



FIRNTEC
BUILDING COMPLIANCE

Unit 4a, Darklake View,
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FIRE RISK APPRAISAL EXTERNAL WALLS

RUSSELL HOUSE

Russell House
Holyhead Road
Wednesbury
West Midlands
WS10 7BB

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Summary

Fire Risk Appraisal External Walls

Assessment and Certificate Reference

RB-PB7U4E

Assessed On, By

26/04/2025, Douglas Murray (Building Safety Consultant)
(BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA)

Approved / Validated On, By

19/06/2025, Douglas Murray (Building Safety Consultant)
(BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA)

Recommended Review Date

26/04/2030

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.

Assessed Property

Property Name

Russell House

Property Reference

RB-FYHWV9

Address

Russell House
Holyhead Road
Wednesbury
West Midlands
WS10 7BB

Assessing Organisation

Firntec Ltd
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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

9 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.

12 Items	Effect	Risk
Wall Construction Wall Type 1 - Brick slip over PUR/PIR insulation (JYY1EZ)	Neutral	Medium
Wall Construction Wall Type 2 - Render over Mineral Wool (QJZS89)	Positive	Low
Wall Construction Wall Type 3 - HPL over aluminium frame with mineral wool insulation (HBTX2K)	Neutral	Medium
Attachment Inset Balcony (L2D68N)		
Penetration Flue (UEIZPY)		
Penetration Flue (TXJPY8)		
External Window Top, Mid, Side Hung Casements (NQG1RS)		
External Window Top, Mid, Side Hung Casements (AT5XVR)		
External Door Single Leaf Entrance Doors (64SERK)		
External Door Single Leaf Entrance Doors (923ZXK)		
External Door Single Leaf Door (CZ1IP6)		
External Door Single Leaf Entrance Doors (VZBVKZ)		

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 **YRHGHI** which includes wall construction **JYY1EZ**.

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 **UWVWC6** which includes wall construction **QJZS89**.

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 **HP618I** which includes wall construction **HBTX2K**.

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.



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.

Recommended Enhancements

No recommended enhancements 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

Neutral

Photo Ref. 1

F.3 Escape Route Design

Single staircase, with lobby approach

Positive

Photo Ref. 2, 3

F.5 Smoke Control

Arrangements in which openable windows, AOVs or inlets and outlets of mechanical systems are in close proximity to combustible cladding or otherwise exposed to fire and smoke spread from the external envelope that could compromise the effectiveness of the smoke control system or allow a route for fire spread back into the building

Negative

Photo Ref. 4, 5, 6, 7, 8

F.6 Fire Alarm & Detection

System Type:

Russell House has a communal fire alarm system that is linked to self-contained fire alarms within each flat. This system provides coverage for the entire building, with smoke detectors in the flats and communal areas.

The system includes sounders and break glass call points on each floor, with an alarm panel located in the lift lobby area. The system is monitored via Community Alarms. The fire alarm system undergoes regular maintenance and testing in accordance with BS 5839. The alarm system is subjected to cyclical testing, and fire safety checks are completed regularly to ensure the system is fully operational. This includes monthly checks for sounders, call points, and alarm panel functionality.

Neutral

Photo Ref. 9, 10, 11, 12, 13

F.7 Fire Suppression

System Type:

Russell House is equipped with a wet pipe sprinkler system that is installed in the scooter room (on the ground floor). This room is used for the storage and charging of mobility scooters by residents.

The sprinkler system is installed in accordance with BS 9251:14, which is the British Standard for sprinkler systems in domestic and residential buildings.

The sprinkler system is directly linked to the fire alarm, ensuring coordinated action in the event of a fire in the scooter room.

Coverage and Purpose:

The primary purpose of the sprinkler system is to control fires in the scooter room, a high-risk area due to the charging of mobility scooters. The sprinkler system helps to prevent the spread of fire in this area, which could potentially impact nearby flats and communal areas.

Neutral

Maintenance:

The sprinkler system is regularly serviced as part of the building's fire safety maintenance plan, ensuring it is in full working order and complies with all relevant standards for residential buildings.

Photo Ref. 14, 15

F.8 - Firefighting Facilities

Dry Riser System:

Russell House is equipped with a dry riser system that provides firefighters with easy access to water on each floor. The dry riser serves all floors of the building and is critical for firefighting operations in high-rise buildings.

The dry riser inlet cabinet is located externally on the rear elevation of the building, while the outlets are located on each communal floor lobby. These outlets are secured with cable ties to prevent unauthorized access but can be easily accessed by firefighters.

Fire Extinguishers:

CO2 extinguishers are provided in the following areas:

Lift motor room

Caretaker's office

Ground floor electrical intake room

Laundry room

Positive

Water extinguishers are located in the communal lounge.

These extinguishers are part of the building's firefighting equipment and are regularly maintained as part of the building's fire safety programme.

Deluge System:

The bin room is equipped with a deluge system to protect the area from fire. This system is regularly serviced every six months.

Maintenance of Firefighting Equipment:

Regular maintenance contracts are in place to service the dry riser, fire extinguishers, and deluge systems. The dry riser is serviced twice a year, with an annual hydraulic test to ensure it complies with BS 9990 standards for dry riser systems.

Portable fire extinguishers are also checked annually to ensure their effectiveness.

F.9 Rising Mains

Suitable rising main present

Photo Ref. 16, 17, 18

Neutral

F.10 Lifts Used By Firefighters

Suitable firefighting lift present

Photo Ref. 19

Neutral

Photos



Fire Service Intervention

Event	Seconds	Minutes & Seconds
Initiation to fire detection	60 Seconds	1 Minute
Actuation Of Fire Detector To Transmission Of Alarm	30 Seconds	30 Seconds
Processing By Central Monitoring Station	60 Seconds	1 Minute
Receipt of call by fire service mobilising control	60 Seconds	1 Minute
Transmission To Fire Station And Response	60 Seconds	1 Minute
Travelling Time Of Fire Service	120 Seconds	2 Minutes
Arrival Protocol And Entry Preparation Time	180 Seconds	3 Minutes
Firefighting Travel In Firefighting Lift	90 Seconds	1 Minute 30 Seconds
Firefighter travel to operational bridgehead	180 Seconds	3 Minutes
Firefighter Travel Walking Up Two Flights Of Stairs To Fire Floor (75 Seconds)	75 Seconds	1 Minute 15 Seconds
Total Time	915 Seconds	15 Minutes 15 Seconds

Nearest Fire Station

The nearest fire and rescue service (F&RS) to Russell House, Holyhead Road, Wednesbury, WS10 7BB, is Wednesbury Fire Station, located at King Street, Wednesbury, WS10 7PQ. This station is part of the West Midlands Fire Service and operates 24 hours a day, 7 days a week

Wall Constructions

Wall Construction	Build-up
Wall Type 1 - Brick slip over PUR/PIR insulation (JYY1EZ)	• External Surface Material (Brick Slip / Brick Tile) • Insulation (Phenolic Foam Insulation) • Inner Leaf (Brickwork)
Wall Type 2 - Render over Mineral Wool (QJZS89)	• External Surface Material (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf (Brickwork)
Wall Type 3 - HPL over aluminium frame with mineral wool insulation (HBTX2K)	• External Surface Material (Suspected High Pressure Laminate (HPL) Panel) • Cavity • Insulation (Mineral Wool Insulation)

Wall Construction: Wall Type 1 - Brick slip over PUR/PIR insulation

Construction Reference
JYY1EZ

This wall construction was identified by wall inspections ZBN28Z, 3PRHCG, and ZS4M38. The build-up, cavity barrier, and floor slab information is taken directly from inspection ZBN28Z. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 1 - Brick slip over PUR/PIR insulation (JYY1EZ)	Neutral	Medium

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
External Surface Material	15mm	Brick Slip / Brick Tile Material Brand: The ground floor features Ibstock Rockshield brick slips.	A1 - Non-Combustible
Insulation	80mm	Phenolic Foam Insulation	B - Combustible
The insulation fills the cavity			
Inner Leaf	100mm	Brickwork	A1 - Non-Combustible
Original brickwork			

Cavity Barriers

No external cavity

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 A1/A2

Positive

K.5 Cavities

Facings into the cavity combustible, but at least Class B

Neutral

K.6 Insulation

Class B

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.

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).

L8 Benchmark

Rainscreen systems come in various forms, generally defined by the cold cavity arrangement they incorporate (see Table L.4):

- ventilated and drained; or
- pressure equalized.

Rainscreen systems are invariably supported on some form of framing or bracketing system. In the majority of cases, framing and bracketry transmit the load of the rainscreen to the back wall, and in turn to the building structure at each floor level.

However, consideration needs to be given to the possibility that the rainscreen load is transmitted down to the base of the system and only provides lateral restraint at floor levels. In this instance, the extent to which the frame might be exposed to fire needs to be taken into account, particularly if a material is used which offers no fire resistance, such as aluminium.

Framing and bracketry are likely to interact with cavity barriers; where these cross over the cavity barriers then the detailing of the cavity barrier needs to be appropriate (including additional fire stopping as necessary) to achieve fire separation of cavities.

Table L.3 gives information on the various insulation materials that might be incorporated into a rainscreen system. It is unlikely that thermoplastic insulation will be acceptable in a rainscreen system, particularly if it is exposed in a cavity.

L9 Benchmark

NON-COMBUSTIBLE and LIMITED COMBUSTIBILITY MATERIALS -

These materials can be subdivided into two categories; those which retain their shape when exposed to fire and those which do not.

