External Wall Inspection

Façade Building

55 Advent Avenue,
Manchester, M6 8YU

VALID BETWEEN 25/09/2023 - 25/09/2024

ASSESSED BY Byron Cox
ASSESSED ON 25/09/2023

APPROVED BY Byron Cox
APPROVED ON 13/10/2023

ASSESSMENT REF. RB-BC3DA8

VERSION 5

Blueprint
FRAEW

Table of Contents

Introduction

Scope and Limitations

No matter how comprehensive the original design information for the external walls on a building might be, it can only ever show what was intended to be constructed. Product substitution is not uncommon, and sometimes there are highly significant differences in fire performance between products selected for use in the construction of the building and those that have actually been used.

Site survey and inspection is, therefore, a vital part of establishing factual information on the composition of the external wall construction and cladding and how the walls have been constructed.

The extent of site survey and inspection required in order to complete an FRAEW will vary. This is determined by the nature and extent of the information required, which, in turn, is dependent on the outcome of the initial information-gathering stage and study of available drawings and other documents (see Clause 9). Site survey and inspection can serve different purposes, and is likely to include some, or all, of the following:

No matter how thorough the original design details for a building's external walls may be, they can only depict the intended construction. The substitution of materials is not unusual, and, at times, there can be significant variations in fire performance between the selected materials for building construction and those actually used.

Consequently, conducting site surveys and inspections is crucial for obtaining accurate information regarding the composition of the external wall construction and cladding, as well as the methods employed in constructing the walls.

The extent of site surveys and inspections required for completing a Fire Risk Assessment of External Walls (FRAEW) can vary. It is influenced by the specific information needed, which, in turn, depends on the findings from the initial data collection phase and the examination of available drawings and documents.

The site survey and inspection can encompass several activities to ascertain essential information, including:

- Disassembly of components to validate the wall structure and identify the precise materials and products utilized. This aims to determine the manufacturer and specific products employed.
- Collection of material and component samples for small-scale testing, such as assessing combustibility (calorific potential) or the reaction to fire classification in accordance with BS EN 13501-1.
- Examination of wall sections at key points to determine the presence of cavity barriers, where applicable, as well as construction methods, workmanship quality, component condition, and any signs of cladding system deterioration. This includes assessing not only the facades and insulation but also the attachment and support mechanisms.
- Verification that the actual construction matches the design information or any other documents reviewed during the document study.

When initial site investigations reveal discrepancies between the installation and the design specified in the plans and drawings, it is probable that a more extensive, detailed analysis of the materials and components used will be necessary to determine their expected performance. This could involve conducting tests and analyses of both the physical and chemical properties of materials or components to achieve the following objectives:

1. Identifying the physical attributes of materials that are unidentifiable or unbranded, for which there is no dependable technical data, in order to compare their performance with the specified materials that were not used.
2. Evaluating the performance or reaction to fire of a material or component to assess any associated risks when used in conjunction with other materials or components, either within the current system under scrutiny or for potential use in a new system.

This process necessitates the removal of materials from the building for testing and analysis by a testing facility, which can be time-consuming and costly.

In many cases, a relatively limited level of inspection and site verification may be sufficient to establish essential information about the cladding type and construction method. However, the findings from this initial sampling may indicate the need for further exploration and increased sampling.

The extent of sampling required in a site survey and inspection for the purpose of determining the fire risk associated with external walls cannot be prescribed by the PAS (Publicly Available Specification). The external wall assessor must exercise judgment based on the specific circumstances of the building being assessed. Flexibility to expand the sample size should be agreed upon with the client and incorporated into the scope of the Fire Risk Assessment of External Walls (FRAEW).

The degree of sampling is likely to be influenced by several factors, including:

- The quantity and quality of documentary information available regarding the external wall construction, such as specifications and drawings dating back to the building's construction or recladding.
- The size of the building.
- Accessibility for removing cladding components and taking samples.
- The findings from the initial site survey and inspection.

Summary

External Wall Inspection

Assessment and Certificate Reference
RB-BC3DA8

Assessed On, By
25/09/2023, Byron Cox

Approved / Validated On, By
13/10/2023, Byron Cox

Start Date — Recommended Review Date
25/09/2023 — 25/09/2024

Produced For the Responsible Person
Blueprint (FRAEW)

Specification Conforms To
Our own internal quality system.

Assessment Scope
Assessment applies only to the building specified.

Assessed Property

Property Name
Façade Building

Property Reference
9980:2022

Address
55 Advent Avenue
Manchester
M6 8YU

Assessing Organisation
Blueprint (FRAEW)

Asset Information

Building Height

Over 18 metres

Total Building Height (m)

19

Height To Uppermost Building Level (m)

16.5

Number Of Storeys

4

Number Of Apartments

13

Type Of Occupancy

Residential

Age Of Building Construction

2010-2022

Aerial Perspective: Facade Building

Aerial perspective of building to show roof and surrounding areas.

Elevations

Photo	Name	No. of Storeys	Features
	North	3 Storeys	• Commercial Premises • Escape Route Exit
	West	4 Storeys	• Car Park Entrance • Escape Route Exit

Elevation: North

Details

Number of Storeys

3 Storeys

Features

Commercial Premises, Escape Route Exit

1

Elements of Note

Air brick on the wall.

3

4

This building has some windows

5

Elevation: West

Details

Number of Storeys

4 Storeys

Features

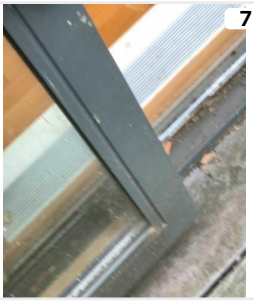
Car Park Entrance, Escape Route Exit


2

Elements of Note

People use doors to get in and out of the building.

