



FIRNTEC
BUILDING COMPLIANCE

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

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FIRE RISK APPRAISAL EXTERNAL WALLS

STANTON HOUSE

Stanton House
Beaconview Road
West Brom
B71 3PW

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Summary

Fire Risk Appraisal External Walls

Assessment and Certificate Reference

RB-47ZWUC

Assessed On, By

21/03/2025, Dean Partridge MIFireE

Recommended Review Date

21/03/2030

Produced For the Responsible Person

Sandwell Metropolitan Council

Specification Conforms To

Our own internal quality system.

Assessment Scope

Assessment applies only to the building specified.

Assessed Property

Property Name

Stanton House

Property Reference

RB-MBTCQG

Address

Stanton House
Beaconview Road
West Brom
B71 3PW

Assessing Organisation

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

Abbreviation/ Term Definition

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

Statement of Competency

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

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

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

We confirm that they have:

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

Terms of Reference

Particulars

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

Limitations

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

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

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

The FRAEW report is to be reviewed:

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

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

Assumptions

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

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

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

Statement of Intent

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

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

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
External Wall survey (20/02/2025)	
Firntec	Received
PAS 9980 Intrusive Step 1 inspection	

Executive Summary

External Wall Systems and Attachments on the Building

7 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.

7 Items	Effect	Risk
Wall Construction Brickwork finish (MHU3ZD)	Neutral	Low
Wall Construction Render (3AHBPH)	Neutral	Low
Wall Construction Aluminium Cladding (G4HU8D)	Neutral	Low
Wall Construction Trespa Class B HPL (XYGUXS)	Neutral	Medium
Attachment Cantilever Balcony (C6ZVE2)	Neutral	Low
External Window Top, Mid, Side Hung Casements (1LD8W3)	Neutral	Low
External Door Single Leaf Entrance Doors (TNZZ9Y)	Neutral	Low

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

Risk Factor Analysis

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

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

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

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

Risk Factor Analysis 1

This analysis looks at façade configuration **L9X8UJ** which includes wall construction **MHU3ZD**.

Conclusion: Masonry brickwork in external walls offers strong fire resistance due to its non-combustible properties and high thermal mass. Bricks are inherently resistant to fire and do not ignite, burn, or contribute fuel to a fire, making them excellent for containing flames and preventing fire spread.

During a fire, brickwork reacts by absorbing and gradually dissipating heat, though intense, prolonged heat may cause cracking or spalling (surface breakage) due to thermal expansion. Despite these effects, the overall structure of brick masonry generally remains intact, ensuring the wall continues to act as a robust barrier against fire, heat, and smoke, which enhances its reliability in fire protection.

The wall type has been assessed against the L7 performance benchmark.

Beyond the external surface material is a cavity space that is fully filled with mineral wool.

The Mineral wool is viewed as presenting a non-combustible product. This means this product will not ignite as such this poses a low risk to the contribution of fire and external fire spread.

The fully filled cavity presents a barrier to fire spread and the location is at ground floor level with no gaps in insulation to allow horizontal or vertical fire and smoke paths

The concrete substrate is non-combustible. The plasterboard inner leaf is considered limited in combustibility to prevent the passage of fire through the external wall system. No conclusion can be formed on the installation, fixing methods and spacings of fixings of the plasterboard sheets to confirm its installation as per the manufacturers guidelines.

This system was identified at ground level and could be susceptible to any accidental or malicious ignition but given the external wall type being of non-combustible nature and the presence of fully filled non-combustible cavity, in the event of any ignition to the system the rate of any spread would be tolerable.

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

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

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

It is our professional opinion that given the analysis of this attachment type, that there is no requirement for remediation.

It is our professional opinion that given the analysis of this external wall type, that there is no requirement for remediation.



Risk Factor Analysis 2

This analysis looks at façade configuration **AWJQ7M** which includes wall construction **3AHBPH**.

Conclusion: The ETICs system assessed is an 8mm Sto render finish directly over 90mm mineral wool. The mineral wool is fixed by supporting external wall fixing pins to the inner leaf masonry system. The render material is considered to be non-combustible and presents a low contributor to the development of external fire spread.

The wall type has been assessed against the L10 performance benchmark.

Beyond the external surface material is a cavity space that is fully filled with mineral wool. The Mineral wool is viewed as presenting a non-combustible product. This means this product will not ignite as such this poses a low risk to the contribution of fire and external fire spread. The fully filled cavity presents a barrier to fire spread and the location is at ground floor level with no gaps in insulation to allow horizontal or vertical fire and smoke paths. The concrete substrate is non-combustible. The plasterboard inner leaf is considered limited in combustibility to prevent the passage of fire through the external wall system.

No conclusion can be formed on the installation, fixing methods and spacings of fixings of the plasterboard sheets to confirm its installation as per the manufacturers guidelines.

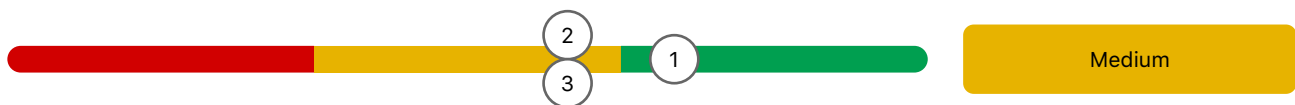
This system was identified at 2 elevations (overlapping on corners of all elevations), spanning floors although the system type would not contribute to fire spread between floors and compartments.

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

- a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.
- b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.

It is our professional opinion that given the analysis of this attachment type, that there is no requirement for remediation.

It is our professional opinion that given the analysis of this external wall type, that there is no requirement for remediation.



Risk Factor Analysis 3

This analysis looks at façade configuration **YG78L8** which includes wall construction **G4HU8D**.

Conclusion: Aluminium infill spandrel section – between windows with additional panelling at top floor level.

This building is part of a number of similarly constructed blocks in close proximity to each other with overall survey assessment information and client information corroborating synergy of characteristics between pairs and groups of buildings.

This infill wall type is present as a vertical strip spandrel in between windows on two elevations of the building. The composition is a boxed aesthetic section in between aluminium windows. The boxed metal system is fixed to 50mm timber battens running vertically between sets of two windows and does not provide a continuous system vertically or horizontally across the elevations.