- Natural stone, terracotta and non-combustible boards all generally remain in situ for a significant period of time when exposed to a fire plume emitting from a building (though they might eventually shatter), thus affording some protection to the underlying 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.

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. Therefore, a BR135 benchmark would not be applicable for this external wall type

Wall Construction: Wall Type 2 - Render over Mineral Wool

Construction Reference
QJZS89

This wall construction was identified by wall inspections F374NR, B2TIP3, and I45Q7C. The build-up, cavity barrier, and floor slab information is taken directly from inspection F374NR. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 2 - Render over Mineral Wool (QJZS89)	Positive	Low

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
External Surface Material	6mm	Render	A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf	100mm	Brickwork	A1 - Non-Combustible

Cavity Barriers

No external 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

Not Applicable

K.5 Cavities

Facings into the cavity at least Class A2

Positive

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).

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.

L8 Benchmark

Rainscreen systems come in various forms, generally defined by the cold cavity arrangement they incorporate (see Table L.4):

- ventilated and drained; or
- pressure equalized.

Rainscreen systems are invariably supported on some form of framing or bracketing system. In the majority of cases, framing and bracketry transmit the load of the rainscreen to the back wall, and in turn to the building structure at each floor level.

However, consideration needs to be given to the possibility that the rainscreen load is transmitted down to the base of the system and only provides lateral restraint at floor levels. In this instance, the extent to which the frame might be exposed to fire needs to be taken into account, particularly if a material is used which offers no fire resistance, such as aluminium.

Framing and bracketry are likely to interact with cavity barriers; where these cross over the cavity barriers then the detailing of the cavity barrier needs to be appropriate (including additional fire stopping as necessary) to achieve fire separation of cavities.

Table L.3 gives information on the various insulation materials that might be incorporated into a rainscreen system. It is unlikely that thermoplastic insulation will be acceptable in a rainscreen system, particularly if it is exposed in a cavity.

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. Therefore, a BR135 benchmark would be applicable for this external wall type

Wall Construction: Wall Type 3 - HPL over aluminium frame with mineral wool insulation

Construction Reference
HBTX2K

This wall construction was identified by wall inspections 3PT6LU, VBTUJ4, and JP83WH. The build-up, cavity barrier, and floor slab information is taken directly from inspection 3PT6LU. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 3 - HPL over aluminium frame with mineral wool insulation (HBTX2K)	Neutral	Medium

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
External Surface Material	8mm	Suspected High Pressure Laminate (HPL) Panel	B - Combustible
Cavity	60mm		
Insulation	80mm	Mineral Wool Insulation	A1 - Non-Combustible

Cavity Barriers

Installed

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

Cavities closed by barriers/fire stopping located in line with all of the following:

- compartment floors;
- compartment walls;
- around openings, e.g. windows, doors; and
- ventilation ducts, grilles and other openings for services

Positive

K.6 Insulation

Class A1/A2

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).

L4 Benchmark

Cavity Barriers -

Cavity barriers are generally needed where cavities pass across compartment lines (so as to avoid the cavity providing a route for fire to circumvent the compartment line), to the extent needed to limit extensive cavities, and around openings including doors, windows and penetrations through cavity construction. Cavities do not, in and of

themselves, need their entire envelopes to be fire-resisting (e.g. the inner face of an external wall cavity can be formed of OSB, provided there are cavity barriers where the cavity passes across a compartment line and to the extent set out previously).

Services passing through cavity external wall construction need either to be surrounded by cavity barriers or to be provided with fire stopping where they pass through the inner leaf of the external wall construction, as would be the case for services passing through 30 min fire-resisting construction.

There are various types of cavity barrier that are commonly encountered in external wall construction.

Full fill cavity barriers can be made of any of the "deemed to satisfy" materials. Mechanical fixing of such cavity barriers is the most reliable approach, but they can be compression fitted if formed of a compressible material such as stone wool.

Open state cavity barriers are commonly used to solve the competing needs of fire separation and ventilation/drainage. There are various forms of open state cavity barrier, ranging from stone wool batt with intumescent edge strips through to multifoil cavity barriers. These cavity barriers are generally only proven to perform in particular arrangements between solid substrates forming the faces of the cavity. Where the cavity barrier only needs to be fixed to one of the two faces and expands onto the other, only the face onto which it is fixed needs to be representative; the other need not be, particularly if it is the inside face of the rainscreen and therefore likely to fall away prior to failure of the cavity barrier. Where the cavity barrier requires fixing into both faces of the cavity (e.g. certain multifoil cavity barriers are designed to be set into mortar in cavities formed of two leaves of brickwork) then both faces and the method of fixing need to be representative of the certification of the cavity barrier.

Open state cavity barriers take time to close, so caution is necessary if they are combined with cavity linings that could spread particularly rapidly, such as EPS.

Proprietary cavity barriers might only be suitable for installation in a particular orientation:

- vertical cavity barriers might not be suitable for use as horizontal cavity barriers;
- horizontal cavity barriers (particularly those which are open state) are unlikely to be suitable for use as vertical cavity barriers, and also need to be installed both the right way up and the right way round.

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).

L8 Benchmark

Rainscreen systems come in various forms, generally defined by the cold cavity arrangement they incorporate (see Table L.4):

- ventilated and drained; or
- pressure equalized.

Rainscreen systems are invariably supported on some form of framing or bracketing system. In the majority of cases, framing and bracketry transmit the load of the rainscreen to the back wall, and in turn to the building structure at each floor level.

However, consideration needs to be given to the possibility that the rainscreen load is transmitted down to the base of the system and only provides lateral restraint at floor levels. In this instance, the extent to which the frame might be exposed to fire needs to be taken into account, particularly if a material is used which offers no fire resistance, such as aluminium.

Framing and bracketry are likely to interact with cavity barriers; where these cross over the cavity barriers then the detailing of the cavity barrier needs to be appropriate (including additional fire stopping as necessary) to achieve fire separation of cavities.

Table L.3 gives information on the various insulation materials that might be incorporated into a rainscreen system. It is unlikely that thermoplastic insulation will be acceptable in a rainscreen system, particularly if it is exposed in a cavity.

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. Therefore, a BR135 benchmark would not be applicable for this external wall type

Façade Configuration: YRHGHI

Items in Façade

10 Items

Effect

Risk

Wall Construction
Wall Type 1 - Brick slip over PUR/PIR insulation
(JYY1EZ)

Neutral

Medium

Attachment
Inset Balcony (L2D68N)

External Door
Single Leaf Entrance Doors (64SERK)

External Door
Single Leaf Entrance Doors (923ZXK)

External Door
Single Leaf Door (CZ1IP6)

External Door
Single Leaf Entrance Doors (VZBVKZ)

External Window
Top, Mid, Side Hung Casements (NQG1RS)

External Window
Top, Mid, Side Hung Casements (AT5XVR)

Penetration
Flue (UEIZPY)

Penetration
Flue (TXJPY8)

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

Limited in extent and not vertically aligned, such as to delay significantly fire spread to windows and other openings on upper levels

Positive

N.4 Cavities & Openings

No cavity

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

Where vent passes through a cavity that contains combustible elements with no identified proprietary means of fire stopping

Neutral

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

Adjacent to windows and openings onto escape routes, but the same fire could not spread to affect more than one escape route

Positive

N.11 Attachments

Not Applicable

Risk Factor Analysis

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: UWVWC6

Items in Façade

10 Items

Effect

Risk

Wall Construction
Wall Type 2 - Render over Mineral Wool (QJZS89)

Positive

Low

Attachment
Inset Balcony (L2D68N)

External Door
Single Leaf Entrance Doors (64SERK)

External Door
Single Leaf Entrance Doors (923ZXK)

External Door
Single Leaf Door (CZ1IP6)

External Door
Single Leaf Entrance Doors (VZBVKZ)

External Window
Top, Mid, Side Hung Casements (NQG1RS)

External Window
Top, Mid, Side Hung Casements (AT5XVR)

Penetration
Flue (UEIZPY)

Penetration
Flue (TXJPY8)

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

<11 m

Positive

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.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

Remote from windows and openings, such that fire and smoke spread into the building, causing secondary fires, is not possible

Positive

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

N.11 Attachments

Non-combustible open balconies

(Where these extend along a façade, they have the potential both to:

- interrupt a cavity; and
- deflect flames away from the building and away from the façade)

Neutral

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

Windows or other openings in adjacent or abutting neighbouring buildings are sufficiently distanced that direct flame impingement from a fire in the neighbouring building is unforeseeable

Neutral

Risk Factor Analysis

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: HP618I

Items in Façade

10 Items

Effect

Risk

Wall Construction
Wall Type 3 - HPL over aluminium frame with mineral wool insulation (HBTX2K)

Neutral

Medium

Attachment
Inset Balcony (L2D68N)

External Door
Single Leaf Entrance Doors (64SERK)

External Door
Single Leaf Entrance Doors (923ZXK)

External Door
Single Leaf Door (CZ1IP6)

External Door
Single Leaf Entrance Doors (VZBVKZ)

External Window
Top, Mid, Side Hung Casements (NQG1RS)

External Window
Top, Mid, Side Hung Casements (AT5XVR)

Penetration
Flue (UEIZPY)

Penetration
Flue (TXJPY8)

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

<11 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

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

Neutral

N.4 Cavities & Openings

Continuous vertically running cavity with cavity barriers or fire stops as appropriate

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

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

Neutral

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

Adjacent to windows and openings onto escape routes, but the same fire could not spread to affect more than one escape route

Positive

N.11 Attachments

Non-combustible open balconies

(Where these extend along a façade, they have the potential both to:

- interrupt a cavity; and
- deflect flames away from the building and away from the façade)

Positive

Risk Factor Analysis

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.



