



FIRNTEC
BUILDING COMPLIANCE

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

Document Version 6

Survey Date 05/12/2024

Suggested Review Date 05/12/2029

EXTERNAL WALL SURVEY

HAMSTEAD HOUSE

Hamstead House
Coniston Crescent
Hamstead
West Midlands
B43 5NU



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Summary

External Wall Survey

Assessment and Certificate Reference

RB-5UWUEU

Assessed On, By

05/12/2024, Haydn Roberts

Recommended Review Date

05/12/2029

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

Hamstead House

Property Reference

RB-CU2Z9Y

Address

Hamstead House
Coniston Crescent
Hamstead
West Midlands
B43 5NU

Assessing Organisation

Firntec Ltd

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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 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 and as per the building's FRA, 'The status panel is on the left-hand wall in the entrance lobby.'

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 within 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

As per the building's FRA - Fire hydrant is located at the rear entry/exit to the building within approximately 2m of the door.

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

1961

Building Height

Approximately 30m 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)

11

Number of Flats

84

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)

Marley (fibre cement) board to balconies (A2), Alumasc Insulated Rockwool render (A2)- brick

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

168

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

2

Number Of Final Exits

4

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

Current Evacuation Strategy for the property considered appropriate?

Yes

Description

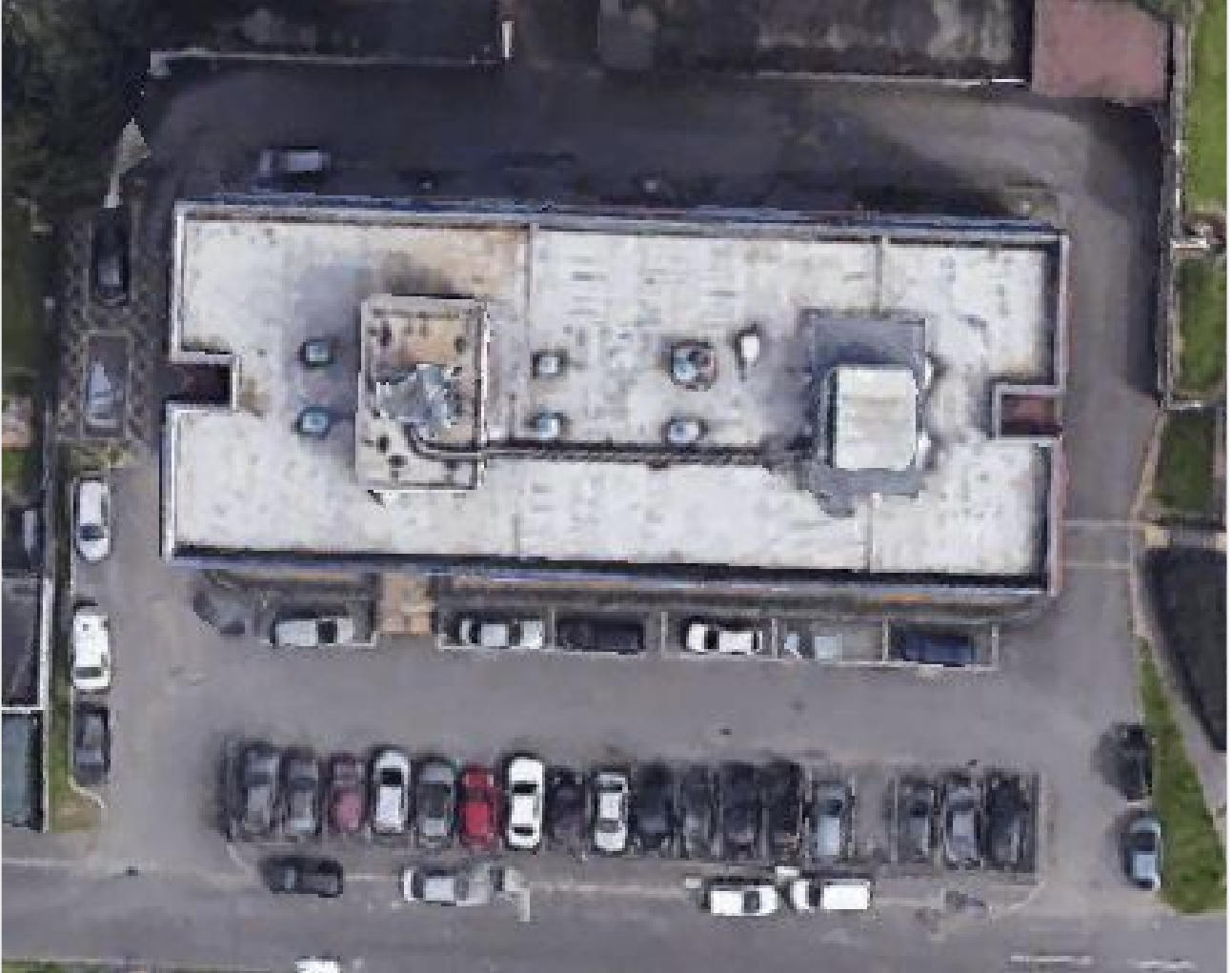
The premises is purpose-built with an adequate standard of compartmentation. The current Stay Put evacuation strategy is considered appropriate.