Metal is a soft metal that has a low melting point. As such this material is able to perform in temperatures between 400°C and 600°C, after which the metal will start to melt. Although it will not combust it will form molten droplets which may fall and ignite combustible materials below to cause secondary fires. Spandrel infill is given as PIR insulation. The PIR is in limited quantities although it should be noted that the heat from the flame causes the PIR insulation to undergo pyrolysis, which results in the black char that is formed on the surface of the board. This char layer creates a barrier inhibiting the oxygen to diffuse into the foam and may lead to self-extinguishment after a short period. However, it should be noted that the final fire performance of plastic foams such as PIR strongly depend on the chemical composition and manufacturing process. e.g., content of isocyanate linkages and type of isocyanate reactive component for PIR. In addition, this insulation is encapsulated by the metal boxed section, 50mm timber fixing lining and the concrete substrate.

The wall system has been assessed on performance and configuration and the system will not lead to rapid fire

spread between compartments.

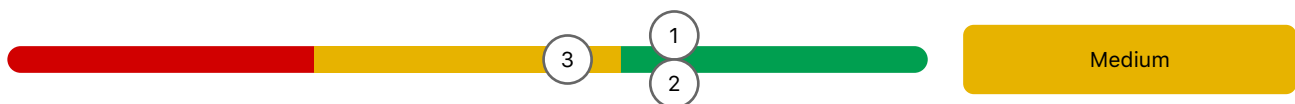
The wall type has been assessed against the L5 performance benchmark.

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

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

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

It is our professional opinion that given the analysis of this attachment type, that there is no requirement for remediation.



Risk Factor Analysis 4

This analysis looks at façade configuration **JLGH7I** which includes wall construction **XYGUXS**.

Conclusion: High density laminate board panels installed are B,s1, d0. HPL are typically made of organic materials.

They consist of layers of cellulose fibrous material impregnated with thermosetting resins. During the high-pressure process, defined as a simultaneous application of heat and pressure, the polymer chains are joined (or cross-linked) by intermolecular bonding (thermosets). This produces homogeneous panels that in a fire situation do not soften or drip. But; has the ability if ignite to rapidly develop across the external envelope of the building. 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. In this building, the HPL has a Class B fire rating.

This indicates a material with a limited contribution to fire, meaning it's combustible but has a relatively low flame spread and smoke development. Cavity barriers were identified at compartment junction lines horizontally with the barriers supported by Rockwool duoslab / Ewi slab (A1) insulation infill.

Date of refurbishment was 2015.

The building is over 18m height and a class B material would not be compliant if built today, although the refurbishment would have used AD-B (Approved document B) 2010 addendum which does not included the enhanced regulation 7 for buildings over 18m which came in later amended versions of AD-B.

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

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

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

It is our professional opinion that given the analysis of this attachment type, that there is no requirement for remediation.



Overall Building Risk Rating



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

Recommended Remediations

No recommended remediations identified.

Recommended Interim Measures

No recommended interim measures identified.

Fire Strategy

Fire Strategy & Hazard Risk Factors

F.1 Occupancy

General needs housing

Neutral

F.2 Evacuation

Stay put

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

Neutral

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 in close proximity to combustible cladding or otherwise exposed to fire and smoke spread from the external envelope that could compromise the effectiveness of the smoke control system or allow a route for fire spread back into the building

Neutral

F.6 Fire Alarm & Detection

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

Neutral

F.7 Fire Suppression

A suppression system is installed in high risk areas such as the refuse/bin store.

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.

Neutral

F.9 Rising Mains

Suitable rising main present

Neutral

F.10 Lifts Used By Firefighters

Absence of firefighting lift in buildings above 18 m

Negative

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	480 Seconds	8 Minutes
Arrival Protocol And Entry Preparation Time	180 Seconds	3 Minutes
Firefighter travel to operational bridgehead	270 Seconds	4 Minutes 30 Seconds
Firefighter Travel Walking Up Two Flights Of Stairs To Fire Floor (75 Seconds)	75 Seconds	1 Minute 15 Seconds
Total Time	1,265 Seconds	21 Minutes 5 Seconds

Nearest Fire Station

West Bromwich Fire Station which is 2.2 miles away

Wall Constructions

Wall Construction	Build-up
Brickwork finish (MHU3ZD)	• Surface Finish (Brickwork, Brick slip /Brick Tile) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original blockwork)
Render (3AHBPH)	• Surface Finish (Sto render) • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Concrete wall)
Aluminium Cladding (G4HU8D)	• Surface Finish (Aluminium Panel) • Insulation (PIR Insulation) • Cavity Support Frame (Timber Batten) • Inner Leaf (Reinforced concrete) • Cavity
Trespa Class B HPL (XYGUXS)	• Surface Finish (High Pressure Laminate (HPL) Panel) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Concrete wall)

Wall Construction: Brickwork finish

Construction Reference
MHU3ZD

This wall construction was identified by wall inspection U4XWXB. The build-up, cavity barrier, and floor slab information is taken directly from inspection U4XWXB. See the Inspections section of this report for full inspection details.

Construction

Effect

Risk

Brickwork finish (MHU3ZD)

Neutral

Low

Build-Up

4 Elements

Thickness/Depth

Material

Rating (BS EN13501)

Surface Finish

100mm

Brickwork, Brick slip /Brick Tile

A1 - Non-Combustible

Cavity

30mm

Insulation

90mm

Mineral Wool Insulation

A1 - Non-Combustible

Inner Leaf
Support (Backing
Wall)

Original blockwork

A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier

Material

Horizontal Cavity Barrier

Solid State Mineral Wool

Floor Slab

Backing Wall Sits On The Floor Slab

Fire Performance

K.1 General

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

Positive

K.2 External Surfaces

Class A1

Positive

K.3 Facings/Cladding Panels

Low HRR

Positive

K.4 Panel Construction

Not Applicable

K.5 Cavities

Cavity full filled with mineral wool

Positive

K.6 Insulation

Mineral/glass insulation

Positive

K.7 Substrate

Masonry, >75 mm thick

Positive

K.8 Sheathing Boards

Not Applicable

K.9 Insulated Core Panels

Not Applicable

K.10 ETICS

Not Applicable

K.11 Infill / Spandrel Panels

Not Applicable

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

PAS Standard Benchmark

L7 Benchmark

DOUBLE SKIN MASONRY

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

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

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

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

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

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

BR135 Benchmark

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

Wall Construction: Render

Construction Reference
3AHBPH

This wall construction was identified by wall inspection 77FKSI. The build-up, cavity barrier, and floor slab information is taken directly from inspection 77FKSI. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Render (3AHBPH)	Neutral	Low

