



FIRNTEC
BUILDING COMPLIANCE

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

Document Version 5

Survey Date 28/07/2024

Suggested Review Date 28/07/2025

PAS 9980 STEP 1

ST MARYS

St Mary's House
Summer Street
West Brom
B71 4HZ



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Summary

PAS 9980 Step 1

Assessment and Certificate Reference

RB-19AE15

Assessed On, By

28/07/2024,

Alex Dodd EngTech MinstRE (Lead Facade Consultant)

Douglas Murray (Building Safety Consultant)

(BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA)

Produced For the Responsible Person

Sandwell Metropolitan Borough Council

Specification Conforms To

Our own internal quality system.

Assessment Scope

Assessment applies only to the building specified.

Recommended Review Date

28/07/2025

Assessed Property

Property Name

St Marys

Property Reference

RB-XSMGLL

Address

St Mary's House

Summer Street

West Brom

B71 4HZ

Assessing Organisation

Firntec Ltd

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

0345 646 1566 — www.firntec.com

Assessor Remarks

The development of St Marys House was commissioned by West Bromwich County Borough Council 1966, and building work was awarded to the contractors Wates who completed building work 1967. The building comprises of 17 floors including ground and houses 66 individual self contained flats.

The present day authority is Sandwell Metropolitan Borough Council.

The structure appears to be of reinforced concrete frame with reinforced staircores, lift core, floor slabs and foundations. The external walls are formed from a hand laid brick outer leaf and an internal leaf of concrete blockwork with projecting balconies on all occupied floors.

A cladding system and other improvement work went ahead in 2002 (planning reference DD/02/38700). The work focused on external refurbishments including installation of a solid aluminium polyester powder coated rainscreen cladding system, replacement Polyester Powder Coated (PPC) windows and front entrance porch, and internal alterations which are not listed.

The external brick leaf cavity was found to have rigid Polyunsaturate (PIR) or Polyurethane (PUR) insulation and a mineral wool quilt insulation within rainscreen sections.

This report has been prepared for Sandwell Metropolitan Borough Council by Firntec Ltd Building Compliance. This survey has included consideration of the following pieces of legislation and other guidance relevant at the time of reporting:

The RRO (FSO) 2005

The Fire Safety Act 2021

The Building Safety Act 2022

Approved Document B of building regulations 2006

This report was prepared by Douglas Murray (BSc Building Surveying, ABBE DipFRA, AIFireE, AssocRICS, MFPA) who is a Building Surveyor with 25 years of fire related and construction experience in both new build and refurbishment projects on behalf of Firntec Ltd. Douglas is a member of the Royal Institute of Chartered Surveyors, the Institute of Fire Engineers, the Fire Protection Association, and an ABBE qualified Fire Risk Assessor. Douglas has specialised within Fire Safety and cladding investigations for eight years and has held senior posts with London and nationally based Registered Social Landlords. Douglas advises on and produces Building Safety Case Reports and has taken the lead for various clients securing, quality checking and completing Type 1-4 Fire Risk Assessments, completing Fire Risk Assessments of External Walls (FRAEW), leading on Intrusive investigative surveys, and preparing fire strategy documents. Part of the work Douglas completes, supports and evidence claims brought forward under the Defective Premises Act in the context of non-compliance and fire safety defects within multi occupancy buildings.

Abbreviation/ Term Definition

- **ACM** Aluminium Composite Material
- **ADB** Approved Document B
- **AOV** Automatic Opening Vent
- **BSA** Building Safety Act
- **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 PO Box 2374
Oldbury
B69 3DE

Responsible Person

Sandwell Metropolitan Borough Council

Safety Assistance

Not Required

Contact Details

As provided by client

Fire Alarm System

Within Flats: Smoke detection is installed to LD2 and LD3 standards. The detectors are located in various areas:

LD3: Hallways (flat 20, 38, 43, 54)

LD2: Living rooms, kitchens, and hallways (flat 43)

Communal Areas: There is no fire detection system in communal areas, due to concerns about vandalism and false alarms. However, the Stay Put Unless policy is in place for evacuation.