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

System Type: The fire alarm system is installed throughout the building with a communal fire alarm that links to self-contained alarms in each flat. This is monitored via Community Alarms, with an alarm panel located in the lift lobby.

Issues: The system conflicts with the "Stay Put Unless" evacuation policy, as it can trigger alarms across the building when only a localized fire should require evacuation. The silencing of the sounders should be considered, as noted in the action plan.

Maintenance: The system is tested cyclically according to BS 5839 standards, with break glass points located on each floor and sounders throughout the premises. There are isolated, obsolete break glass points on the ground floor.

Emergency Lighting

Installed in communal parts

Emergency Lighting

Provision: Emergency lighting is provided in communal areas, including corridors, staircases, and the lift motor room, in compliance with BS 5266 standards.

Maintenance: The installed equipment is checked and tested monthly by the in-house electrical team or approved contractors to ensure functionality and compliance with current standards.

Portable Fire Fighting Equipment

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

Portable Fire Fighting Equipment

Portable fire extinguisher (CO2) is provided to the lift motor room. Portable fire extinguisher (CO2) and a fire blanket are provided to the Caretakers Office. Portable fire extinguisher (CO2) is provided to the ground floor electrical intake room. Portable extinguisher (Water) to Communal Lounge. Portable extinguisher (CO2) to Laundry

Smoke Control

Mechanical smoke control

Smoke Control

System Type: The building employs automatic smoke ventilation (AOV) in the communal stairwells and corridors, which is tested, inspected, and maintained biannually by a competent contractor in line with BS 7346.

Manual Controls: There are master reset key switches located on both the top floor and ground floor lobby for the AOV system.

Suppression Systems

Partial sprinkler system installed (Detailed in Description)

Suppression System

Sprinkler System: A wet pipe sprinkler system is installed in the scooter room (ground floor) for the protection of mobility scooter storage and charging areas. The system complies with BS 9251:14 and is connected to the fire alarm system.

Deluge System: The bin room is protected by a deluge system and is serviced every six months.

Fire Fighting Facilities

Dry Riser

Fire Fighting Facilities

Dry Riser: The building is equipped with a dry riser that serves all floors, and each riser has exposed outlets secured with cable ties. These outlets are located on the communal lobby of each floor.

Maintenance: Regular checks are done by the caretaker team, and maintenance contracts ensure the dry riser is serviced twice annually.

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 for Russell House is located externally to the right-hand side of the main entrance

Housekeeping

Good standard. Means of escape clear. Refuse stored appropriately

Secure Information Boxes

Secure information box (SIB) installed

Secure Information Boxes

Location: The building has a Secure Premise Information Box (PIB) on the ground floor near the entrance. The box contains essential information for West Midlands Fire Service (WMFS), including floor plans, vertical plans, and details for residents who may require additional assistance during an emergency (e.g., Personal Emergency Evacuation Plans, or PEEPs).

Access: The PIB uses a standard WMFS suited key and is crucial for the efficient operation of fire services in the event of an emergency.

Signage

Appropriate signage installed throughout premises

Signage

Fire Door Signage: "Fire Door Keep Shut" signs are displayed on all relevant fire doors throughout the building.

Fire Action Notices: Fire action notices are prominently displayed throughout the building, informing residents and visitors of the fire evacuation procedures.

Wayfinding Signage: Clear directional signage is installed throughout the corridors, staircases, and lift areas to guide occupants to exits. This includes floor-level and flat number indications near the lifts and fire escape routes.

LPG Warning Signs: Yellow signs warning of the presence of LPG are displayed in the lift cars to alert residents to any flammable materials.

Fire Escape Route Signage: Directional signage for the fire escape routes is used to ensure occupants know the safest path to evacuation.

Property Type

Residential Purpose-built

Building Era / Age

Assumed 1950 - 1979

Guidance Applicable At Time Of Construction

1965 Building Regulations: These were the relevant regulations for buildings constructed in the 1960s. They were more comprehensive than earlier regulations and addressed fire safety in more detail. They required fire-resistant construction (such as fire-resisting doors, fireproof structural elements) in certain building types, particularly high-rise buildings.

Part B - Fire Safety of the 1965 Building Regulations started to set clear standards for fire safety. It outlined measures such as minimum fire resistance for floors and walls, and escape routes, as well as requirements for fire alarms and firefighting access.

Building Height

Approximately 33m to the highest occupied floor level. (calculated at 3m per floor as per PAS 9980-2022 section 3.1.22)

Approx Floor Area Per Floor

1,200 m² and 1,500 m² per floor,

Number of Storeys (Ground and above)

An 11-storey residential building

Number of Basement Levels

None

Number of Flats

81 flats in total.

Ground floor: 1 flat.

First to tenth floors: Each of these floors contains 8 flats, resulting in 80 flats across the upper floors.

Flat Types

Single Storey

Structural Wall Material

Traditional build with concrete floor slab

Structural Floor Material

Reinforced Concrete

Structural Stairs Material

Concrete

Construction (Details)

Traditional concrete frame and brick construction which has had refurbishment works including aluminium windows, insulation and render facade over the existing facade.

Exterior Cladding

FRAEW Completed on Exterior Cladding

Exterior Cladding (Details)

Ibstock Rockshield brick slips at ground floor (insulation behind: PIR/PUR, Class rating unknown).

Rockwool Insulated Render to gable walls (Fire Classification A2).

High-Pressure Laminate Panels (Front and rear façade, Fire Classification B-s2, d0).

The external walls, particularly the cladding, are of mixed materials with varying fire resistance classifications (e.g., A2-rated Rockwool and B-s2, d0-rated high-pressure laminate panels).

Potential issues were noted regarding the foam insulation behind the brick slips, which may have an unknown combustibility rating. There is ongoing discussion regarding rectification and ensuring an "A" rated insulation system.

Electronic Entrance System

Yes

Carpark

External/Outdoor Carpark

Employees

None

Residents

Yes

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

Main Escape Routes:

The building is designed with clear escape routes to ensure safe evacuation in the event of a fire.

There are 4 final exit doors from the building, providing multiple points of egress for residents and visitors.

The communal corridors and staircases are designed to be wide enough (at least 1050mm) and are maintained clear of obstructions, ensuring easy access for evacuation.

Final Exits:

The final exit doors have door entry systems installed, which are designed to fail-safe (i.e., the doors unlock in the event of a power failure) to ensure residents are not locked in or out during an emergency.

Number Of Internal Escape Stairs

There is 1 protected staircase within the building, which serves as the main escape route in the event of a fire.

The staircase is adequately wide, with a width of 1050mm, which meets basic fire safety requirements for high-rise buildings.

Number Of Final Exits

There are 4 final exit doors from the building, providing multiple points of egress for residents and visitors.

External Means Of Escape

None Present

Types Of Lifts Installed

Passenger

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 building follows a "Stay Put Unless" evacuation strategy, which means that in the event of a fire in an individual flat, the resident should evacuate. However, if the fire is elsewhere in the building and does not directly affect them, residents should remain in their flats unless they are directly affected by smoke, fire, or emergency services advise evacuation.

The design of the building's compartmentation supports this evacuation strategy, limiting the spread of smoke and fire to other parts of the building.

Current Evacuation Strategy for the property considered appropriate?

Yes

What is the recommended evacuation strategy for the property?

Stay Put

Aerial Perspective: Russell House

Aerial Perspective (picture sourced from Google Earth)



Elevations

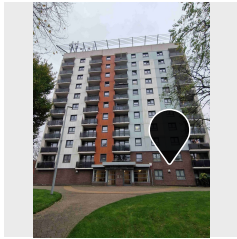
Photo	Name	No. of Storeys	Features
 A photograph of the West Elevation of Russell House, a 11-storey apartment building. The building has a modern design with a mix of grey, white, and orange-brown panels. It features a flat roof with a metal railing. The number 20 is in the top right corner of the photo.	West Elevation	11 Storeys	• Escape Route Exit • Brise Soleil • Private Balconies Stacked
 A photograph of the South Elevation of Russell House, a 11-storey apartment building. The building is a tall, narrow structure with a light grey facade and a flat roof. The number 21 is in the top right corner of the photo.	South Elevation	11 Storeys	
 A photograph of the East Elevation of Russell House, a 11-storey apartment building. The building has a modern design with a mix of grey, white, and orange-brown panels. It features a flat roof with a metal railing. The number 22 is in the top right corner of the photo.	East Elevation	11 Storeys	• Escape Route Exit • Private Balconies Inset Stacked • Private Balconies Stacked
 A photograph of the North elevation of Russell House, a 11-storey apartment building. The building is a tall, narrow structure with a light grey facade and a flat roof. The number 23 is in the top right corner of the photo.	North elevation	11 Storeys	

Inspections

Elevation Location

Inspection

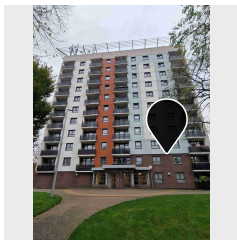
Elements



Inspection: ZBN28Z

West Elevation (Front Entrance)
Compartment Floor and Vertical
Compartment Junction

