



FIRNTEC
BUILDING COMPLIANCE

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

Document Version 2

Survey Date 22/06/2025

Suggested Review Date 22/06/2030

EXTERNAL WALL SURVEY

1-32 HORTON STREET

1-32 Horton Street
Tipton
DY4 7JW



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Summary

External Wall Survey

Assessment and Certificate Reference

RB-5NQJ4L

Assessed On, By

22/06/2025, Douglas Murray (Building Safety Consultant)
(BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA)

Approved / Validated On, By

13/08/2025, James Major (Facade Manager)

Recommended Review Date

22/06/2030

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

1-32 Horton Street

Property Reference

RB-MSAA42

Address

1-32 Horton Street
Tipton
DY4 7JW

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
- **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
- **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
- **SFS** Steel Framing System
- **SIB** Secure Information Box # Overview

Terms of Reference

Overview

Firntec have been instructed by the client to undertake an intrusive inspection of the external walls, attachments, windows and doors to the appointed building as addressed on the cover page.

The purpose of the report is to identify the construction, make-up and materials used within each external wall type and attachment on the building as required under the Fire Safety Act 2021.

Scope of Works

The client has requested Firntec to undertake an intrusive inspection of the external walls, attachments, windows and doors.

The purpose of this survey report is to assess the external walls and attachments construction to identify the materials used, installation method, presence of any cavity barriers or fire stopping and the configuration on the building.

For any identified materials within the construction of the sample, a euro-classification rating in accordance with BS EN 13501-1 will be assigned where applicable.

Within the findings of each wall type and attachment, where applicable, detailed comments will be provided on the findings, with reference to quality of workmanship or other identified factors within the construction.

The intent of the report is not to assign any level of risk, conclusion or recommendations, but should it be identified during the intrusive investigation that there is an immediate risk to life safety, interim measures may be recommended.

Limitations

The inspection of any external wall types or attachments are undertaken by the defined terms as described in Approved Document B:

- External Wall: Includes all of the following.
 - Anything located within any space forming part of the wall.
 - Any decoration or other finish applied to any external (but not internal) surface forming part of the wall.
 - Any windows and doors in the wall.
 - Any part of a roof pitched at an angle of more than 70 degrees to the horizontal if that part of the roof adjoins a space within the building to which persons have access, but not access only for the purpose of carrying out repairs or maintenance
- Specific Attachment Includes any of the following.
 - A balcony attached to an external wall.
 - A device for reducing heat gain within a building by deflecting sunlight which is attached to an external wall.
 - A solar panel attached to an external wall.

The findings within the report will not state any areas of compliance with advisory sub-clauses of the relevant Approved Document B, nor does it aim to guarantee compliance with the mandatory clause of B4(1) and our comments cannot be interpreted as such.

We endeavour to undertake intrusive inspections at various elevations and varying heights, however, this may not always be achievable due to mitigating factors out of our control such as access or weather conditions.

The findings of the investigation are limited to each precise inspection location and cannot be used to confirm absolute consistency of the façade in its entirety.

The manufacturer of a product cannot be confirmed with absolute certainty unless the sampled materials carry the product branding inclusive of the product number.

Where product branding is absent or ambiguous, we will where provided, refer to as-built drawings and

specification contained in the O&M manuals, However, this does not guarantee or confirm the products used in construction.

Assumptions

It is understood that the absence of evidence, is not evidence of the absence; therefore, Where a products branding is absent we will use our professional engineering judgment, and any assumptions made with regards to the materials combustibility should be submitted for further testing to verify this.

It has been assumed that documentation regarding the buildings fire safety, fire strategy, construction details and O&M manuals have been provided for our reference within the report.

Outcomes

The findings within this report do not assign any level of risk, conclusion or recommendations, nor does it confirm any compliance with applicable building regulations at the time of construction.

The findings of this report may form part of the gathered information to form such reports as:

- PAS9980:2022 Fire risk appraisal of external wall construction and cladding of existing blocks of flats – Code of practice or;
- External Wall Compliance at Time of Construction Report.

If during the intrusive survey any ACM is identified to be present, this will be reflected within the report and evidence requested to determine its calorific value, if this evidence is not available a request of sample testing may be recommended separate to this report.

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

Early warning is limited to hard wire or battery smoke alarms within each of the resident's flats. The equipment is subjected to a cyclical test. Based on the sample of properties accessed during the fire risk assessment the smoke alarms within resident's flats are installed to a combination of LD2 & LD3 standard. There is no effective means for detecting an outbreak of fire to communal areas.

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

CO₂ extinguisher in lift motor room; annually serviced

Smoke Control

Natural smoke control, Smoke control installed

Smoke Control

AOV at 7th floor rear stair; louvre vents at front .

Suppression Systems

Partial sprinkler system installed (Detailed in Description)

Suppression System

Bin store protected by deluge system; biannual servicing .

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

Good access for firefighting vehicles

NOTE This is where access exceeds 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. This might be the case where access is possible to all elevations of the building.

Fire Hydrant Location/ Water Supply

Public fire hydrants are available. There is a fire hydrant adjacent to the front main entrance as detailed in the on arrival information.

Public fire hydrants can be located: <https://dataservices.riscauthority.co.uk/map/index>

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

Gerda PIB at rear GF lobby; white box at front door .

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

Wates system-built concrete/brick structure (c.1960). Refurbished 2009.

Guidance Applicable At Time Of Construction

Byelaws of Local Authorities (pre-Building Regs): likely Sandwell/Tipton area-specific fire precautions and structural standards.

Building Height

Overall Building Height Approximately 24m
Highest Occupied Floor Level 21m
(calculated at 3m per floor as per PAS 9980-2022 section 3.1.22)

Approx Floor Area Per Floor

Based on typical floor layouts for 4 flats per level across 8 storeys and observed scale from plans (pages 26–28), the approximate floor area per floor is estimated at: $\approx 200\text{--}220\text{ m}^2$ per floor

This estimation assumes:
Each flat averages $\sim 50\text{--}55\text{ m}^2$
Communal circulation (stairs, lobby, lift) adds $\sim 20\text{--}30\text{ m}^2$

External Dimensions

the approximate external dimensions for 1–32 Horton Street are:
Length: $\sim 22\text{--}24$ metres
Width: $\sim 9\text{--}10$ metres
Height: ~ 21.6 metres (8 storeys including ground floor at approx. 2.7 m/storey)
These dimensions align with standard footprints for 4-flat-per-floor Wates blocks of the 1960s.

Number of Storeys (Ground and above)

8 storeys total, including the ground floor.
This comprises:
Ground Floor (Level 0)
Floors 1 to 7 above (Levels 1–7)

Number of Basement Levels

Not applicable

Number of Flats

32 self-contained residential flats.