What is the recommended evacuation strategy for the property?

Stay Put

Aerial Perspective: Hamstead House

Aerial Perspective (picture sourced from Google Earth)



Elevations

Photo	Name	No. of Storeys
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South Elevation

11 Storeys



West Elevation

11 Storeys



East Elevation

11 Storeys



North Elevation

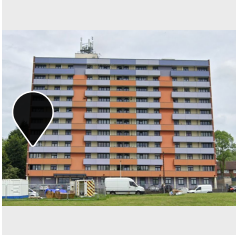
11 Storeys

Inspections

Elevation Location

Inspection

Elements

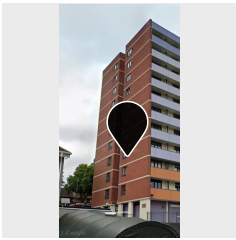


Inspection: 4UWETN

South Elevation

Accessible wall/Parapet/balcony cladding

- Surface Finish (Cement board)
- Cavity
- Inner Leaf (Reinforced concrete finished with ceramic tiles)

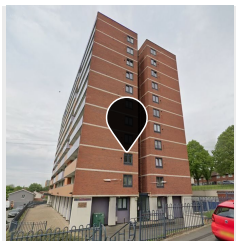


Inspection: EAQZI5

West Elevation

Window Aperture

- Outer leaf
- Cavity
- Insulation (PIR Insulation)
- Inner Leaf (Blockwork)

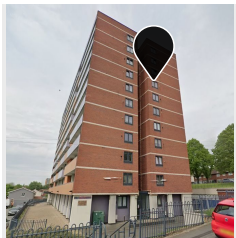


Inspection: YF5545

East Elevation

Compartment Floor & Window Aperture

- Surface Finish (Brickwork)
- Cavity
- Insulation (PIR Insulation)
- Inner Leaf (Blockwork)

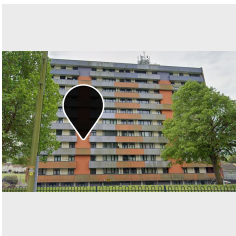


Inspection: USMYCL

East Elevation

Compartment Floor & Window Aperture

- Surface Finish (Brickwork)
- Cavity
- Insulation (PIR Insulation)
- Inner Leaf (Blockwork)

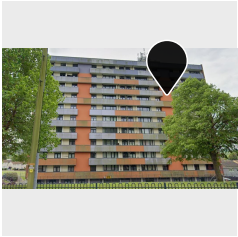
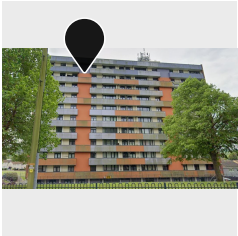


Inspection: 6G99NL

North Elevation

Compartment Floor & Vertical Junction

- Surface Finish (Render)
- Insulation (Mineral Wool Insulation)
- Cavity
- Inner Leaf (Reinforced concrete)

Elevation Location	Inspection	Elements
	Inspection: DJ9KT3 North Elevation Compartment Floor & Vertical Junction	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf (Reinforced concrete)
	Inspection: XHBA1E North Elevation Compartment Floor & Vertical Junction	• Surface Finish (Render) • Insulation (Mineral Wool Insulation) • Inner Leaf (Reinforced concrete)

