FIRNTEC
BUILDING COMPLIANCE

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

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Suggested Review Date	29/07/2025

PAS 9980 STEP 2-5 (FRAEW)

ASHCROFT

Ashcroft
Windmill Lane
Smethwick
West Midlands
B66 3JP

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Summary

PAS 9980 Step 2-5 (FRAEW)

Assessment and Certificate Reference
RB-CJWLQS

Assessed On, By
29/07/2024, Douglas Murray (Building Safety Consultant)
(BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA)

Produced For the Responsible Person
Sandwell Metropolitan Borough Council

Specification Conforms To
Our own internal quality system.

Assessment Scope
Assessment applies only to the building specified.

Recommended Review Date
29/07/2025

Assessed Property

Property Name
Ashcroft

Property Reference
RB-STACE1

Address
Ashcroft
Windmill Lane
Smethwick
West Midlands
B66 3JP

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

Assessor Remarks

The development of Ashcroft was commissioned by Smethwick Council 1963, and building work was awarded to the contractors Five Oaks Ltd who completed building work on three similar buildings circa 1965. The building comprises of 15 floors including ground and houses 90 individual self contained flats. The present day authority is Sandwell Metropolitan Borough Council.

The original structure is of reinforced concrete frame with reinforced staircores, lift core, floor slabs and foundations. The original external walls are formed from brick slip over PS insulation, Stonewall rainscreen cladding panels over mineral wool insulation, and aluminium PPC spandrel panels which form part of a curtain wall.

Cladding systems and other improvement work went ahead in 2017 (planning reference DC/14/56775). The work focused on external refurbishments including refurbishment and environmental works to 3 high rise blocks including insulated cladding, replacement windows and balcony doors, glazed enclosure to balconies, new steel framed aluminium sheeted roof with photovoltaic panels, new front entrance porches and landscaping works with additional parking areas.

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 2010

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 though 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.

9 Items	Effect	Risk
Wall Construction Wall type 1 (4EZLYX)	Positive	Low
Wall Construction Wall type 2 (GQ1XRU)	Neutral	Medium
Wall Construction Wall type 3 (21JJ3E)	Positive	Low
Wall Construction Wall type (3D23KX)	Neutral	Medium
Attachment Cantilever Balcony (RMEGQ7)	Positive	Low
Penetration Ventilation (51DTL4)		
External Window Top, Mid, Side Hung Casements (HZSMFG)	Positive	Low
External Door Main and secondary entrances (VUV5K7)	Positive	Low
External Door Single Leaf Entrance Doors (N1PXB9)		

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 **LBE62J** which includes wall construction **4EZLYX**.

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 **6Q9KKE** which includes wall construction **GQ1XRU**.

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 **CB9UWI** which includes wall construction **21JJ3E**.

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.

Low

Overall Building Risk Rating

Low

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

The Ashcroft building comprises of 15 (fifteen) floor levels and 90 (ninety) self contained individual flats. It is assumed to be two residents per flat however exact numbers are not known. The building operates a stay put evacuation strategy which is appropriate for these premises.

Neutral

F.2 Evacuation

The current evacuation strategy is stay put as denoted by the fire action notices displayed in the common areas.

Photo Ref. 1

Positive

F.3 Escape Route Design

Ashcroft comprises of a single escape stair that deposits at ground floor into two final exits at ground and transfer areas between stairs and final exit doors. Stair widths were in excess of 900mm including at turns and there was a good standard of emergency lighting.

Photo Ref. 2, 3, 4, 5, 6, 7, 8

Negative

F.4 Compartmentation

Adequate compartmentation in line with the expectations for a block of flats, Sandwell Council operates an ongoing regime of compartmentation checks and repair work against all stock.

Positive

F.5 Smoke Control

Installed at the stairwell on the 14th floor.
System includes automatic opening windows.
Control and repeater panels are located in the ground floor lobby and 14th floor staircase.

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

Positive

F.6 Fire Alarm & Detection

No automatic fire detection in communal areas.there is a part 1 system that covers the lift shaft.
Within Flats: Smoke alarms are installed to LD1, LD2, and LD3 standards.
LD1: Smoke detectors in all rooms except wet rooms.
LD2: Smoke detectors in all-risk rooms (Living Room, Kitchen, Hallway).
LD3: Smoke detectors in the Hallway only

Photo Ref. 14

Positive

F.7 Fire Suppression

Bin Store: A deluge system is installed.

Positive

F.8 - Firefighting Facilities

There is a secure document box installed inside the main entrance, however we did not access this item at survey.
There are fire switch keys on both lifts, lifts are considered to be of passenger standard only.
There is a dry riser at ground and found on all floor levels.
According to RICS fire hydrant mapping the FH for Ashcroft is outside the grassed area within 10 metres of the building

Photo Ref. 15, 16, 17, 18, 19, 20, 21

Positive

F.9 Rising Mains

Dry riser inlet cabinet: Located in the entrance lobby.
Cabinet is secured with a budget lock.
Dry riser outlets:
Serves all floors up to the 14th floor.
Outlets are exposed and located in communal lobbies.
Each outlet valve is secured with a cable tie.

Photo Ref. 22, 23

Positive

F.10 Lifts Used By Firefighters

There are two passenger lifts installed, which are fitted with a fire switch at ground

Photo Ref. 24, 25

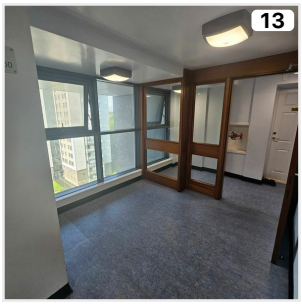
Positive

F.11 Specific Fire Hazards

Risks and Fire Hazards
(1) Ground floor brick slip sections have been installed over an XPS insulation, on removal of vent caps which are
fitted over the brick slips at lightning protection earthing points, XPS is clearly visible. As this material is a known
combustible product, it remains a fire hazard, particularly if a lighting strike ignites the XPS.
(2) Spandrel panels with what appears to be polyurethane PUR foam insulation have been installed across curtain
wall glazing at floor slab level. Even though the local area is sterile, there are flat windows in close proximity to the
intermediate stair lobbys which is where the spandrels are located. This means in the event of a flat fire, spandrels
could ignite from a flashover and create an accumulation of smoke internally within the intermediate lobby and or
stairwell.