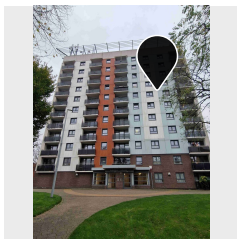
- External Surface Material (Brick Slip / Brick Tile)
- Insulation (Phenolic Foam Insulation)
- Inner Leaf (Brickwork)



Inspection: 3PRHCG

West Elevation (Front Entrance)
Compartment Floor and Vertical
Compartment Junction

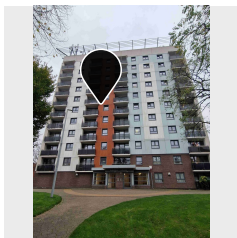
- External Surface Material (Brick Slip / Brick Tile)
- Insulation (Phenolic Foam Insulation)
- Inner Leaf (Brickwork)



Inspection: F374NR

West Elevation (Front Entrance)
Compartment Floor and Vertical
Compartment Junction

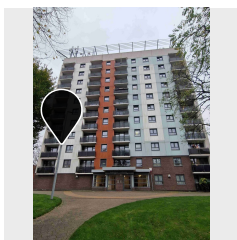
- External Surface Material (Render)
- Insulation (Mineral Wool Insulation)
- Inner Leaf (Brickwork)



Inspection: 3PT6LU

West Elevation (Front Entrance)
Compartment Floor and Vertical
Compartment Junction

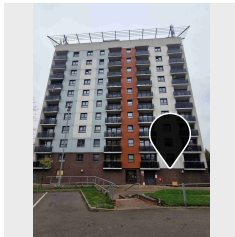
- External Surface Material (Suspected High Pressure Laminate (HPL) Panel)
- Cavity
- Insulation (Mineral Wool Insulation)



Inspection: B2TIP3

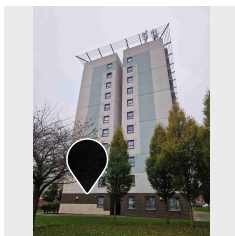
West Elevation (Front Entrance)
Compartment Floor and Vertical
Compartment Junction

- External Surface Material (Render)
- Insulation (Mineral Wool Insulation)
- Inner Leaf (Brickwork)

Elevation Location**Inspection****Elements****Inspection: I45Q7C**

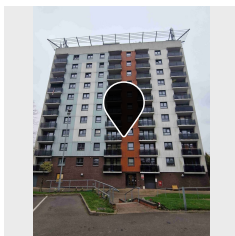
East Elevation
Compartment Floor

- External Surface Material (Render)
- Insulation (Mineral Wool Insulation)
- Inner Leaf (Brickwork)

**Inspection: ZS4M38**

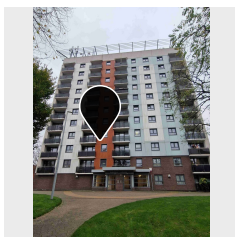
South Elevation
Compartment Floor

- External Surface Material (Brick Slip / Brick Tile)
- Insulation (Phenolic Foam Insulation)
- Inner Leaf (Brickwork)

**Inspection: VBTUJ4**

East Elevation
Compartment Floor and Vertical
Compartment Junction

- External Surface Material (Suspected High Pressure Laminate (HPL) Panel)
- Cavity
- Insulation (Mineral Wool Insulation)

**Inspection: JP83WH**

West Elevation (Front Entrance)
Compartment Floor and Vertical
Compartment Junction

- External Surface Material (Suspected High Pressure Laminate (HPL) Panel)
- Cavity
- Insulation (Mineral Wool Insulation)

Inspection: ZBN28Z

Elevation • Location
West Elevation (Front Entrance) • Compartment Floor and Vertical
Compartment Junction



Name/Summary

Wall Type 1 - Brick slips over PIR/PUR insulation

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	15mm	Brick Slip / Brick Tile Material Brand: The ground floor features Ibstock Rockshield brick slips.		A1 - Non-Combustible
Insulation	80mm	Phenolic Foam Insulation		B - Combustible
The insulation fills the cavity				
Inner Leaf	100mm	Brickwork		A1 - Non-Combustible
Original brickwork				

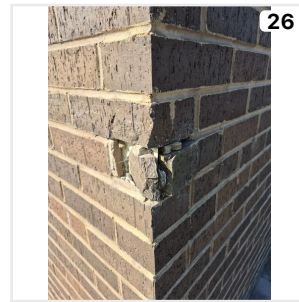
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: 3PRHCG

Elevation • Location
West Elevation (Front Entrance) • Compartment Floor and Vertical
Compartment Junction



Name/Summary

Wall Type 1 - Brick slips over PIR/PUR insulation

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	15mm	Brick Slip / Brick Tile		A1 - Non-Combustible
Insulation	80mm	Phenolic Foam Insulation		B - Combustible
Inner Leaf	100mm	Brickwork		A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: F374NR

Elevation • Location
West Elevation (Front Entrance) • Compartment Floor and Vertical
Compartment Junction



Name/Summary

Wall Type 2 - Render over Mineral Wool

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	6mm	Render		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	Brickwork		A1 - Non-Combustible

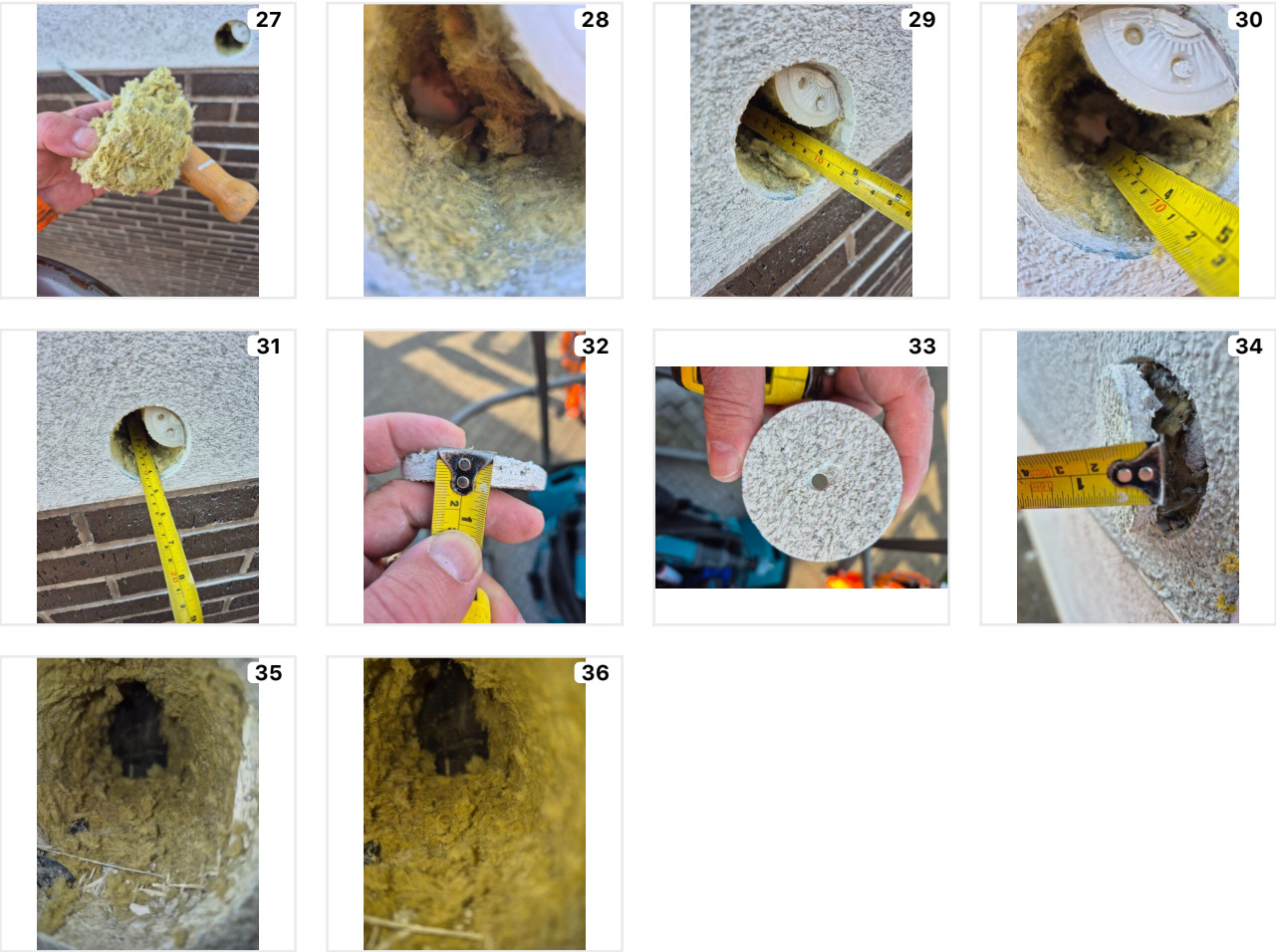
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: 3PT6LU

Elevation • Location
West Elevation (Front Entrance) • Compartment Floor and Vertical
Compartment Junction



Name/Summary

Wall Type 3 - HPL onto aluminum carrier rails over mineral wool

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	8mm	Suspected High Pressure Laminate (HPL) Panel		B - Combustible
Cavity	60mm			
Insulation	80mm	Mineral Wool Insulation		A1 - Non-Combustible

