---------------------

Surface Finish	102mm	Brickwork		A1 - Non-Combustible
----------------	-------	-----------	--	----------------------

Brickwork sections have a full fill mineral wool insulation, the internal leaf forms part of the original external masonry wall

Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
------------	-------	-------------------------	--	----------------------

Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible
---	-------	--------------------	--	----------------------

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: AHXSF6

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 2 - Render over mineral wool insulation

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: J7JTM8

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 2 - Render over mineral wool insulation

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: MWYFX2

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 3 - HPL panels attached to original balustrades

Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm			B - Combustible
Inner Leaf Support (Backing Wall)	100mm	Reinforced concrete		A1 - Non-Combustible

Floor Slab

Backing Wall Sits On The Floor Slab

Attachments & Balconies

Photo

Attachment



Cantilever Balcony (DKQZFE)
Configuration: Stacked

Attachment: Cantilever Balcony

Attachment Reference
DKQZFE

Details

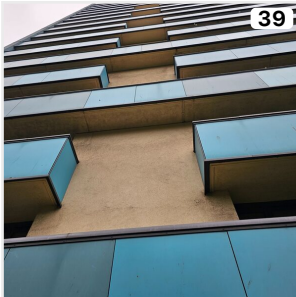
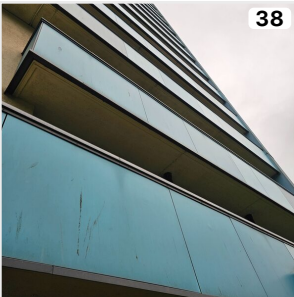
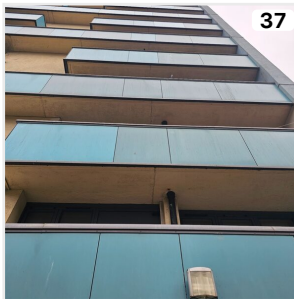
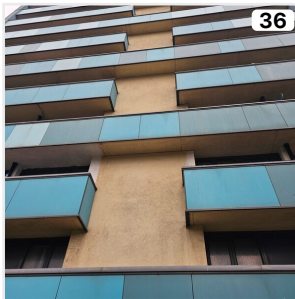
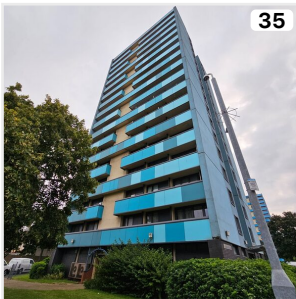
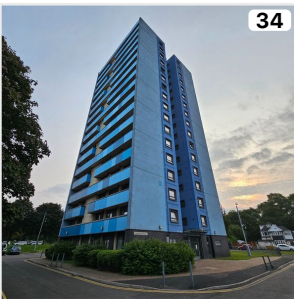
Configuration

Stacked

Framework/Structure

The balcony forms part of the corresponding floor slab

Photos



Penetrations

Photo

Penetration

No Image

Flue (1MD21F)
Inspection Type: Visual

Penetration: Flue

Penetration Reference
1MD21F

Details

Photo

1 Image

Inspection Type

Visual

Duct Pipework Material

PVC

External Windows

Photo

External Window



Top, Mid, Side Hung Casements (QKY2GS)

External Window: Top, Mid, Side Hung Casements

External Window Reference
QKY2GS

Details

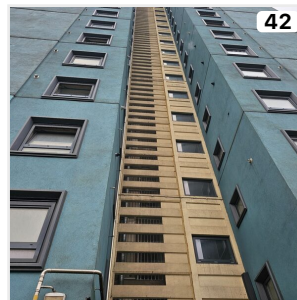
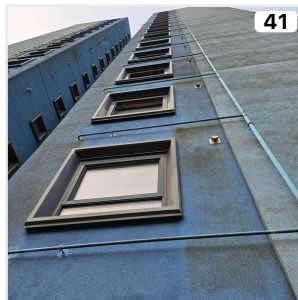
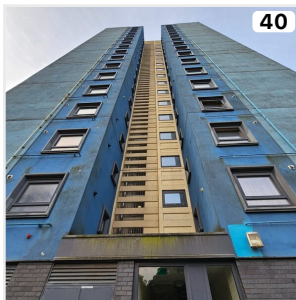
Surface Material