Negative

Photos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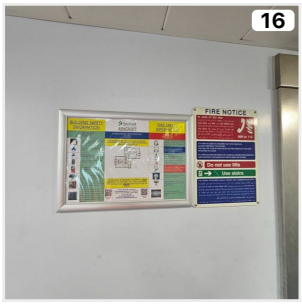

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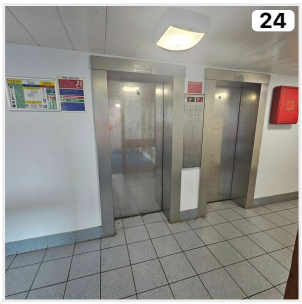
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Nearest Fire Station

The nearest fire and rescue service is found at Stony Lane Smethwick B67 7QW and approximately 1.5 miles away or 7 minutes in peak hours traffic.

Wall Constructions

Wall Construction	Build-up
Wall type 1 (4EZLYX)	• Surface Finish (Stonewall panels) • Cavity
Wall type 2 (GQ1XRU)	• Surface Finish (brick slip) • Insulation (XPS Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
Wall type 3 (21JJ3E)	• Surface Finish (5mm render with 100mm mineral wool insulation mechanically fixed to the original external leaf) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
Wall type (3D23KX)	• Surface Finish (Solid PPC aluminium) • Insulation (PUR Insulation) • Cavity

Wall Construction: Wall type 1

Construction Reference
4EZLYX

This wall construction was identified by wall inspections 5DT9IX and 28RCNB. The build-up, cavity barrier, and floor slab information is taken directly from inspection 5DT9IX. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall type 1 (4EZLYX)	Positive	Low

Build-Up

2 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	9mm	Stonewall panels Material Brand: Rockwool	A1 - Non-Combustible
Confirmed class A			
Cavity	25mm		

Cavity Barriers

1 Cavity Barrier	Material
Horizontal Cavity Barrier	Open State Cavity Barrier Material Brand: Siderise

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

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

K.5 Cavities

Cavity barriers present with no more than minor workmanship defects — 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).

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.

L5 Benchmark

FRAMES -

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

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.

Wall Construction: Wall type 2

Construction Reference
GQ1XRU

This wall construction was identified by wall inspections TH2ZME and EDARER. The build-up, cavity barrier, and floor slab information is taken directly from inspection TH2ZME. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall type 2 (GQ1XRU)	Neutral	Medium

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	15mm	brick slip	A1 - Non-Combustible
Insulation	100mm	XPS Insulation	D - Highly Combustible
Inner Leaf Support (Backing Wall)	102mm	Original 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) >3 MJ/kg and ≤35 MJ/kg	Negative

K.2 External Surfaces

Class A1/A2	Positive

K.3 Facings/Cladding Panels

Adhesive fixed	Neutral

K.4 Panel Construction

No gaps between panels	Positive

K.5 Cavities

Facings into the cavity combustible, but Class C or lower	Negative

K.6 Insulation

Class D	Negative

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

Thermoplastic insulation
- EPS foam
- XPS foam
- "Multifoil insulation" (e.g. layers of reflective foil and thermoplastic fibre wadding or bubble-wrap type material)
- Importance of cavities being formed on heating

Thermoplastic insulation typically offers poor fire performance and so is reliant upon encapsulation to achieve safe external wall construction.
Thermoplastic insulation will, by definition, melt on heating, so any space which is occupied by a thermoplastic insulation needs to be assumed as becoming a cavity lined with combustible residue once involved in fire.
Encapsulation of thermoplastic insulation therefore needs to retain its integrity and likely needs to retain its shape when exposed to fire; it cannot be reliant upon the thermoplastic insulation to do this.
It is generally accepted that thermoplastic insulation will be installed below damp-proof course (DPC) level in buildings, given the need to mitigate against damp.
This is unlikely to have a significant impact on fire risk.

L5 Benchmark

FRAMES -

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

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 not find a cladding system with the configuration and components that would constitute an exact match to what our inspections found on the Property.

Wall Construction: Wall type 3

Construction Reference
21JJ3E

This wall construction was identified by wall inspections EK21CJ, DYFUFM, and R555K3. The build-up, cavity barrier, and floor slab information is taken directly from inspection EK21CJ. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall type 3 (21JJ3E)	Positive	Low

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	5mm	5mm render with 100mm mineral wool insulation mechanically fixed to the original external leaf	A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork	A1 - Non-Combustible

Cavity Barriers

No external cavity

Fire Performance

K.1 General

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

K.2 External Surfaces

Class A1/A2 — Positive

K.3 Facings/Cladding Panels

Mechanically fixed — Positive

K.4 Panel Construction

No gaps between panels — Positive

K.5 Cavities

Facings into the cavity at least Class A2 — 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).

L5 Benchmark

FRAMES -

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

L6 Benchmark

BALCONIES -

Balconies are defined in BS 8579. However, for the purpose of this PAS and the manner in which balconies impact external fire behaviour, balconies fall into one of three categories:
a) those which fall entirely within the curtilage of the building structure (i.e. they are built on the slab and appear inset into the building when observed from outside). They might be enclosed to an extent and might effectively be made fully enclosed (sometimes referred to as a “winter garden”). The extent of enclosure needs to be considered in light of whether, from a fire perspective, the space can be treated as part of the outside or whether it is in effect a compartment (i.e. subject to compartment fire behaviour);
b) those which project beyond the main building structure but do so on an extension of the floor slab. They provide an advantage in that their construction matches that of the compartment floor within the building, and can deflect fire/smoke plumes away from the building; and
c) those which project beyond the main building structure and are fixed to the outside face of the building. They can only be of lightweight construction; their construction needs to be assessed based upon the combustibility and fire resistance of any materials used.

Regardless of balcony type, the materials used to line the balconies (including soffits) need to be assessed in light of their likely contribution to external fire spread.
Storage of materials and other uses by residents also need to be taken into account. Any bulk storage can pose a significant hazard, as can the use of combustion appliances such as barbecues and heaters.

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

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.