Emergency Lighting

Installed in communal parts

Emergency Lighting

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

Portable Fire Fighting Equipment

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

Portable Fire Fighting Equipment

Extinguisher equipment is installed within staff only / Restricted access areas of the building.

Smoke Control

Natural smoke control

Smoke Control

Automatic Opening Vents (AOVs): These are installed in the staircases to provide smoke ventilation. Specifically, AOVs are present on the 16th and 7th floors.

Smoke Ventilation: The communal staircases are protected with automatic smoke ventilation, which is maintained and tested twice yearly.

Ventilation and Access: Windows in communal areas can only be opened by operating the smoke vents with a key.

Suppression Systems

Partial sprinkler system installed (Detailed in Description)

Suppression System

A deluge 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

Dry Riser: There is a dry riser that serves the building, with the dry riser inlet located in the ground-floor dry riser cupboard. Maintenance is conducted twice yearly, with annual hydraulic testing.

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

The fire hydrant for St Marys House is within 3 metres of the building at the front door

Housekeeping

Good standard. Means of escape clear. Refuse stored appropriately

Secure Information Boxes

Secure information box (SIB) installed

Secure Information Boxes

A proprietary steel SIB is fitted within the main entrance lobby

Signage

Appropriate signage installed throughout premises

Signage

Assumed Post 2018

Property Type

Apartment Block

Building Era / Age

Known Build Date

Known Build Date

1966-1967

Building Height

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

Approx Floor Area Per Floor

The approximate footprint of St Marys House is 400m2

Number of Storeys (Ground and above)

17

Number of Basement Levels

There are no basement or lower ground floors

Number of Flats

64

Flat Types

Single Storey

Structural Wall Material

Traditional cavity brick and block build with reinforced concrete floor slabs

Structural Floor Material

Floors were found to be of reinforced concrete

Structural Stairs Material

Stairs were found to be of reinforced 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)

A cladding system and other improvement work went ahead in 2002 (planning reference DD/02/38700). The work focused on external refurbishments including installation of a solid aluminium polyester powder coated rainscreen cladding system, replacement Polyester Powder Coated (PPC) with a loose laid mineral wool insulation.

Electronic Entrance System

Yes

Carpark

External/Outdoor Carpark

Employees

None

Residents

Yes

Approx number of Residents

128

Residents (Extended)

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

People With Reduced Mobility

Other

People with Reduced Mobility (Extended)

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

Lone Workers

None

Young Persons Employed in the Premises

None

Escapes & Exits

There are sufficient fire exits from the premises of suitable width and within acceptable travel distances. Emergency exits open outwards in escape direction.

