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

Document Version 1
Survey Date 28/07/2025
Suggested Review Date 28/07/2030

FIRE RISK APPRAISAL EXTERNAL WALLS

KYNASTON HOUSE

Kynaston House
Rydding Lane
West Brom
B71 2HD

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Summary

Fire Risk Appraisal External Walls

Assessment and Certificate Reference
RB-2K5J17

Assessed On, By
28/07/2025, James Major (Facade Manager)

Approved / Validated On, By
Not Approved

Recommended Review Date
28/07/2030

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
Kynaston House

Property Reference
RB-MBPKTL

Address
Kynaston House
Rydding Lane
West Brom
B71 2HD

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

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Abbreviation/ Term Definition

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

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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.

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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.

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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).

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Supporting Documents

The following documentation was requested for review prior to our visit. Any provided documentation has been reviewed and considered as part of our findings. The range, quality and reliability of the information contained in the provided documents have been examined and deemed satisfactory for completing this FRAEW report:

Document	Received
Fire Risk Assessment (16/01/2025) Carl Hill (Sandwell Metropolitan Council) Fire Risk Assessment	Received
BBA Certificate (01/04/2015) BBA BBA Certificate 15/5207 Rockwool RedArt Render System	Received

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Executive Summary

External Wall Systems and Attachments on the Building

17 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.

6 Items	Effect	Risk
Wall Construction Masonry (Brickslip) (7WC6XL)	Positive	Low
Wall Construction HPL Cladding (4V3APJ)	Neutral	Low
Wall Construction Render (WAUFEI)	Positive	Low
Attachment Cantilever Balcony (DJUPAI)	Positive	Low
External Window Top, Mid, Side Hung Casements (7IQYIZ)	Positive	Low
External Door Single Leaf Door (CJSPG8)	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.

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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 **RDJ5CQ** which includes wall construction **7WC6XL**.

Conclusion: This system is formed of an outer leaf of 12mm brickslip adhesively bonded to a 100mm mineral wool insulation layer. Beneath the insulation is the original 1960s masonry construction of the building.

The brick slip presents a non-combustible surface material that does not sustain, support, or contribute to fire spread across the external surface of the building. Although the surface material is non-combustible, it appears to be only adhesively fixed to the insulation. Unlike full-size masonry bricks, which have a good thermal capacity to absorb heat released from a fire breaching a compartment aperture, the brickslips have limited capacity and their adhesion may fail prematurely, presenting a risk of falling debris, although in this building, the brickslips are located on the ground floor only.

Mineral wool, which includes materials like stone wool, is known for its excellent fire-resistant properties. Mineral wool has a very high melting point, typically around 1,000°C to 1,200°C. This makes it non-combustible, meaning it does not contribute to the spread of fire. In the event of a fire, mineral wool acts as a thermal barrier. Its fibrous structure traps air, reducing the transmission of heat to other parts of the structure and slowing the spread of fire. Mineral wool maintains its insulation properties and shape even at high temperatures, further protecting the structural components of buildings, like steel, from heat damage.

The inner leaf of masonry brickwork is generally considered fire-resistant and can provide significant protection against fire for structural and non-structural elements. Masonry bricks, typically made from clay or concrete, have very high melting points (above 1000°C for clay bricks), making them resistant to fire and heat. Bricks have low thermal conductivity. This helps prevent the spread of fire to adjacent areas and provides a thermal barrier that protects the underlying structure. Masonry walls provide effective fire containment, often preventing fire from spreading between compartments within a building. The thickness and density of the masonry wall determine its fire resistance rating.

The brickslip system is located on the ground floor only and extends the perimeter of the building. It encompasses windows and doors on the ground floor, as well as some service penetrations. The brickslip system is remote from sources of external ignition as there is no permanent parking immediately adjacent, nor is there permanent refuse storage nearby. Due to the non-combustible nature of the system, the likelihood of this system succumbing to external ignition is very low.

This building operates a 'Stay Put' evacuation policy. It is anticipated that, due to the nature of the building's construction, a fire would be contained within the compartment of origin long enough for firefighter intervention to begin or for affected occupants to evacuate if necessary. The building has a single central staircase with lobby protection serving all floors. An AOV was located at the head of the staircase with smoke vents located in the communal corridors to prolong the tenability of the means of escape and to aid internal firefighter intervention. A dry riser is fitted to the building with an outlet on every floor. There is adequate access for the fire service to all elevations of the building. The nearest fire station is approximately 1.8 miles away, and as such, the response to a call out would be expected to be swift.

In the event of a fire:

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a) fire spread is likely to be at a rate within expectations for a building of this height, or at a greater, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or
b) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping; and/or
c) 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; and/or
d) the fire and rescue service are likely to be able to intervene effectively to enable occupants to reach safety in time.

It is our professional opinion that there is no requirement for remediation of this wall type.

Low

Risk Factor Analysis 2

This analysis looks at façade configuration **L8VYWX** which includes wall construction **4V3APJ**.

Conclusion: This wall system was identified as being an external leaf of HPL cladding panels (detailed in the provided FRA as Fundermax branded, achieving B,s2,d0), supported by an aluminium framework, followed by 100mm mineral wool (Rockwool) insulation and the underlying original LPS construction.

HPLs are most commonly formed of a mixture of cellulose (wood pulp, recycled paper or similar) and combustible polymeric resin, though any combination of materials formed in a press can be termed a “high pressure laminate” and might be difficult to differentiate visually. HPLs formed of cellulose and resin typically behave in a charring manner analogous to timber, with similar flame spread, energy release and mechanical behaviour (charring until breaking apart). With treatment for enhanced fire performance (usually by addition of chemical fire retardant), these behaviours can potentially be improved, but need to be known on a product-specific basis before they can be relied upon as providing better performance.

Although the aluminium framework is considered to be of limited combustibility, aluminium is recognised as having a lower melting point than other metals used in construction. This may mean that in scenarios resulting in prolonged exposure to fire, where temperatures exceed 600 degrees, the material may begin to lose its structural integrity. In this scenario, it may lead to structural failure and falling debris that could have a detrimental impact on escaping occupants or fire service intervention.

Mineral wool, which includes materials like stone wool, is known for its excellent fire-resistant properties. Mineral wool has a very high melting point, typically around 1,000°C to 1,200°C. This makes it non-combustible, meaning it does not contribute to the spread of fire. In the event of a fire, mineral wool acts as a thermal barrier. Its fibrous structure traps air, reducing the transmission of heat to other parts of the structure and slowing the spread of fire. Mineral wool maintains its insulation properties and shape even at high temperatures, further protecting the structural components of buildings, like steel, from heat damage.

The building is of Large Panel System (LPS) construction, a structural method involving the use of precast concrete wall and floor panels mechanically connected on site. This form of construction was widely used in mid-20th century UK residential developments. While the primary structure is non-combustible, LPS buildings are known to present potential fire safety challenges due to historical detailing, particularly in relation to compartmentation, service penetrations, and voids between panels. These features can allow for concealed fire or smoke spread in the absence of effective fire stopping.

This wall system forms the primary facade type of the building. It is present on the East and West elevations and extends from the first floor to the uppermost storey of the building. Structural openings in this facade include windows and doors. The likelihood of external ignition has been determined to be very low due to this wall type starting on the first floor, and there being no sources of ignition immediately adjacent, there is no parking or refuse storage in close proximity to this wall type. The HPL was observed to be mechanically secured to an aluminium framework that provides structural integrity in the early stages of a fire, and the presence of the non-combustible insulation will also resist the spread of fire across the external surface of the building. A cavity was observed between the HPL panels and the insulation that would allow smoke and effluents to enter the cavity, but it is understood that fire breaks are present within the wall system that will disrupt the spread of fire within the cavity and should contain the fire to the compartment of origin. This wall type has no direct openings into the central escape staircase, ensuring that in the event of a fire, this staircase should remain tenable for all occupants, allowing

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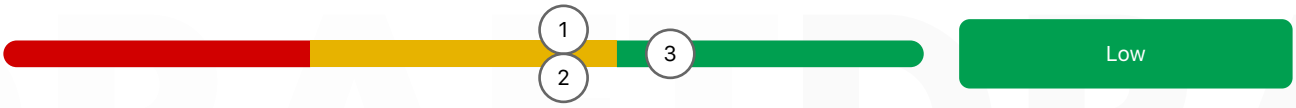
them to escape the building in the event that they become affected by heat or smoke in their dwelling, with an exit to the front and rear of the building in the event of falling debris.

This building operates a 'Stay Put' evacuation policy. It is anticipated that, due to the nature of the building's construction, a fire would be contained within the compartment of origin long enough for firefighter intervention to begin or for affected occupants to evacuate if necessary. The building has a single central staircase with lobby protection serving all floors. An AOV was located at the head of the staircase with smoke vents located in the communal corridors to prolong the tenability of the means of escape and to aid internal firefighter intervention. A dry riser is fitted to the building with an outlet on every floor. There is adequate access for the fire service to all elevations of the building. The nearest fire station is approximately 1.8 miles away, and as such, the response to a call out would be expected to be swift.

In the event of a fire:
a) fire spread is likely to be at a rate within expectations for a building of this height, or at a greater, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or
b) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping; and/or
c) 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; and/or
d) the fire and rescue service are likely to be able to intervene effectively to enable occupants to reach safety in time.