6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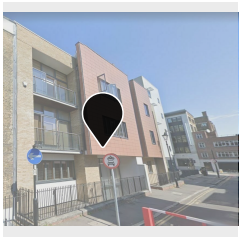
Inspections

Elevation Location	Inspection	Elements
	**Inspection: QZF4X9** North Elevation First Floor Slab and Window.	• Surface Finish (Terracotta Tile) • Cavity Support Frame (Galvanised Steel Horizontal Rails with Hook-on Clips) • Cavity • Other (Breather Membrane (Textile)) • Insulation (Phenolic Foam Insulation) • Other (Breather Membrane (Textile)) • Inner Leaf (Concrete Slab)
	**Inspection: 6PIM2T** North Elevation Second Floor Window.	• Surface Finish (Terracotta Tiles) • Cavity Support Frame (Galvanised Steel Horizontal Rails with Hook-on Clips) • Cavity • Other (Breather Membrane (Textile)) • Insulation (Phenolic Foam Insulation) • Other (Tyvek Dupont Breather Membrane) • Inner Leaf (Concrete Blockwork) • Other ('Dot and Dab' Adhesive) • Inner Leaf (Plasterboard)
	**Inspection: HJF8EU** West Elevation Third Floor	• Surface Finish (Standing Seam Zinc Sheet) • Cavity Support Frame (Plywood Backing Board) • Cavity Support Frame (Timber Batten) • Cavity • Inner Leaf (Blockwork) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (Blockwork)
	**Inspection: WRRTZI** West Elevation Second Floor	• Surface Finish (Standing Seam Zinc sheet) • Cavity Support Frame (Plywood backing board) • Cavity Support Frame (Timber frame) • Cavity • Inner Leaf (Concrete Blockwork) • Other ('Dot and Dab' Adhesive) • Inner Leaf (Plasterboard)
	**Inspection: UC39YN** West Elevation Third Floor	• Surface Finish (Brickwork) • Cavity • Insulation (Mineral Wool Insulation) • Inner Leaf (Blockwork) • Inner Leaf Support (Backing Wall) (Metal Stud Frame) • Inner Leaf (Plasterboard)

Inspection: QZF4X9

Elevation • Location
North Elevation • First Floor Slab and Window.

Build-Up

7 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	15mm	Terracotta Tile	8, 9	A1 - Non-Combustible
Cavity Support Frame	20mm	Galvanised Steel Horizontal Rails with Hook-on Clips	10, 11	A1 - Non-Combustible
Cavity	60mm		12	
Other		Breather Membrane (Textile)	10	D - Highly Combustible
Insulation	50mm	Phenolic Foam Insulation	10	C - Combustible
Consists of a weather-proof external lining				
Other		Breather Membrane (Textile)		D - Highly Combustible
Inner Leaf		Concrete Slab		A1 - Non-Combustible

Cavity Barriers

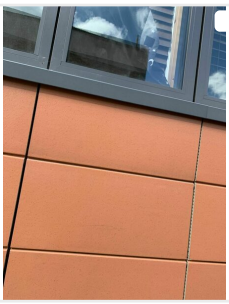
None

Floor Slab

Backing Wall Sits On The Floor Slab

Build-up Photos


8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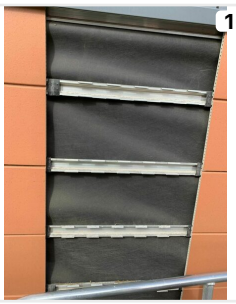
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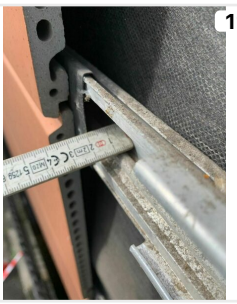
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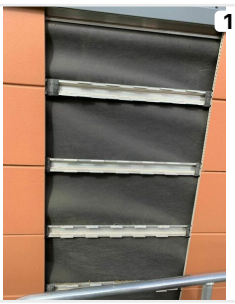
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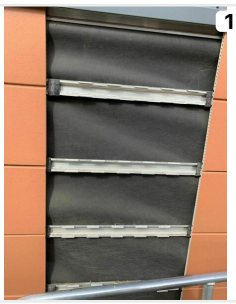
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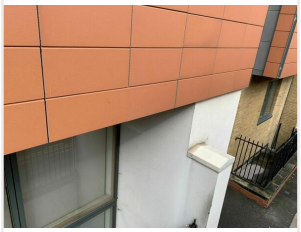
Inspection Photos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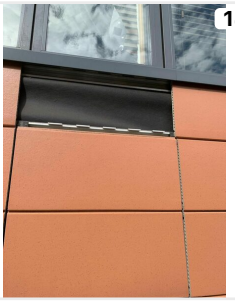
14


15


16

Inspection: 6PIM2T

Elevation • Location
North Elevation • Second Floor Window.

Build-Up

9 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	15mm	Terracotta Tiles	17, 18, 19, 20	A1 - Non-Combustible
Cavity Support Frame	20mm	Galvanised Steel Horizontal Rails with Hook-on Clips	21, 22, 23	A1 - Non-Combustible
Cavity	60mm		24, 25	
Other		Breather Membrane (Textile)	21	D - Highly Combustible
Insulation	50mm	Phenolic Foam Insulation	26, 27	C - Combustible
Consists of a weather-proof external lining.				
Other		Tyvek Dupont Breather Membrane	28, 29	D - Highly Combustible
Inner Leaf	100mm	Concrete Blockwork	30	A1 - Non-Combustible
Other	20mm	'Dot and Dab' Adhesive		A1 - Non-Combustible
Inner Leaf (Plasterboard)	15mm		31, 32	A2 - Limited Combustibility
Finished with 2-3mm plaster skim coat and paint.				

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Window Aperture	Intumescent Cavity Strip Material Brand: Envirograf Rainscreen Cavity Barrier (RSM/I/70)	

Fitted around window opening.