Wall Construction: Wall type

Construction Reference
3D23KX

This wall construction was identified by wall inspection DK4DEV. The build-up, cavity barrier, and floor slab information is taken directly from inspection DK4DEV. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall type (3D23KX)	Neutral	Medium

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	2mm	Solid PPC aluminium	A2 - Limited Combustibility
Insulation	30mm	PUR Insulation	D - Highly Combustible
Cavity	100mm		

Cavity Barriers

None

Floor Slab

Floor Slab Abuts The Backing Wall

Fire Performance

K.1 General

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

K.2 External Surfaces

Class C	Negative

K.3 Facings/Cladding Panels

Mechanically fixed	Positive

K.4 Panel Construction

No gaps between panels	Positive

K.5 Cavities

Facings into the cavity combustible, but Class C or lower	Negative

K.6 Insulation

Class D	Negative

PAS Standard Benchmark

L3 Benchmark

Rigid (thermoset) foam insulations
• Polyurethane (PUR)
• Polyisocyanurate (PIR)
• Phenolic

Thermoset foam insulations are combustible, but can offer a wide range of fire performance, depending upon the specific product in question.
Both PUR and PIR can be formulated in a wide variety of ways, so where possible the assessor needs to identify the product in question. PUR and PIR foams are based upon
similar underlying chemistry, but PIR foam generally performs better than PUR due to it having greater thermal stability (more likely to char and less likely to break down into flammable substances).
Phenolic foams are generally similar to PIR foams in terms of their fire performance, though their underlying chemistry is different.
Where a rigid foam has been engineered for improved fire performance, a foil facing is commonly employed to improve performance further by protecting the foam from direct flame attack. Where a foil faced foam is used, it is typically necessary to use foil tape to seal any joints so that the underlying foam is not left exposed. The extent to which tape failure can be accepted needs to be considered in the context of the overall wall construction.
While cavity barriers need to be fixed to substrates offering the same period of fire resistance as the cavity barrier, rigid foams might, in practice, remain in place for long enough to afford a satisfactory delay to fire spread, provided the cavity barrier is not reliant upon the foam itself for support.

L5 Benchmark

SPANDREL / IN-FILL PANELS

The terms “spandrel panel” and “infill panel” are used interchangeably throughout the industry to refer to panels which are normally fitted in lieu of glazing in either window fenestration systems or curtain wall units. The edges of these panels usually expose the insulating core and are normally only protected by the frame into which they are installed. They are sometimes protected with aluminium foil tape but this cannot be assumed.
Spandrel and infill panels are typically some form of composite, such as:
• metal skins with an insulating core;
• metal skins with an insulating and timber (typically plywood) core;
• metal external face with insulating core and timber (typically plywood) internal face;
• HPL skins with an insulating core; and
• solid HPL.
Their performance needs to be assessed in light of the materials involved in their construction (as described in this annex) and the manner in which they interact with compartmentation.
• Panels which are installed in such a way as to cross compartment lines (e.g. to conceal the edges of floor slabs) need to be considered in light of the potential route they provide for fire to spread from one compartment to another.
• Panels which are installed entirely within the confines of a compartment (as it meets the external wall) are unlikely to have a significant impact on fire spread, unless their performance is such that they are likely to contribute to substantial flame extension.

L10 Benchmark

CURTAIN WALLING SYSTEMS -

There are two principal forms of curtain wall system.
• Stand-off systems are built beyond the edges of floor slabs and run continuously across the height and width of a building. Unless a strategy has been devised to negate this need, fire stopping needs to be provided between slab edges and the inside face of the curtain wall system.
• Infill systems (now more commonly referred to as window assemblies) are built inboard of slab and/or wall edges, although they might pass across particular floor and/or wall lines to achieve a particular architectural objective. Where the system is broken up by lines of fire compartmentation, this limits the extent/speed at which fire can spread across the system.

The structures of these systems can differ substantially; whereas infill systems are invariably supported at regular intervals by the building's primary structure, low-rise stand-off systems can transmit their load down to ground level, with only lateral support back to the primary structure.

Regardless of whether a curtain wall system is built as a stick system (assembled on site) or a unitized system (prefabricated panels), it is the materials used to form the framework that influence the fire performance.
• Steel framed systems can provide good edge protection to the panels in the curtain wall (provided the geometry actually covers and protects edges) as well as good resistance to collapse in the event of fire.
• uPVC framed systems are combustible; they might offer some edge protection and resistance to collapse if steelwork is embedded within them, but this would need to be confirmed.
• Aluminium framed systems are non-combustible but melt when exposed to fire, offering little edge protection and potentially risking collapse (which can be extensive if the aluminium transmits the load of the curtain wall down to ground level).
The other components of curtain wall systems are covered in Table L.5.

Façade Configuration: LBE62J

Items in Façade

4 Items	Effect	Risk
Wall Construction Wall type 1 (4EZLYX)	Positive	Low
Attachment Cantilever Balcony (RMEGQ7)	Positive	Low
External Door Main and secondary entrances (VUV5K7)	Positive	Low
External Window Top, Mid, Side Hung Casements (HZSMFG)	Positive	Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

18 m to 30 m — Negative

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 accidently or deliberately) igniting the cladding is highly unlikely. — Positive

N.3 Extent of Cladding

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

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

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

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

Positive

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.

Low

Façade Configuration: 6Q9KKE

Items in Façade

4 Items	Effect	Risk
Wall Construction Wall type 2 (GQ1XRU)	Neutral	Medium
External Door Main and secondary entrances (VUV5K7)	Positive	Low
External Door Single Leaf Entrance Doors (N1PXB9)		
External Window Top, Mid, Side Hung Casements (HZSMFG)	Positive	Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

<11 m — Negative

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

Not Applicable

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

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

Neutral

N.11 Attachments

Not Applicable

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

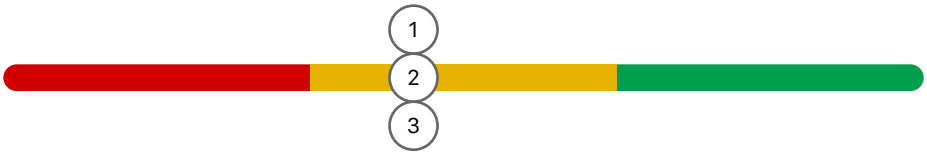
Windows or other openings in adjacent or abutting neighbouring buildings are sufficiently distanced that direct flame impingement from a fire in the neighbouring building is unforeseeable

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.