Number Of Internal Escape Stairs

The building is provided with a single escape stair

Number Of Final Exits

The building is provided with three individual escape exits

External Means Of Escape

None Present

Types Of Lifts Installed

Passenger

Evacuation Chairs Installed

No

Refuge Points Present

No

Stairwells Protected / Lobbied

Yes

Flat Doors Open Onto Stairs

No

Current Evacuation Strategy

Stay Put

Current Stay Put Strategy Description

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

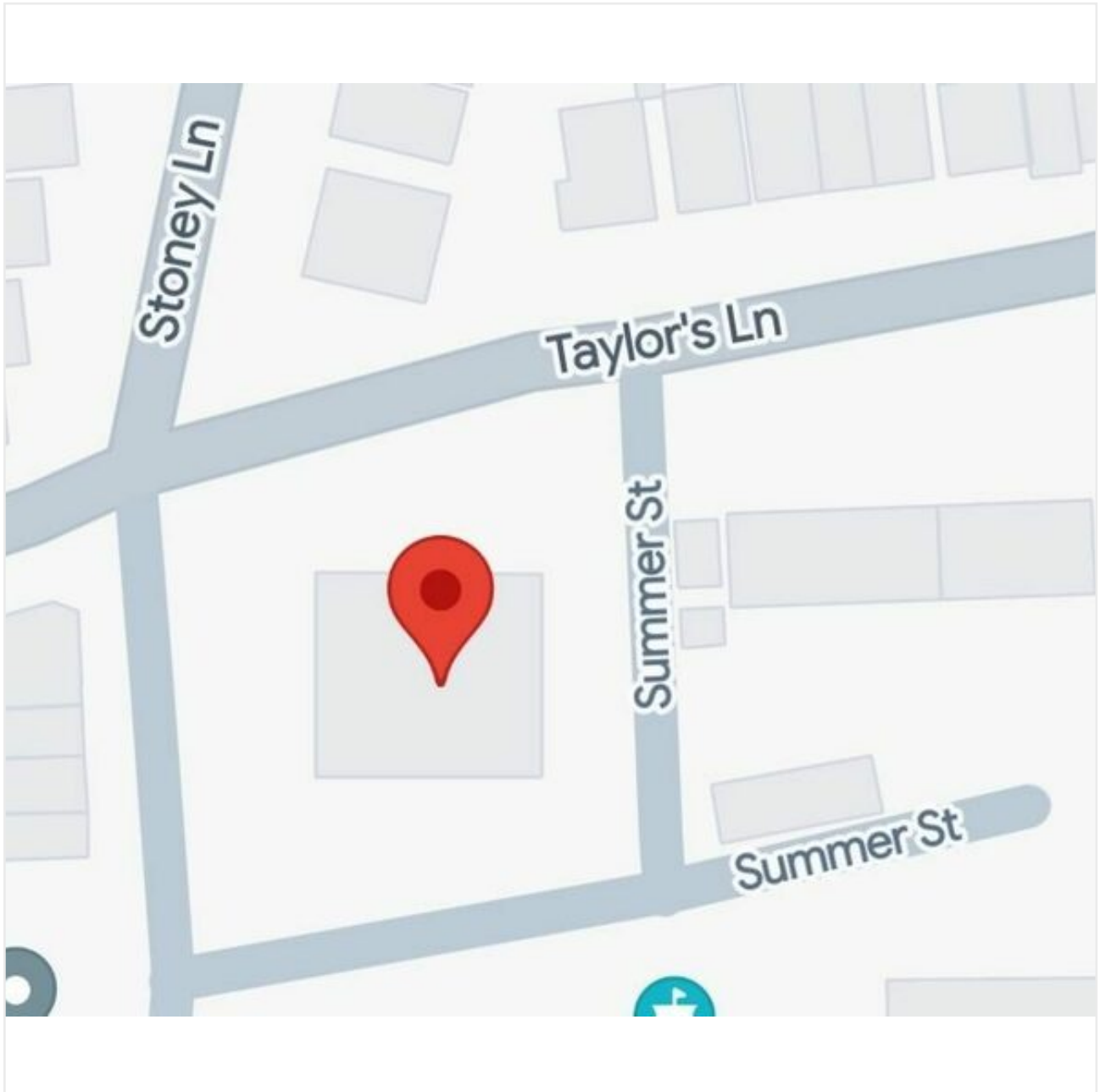
Description

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: Aerial image of St Marys House and surrounding access roads



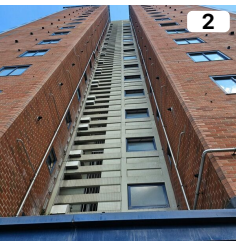
Elevations

Photo	Name	No. of Storeys
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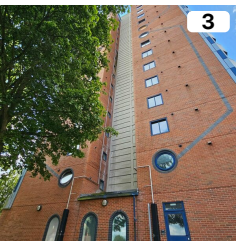
North Elevation

17 Storeys



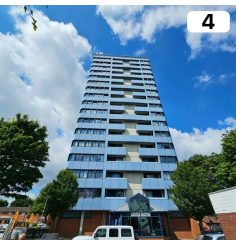
West Elevation

17 Storeys



East Elevation

17 Storeys



South Elevation

17 Storeys

Inspections

Elevation Location

Inspection

Elements



Inspection: 81TVQ4

East Elevation
Accessible wall

- Surface Finish
- Cavity
- Insulation
- Inner Leaf Support (Backing Wall)



