



FIRNTEC
BUILDING COMPLIANCE

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

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PAS 9980 STEP 2-5 (FRAEW)

ADDENBROOKE COURT

Addenbrooke Court
Southbank Road
Old Hill
West Midlands
B64 6LL



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Summary

PAS 9980 Step 2-5 (FRAEW)

Assessment and Certificate Reference

RB-DCKYLJ

Assessed On, By

24/08/2024, 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

24/08/2025

Assessed Property

Property Name

Addenbrooke Court

Property Reference

RB-Z81YU8

Address

Addenbrooke Court

Southbank Road

Old Hill

West Midlands

B64 6LL

Assessing Organisation

Firntec Ltd

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

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Assessor Remarks

The Riddins estate is a housing estate in Cradley Heath, England. The Riddins Estate project was approved in 1965 and consisted of three 16 storey towers (Addenbrooke, Bridge and Wesley Courts). The three blocks were developed by the builders Tarmac PLC.

Bridge Court is the only tower block to have been demolished and this took place by controlled explosion in 1996.

The remaining blocks Addenbrook and Wesley are considered to be approximately 43 metres tall. Wesley Court contains 96 individual flats and there are four flats per floor plus two flats on the top floor. There are two lifts within a central core which serve alternate floor levels and a single escape stairway is situated towards the rear of the building.

The structure is of reinforced concrete frame with reinforced concrete 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. At ground floor, composite/fiberglass sheets have been installed over pressure treated timber frame and this has been attached to the main structure. Otherwise, the building has retained most of its original features and according to planning application ref DD/30865, the building has undergone refurbishment works which included the installation of blown mineral wool; the aesthetic impact of this work can be seen across each elevation where drill holes have been made good in uniform patterns on each section of brickwork.

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

The author of this report is Douglas Murray 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 a Certified ABBE Fire Risk Assessor. Douglas has specialised within Fire Safety and cladding investigations for eight years and has held senior technical posts through the last 10 years with London and nationally based Registered Social Landlords. Douglas has taken the lead for various clients preparing Building Safety Case reports, Quality checking and completing Type 1-4 Fire Risk Assessments, preparing Fire Strategy documents, producing (PAS9980: 2022) Fire Risk Assessments of External Walls (FRAEW) and leading on Intrusive investigative surveys. Part of the work Douglas carries out, supports and evidences claims brought forward under the Defective Premises Act in the context of expert witness work.

Abbreviation/ Term Definition

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

Statement of Competency

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

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

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

We confirm that they have:

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

Terms of Reference

Particulars

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

Limitations

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

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

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

The FRAEW report is to be reviewed:

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

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

Assumptions

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

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

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

Statement of Intent

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

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

Executive Summary

External Wall Systems and Attachments on the Building

8 areas were inspected to gain data about the building's wall constructions. See the Inspections section of this report for full inspection details.

The table below outlines the ratings of the various wall systems and constructions to the property. Each element is explained in more detail further within this report.

6 Items	Effect	Risk
Wall Construction Wall Type 1 - brickwork with 80mm residual cavity and full fill blown mineral fibre (56KD8J)	Positive	Low
Wall Construction Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons (NDM8DQ)	Neutral	Medium
Penetration Ventilation (P4B1TL)		
External Window Top, Mid, Side Hung Casements (PJ3F5H)	Neutral	Medium
External Door Single Leaf Entrance Doors (A7UKWJ)	Positive	Low
External Door Single Leaf Entrance Doors (C2W4FD)	Positive	Low

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

Risk Factor Analysis

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

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

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

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

Risk Factor Analysis 1

This analysis looks at façade configuration **8EW6A2** which includes wall construction **NDM8DQ**.

1) Impact of Risk from Fire Performance: Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons ground floor only

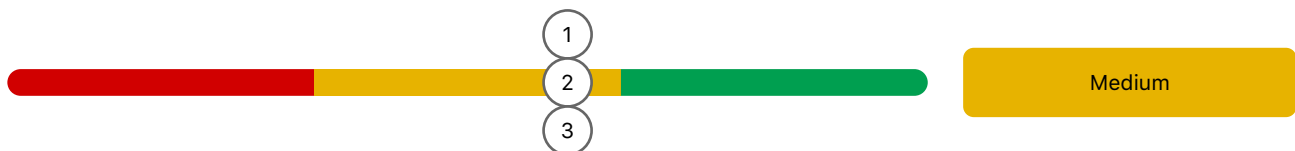
2) Impact of Risk from Façade Configuration: Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons will moderately add fire load

3) Impact of Risk from Fire Strategy / Fire Hazards: resin panels present a risk of fire spread across lower floor only

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

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

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



Risk Factor Analysis 2

This analysis looks at façade configuration **WUXL2X** which includes wall construction **56KD8J**.

1) Impact of Risk from Fire Performance: risk of fire spread across the surface not applicable wall system is brickwork

2) Impact of Risk from Façade Configuration: risk of fire spread across the surface not applicable wall system is brickwork

3) Impact of Risk from Fire Strategy / Fire Hazards: risk of fire spread across the surface not applicable wall system is brickwork

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

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

b) fire is unlikely to spread in such a way that the communal means of escape will be compromised before

occupants can safely use them to escape.