Medium

Façade Configuration: CB9UWI

Items in Façade

1 Item	Effect	Risk
Wall Construction Wall type 3 (21JJ3E)	Positive	Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

18 m to 30 m — Neutral

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

>5 m
NOTE At this height, the likelihood of a fire originating externally (e.g. involving a parked vehicle or waste skip and started either accidently or deliberately) igniting the cladding is highly unlikely. — Positive

N.3 Extent of Cladding

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

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

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

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

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.

Low

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 LD1, LD2, and LD3 standards.
LD1: Smoke detectors in all rooms except wet rooms.
LD2: Smoke detectors in all-risk rooms (Living Room, Kitchen, Hallway).
LD3: Smoke detectors in the Hallway only
No automatic fire detection in communal areas there is a part 1 system that covers the lift shaft..

Emergency Lighting

Installed in communal parts

Emergency Lighting

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

Portable Fire Fighting Equipment

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

Portable Fire Fighting Equipment

There is portable fire fighting equipment located in the lift motor room, Photo Voltaic meter room and caretakers welfare room.

Smoke Control

Natural smoke control, Mechanical smoke control

Smoke Control

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

Suppression Systems

Partial sprinkler system installed (Detailed in Description)

Suppression System

There is a suppression (drencher) system located in the bin/refuse store.

Fire Fighting Facilities

Dry Riser

Fire Fighting Facilities

Dry riser inlet cabinet: Located in the entrance lobby.
Cabinet is secured with a budget lock.
Dry riser outlets:
Serves all floors up to the 14th floor.
Outlets are exposed and located in communal lobbies.
Each outlet valve is secured with a cable tie.

Access for fire-fighting vehicles

Access to the front elevation of Ashcroft is found to be adequate for F&RS. However there is a tree/grassed fenced area on three other sides of the building which inhibits free access to certain sections of the building.

Fire Hydrant Location/ Water Supply

The Fire Hydrant for the Ashcroft building is located externally at the front of the property, within a firefighter's white box positioned 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

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, lift and other advisory notices

Property Type

Apartment Block

Building Era / Age

Known Build Date

Known Build Date

1963-1964

Building Height

From lowest point at ground to the upper most finished floor, Ashcroft is approximately 45 metres in height.

Approx Floor Area Per Floor

The approximate footprint of Ashcroft is 400m2

Number of Storeys (Ground and above)

Ashcroft is 15 storeys including ground

Number of Basement Levels

There are no basement or lower ground floors

Number of Flats

Ashcroft caters for 90 self contained flats

Flat Types

Single Storey

Structural Wall Material

The original structure appears to be of reinforced concrete frame with concrete staircores, lift core, floor slabs and foundations. Following refurbishment in 2017, external wall finishes are now formed from brick slips, high density stonewall cladding panels and incidental polyester powder coated aluminium spandrel panels.

Structural Floor Material

Floors were found to be of reinforced concrete

Structural Stairs Material

Stairs were found to be of concrete

Construction (Details)

The development of Ashcroft was commissioned by Smethwick Council 1963, and building work was awarded to the contractors Five Oaks Ltd who completed building work on three similar buildings circa 1965. The building comprises of 15 floors including ground and houses 90 individual self contained flats. The present day authority is Sandwell Metropolitan Borough Council.

Exterior Cladding

FRAEW Completed on Exterior Cladding

Exterior Cladding (Details)

Cladding systems and other improvement work went ahead in 2014 (planning reference DC/14/56775). The work focused on external refurbishments including refurbishment and environmental works to 3 high rise blocks including insulated cladding, replacement windows and balcony doors, glazed enclosure to balconies, new steel framed aluminium sheeted roof with photovoltaic panels, new front entrance porches and landscaping works with additional parking areas.

Electronic Entrance System

Yes

Carpark

External/Outdoor Carpark

Employees

Day staff

~ Number of Employees on duty

3

Employees (Extended)

There were three (3) cleaning staff on site at the time of survey

Residents

Yes

Approx number of Residents

180

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 two (2) satisfactory fire exits from the premises of suitable width and within acceptable travel distances. Emergency exits open outwards in escape direction.

Number Of Internal Escape Stairs

The building is provided with a single escape stair

Number Of Final Exits

The building is provided with two individual escape exits

External Means Of Escape

None Present

Types Of Lifts Installed

Passenger

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

Stay put is denoted on Fire Action Notices on display throughout common parts

Current Evacuation Strategy for the property considered appropriate?

Yes

What is the recommended evacuation strategy for the property?

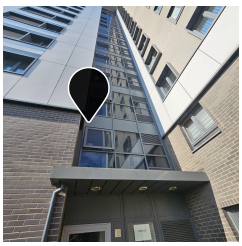
Stay Put

Aerial Perspective: Aerial image of Ashcroft and surrounding area

Elevations

Photo	Name	No. of Storeys
	South Elevation	15 Storeys
	North Elevation	15 Storeys
	East Elevation	15 Storeys
	West Elevation	15 Storeys

Inspections

Elevation Location	Inspection	Elements
	**Inspection: TH2ZME** Survey locations as tagged	• Surface Finish (brick slip) • Insulation (XPS Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	**Inspection: 5DT9IX** Survey locations as tagged	• Surface Finish (Stonewall panels) • Cavity
	**Inspection: EK21CJ** Survey locations as tagged Accessible wall	• Surface Finish (5mm render with 100mm mineral wool insulation mechanically fixed to the original external leaf) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	**Inspection: 28RCNB** Survey locations as tagged Accessible wall	• Surface Finish (High density stonewool panels) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	**Inspection: DK4DEV** Survey locations as tagged	• Surface Finish (Solid PPC aluminium) • Insulation (PUR Insulation) • Cavity