Flat Types

Single Storey

Structural Wall Material

Traditional build with concrete floor slab

Structural Floor Material

Reinforced Concrete

Structural Stairs Material

Concrete

Construction (Details)

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

Exterior Cladding

FRAEW Completed on Exterior Cladding

Exterior Cladding (Details)

EWI (External Wall Insulation) retrofit onto a masonry/brick original outer leaf. The render system appears to be a polymer-modified or sand-cement render, with signs of long-term weather exposure and thermal stress-induced

cracking.

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)

Residents

Yes

Approx number of Residents

64

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

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

Two protected staircases serve all floors, located at front and rear of the building.

Number Of Final Exits

Front entrance (main door, fob + firefighter override access)

Rear entrance (secured, with internal access to rear lobby and firefighter switch)

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

Flat Doors Open Onto Stairs

No

Current Evacuation Strategy

Stay Put

Current Stay Put Strategy Description

The current evacuation strategy is Stay Put as denoted by the fire action notices displayed in the common area.

Current Evacuation Strategy for the property considered appropriate?

Yes

What is the recommended evacuation strategy for the property?

Stay Put

Executive Summary

Summary

SUMMARY INFORMATION

A Step 1 Fire Risk Assessment of External Wall Construction (FRAEW) was conducted on 18/06/2025 at 1-32 Horton Street, Tipton, in accordance with PAS 9980:2022. The assessment focused on the risk of external fire spread, considering the building's height, external wall system, balconies, occupancy type, and evacuation strategy. The approach taken was proportionate and evidence-based, aligning with fire safety objectives under the Fire Safety Act 2021 and Regulatory Reform (Fire Safety) Order 2005.

1-32 Horton Street comprises Ground plus 7 upper storeys (8 storeys total), with 32 self-contained residential flats, accessed via two protected staircases and a single lift.

PROPERTY DESCRIPTION

The building is a mid-20th century concrete-framed residential block with original brick masonry to the front and rear elevations, and Wetherby mineral wool silicone render system (A2-s1,d0 rated) applied to the side gable elevations during refurbishment works around 2009. All flats are served by projecting concrete balconies with galvanised steel balustrades and wired glass infill panels.

No combustible materials were identified within balcony construction. Handrails, vertical supports, and panels are confirmed as non-combustible.

EVACUATION STRATEGY

The building follows a Stay Put – Unless Affected evacuation strategy, supported by:
Compartmented flat construction.

Two protected staircases.

Mechanical AOV (rear stair) and natural ventilation (front stair).

FD30s-rated flat entrance doors and fire-stopping works in progress.

BUILDING RISK PROFILE (PAS 9980:2022)

Occupancy Profile:

Ci – Residents with long-term individual occupancy, no 24-hour staff.

A / B – Awake and familiar/unfamiliar persons in communal areas.

Fire Growth Rate Assumed: 2

Risk Categories Applied:

A2 / B2 – Communal escape areas

Ci2 – Sleeping accommodation (flats)

Smoke/heat detection and alarm systems are installed in communal plant/service rooms.

EXTERNAL WALL CONSTRUCTION

Gable Elevations (Sides):

Wetherby external wall insulation (EWI) system with mineral wool insulation and silicone render.

Classified as A2-s1,d0. No combustible insulation or high-risk cladding types detected.

Visual inspection showed no evidence of missing cavity barriers at window heads or floor lines; however, confirmation of correct cavity barrier installation is recommended if future intrusive works are undertaken.

Front and Rear Elevations:

Traditional cavity brick masonry construction, with no applied EWI or rain screen system.

Balconies:

Concrete slab structure with painted metal railings and non-combustible infill panels.

No combustible balcony elements or attachments present.

No screening or additional privacy panels observed.

FIRE RISK RATING (FRAEW)

Based on the available evidence, the external wall system is assessed to present a Low to Medium risk of external fire spread. There are no combustible materials or design features that would significantly compromise the Stay Put strategy.

FRAEW External Wall Risk Rating: Low to Medium
Remedial Action Required: None related to cladding or balconies
Further Intrusive Investigation: Not required at this time

Assessor Details

Douglas Murray Bsc Building Surveying GFireE NEBOSH Fire Safety ABBE DipFRA | Firntec
Fire Safety Consultant
Main Line: 01752 977147