Aluminium

Details

Aluminium windows would not add to or support the growth of a fire

Photos



External Doors

Photo

External Door



Single Leaf Entrance Doors (4AYFPR)



Aluminium (V9R2SP)

External Door: Single Leaf Entrance Doors

External Door Reference
4AYFPR

Details

Surface Material

Aluminium

Frame Material

Aluminium

Details

Aluminium doors would not add to or support the growth of a fire

Photos



External Door: Aluminium

External Door Reference
V9R2SP

Details

Surface Material

Aluminium

Frame Material

Aluminium

Details

Aluminium doors would not add to or support the growth of a fire

Photos



Plan: Survey locations as tagged



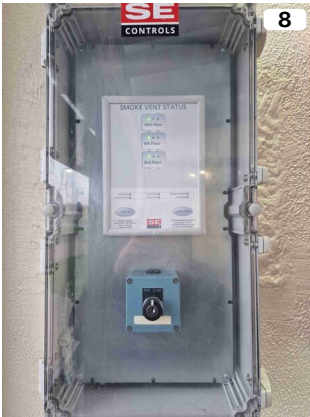
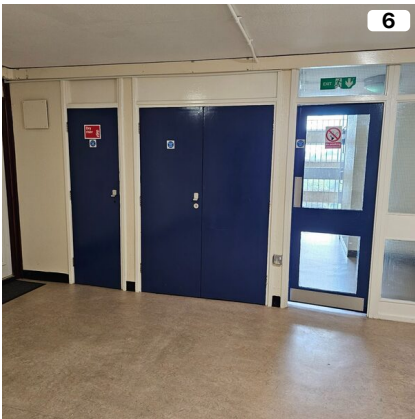
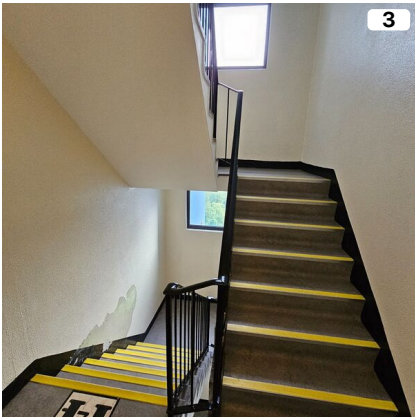
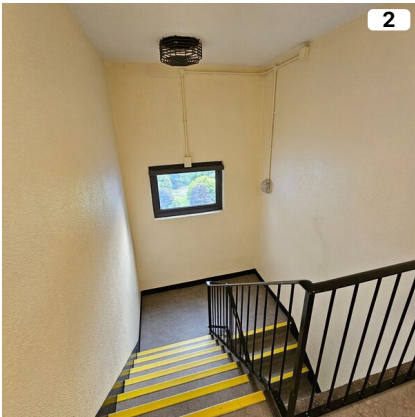
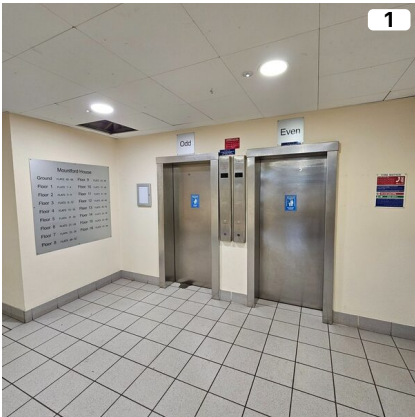
Plan: Survey locations as tagged



