



FIRNTEC
BUILDING COMPLIANCE

Unit 4a, Darklake View
Estover
Plymouth
PL6 7TL

Document Version 3
Survey Date 11/01/2025
Suggested Review Date 11/01/2030

FIRE RISK APPRAISAL EXTERNAL WALLS

BROOKVIEW

Brookview
Stanhope Road
Semethwick
West Midlands
B67 6HG

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

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Summary

Fire Risk Appraisal External Walls

Assessment and Certificate Reference

RB-Z9GIEK

Assessed On, By

11/01/2025, Douglas Murray (Building Safety Consultant)
(BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA)

Approved / Validated On, By

27/03/2025, Douglas Murray (Building Safety Consultant)
(BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA)

Recommended Review Date

11/01/2030

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

Brookview

Property Reference

RB-D5NKNR

Address

Brookview
Stanhope Road
Semethwick
West Midlands
B67 6HG

Assessing Organisation

Firntec Ltd
4a Darklake View, Estover, Plymouth, Devon, PL6 7TL
0345 646 1566 — www.firntec.com

Assessor Remarks

Brookview is a 12 storey tower block which was built circa 1959 by Building contractors Whittall, architects K.R. Emmett, and engineers: D.M. Waite and it is considered to be approximately 32 metres tall. The block contains 68 individual flats.

Each flat has its own balcony and the area is enclosed by steel railings at the perimeter. There are two lifts in the block and these serve alternate floor levels. The structure is formed from reinforced concrete frame with concrete staircores, lift core, floor slabs and foundations. The external walls are formed from a brick outer leaf and an internal leaf of concrete

blockwork with projecting cantilevered balconies on all occupied floors. There is no basement level.

Improvement work which comprised of external wall insulation with render finish, replacement windows, new front entrance porch, replacement balcony panels has been completed within the preceding 10 year period.

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.

9 Items	Effect	Risk
Wall Construction Wall Type 1 - (EWI) render over mineral wool mechanically fixed to original brickwork (NR26M6)	Positive	Low
Wall Construction Wall Type 2- new brickwork with full fill mineral wool over original brickwork (NI59D9)	Positive	Low
Attachment Cantilever Balcony (UWLLNB)	Neutral	Low
Penetration Flue (PL617X)	Neutral	Medium
External Window Top, Mid, Side Hung Casements (QV9JI5)	Neutral	Low
External Window Top, Mid, Side Hung Casements (88MG1J)	Neutral	Low
External Window Top, Mid, Side Hung Casements (74WIST)	Neutral	Low
External Door Single Leaf Entrance Doors (J4XD4U)	Positive	Low
External Door Single Leaf Entrance Doors (1AJYBF)	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 **N99D61** which includes wall construction **NR26M6**.

1) Impact of Risk from Fire Performance: The EWI comprises of an acrylic render finish which as been applied to a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

2) Impact of Risk from Façade Configuration: The EWI comprises of an acrylic render finish which as been applied to a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

3) Impact of Risk from Fire Strategy / Fire Hazards: The EWI comprises of an acrylic render finish which as been applied to a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

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 **YGAUL5** which includes wall construction **NI59D9**.

1) Impact of Risk from Fire Performance: The lower walls comprise of brick finish which as been installed over a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

2) Impact of Risk from Façade Configuration: The lower walls comprise of brick finish which as been installed over a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

3) Impact of Risk from Fire Strategy / Fire Hazards: The lower walls comprise of brick finish which as been installed over a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

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 Positive 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

Neutral

Photo Ref. 1

F.3 Escape Route Design

Access to more than one staircase for escape

1 scissor staircore

Positive

Photo Ref. 2, 3

F.4 Compartmentation

Adequate compartmentation in line with the expectations for a block of flats

Photo Ref. 4

Neutral

F.5 Smoke Control

Installed at stairwells on floors 1st (B), 6th (G), 10th (L), 11th (M).

AOVs present on all lobby landings (1st-11th floor, B to M).

Control panel located on ground floor near MAP (Main Access Point).

Positive

Photo Ref. 5, 6, 7, 8

F.6 Fire Alarm & Detection

Within Flats: Smoke alarms are installed to LD2 and LD3 standards.

LD2: Smoke detectors in hall/living room + heat detector in kitchen.

LD3: Smoke detectors in the hallway only.

Sampled flats indicate a mix of LD2 and LD3 installations.

Void properties are being upgraded to LD1 systems.

Communal detection: No fire detection system in communal areas

Positive

F.7 Fire Suppression

Bin Store: Deluge system installed.

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

Dry Riser System:

Inlet cabinet location: Right-hand side of front main entrance, adjacent to bin store.

Serves all floors (1st – 11th, B to M).

Outlets: Located in communal lobbies on each floor.

Secured with cable ties, checked regularly by caretakers.