Assessor Competency Statement

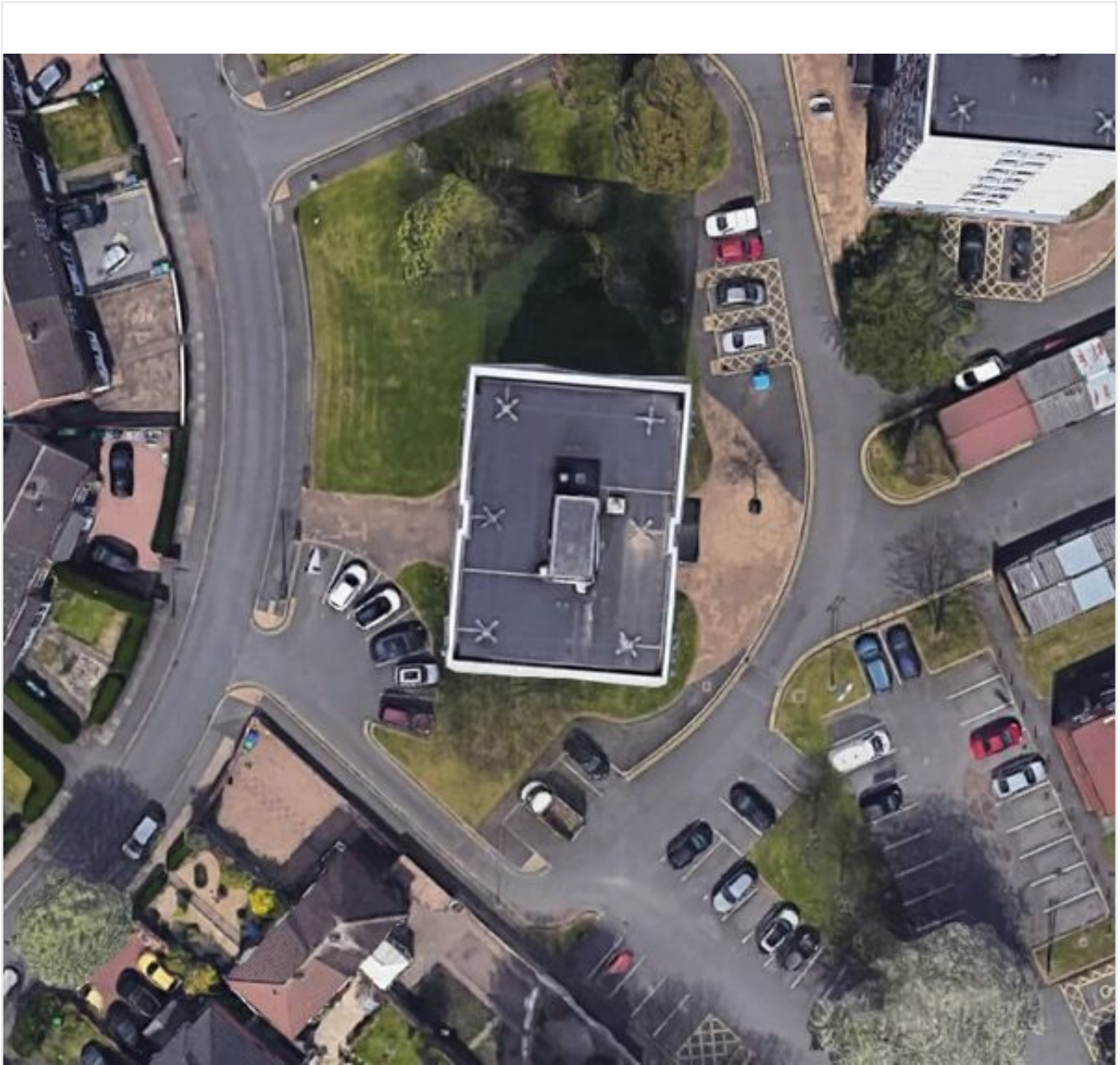
Mr. Douglas Murray is a highly experienced Building Surveyor and Fire Safety Consultant with over 30 years of industry expertise, including eight years specialising in fire safety, cladding risk assessment, and regulatory compliance across complex residential and mixed-use settings. He holds a BSc in Building Surveying, the ABBE Level 4 Diploma in Fire Risk Assessment, and the NEBOSH Fire Safety Certificate. Douglas is a Graduate of the Institution of Fire Engineers (GFireE), a Member of the Fire Protection Association (MFPA), and an Associate Member of the Royal Institution of Chartered Surveyors (AssocRICS).

Douglas's professional practice spans all major fire risk assessment types (Type 1–4), Fire Risk Assessments of External Walls (FRAEW), retrospective and design-stage Fire Strategy Reports, and litigation-support surveys under the Defective Premises Act. He has led fire consultancy input for housing associations, local authorities, NHS Trusts, commercial developers, and hotel operators, including high-rise buildings, sheltered housing, heritage refurbishments, and occupied retrofit schemes.

Recognised for his rigorous, evidence-based approach and clarity in technical reporting, Douglas consistently delivers proportionate, standards-aligned fire safety advice tailored to building use, risk profile, and client need.

Aerial Perspective: 1-32 Horton Street

Aerial Perspective (picture sourced from Google Earth)



Elevations

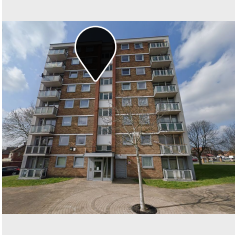
Photo	Name	No. of Storeys
 A photograph of the North Elevation of a multi-story building. The building has a brick facade with white balconies and a white entrance area. A small white box with the number '1' is in the top right corner of the photo.	North Elevation	8 Storeys
 A photograph of the South Elevation of a multi-story building. The building has a brick facade with white balconies and a white entrance area. A small white box with the number '2' is in the top right corner of the photo.	South Elevation	8 Storeys
 A photograph of the West Elevation of a multi-story building. The building has a grey concrete facade with white balconies and a white entrance area. A small white box with the number '3' is in the top right corner of the photo.	West Elevation	8 Storeys
 A photograph of the East Elevation of a multi-story building. The building has a grey concrete facade with white balconies and a white entrance area. A small white box with the number '4' is in the top right corner of the photo.	East Elevation	8 Storeys

Inspections

Elevation Location

Inspection

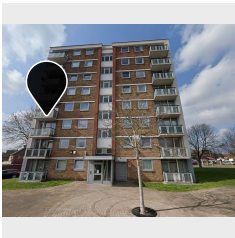
Elements



Inspection: MY4FFL

East Elevation
Compartment Floor and Wall Junction
Interface

- Outer leaf
- Cavity
- Insulation (Mineral Wool Insulation)
- Inner Leaf (Likely dense concrete block or brickwork (solid wall lining), plaster finish.)



Inspection: I9FFWK

East Elevation
Stacked Balcony

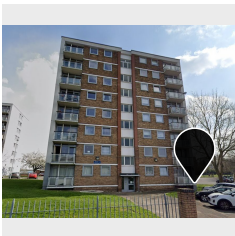
- External Surface Material (Concrete)
- Waterproof Membrane



Inspection: 3RZ4AK

South Elevation
Compartment Floor Junction

- External Surface Material (Render)
- Insulation (Mineral Wool Insulation)
- Outer leaf



Inspection: ZMN5VG

West Elevation
Stacked Balcony

- External Surface Material (Concrete)
- Waterproof Membrane

Inspection: MTL1UD

Compartment Floor and Wall Junction
Interface

- Outer leaf
- Cavity
- Insulation (Mineral Wool Insulation)
- Inner Leaf (Likely dense concrete block or brickwork (solid wall lining), plaster finish.)

Inspection: 7AHY8Q

Aperture Opening

- Outer leaf
- Cavity
- Insulation (Mineral Wool Insulation)
- Inner Leaf (Likely dense concrete block or brickwork (solid wall lining), plaster finish.)

Elevation Location	Inspection	Elements
	Inspection: 3ST48B Compartment Floor Junction	• External Surface Material (Render) • Insulation (Mineral Wool Insulation) • Outer leaf
	Inspection: CTNZE Aperture Opening	• External Surface Material (Render) • Insulation (Mineral Wool Insulation) • Outer leaf
	Inspection: IUFT8X Compartment Floor and Wall Junction Interface	• Outer leaf • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (Likely dense concrete block or brickwork (solid wall lining), plaster finish.)
	Inspection: M3MYW7 Vertical section external to staircore	• Outer leaf • Cavity • Inner Leaf (Likely dense concrete block or brickwork (solid wall lining), plaster finish.)