Build-Up

3 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	9mm	Sto render	A1 - Non-Combustible
Insulation		Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)		Concrete wall	A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material
Horizontal Cavity Barrier	Solid State Mineral Wool

Floor Slab

Reinforced concrete

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

K.4 Panel Construction

Not Applicable

K.5 Cavities

Cavity full filled with mineral wool

Positive

K.6 Insulation

Mineral/glass insulation

Positive

K.7 Substrate

Masonry, >75 mm thick

Positive

K.8 Sheathing Boards

Not Applicable

K.9 Insulated Core Panels

Not Applicable

K.10 ETICS

Thin organic render or inorganic render on Class A1/A2 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

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.

Wall Construction: Aluminium Cladding

Construction Reference
G4HU8D

This wall construction was identified by wall inspections 3X4G1B and WAIYBI. The build-up, cavity barrier, and floor slab information is taken directly from inspection 3X4G1B. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Aluminium Cladding (G4HU8D)	Neutral	Low

Build-Up

5 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	3mm	Aluminium Panel	A1 - Non-Combustible
Insulation	40mm	PIR Insulation	C - Combustible
Cavity Support Frame	50mm	Timber Batten	D - Highly Combustible
Inner Leaf		Reinforced concrete	A1 - Non-Combustible
Cavity	100mm		

Cavity Barriers

None

Fire Performance

K.1 General

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

Neutral

K.2 External Surfaces

Class A1

Positive

K.3 Facings/Cladding Panels

Low HRR

Positive

K.4 Panel Construction

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

Neutral

K.5 Cavities

External boxed section over concrete- infill between windows

Neutral

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

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

Neutral

K.6 Insulation

Class C

Neutral

K.7 Substrate

Masonry, >75 mm thick

Positive

K.8 Sheathing Boards

Not Applicable

K.9 Insulated Core Panels

Not Applicable

K.10 ETICS

Not Applicable

K.11 Infill / Spandrel Panels

Metal faced, with PIR insulation over concrete

Neutral

K.12 Internal Finishes

Not Applicable

PAS Standard Benchmark

L5 Benchmark

SPANDREL / IN-FILL PANELS

The terms “spandrel panel” and “infill panel” are used interchangeably throughout the industry to refer to panels which are normally fitted in lieu of glazing in either window fenestration systems or curtain wall units. The edges of these panels usually expose the insulating core and are normally only protected by the frame into which they are installed. They are sometimes protected with aluminium foil tape but this cannot be assumed.

Spandrel and infill panels are typically some form of composite, such as:

- metal skins with an insulating core;
- metal skins with an insulating and timber (typically plywood) core;
- metal external face with insulating core and timber (typically plywood) internal face;
- HPL skins with an insulating core; and
- solid HPL.

Their performance needs to be assessed in light of the materials involved in their construction (as described in this annex) and the manner in which they interact with compartmentation.

- Panels which are installed in such a way as to cross compartment lines (e.g. to conceal the edges of floor slabs) need to be considered in light of the potential route they provide for fire to spread from one compartment to another.
- Panels which are installed entirely within the confines of a compartment (as it meets the external wall) are unlikely to have a significant impact on fire spread, unless their performance is such that they are likely to contribute to substantial flame extension.

BR135 Benchmark

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

Wall Construction: Trespa Class B HPL

Construction Reference
XYGUXS

This wall construction was identified by wall inspections 7HDWZN and VCKR7P. The build-up, cavity barrier, and floor slab information is taken directly from inspection 7HDWZN. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Trespa Class B HPL (XYGUXS)	Neutral	Medium

Build-Up

4 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	10mm	High Pressure Laminate (HPL) Panel Material Brand: TRESPA	B - Combustible
Cavity	90mm		
Insulation	90mm	Mineral Wool Insulation	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)		Concrete wall	A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material
Horizontal Cavity Barrier	Solid State Mineral Wool

Floor Slab

Reinforced concrete

Fire Performance

K.1 General

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

Neutral

K.2 External Surfaces

Class B

Neutral

K.3 Facings/Cladding Panels

Low HRR

Positive

K.4 Panel Construction

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

Neutral

K.5 Cavities

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

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

Positive

K.6 Insulation

Mineral/glass insulation

Positive

K.7 Substrate

Masonry, >75 mm thick

Positive

K.8 Sheathing Boards

Not Applicable

K.9 Insulated Core Panels

Not Applicable

K.10 ETICS

Not Applicable

K.11 Infill / Spandrel Panels

Not Applicable

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

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

Façade Configuration: L9X8UJ

Items in Façade

4 Items	Effect	Risk
Wall Construction Brickwork finish (MHU3ZD)	Neutral	Low
Attachment Cantilever Balcony (C6ZVE2)	Neutral	Low
External Door Single Leaf Entrance Doors (TNZZ9Y)	Neutral	Low
External Window Top, Mid, Side Hung Casements (1LD8W3)	Neutral	Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

18 m to 30 m	Negative
--------------	----------

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

<2 m NOTE At this height, the likelihood of a fire originating externally (e.g. involving a parked vehicle or waste skip started either accidentally or deliberately) igniting the cladding is highly likely.	Negative
--	----------

N.3 Extent of Cladding

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

N.4 Cavities & Openings

Cavity full filled with mineral wool	Neutral
--------------------------------------	---------

N.5 Infill / Spandrel Panels

Not Applicable

N.6 Setbacks - Combustible Cladding Setback from Wall Edge

Not Applicable

N.7 Overhangs & Projections

Not Applicable

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

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

Neutral

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

Where vents pass through a cavity, either:

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

Neutral

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

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

Positive

N.11 Attachments

Non-combustible open balconies

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

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

Neutral

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

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

Neutral

Risk Factor Analysis

Conclusion: Masonry brickwork in external walls offers strong fire resistance due to its non-combustible properties and high thermal mass. Bricks are inherently resistant to fire and do not ignite, burn, or contribute fuel to a fire, making them excellent for containing flames and preventing fire spread. During a fire, brickwork reacts by absorbing and gradually dissipating heat, though intense, prolonged heat may cause cracking or spalling (surface breakage) due to thermal expansion. Despite these effects, the overall structure of brick masonry generally remains intact, ensuring the wall continues to act as a robust barrier against fire, heat, and smoke, which enhances its reliability in fire protection.