Inspection: 1W89EG

East Elevation
Accessible wall

- Surface Finish (Powder coated solid aluminium)
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Original brickwork)



Inspection: CZ4KMH

East Elevation
Accessible roof

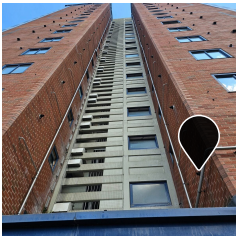
- Surface Finish (Aluminium Panel)
- Insulation (Phenolic Foam Insulation)
- Inner Leaf (Plasterboard)



Inspection: KYKWMS

East Elevation
Accessible wall

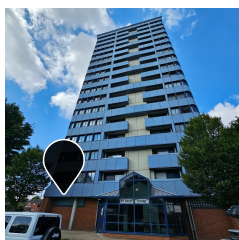
- Surface Finish
- Cavity
- Insulation
- Inner Leaf Support (Backing Wall)



Inspection: GLAESA

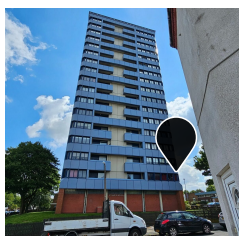
West Elevation
Accessible wall

- Surface Finish
- Cavity
- Insulation
- Inner Leaf Support (Backing Wall)

Elevation Location**Inspection****Elements**

Inspection: NDV1MP
North Elevation (Front Entrance)
Accessible wall

- Surface Finish (Powder coated solid aluminium)
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Original brickwork)



Inspection: T6U3A8
South Elevation
Accessible wall

- Surface Finish (Powder coated solid aluminium)
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Original brickwork)



Inspection: EXWDP9
East Elevation
Accessible wall

- Surface Finish
- Cavity
- Insulation
- Inner Leaf Support (Backing Wall)

Inspection: 81TVQ4

Elevation • Location
East Elevation • Accessible wall



Name/Summary

Wall Type 1 Traditional cavity brickwork with PIR/PUR insulation

Description

Showing wall tie detail and no cavity insulation

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm			A1 - Non-Combustible
Cavity	80mm			
Insulation	60mm	Material Brand: Unknown, however silver foil backed with closed cell foam inner core		B - Combustible
Inner Leaf Support (Backing Wall)	100mm			A1 - Non-Combustible

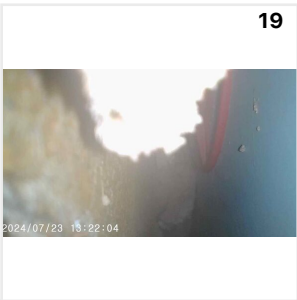
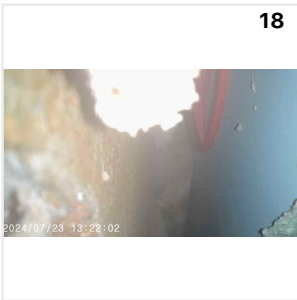
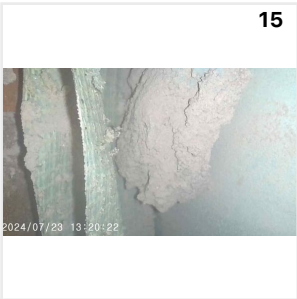
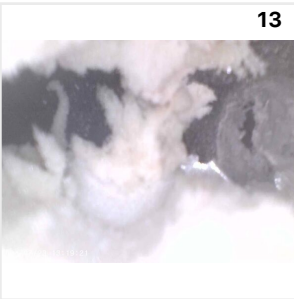
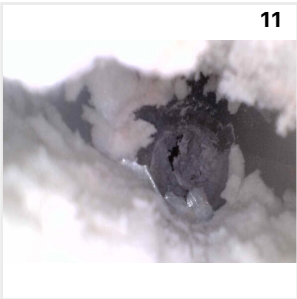
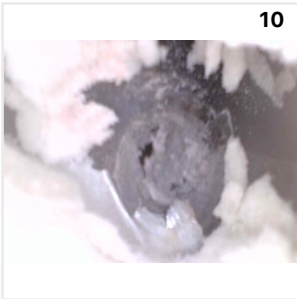
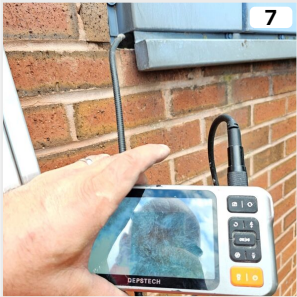
Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