Positive

Photo Ref. 9, 10, 11, 12

F.10 Lifts Used By Firefighters

Absence of firefighting lift in buildings above 18 m

Photo Ref. 13, 14

Neutral

Photos



Fire Service Intervention

Event	Seconds	Minutes & Seconds
Initiation to fire detection	5 Seconds	5 Seconds
Actuation Of Fire Detector To Transmission Of Alarm	5 Seconds	5 Seconds
Processing By Central Monitoring Station	30 Seconds	30 Seconds
Receipt of call by fire service mobilising control	30 Seconds	30 Seconds
Transmission To Fire Station And Response	30 Seconds	30 Seconds
Travelling Time Of Fire Service	240 Seconds	4 Minutes
Arrival Protocol And Entry Preparation Time	240 Seconds	4 Minutes
Firefighting Travel In Firefighting Lift	180 Seconds	3 Minutes
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	1,015 Seconds	16 Minutes 55 Seconds

Nearest Fire Station

The nearest fire station to Brookview Flats in Smethwick is the Smethwick Fire Station, located at Stony Lane, Smethwick, B67 approximately 0.5 miles or around 2 minutes

Wall Constructions

Wall Construction

Build-up

Wall Type 1 - (EWI) render over mineral wool mechanically fixed to original brickwork (NR26M6)

- Surface Finish (Render)
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Original brickwork)
- Cavity
- Inner Leaf (Blockwork)

Wall Type 2- new brickwork with full fill mineral wool over original brickwork (NI59D9)

- Outer leaf
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Original brickwork)

Wall Construction: Wall Type 1 - (EWI) render over mineral wool mechanically fixed to original brickwork

Construction Reference
NR26M6

This wall construction was identified by wall inspections VDEYHC, LX3KFB, 5JFPHC, R54XHN, EBW5CZ, and 28L1RL. The build-up, cavity barrier, and floor slab information is taken directly from inspection VDEYHC. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 1 - (EWI) render over mineral wool mechanically fixed to original brickwork (NR26M6)	Positive	Low

Build-Up

5 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	6mm	Render	A2 - Limited Combustibility
Appears to be a through colour acrylic based render			
Insulation	100mm	Mineral Wool Insulation	A1 - Non-Combustible
The insulation has the appearance of Rockwool Duo Slab			
Inner Leaf Support (Backing Wall)	100mm	Original brickwork	A1 - Non-Combustible
Original brickwork			
Cavity	60mm		
Inner Leaf	100mm	Blockwork	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

Neutral

K.4 Panel Construction

Not Applicable

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

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.

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.

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.

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- new brickwork with full fill mineral wool over original brickwork

Construction Reference
NI59D9

This wall construction was identified by wall inspections 2JW8BL, EXYQGZ, VIK2QM, and 9YSKF4. The build-up, cavity barrier, and floor slab information is taken directly from inspection 2JW8BL. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 2- new brickwork with full fill mineral wool over original brickwork (NI59D9)	Positive	Low

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Outer leaf	100mm		A1 - Non-Combustible
Brickwork which has been installed over the original outer leaf and now includes a mineral wool fill in the formed cavity			
Insulation	100mm	Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original brickwork	A1 - Non-Combustible

Cavity Barriers

Material
Solid State Mineral Wool

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

High HRR

Neutral

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

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.

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.

L7 Benchmark

DOUBLE SKIN MASONRY

As set out previously in this PAS, a building whose external walls are composed exclusively of this form of construction is not ordinarily expected to require an FRAEW. However, it is recognized that this form of wall construction might be mixed with other forms of wall construction.

This form of construction constitutes the lowest risk form of construction that might be used for external walls, for the following reasons.

- Each leaf of the wall, provided it is formed of masonry/concrete at least 75 mm thick and is generally well constructed, is likely to provide at least 30 min fire resistance.
- The masonry/concrete is likely to be of limited combustibility or better.

Given the above, this form of construction is invariably accepted as:

- not requiring cavity barriers generally, except that cavity closers are needed so that there is no free flow of air through the cavity; and
- being able to accommodate combustible materials within the cavity irrespective of building height.

This is illustrated in Diagram 8.2 in ADB Volume 1:2019 [8]. The equivalent diagram in Volume 2:2019 [9] is Diagram 9.2.

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 find a cladding system with the configuration and components that would constitute an exact match to what our inspections found installed on the Property.

Façade Configuration: N99D61

Items in Façade

8 Items	Effect	Risk
Wall Construction Wall Type 1 - (EWI) render over mineral wool mechanically fixed to original brickwork (NR26M6)	Positive	Low
Attachment Cantilever Balcony (UWLLNB)	Neutral	Low
External Door Single Leaf Entrance Doors (J4XD4U)	Positive	Low
External Door Single Leaf Entrance Doors (1AJYBF)	Positive	Low
External Window Top, Mid, Side Hung Casements (QV9JI5)	Neutral	Low
External Window Top, Mid, Side Hung Casements (88MG1J)	Neutral	Low
External Window Top, Mid, Side Hung Casements (74WIST)	Neutral	Low
Penetration Flue (PL617X)	Neutral	Medium

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

Entire façade covered

Neutral

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

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

Positive

N.11 Attachments

Not Applicable

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

1) Impact of Risk from Fire Performance: The EWI comprises of an acrylic render finish which as been applied to a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

2) Impact of Risk from Façade Configuration: The EWI comprises of an acrylic render finish which as been applied to a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

3) Impact of Risk from Fire Strategy / Fire Hazards: The EWI comprises of an acrylic render finish which as been applied to a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

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: YGAUL5

Items in Façade

8 Items

Effect

Risk

Wall Construction
Wall Type 2- new brickwork with full fill mineral wool over original brickwork (NI59D9)

Positive

Low

Attachment
Cantilever Balcony (UWLLNB)

Neutral

Low

External Door
Single Leaf Entrance Doors (J4XD4U)

Positive

Low

External Door
Single Leaf Entrance Doors (1AJYBF)

Positive

Low

External Window
Top, Mid, Side Hung Casements (QV9JI5)

Neutral

Low

External Window
Top, Mid, Side Hung Casements (88MG1J)

Neutral

Low

External Window
Top, Mid, Side Hung Casements (74WIST)

Neutral

Low

Penetration
Flue (PL617X)

Neutral

Medium

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

Cavity limited in extent and running horizontally only

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

Positive

N.11 Attachments

Not Applicable

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

1) Impact of Risk from Fire Performance: The lower walls comprise of brick finish which as been installed over a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

2) Impact of Risk from Façade Configuration: The lower walls comprise of brick finish which as been installed over a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

3) Impact of Risk from Fire Strategy / Fire Hazards: The lower walls comprise of brick finish which as been installed over a mineral wool/original brickwork substrate. The system is non combustible therefore would not support flame spread.