It is our professional opinion that there is no requirement for remediation of this wall type.



Risk Factor Analysis 3

This analysis looks at façade configuration **CI33G4** which includes wall construction **WAUFEI**.

Conclusion: This wall system was identified as being an external leaf of 6mm Render (detailed in client provided FRA as Rockwool RedArt Silicone render) adhesively fixed via a supporting mesh to the underlying 100mm mineral wool (Rockwool) insulation. This is mechanically fixed to the underlying original LPS construction.

Silicone renders are typically considered to be of limited combustibility and can withstand high temperatures without catching fire or releasing harmful gases. The fire resistance of render depends on its composition, thickness, and the type of reinforcement used. In general, thicker layers of render provide better fire resistance. Its insulating properties can contribute to how a building performs in a fire. In some cases, the render can help protect the underlying structure (such as brick or wood) from high heat by providing a protective layer. The Rockwool RedArt render system that was identified achieves a Euroclass A2-s1, d0 rating and as such would not be expected to support, sustain, or contribute to fire spread across the external surface of the building.

Mineral wool, which includes materials like stone wool, is known for its excellent fire-resistant properties. Mineral wool has a very high melting point, typically around 1,000°C to 1,200°C. This makes it non-combustible, meaning it does not contribute to the spread of fire. In the event of a fire, mineral wool acts as a thermal barrier. Its fibrous structure traps air, reducing the transmission of heat to other parts of the structure and slowing the spread of fire. Mineral wool maintains its insulation properties and shape even at high temperatures, further protecting the structural components of buildings, like steel, from heat damage.

The building is of Large Panel System (LPS) construction, a structural method involving the use of precast concrete wall and floor panels mechanically connected on site. This form of construction was widely used in mid-20th century UK residential developments. While the primary structure is non-combustible, LPS buildings are known to present potential fire safety challenges due to historical detailing, particularly in relation to compartmentation, service penetrations, and voids between panels. These features can allow for concealed fire or smoke spread in the absence of effective fire stopping.

This wall system forms the secondary facade type of the building. It is present on the North and South elevations and extends from the first floor to the uppermost storey of the building. Structural openings in this facade include windows and service penetrations. The likelihood of external ignition has been determined to be very low due to this

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wall type starting on the first floor, and there being no sources of ignition immediately adjacent, there is no parking or refuse storage in close proximity to this wall type. The limited combustibility nature of the external surface, coupled with the presence of the non-combustible insulation, will also resist the spread of fire across the external surface of the building. There is no air cavity present in this wall system to provide an envelope for fire or smoke to travel vertically or horizontally unseen. This wall type has no direct openings into the central escape staircase or communal areas, ensuring that in the event of a fire, this staircase should remain tenable for all occupants, allowing them to escape the building in the event that they become affected by heat or smoke in their dwelling, with an exit to the front and rear of the building in the event of falling debris.

This building operates a 'Stay Put' evacuation policy. It is anticipated that, due to the nature of the building's construction, a fire would be contained within the compartment of origin long enough for firefighter intervention to begin or for affected occupants to evacuate if necessary. The building has a single central staircase with lobby protection serving all floors. An AOV was located at the head of the staircase with smoke vents located in the communal corridors to prolong the tenability of the means of escape and to aid internal firefighter intervention. A dry riser is fitted to the building with an outlet on every floor. There is adequate access for the fire service to all elevations of the building. The nearest fire station is approximately 1.8 miles away, and as such, the response to a call out would be expected to be swift.

In the event of a fire:
a) fire spread is likely to be at a rate within expectations for a building of this height, or at a greater, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or
b) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping; and/or
c) 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; and/or
d) the fire and rescue service are likely to be able to intervene effectively to enable occupants to reach safety in time.

It is our professional opinion that there is no requirement for remediation of this wall type.

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.

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Recommended Interim Measures

No recommended interim measures identified.

Recommended Enhancements

No recommended enhancements identified.

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Fire Strategy

Fire Strategy & Hazard Risk Factors

F.1 Occupancy

General needs housing

Neutral

F.2 Evacuation

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

Positive

Photo Ref. 1

F.3 Escape Route Design

Single staircase, with lobby approach

Neutral

F.4 Compartmentation

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

Neutral

F.5 Smoke Control

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

Positive

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F.6 Fire Alarm & Detection

Domestic smoke and heat alarms within flats, Category LD2 or LD3

Positive

F.7 Fire Suppression

Deluge system in bin store only

Neutral

F.8 - Firefighting Facilities

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

Positive

F.9 Rising Mains

Suitable rising main present

Photo Ref. 2

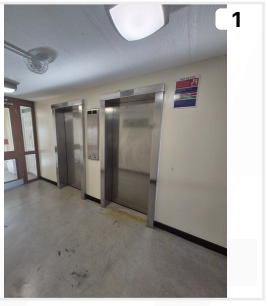
Positive

F.10 Lifts Used By Firefighters

Absence of firefighting lift in buildings above 18 m

Negative

Photos



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Fire Service Intervention

Event	Seconds	Minutes & Seconds
Initiation to fire detection	120 Seconds	2 Minutes
Actuation Of Fire Detector To Transmission Of Alarm	10 Seconds	10 Seconds
Processing By Central Monitoring Station	60 Seconds	1 Minute
Receipt of call by fire service mobilising control	10 Seconds	10 Seconds
Transmission To Fire Station And Response	60 Seconds	1 Minute
Travelling Time Of Fire Service	360 Seconds	6 Minutes
Arrival Protocol And Entry Preparation Time	120 Seconds	2 Minutes
Firefighter travel to operational bridgehead	360 Seconds	6 Minutes
Firefighter Travel Walking Up Two Flights Of Stairs To Fire Floor (75 Seconds)	75 Seconds	1 Minute 15 Seconds
Total Time	**1,175 Seconds**	**19 Minutes 35 Seconds**

Nearest Fire Station

West Bromwich Community Fire Station Hargate Lane, West Bromwich, B71 Approx 1.8 miles, Approx 6 minutes under normal traffic conditions

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Wall Constructions

Wall Construction	Build-up
Masonry (Brickslip) (7WC6XL)	• External Surface Material (Brick slip) • Insulation (Mineral Wool Insulation) • Inner Leaf (Concrete)
HPL Cladding (4V3APJ)	• External Surface Material (High Pressure Laminate (HPL) Panel) • Framework (Aluminium L/T Rail) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)
Render (WAUFEI)	• External Surface Material (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)

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Wall Construction: Masonry (Brickslip)

Construction Reference
7WC6XL

This wall construction was identified by wall inspections GN6IRW, J5XHUG, VHAHQG, and QSQI91. The build-up, cavity barrier, and floor slab information is taken directly from inspection GN6IRW. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Masonry (Brickslip) (7WC6XL)	Positive	Low

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
External Surface Material	12mm	Brick slip	A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf	100mm	Concrete	A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

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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	Positive

K.3 Facings/Cladding Panels

Low HRR	Positive
Adhesive fixed	Negative

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 insulation	Positive

K.7 Substrate

Masonry, >75 mm thick	Positive

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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

K.12 Internal Finishes

Plasterboard
Note: The plasterboard can not be confirmed to be installed as per the manufacturers instructions or ensure its method of fixing

Neutral

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PAS Standard Benchmark

L7 Benchmark

MASONRY (OUTER SINGLE SKIN ONLY)

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

BR135 Benchmark

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

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Wall Construction: HPL Cladding

Construction Reference
4V3APJ

This wall construction was identified by wall inspections YPJJ36, C1FK33, S2U43U, WTSDS6, BDKFS3, 7K4U76, and 7F5YFJ. The build-up, cavity barrier, and floor slab information is taken directly from inspection YPJJ36. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
HPL Cladding (4V3APJ)	Neutral	Low

Build-Up

5 Elements	Thickness/Depth	Material	Rating (BS EN13501)
External Surface Material	9mm	High Pressure Laminate (HPL) Panel Material Brand: Fundermax (As per FRA)	B - Combustible
Framework		Aluminium L/T Rail	A2 - Limited Combustibility
Cavity	100mm		
Insulation	100mm	Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf	100mm	LPS	A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material
Horizontal Cavity Barrier	Tenmat FF109 or FF102/25 Or another horizontal open-state barrier system designed to allow drainage and ventilation under normal conditions, but to swell and seal off the cavity during fire exposure.