Inspection: 4UWETN

Elevation • Location
South Elevation • Accessible wall/Parapet/balcony cladding



Name/Summary

Sample Area 1

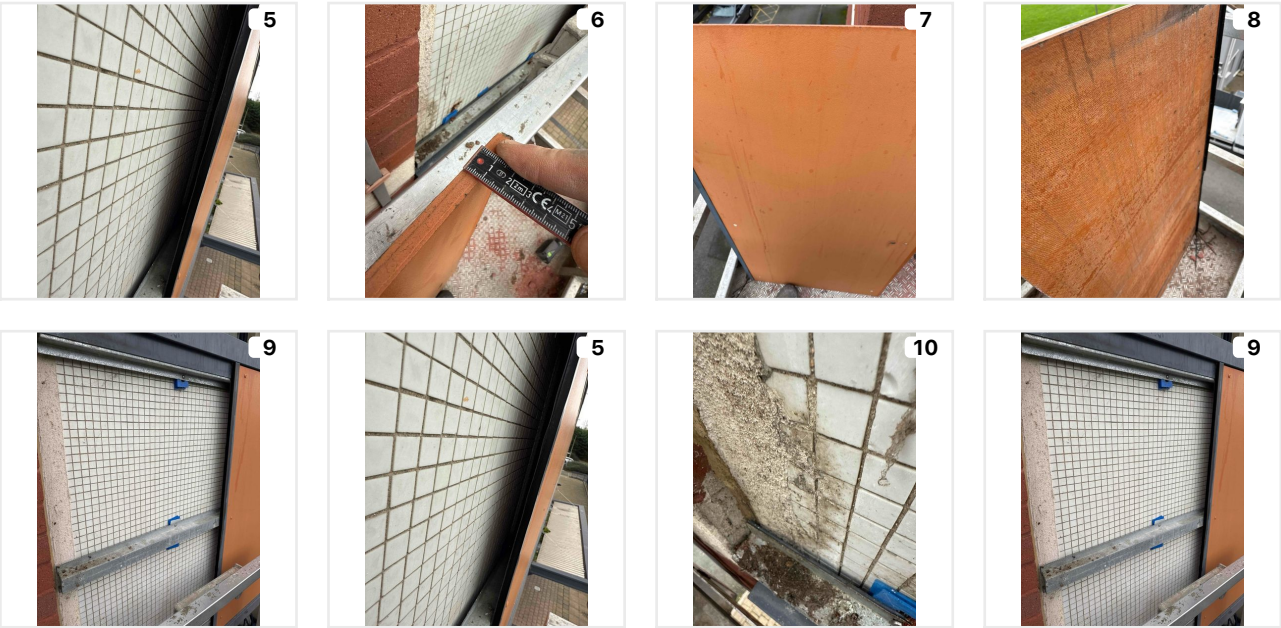
Description

Balcony is concrete and over clad
Cement board fixed to steel brackets what are fixed to concrete parapet wall
All balconies are concrete up stand parapet wall and all covered with cement board in 2 colours
Concrete parapet is sat on slab edge

Build-Up

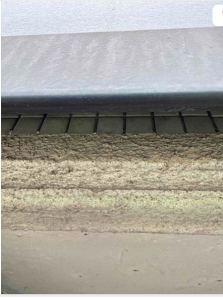
3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	10mm	Cement board	5, 6, 7, 8, 9	A1 - Non-Combustible
Cement board fixed to steel brackets what are fixed to concrete parapet wall				
Cavity			5	
Inner Leaf		Reinforced concrete finished with ceramic tiles	10, 9	A1 - Non-Combustible

Build-up Photos



Inspection Photos





Inspection: EAQZI5

Elevation • Location
West Elevation • Window Aperture



Name/Summary

Sample Area 2

Description

Plastic cavity closer to window jam at bottom expanding foam in corner joint

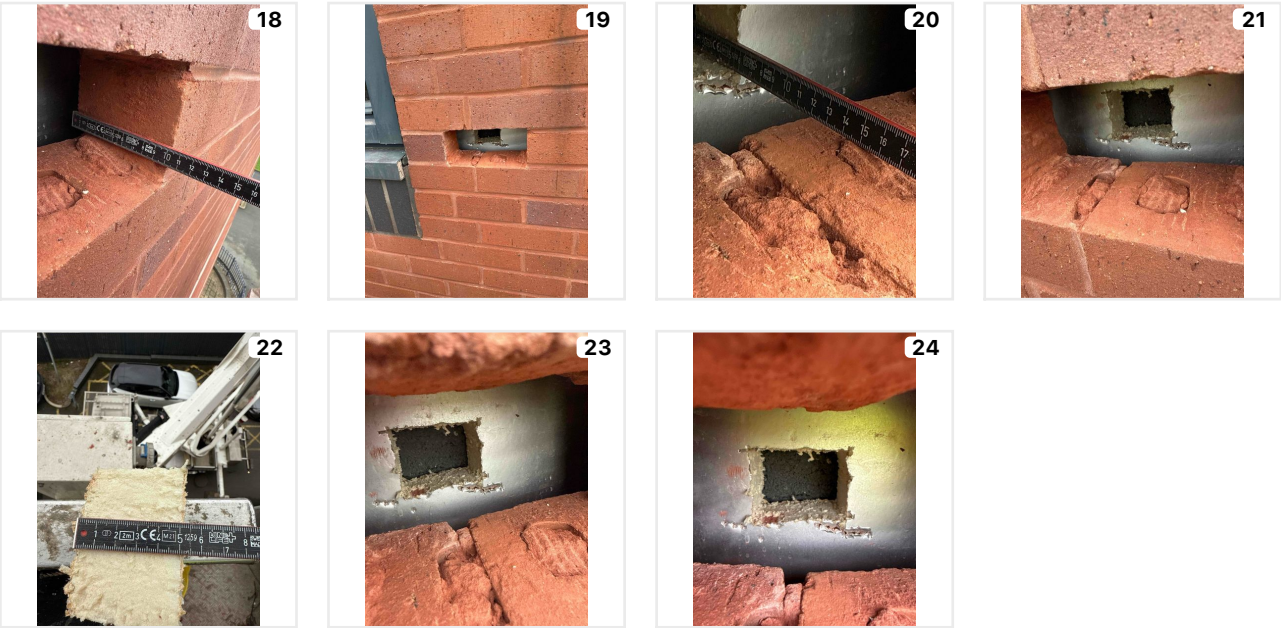
Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Outer leaf	100mm		18, 19	A1 - Non-Combustible
Brick				
Cavity	120mm		20, 21	
Insulation	50mm	PIR Insulation	22, 23	C - Combustible
Inner Leaf	100mm	Blockwork	24	A1 - Non-Combustible