Elevation Location	Inspection	Elements
	**Inspection: RTVXX6** Survey locations as tagged	• Surface Finish (glazed spandrel panel) • Spandrel Panel
	**Inspection: DYFUFM** Survey locations as tagged Accessible wall	• Surface Finish (5mm render with 100mm mineral wool insulation mechanically fixed to the original external leaf) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (No cavity)
	**Inspection: EDARER** Survey locations as tagged	• Surface Finish (brick slip) • Insulation (XPS Insulation) • Inner Leaf Support (Backing Wall) (Original brickwork)
	**Inspection: R555K3** Survey locations as tagged Accessible wall	• Surface Finish (5mm render with 100mm mineral wool insulation mechanically fixed to the original external leaf) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (No cavity)

Inspection: TH2ZME

Elevation
Survey locations as tagged

Name/Summary

Wall type 2 - Brick slips over XPS insulation at ground floor only

Description

Showing XPS insulation mechanically fixed to original outer leaf with brick slip finish

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	15mm	brick slip		A1 - Non-Combustible
Insulation	100mm	XPS Insulation		D - Highly Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos

Inspection: 5DT9IX

Elevation
Survey locations as tagged

Name/Summary

Wall type 1 - High density stonewall panels, primarily installed from second floor to upper most floor level.

Description

High density stone wall panels which extend full height from ground to the most upper floor level.
Includes residual cavity of 25mm
Open state cavity barrier Siderise RH25
Mineral wool insulation 100mm

Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	9mm	Stonewall panels Material Brand: Rockwool		A1 - Non-Combustible
Confirmed class A				
Cavity	25mm		35	

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Open State Cavity Barrier Material Brand: Siderise	

Siderise Product RH25-120/60 E120 I60 Black for air gaps up to 25mm

Build-up Photos

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Inspection Photos

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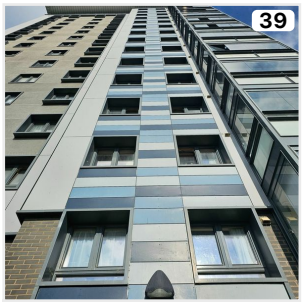
37

38

39



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Inspection: EK21CJ

Elevation • Location
Survey locations as tagged • Accessible wall

Name/Summary

Wall type 3 - cementicious render with mineral wool substrate

Description

4-6mm render over mineral wool semi rigid slab which is mechanically fixed to the original external brickwork leaf.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	5mm	5mm render with 100mm mineral wool insulation mechanically fixed to the original external leaf		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

No external cavity

Inspection Photos

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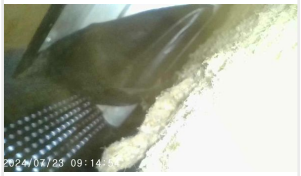

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Inspection: 28RCNB

Elevation • Location
Survey locations as tagged • Accessible wall

Name/Summary

Wall type 1 - High density stonewall panels, primarily installed from second floor to upper most floor level.

Build-Up

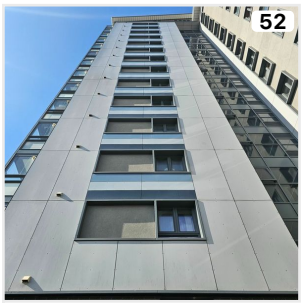
4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	9mm	High density stonewool panels Material Brand: Rockwool		A1 - Non-Combustible
Cavity	50mm			
Insulation	100mm	Mineral Wool Insulation Material Brand: Rockwool		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Vertical Cavity Barrier	Siderise Product RH25-120/60 E120 I60 Black for air gaps up to 25mm Material Brand: Siderise	

Siderise Product RH25-120/60 E120 I60 Black for air gaps up to 25mm

Inspection Photos



Inspection: DK4DEV

Elevation
Survey locations as tagged

Name/Summary

Wall type 4 - spandrel panel found on full height curtain wall glazing section above main entrances

Description

Solid PPC aluminium with sandwich core of likely PU Polyurethane foam

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	2mm	Solid PPC aluminium		A2 - Limited Combustibility
Insulation	30mm	PUR Insulation		D - Highly Combustible
Cavity	100mm			

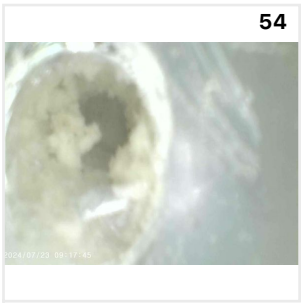
Cavity Barriers

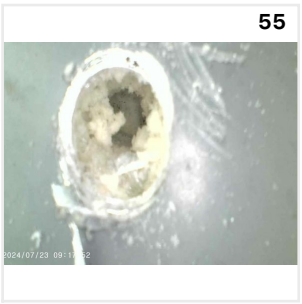
None

Floor Slab

Floor Slab Abuts The Backing Wall

Inspection Photos





Inspection: RTVXX6

Elevation
Survey locations as tagged

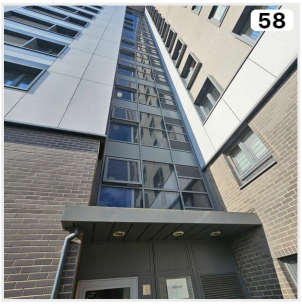
Name/Summary

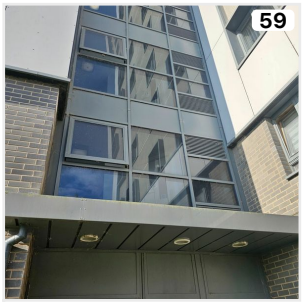
Wall type 6 - glazed spandrel found on curtain wall glazing and incidentally as privacy glass all elevations

Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish		glazed spandrel panel		A1 - Non-Combustible
Spandrel Panel	30mm			C - Combustible

Inspection Photos





Inspection: DYFUFM

Elevation • Location
Survey locations as tagged • Accessible wall

Name/Summary

Wall type 3 - cementicious render with mineral wool substrate

Description

4-6mm render over mineral wool semi rigid slab which is mechanically fixed to the original external brickwork leaf.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	5mm	5mm render with 100mm mineral wool insulation mechanically fixed to the original external leaf		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	No cavity		A1 - Non-Combustible

Cavity Barriers

No external cavity

Inspection Photos

Inspection: EDARER

Elevation
Survey locations as tagged

Name/Summary

Wall type 2 - Brick slips over XPS insulation at ground floor only

Description

Showing XPS insulation mechanically fixed to original outer leaf with brick slip finish