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Floor Slab

Backing Wall Sits On The Floor Slab

Fire Performance

K.1 General

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

K.2 External Surfaces

Class B	Positive

K.3 Facings/Cladding Panels

Low HRR	Positive
Mechanically fixed	Positive

K.4 Panel Construction

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

K.5 Cavities

Cavities closed at least at compartment floors and walls but not: • around windows and other openings*; or • at ventilation ducts, grilles or other openings for services	Neutral

K.6 Insulation

Mineral insulation	Positive

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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

K.12 Internal Finishes

Plasterboard
Note: The plasterboard can not be confirmed to be installed as per the manufacturers instructions or ensure its method of fixing

Neutral

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PAS Standard Benchmark

L9 Benchmark

HPL -

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

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

BR135 Benchmark

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

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Wall Construction: Render

Construction Reference
WAUFEI

This wall construction was identified by wall inspections SNZQ4X, Q2C5WC, CBAD4P, and C19SE8. The build-up, cavity barrier, and floor slab information is taken directly from inspection SNZQ4X. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Render (WAUFEI)	Positive	Low

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
External Surface Material	6mm	Render	A2 - Limited Combustibility
Insulation	100mm	Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf	100mm	LPS	A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

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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

Low HRR — Positive

Adhesive fixed — Negative

K.4 Panel Construction

Not Applicable

K.5 Cavities

Facings into the cavity at least Class A2 — Positive

K.6 Insulation

Mineral insulation — Positive

K.7 Substrate

Masonry, >75 mm thick — Positive

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K.8 Sheathing Boards

Not Applicable

K.9 Insulated Core Panels

Not Applicable

K.10 ETICS

Thin organic render or inorganic render on Class A1 insulation	Positive

K.11 Infill / Spandrel Panels

Not Applicable

K.12 Internal Finishes

Plasterboard Note: The plasterboard can not be confirmed to be installed as per the manufacturers instructions or ensure its method of fixing	Neutral

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PAS Standard Benchmark

L10 Benchmark

ETICS -

These systems are sometimes referred to as rendered systems, as they feature an externally applied render coat as their weatherproof surface.

The level of risk that might potentially be posed by these systems is generally dictated by the type of insulation they incorporate.
• Mineral wool-based systems are likely to be low-risk.
• Rigid thermoset foam-based systems can be low-risk if fire barriers and cavity barriers (if a cavity exists behind the insulation) are properly provided. If there are gaps or other deficiencies then the level of risk might increase to medium or, in extreme cases, high.
• Thermoplastic foam-based systems might be low-risk if fire barriers and cavity barriers (if a cavity exists behind the insulation) are properly provided and where there is a significant thickness of cement-based render applied to the insulation. If there are gaps or other deficiencies, a non-cement-based (i.e. polymeric organic) render has been used or an insufficient thickness of cement-based render has been applied, then the level of risk is high.

In particular regard to thermoplastic systems, there are historic systems which are known to have had approximately 20 mm thick slivers of EPS insulation passing across the front of fire barriers, providing a route for fire to rapidly circumvent the barriers. It needs to be confirmed by inspection whether or not this situation exists; if it does exist, such a system is high risk irrespective of the type of render provided.

BR135 Benchmark

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

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Façade Configuration: RDJ5CQ

Items in Façade

2 Items	Effect	Risk
Wall Construction Masonry (Brickslip) (7WC6XL)	Positive	Low
External Door Single Leaf Door (CJSPG8)	Positive	Low

Façade Configuration Risk Factors

N.1 Building Height

18 m to 30 m

Negative

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 accidently or deliberately) igniting the cladding is highly likely.

Negative

N.3 Extent of Cladding

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

Neutral

N.4 Cavities & Openings

Cavity not continuous, due to façade being only partially clad or broken by building features:
• projecting floor slabs that divide part of the wall and isolate sections of cavity from each other; and
• walls that project out or are set back, such as to limit the vertical extent of cavities)

Positive

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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, and 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 highly likely

Negative

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

Where vents pass through a cavity, either:
• the cavity does not include combustible materials; or
• the cavity is faced on either side by brick or concrete at least 75 mm thick and any combustible insulation in the cavity is not thermoplastic

Positive

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

No combustible elements.

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

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Risk Factor Analysis

Conclusion: This system is formed of an outer leaf of 12mm brickslip adhesively bonded to a 100mm mineral wool insulation layer. Beneath the insulation is the original 1960s masonry construction of the building.

The brick slip presents a non-combustible surface material that does not sustain, support, or contribute to fire spread across the external surface of the building. Although the surface material is non-combustible, it appears to be only adhesively fixed to the insulation. Unlike full-size masonry bricks, which have a good thermal capacity to absorb heat released from a fire breaching a compartment aperture, the brickslips have limited capacity and their adhesion may fail prematurely, presenting a risk of falling debris, although in this building, the brickslips are located on the ground floor only.

Mineral wool, which includes materials like stone wool, is known for its excellent fire-resistant properties. Mineral wool has a very high melting point, typically around 1,000°C to 1,200°C. This makes it non-combustible, meaning it does not contribute to the spread of fire. In the event of a fire, mineral wool acts as a thermal barrier. Its fibrous structure traps air, reducing the transmission of heat to other parts of the structure and slowing the spread of fire. Mineral wool maintains its insulation properties and shape even at high temperatures, further protecting the structural components of buildings, like steel, from heat damage.

The inner leaf of masonry brickwork is generally considered fire-resistant and can provide significant protection against fire for structural and non-structural elements. Masonry bricks, typically made from clay or concrete, have very high melting points (above 1000°C for clay bricks), making them resistant to fire and heat. Bricks have low thermal conductivity. This helps prevent the spread of fire to adjacent areas and provides a thermal barrier that protects the underlying structure. Masonry walls provide effective fire containment, often preventing fire from spreading between compartments within a building. The thickness and density of the masonry wall determine its fire resistance rating.

The brickslip system is located on the ground floor only and extends the perimeter of the building. It encompasses windows and doors on the ground floor, as well as some service penetrations. The brickslip system is remote from sources of external ignition as there is no permanent parking immediately adjacent, nor is there permanent refuse storage nearby. Due to the non-combustible nature of the system, the likelihood of this system succumbing to external ignition is very low.

This building operates a ‘Stay Put’ evacuation policy. It is anticipated that, due to the nature of the building’s construction, a fire would be contained within the compartment of origin long enough for firefighter intervention to begin or for affected occupants to evacuate if necessary. The building has a single central staircase with lobby protection serving all floors. An AOV was located at the head of the staircase with smoke vents located in the communal corridors to prolong the tenability of the means of escape and to aid internal firefighter intervention. A dry riser is fitted to the building with an outlet on every floor. There is adequate access for the fire service to all elevations of the building. The nearest fire station is approximately 1.8 miles away, and as such, the response to a call out would be expected to be swift.

In the event of a fire:
a) fire spread is likely to be at a rate within expectations for a building of this height, or at a greater, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or
b) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping; and/or
c) 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; and/or
d) the fire and rescue service are likely to be able to intervene effectively to enable occupants to reach safety in time.

It is our professional opinion that there is no requirement for remediation of this wall type.

Low

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Façade Configuration: L8VYWX

Items in Façade

3 Items	Effect	Risk
Wall Construction HPL Cladding (4V3APJ)	Neutral	Low
Attachment Cantilever Balcony (DJUPAI)	Positive	Low
External Window Top, Mid, Side Hung Casements (7IQYIZ)	Positive	Low

Façade Configuration Risk Factors

N.1 Building Height

18 m to 30 m

Negative

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

2 m to 5 m
NOTE At this height, the scope for a fire originating externally (e.g. involving a parked vehicle or waste skip started either accidently or deliberately) igniting the cladding is considered possible, but not likely at an early stage in the development of the fire.

Neutral

N.3 Extent of Cladding

Entire façade covered

Negative

N.4 Cavities & Openings

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

Positive

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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, and 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 highly likely

Negative

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

Where vents pass through a cavity, either:
• the cavity does not include combustible materials; or
• the cavity is faced on either side by brick or concrete at least 75 mm thick and any combustible insulation in the cavity is not thermoplastic

Positive

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

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

Positive

N.11 Attachments

Non-combustible open balconies

(Where these extend along a façade, they have the potential both to:
• interrupt a cavity; and
• deflect flames away from the building and away from the façade)

Positive

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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: This wall system was identified as being an external leaf of HPL cladding panels (detailed in the provided FRA as Fundermax branded, achieving B,s2,d0), supported by an aluminium framework, followed by 100mm mineral wool (Rockwool) insulation and the underlying original LPS construction.

HPLs are most commonly formed of a mixture of cellulose (wood pulp, recycled paper or similar) and combustible polymeric resin, though any combination of materials formed in a press can be termed a "high pressure laminate" and might be difficult to differentiate visually. HPLs formed of cellulose and resin typically behave in a charring manner analogous to timber, with similar flame spread, energy release and mechanical behaviour (charring until breaking apart). With treatment for enhanced fire performance (usually by addition of chemical fire retardant), these behaviours can potentially be improved, but need to be known on a product-specific basis before they can be relied upon as providing better performance.

Although the aluminium framework is considered to be of limited combustibility, aluminium is recognised as having a lower melting point than other metals used in construction. This may mean that in scenarios resulting in prolonged exposure to fire, where temperatures exceed 600 degrees, the material may begin to lose its structural integrity. In this scenario, it may lead to structural failure and falling debris that could have a detrimental impact on escaping occupants or fire service intervention.

Mineral wool, which includes materials like stone wool, is known for its excellent fire-resistant properties. Mineral wool has a very high melting point, typically around 1,000°C to 1,200°C. This makes it non-combustible, meaning it does not contribute to the spread of fire. In the event of a fire, mineral wool acts as a thermal barrier. Its fibrous structure traps air, reducing the transmission of heat to other parts of the structure and slowing the spread of fire. Mineral wool maintains its insulation properties and shape even at high temperatures, further protecting the structural components of buildings, like steel, from heat damage.

The building is of Large Panel System (LPS) construction, a structural method involving the use of precast concrete wall and floor panels mechanically connected on site. This form of construction was widely used in mid-20th century UK residential developments. While the primary structure is non-combustible, LPS buildings are known to present potential fire safety challenges due to historical detailing, particularly in relation to compartmentation, service penetrations, and voids between panels. These features can allow for concealed fire or smoke spread in the absence of effective fire stopping.