Overall Building Risk Rating



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

Recommended Remediations

No recommended remediations identified.

Recommended Interim Measures

No recommended interim measures identified.

Fire Strategy

Fire Strategy & Hazard Risk Factors

F.1 Occupancy

General needs housing

Neutral

F.2 Evacuation

Stay put

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

Positive

Photo Ref. 1

F.3 Escape Route Design

Single staircase, with lobby approach

Photo Ref. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15

Negative

F.4 Compartmentation

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

Neutral

F.5 Smoke Control

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

Positive

Photo Ref. 16

F.6 Fire Alarm & Detection

Fire detection in flats is installed to LD1 or LD2 standard, meaning:
LD1 (highest standard) – Smoke detection in all rooms except wet rooms.
LD2 – Smoke detection in hallways and living rooms, with heat detection in kitchens.
All smoke alarms are hard-wired or battery-operated and are subject to cyclical testing. No fire alarm system is installed in general communal areas.
Smoke detectors in communal corridors are only linked to the Automatic Opening Vent (AOV) system.
A fire alarm system is installed in the server room only,

Positive

Photo Ref. 17, 18, 19

F.7 Fire Suppression

A fire suppression (deluge) system is installed in the refuse chute bin store.
Control panel location: Inside the bin store, right-hand side wall.

Neutral

F.8 – Firefighting Facilities

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

Positive

Photo Ref. 20, 21, 22, 23, 24

F.9 Rising Mains

Suitable rising main present

Positive

Photo Ref. 25

F.10 Lifts Used By Firefighters

Absence of firefighting lift in buildings above 18 m

Negative

Photo Ref. 26, 27, 28

F.11 Specific Fire Hazards

Photos





Fire Service Intervention

Event	Seconds	Minutes & Seconds
Initiation to fire detection	5 Seconds	5 Seconds
Actuation Of Fire Detector To Transmission Of Alarm	5 Seconds	5 Seconds
Processing By Central Monitoring Station	30 Seconds	30 Seconds
Receipt of call by fire service mobilising control	30 Seconds	30 Seconds
Transmission To Fire Station And Response	30 Seconds	30 Seconds
Travelling Time Of Fire Service	240 Seconds	4 Minutes
Arrival Protocol And Entry Preparation Time	240 Seconds	4 Minutes
Firefighting Travel In Firefighting Lift	240 Seconds	4 Minutes
Firefighter travel to operational bridgehead	240 Seconds	4 Minutes
Firefighter Travel Walking Up Two Flights Of Stairs To Fire Floor (75 Seconds)	75 Seconds	1 Minute 15 Seconds
Total Time	1,135 Seconds	18 Minutes 55 Seconds

Nearest Fire Station

Haden Cross Fire Station which is 1.0 mile or 4 minutes in peak hours traffic

Wall Constructions

Wall Construction

Wall Type 1 - brickwork with 80mm residual cavity and full fill blown mineral fibre (56KD8J)

Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons (NDM8DQ)

Build-up

- Surface Finish (Brickwork)
- Cavity
- Insulation (Mineral Wool Insulation)
- Inner Leaf Support (Backing Wall) (Original blockwork)

- Surface Finish (Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons)
- Inner Leaf Support (Backing Wall) (Original brickwork)

Wall Construction: Wall Type 1 - brickwork with 80mm residual cavity and full fill blown mineral fibre

Construction Reference
56KD8J

This wall construction was identified by wall inspections TSIMH8, X44G87, A9JM1S, and YVZLTP. The build-up, cavity barrier, and floor slab information is taken directly from inspection TSIMH8. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 1 - brickwork with 80mm residual cavity and full fill blown mineral fibre (56KD8J)	Positive	Low

Build-Up

4 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	102mm	Brickwork	A1 - Non-Combustible
Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.			
Cavity	80mm		
Insulation	80mm	Mineral Wool Insulation Material Brand: Retrofitted blown mineral fibre	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original blockwork	A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Fire Performance

K.1 General

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

Positive

K.2 External Surfaces

Class A1/A2

Positive

K.3 Facings/Cladding Panels

High HRR

Positive

K.4 Panel Construction

Not Applicable

K.5 Cavities

Facings into the cavity at least Class A2

Positive

K.6 Insulation

Mineral/glass insulation

Positive

K.7 Substrate

Masonry, >75 mm thick

Positive

PAS Standard Benchmark

L1 Benchmark

The Construction benchmark is outlined in section L1 of the PAS 9980 Guidance Document -

Masonry (brickwork, blockwork, reinforced concrete)

Loadbearing masonry, provided it is in good condition, can generally be regarded as providing a substrate which is both non-combustible and fire-resisting to a standard of at least 30 min (60 min if 100 mm thick or more). Non-loadbearing masonry might, or might not, have the same properties.