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

Within Flats: Smoke alarms are installed to LD2 and LD3 standards.
LD2: Smoke detectors in hall/living room + heat detector in kitchen.
LD3: Smoke detectors in the hallway only.
Sampled flats indicate a mix of LD2 and LD3 installations.
Void properties are being upgraded to LD1 systems.
Communal detection: No fire detection system in communal areas

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 appear to be 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

Natural smoke control, Mechanical smoke control

Smoke Control

Automatic Smoke Ventilation:

Installed at stairwells on floors 1st (B), 6th (G), 10th (L), 11th (M).

AOVs present on all lobby landings (1st-11th floor, B to M).

Control panel located on ground floor near MAP (Main Access Point).

Suppression Systems

Partial sprinkler system installed (Detailed in Description)

Suppression System

Bin Store: Deluge system installed.

Fire Fighting Facilities

Dry Riser

Fire Fighting Facilities

Dry Riser System:

Inlet cabinet location: Right-hand side of front main entrance, adjacent to bin store.

Serves all floors (1st – 11th, B to M).

Outlets: Located in communal lobbies on each floor.

Secured with cable ties, checked regularly by caretakers.

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

Fire Hydrant Present:

Located adjacent to the front main entrance.

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

Good standard of signs was found for wayfinding, fire door, floor level and advisory notices

Property Type

Residential Purpose-built, General Needs

Building Era / Age

Assumed 1950 - 1979

Building Height

Approximately 32m to the highest occupied floor level. (calculated at 2.7m per floor as per PAS 9980-2022 section 3.1.22)

Number of Storeys (Ground and above)

12

Number of Basement Levels

None

Number of Flats

68

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 UPVC windows, insulation and render facade over the existing facade.

Exterior Cladding

FRAEW Completed on Exterior Cladding

Exterior Cladding (Details)

EWI mechanically fixed to original brickwork with mineral wool and render finish

Electronic Entrance System

Yes

Carpark

External/Outdoor Carpark

Employees

None

Residents

Yes

Approx number of Residents

136

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

There are two staircases within in a single core, designed in a scissor arrangement.

Number Of Final Exits

There are two final exits at ground

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 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?