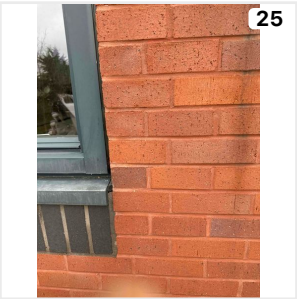
Floor Slab

Reinforced concrete

Build-up Photos



Inspection Photos



Inspection: YF5545

Elevation • Location
East Elevation • Compartment Floor & Window Aperture



Name/Summary

Sample Area 3

Description

Slab comes to front edge of brick
Plastic cavity closer around window

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	100mm	Brickwork	26, 27	A1 - Non-Combustible
Brick				
Cavity	150mm		28, 29	
Insulation	50mm	PIR Insulation	30, 31	C - Combustible
50mm Pir				
Inner Leaf	100mm	Blockwork	32, 33	A1 - Non-Combustible

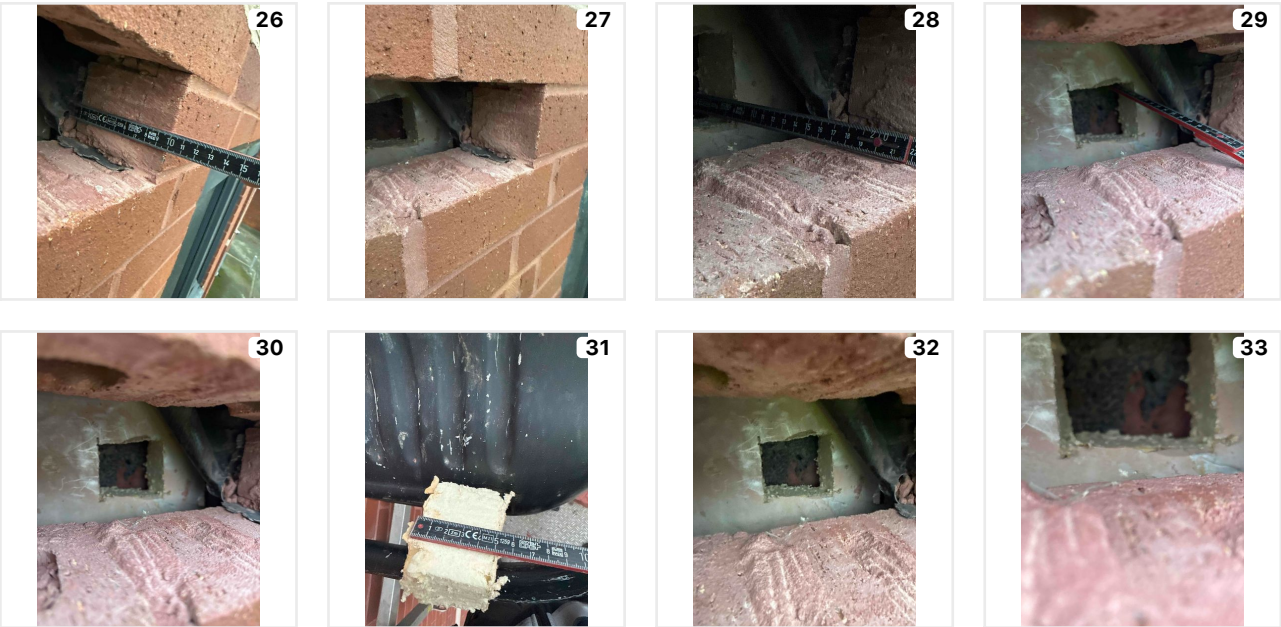
Cavity Barriers

None

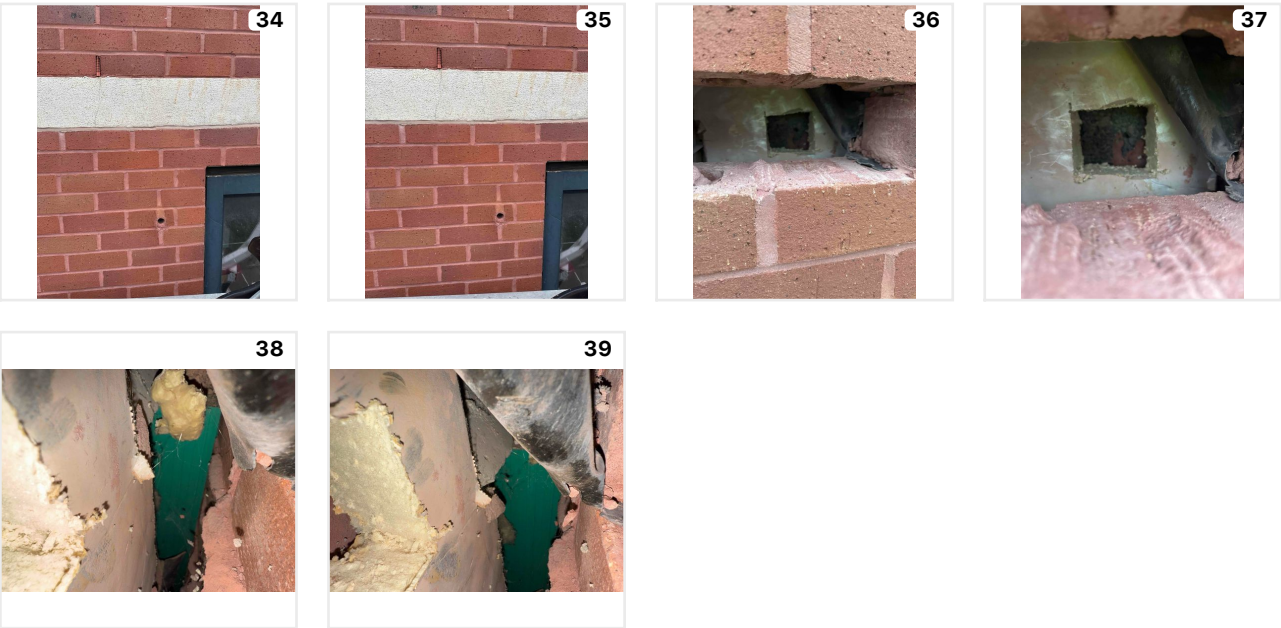
Floor Slab

Outside and backing walls sit on the floor slab

Build-up Photos



Inspection Photos



Inspection: USMYCL

Elevation • Location
East Elevation • Compartment Floor & Window Aperture



Name/Summary

Sample Area 4

Description

Slab comes to front edge of brick
Plastic cavity closer to window jam

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	100mm	Brickwork	40, 41, 42	A1 - Non-Combustible
Brick				
Cavity	110mm		43, 44, 45	
Insulation	50mm	PIR Insulation	46, 47	C - Combustible