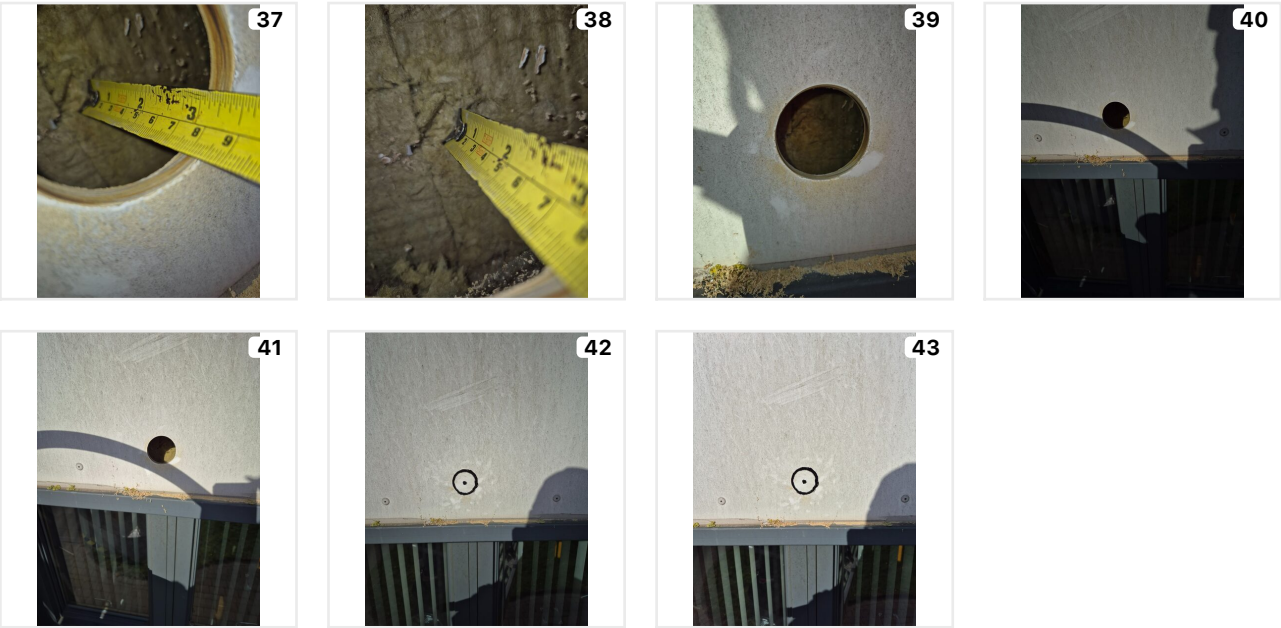
Cavity Barriers

Installed

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: B2TIP3

Elevation • Location
West Elevation (Front Entrance) • Compartment Floor and Vertical
Compartment Junction



Name/Summary

Wall Type 2 - Render over Mineral Wool

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	8mm	Render		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	Brickwork		A1 - Non-Combustible

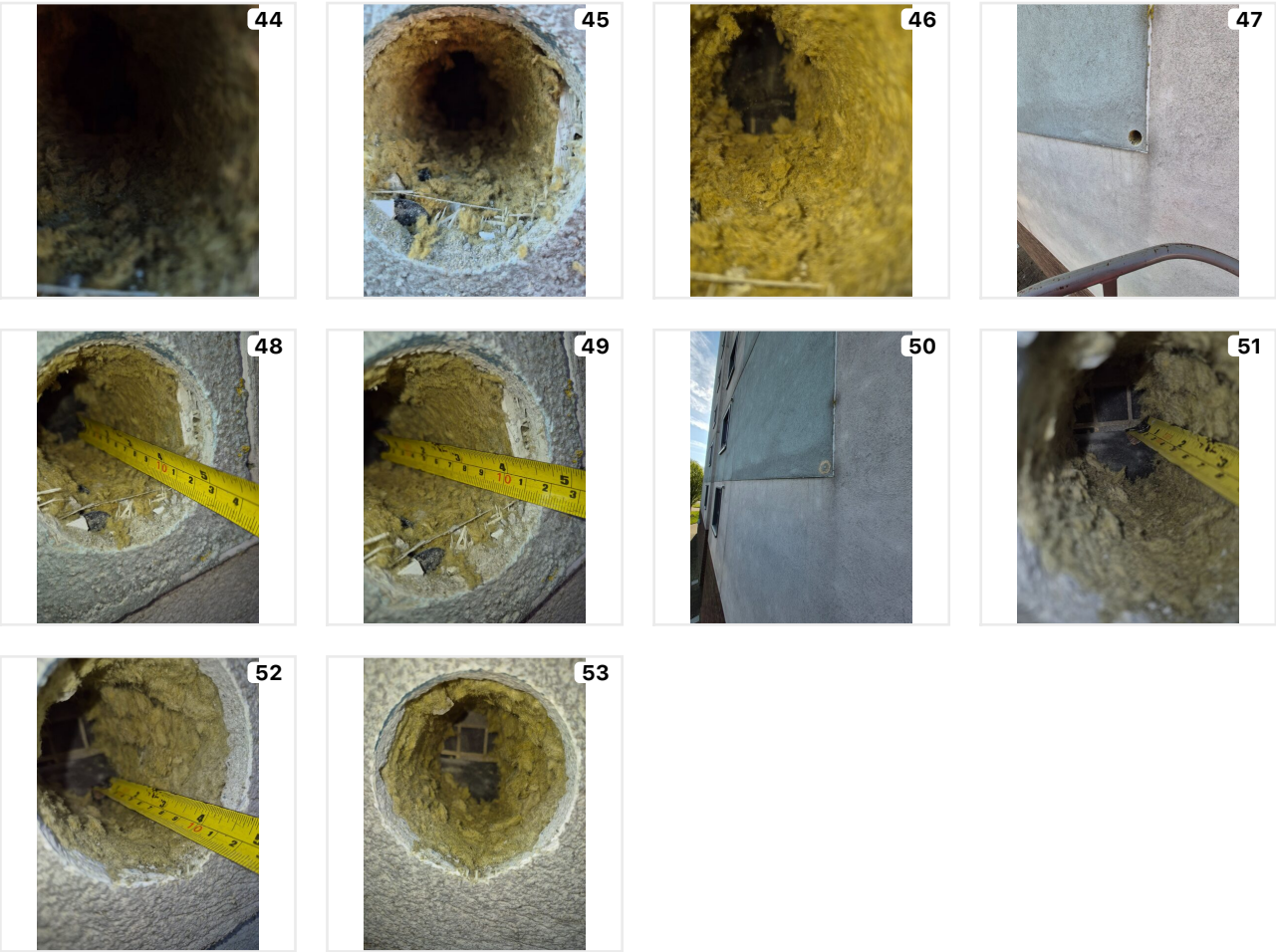
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: I45Q7C

Elevation • Location
East Elevation • Compartment Floor



Name/Summary

Wall Type 2 - Render over Mineral Wool

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	8mm	Render		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	Brickwork		A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: ZS4M38

Elevation • Location
South Elevation • Compartment Floor



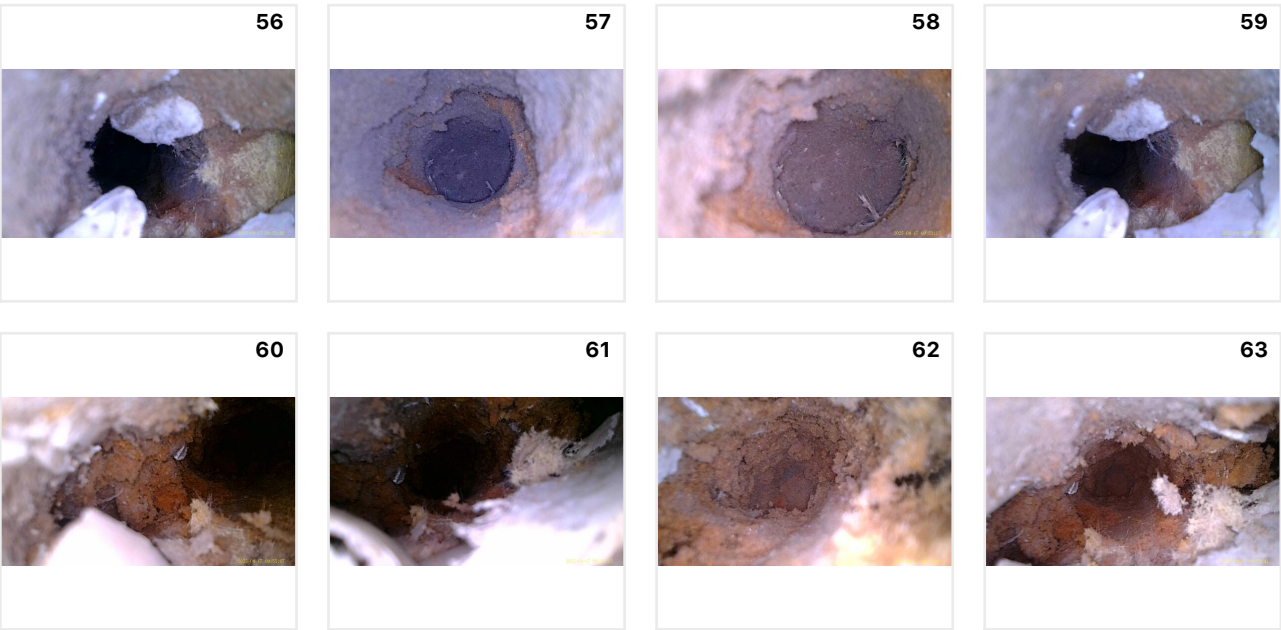
Name/Summary

Wall Type 1 - Brick Slips over PIR/PUR insulation

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	15mm	Brick Slip / Brick Tile		A1 - Non-Combustible
Insulation	80mm	Phenolic Foam Insulation		B - Combustible
Inner Leaf	100mm	Brickwork		A1 - Non-Combustible