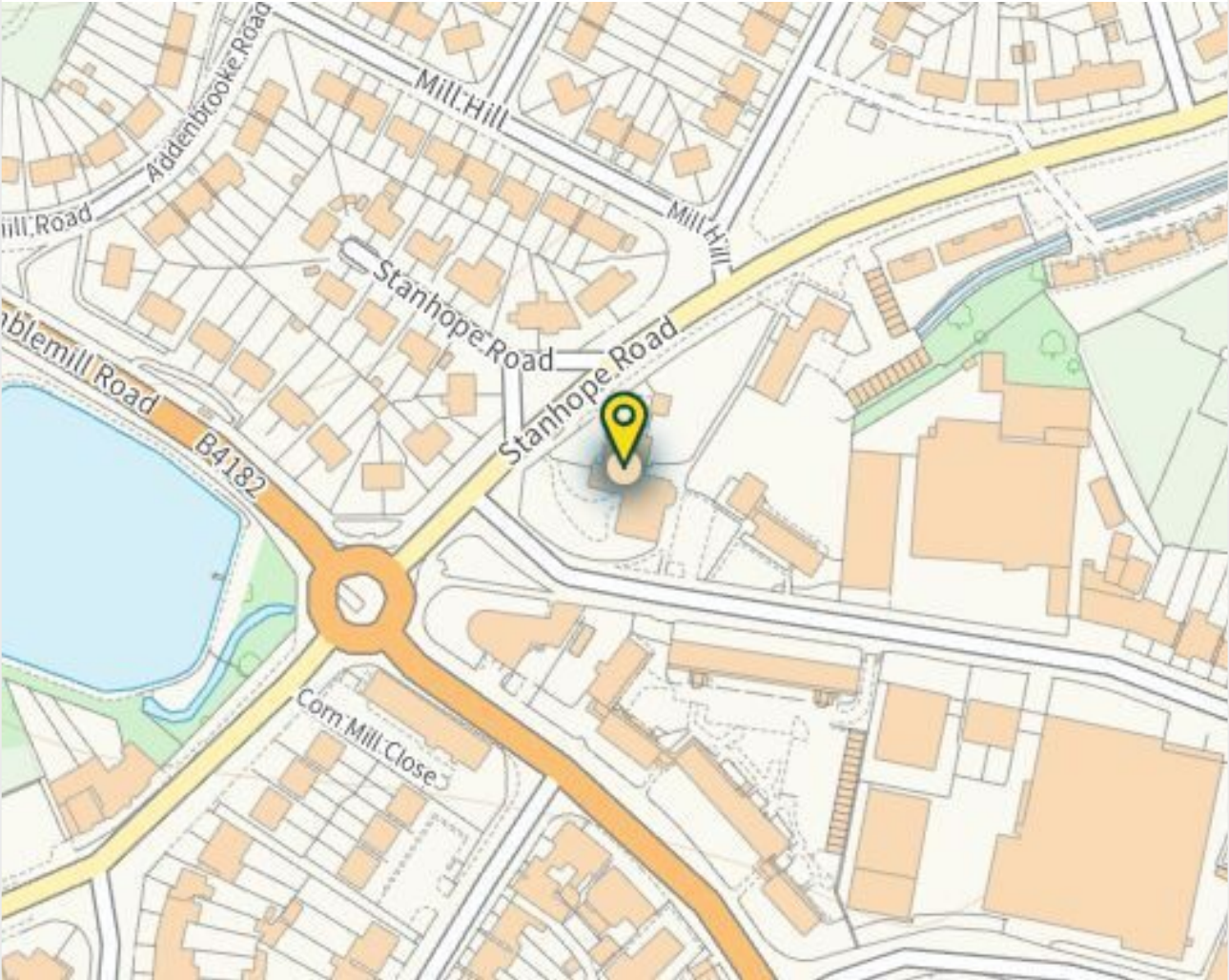
Yes

What is the recommended evacuation strategy for the property?

Stay Put

Aerial Perspective: Brookview

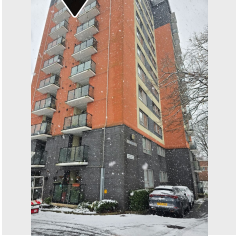
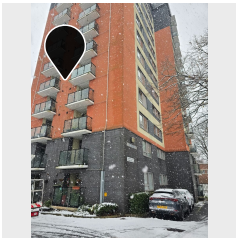
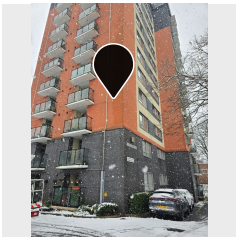
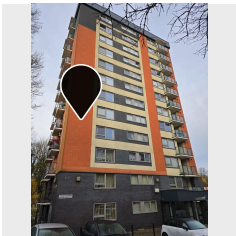
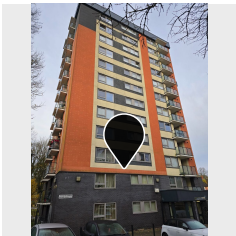
Aerial image of Brookview and the surrounding area

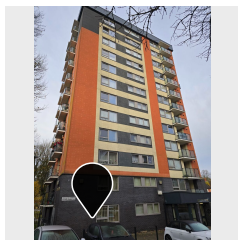


Elevations

Photo	Name	No. of Storeys
 A photograph of a tall, modern building with a blue and orange facade, viewed from the north. The building has 12 storeys. A small white box with the number '15' is in the top right corner of the photo.	North Elevation	12 Storeys
 A photograph of the same building from the south. The facade is blue and orange. A small white box with the number '16' is in the top right corner of the photo.	South Elevation	12 Storeys
 A photograph of the building from the east. The facade is blue and orange. A small white box with the number '17' is in the top right corner of the photo.	East Elevation	12 Storeys
 A photograph of the building from the west. The facade is blue and orange. A small white box with the number '18' is in the top right corner of the photo.	West Elevation	12 Storeys

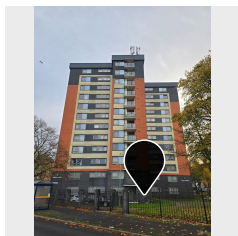
Inspections

Elevation Location	Inspection	Elements
	Inspection: VDEYHC Survey locations as tagged Accessible wall	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork) • Cavity • Inner Leaf (Blockwork)
	Inspection: LX3KFB Survey locations as tagged Accessible wall	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork) • Cavity • Inner Leaf (Blockwork)
	Inspection: 5JFPHC Survey locations as tagged Accessible wall	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork) • Cavity • Inner Leaf (Blockwork)
	Inspection: R54XHN Survey locations as tagged Accessible wall	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork) • Cavity • Inner Leaf (Blockwork)
	Inspection: EBW5CZ Survey locations as tagged Accessible wall	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork) • Cavity • Inner Leaf (Blockwork)
	Inspection: 2JW8BL Accessible wall	• Outer leaf • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)

Elevation Location**Inspection****Elements****Inspection: EXYQGZ**

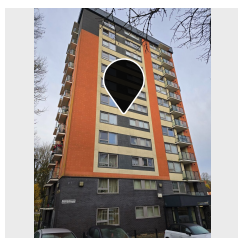
Survey locations as tagged
Accessible wall

- Outer leaf
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall)
(Original brickwork)

**Inspection: VIK2QM**

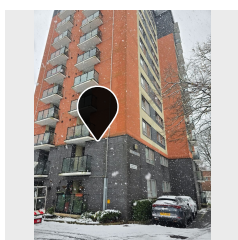
Survey locations as tagged
Accessible wall

- Outer leaf
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall)
(Original brickwork)

**Inspection: 28L1RL**

Survey locations as tagged
Accessible wall

- Surface Finish (Render)
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall)
(Original brickwork)
- Cavity
- Inner Leaf (Blockwork)