Floor Slab

Backing Wall Sits On The Floor Slab

Build-up Photos


17


18


19


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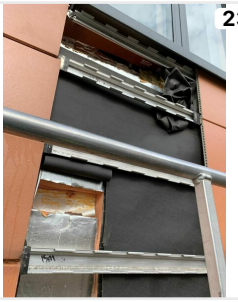
21


22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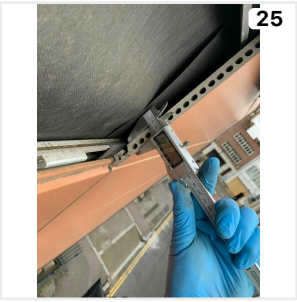
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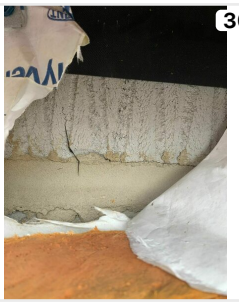

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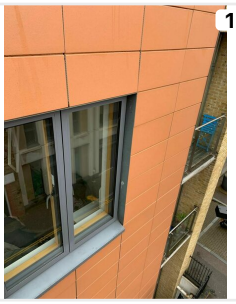
32

Inspection Photos

17



18

Inspection: HJF8EU

Elevation • Location
West Elevation • Third Floor

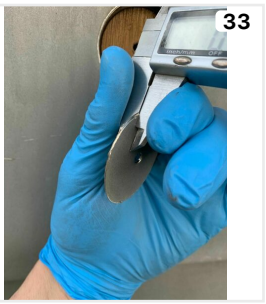
Build-Up

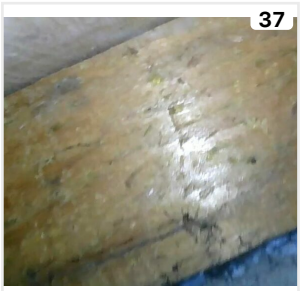
8 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Standing Seam Zinc Sheet	33, 34	A1 - Non-Combustible
Cavity Support Frame	28mm	Plywood Backing Board	35, 36	D - Highly Combustible
Backing board to which the zinc sheet is supported and bonded to.				
Cavity Support Frame	35mm	Timber Batten	37, 38	D - Highly Combustible
Horizontal timber battens supporting the zinc and backing board.				
Cavity	35mm		36	
Inner Leaf	100mm	Blockwork	39, 40	A1 - Non-Combustible
The masonry wall to this location formed the outer layer of two internal masonry skins.				
Cavity	100mm		41	
Insulation	100mm	Mineral Wool Insulation	41, 42	A1 - Non-Combustible
Loose fill mineral wool partially filling the cavity.				
Inner Leaf	100mm	Blockwork	43	A1 - Non-Combustible
Masonry wall inner leaf.				

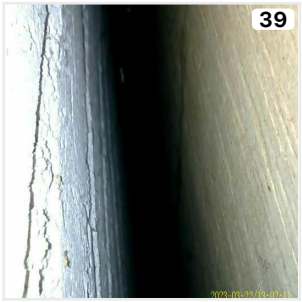
Cavity Barriers

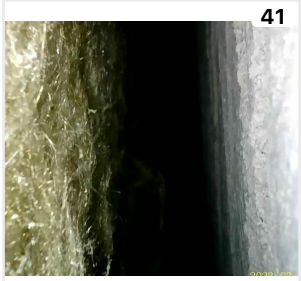
Installed

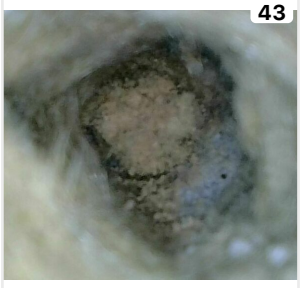
Build-up Photos



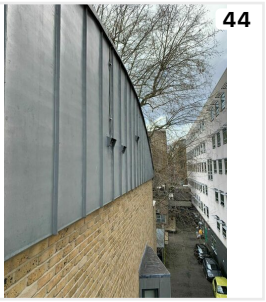


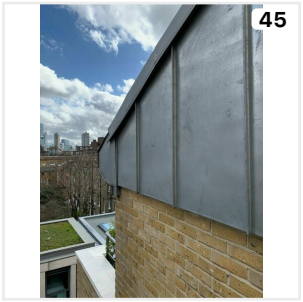






Inspection Photos





Inspection: WRRTZI

Elevation • Location
West Elevation • Second Floor

Build-Up

7 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	6mm	Standing Seam Zinc sheet	47, 33	A1 - Non-Combustible
Cavity Support Frame	20mm	Plywood backing board	48, 49	D - Highly Combustible
Backing board to which the zinc sheet is supported and bonded to.				
Cavity Support Frame	135mm	Timber frame	50, 51	D - Highly Combustible
Timber framework supporting the zinc and backing board.				
Cavity	135mm		51	
Inner Leaf	100mm	Concrete Blockwork		A1 - Non-Combustible
Other	20mm	'Dot and Dab' Adhesive	52, 53	A1 - Non-Combustible
Inner Leaf (Plasterboard)	16mm	Material Brand: Gypsum Plasterboard	54, 55	A2 - Limited Combustibility
One layer of 12.5mm plasterboard finished with plaster 2-3mm skim coat and paint.				

Cavity Barriers

1 Cavity Barrier	Material	Photo Ref.
Window Aperture	Timber over 38mm	
Timber frame closes cavity at the window opening.		

Floor Slab

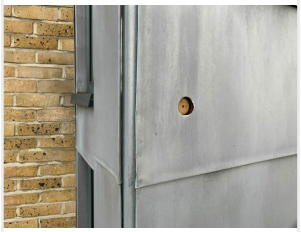
Backing Wall Sits On The Floor Slab

Details

There is no cavity barrier at the slab level.