Inner Leaf	100mm	Blockwork	48	A1 - Non-Combustible

Cavity Barriers

None

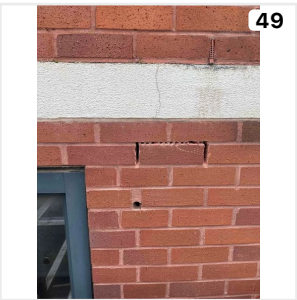
Floor Slab

Outside and backing walls sit on the floor slab

Build-up Photos



Inspection Photos



Inspection: 6G99NL

Elevation • Location
North Elevation • Compartment Floor & Vertical Junction



Name/Summary

Sample Area 5

Description

Moved pin up due to can't access due to machine to close
Concrete blade column over board with rockwool and render

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
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Surface Finish	8mm	Render Material Brand: Sto	50, 51, 52, 53	A1 - Non-Combustible
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Render on rockwool

Insulation	95mm	Mineral Wool Insulation Material Brand: Rockwool	54, 55	A1 - Non-Combustible
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Cavity	40mm		56	
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Inner Leaf		Reinforced concrete	57, 58	A1 - Non-Combustible
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Concrete blade column

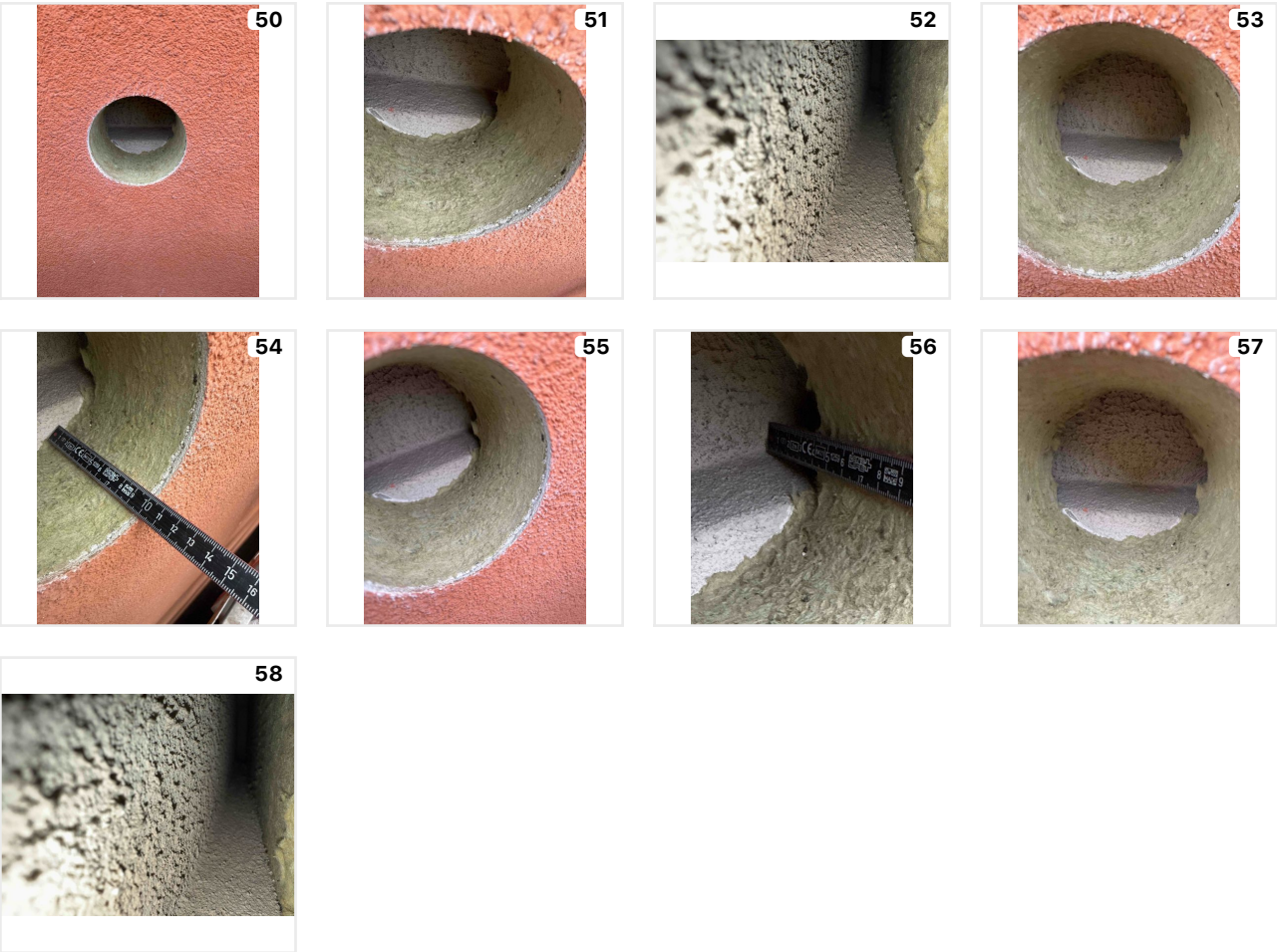
Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Build-up Photos