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	15mm	brick slip		A1 - Non-Combustible
Insulation	100mm	XPS Insulation		D - Highly Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: R555K3

Elevation • Location
Survey locations as tagged • Accessible wall

Name/Summary

Wall type 3 - cementicious render with mineral wool substrate

Description

4-6mm render over mineral wool semi rigid slab which is mechanically fixed to the original external brickwork leaf.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	5mm	5mm render with 100mm mineral wool insulation mechanically fixed to the original external leaf		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	No cavity		A1 - Non-Combustible

Cavity Barriers

No external cavity

Inspection Photos

Attachments & Balconies

Photo	Attachment
	**Cantilever Balcony (RMEGQ7)** Configuration: Stacked

Attachment: Cantilever Balcony

Attachment Reference
RMEGQ7

Details

Configuration

Stacked

Framework/Structure

Balcony deck is formed as part of the original and existing floor slab

Fire Engineer Comments

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

a) Those which fall entirely within the cartilage 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 behavior);

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

Positive

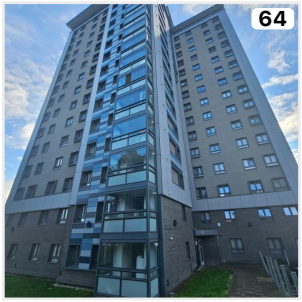
c) Those which project beyond the main building structure and are fixed to the outside face of the building. They
can only be of lightweight construction; their construction needs to be assessed based upon the combustibility and
fire resistance of any materials used.

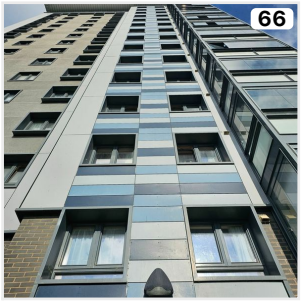
Regardless of balcony type, the materials used to line the balconies need to be assessed in light of their likely
contribution to external fire spread.

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.

The balconies on Ashcroft are category A.

Photos





Penetrations

Photo	Penetration
No Image	**Ventilation (51DTL4)** Inspection Type: Visual

Penetration: Ventilation

Penetration Reference
51DTL4

Details

Photo

1 Image

Inspection Type

Visual

Duct Pipework Material

PVC

External Windows

Photo	External Window
	Top, Mid, Side Hung Casements (HZSMFG)

External Window: Top, Mid, Side Hung Casements

External Window Reference
HZSMFG

Details

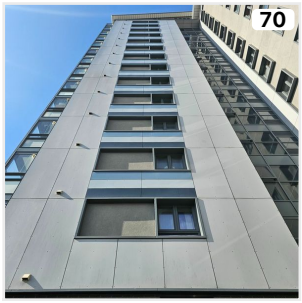
Surface Material

Aluminium

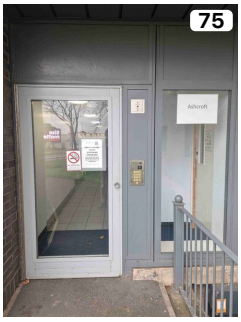
Frame Material

Other

Photos



External Doors

Photo	External Door
	Main and secondary entrances (VUV5K7)
	Single Leaf Entrance Doors (N1PXB9)