Inspection Photos



64



65



66



67



68



69



70



71



72



73



74



75



Inspection: VBTUJ4

Elevation • Location
East Elevation • Compartment Floor and Vertical Compartment Junction



Name/Summary

Wall Type 3 - HPL onto aluminum carrier rails over mineral wool

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	8mm	Suspected High Pressure Laminate (HPL) Panel		B - Combustible
Cavity	60mm			
Insulation	80mm	Mineral Wool Insulation		A1 - Non-Combustible

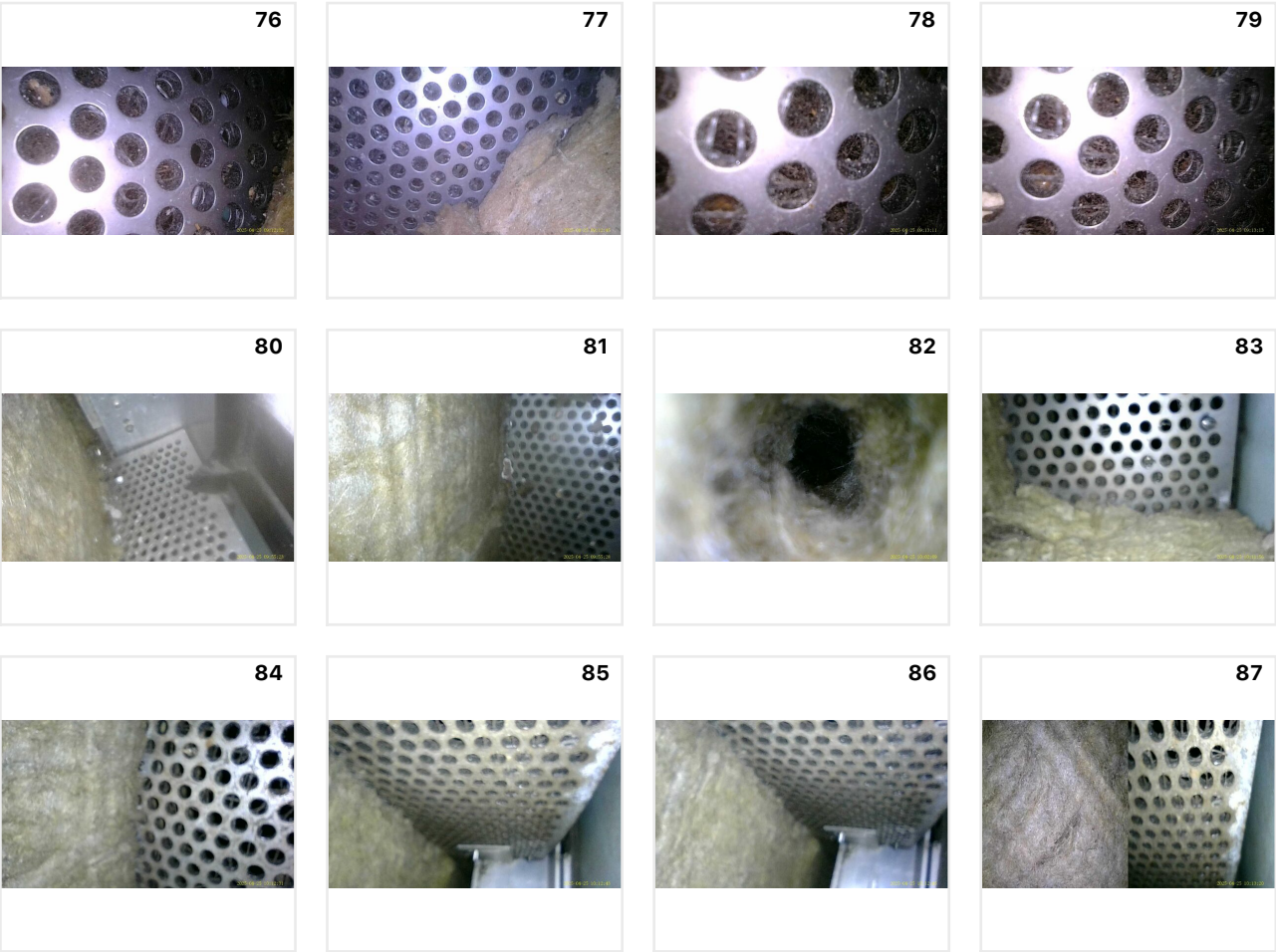
Cavity Barriers

Installed

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: JP83WH

Elevation • Location
West Elevation (Front Entrance) • Compartment Floor and Vertical
Compartment Junction



Name/Summary

Wall Type 3 - HPL onto aluminum carrier rails over mineral wool

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	8mm	Suspected High Pressure Laminate (HPL) Panel		B - Combustible
Cavity	60mm			
Insulation	80mm	Mineral Wool Insulation		A1 - Non-Combustible

Cavity Barriers

Installed

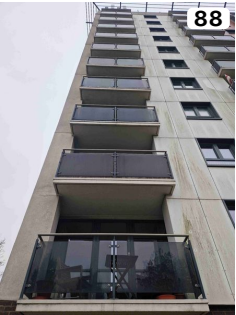
Floor Slab

Backing Wall Sits On The Floor Slab

Attachments & Balconies

Photo

Attachment



Inset Balcony (L2D68N)

Configuration: Stacked

Size: Private balcony spanning only a single compartment

Attachment: Inset Balcony

Attachment Reference
L2D68N

Details

Configuration

Stacked

Size

Private balcony spanning only a single compartment

Framework/Structure

Reinforced concrete framework extension of the floor slab

Decking & Supports

Concrete

Handrail

Stainless Steel

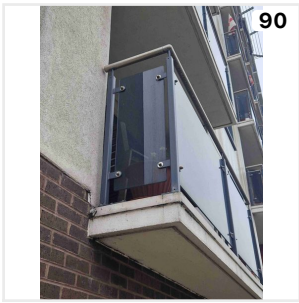
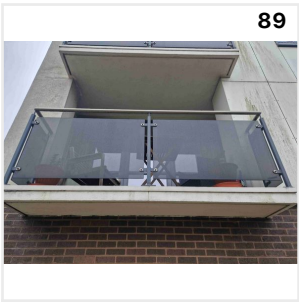
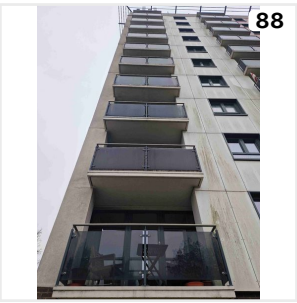
Balustrade

Safety Glass

Soffit

Concrete

Photos



Penetrations

Photo

Penetration



Flue (UEIZPY)

Inspection Type: Visual

No Image

Flue (TXJPY8)

Inspection Type: Visual

Penetration: Flue

Penetration Reference
UEIZPY

Details

Photo

1 Image

Inspection Type

Visual

Duct Pipework Material

Aluminium

Means Of Fire Stopping

No firestopping identified

Additional Photos



Penetration: Flue

Penetration Reference
TXJPY8

Details

Photo

1 Image

Inspection Type

Visual

Duct Pipework Material

PVC

External Windows

Photo

External Window



Top, Mid, Side Hung Casements (NQG1RS)



Top, Mid, Side Hung Casements (AT5XVR)

External Window: Top, Mid, Side Hung Casements

External Window Reference
NQG1RS

Details

Surface Material

Aluminium

Frame Material

Timber

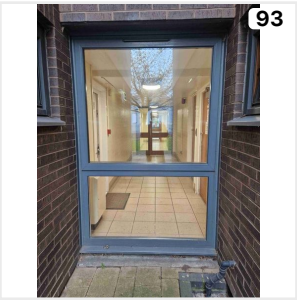
Infill / Panel Material

Toughened Safety Glass

Details

Kite mark indicating glass is 12150 laminated

Photos



External Window: Top, Mid, Side Hung Casements

External Window Reference
AT5XVR

Details

Surface Material

Aluminium

Infill / Panel Material

Toughened Safety Glass

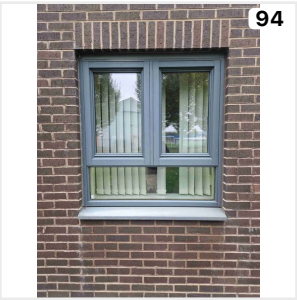
Frame Material

Timber

Details

Kite marking indicates EN 12600

Photos



External Doors

Photo

External Door



Single Leaf Entrance Doors (64SERK)



Single Leaf Entrance Doors (923ZXK)



Single Leaf Door (CZ1IP6)



Single Leaf Entrance Doors (VZBVKZ)