21



2024/07/23 13:54:40

22



2024/07/23 13:54:55

23



2024/07/23 13:55:59

24



2024/07/23 13:57:25

Inspection: 1W89EG

Elevation • Location
East Elevation • Accessible wall



Name/Summary

Wall type 2 PPC Rainscreen cladding

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	2mm	Powder coated solid aluminium		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

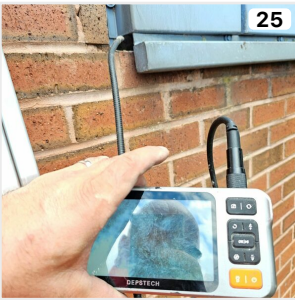
Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: CZ4KMH

Elevation • Location
East Elevation • Accessible roof



Name/Summary

Roof detail above ground floor exit

Description

Showing PIR/PUR foam insulation within roof system

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	2mm	Aluminium Panel		A1 - Non-Combustible
Insulation		Phenolic Foam Insulation		B - Combustible
Inner Leaf (Plasterboard)	125mm			A1 - Non-Combustible

Cavity Barriers

None

Inspection Photos



Inspection: KYKWMS

Elevation • Location
East Elevation • Accessible wall



Name/Summary

Wall Type 1 Traditional cavity brickwork with PIR/PUR insulation

Description

Showing wall tie detail and no cavity insulation

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm			A1 - Non-Combustible
Cavity	80mm			
Insulation	60mm	Material Brand: Unknown, however silver foil backed with closed cell foam inner core		B - Combustible
Inner Leaf Support (Backing Wall)	100mm			A1 - Non-Combustible

Cavity Barriers

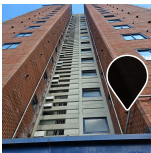
None

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: GLAESA

Elevation • Location
West Elevation • Accessible wall



Name/Summary

Wall Type 1 Traditional cavity brickwork with PIR/PUR insulation

Description

Showing wall tie detail and no cavity insulation

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm			A1 - Non-Combustible
Cavity	80mm			
Insulation	60mm	Material Brand: Unknown, however silver foil backed with closed cell foam inner core		B - Combustible
Inner Leaf Support (Backing Wall)	100mm			A1 - Non-Combustible

Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: NDV1MP

Elevation • Location
North Elevation (Front Entrance) • Accessible wall



Name/Summary

Wall type 2 PPC Rainscreen cladding

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	2mm	Powder coated solid aluminium		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: T6U3A8

Elevation • Location
South Elevation • Accessible wall



Name/Summary

Wall type 2 PPC Rainscreen cladding

Build-Up

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	2mm	Powder coated solid aluminium		A1 - Non-Combustible
Insulation	100mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

There is no external wall cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: EXWDP9

Elevation • Location
East Elevation • Accessible wall



Name/Summary

Wall Type 1 Traditional cavity brickwork with PIR/PUR insulation

Description

Showing wall tie detail and no cavity insulation

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm			A1 - Non-Combustible
Cavity	80mm			
Insulation	60mm	Material Brand: Unknown, however silver foil backed with closed cell foam inner core		B - Combustible
Inner Leaf Support (Backing Wall)	100mm			A1 - Non-Combustible

Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Attachments & Balconies

Photo

Attachment



Cantilever Balcony (49D5BX)
Configuration: Stacked

Attachment: Cantilever Balcony

Attachment Reference
49D5BX

Details

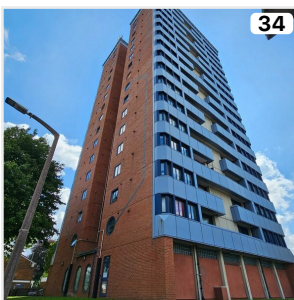
Configuration

Stacked

Framework/Structure

Balconies are formed from the original reinforced concrete walling which has subsequently been clad over circa 2002 to form additional usable space internally.