The wall type has been assessed against the L7 performance benchmark.

Beyond the external surface material is a cavity space that is fully filled with mineral wool.

The Mineral wool is viewed as presenting a non-combustible product. This means this product will not ignite as such this poses a low risk to the contribution of fire and external fire spread.

The fully filled cavity presents a barrier to fire spread and the location is at ground floor level with no gaps in insulation to allow horizontal or vertical fire and smoke paths

The concrete substrate is non-combustible. The plasterboard inner leaf is considered limited in combustibility to prevent the passage of fire through the external wall system. No conclusion can be formed on the installation, fixing methods and spacings of fixings of the plasterboard sheets to confirm its installation as per the manufacturers guidelines.

This system was identified at ground level and could be susceptible to any accidental or malicious ignition but given the external wall type being of non-combustible nature and the presence of fully filled non-combustible cavity, in the event of any ignition to the system the rate of any spread would be tolerable.

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

- a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.
- b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.

It is our professional opinion that given the analysis of this attachment type, that there is no requirement for remediation.

It is our professional opinion that given the analysis of this external wall type, that there is no requirement for remediation.



Façade Configuration: AWJQ7M

Items in Façade

2 Items	Effect	Risk
Wall Construction Render (3AHBPH)	Neutral	Low
External Window Top, Mid, Side Hung Casements (1LD8W3)	Neutral	Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

18 m to 30 m	Negative
--------------	----------

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

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

N.3 Extent of Cladding

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

N.4 Cavities & Openings

Windows and other openings in line with vertical cavity	Negative
---	----------

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

Not Applicable

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

Above doorways forming final exits from escape routes, such that burning material or debris from a fire involving the external walls above will pose a danger to escaping occupants

Negative

N.11 Attachments

Not Applicable

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

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

Neutral

Risk Factor Analysis

Conclusion: The ETICs system assessed is an 8mm Sto render finish directly over 90mm mineral wool. The mineral wool is fixed by supporting external wall fixing pins to the inner leaf masonry system. The render material is considered to be non-combustible and presents a low contributor to the development of external fire spread.

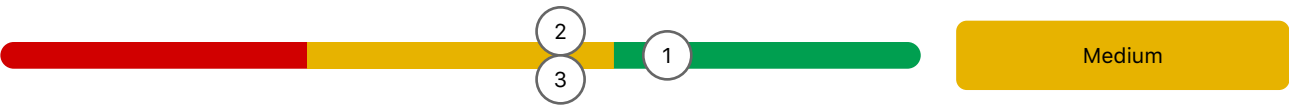
The wall type has been assessed against the L10 performance benchmark. Beyond the external surface material is a cavity space that is fully filled with mineral wool. The Mineral wool is viewed as presenting a non-combustible product. This means this product will not ignite as such this poses a low risk to the contribution of fire and external fire spread. The fully filled cavity presents a barrier to fire spread and the location is at ground floor level with no gaps in insulation to allow horizontal or vertical fire and smoke paths. The concrete substrate is non-combustible. The plasterboard inner leaf is considered limited in combustibility to prevent the passage of fire through the external wall system. No conclusion can be formed on the installation, fixing methods and spacings of fixings of the plasterboard sheets to confirm its installation as per the manufacturers guidelines. This system was identified at 2 elevations (overlapping on corners of all elevations), spanning floors although the system type would not contribute to fire spread between floors and compartments.

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

- a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.
- b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.

It is our professional opinion that given the analysis of this attachment type, that there is no requirement for remediation.

It is our professional opinion that given the analysis of this external wall type, that there is no requirement for remediation.



Façade Configuration: YG78L8

Items in Façade

2 Items	Effect	Risk
Wall Construction Aluminium Cladding (G4HU8D)	Neutral	Low
External Window Top, Mid, Side Hung Casements (1LD8W3)	Neutral	Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

18 m to 30 m	Negative
--------------	----------

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

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

N.3 Extent of Cladding

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

N.4 Cavities & Openings

Cavity limited in extent	Neutral
--------------------------	---------

N.5 Infill / Spandrel Panels

Adjacent to, but not in a vertical continuous line with, windows

Neutral

N.6 Setbacks - Combustible Cladding Setback from Wall Edge

Not Applicable

N.7 Overhangs & Projections

Not Applicable

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

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

Positive

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

Not Applicable

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

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

Neutral

N.11 Attachments

Not Applicable

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

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

Neutral

Risk Factor Analysis

Conclusion: Aluminium infill spandrel section – between windows with additional panelling at top floor level.

This building is part of a number of similarly constructed blocks in close proximity to each other with overall survey assessment information and client information corroborating synergy of characteristics between pairs and groups of buildings.

This infill wall type is present as a vertical strip spandrel in between windows on two elevations of the building. The composition is a boxed aesthetic section in between aluminium windows. The boxed metal system is fixed to 50mm timber battens running vertically between sets of two windows and does not provide a continuous system vertically or horizontally across the elevations.

Metal is a soft metal that has a low melting point. As such this material is able to perform in temperatures between 400°C and 600°C, after which the metal will start to melt. Although it will not combust it will form molten droplets which may fall and ignite combustible materials below to cause secondary fires. Spandrel infill is given as PIR insulation. The PIR is in limited quantities although it should be noted that the heat from the flame causes the PIR insulation to undergo pyrolysis, which results in the black char that is formed on the surface of the board. This char layer creates a barrier inhibiting the oxygen to diffuse into the foam and may lead to self-extinguishment after a short period. However, it should be noted that the final fire performance of plastic foams such as PIR strongly depend on the chemical composition and manufacturing process. e.g., content of isocyanate linkages and type of isocyanate reactive component for PIR. In addition, this insulation is encapsulated by the metal boxed section, 50mm timber fixing lining and the concrete substrate.