External Door: Single Leaf Entrance Doors

External Door Reference
64SERK

Details

Surface Material

Aluminium

Frame Material

Aluminium

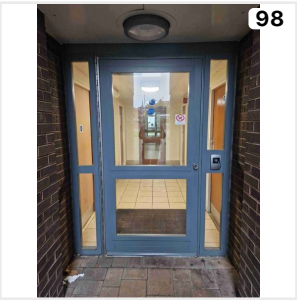
Infill / Panel Material

Toughened Glass

Details

No visible kite marking

Photos



External Door: Single Leaf Entrance Doors

External Door Reference
923ZXK

Details

Surface Material

Aluminium

Frame Material

Aluminium

Infill / Panel Material

Toughened Glass

Details

No visible kite marking

Photos



External Door: Single Leaf Door

External Door Reference
CZ1IP6

Details

Surface Material

Aluminium

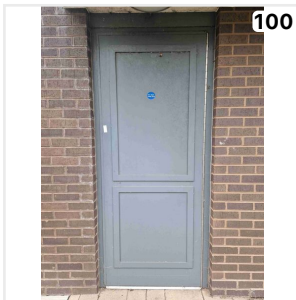
Frame Material

Aluminium

Infill / Panel Material

Aluminium

Photos



External Door: Single Leaf Entrance Doors

External Door Reference
VZBVKZ

Details

Surface Material

Aluminium

Infill / Panel Material

Toughened Glass

Frame Material

Aluminium

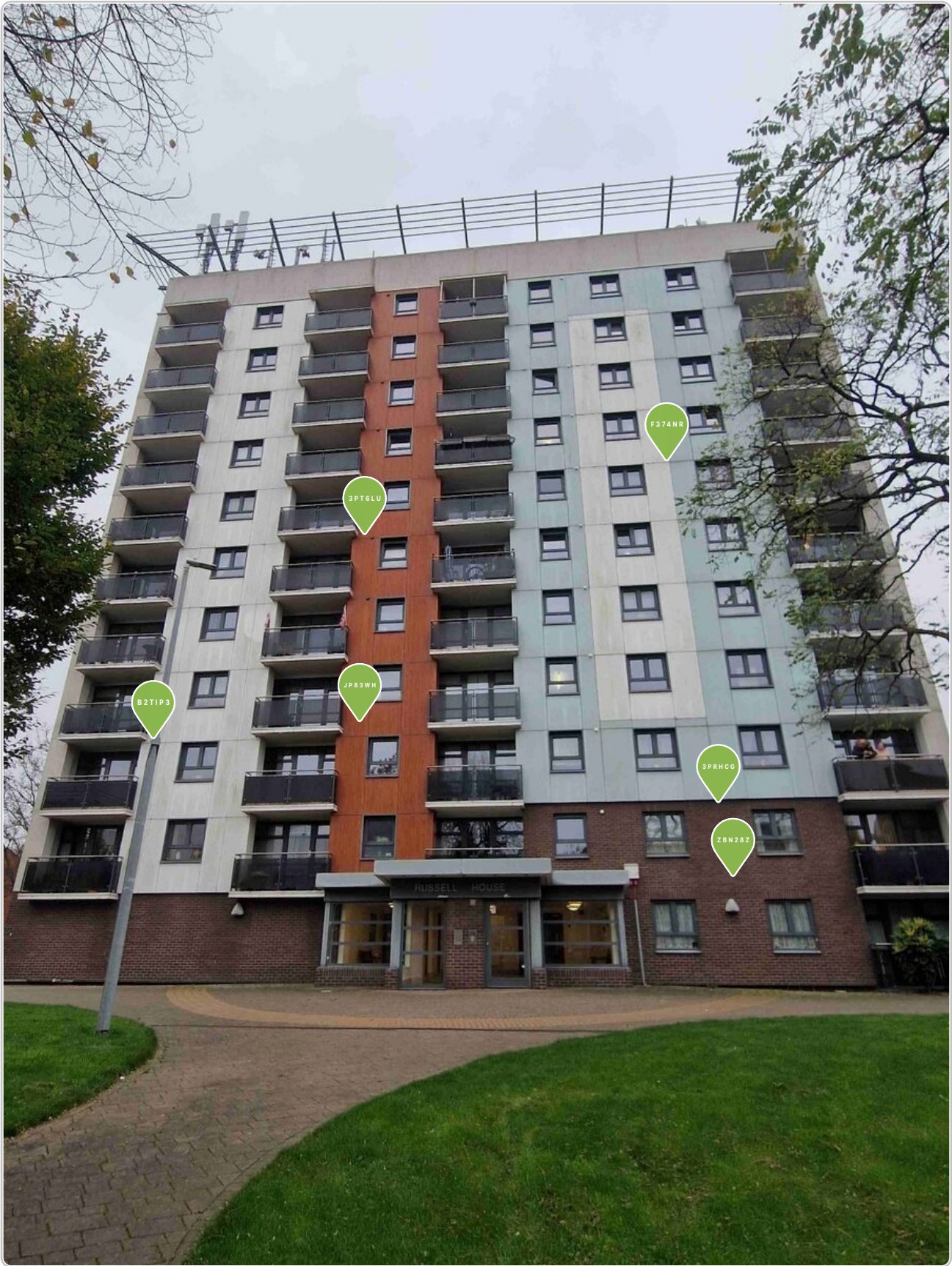
Details

No visible kite marking

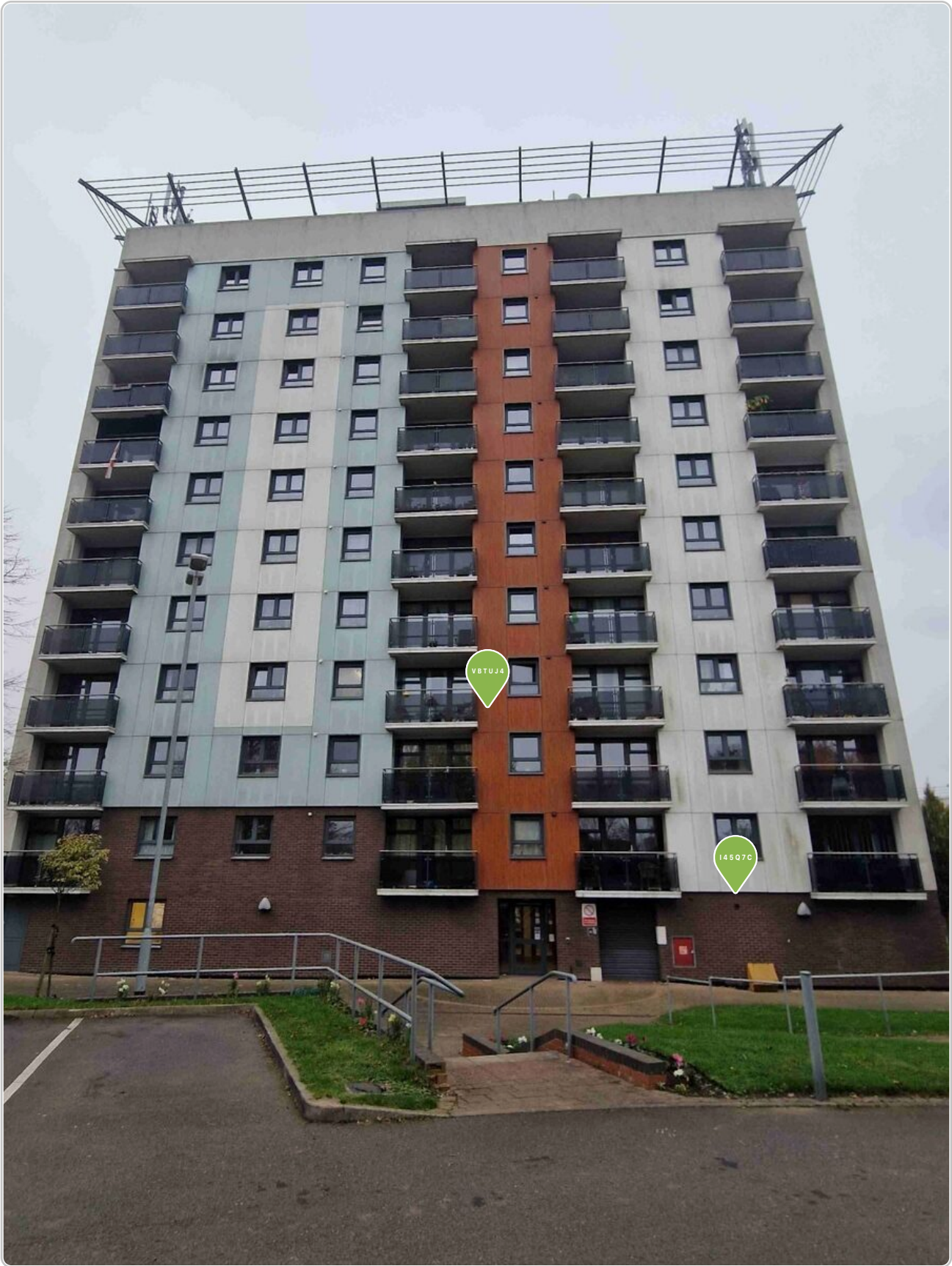
Photos



Plan: West Elevation (Front Entrance)