Inspection: MY4FFL

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



Name/Summary

Masonry (Brickwork)

Description

Masonry construction appears original and robust but lacks modern cavity fire barrier provision. Localised brick removal (as seen in investigative openings) confirms presence of mineral wool-type insulation, but continuity and integrity not fully verified. Surface spalling and mortar degradation observed in some areas, particularly under balconies and near service penetrations. No cladding, rainscreen systems or panelised façades present.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Traditional facing brickwork, stretcher bond, cavity wall construction.				
Cavity	75mm			
Insulation	75mm	Mineral Wool Insulation		A1 - Non-Combustible
Depth of insulation suggests partial-fill or fully-filled cavity, installed post-construction.				
Inner Leaf	100mm	Likely dense concrete block or brickwork (solid wall lining), plaster finish.		A1 - Non-Combustible

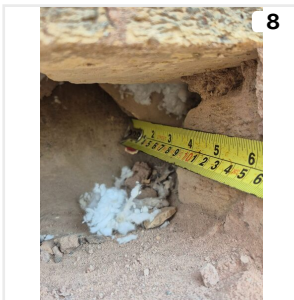
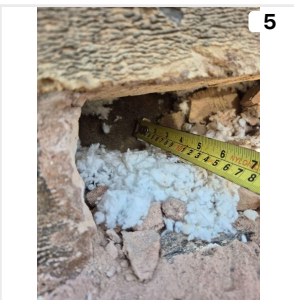
Cavity Barriers

No cavity barrier identified at this inspection location

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: I9FFWK

Elevation • Location
East Elevation • Stacked Balcony



Name/Summary

Balcony Inspection

Description

The balconies are constructed from solid, predominantly non-combustible materials and do not incorporate combustible cladding or screening. Current condition is aged but does not significantly increase external fire spread risk.

Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	200mm	Concrete		A1 - Non-Combustible
Waterproof Membrane		Void: Coated concrete (possibly bituminous or painted waterproof layer); aged/worn.		B - Combustible

Cavity Barriers

No external cavity

Floor Slab

Reinforced concrete

Inspection Photos



Inspection: 3RZ4AK

Elevation • Location
South Elevation • Compartment Floor Junction



Name/Summary

Render (White)

Description

Substrate
The render is applied directly to a solid masonry wall—specifically blockwork inner leaf with brick outer leaf and cavity insulation.
No evidence of any carrier board, EPS insulation, or framing behind the render was observed.

2. Render Type and Build-Up
The render is a cementitious or acrylic-based system, likely composed of the following layers:
Base coat: A thick, grey cementitious layer providing mechanical adhesion.
Mesh-reinforced scratch coat: Not exposed, but presumed typical for crack resistance.
Finish coat: A coarse-textured acrylic or polymer-modified topcoat, cream/grey in colour.

3. Fire Performance
The render system appears to be direct-to-substrate with no combustible backing.
Combined with mineral wool cavity insulation and masonry substrate, this system is non-combustible (Euroclass A1–A2-s1,d0).
No combustible detailing, intumescent trims, or polymeric expansion joints were observed.

4. Condition
Localised weathering and surface staining observed, but no visible detachment or cracking indicative of structural failure.
The drilled inspection confirmed continuous mineral wool insulation behind render.

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

The insulation is attached mechanically to the original external outer leaf

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible

Original brickwork

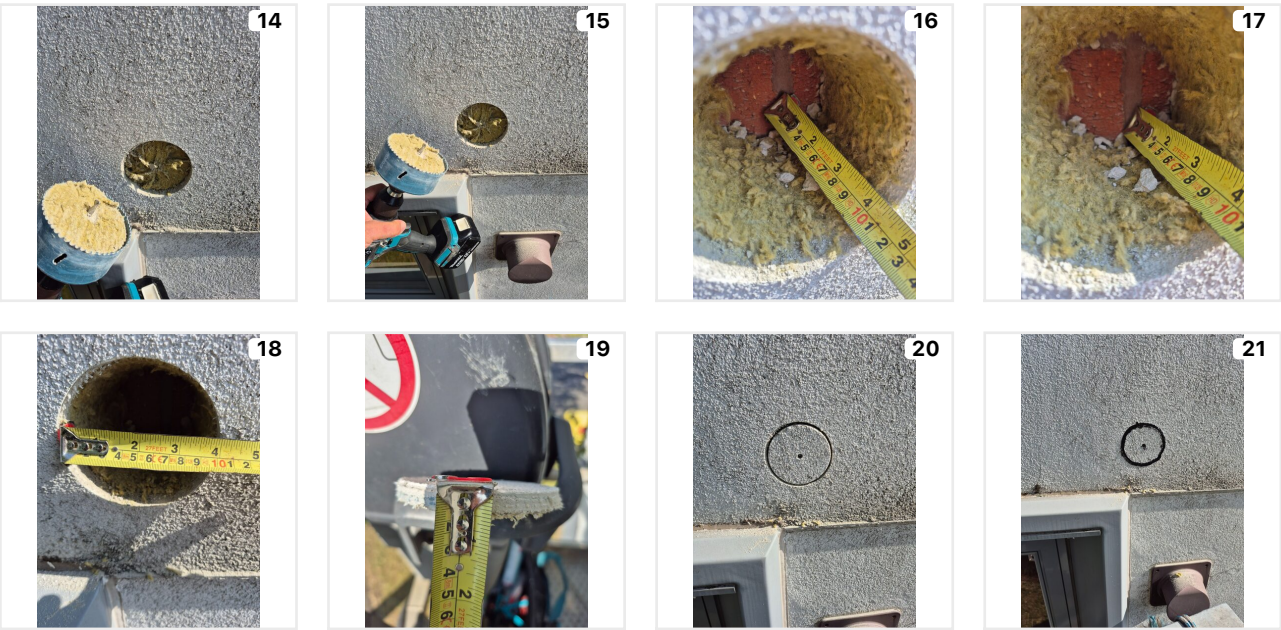
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: ZMN5VG

Elevation • Location
West Elevation • Stacked Balcony



Name/Summary

Balcony Inspection

Description

The balconies are constructed from solid, predominantly non-combustible materials and do not incorporate combustible cladding or screening. Current condition is aged but does not significantly increase external fire spread risk.

Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
External Surface Material	200mm	Concrete		A1 - Non-Combustible
Waterproof Membrane		Void: Coated concrete (possibly bituminous or painted waterproof layer); aged/worn.		B - Combustible

Cavity Barriers

No external cavity

Floor Slab

Reinforced concrete

Inspection Photos



Inspection: MTL1UD

Location
Compartment Floor and Wall Junction Interface

Name/Summary

Masonry (Brickwork)

Description

Masonry construction appears original and robust but lacks modern cavity fire barrier provision. Localised brick removal (as seen in investigative openings) confirms presence of mineral wool-type insulation, but continuity and integrity not fully verified. Surface spalling and mortar degradation observed in some areas, particularly under balconies and near service penetrations. No cladding, rainscreen systems or panelised façades present.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Traditional facing brickwork, stretcher bond, cavity wall construction.				
Cavity	75mm			
Insulation	75mm	Mineral Wool Insulation		A1 - Non-Combustible
Depth of insulation suggests partial-fill or fully-filled cavity, installed post-construction.				
Inner Leaf	100mm	Likely dense concrete block or brickwork (solid wall lining), plaster finish.		A1 - Non-Combustible

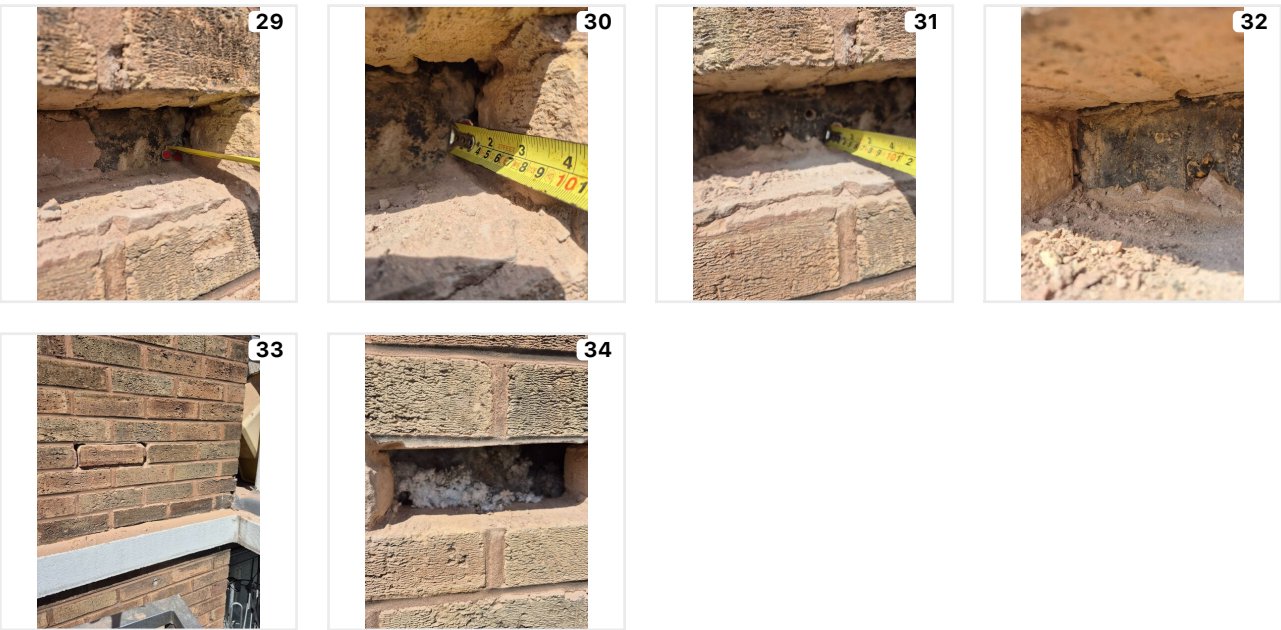
Cavity Barriers

No cavity barrier identified at this inspection location

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: 7AHY8Q

Location
Aperture Opening

Name/Summary

Masonry (Brickwork)

Description

Masonry construction appears original and robust but lacks modern cavity fire barrier provision. Localised brick removal (as seen in investigative openings) confirms presence of mineral wool-type insulation, but continuity and integrity not fully verified. Surface spalling and mortar degradation observed in some areas, particularly under balconies and near service penetrations. No cladding, rainscreen systems or panelised façades present.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Traditional facing brickwork, stretcher bond, cavity wall construction.				
Cavity	75mm			
Insulation	75mm	Mineral Wool Insulation		A1 - Non-Combustible
Depth of insulation suggests partial-fill or fully-filled cavity, installed post-construction.				
Inner Leaf	100mm	Likely dense concrete block or brickwork (solid wall lining), plaster finish.		A1 - Non-Combustible

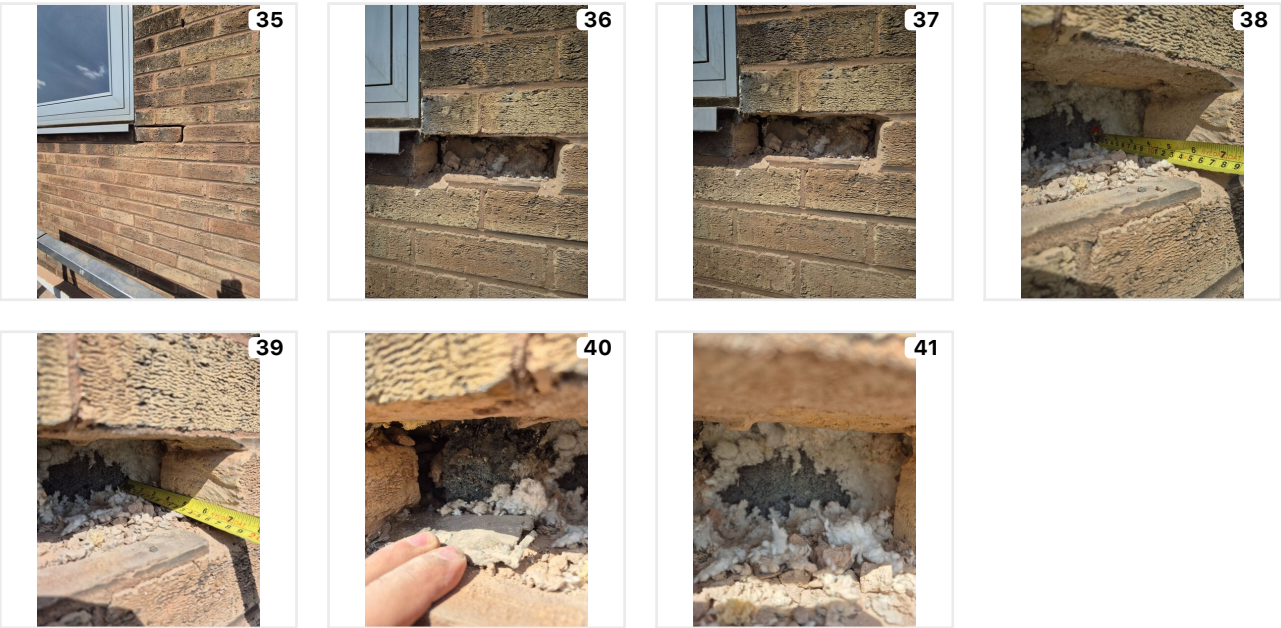
Cavity Barriers

No cavity barrier identified at this inspection location

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: 3ST48B

Location
Compartment Floor Junction

Name/Summary

Render (White)

Description

Substrate
The render is applied directly to a solid masonry wall—specifically blockwork inner leaf with brick outer leaf and cavity insulation.
No evidence of any carrier board, EPS insulation, or framing behind the render was observed.