Photos



Penetrations

Photo

Penetration

No Image

Air Brick (9AIHZI)
Inspection Type: Visual

Penetration: Air Brick

Penetration Reference
9AIHZI

Details

Photo

1 Image

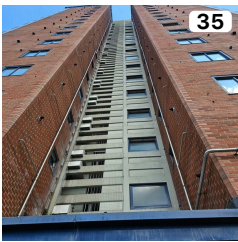
Inspection Type

Visual

External Windows

Photo

External Window



YZNGDA

External Window: YZNGDA

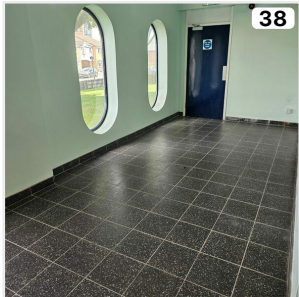
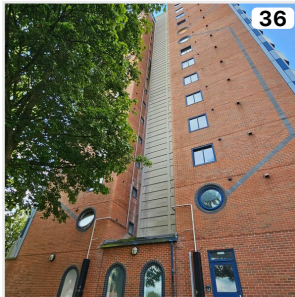
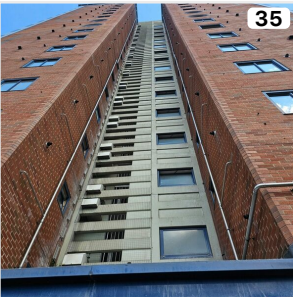
External Window Reference
YZNGDA

Details

Surface Material

Aluminium

Photos



External Doors

Photo

External Door



Single Leaf Entrance Doors (7YTBZ8)



Single Leaf Entrance Doors (W4TDXB)

External Door: Single Leaf Entrance Doors

External Door Reference
7YTBZ8

Details

Surface Material

Steel

Infill / Panel Material

Toughened Glass

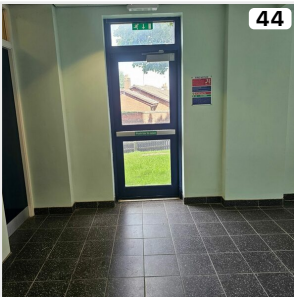
Frame Material

Steel

Details

Kite marking indicates BS EN 12150-2

Photos



External Door: Single Leaf Entrance Doors

External Door Reference
W4TDXB

Details

Surface Material

Steel

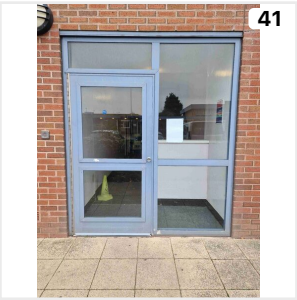
Frame Material

Steel

Infill / Panel Material

Toughened Glass

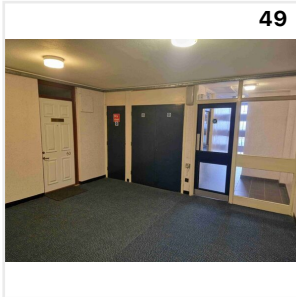
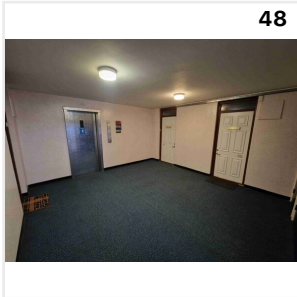
Photos