L3 Benchmark

Insulation materials previously classified as non-combustible/ limited combustibility (now Class A1 or Class A2)

- Stone wool
- Ceramic fibre
- Glass fibre
- Foamed glass
- Exfoliated vermiculite

Class A1 or Class A2 (non-combustible and limited combustibility) insulators pose negligible risk in external wall construction. Where such insulators fully fill wall construction then this might indicate that they are being relied upon as contributing to a period of fire resistance. However, if fire resistance is required or being relied upon as part of the assessment, it is important that these insulators fully fill the space they are in or are sufficiently rigid or otherwise mechanically retained/supported to provide a continuous barrier through the space (e.g. batts will retain their shape whereas quilt can slump in a cavity).

L7 Benchmark

DOUBLE SKIN MASONRY

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

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

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

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

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

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

BR135 Benchmark

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

Wall Construction: Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons

Construction Reference
NDM8DQ

This wall construction was identified by wall inspections ZMQEBV, DCZ4A2, QHVTWE, and VK4LDD. The build-up, cavity barrier, and floor slab information is taken directly from inspection ZMQEBV. See the Inspections section of this report for full inspection details.

Construction	Effect	Risk
Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons (NDM8DQ)	Neutral	Medium

Build-Up

2 Elements	Thickness/Depth	Material	Rating (BS EN13501)
Surface Finish	6mm	Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons Material Brand: Unknown	B - Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork	A1 - Non-Combustible

Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Fire Performance

K.1 General

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

Neutral

K.2 External Surfaces

Class B

Neutral

K.3 Facings/Cladding Panels

Mechanically fixed

Neutral

K.4 Panel Construction

No gaps between panels

Neutral

K.5 Cavities

No cavity barriers present, or cavity barriers ineffective through poor installation/maintenance

Negative

K.6 Insulation

No insulation

Neutral

K.7 Substrate

Masonry, >75 mm thick

Positive

PAS Standard Benchmark

BR135 Benchmark

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

Façade Configuration: 8EW6A2

Items in Façade

5 Items	Effect	Risk
Wall Construction Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons (NDM8DQ)	Neutral	Medium
External Door Single Leaf Entrance Doors (A7UKWJ)	Positive	Low
External Door Single Leaf Entrance Doors (C2W4FD)	Positive	Low
External Window Top, Mid, Side Hung Casements (PJ3F5H)	Neutral	Medium
Penetration Ventilation (P4B1TL)		

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

<11 m

Neutral

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

<2 m

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

Neutral

N.3 Extent of Cladding

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

Neutral

N.4 Cavities & Openings

Cavity limited in extent and running horizontally only

Neutral

N.5 Infill / Spandrel Panels

Not Applicable

N.6 Setbacks - Combustible Cladding Setback from Wall Edge

Not Applicable

N.7 Overhangs & Projections

Not Applicable

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

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

Negative

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

Not Applicable

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

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

Positive

N.11 Attachments

Not Applicable

Risk Factor Analysis

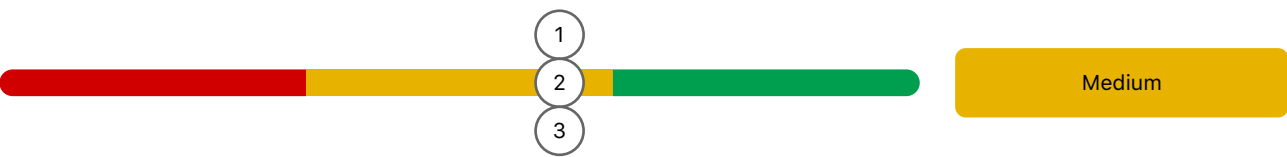
1) Impact of Risk from Fire Performance: Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons ground floor only

2) Impact of Risk from Façade Configuration: Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons will moderately add fire load

3) Impact of Risk from Fire Strategy / Fire Hazards: resin panels present a risk of fire spread across lower floor only

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

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



Façade Configuration: WUXL2X

Items in Façade

5 Items	Effect	Risk
Wall Construction Wall Type 1 - brickwork with 80mm residual cavity and full fill blown mineral fibre (56KD8J)	Positive	Low
External Door Single Leaf Entrance Doors (A7UKWJ)	Positive	Low
External Door Single Leaf Entrance Doors (C2W4FD)	Positive	Low
External Window Top, Mid, Side Hung Casements (PJ3F5H)	Neutral	Medium
Penetration Ventilation (P4B1TL)		

Façade Configuration Risk Factors

N.1 Building Height/Cladding Height

>30 m	Neutral
-------	---------

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

not applicable wall system is brickwork	Positive
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N.3 Extent of Cladding

not applicable wall system is brickwork	Positive
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N.4 Cavities & Openings

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

Positive

N.5 Infill / Spandrel Panels

Not Applicable

N.6 Setbacks - Combustible Cladding Setback from Wall Edge

Not Applicable

N.7 Overhangs & Projections

Not Applicable

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

risk of fire spread across the surface not applicable wall system is brickwork

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

Where vents pass through a cavity, either:

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

Positive

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

risk of fire spread across the surface not applicable wall system is brickwork

Positive

N.11 Attachments

Not Applicable

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

the building is at least 20 metres away from any other structure

Risk Factor Analysis

1) Impact of Risk from Fire Performance: risk of fire spread across the surface not applicable wall system is brickwork

2) Impact of Risk from Façade Configuration: risk of fire spread across the surface not applicable wall system is brickwork

3) Impact of Risk from Fire Strategy / Fire Hazards: risk of fire spread across the surface not applicable wall system is brickwork

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

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



APPENDIX

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

Fire detection is installed to a minimum of LD3 standard, with many flats upgraded to LD2 and LD1.
LD3 – Smoke detection in the hallway only.
LD2 – Smoke detection in the hallway and living room, plus heat detection in the kitchen.
LD1 – Smoke detection in all rooms except wet rooms.No general fire alarm system is installed in communal areas.
Smoke detectors are only used for Automatic Opening Vent (AOV) activation.

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 the communal areas

Portable Fire Fighting Equipment

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

Smoke Control

Natural smoke control

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 deluge (sprinkler) system is installed only in the 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

The fire hydrant is located at the rear entrance/exit of the building, approximately 1 meter from the door, near the bin store shutters.

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

A good standard of directional. Wayfinding. Fire Action Notices. No Smoking. Do Not Use Lift in Case of Fire. Final Exit. Fire Door was noted.

Property Type

Apartment Block, Residential Purpose-built

Building Era / Age

Known Build Date

Known Build Date

1965-1967

Building Height

Is approximately 43 metres from lowest point at ground to the upper most enclosed finished floor slab

Approx Floor Area Per Floor

The approximate footprint of Addenbrooke Court is 600m²

Number of Storeys (Ground and above)

There are 16 floors including the ground floor

Number of Basement Levels

None

Number of Flats

96

Flat Types

Single Storey

Structural Wall Material

Traditional build with concrete floor slab

Structural Floor Material

Reinforced Concrete

Structural Stairs Material

Concrete

Exterior Cladding

FRAEW Completed on Exterior Cladding

Exterior Cladding (Details)

Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons

Electronic Entrance System

Yes

Carpark

External/Outdoor Carpark

Employees

None

Residents

Yes

Approx number of Residents

192

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. 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

The building is provided with a single escape stair

Number Of Final Exits

The building is provided with two individual escape exits

External Means Of Escape

None Present

Types Of Lifts Installed

Passenger + Fireman's Control

Evacuation Chairs Installed

No

Refuge Points Present

Yes

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 Perspective: Addenbrooke Court Center Left

Showing Wesley Court and Addenbrook Court and the surrounding area



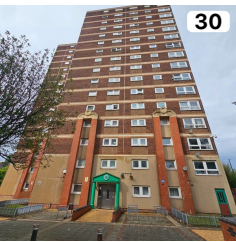
Elevations

Photo	Name	No. of Storeys
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North Elevation

16 Storeys



South Elevation

16 Storeys



East Elevation

16 Storeys



West Elevation

16 Storeys

Inspections

Elevation Location	Inspection	Elements
	Inspection: TSIMH8 Accessible wall	• Surface Finish (Brickwork) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original blockwork)
	Inspection: X44G87	• Surface Finish (Wall Type 1 - hand laid class 2 brickwork of 102mm with residual cavity of 80mm and full fill mineral wool)
	Inspection: ZMQEBV Accessible wall	• Surface Finish (Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons) • Inner Leaf Support (Backing Wall) (Original brickwork)
	Inspection: DCZ4A2	• Surface Finish (Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons)
	Inspection: A9JM1S Accessible wall	• Surface Finish (Brickwork) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original blockwork)
	Inspection: YVZLTP Accessible wall	• Surface Finish (Brickwork) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf Support (Backing Wall) (Original blockwork)
	Inspection: QHVTWE Accessible wall	• Surface Finish (Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons) • Inner Leaf Support (Backing Wall) (Original brickwork)
	Inspection: VK4LDD Accessible wall	• Surface Finish (Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons) • Inner Leaf Support (Backing Wall) (Original brickwork)

Inspection: TSIMH8

Location
Accessible wall

Name/Summary

Wall Type 1 - brickwork with residual cavity of 80mm and full fill mineral wool

Description

Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm	Brickwork		A1 - Non-Combustible
Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.				
Cavity	80mm			
Insulation	80mm	Mineral Wool Insulation Material Brand: Retrofitted blown mineral fibre		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original blockwork		A1 - Non-Combustible

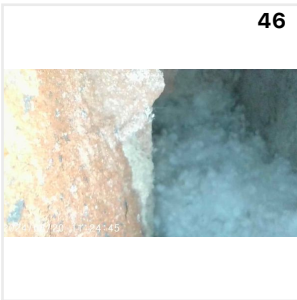
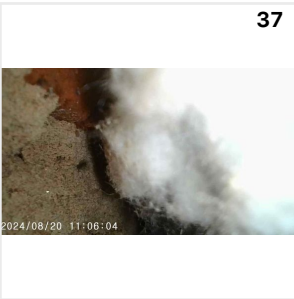
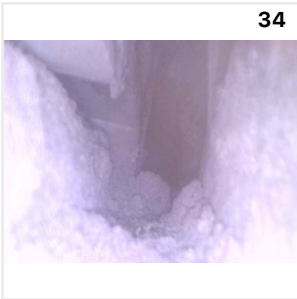
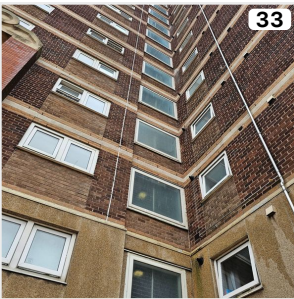
Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: X44G87