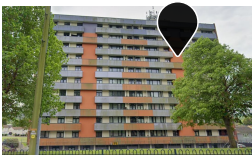


Inspection Photos



Inspection: DJ9KT3

Elevation • Location
North Elevation • Compartment Floor & Vertical Junction



Name/Summary

Sample Area 6

Description

Rockwool to slab and blade column

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	8mm	Render Material Brand: Sto	60, 61	A1 - Non-Combustible
Render on rockwool to slab				
Insulation	95mm	Mineral Wool Insulation Material Brand: Rockwool	62, 63, 64	A1 - Non-Combustible
Render to rockwool to slab no gap behind rockwool				
Inner Leaf		Reinforced concrete	63	A1 - Non-Combustible

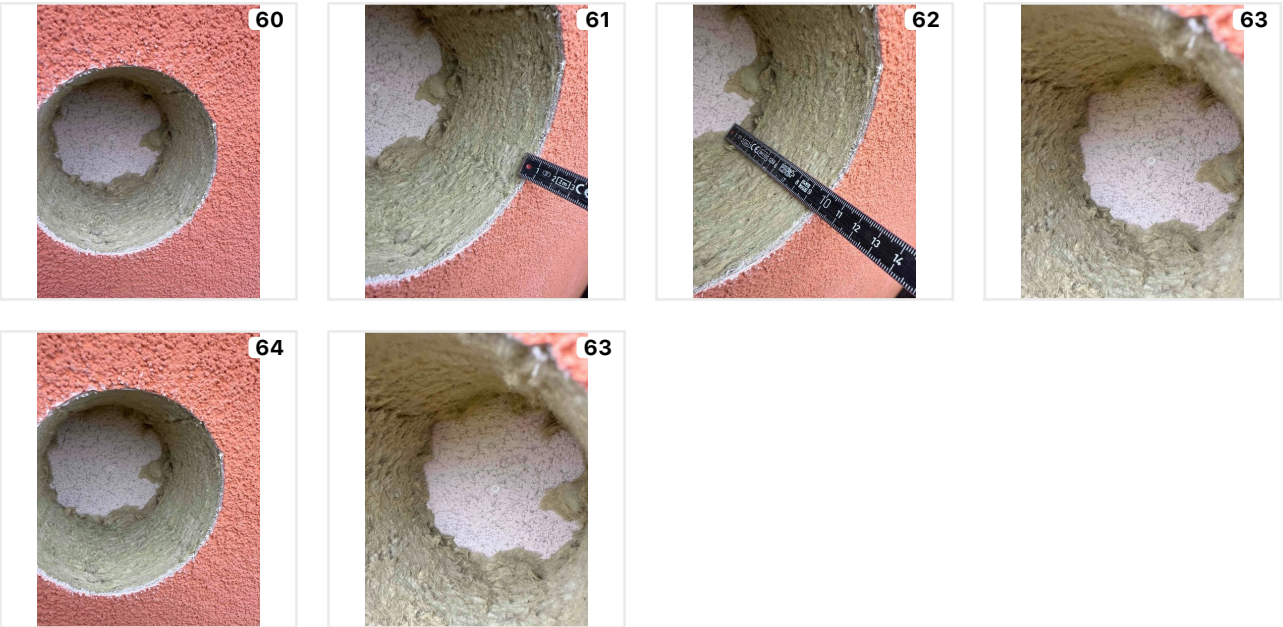
Cavity Barriers

None

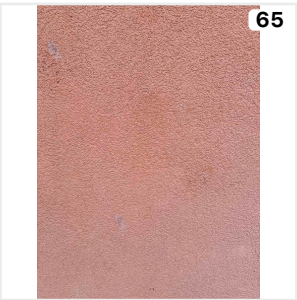
Floor Slab

Backing Wall Sits On The Floor Slab

Build-up Photos



Inspection Photos



Inspection: XHBA1E

Elevation • Location
North Elevation • Compartment Floor & Vertical Junction



Name/Summary

Sample Area 7

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	8mm	Render Material Brand: Sto	66, 67	A1 - Non-Combustible