General Observations

Risks and Fire Hazards

- (1) PIR/PUR within brick cavity
- (2) Missing fire cavity barriers around gas flue pipes through brick sections



Plan: North Elevation (Front Entrance)



Plan: West Elevation



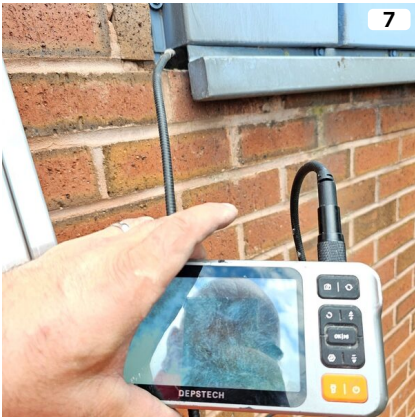
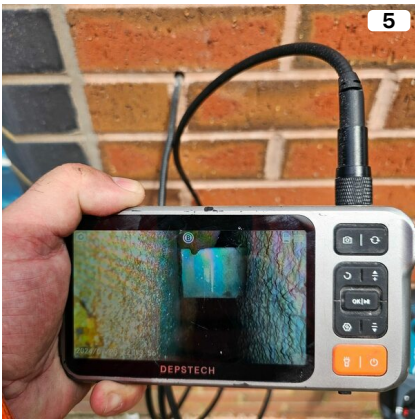
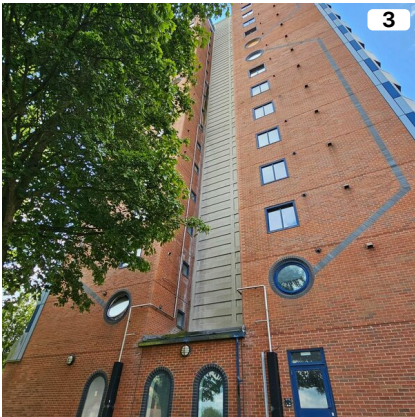
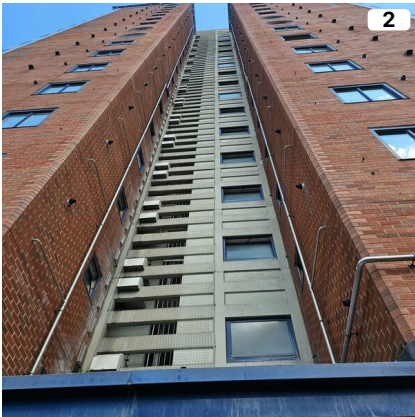
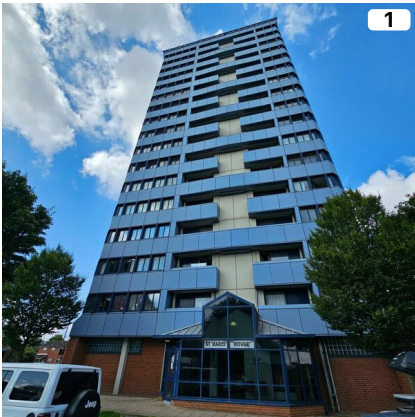
Plan: East Elevation