2. Render Type and Build-Up
The render is a cementitious or acrylic-based system, likely composed of the following layers:
Base coat: A thick, grey cementitious layer providing mechanical adhesion.
Mesh-reinforced scratch coat: Not exposed, but presumed typical for crack resistance.
Finish coat: A coarse-textured acrylic or polymer-modified topcoat, cream/grey in colour.

3. Fire Performance
The render system appears to be direct-to-substrate with no combustible backing.
Combined with mineral wool cavity insulation and masonry substrate, this system is non-combustible (Euroclass A1-A2-s1,d0).
No combustible detailing, intumescent trims, or polymeric expansion joints were observed.

4. Condition
Localised weathering and surface staining observed, but no visible detachment or cracking indicative of structural failure.
The drilled inspection confirmed continuous mineral wool insulation behind render.

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

The insulation is attached mechanically to the original external outer leaf

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible

Original brickwork

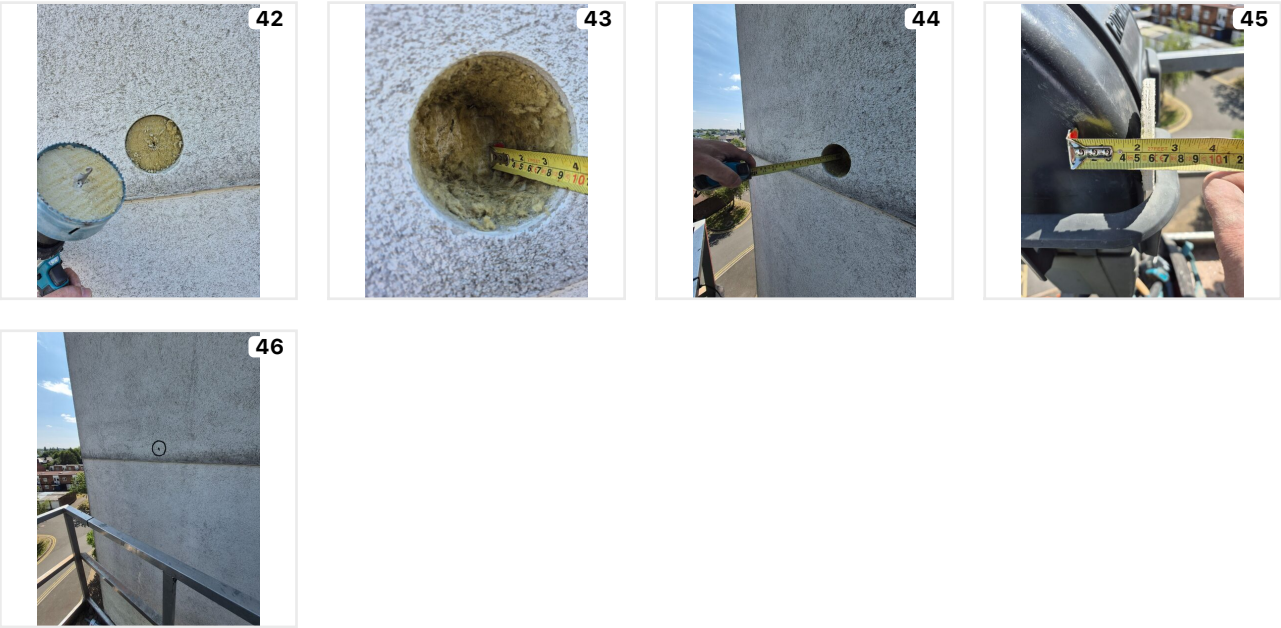
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: CTNZYE

Location
Aperture Opening

Name/Summary

Render (White)

Description

Substrate
The render is applied directly to a solid masonry wall—specifically blockwork inner leaf with brick outer leaf and cavity insulation.
No evidence of any carrier board, EPS insulation, or framing behind the render was observed.

2. Render Type and Build-Up
The render is a cementitious or acrylic-based system, likely composed of the following layers:
Base coat: A thick, grey cementitious layer providing mechanical adhesion.
Mesh-reinforced scratch coat: Not exposed, but presumed typical for crack resistance.
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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

The insulation is attached mechanically to the original external outer leaf

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible

Original brickwork

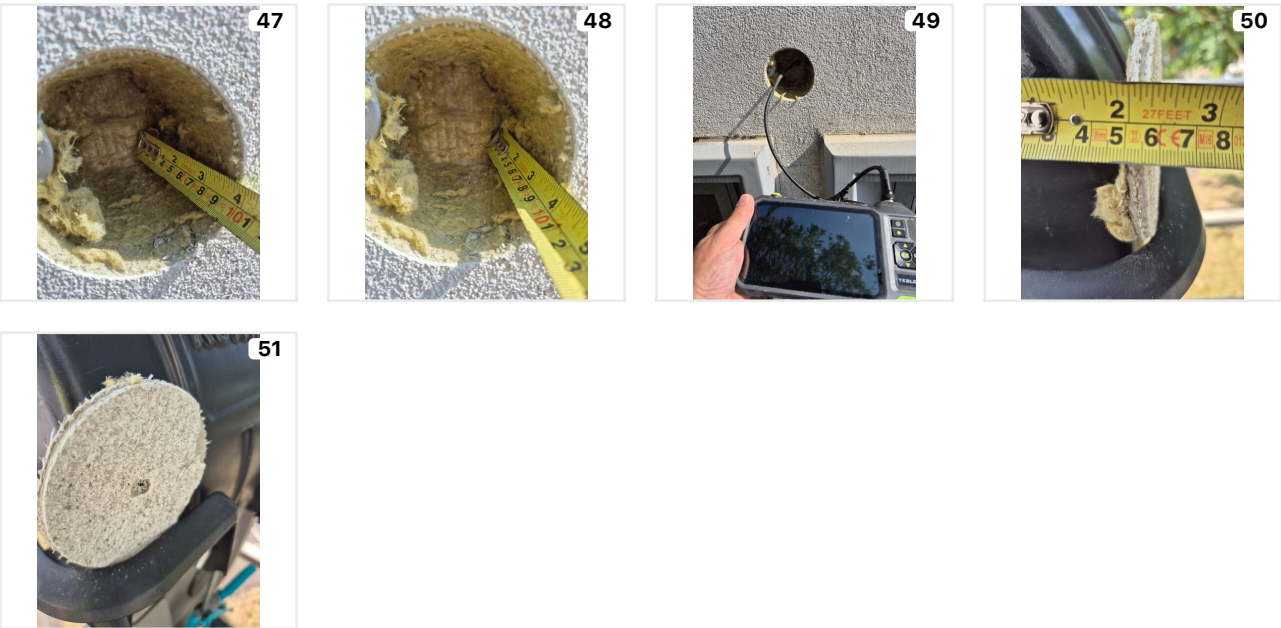
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: IUFT8X