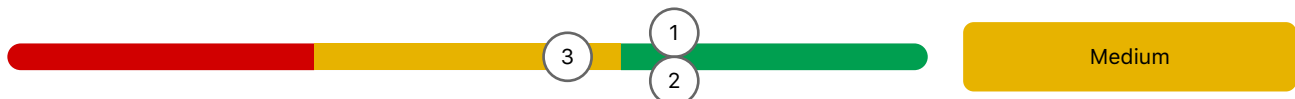
The wall system has been assessed on performance and configuration and the system will not lead to rapid fire spread between compartments.

The wall type has been assessed against the L5 performance benchmark.

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

- a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.
- b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.

It is our professional opinion that given the analysis of this attachment type, that there is no requirement for remediation.



Façade Configuration: JLGH7I

Items in Façade

2 Items	Effect	Risk
Wall Construction Trespa Class B HPL (XYGUXS)	Neutral	Medium
External Window Top, Mid, Side Hung Casements (1LD8W3)	Neutral	Low

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

18 m to 30 m	Negative
--------------	----------

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

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

N.3 Extent of Cladding

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

N.4 Cavities & Openings

Cavity not continuous, due to façade being only partially clad or broken by other wall types	Neutral
--	---------

N.5 Infill / Spandrel Panels

Not Applicable	
----------------	--

N.6 Setbacks - Combustible Cladding Setback from Wall Edge

Not Applicable

N.7 Overhangs & Projections

Not Applicable

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

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

Positive

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

Not Applicable

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

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

Positive

N.11 Attachments

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

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: High density laminate board panels installed are B,s1, d0. HPL are typically made of organic materials.

They consist of layers of cellulose fibrous material impregnated with thermosetting resins. During the high-pressure process, defined as a simultaneous application of heat and pressure, the polymer chains are joined (or cross-linked) by intermolecular bonding (thermosets). This produces homogeneous panels that in a fire situation do not soften or drip. But; has the ability if ignite to rapidly develop across the external envelope of the building. 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. In this building, the HPL has a Class B fire rating.

This indicates a material with a limited contribution to fire, meaning it's combustible but has a relatively low flame spread and smoke development. Cavity barriers were identified at compartment junction lines horizontally with the barriers supported by Rockwool duoslab / Ewi slab (A1) insulation infill.

Date of refurbishment was 2015.

The building is over 18m height and a class B material would not be compliant if built today, although the refurbishment would have used AD-B (Approved document B) 2010 addendum which does not included the enhanced regulation 7 for buildings over 18m which came in later amended versions of AD-B.

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

- a) fire spread is unlikely to give rise to widespread secondary fires resulting in occupants being significantly harmed or prevented from escaping.
- b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before occupants can safely use them to escape.

It is our professional opinion that given the analysis of this attachment type, that there is no requirement for remediation.



APPENDIX

Asset Information

Client Name

Sandwell Metropolitan Council

Responsible Person

Sandwell Metropolitan Council

Contact Details

0121 569 0162 - Lisa Ellis

Fire Alarm System

There is no BS5839 (Part 6 or Part 1) Fire detection/alarm system provided in the common areas of the building. The smoke detection provided is part of the smoke ventilation system. Smoke vents have their own control panels located within the riser cupboards.

Emergency Lighting

Installed in communal parts

Emergency Lighting

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

Portable Fire Fighting Equipment

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

Smoke Control

Natural smoke control, Smoke control installed

Smoke Control

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

Suppression Systems

Partial sprinkler system installed (Detailed in Description)

Suppression System

A suppression system is installed in high risk areas such as the refuse/bin store.

Fire Fighting Facilities

Dry Riser

Fire Fighting Facilities

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

Access for fire-fighting vehicles

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

Fire Hydrant Location/ Water Supply

Hydrant is located next to approach road to the front of the main entrance/main access point. Information for services is in the PIB.
Public fire hydrants can be located: <https://dataservices.riscauthority.co.uk/map/index>

Housekeeping

Good standard. Means of escape clear. Refuse stored appropriately

Secure Information Boxes

Secure information box (SIB) installed

Signage

Appropriate signage installed throughout premises

Property Type

Residential

Building Era / Age

Known Build Date

Known Build Date

1964

Building Height

Approximately 24m to the highest occupied floor level. (calculated at 3m per floor as per PAS 9980-2022 section 3.1.22)

Number of Storeys (Ground and above)

9

Number of Flats

36

Flat Types

Single Storey

Structural Wall Material

Concrete / Brick

Structural Floor Material

Reinforced Concrete

Structural Stairs Material

Concrete

Construction (Details)

Traditional concrete frame and brick construction

Exterior Cladding

FRAEW Completed on Exterior Cladding

Exterior Cladding (Details)

TRESPA High pressure laminate panel , Rockwool insulated render (A2) - Brick, Brick slips on 100mm rockwool.

Electronic Entrance System

Yes

Carpark

External/Outdoor Carpark

Employees

Day staff

Employees (Extended)

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

Residents

Yes

Approx number of Residents

72

Residents (Extended)

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

Visitors

Day

Visitors (Extended)

Residential block - low number of visitors expected at any one time

People With Reduced Mobility

None

People with Reduced Mobility (Extended)

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

Lone Workers

None

Young Persons Employed in the Premises

None

Escapes & Exits

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

Number Of Internal Escape Stairs

1

Number Of Final Exits

2

External Means Of Escape

None Present

Types Of Lifts Installed

Passenger + Fireman's Control

Evacuation Chairs Installed

No

Stairwells Protected / Lobbied

Yes

Flat Doors Open Onto Stairs

No

Current Evacuation Strategy

Stay Put

What is the recommended evacuation strategy for the property?