Plan: South Elevation



Photos



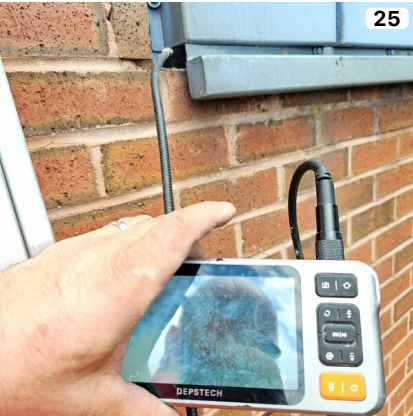
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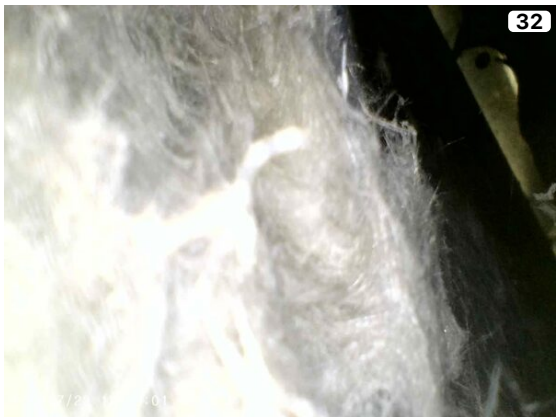
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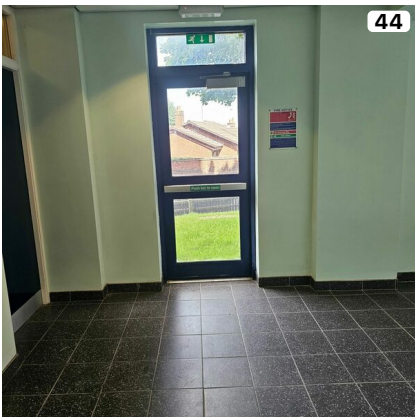
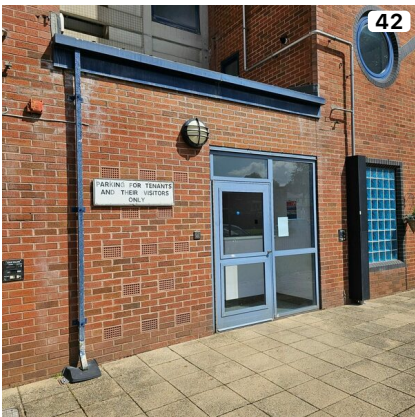
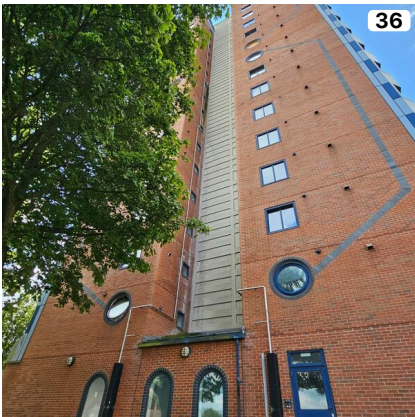
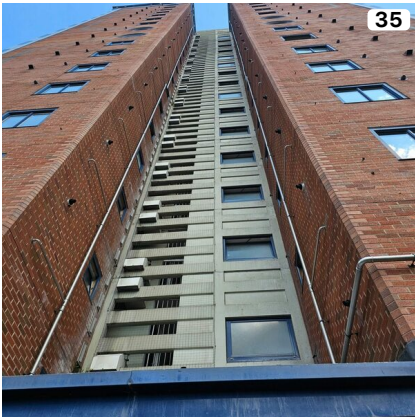
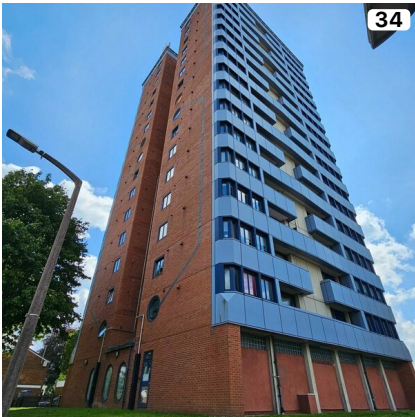
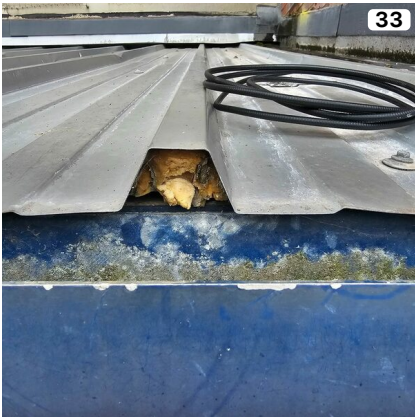
Photos Continued...



Photos Continued...



Photos Continued...



Photos Continued...





FIRNTEC
BUILDING COMPLIANCE