Location
Compartment Floor and Wall Junction Interface

Name/Summary

Masonry (Brickwork)

Description

Masonry construction appears original and robust but lacks modern cavity fire barrier provision. Localised brick removal (as seen in investigative openings) confirms presence of mineral wool-type insulation, but continuity and integrity not fully verified. Surface spalling and mortar degradation observed in some areas, particularly under balconies and near service penetrations. No cladding, rainscreen systems or panelised façades present.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Traditional facing brickwork, stretcher bond, cavity wall construction.				
Cavity	75mm			
Insulation	75mm	Mineral Wool Insulation		A1 - Non-Combustible
Depth of insulation suggests partial-fill or fully-filled cavity, installed post-construction.				
Inner Leaf	100mm	Likely dense concrete block or brickwork (solid wall lining), plaster finish.		A1 - Non-Combustible

Cavity Barriers

No cavity barrier identified at this inspection location

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: M3MYW7

Location
Vertical section external to staircore

Name/Summary

Brickwork and Render over Brickwork (Vertical section external to staircore)

Description

Masonry construction appears original and robust but lacks modern cavity fire barrier provision.
Localised borescope confirms no insulation within cavity at survey location
Surface spalling and mortar degradation observed in some areas, particularly under windows.
No cladding, rainscreen systems or panelised façades present.

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm			A1 - Non-Combustible
Traditional facing brickwork, stretcher bond, cavity wall construction.				
Cavity	75mm	Void: no cavity fill was found		
Inner Leaf	100mm	Likely dense concrete block or brickwork (solid wall lining), plaster finish.		A1 - Non-Combustible

Cavity Barriers

No cavity barrier identified at this inspection location

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Attachments & Balconies

Photo

Attachment



Cantilever Balcony (1RDMCQ)

Configuration: Stacked

Size: Private balcony spanning only a single compartment

Attachment: Cantilever Balcony

Attachment Reference
1RDMCQ

Details

Configuration

Stacked

Size

Private balcony spanning only a single compartment

Framework/Structure

Reinforced concrete framework extension of the floor slab

Handrail

steel

Balustrade

wired glazing

Soffit

Concrete

Details

General Configuration

All flats are served by projecting private balconies to front and rear elevations.

Balconies are typically provided to the living room elevation via double-glazed doors.

Structural Components

Balcony slabs are constructed from cast in-situ reinforced concrete, integrally tied into the floor slab.

Soffits and top surfaces exhibit signs of localised weathering but remain functionally intact.

There is no evidence of balcony boxing, voids, or underside cladding.

Balustrade System

Balustrades comprise:

Galvanised steel frame uprights with a welded tubular steel top rail.

Opaque textured infill panels, likely wired glass or fibre-reinforced polycarbonate, mounted in steel channels.

No timber, aluminium composite material (ACM), high-pressure laminate (HPL), or uPVC components observed.

Fixings and Penetrations

Steel balustrades are mechanically fixed through the slab edges using baseplates.

There is no evidence of combustible packers, gaskets, or untreated sealants at fixing locations.

Balustrade connections appear continuous and non-combustible in composition and finish.

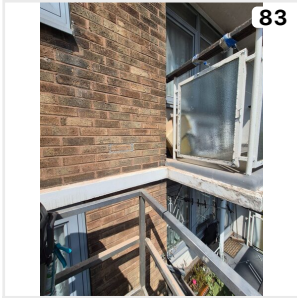
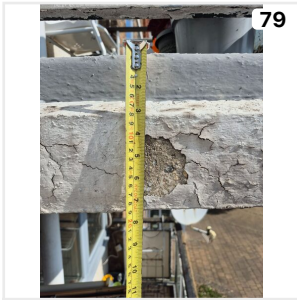
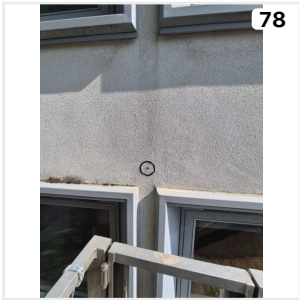
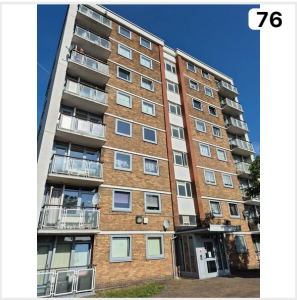
Combustibility Assessment (PAS 9980:2022 Criteria)

No combustible materials identified within balcony construction.

No applied finishes, decking, or screens were present that would contribute to vertical or horizontal fire spread.

Balconies are considered non-contributory to external fire spread risk under PAS 9980:2022 methodology.

Photos



External Windows

Photo

External Window



Top, Mid, Side Hung Casements (RNEQTF)

External Window: Top, Mid, Side Hung Casements

External Window Reference
RNEQTF

Details

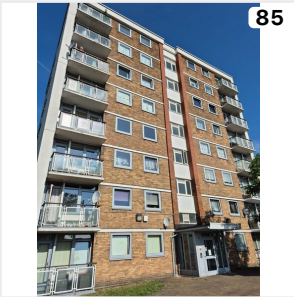
Surface Material

Aluminium

Frame Material

Timber

Photos



External Doors

Photo

External Door



Single Leaf Door (WEWW2B)

External Door: Single Leaf Door

External Door Reference
WEWW2B

Details

Surface Material

Aluminium

Frame Material

Aluminium

Infill / Panel Material

Glazing

Details

Door Set Construction

The entrance is formed of a double leaf aluminium framed door set, part of a full-height aluminium and glazed access screen.

Door and side panel glazing appear to be laminated safety glass within metal rebates.

The system includes a polycarbonate or aluminium canopy fixed overhead for weather protection.

Security System

The door is fitted with:

A functional coded keypad entry system.

Audio-based intercom unit with integrated call buttons.

Magnetic strike plate and solenoid for electronic access release.