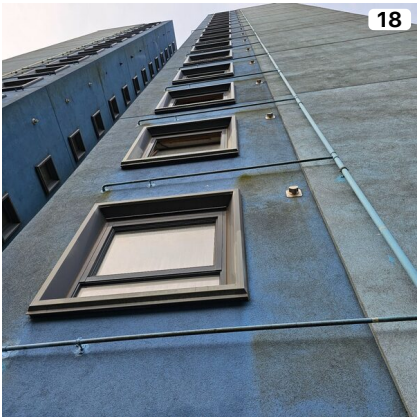
Plan: Survey locations as tagged



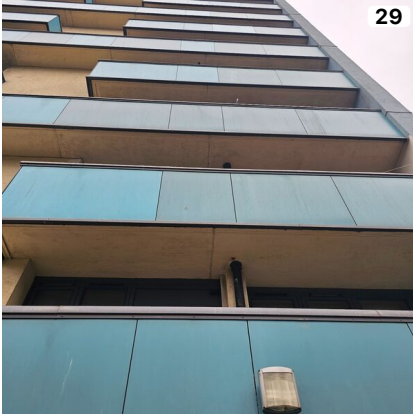
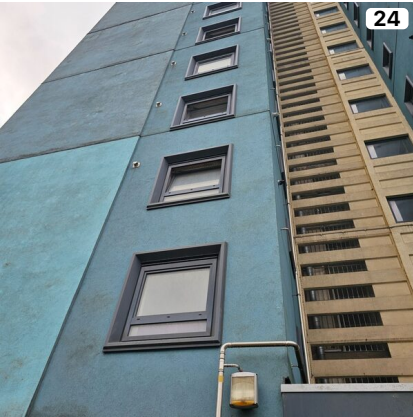
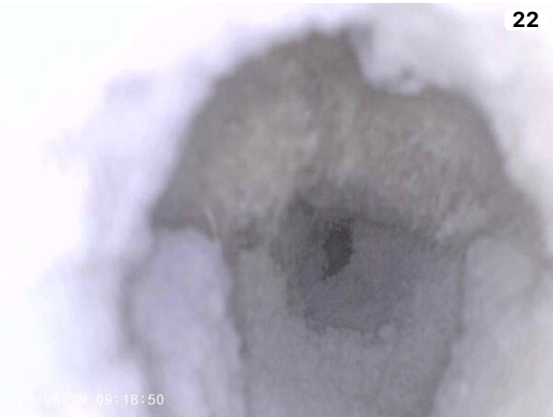
Photos



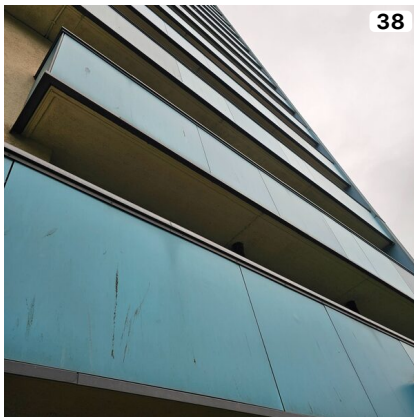
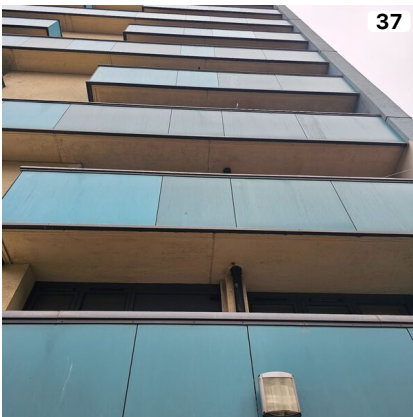
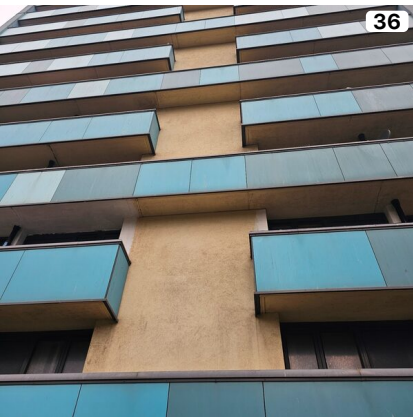
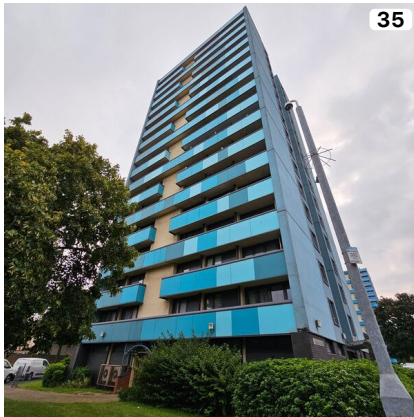
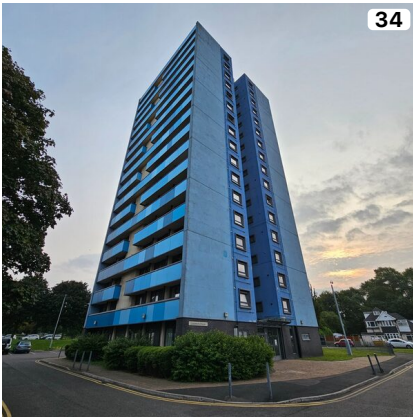
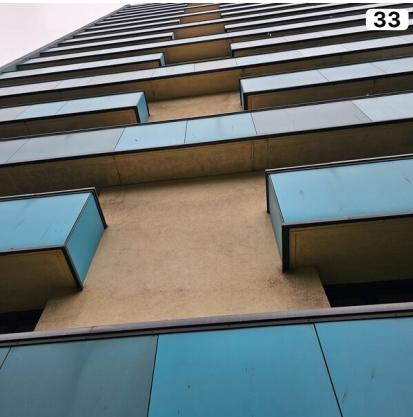
Photos Continued...