External Door: Main and secondary entrances

External Door Reference
VUV5K7

Details

Surface Material

PPC metal

Frame Material

PPC metal

Photos

External Door: Single Leaf Entrance Doors

External Door Reference
N1PXB9

Details

Surface Material

PPC metal

Frame Material

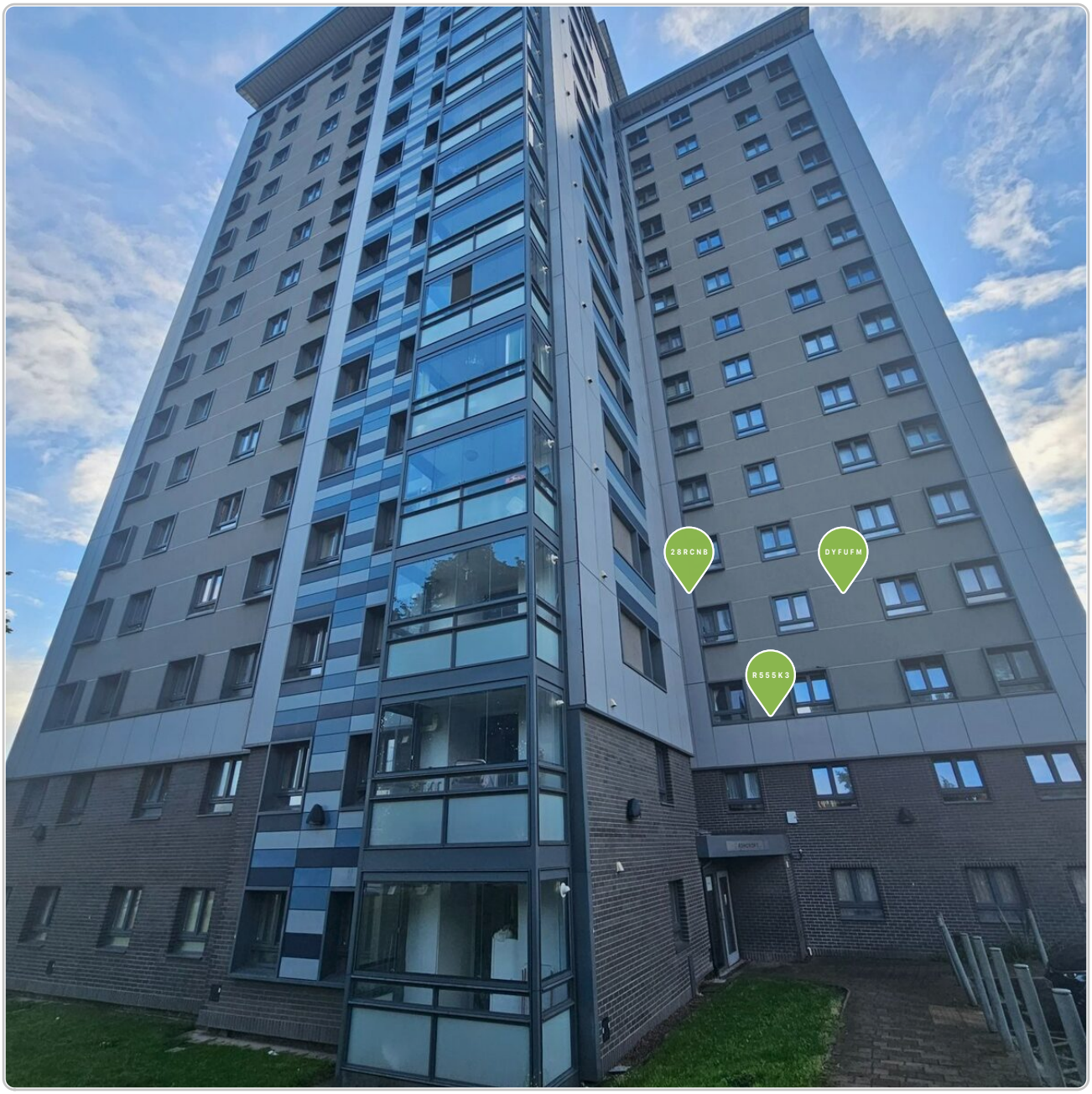
PPC metal

Photos

Plan: Survey locations as tagged

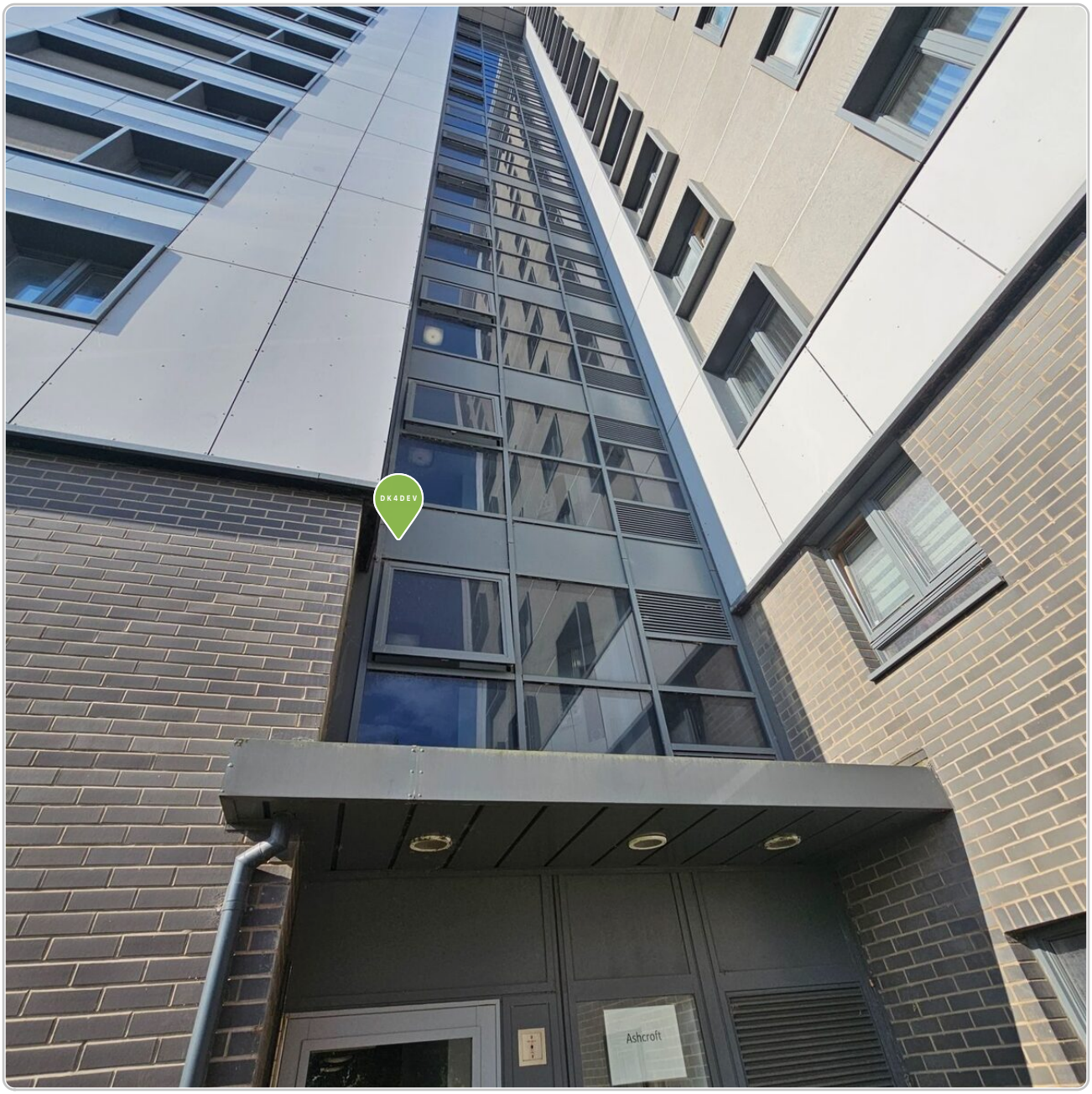
Plan: Survey locations as tagged

Plan: Survey locations as tagged



Plan: Survey locations as tagged

Plan: Survey locations as tagged



Photos

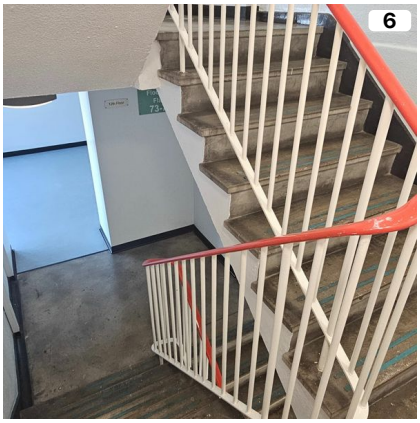

1
FIRE NOTICE
In case of fire dial:
999 or 112
IF A FIRE OCCURS IN A NEARBY FLAT STAY INDOORS.
DO NOT OBSTRUCT THE STAIRS.
YOU WILL BE TOLD BY THE POLICE OR FIRE SERVICE IF YOU ARE REQUIRED TO LEAVE.
IF A FIRE OCCURS IN YOUR FLAT CLOSE ALL DOORS AND WINDOWS AND EVACUATE OCCUPANTS AT ONCE USING THE STAIRS.
Do not use lifts
Use stairs
For further information please contact your neighbourhood office


2


3


4


5


6


7


8
Ground Floor
Flats
1-6


9


10


11


12

Photos Continued...