This wall system forms the primary facade type of the building. It is present on the East and West elevations and extends from the first floor to the uppermost storey of the building. Structural openings in this facade include windows and doors. The likelihood of external ignition has been determined to be very low due to this wall type starting on the first floor, and there being no sources of ignition immediately adjacent, there is no parking or refuse storage in close proximity to this wall type. The HPL was observed to be mechanically secured to an aluminium framework that provides structural integrity in the early stages of a fire, and the presence of the non-combustible insulation will also resist the spread of fire across the external surface of the building. A cavity was observed between the HPL panels and the insulation that would allow smoke and effluents to enter the cavity, but it is understood that fire breaks are present within the wall system that will disrupt the spread of fire within the cavity and should contain the fire to the compartment of origin. This wall type has no direct openings into the central escape staircase, ensuring that in the event of a fire, this staircase should remain tenable for all occupants, allowing them to escape the building in the event that they become affected by heat or smoke in their dwelling, with an exit to the front and rear of the building in the event of falling debris.

This building operates a 'Stay Put' evacuation policy. It is anticipated that, due to the nature of the building's

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construction, a fire would be contained within the compartment of origin long enough for firefighter intervention to begin or for affected occupants to evacuate if necessary. The building has a single central staircase with lobby protection serving all floors. An AOV was located at the head of the staircase with smoke vents located in the communal corridors to prolong the tenability of the means of escape and to aid internal firefighter intervention. A dry riser is fitted to the building with an outlet on every floor. There is adequate access for the fire service to all elevations of the building. The nearest fire station is approximately 1.8 miles away, and as such, the response to a call out would be expected to be swift.

In the event of a fire:
a) fire spread is likely to be at a rate within expectations for a building of this height, or at a greater, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or
b) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping; and/or
c) 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; and/or
d) the fire and rescue service are likely to be able to intervene effectively to enable occupants to reach safety in time.

It is our professional opinion that there is no requirement for remediation of this wall type.

Low

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Façade Configuration: CI33G4

Items in Façade

2 Items	Effect	Risk
Wall Construction Render (WAUFEI)	Positive	Low
External Window Top, Mid, Side Hung Casements (7IQYIZ)	Positive	Low

Façade Configuration Risk Factors

N.1 Building Height

18 m to 30 m

Negative

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

2 m to 5 m
NOTE At this height, the scope for a fire originating externally (e.g. involving a parked vehicle or waste skip started either accidently or deliberately) igniting the cladding is considered possible, but not likely at an early stage in the development of the fire.

Neutral

N.3 Extent of Cladding

Entire façade covered

Negative

N.4 Cavities & Openings

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

Positive

N.5 Infill / Spandrel Panels

Not Applicable

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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, and 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 highly likely

Negative

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

Where vents pass through a cavity, either:
• the cavity does not include combustible materials; or
• the cavity is faced on either side by brick or concrete at least 75 mm thick and any combustible insulation in the cavity is not thermoplastic

Positive

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

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

Positive

N.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

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Risk Factor Analysis

Conclusion: This wall system was identified as being an external leaf of 6mm Render (detailed in client provided FRA as Rockwool RedArt Silicone render) adhesively fixed via a supporting mesh to the underlying 100mm mineral wool (Rockwool) insulation. This is mechanically fixed to the underlying original LPS construction.

Silicone renders are typically considered to be of limited combustibility and can withstand high temperatures without catching fire or releasing harmful gases. The fire resistance of render depends on its composition, thickness, and the type of reinforcement used. In general, thicker layers of render provide better fire resistance. Its insulating properties can contribute to how a building performs in a fire. In some cases, the render can help protect the underlying structure (such as brick or wood) from high heat by providing a protective layer. The Rockwool RedArt render system that was identified achieves a Euroclass A2-s1, d0 rating and as such would not be expected to support, sustain, or contribute to fire spread across the external surface of the building.

Mineral wool, which includes materials like stone wool, is known for its excellent fire-resistant properties. Mineral wool has a very high melting point, typically around 1,000°C to 1,200°C. This makes it non-combustible, meaning it does not contribute to the spread of fire. In the event of a fire, mineral wool acts as a thermal barrier. Its fibrous structure traps air, reducing the transmission of heat to other parts of the structure and slowing the spread of fire. Mineral wool maintains its insulation properties and shape even at high temperatures, further protecting the structural components of buildings, like steel, from heat damage.

The building is of Large Panel System (LPS) construction, a structural method involving the use of precast concrete wall and floor panels mechanically connected on site. This form of construction was widely used in mid-20th century UK residential developments. While the primary structure is non-combustible, LPS buildings are known to present potential fire safety challenges due to historical detailing, particularly in relation to compartmentation, service penetrations, and voids between panels. These features can allow for concealed fire or smoke spread in the absence of effective fire stopping.

This wall system forms the secondary facade type of the building. It is present on the North and South elevations and extends from the first floor to the uppermost storey of the building. Structural openings in this facade include windows and service penetrations. The likelihood of external ignition has been determined to be very low due to this wall type starting on the first floor, and there being no sources of ignition immediately adjacent, there is no parking or refuse storage in close proximity to this wall type. The limited combustibility nature of the external surface, coupled with the presence of the non-combustible insulation, will also resist the spread of fire across the external surface of the building. There is no air cavity present in this wall system to provide an envelope for fire or smoke to travel vertically or horizontally unseen. This wall type has no direct openings into the central escape staircase or communal areas, ensuring that in the event of a fire, this staircase should remain tenable for all occupants, allowing them to escape the building in the event that they become affected by heat or smoke in their dwelling, with an exit to the front and rear of the building in the event of falling debris.

This building operates a 'Stay Put' evacuation policy. It is anticipated that, due to the nature of the building's construction, a fire would be contained within the compartment of origin long enough for firefighter intervention to begin or for affected occupants to evacuate if necessary. The building has a single central staircase with lobby protection serving all floors. An AOV was located at the head of the staircase with smoke vents located in the communal corridors to prolong the tenability of the means of escape and to aid internal firefighter intervention. A dry riser is fitted to the building with an outlet on every floor. There is adequate access for the fire service to all elevations of the building. The nearest fire station is approximately 1.8 miles away, and as such, the response to a call out would be expected to be swift.

In the event of a fire:
a) fire spread is likely to be at a rate within expectations for a building of this height, or at a greater, but nevertheless, tolerable rate, given the circumstances at the building in question; and/or
b) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping; and/or
c) 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; and/or
d) the fire and rescue service are likely to be able to intervene effectively to enable occupants to reach safety in time.

It is our professional opinion that there is no requirement for remediation of this wall type.

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Low

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APPENDIX

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Asset Information

Client Name

Sandwell Metropolitan Borough Council

Client Address

Sandwell Council House, Freeth Street, Oldbury B69 3DE

Responsible Person

Sandwell Metropolitan Borough Council

Safety Assistance

Not Required

Contact Details

As Provided by Client

Fire Alarm System

No communal alarm; LD3 detection in flats with many upgraded to LD2 .There is no communal fire alarm system installed.

Emergency Lighting

Installed in communal parts

Emergency Lighting

Sufficient; monthly tested and maintained .

Portable Fire Fighting Equipment

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

Portable Fire Fighting Equipment

CO_2 extinguisher in lift motor room; annually serviced

Smoke Control

Smoke control installed

Smoke Control

Automatic Opening Vent (AOV) system
Automatically in the event of smoke detection (noting no communal detection), with override
Manual status panel and override switch in ground floor lobby
Biannual (April and October) by competent contractor as per BS 7346-1

Suppression Systems

Partial sprinkler system installed (Detailed in Description)

Suppression System

A water-based deluge suppression system is installed in the bin store and maintained biannually, providing localised fire control in a high-risk area..

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Fire Fighting Facilities

Dry Riser

Fire Fighting Facilities

A dry riser system serves all floors with exposed outlets, maintained biannually and tested annually in accordance with BS 9990.

Access for fire-fighting vehicles

Fire-fighting vehicle access is available directly to the front entrance, with the dry riser inlet, firefighter override switch, and premise information box all accessible at ground level.

Fire Hydrant Location/ Water Supply

The nearest fire hydrant is located to the left-hand side of the building's rear entrance, providing immediate water supply for firefighting operations.

Housekeeping

Good standard. Means of escape clear. Refuse stored appropriately

Housekeeping

Clean; daily checks and bulk item removal in place .

Secure Information Boxes

Secure information box (SIB) installed

Secure Information Boxes

Kynaston House has a ground floor Premises Information Box (Gerda) secured with a WMFS-suited key, containing floor plans, orientation details, and PEEPs, supported by a firefighter's key box externally by the main entrance.

Signage

Appropriate signage installed throughout premises

Signage

Generally adequate throughout

Property Type

Apartment Block, Residential Purpose-built

Building Era / Age

Known Build Date

Known Build Date

Circa 1961, LPS build with facade and roof refurbishment circa 2016.