Emergency Fire Brigade override switch positioned adjacent to the entry system.

This provides secure access control to communal areas in line with residential risk expectations.

Condition and Integrity

The door set is in a generally fair condition.

Cosmetic surface rust is visible around the override switch plate and panel screws, suggesting minor age-related weathering but no evident compromise to structure or security.

Doors self-close and latch effectively.

Fire Safety and Access Provisions

While the system provides secure access, no internal fire door set is visible immediately beyond the lobby area from external review.

No evidence of fire-rated glazing or intumescent seals on the entrance screen itself—further internal review may be warranted if the screen forms part of a protected route.

Photos



General Observations

The following general observations were made during the Step 1 Fire Risk Appraisal of External Walls (FRAEW) conducted on 18/06/2025 at 1-32 Horton Street, Tipton. These observations support the overall assessment under PAS 9980:2022:

1. External Wall Construction

The building is of traditional masonry construction with brick outer leaf, cavity insulation, and block inner leaf. Drilled inspections confirmed the presence of mineral wool insulation within the cavity, with no evidence of combustible cladding, membranes, or rain-screen systems.

No cavity trays or barriers containing combustible components were identified.

Portions of the façade are finished with a cementitious/acrylic render, applied directly to the masonry substrate—also confirmed to be non-combustible.

2. Balcony Structures

Balconies are constructed of projecting concrete slabs with non-combustible balustrades formed of painted steel framing and Georgian wired glass panels.

Handrails and supports are metallic and visibly aged but remain structurally stable.

No timber decking, uPVC panelling, or plastic screening was identified on or around balconies.

There is no continuity of combustible elements between balconies that would support external fire spread.

3. External Features

Windows are modern uPVC with sealed units; these are not considered a route for significant external fire spread.

There is no evidence of overhanging eaves, combustible soffits, or decorative external projections.

Roof not visible from inspection point—no data obtained on roofing membrane or construction.

4. Access and Fire Safety Features

The building is fitted with an electronic entry system with a functioning fireman's override switch at the main entrance.

Access for Fire and Rescue appears to be adequate from the street, with clear hardstanding and access to all elevations.

External signage was present, but minor wear and illegibility was noted on some notices.

5. Maintenance and Condition

Overall façade condition is serviceable, though signs of localised corrosion and paint deterioration were noted at balcony balustrades and door frames.

There is no visible indication of historic fire damage, structural cracking, or render failure.

Site appears reasonably well maintained, with no significant fire loading observed in the vicinity of the building.

Conclusion

The general condition and construction of the building do not present a significant external fire spread risk. The absence of combustible materials, along with robust masonry and mineral wool construction, supports a low fire risk rating from an external wall perspective. No further investigation or remediation is currently recommended.

Plan: East Elevation



Plan: South Elevation



Plan: West Elevation



Photos



Photos Continued...



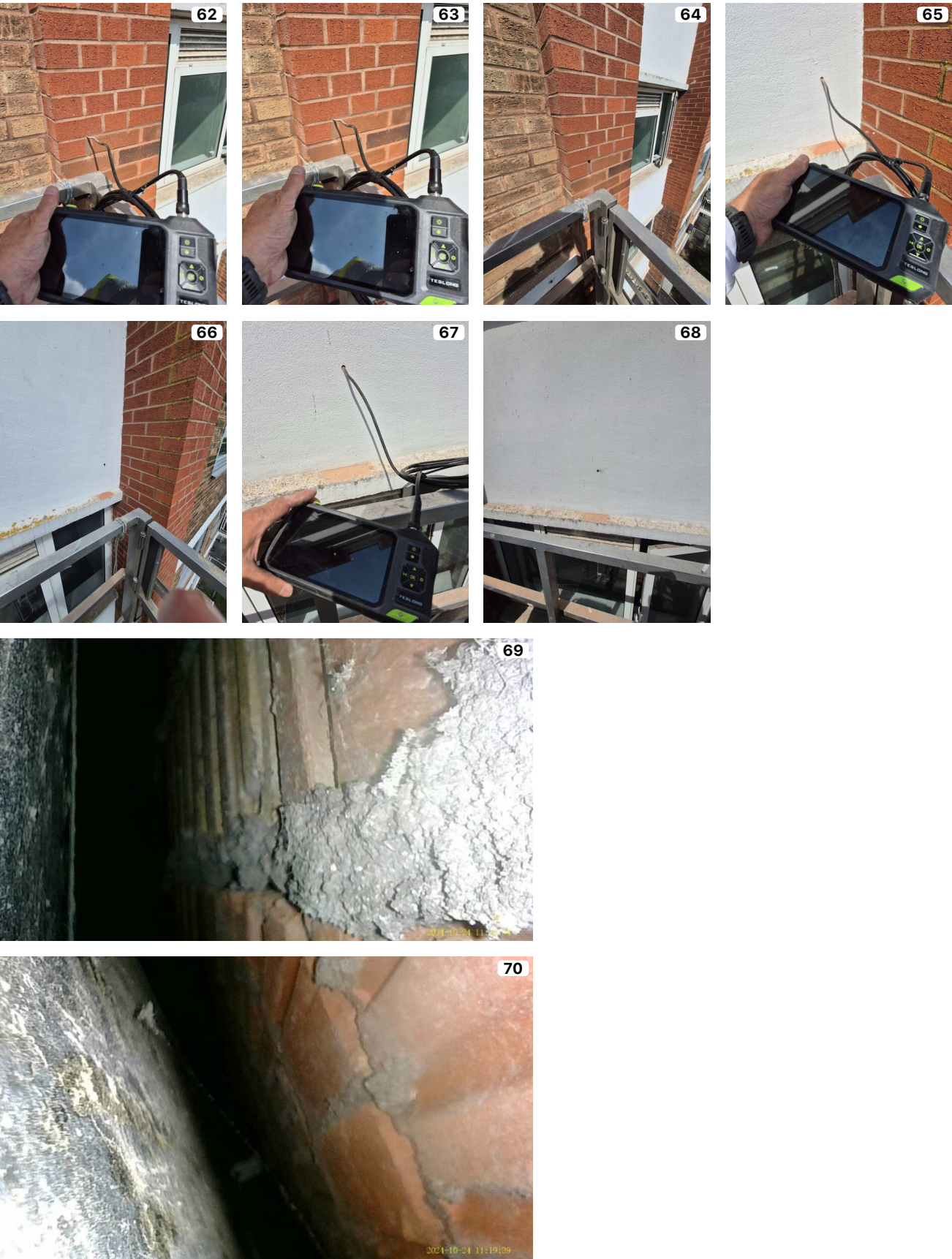
Photos Continued...



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