Build-up Photos

47



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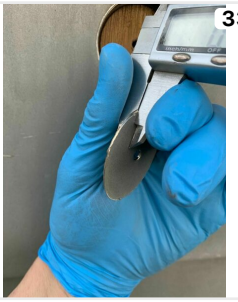

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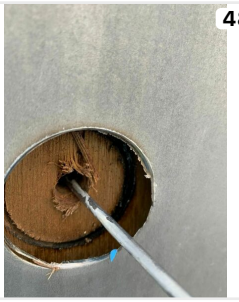

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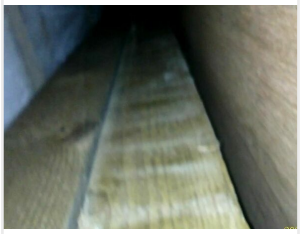

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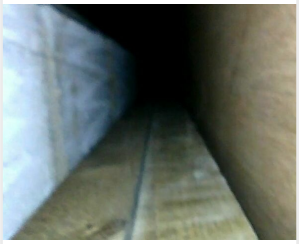

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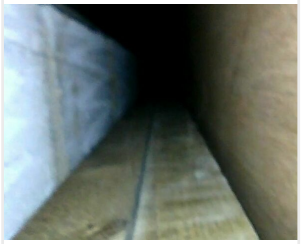


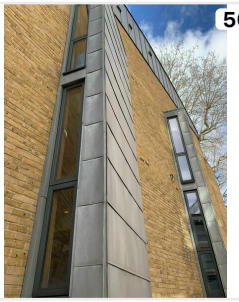
52

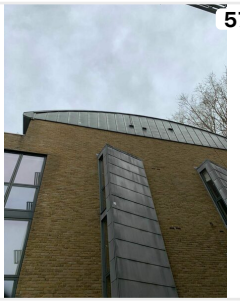
53

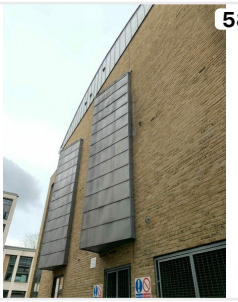
54

55

Inspection Photos







Inspection: UC39YN

Elevation • Location
West Elevation • Third Floor

Build-Up

6 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm	Brickwork	59, 60, 61	A1 - Non-Combustible
Cavity	90mm		62, 63	
Insulation	70mm	Mineral Wool Insulation		A1 - Non-Combustible
Inner Leaf	100mm	Blockwork	64	A1 - Non-Combustible
Inner Leaf Support (Backing Wall)	150mm	Metal Stud Frame	65	A1 - Non-Combustible
Void within the frame work is empty				
Inner Leaf (Plasterboard)	28mm	Material Brand: Gypsum Plasterboard	66, 67	A2 - Limited Combustibility

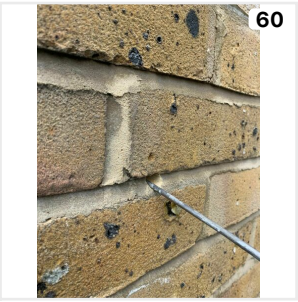
Two layers of 12.5,, plasterboard finished with plaster 2-3mm skim coat and paint.

Cavity Barriers

None

Build-up Photos


59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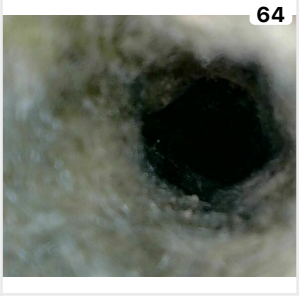
61


62


63


64


65


66

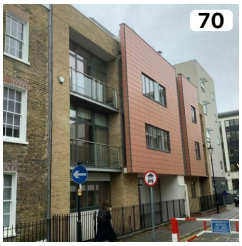

67

Inspection Photos


68


69

Attachments & Balconies

Photo	Attachment
	**Cantilever Balcony (S248KT)** Configuration: Inset Size: Private balcony spanning only a single compartment

Attachment: Cantilever Balcony

Attachment Reference
S248KT

Details

Configuration

Inset

Framework/Structure

Steel Framed

Size

Private balcony spanning only a single compartment

Balustrade/Handrail

Frameless glass with stainless steel fixings and handrails

Decking & Supports

Timber decking on a steel frame

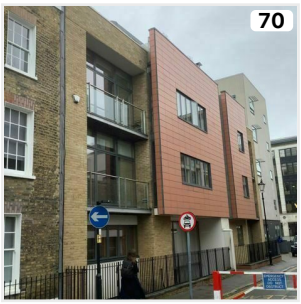
Soffit

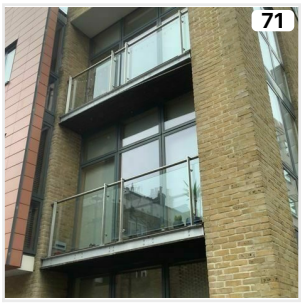
Timber

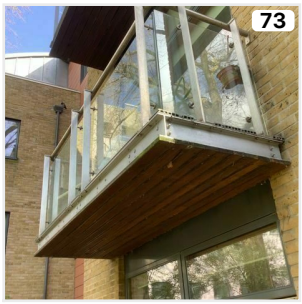
Details

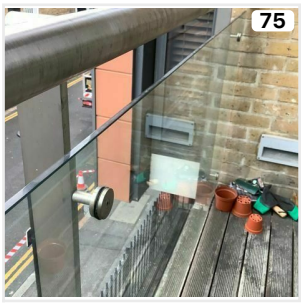
Open, projecting and Vertically aligned

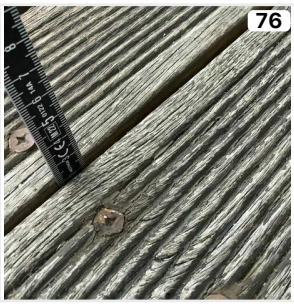
Photos

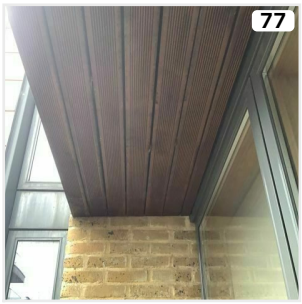












Penetrations

Photo	Penetration
	**Ventilation (1S69KN)** Inspection Type: Intrusive
	**Air Brick (6XLYNF)** Inspection Type: Visual