**Inspection: 9YSKF4**

Survey locations as tagged
Accessible wall

- Outer leaf
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall)
(Original brickwork)

Inspection: VDEYHC

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 - (EWI) render over mechanically fixed mineral wool attached to original brickwork

Description

Insulation with a render finish has been added to the original construction

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A2 - Limited Combustibility
Appears to be a through colour acrylic based render				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
The insulation has the appearance of Rockwool Duo Slab				
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible
Original brickwork				
Cavity	60mm			
Inner Leaf	100mm	Blockwork		A1 - Non-Combustible

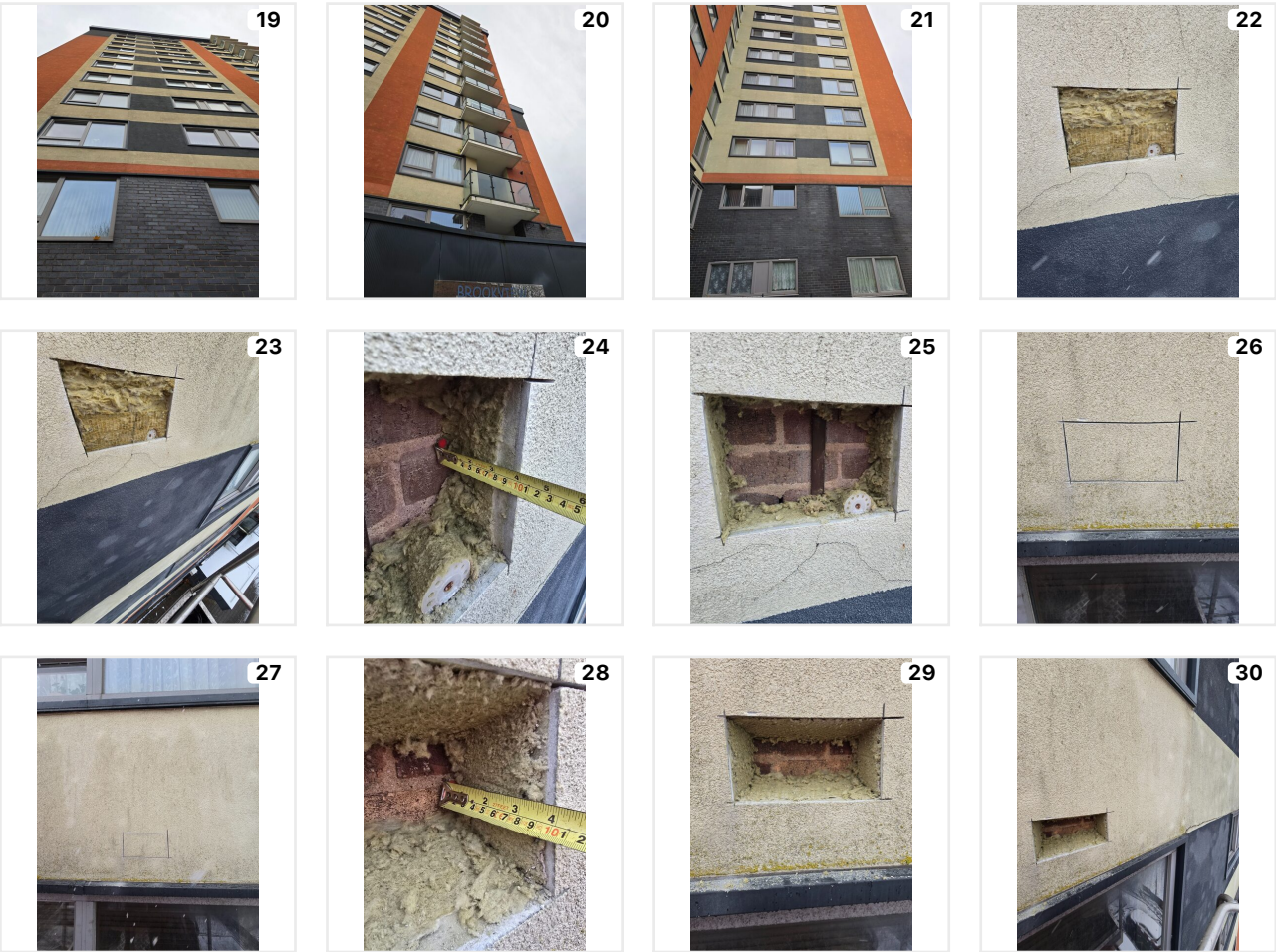
Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos





Inspection: LX3KFB

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 - (EWI) render over mechanically fixed mineral wool attached to original brickwork

Description

Insulation with a render finish has been added to the original construction

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A2 - Limited Combustibility
Appears to be a through colour acrylic based render				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
The insulation has the appearance of Rockwool Duo Slab				
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible
Original brickwork				
Cavity	60mm			
Inner Leaf	100mm	Blockwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: 5JFPHC

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 - (EWI) render over mechanically fixed mineral wool attached to original brickwork

Description

Insulation with a render finish has been added to the original construction

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A2 - Limited Combustibility
Appears to be a through colour acrylic based render				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
The insulation has the appearance of Rockwool Duo Slab				
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible
Original brickwork				
Cavity	60mm			
Inner Leaf	100mm	Blockwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: R54XHN

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 - (EWI) render over mechanically fixed mineral wool attached to original brickwork