Guidance Applicable At Time Of Construction

CP3 Chapter IV (1962) – Fire precautions and means of escape
BS 476: Parts 4 & 5 (1953, 1959)
Local byelaws (pre-1965)
Joint Fire Code / MoH Circulars
Building Regulations 1965 likely applied retrospectively to minor works

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Building Height

Overall Building Height Approximately 25.9m
Highest Occupied Floor Level 22.3m
(11 storeys including ground floor; ~2.7 m floor height assumption as per PAS 9980:2022 S3.1.22)

Number of Storeys (Ground and above)

11 storeys total including ground floor. Additional roof void levels (2 levels) not used for occupancy

Number of Basement Levels

Not applicable

Number of Flats

44 flats (4 per floor, across 11 floors)

Flat Types

Single Storey

Structural Wall Material

Traditional build with concrete floor slab

Structural Floor Material

Reinforced Concrete

Structural Stairs Material

Concrete

Construction (Details)

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

Exterior Cladding

FRAEW Completed on Exterior Cladding

Exterior Cladding (Details)

As detailed in client provided FRA.

Fundermax HPL panels (B,s2,d0) – Front, rear, and part sides
Rockwool Duo Slab insulation – all areas
CEP aluminium rail & bracket system with fire breaks
Brick Shield system (up to 1st floor) with Rockwool Ultra Façade board
RedArt Silicone Render (EWI) – to sides
Rockwool insulation throughout (Euroclass A1)
Balconies: Open, cantilevered concrete with steel/glass balustrades

Electronic Entrance System

Yes

Carpark

External/Outdoor Carpark

Employees

Day staff

~ Number of Employees on duty

1

Employees (Extended)

No staff on site (Occasional staff attendance expected - low numbers anticipated)

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Residents

Yes

Approx number of Residents

88

Residents (Extended)

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

Visitors

Not Known

People With Reduced Mobility

Not Known

Lone Workers

None

Young Persons Employed in the Premises

None

Escapes & Exits

Single protected stair (1050mm width)
2 final exit doors (front & rear)
AOVs installed to all dead-end corridors
All lobbies compartmented
Flat entrance doors FD30s composite with intumescent and smoke seals

There are sufficient fire exits that discharge from the premises of an assumed suitable width and within acceptable travel distances. These will aid in facilitating persons within the premises to evacuate safely in the event of fire. Emergency exits open inwards and outwards in direction of escape.

Number Of Internal Escape Stairs

A single protected staircase serve all floors, located centrally within the building.

Number Of Final Exits

Served by a Front entrance and Rear entrance

External Means Of Escape

None Present

Types Of Lifts Installed

Passenger + Fireman's Control

Evacuation Chairs Installed

No

Refuge Points Present

No

Stairwells Protected / Lobbied

Yes

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Flat Doors Open Onto Stairs

No

Current Evacuation Strategy

Stay Put

Current Stay Put Strategy Description

Occupants remain unless directly affected by smoke/fire or instructed to evacuate by emergency services.

Current Evacuation Strategy for the property considered appropriate?

Yes

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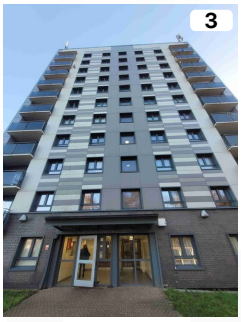
Aerial Perspective: Kynaston House

Aerial Perspective (picture sourced from Google Earth)

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Elevations

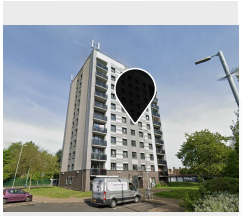
Photo	Name	No. of Storeys	Features
	West Elevation	11 Storeys	• Escape Route Exit
	South Elevation	11 Storeys	
	East Elevation	11 Storeys	
	North Elevation	11 Storeys	

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

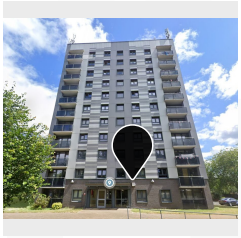
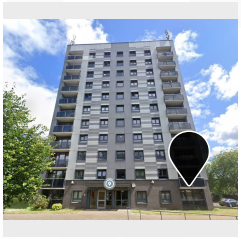
Inspections

Elevation Location	Inspection	Elements
	**Inspection: GN6IRW** East Elevation Aperture Opening	• External Surface Material (Brick slip) • Insulation (Mineral Wool Insulation) • Inner Leaf (Concrete)
	**Inspection: 7YDYAM** East Elevation Balcony Inspection	• External Surface Material (Concrete)
	**Inspection: YPJJ36** East Elevation Compartment Floor Junction	• External Surface Material (High Pressure Laminate (HPL) Panel) • Framework (Aluminium L/T Rail) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)
	**Inspection: C1FK33** East Elevation Compartment Floor and Wall Junction Interface	• External Surface Material (High Pressure Laminate (HPL) Panel) • Framework (Aluminium L/T Rail) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)
	**Inspection: S2U43U** East Elevation Aperture Opening	• External Surface Material (Suspected High Pressure Laminate (HPL) Panel) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Elevation Location	Inspection	Elements
	**Inspection: WTSDS6** East Elevation Compartment Floor and Wall Junction Interface	• External Surface Material (Suspected High Pressure Laminate (HPL) Panel) • Framework (Aluminium L/T Rail) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)
	**Inspection: BDKFS3** East Elevation Aperture Opening	• External Surface Material (High Pressure Laminate (HPL) Panel) • Framework (Aluminium L/T Rail) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)
	**Inspection: J5XHUG** South Elevation Compartment Floor and Wall Junction Interface	• External Surface Material (Brick slip) • Insulation (Mineral Wool Insulation) • Inner Leaf
	**Inspection: SNZQ4X** South Elevation Aperture Opening	• External Surface Material (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)
	**Inspection: Q2C5WC** South Elevation Compartment Floor and Wall Junction Interface	• External Surface Material (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)
	**Inspection: CBAD4P** South Elevation Compartment Floor Junction	• External Surface Material (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Elevation Location	Inspection	Elements
	**Inspection: 7K4U76** South Elevation Compartment Floor Junction	No elements identified
	**Inspection: VHAHQG** West Elevation Compartment Floor and Wall Junction Interface	• External Surface Material (Brick slip) • Insulation (Mineral Wool Insulation) • Outer leaf
	**Inspection: 3ACSSK** West Elevation Balcony Inspection	• External Surface Material (Concrete)
	**Inspection: 7F5YFJ** West Elevation Aperture Opening	• External Surface Material (High Pressure Laminate (HPL) Panel) • Framework (Aluminium L/T Rail) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)
	**Inspection: QSQI91** North Elevation Compartment Floor and Wall Junction Interface	• External Surface Material (Brick slip) • Insulation (Mineral Wool Insulation) • Inner Leaf
	**Inspection: C19SE8** North Elevation Aperture Opening	• External Surface Material (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf (LPS)

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: GN6IRW

Elevation • Location
East Elevation • Aperture Opening

Name/Summary

Masonry (Brickslip)

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	12mm	Brick slip		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	Concrete		A1 - Non-Combustible

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

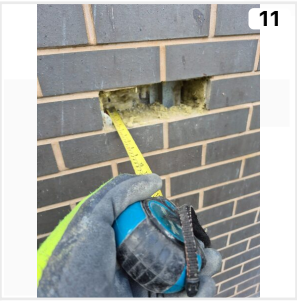
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: 7YDYAM

Elevation • Location
East Elevation • Balcony Inspection

Name/Summary

Balcony

Proposed Inspection

The purpose of the balcony inspection will consist of visual and intrusive inspections to identify the attachment types material configuration.
The Engineer will be looking to determine the:
a) Surface material (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify any material and Euroclass)
d) Membranes (identify their presence and where possible manufacturer)
e) Substrates (the means in which the façade is attached to the building)
f) Cavity Barriers (Horizontally, Vertically, Around Openings)
The materials are then measured and observed in there construction along with photographic evidence.
Upon completion any removed material is placed back.

Build-Up

1 Element	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	200mm	Concrete		A1 - Non-Combustible

Floor Slab

Reinforced concrete

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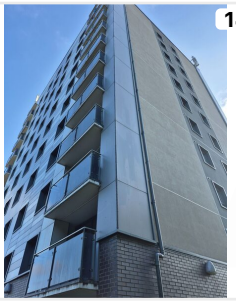
Inspection Photos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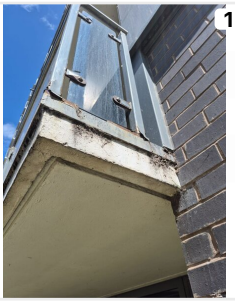
15


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Inspection: YPJJ36

Elevation • Location
East Elevation • Compartment Floor Junction

Name/Summary

Cladding Panel

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	9mm	High Pressure Laminate (HPL) Panel Material Brand: Fundermax (As per FRA)		B - Combustible
Framework		Aluminium L/T Rail		A2 - Limited Combustibility
Cavity	100mm			

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Tenmat FF109 or FF102/25 Or another horizontal open-state barrier system designed to allow drainage and ventilation under normal conditions, but to swell and seal off the cavity during fire exposure.	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: C1FK33

Elevation • Location
East Elevation • Compartment Floor and Wall Junction Interface

Name/Summary

Cladding Panel

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	9mm	High Pressure Laminate (HPL) Panel Material Brand: Fundermax (As per FRA)		B - Combustible
Framework		Aluminium L/T Rail		A2 - Limited Combustibility
Cavity	100mm			