Penetration: Ventilation

Penetration Reference
1S69KN

Details

Inspection Type

Intrusive

Duct Pipework Material

UPVC

Means Of Fire Stopping

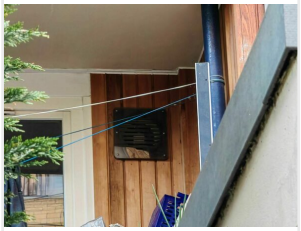
None

Additional Photos

78

80

81



82

83

84

85

Penetration: Air Brick

Penetration Reference
6XLYNF

Details

Location

Pin on North Elevation

Inspection Type

Visual

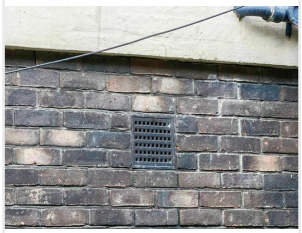
Means Of Fire Stopping

N/A

Additional Photos

79

3



4

External Windows

Photo	External Window
	Top, Mid, Side Hung Casements (LQ8ZS7)

External Window: Top, Mid, Side Hung Casements

External Window Reference
LQ8ZS7

Details

Surface Material

Aluminium

Frame Material

Timber

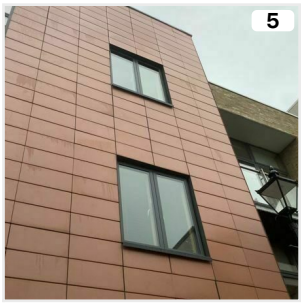
Infill / Panel Material

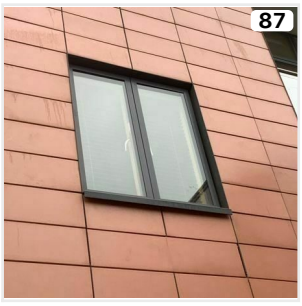
Toughened Glass

Details

BS 12150 Kite-mark

Photos





External Doors

Photo	External Door
	French Doors (MZHMBX)

External Door: French Doors

External Door Reference
MZHMBX

Details

Surface Material

Aluminium (powder coated) exterior profile on top of Timber

Frame Material

Timber

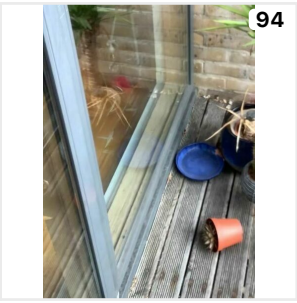
Infill / Panel Material

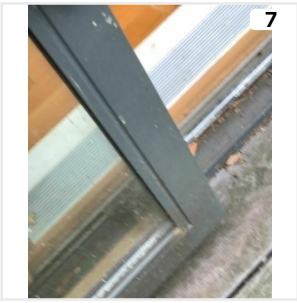
Toughened Glass

Details

No kite-marks on the glass

Photos





General Observations

These are some additional observations made by the surveyor which the engineer may find helpful during write up.