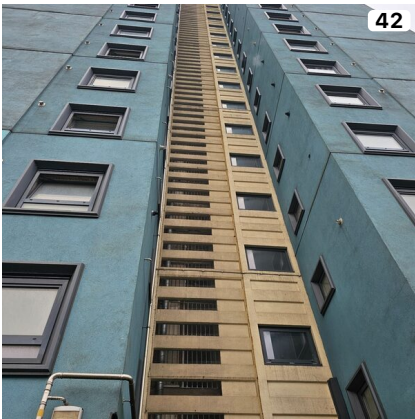
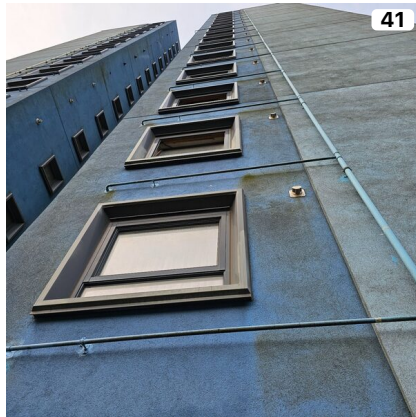
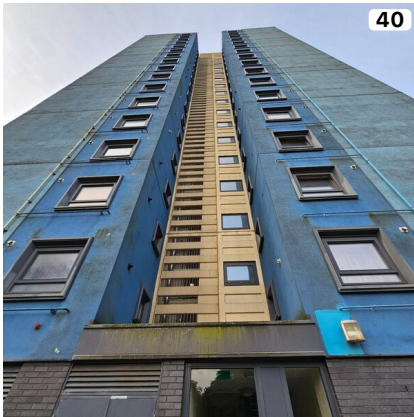
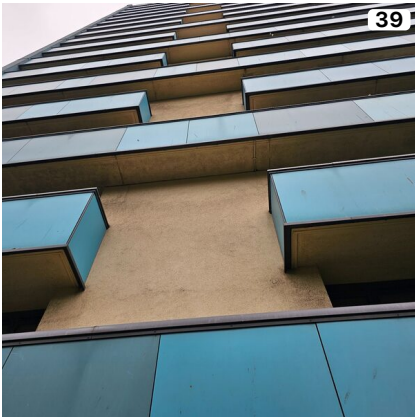
Photos Continued...



Photos Continued...



Photos Continued...





FIRNTEC
BUILDING COMPLIANCE