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Tenmat FF109 or FF102/25 Or another horizontal open-state barrier system designed to allow drainage and ventilation under normal conditions, but to swell and seal off the cavity during fire exposure.	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: S2U43U

Elevation • Location
East Elevation • Aperture Opening

Name/Summary

Cladding Panel

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	9mm	Suspected High Pressure Laminate (HPL) Panel Material Brand: Fundermax		B - Combustible
Cavity	100mm			
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Inner Leaf	100mm	LPS		A1 - Non-Combustible

Cavity Barriers

Material	Photo Ref.
Tenmat FF109 or FF102/25 Or another horizontal open-state barrier system designed to allow drainage and ventilation under normal conditions, but to swell and seal off the cavity during fire exposure.	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: WTSDS6

Elevation • Location
East Elevation • Compartment Floor and Wall Junction Interface

Name/Summary

Cladding Panel

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	9mm	Suspected High Pressure Laminate (HPL) Panel Material Brand: Fundermax		B - Combustible
Framework		Aluminium L/T Rail		A2 - Limited Combustibility
Cavity	100mm			

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Tenmat FF109 or FF102/25 Or another horizontal open-state barrier system designed to allow drainage and ventilation under normal conditions, but to swell and seal off the cavity during fire exposure.	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos


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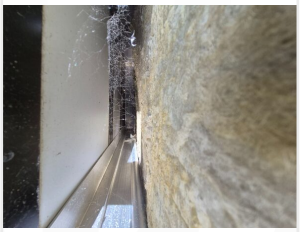
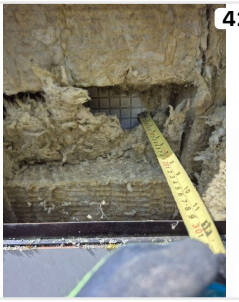

40


41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Inspection: BDKFS3

Elevation • Location
East Elevation • Aperture Opening

Name/Summary

Cladding Panel

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	9mm	High Pressure Laminate (HPL) Panel Material Brand: Fundermax		B - Combustible
Framework		Aluminium L/T Rail		A2 - Limited Combustibility
Cavity	100mm			

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Tenmat FF109 or FF102/25 Or another horizontal open-state barrier system designed to allow drainage and ventilation under normal conditions, but to swell and seal off the cavity during fire exposure.	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: J5XHUG

Elevation • Location
South Elevation • Compartment Floor and Wall Junction Interface

Name/Summary

Masonry (Brickslip)

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	12mm	Brick slip		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm			A1 - Non-Combustible

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

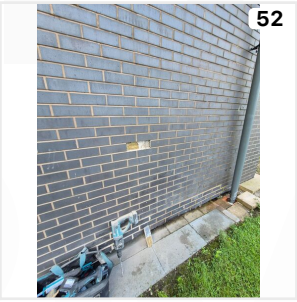
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: SNZQ4X

Elevation • Location
South Elevation • Aperture Opening

Name/Summary

Render (Grey)

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	6mm	Render		A2 - Limited Combustibility
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

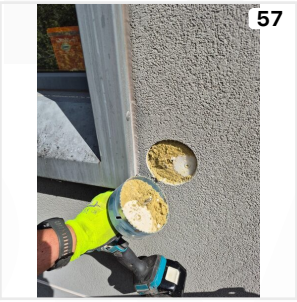
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: Q2C5WC

Elevation • Location
South Elevation • Compartment Floor and Wall Junction Interface

Name/Summary

Render (Grey)

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	6mm	Render		A2 - Limited Combustibility
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: CBAD4P

Elevation • Location
South Elevation • Compartment Floor Junction

Name/Summary

Render (White)

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	6mm	Render		A2 - Limited Combustibility
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

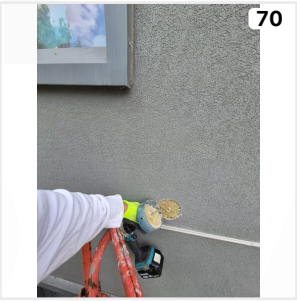
Cavity Barriers

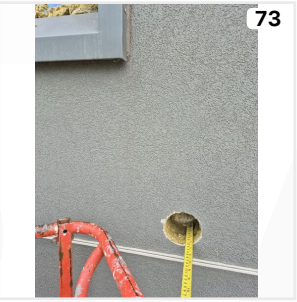
No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos





THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: 7K4U76

Elevation • Location
South Elevation • Compartment Floor Junction

Name/Summary

Cladding Panel

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:

a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: VHAHQG

Elevation • Location
West Elevation • Compartment Floor and Wall Junction Interface

Name/Summary

Masonry (Brickslip)

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	12mm	Brick slip		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Outer leaf	100mm			A1 - Non-Combustible

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

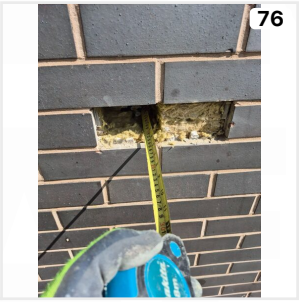
Cavity Barriers

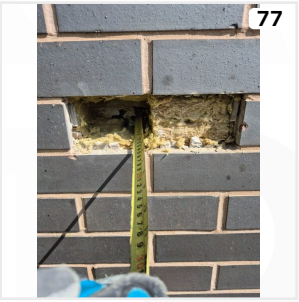
No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos





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Inspection: 3ACSSK

Elevation • Location
West Elevation • Balcony Inspection

Name/Summary

Balcony

Proposed Inspection

The purpose of the balcony inspection will consist of visual and intrusive inspections to identify the attachment types material configuration.
The Engineer will be looking to determine the:
a) Surface material (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify any material and Euroclass)
d) Membranes (identify their presence and where possible manufacturer)
e) Substrates (the means in which the façade is attached to the building)
f) Cavity Barriers (Horizontally, Vertically, Around Openings)
The materials are then measured and observed in there construction along with photographic evidence.
Upon completion any removed material is placed back.

Build-Up

1 Element	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	200mm	Concrete		A1 - Non-Combustible

Floor Slab

Reinforced concrete

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Inspection Photos

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Inspection: 7F5YFJ

Elevation • Location
West Elevation • Aperture Opening

Name/Summary

Cladding Panel

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	9mm	High Pressure Laminate (HPL) Panel Material Brand: Fundermax (As per FRA)		B - Combustible
Framework		Aluminium L/T Rail		A2 - Limited Combustibility
Cavity	100mm			

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5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Tenmat FF109 or FF102/25 Or another horizontal open-state barrier system designed to allow drainage and ventilation under normal conditions, but to swell and seal off the cavity during fire exposure.	

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Inspection: QSQI91

Elevation • Location
North Elevation • Compartment Floor and Wall Junction Interface

Name/Summary

Masonry (Brickslip)

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	12mm	Brick slip		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	Material Brand: Brickwork		A1 - Non-Combustible

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

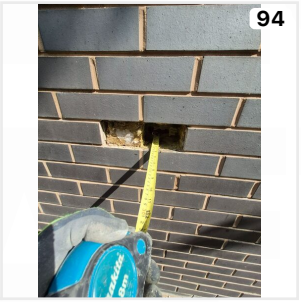
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



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Inspection: C19SE8

Elevation • Location
North Elevation • Aperture Opening

Name/Summary

Render (Grey)

Proposed Inspection

The purpose of the intrusive survey will consist of the visual and intrusive inspections of the identified systems and attachments to determine the through wall construction.

The Engineer will be looking to determine the:
a) External Leaf (Identify the material and Euroclass)
b) Cavities (if a cavity is present and if so the depth and extent)
c) Insulation (identify the material and Euroclass)
d) Sheathing Board (the presence of any Sheathing Board)
e) Membranes (identify their presence and where possible manufacturer)
f) Substrates (the means in which the façade is attached to the building)
g) Cavity Barriers (Horizontally, Vertically, Around Openings)

The external inspection is undertaken by either using an approximate 25mm – 150mm bore in a discreet location or the removal of the external surface material. The engineer will then gather the external walls construction from external to internal.

The materials are then measured and observed in there construction along with photographic evidence.
Upon completion the removed material is placed back into the opening and sealed to a fire safe condition but will not conduct any decorative repairs.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	6mm	Render		A2 - Limited Combustibility
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	LPS		A1 - Non-Combustible

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Cavity Barriers

No external cavity

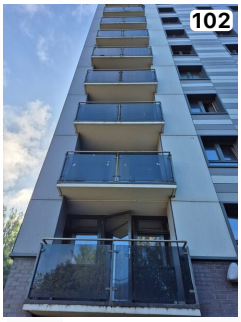
Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Attachments & Balconies

Photo	Attachment
	**Cantilever Balcony (DJUPAI)** Configuration: Stacked Size: Private balcony spanning only a single compartment

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Attachment: Cantilever Balcony

Attachment Reference
DJUPAI

Details

Configuration

Stacked

Size

Private balcony spanning only a single compartment

Framework/Structure

Reinforced concrete framework extension of the floor slab

Handrail

Steel

Balustrade

Steel

Soffit

Concrete

Infill

Glazing

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.

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Fire Engineer Comments

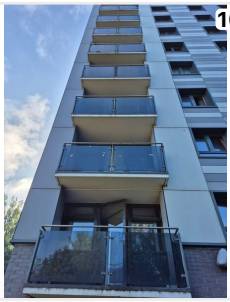
These cantilever type balcony are present on the East and West elevations. They begin at the first floor and extend the full height of the building.