65

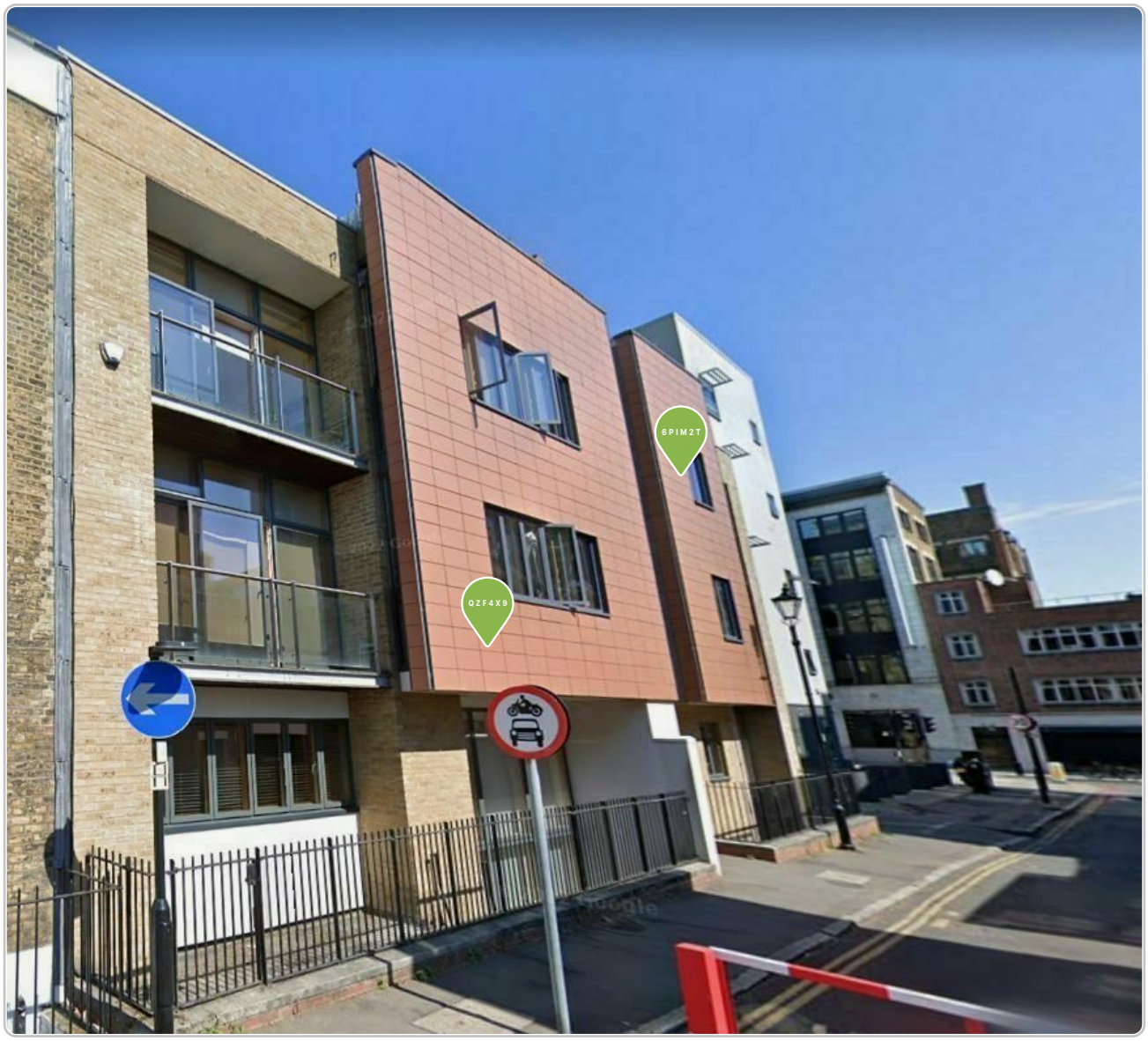

66


67

This shows a person with blue hands measuring something.

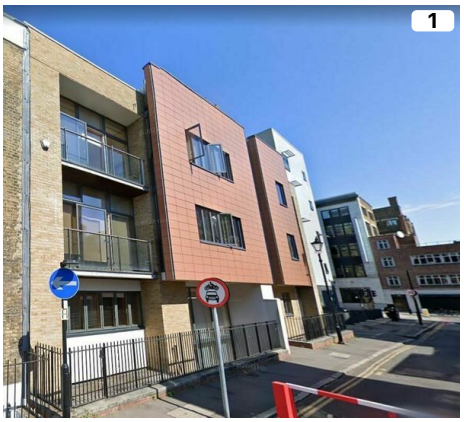

49

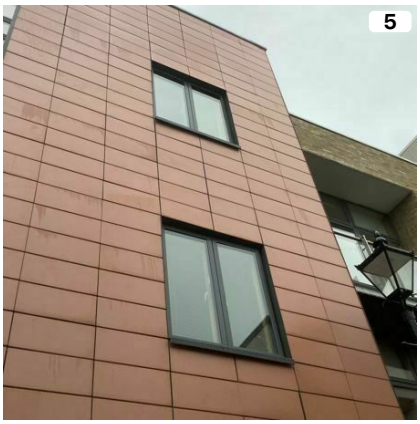
Plan: North Elevation

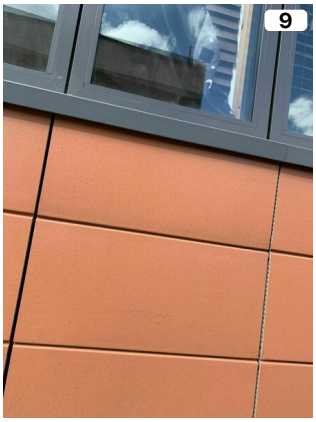


Plan: West Elevation

Photos







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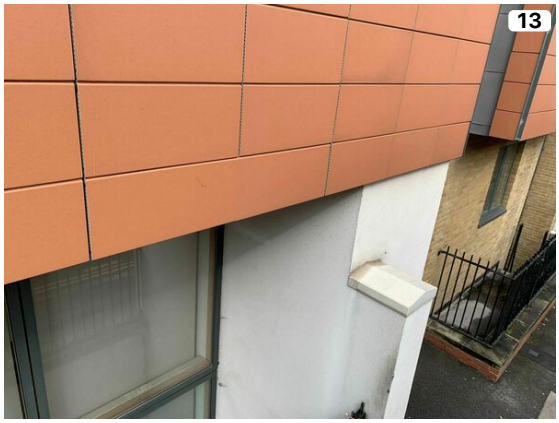

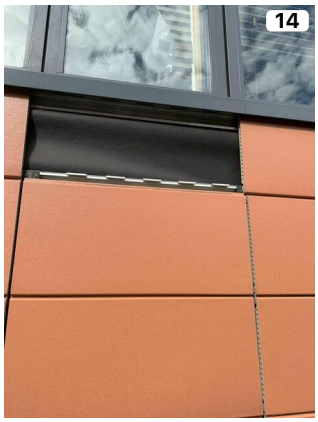

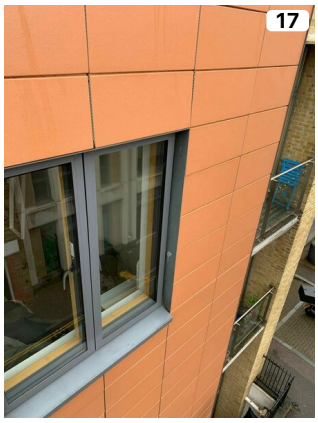

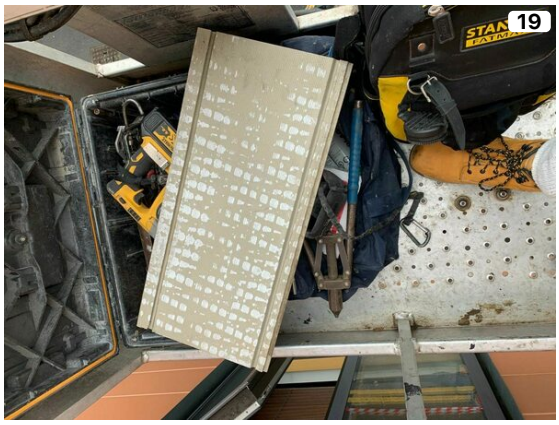

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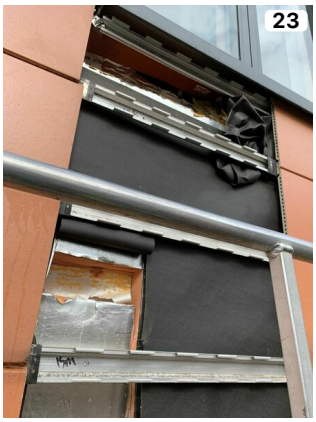