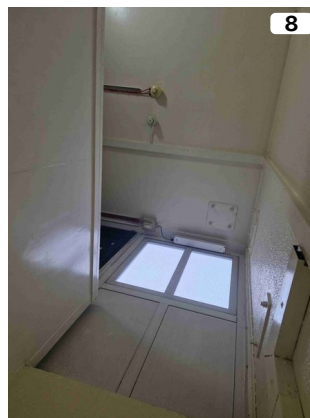
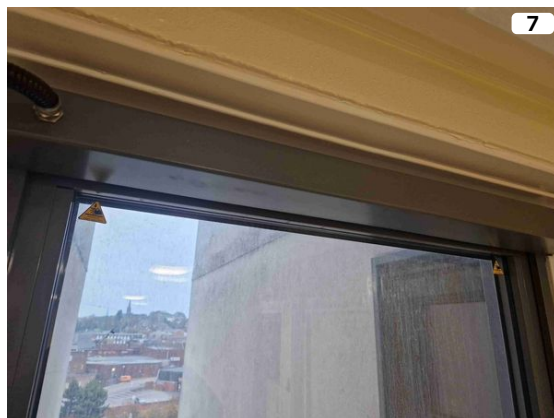
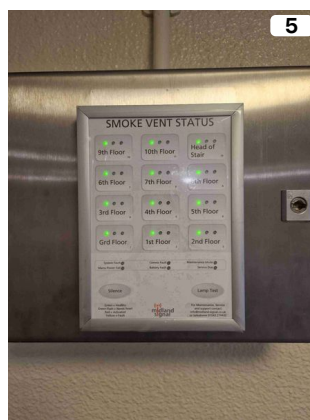
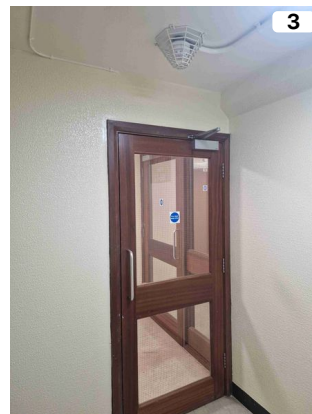
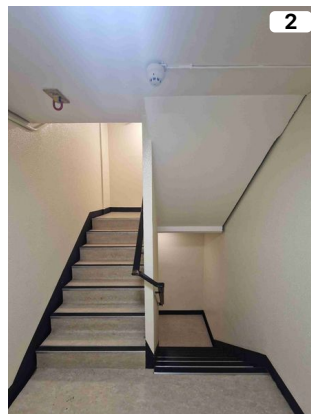
Plan: East Elevation



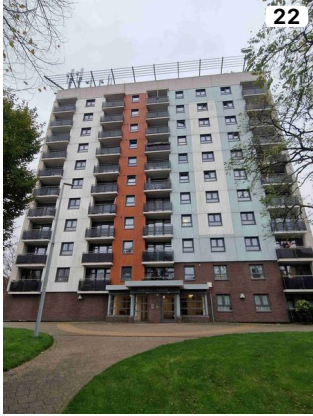
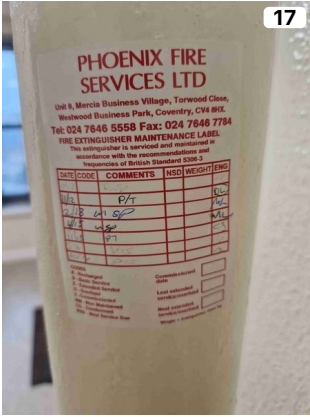
Plan: South Elevation



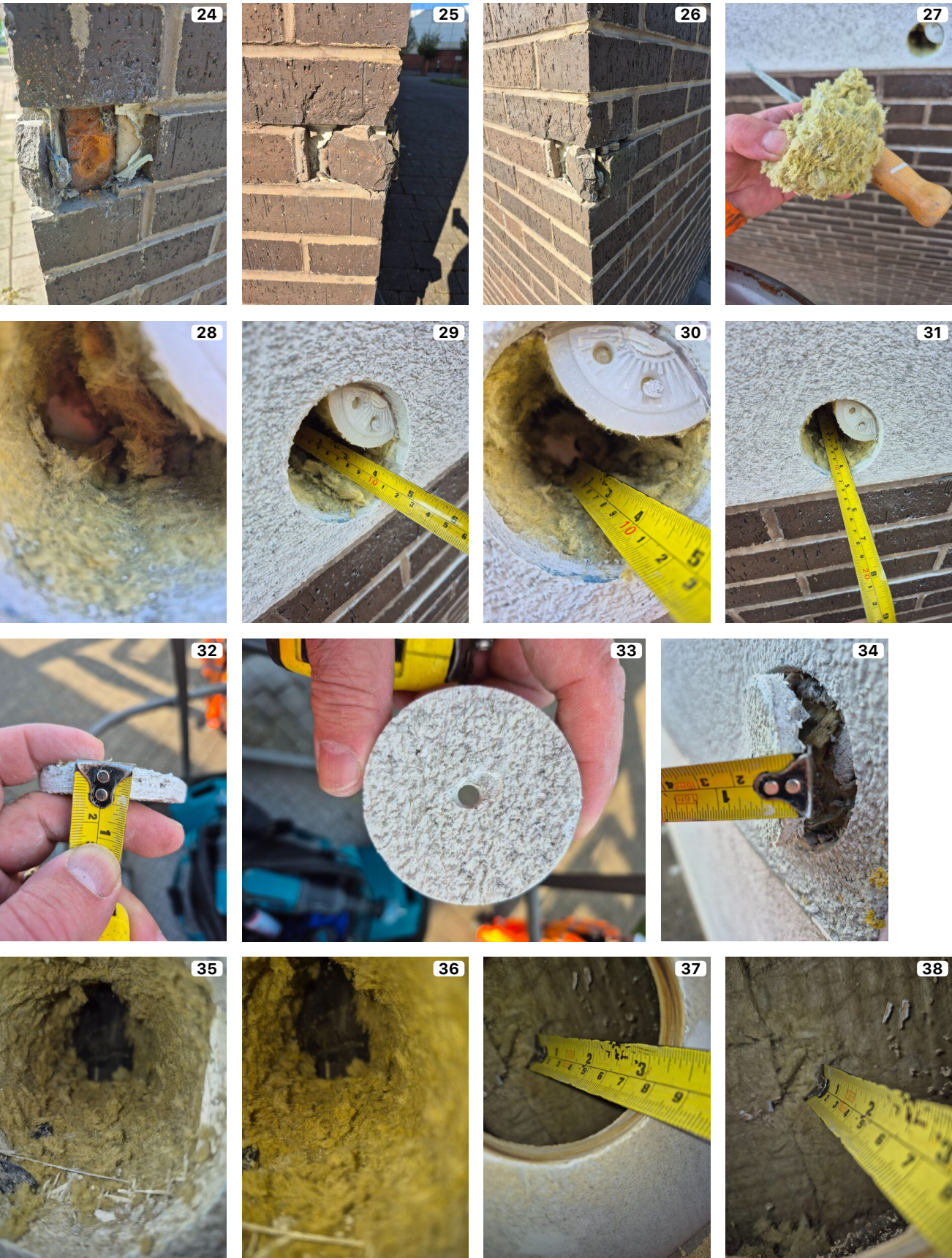
Photos



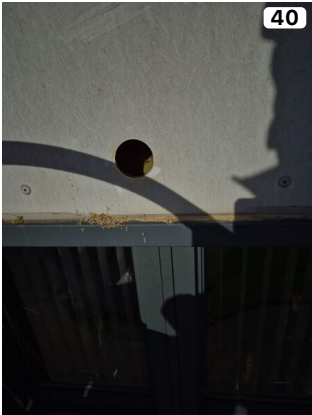
Photos Continued...



Photos Continued...



Photos Continued...



Photos Continued...



Photos Continued...



Photos Continued...



Photos Continued...



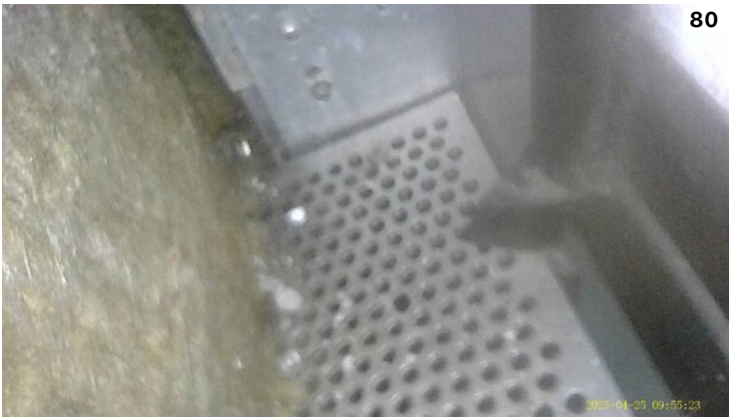
Photos Continued...



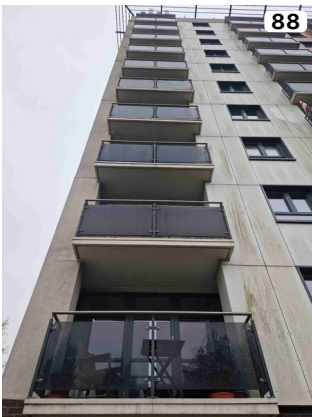
Photos Continued...



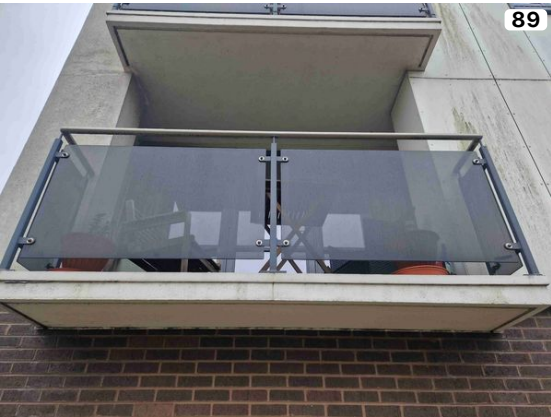
Photos Continued...



Photos Continued...



Photos Continued...



Photos Continued...





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