They are primarily formed of non-combustible materials. The concrete frame, steel balustrade, and glazing will not contribute to the spread of fire across the external surface of the building. The presence of a non-combustible imperforate soffit will also act to disrupt the mechanism for vertical fire spread between the balconies.

It is our opinion that there is no requirement for remediation of the balconies.

It should be noted that during our inspection, the condition of the metalwork frame on some balconies was beginning to deteriorate.

Photos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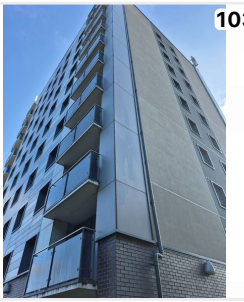
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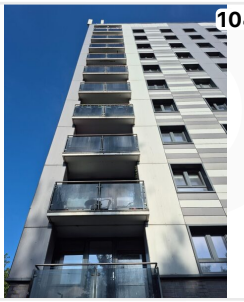
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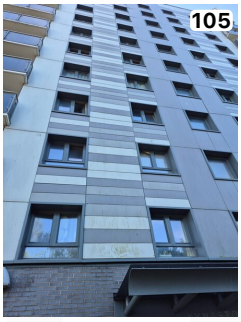
THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

External Windows

Photo	External Window
	Top, Mid, Side Hung Casements (7IQYIZ)

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

External Window: Top, Mid, Side Hung Casements

External Window Reference
7IQYIZ

Details

Surface Material

Aluminium

Frame Material

Aluminium

Infill / Panel Material

Glazing

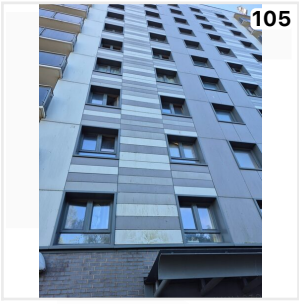
Fire Engineer Comments

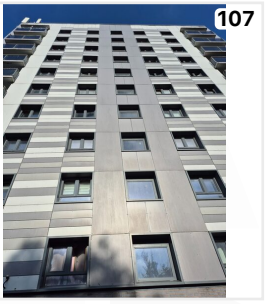
Aluminium is a non-combustible material and does not contribute to the spread of fire. However, its relatively low melting point (approximately 660°C) and high thermal conductivity mean that it may deform or fail when exposed to high levels of heat.

The window infill has been identified as laminated glass, which consists of layers of glass bonded with a polymer interlayer, typically PVB or EVA. While these interlayers are combustible, they are generally slow to ignite. Under prolonged exposure to elevated temperatures or direct flame, the interlayers may degrade, and the glass may crack or shatter due to thermal stress.

The windows are vertically aligned with less than 2 meters of separation between openings, which could create a potential pathway for vertical fire spread.
However, the aluminium window frames are likely to maintain integrity beyond flashover temperatures. This offers a temporary barrier to flame ingress within the cavity, potentially delaying fire spread and supporting occupant evacuation and external firefighting intervention.

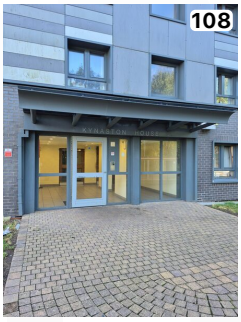
Photos





THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

External Doors

Photo	External Door
	Single Leaf Door (CJSPG8)

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

External Door: Single Leaf Door

External Door Reference
CJSPG8

Details

Surface Material

Aluminium

Frame Material

Aluminium

Infill / Panel Material

Glazing

Fire Engineer Comments

Aluminium is a non-combustible material and does not contribute to the spread of fire. However, its relatively low melting point (approximately 660°C) and high thermal conductivity mean that it may deform or fail when exposed to high levels of heat.

The door infill has been identified as laminated glass, which consists of layers of glass bonded with a polymer interlayer, typically PVB or EVA. While these interlayers are combustible, they are generally slow to ignite. Under prolonged exposure to elevated temperatures or direct flame, the interlayers may degrade, and the glass may crack or shatter due to thermal stress.

However, the aluminium door frames are likely to maintain integrity beyond flashover temperatures. This offers a temporary barrier to flame ingress within the cavity, potentially delaying fire spread and supporting occupant evacuation and external firefighting intervention.

Photos

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Plan: East Elevation

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Plan: South Elevation

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Plan: West Elevation

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Plan: North Elevation

THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Photos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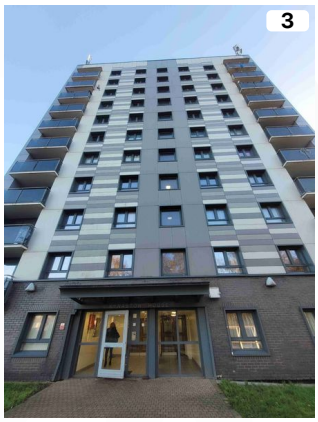
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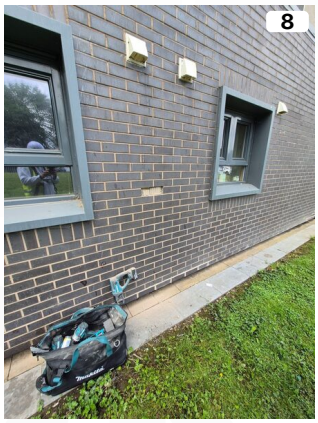
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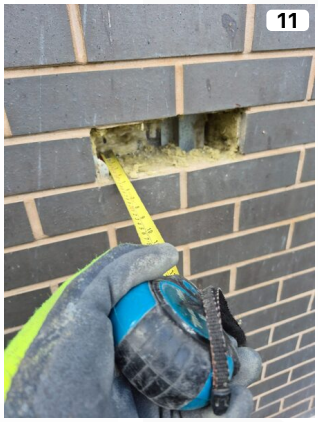
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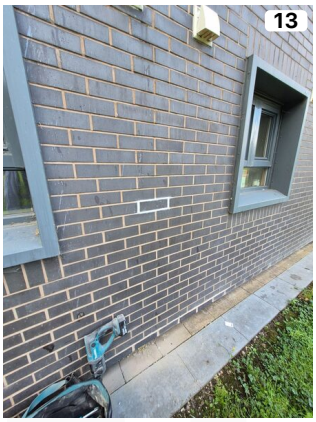
Photos Continued...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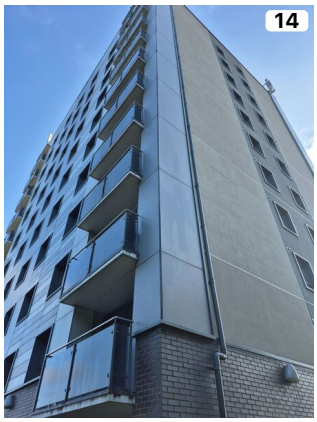
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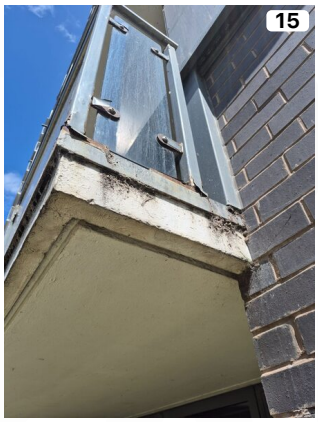
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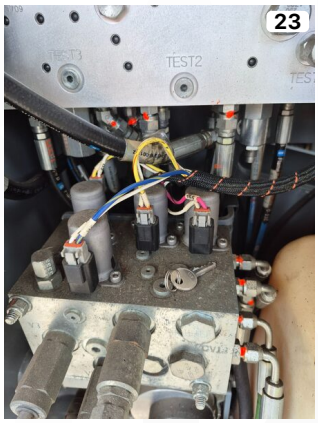

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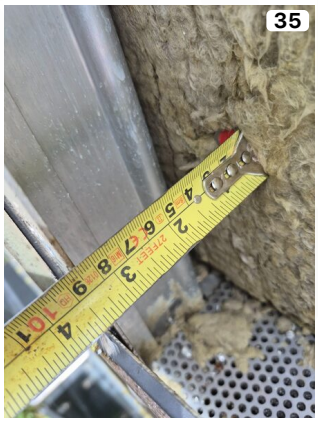
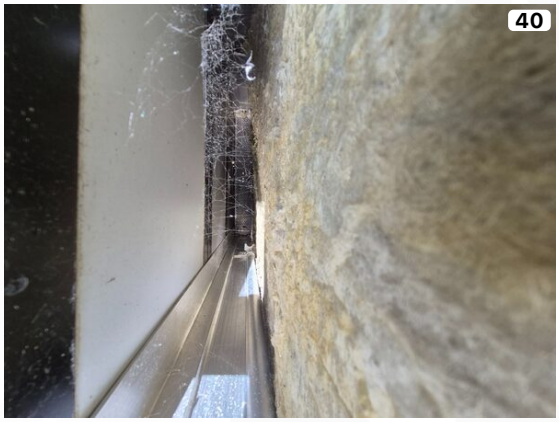
THIS DOCUMENT HAS NOT BEEN APPROVED; THE CONTENTS MAY CHANGE

Photos Continued...





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Photos Continued...