Stay Put

Aerial Perspective: Stanton House Beaconview Road West Brom B71 3PW

Aerial Perspective (picture sourced from Google Earth)



Elevations

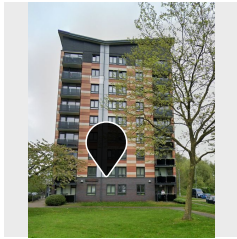
Photo	Name	No. of Storeys	Features
	NORTH	9 Storeys	
	SOUTH	9 Storeys	
	EAST	9 Storeys	• Private Balconies Stacked
	WEST	9 Storeys	• Private Balconies Stacked

Inspections

Elevation Location

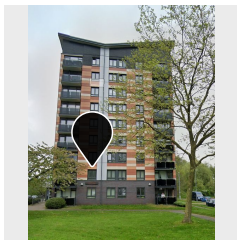
Inspection

Elements



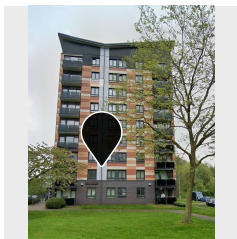
Inspection: U4XWXB
WEST
FLOOR SLAB JUNCTION

- Surface Finish (Brickwork, Brick slip / Brick Tile)
- Cavity
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Original blockwork)



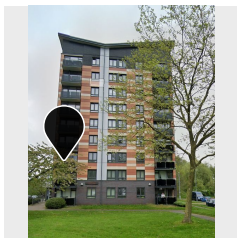
Inspection: 7HDWZN
WEST
JUNCTION WITH OTHER FACADE TYPES

- Surface Finish (High Pressure Laminate (HPL) Panel)
- Cavity
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Concrete wall)



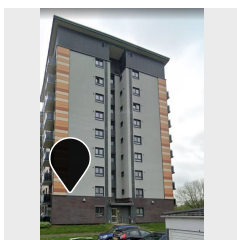
Inspection: VCKR7P
WEST
PANEL BUILD UP -PLUS JUNCTION WITH OTHER FACADE TYPES

- Surface Finish (High Pressure Laminate (HPL) Panel)
- Cavity
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Reinforced concrete)



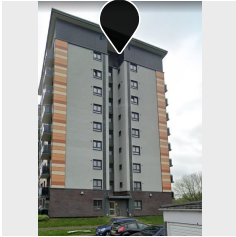
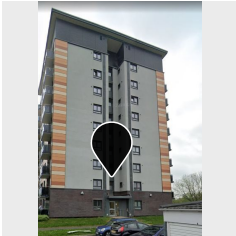
Inspection: 98LG16
WEST
BALCONY

No elements identified



Inspection: 77FKSI
SOUTH
JUNCTION TO BRICKWORK FLOOR SLAB AND TERRACOTTA TILED SECTIONS

- Surface Finish (Sto render)
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Concrete wall)

Elevation Location	Inspection	Elements
	Inspection: WAIYBI SOUTH TOP FLOOR	No elements identified
	Inspection: 3X4G1B SOUTH CURTAIN STAIRWELL WALL	• Surface Finish (Aluminium Panel) • Insulation (PIR Insulation) • Cavity Support Frame (Timber Batten) • Inner Leaf (Reinforced concrete) • Cavity

Inspection: U4XWXB

Elevation • Location
WEST • FLOOR SLAB JUNCTION



Name/Summary

BRICKWORK - WEST ELEVATION

Proposed Inspection

Cut out 3/4 bricks to expose construction behind.
Inspect the construction, cavity, insulation, junction with compartment floor slab, junction at compartment wall and window opening.
Replace any insulation removed with new.
Replace bricks with existing or new as required and mortar. We will match existing bricks and mortar as best as possible but cannot guarantee a perfect match. Access provided by lorry mounted cherry picker 21m height capacity by Firntec.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	100mm	Brickwork, Brick slip / Brick Tile	5, 6	A1 - Non-Combustible
Cavity	30mm		7, 8, 9	
Insulation	90mm	Mineral Wool Insulation	10, 11	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)		Original blockwork	12, 13	A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Solid State Mineral Wool	

Floor Slab

Backing Wall Sits On The Floor Slab

Build-up Photos



Inspection: 7HDWZN

Elevation • Location
WEST • JUNCTION WITH OTHER FACADE TYPES



Name/Summary

PANEL- WEST ELEVATION

Proposed Inspection

- Panel Inspection options
1. Remove panel if possible or conduct a core hole removal of external surface material
Assess material making up the wall type
Reinstate to a weathertight condition
 2. If panel cannot be removed. Cut a 250mm core hole
Assess material making up the wall type
Reinstate to a weathertight condition
 3. If access is restricted externally-From internal-
Cut out 200mm x 200mm inspection panel through internal plaster / plasterboard to expose construction behind.
Inspect the construction, cavity, insulation and junction with compartment floor slab, compartment wall and window opening
Replace any insulation removed with new
Replace plasterboard with existing / new as required fixing to a timber batten
Redecoration by the Building Management

IN ADDITION, CHECK AND MEASURE CAVITY BARRIER LOCATIONS BETWEEN WALL AND WINDOW JUNCTIONS

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	10mm	High Pressure Laminate (HPL) Panel Material Brand: TRESPA	14, 15	B - Combustible
Cavity	90mm		16, 17, 18, 19	
Insulation	90mm	Mineral Wool Insulation	20, 21	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)		Concrete wall	22	A1 - Non-Combustible