Description

Insulation with a render finish has been added to the original construction

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A2 - Limited Combustibility
Appears to be a through colour acrylic based render				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
The insulation has the appearance of Rockwool Duo Slab				
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible
Original brickwork				
Cavity	60mm			
Inner Leaf	100mm	Blockwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: EBW5CZ

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 - (EWI) render over mechanically fixed mineral wool attached to original brickwork

Description

Insulation with a render finish has been added to the original construction

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A2 - Limited Combustibility
Appears to be a through colour acrylic based render				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
The insulation has the appearance of Rockwool Duo Slab				
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible
Original brickwork				
Cavity	60mm			
Inner Leaf	100mm	Blockwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: 2JW8BL

Location
Accessible wall

Name/Summary

Wall Type 2 - brickwork with full fill mineral insulation at ground only

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Brickwork which has been installed over the original outer leaf and now includes a mineral wool fill in the formed cavity				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

Material	Photo Ref.
Solid State Mineral Wool	
The cavity is fully filled with a mineral wool quilt	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: EXYQGZ

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 2 - brickwork with full fill mineral insulation at ground only

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Brickwork which has been installed over the original outer leaf and now includes a mineral wool fill in the formed cavity				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

Material	Photo Ref.
Solid State Mineral Wool	
The cavity is fully filled with a mineral wool quilt	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: VIK2QM

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 2 - brickwork with full fill mineral insulation at ground only

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Brickwork which has been installed over the original outer leaf and now includes a mineral wool fill in the formed cavity				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

Material	Photo Ref.
Solid State Mineral Wool	
The cavity is fully filled with a mineral wool quilt	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: 28L1RL

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 1 - (EWI) render over mechanically fixed mineral wool attached to original brickwork

Description

Insulation with a render finish has been added to the original construction

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Render		A2 - Limited Combustibility
Appears to be a through colour acrylic based render				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
The insulation has the appearance of Rockwool Duo Slab				
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible
Original brickwork				
Cavity	60mm			
Inner Leaf	100mm	Blockwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: 9YSKF4

Elevation • Location
Survey locations as tagged • Accessible wall



Name/Summary

Wall Type 2 - brickwork with full fill mineral insulation at ground only

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Brickwork which has been installed over the original outer leaf and now includes a mineral wool fill in the formed cavity				
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

Material	Photo Ref.
Solid State Mineral Wool	
The cavity is fully filled with a mineral wool quilt	

Floor Slab

Backing Wall Sits On The Floor Slab

Attachments & Balconies

Photo

Attachment



Cantilever Balcony (UWLLNB)

Configuration: Stacked

Size: Private balcony spanning only a single compartment

Attachment: Cantilever Balcony

Attachment Reference
UWLLNB

Details

Configuration

Stacked

Size

Private balcony spanning only a single compartment

Framework/Structure

Concrete

Decking & Supports

Concrete

Handrail

Steel

Balustrade

Heat soaked glass

Soffit

Concrete

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.

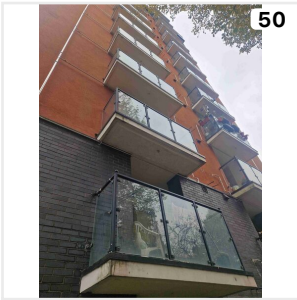
Regardless of balcony type, the materials used to line the balconies (including soffits) need to be assessed in light of their likely contribution to external fire spread.

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.

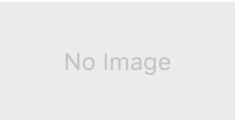
Photos



Penetrations

Photo

Penetration



Flue (PL617X)
Inspection Type: Visual

Penetration: Flue

Penetration Reference
PL617X

Details

Photo

1 Image

Duct Pipework Material

PVC

Inspection Type

Visual

Means Of Fire Stopping

None

External Windows

Photo

External Window



Top, Mid, Side Hung Casements (QV9JI5)



Top, Mid, Side Hung Casements (88MG1J)



Top, Mid, Side Hung Casements (74WIST)

External Window: Top, Mid, Side Hung Casements

External Window Reference
QV9JI5

Details

Surface Material

Aluminium

Frame Material

Timber

Infill / Panel Material

Toughened Glass

Photos



External Window: Top, Mid, Side Hung Casements

External Window Reference
88MG1J

Details

Surface Material

Aluminium

Frame Material

Timber

Infill / Panel Material

Toughened Glass

Photos



External Window: Top, Mid, Side Hung Casements

External Window Reference
74WIST

Details

Surface Material

Aluminium

Frame Material

Aluminium

Infill / Panel Material

Toughened Glass

Photos



External Doors

Photo

External Door



Single Leaf Entrance Doors (J4XD4U)



Single Leaf Entrance Doors (1AJYBF)