Render on rockwool				
Insulation	95mm	Mineral Wool Insulation Material Brand: Rockwool	68, 69, 70	A1 - Non-Combustible
Render on rockwool then at slab level No gap behind rockwool				
Inner Leaf		Reinforced concrete	63	A1 - Non-Combustible

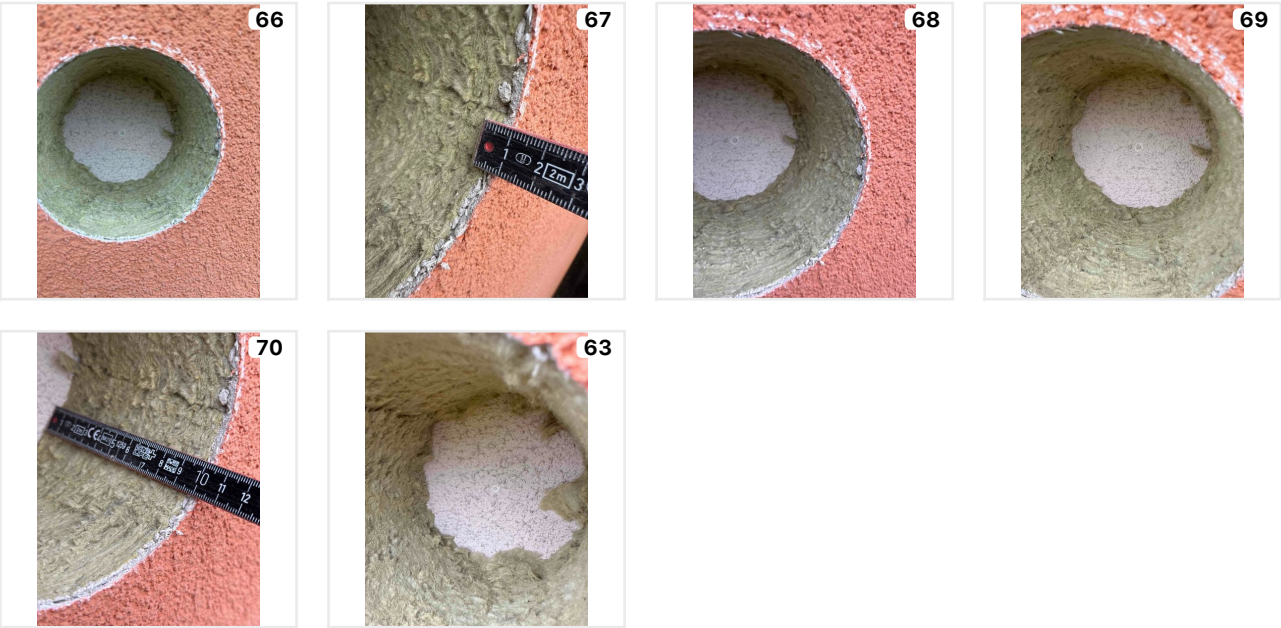
Cavity Barriers

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

Floor Slab

Floor Slab Abuts The Backing Wall

Build-up Photos



Inspection Photos



Attachments & Balconies

Photo

Attachment



Inset Balcony (1SWSKD)

Configuration: Inset

Size: Open deck which spans multiple compartments

Attachment: Inset Balcony

Attachment Reference
1SWSKD

Details

Configuration

Inset

Size

Open deck which spans multiple compartments

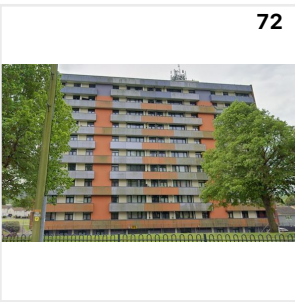
Framework/Structure

Reinforced concrete framework with inset balconies

Soffit

Concrete

Photos



External Windows

Photo

External Window



Top, Mid, Side Hung Casements (ZIN1KB)