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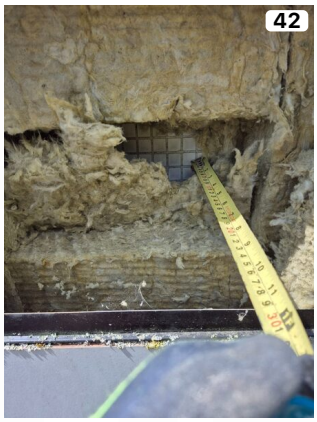
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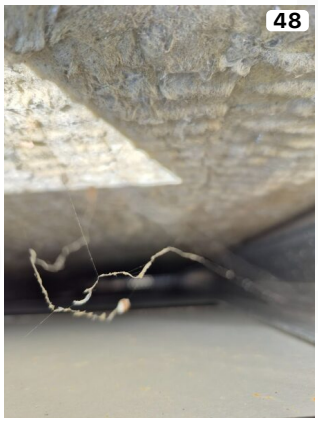
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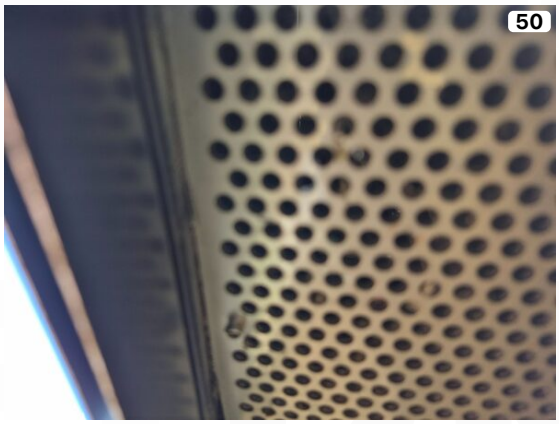
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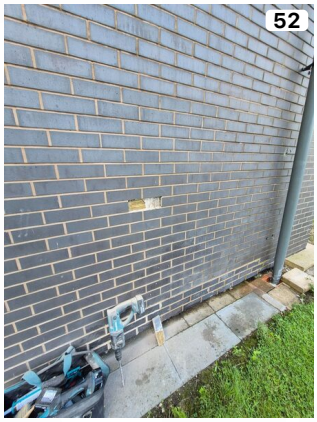
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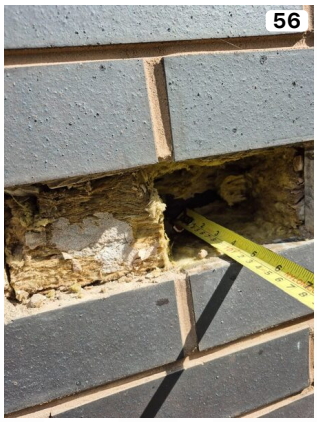
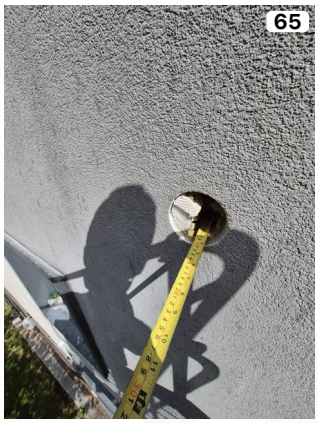
Photos Continued...





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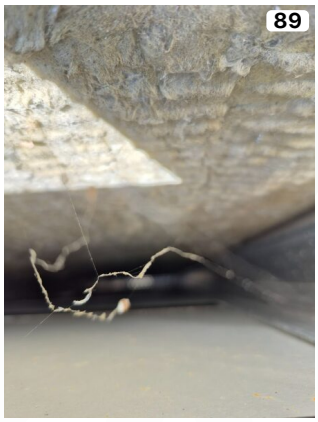

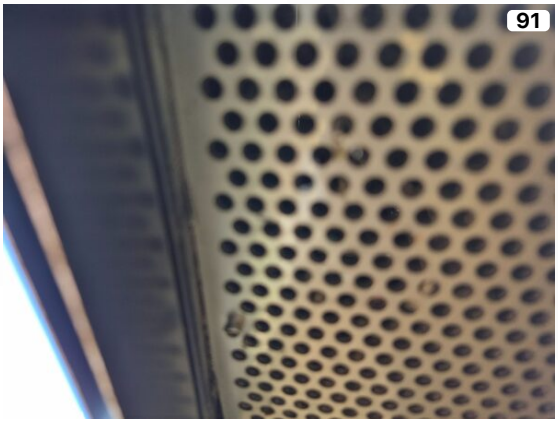

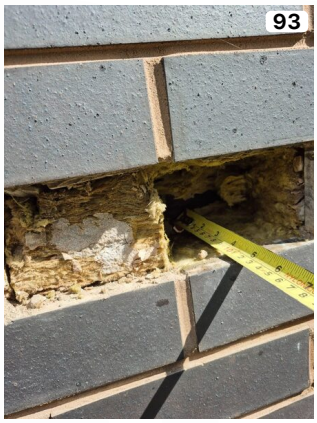

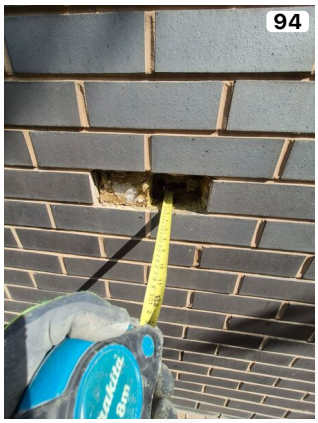

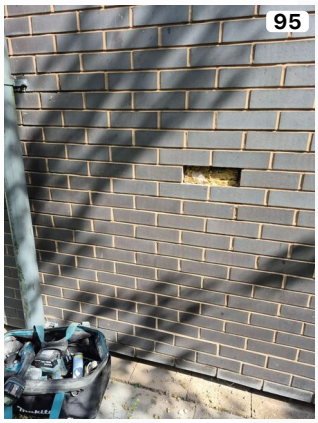

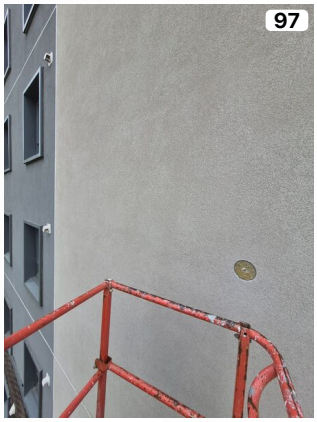

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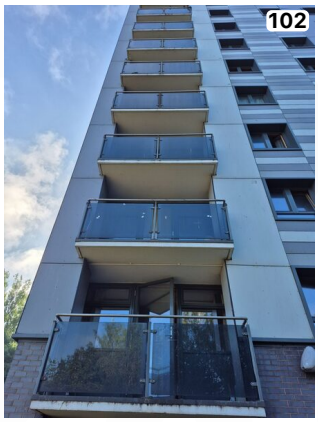

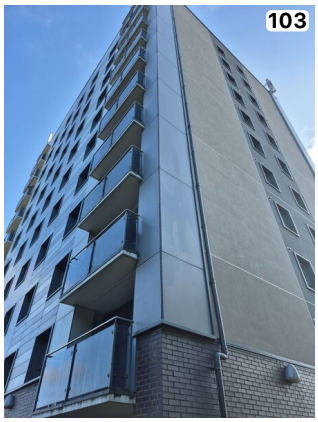

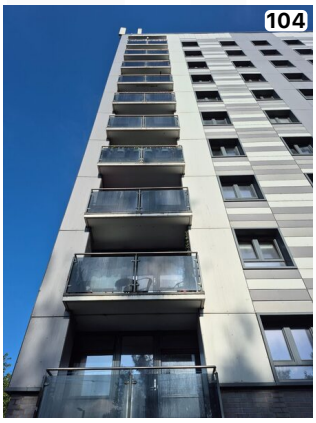

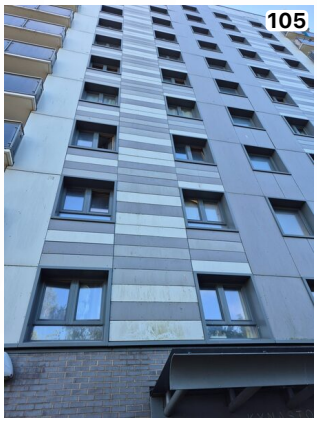

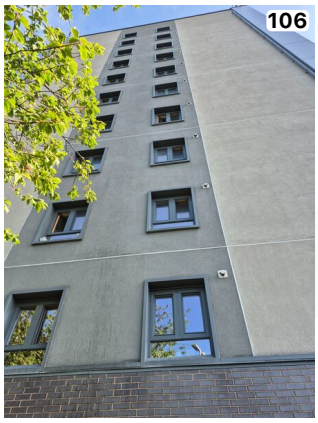

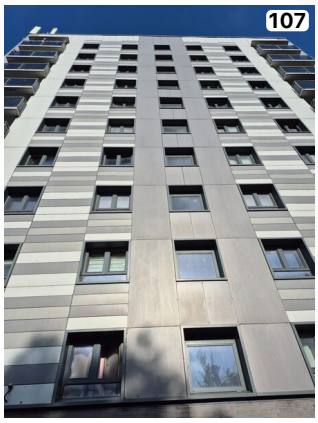

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