Name/Summary

Wall Type 1 - hand laid class 2 brickwork of 102mm with residual cavity of 80mm and full fill mineral wool

Description

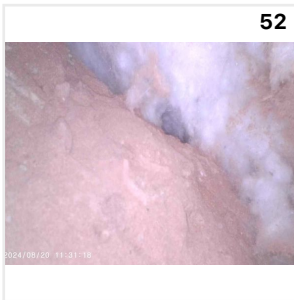
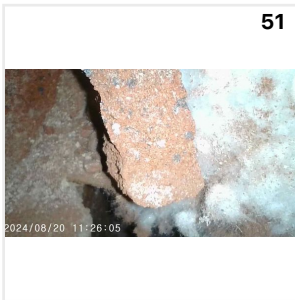
Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.

Build-Up

1 Element	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	182mm	Wall Type 1 - hand laid class 2 brickwork of 102mm with residual cavity of 80mm and full fill mineral wool		A1 - Non-Combustible

Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.

Inspection Photos



53



54



Inspection: ZMQEBV

Location
Accessible wall

Name/Summary

Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons

Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons Material Brand: Unknown		B - Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

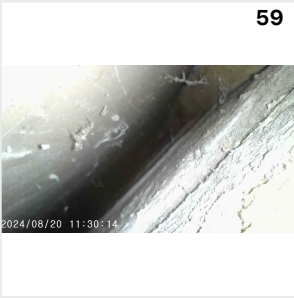
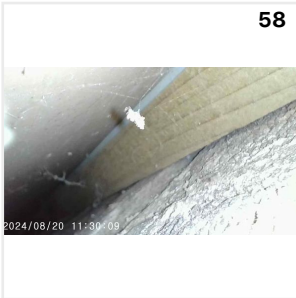
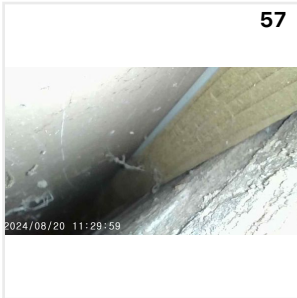
Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection Photos



Inspection: DCZ4A2

Name/Summary

Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons

Build-Up

1 Element	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons Material Brand: Unknown		B - Combustible

It was not possible to identify the composite panels, however due to the high polymer content, we believe these panels will be highly combustible and as they do not appear to provide any substantial value other than for aesthetic appearance, we would suggest they are tested or removed.

Inspection Photos



Inspection: A9JM1S

Location
Accessible wall

Name/Summary

Wall Type 1 - brickwork with residual cavity of 80mm and full fill mineral wool

Description

Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm	Brickwork		A1 - Non-Combustible
Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.				
Cavity	80mm			
Insulation	80mm	Mineral Wool Insulation Material Brand: Retrofitted blown mineral fibre		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original blockwork		A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: YVZLTP

Location
Accessible wall

Name/Summary

Wall Type 1 - brickwork with residual cavity of 80mm and full fill mineral wool

Description

Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm	Brickwork		A1 - Non-Combustible
Brickwork sections have a full fill blown mineral fibre insulation, the system forms part of the original external and infill masonry walls.				
Cavity	80mm			
Insulation	80mm	Mineral Wool Insulation Material Brand: Retrofitted blown mineral fibre		A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	100mm	Original blockwork		A1 - Non-Combustible

Cavity Barriers

No external cavity

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: QHVTWE

Location
Accessible wall

Name/Summary

Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons

Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons Material Brand: Unknown		B - Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Inspection: VK4LDD

Location
Accessible wall

Name/Summary

Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons

Build-Up

2 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Wall Type 2 - Resin board class B s1 d0 with granular finish set onto pressure treated batons Material Brand: Unknown		B - Combustible
Inner Leaf Support (Backing Wall)	102mm	Original brickwork		A1 - Non-Combustible

Cavity Barriers

None

Floor Slab

Backing Wall Sits On The Floor Slab

Penetrations

Photo

Penetration

No Image

Ventilation (P4B1TL)
Inspection Type: Visual

Penetration: Ventilation

Penetration Reference
P4B1TL

Details

Photo

1 Image

Inspection Type

Visual

Duct Pipework Material

Aluminium

External Windows

Photo

External Window



Top, Mid, Side Hung Casements (PJ3F5H)