External Window: Top, Mid, Side Hung Casements

External Window Reference
ZIN1KB

Details

Surface Material

uPVC

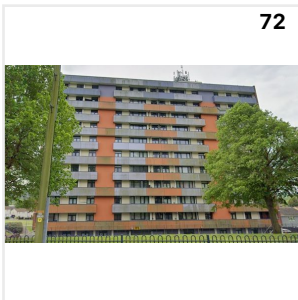
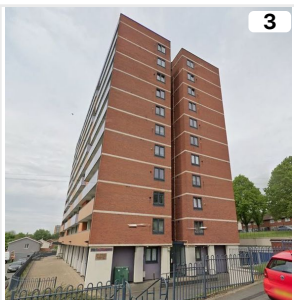
Frame Material

uPVC

Infill / Panel Material

Toughened Glass

Photos



Plan: South Elevation



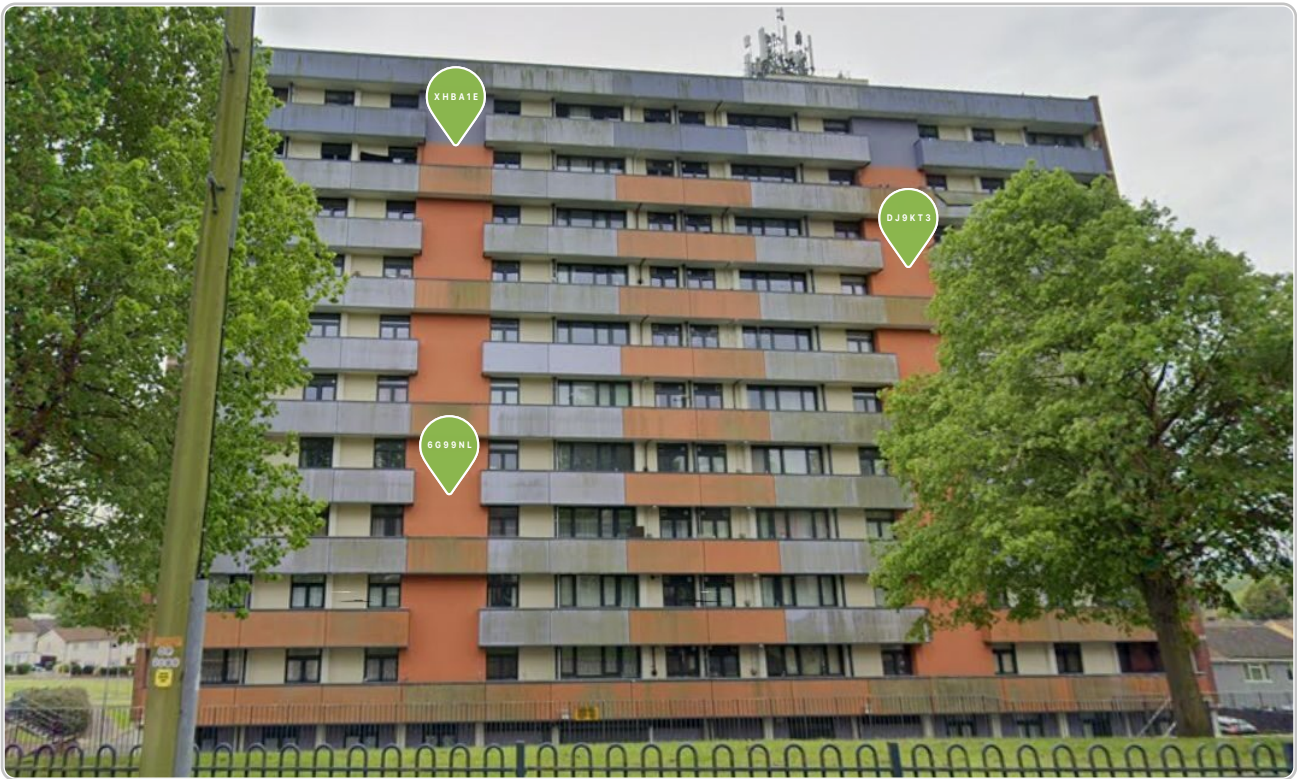
Plan: West Elevation



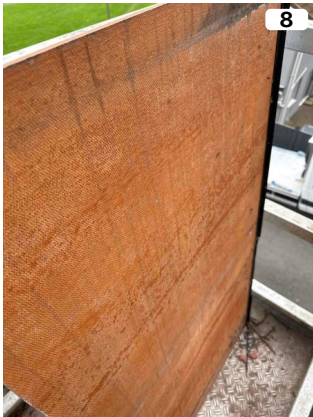
Plan: East Elevation



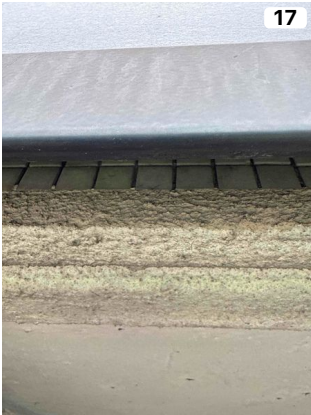
Plan: North Elevation



Photos



Photos Continued...



Photos Continued...



Photos Continued...



Photos Continued...



Photos Continued...





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