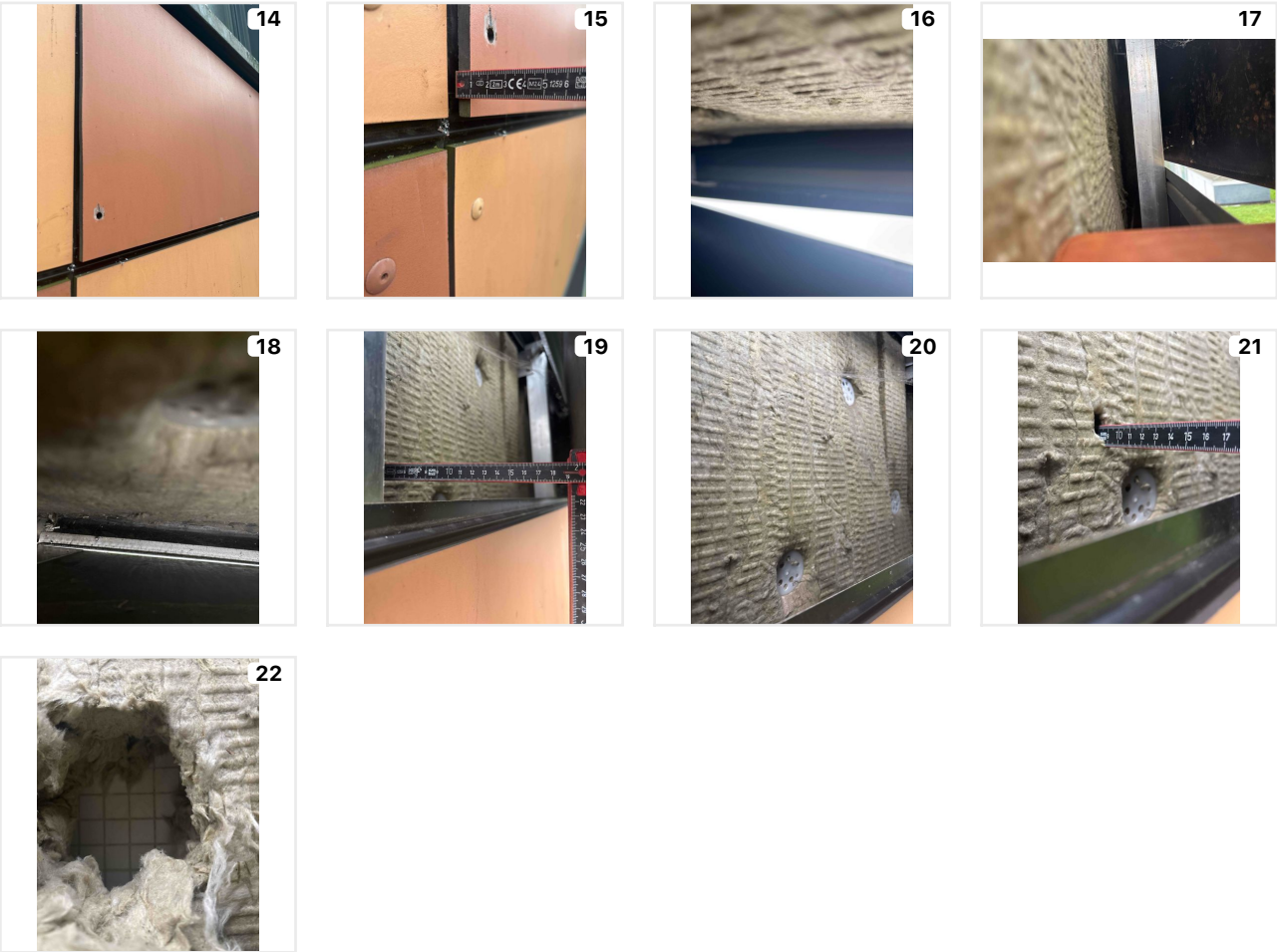
Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Solid State Mineral Wool	

Floor Slab

Reinforced concrete

Build-up Photos



Inspection: VCKR7P

Elevation • Location
WEST • PANEL BUILD UP -PLUS JUNCTION WITH OTHER FACADE TYPES



Name/Summary

PANEL SYSTEM - WEST ELEVATION

Proposed Inspection

- Panel Inspection options
1. Remove panel if possible or conduct a core hole removal of external surface material
Assess material making up the wall type
Reinstate to a weathertight condition
 2. If panel cannot be removed. Cut a 250mm core hole
Assess material making up the wall type
Reinstate to a weathertight condition
 3. If access is restricted externally-From internal-
Cut out 200mm x 200mm inspection panel through internal plaster / plasterboard to expose construction behind.
Inspect the construction, cavity, insulation and junction with compartment floor slab, compartment wall and window opening
Replace any insulation removed with new
Replace plasterboard with existing / new as required fixing to a timber batten
Redecoration by the Building Management

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	10mm	High Pressure Laminate (HPL) Panel Material Brand: TRESPA	23, 24	B - Combustible
Cladding				
Cavity	90mm		25, 26, 27	
Insulation	50mm	Mineral Wool Insulation	28	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)		Reinforced concrete Material Brand: Concrete wall	29	A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Solid State Mineral Wool	

Floor Slab

Reinforced concrete

Build-up Photos



Inspection: 98LG16

Elevation • Location
WEST • BALCONY



Name/Summary

BALCONIES - WEST ELEVATION

Proposed Inspection

Balcony Visual

General check

Check balconies floor for construction material. Balcony floors, Handrail and glazing used.

Check if windows and doors are Aluminium/UPVC etc

ASSESS MATERIAL TYPE ON BALCONY SOFFITS

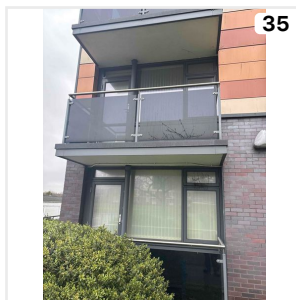
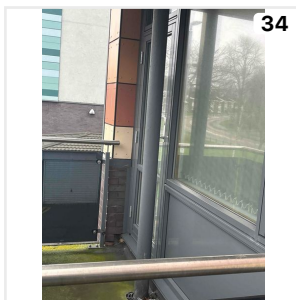
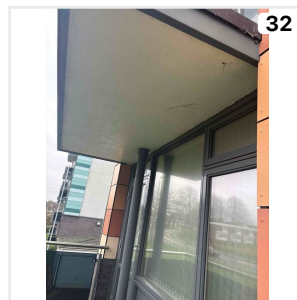
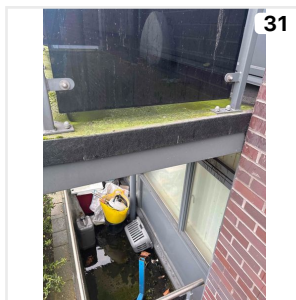
Remove panel to expose the construction behind.

Inspect the construction, cavity, insulation and inner skin.

Replace any insulation removed with existing or new if required.

Replace panel.