External Window: Top, Mid, Side Hung Casements

External Window Reference
PJ3F5H

Details

Surface Material

uPVC

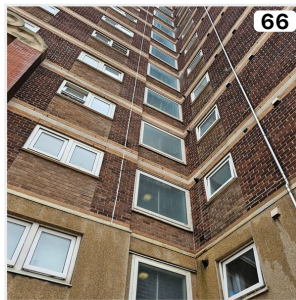
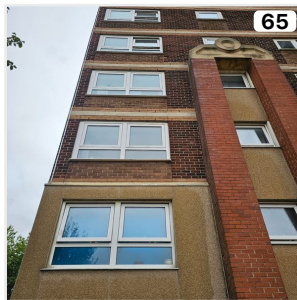
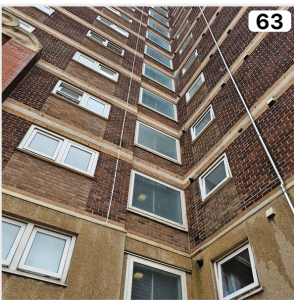
Frame Material

uPVC

Details

PVCu windows will melt at relatively low temperatures which may result in falling flaming debris and glass. In addition, the stacked arrangement of windows do present a risk of secondary fires from lower floor flat fires to the floors directly above.

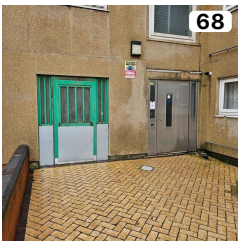
Photos



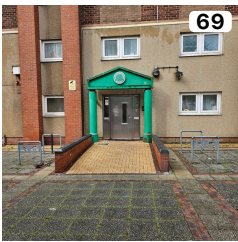
External Doors

Photo

External Door



Single Leaf Entrance Doors (A7UKWJ)



Single Leaf Entrance Doors (C2W4FD)

External Door: Single Leaf Entrance Doors

External Door Reference
A7UKWJ

Details

Surface Material

Polyester powder coated aluminium

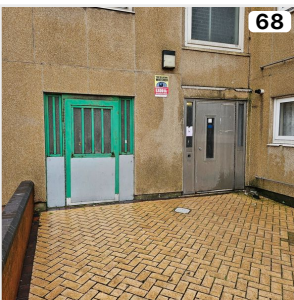
Frame Material

Polyester powder coated aluminium

Infill / Panel Material

Polyester powder coated aluminium

Photos



External Door: Single Leaf Entrance Doors

External Door Reference
C2W4FD

Details

Surface Material

Polyester powder coated aluminium

Frame Material

Polyester powder coated aluminium

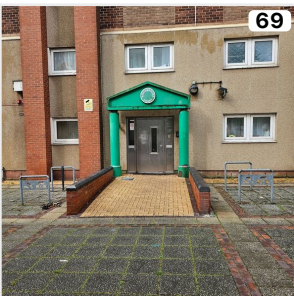
Infill / Panel Material

Polyester powder coated aluminium

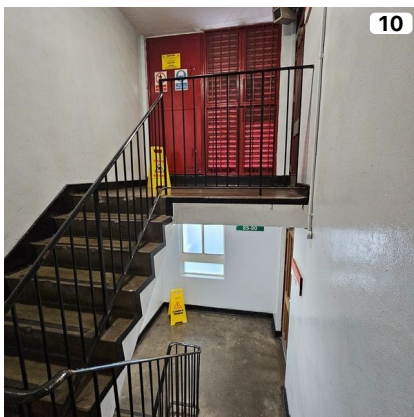
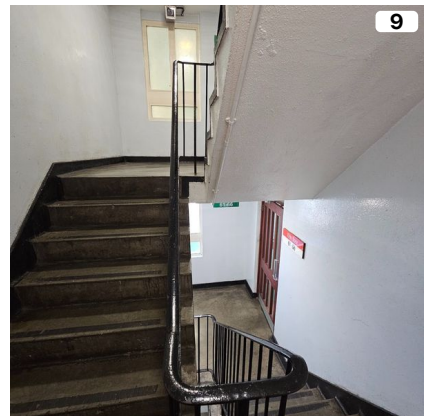
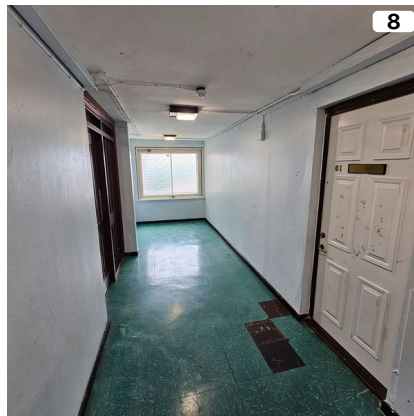
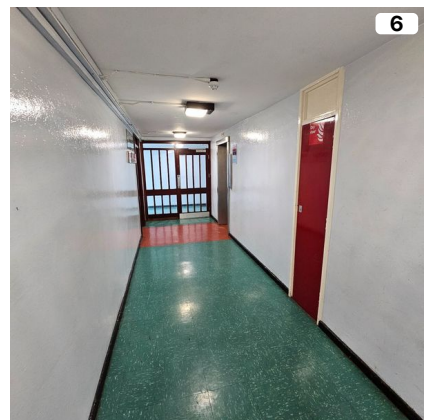
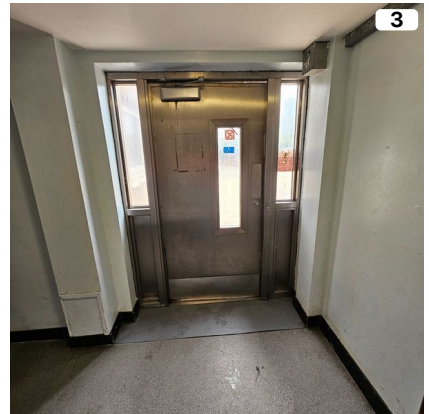
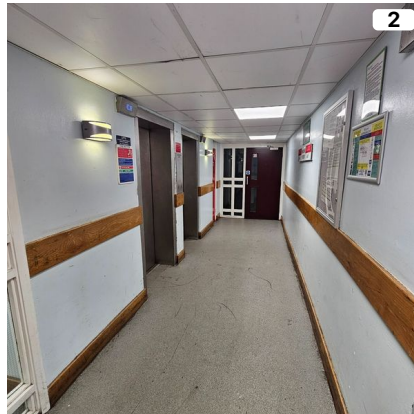
Details