13


14


15

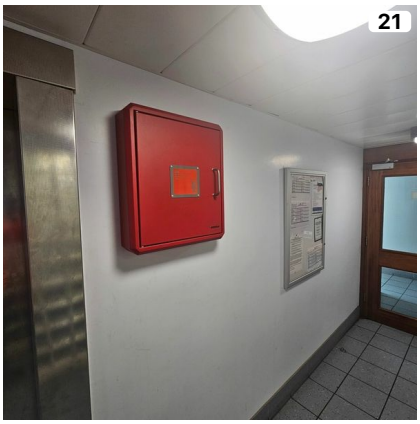
16

17

18


19


20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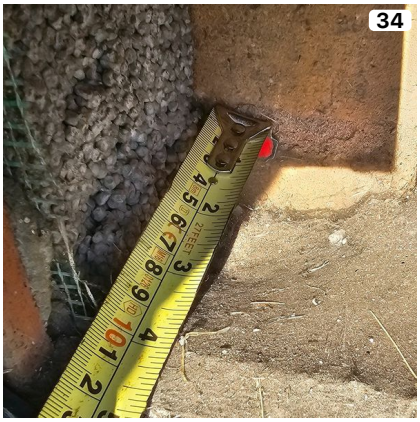
Photos Continued...



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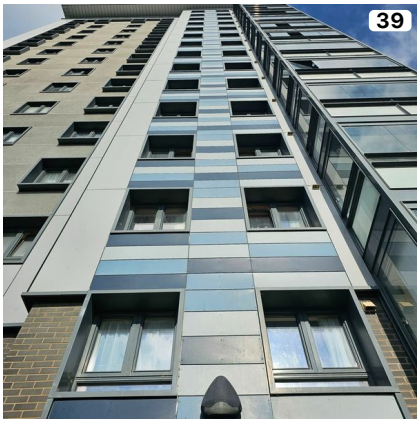
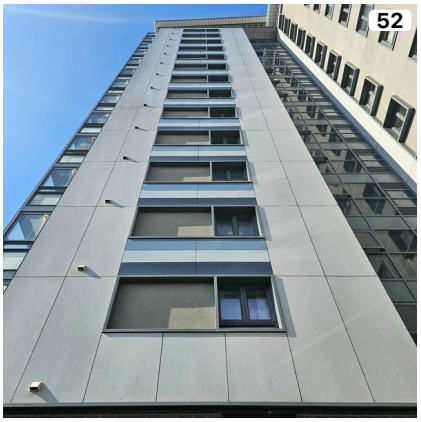
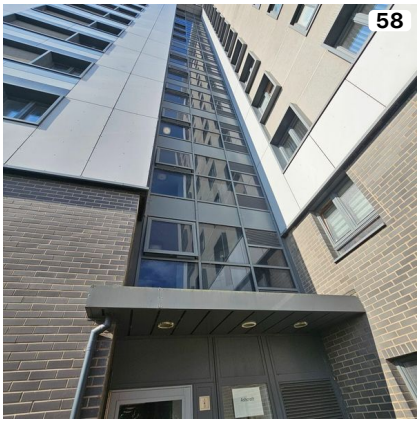
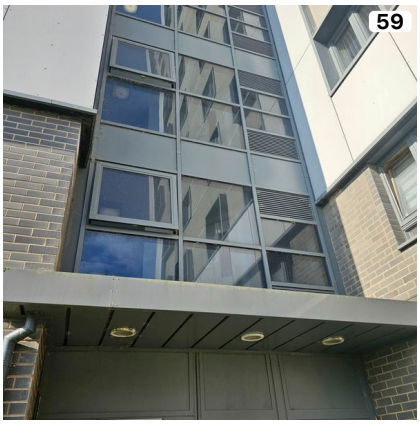


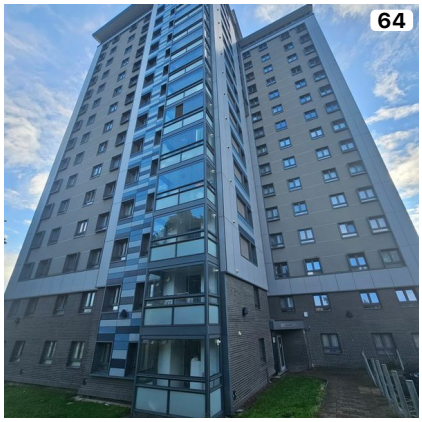
Photos Continued...



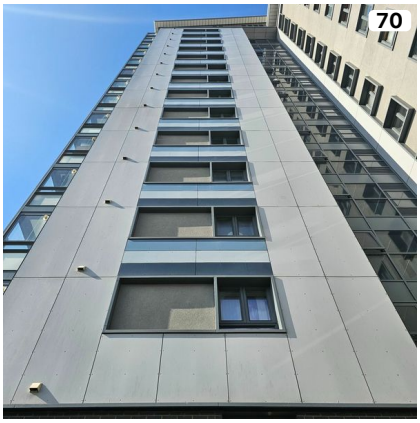
Photos Continued...

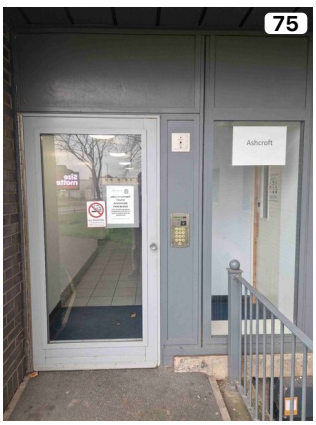






Photos Continued...





Photos Continued...

FIRNTEC

BUILDING COMPLIANCE

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