Inspection Photos



Inspection: 77FKSI

Elevation • Location

SOUTH • JUNCTION TO BRICKWORK FLOOR SLAB AND TERRACOTTA
TILED SECTIONS



Name/Summary

RENDER SYSTEM - SOUTH ELEVATION

Proposed Inspection

Panel Inspection options

1. Remove panel if possible or conduct a core hole removal of external surface material
Assess material making up the wall type
Reinstate to a weathertight condition
2. If panel cannot be removed. Cut a 250mm core hole
Assess material making up the wall type
Reinstate to a weathertight condition
3. If access is restricted externally-From internal-
Cut out 200mm x 200mm inspection panel through internal plaster / plasterboard to expose construction behind.
Inspect the construction, cavity, insulation and junction with compartment floor slab, compartment wall and window opening
Replace any insulation removed with new
Replace plasterboard with existing / new as required fixing to a timber batten
Redecoration by the Building Management

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	9mm	Sto render	36, 37	A1 - Non-Combustible
Insulation		Mineral Wool Insulation	38, 39	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)		Concrete wall	40, 41	A1 - Non-Combustible

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Horizontal Cavity Barrier	Solid State Mineral Wool	

Floor Slab

Reinforced concrete

Build-up Photos



Inspection: WAIYBI

Elevation • Location
SOUTH • TOP FLOOR



Name/Summary

PANEL SYSTEM - TOP FLOOR SOUTH ELEVATION

Proposed Inspection

Panel Inspection options

1. Remove panel if possible or conduct a core hole removal of external surface material

Assess material making up the wall type

Reinstate to a weathertight condition

2. If panel cannot be removed. Cut a 250mm core hole

Assess material making up the wall type

Reinstate to a weathertight condition

3. If access is restricted externally-From internal-

Cut out 200mm x 200mm inspection panel through internal plaster / plasterboard to expose construction behind.

Inspect the construction, cavity, insulation and junction with compartment floor slab, compartment wall and window opening

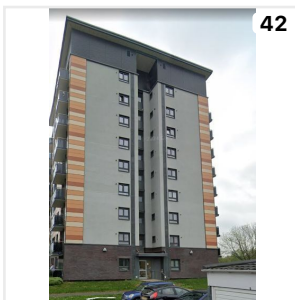
Replace any insulation removed with new

Replace plasterboard with existing / new as required fixing to a timber batten

Redecoration by the Building Management

Note: Access provided by Building Management to a vacant room or location communally

Inspection Photos



Inspection: 3X4G1B

Elevation • Location
SOUTH • CURTAIN STAIRWELL WALL



Name/Summary

SPANDRELS - SOUTH ELEVATION

Proposed Inspection

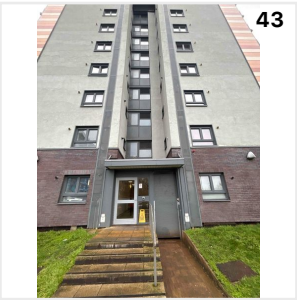
Panel Inspection options

1. Remove panel if possible or conduct a core hole removal of external surface material
Assess material making up the wall type
Reinstate to a weathertight condition
2. If panel cannot be removed. Cut a 250mm core hole
Assess material making up the wall type
Reinstate to a weathertight condition
3. If access is restricted externally-From internal-
Cut out 200mm x 200mm inspection panel through internal plaster / plasterboard to expose construction behind.
Inspect the construction, cavity, insulation and junction with compartment floor slab, compartment wall and window opening
Replace any insulation removed with new
Replace plasterboard with existing / new as required fixing to a timber batten
Redecoration by the Building Management

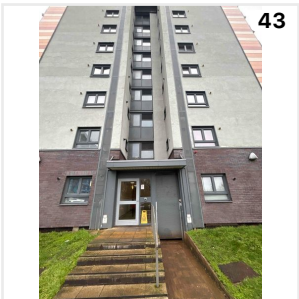
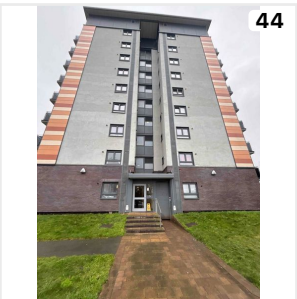
Build-Up

5 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	3mm	Aluminium Panel	43	A1 - Non-Combustible
Insulation	40mm	PIR Insulation		C - Combustible
Cavity Support Frame	50mm	Timber Batten		D - Highly Combustible
Inner Leaf		Reinforced concrete		A1 - Non-Combustible
Cavity	100mm			

Build-up Photos



Inspection Photos



Attachments & Balconies

Photo

Attachment



Cantilever Balcony (C6ZVE2)
Configuration: Stacked, Single Unit
Size: Private balcony spanning only a single compartment

Attachment: Cantilever Balcony

Attachment Reference
C6ZVE2

Details

Configuration

Stacked, Single Unit

Size

Private balcony spanning only a single compartment

Framework/Structure

Reinforced concrete framework extension of the floor slab

Balustrade

Steel handrail and balusters with clear glazing

Soffit

Concrete

L6 Benchmark

Balconies -

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

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

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

Storage of materials and other uses by residents also need to be taken into account.

Any bulk storage can pose a significant hazard, as can the use of combustion appliances such as barbecues and heaters.

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

Photos



External Windows

Photo

External Window



Top, Mid, Side Hung Casements (1LD8W3)

External Window: Top, Mid, Side Hung Casements

External Window Reference
1LD8W3

Details

Surface Material

Aluminium

Frame Material

Aluminium

Infill / Panel Material

Toughened Glass

Photos



External Doors

Photo

External Door



Single Leaf Entrance Doors (TNZZ9Y)

External Door: Single Leaf Entrance Doors

External Door Reference
TNZZ9Y

Details

Surface Material

Aluminium

Frame Material

Aluminium

Infill / Panel Material

Toughened Glass

Photos



Plan: WEST



Plan: SOUTH



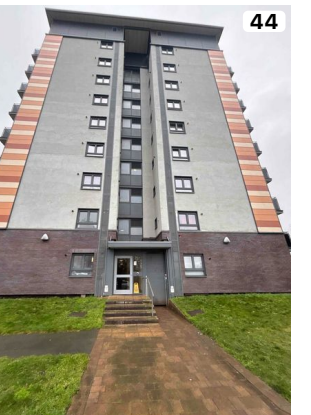
Photos



Photos Continued...



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Photos Continued...





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