Aluminium doors will not add significant fire load or support flame spread

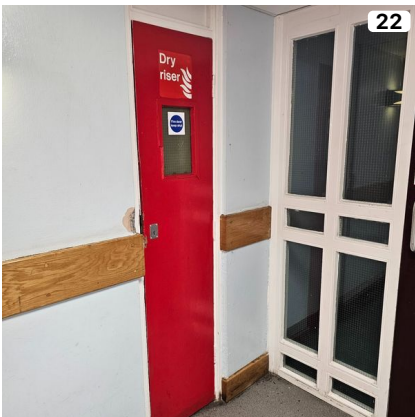
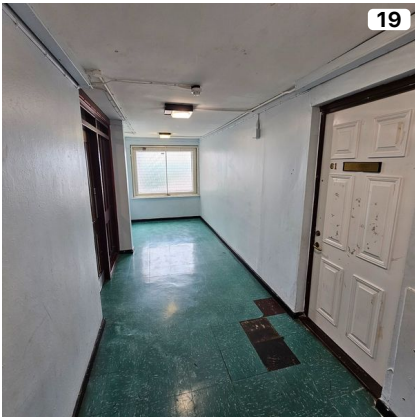
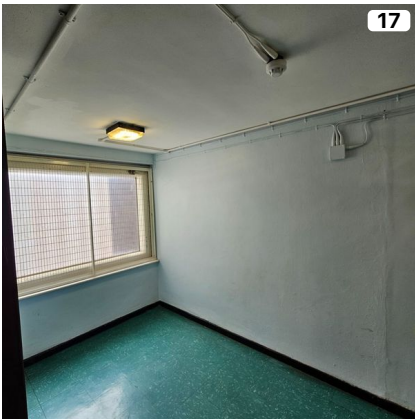
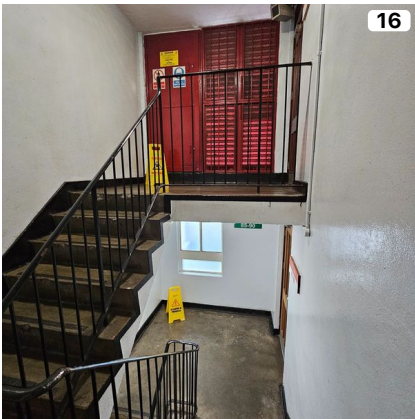
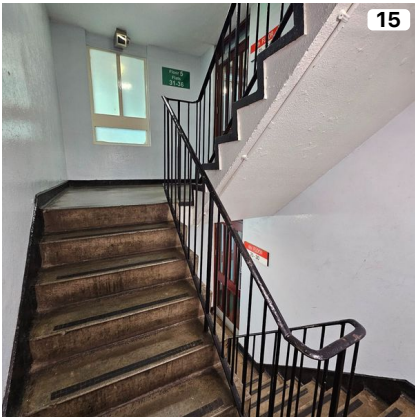
Photos



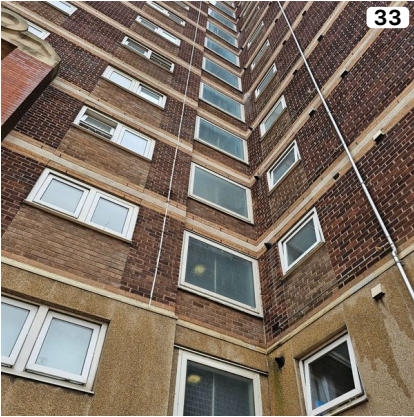
Photos



Photos Continued...