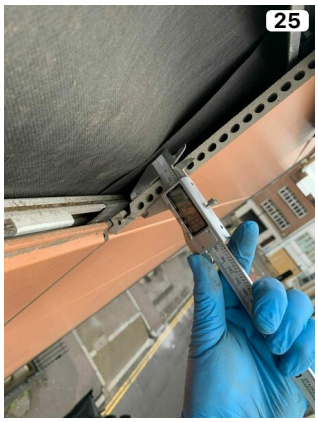

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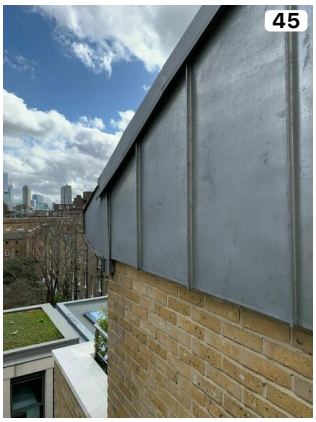
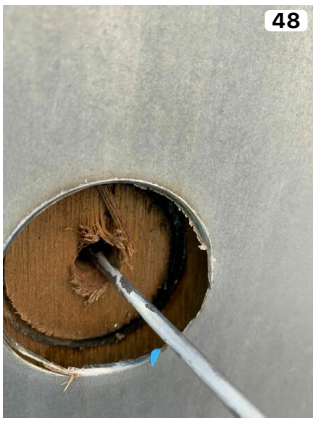
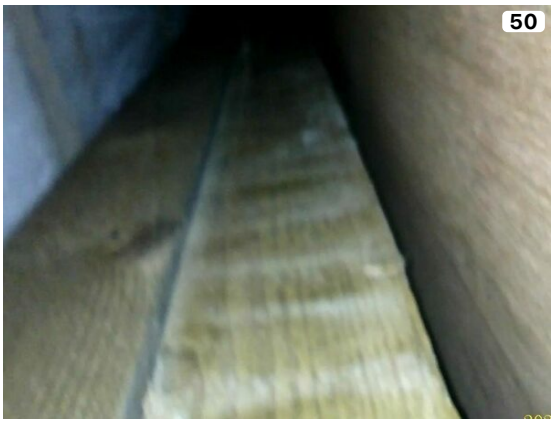
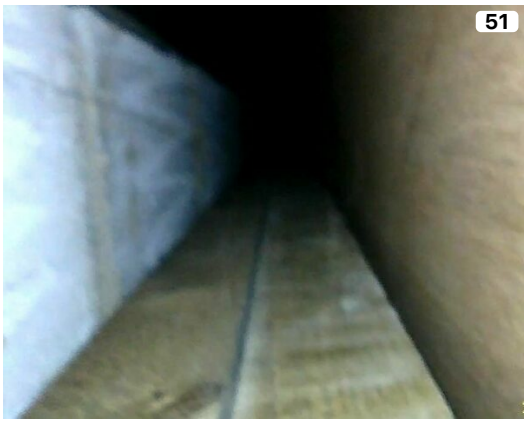
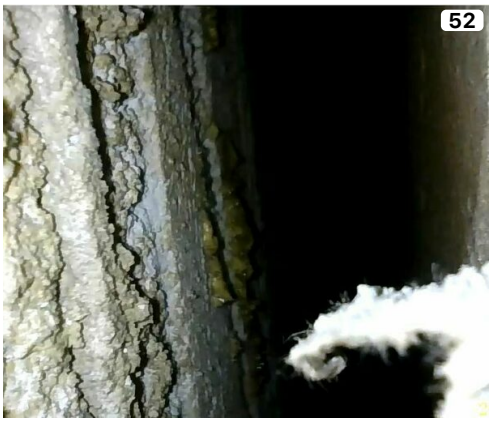
Photos Continued...











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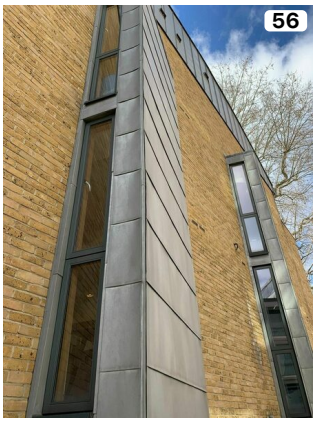