External Door: Single Leaf Entrance Doors

External Door Reference
J4XD4U

Details

Surface Material

Aluminium

Infill / Panel Material

Toughened Glass

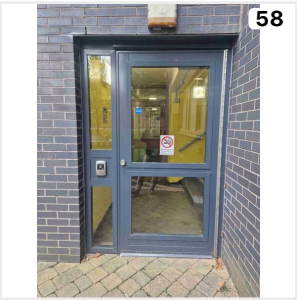
Frame Material

Aluminium

Details

Kite marking EN 14449

Photos



External Door: Single Leaf Entrance Doors

External Door Reference
1AJYBF

Details

Surface Material

Aluminium

Infill / Panel Material

Toughened Glass

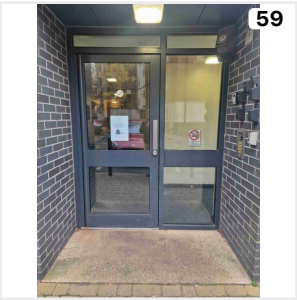
Frame Material

Aluminium

Details

Kite marking identified the glazing as laminated

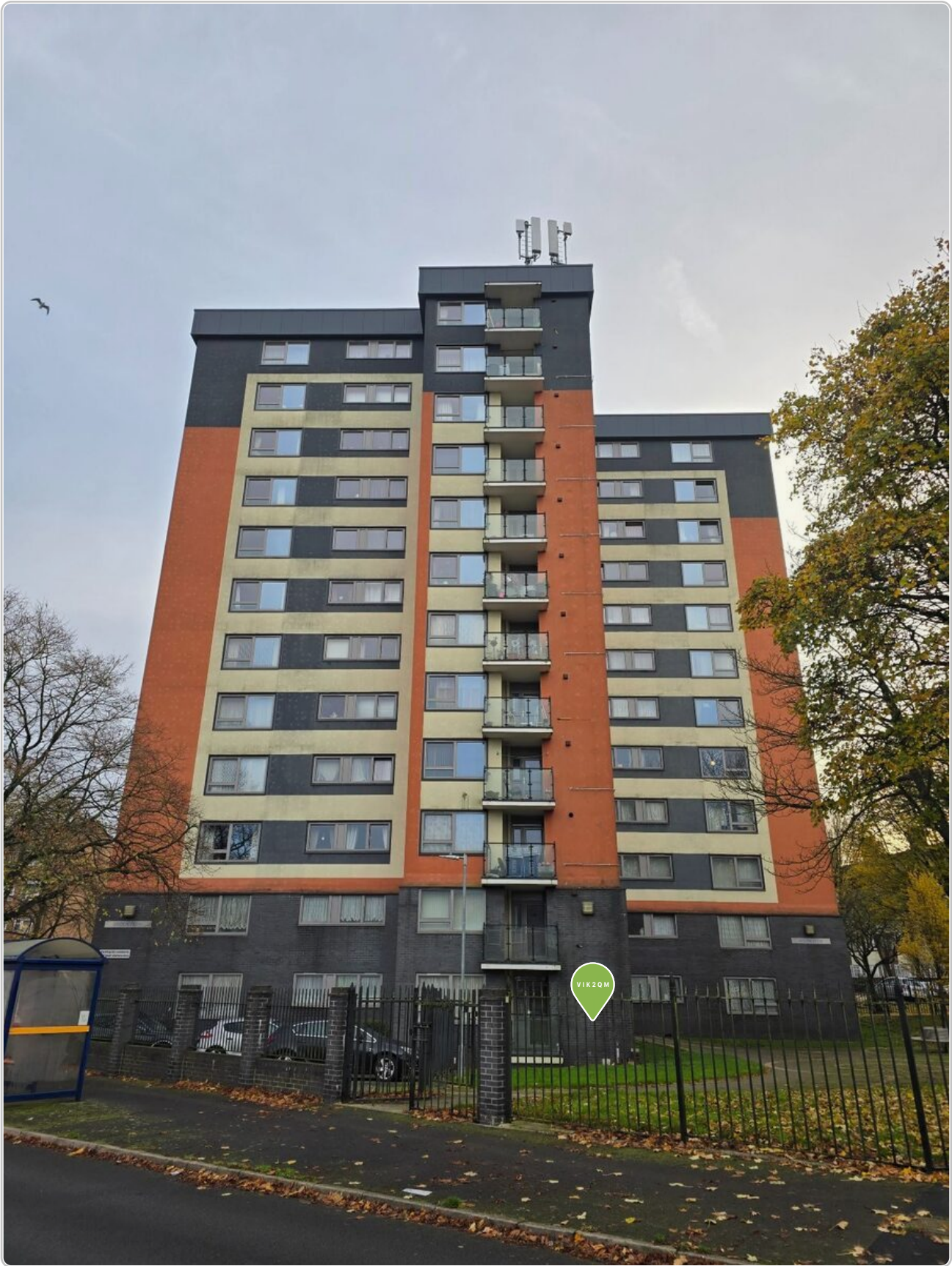
Photos



Plan: Survey locations as tagged



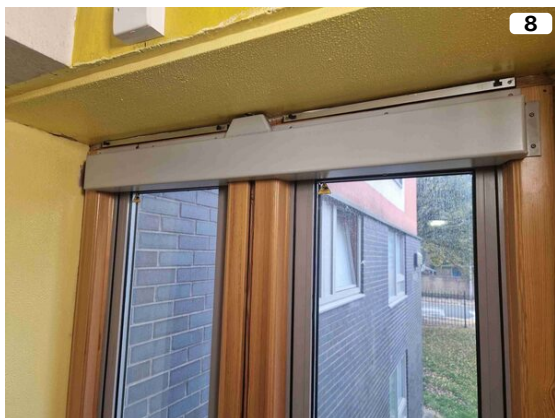
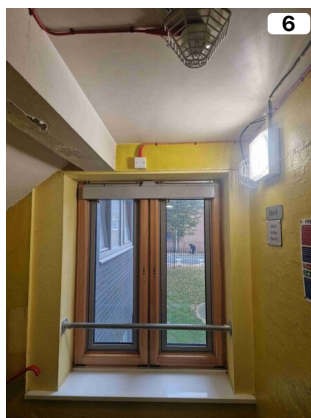