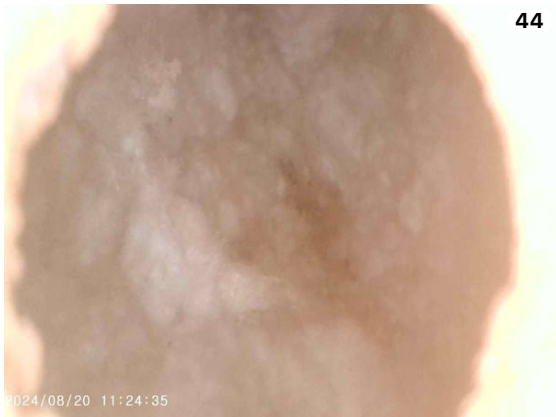
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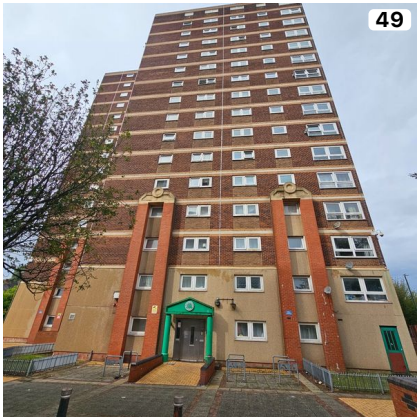
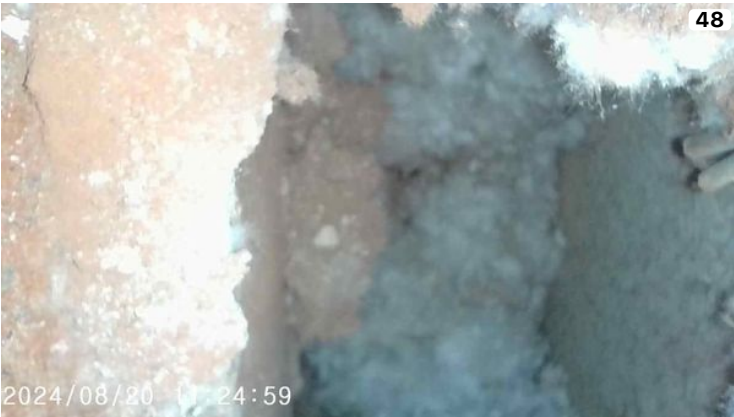
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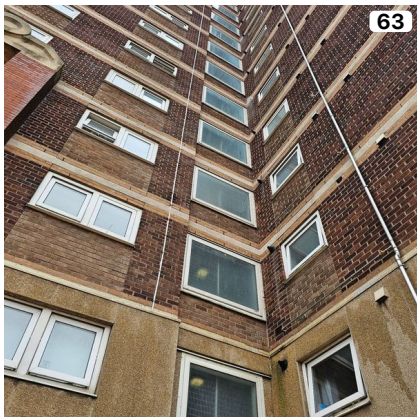
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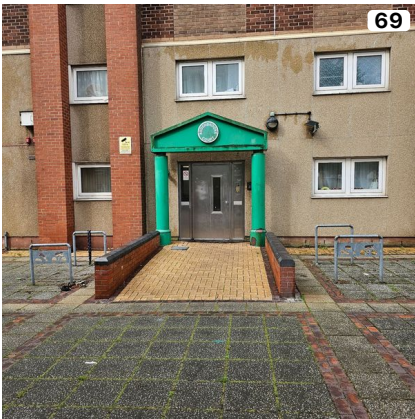
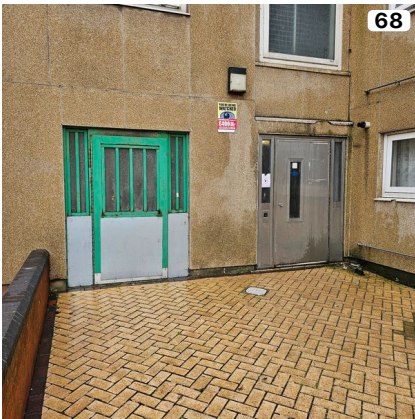
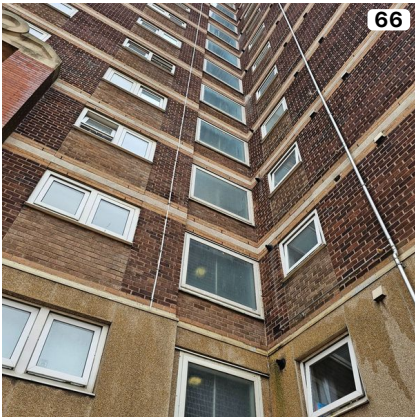
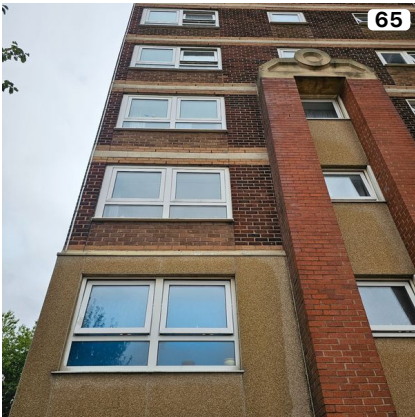
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Photos Continued...





FIRNTEC
BUILDING COMPLIANCE