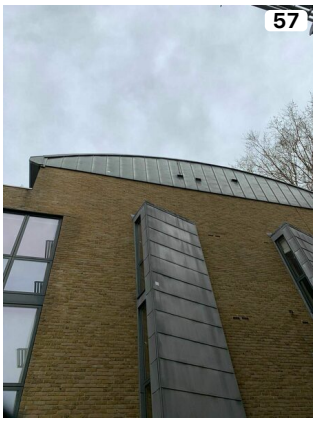

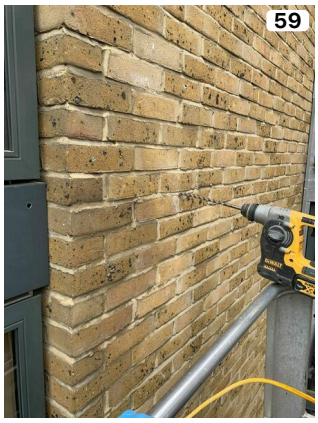

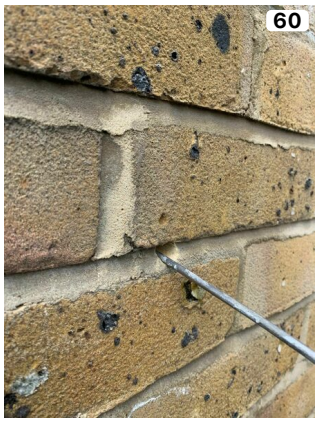

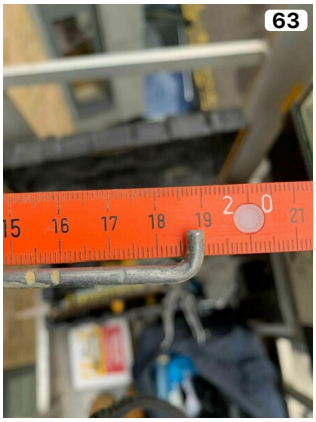

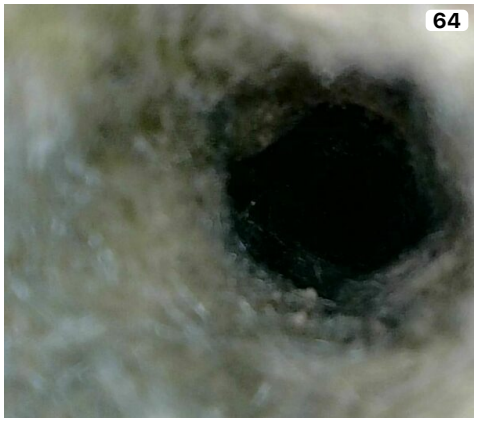

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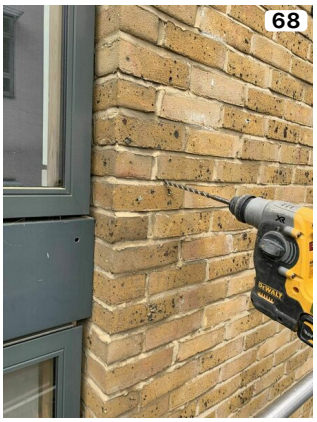

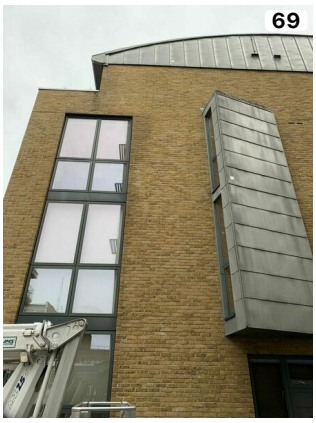

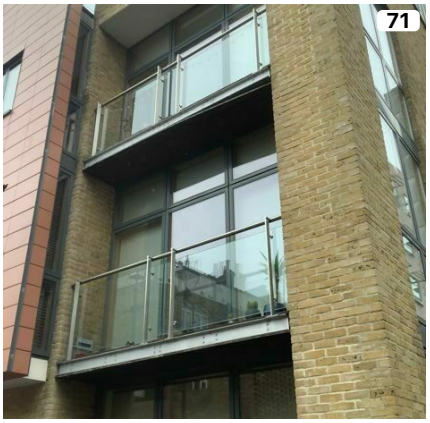

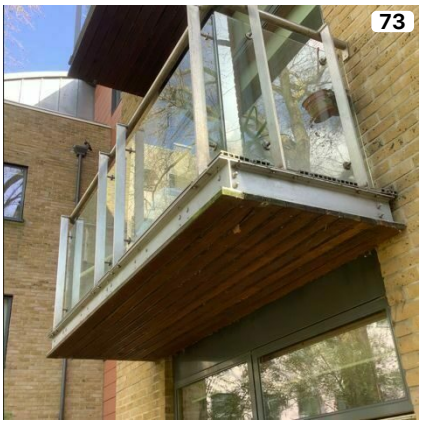

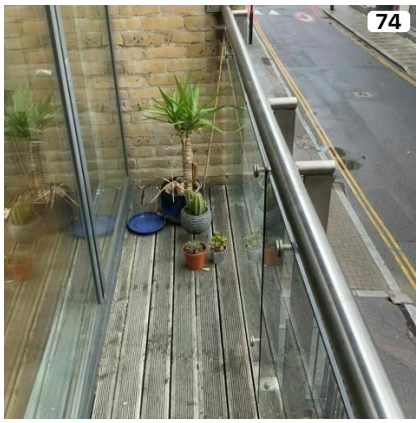

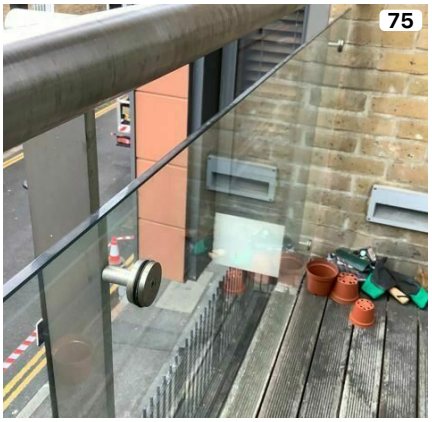

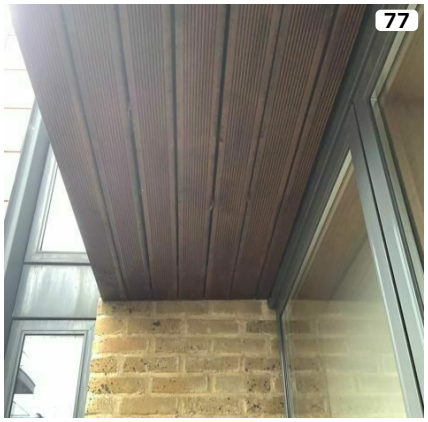

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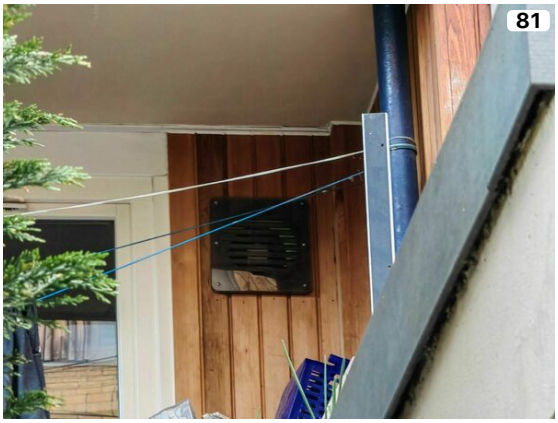

Photos Continued...