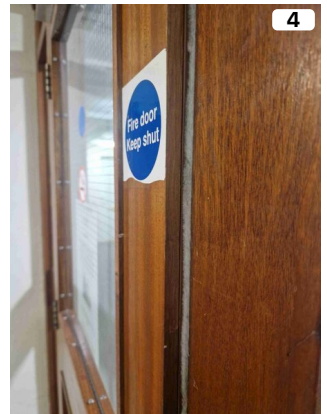
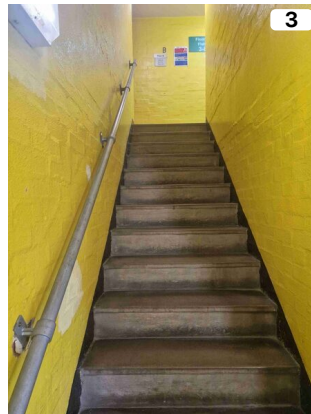
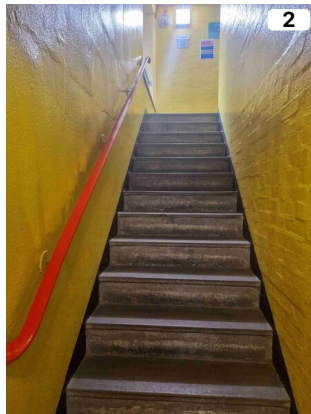
Plan: Survey locations as tagged



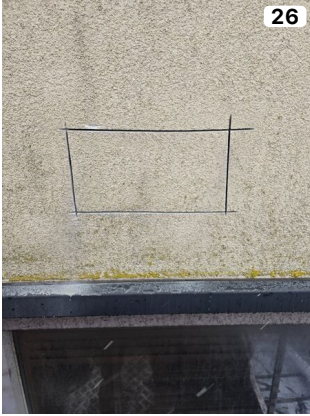
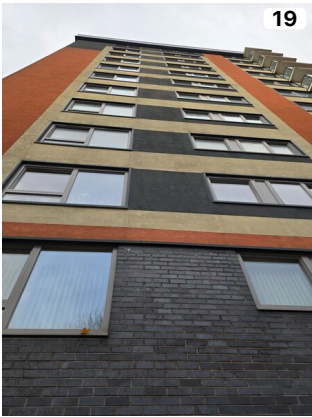
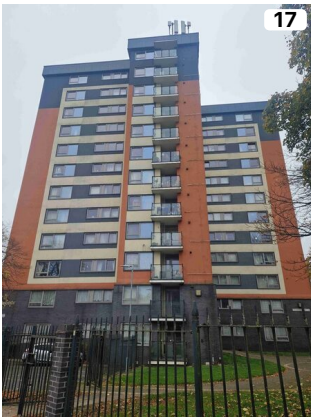
Plan: Survey locations as tagged



Photos



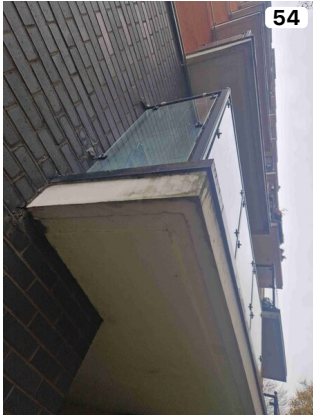
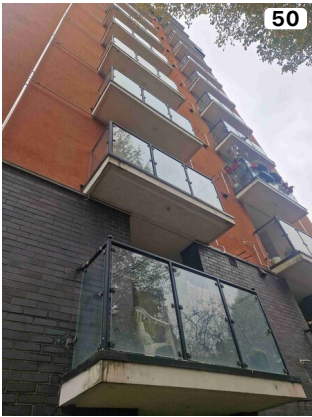
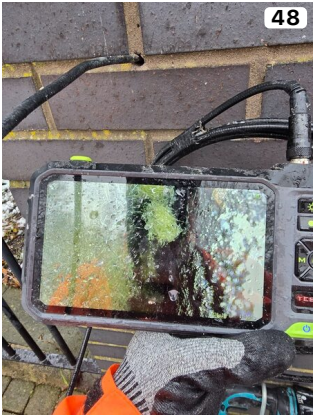
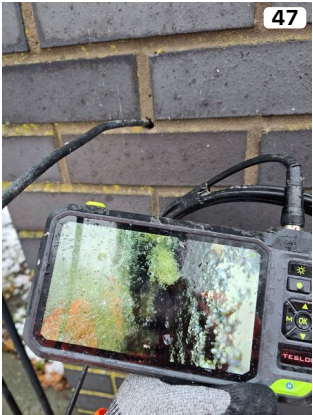
Photos Continued...



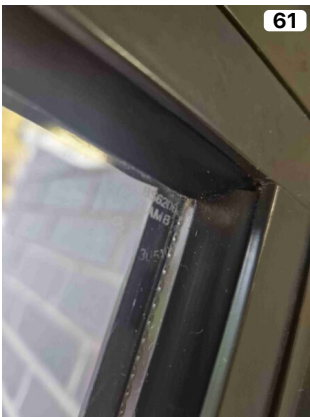
Photos Continued...



Photos Continued...



Photos Continued...





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