FIRNTEC
BUILDING COMPLIANCE

Unit 4a, Darklake View
Estover
Plymouth
PL6 7TL

Document Version 1
Survey Date 22/01/2024
Suggested Review Date 22/01/2025

PAS 9980 STEP 1
LABURNUM HOUSE

Laburnum House
89 Bradwell Avenue
Dagenham
London
RM10 7AE

This report must be retained on the premises for inspection by statutory authorities.
Management is responsible for actions required in this report and should brief all staff on the report's findings.

Enforcement Officers are requested to note that this document is designed to informed the Lessee Tenant Manager of the existing Fire Safety Arrangements and any Significant Findings. Issues relating to the control and management of fire safety management for fire safety measures can be found in in-house documents such as:

Fire Policy and Testing and Maintenance records

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Summary

PAS 9980 Step 1

Assessment and Certificate Reference

RB-R99IHA

Assessed On, By

22/01/2024, Barry Jubb

Approved / Validated On, By

23/01/2024, Ellie Dixon (Operations Administrator)

Start Date — Recommended Review Date

22/01/2024 — 22/01/2025

Produced For the Overall Responsible Person

London Borough of Barking & Dagenham

Specification Conforms To

Our own internal quality system.

Assessment Scope

Assessment applies only to the building specified.

Assessed Property

Property Name

Laburnum House

89 Bradwell Avenue

Property Reference

RB-SJPI5V

RM10 7AE

Address

Laburnum House

Dagenham

London

Assessing Organisation
Firntec
4a Darklake View, Estover, Plymouth, Devon, PL6 7TL
0345 646 1566 — www.firntec.com

Summary

Overview

1.1 Mission Statement

1.1.1 The customer has instructed us to undertake an intrusive inspection of the cladding including all associated components on this property, to comment on the existing building materials with reference to the provisions set out in the Approved Documents applicable at the time of construction. This looks at how combustible the materials are within the external wall system, fire stopping within the external wall system and potential for surface spread of flame as well as looking for any potential installation defects from within the sample areas.

1.2 Problem Statement

1.2.1 This investigation has been commissioned due to concerns arising as to the fire resisting qualities of the exterior cladding to ensure the safety of residents and whether it meets the Mandatory Requirement B4(1) of the Building Regulations.

1.3 Limitations

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

1.3.2 All findings and comments are subject to any Building Control applications and approvals that have not been disclosed to us at the time of this report.

1.3.3 The inspection was limited to the external wall only as described in Approved Document B of the Building Regulations 2019 edition.

1.3.4 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 refer to as built drawings and specification contained in the O&M manuals, if they are made available. However, this does not provide proof of the brand of the products used in construction. Where the products branding is absent we will assume that the material is not non- combustible and will need to be submitted for further testing (to determine calorific value) to verify this.

1.3.5 We will endeavor to review sample areas from various elevations and levels where necessary. However, this may not always be possible due to factors out of our control, such as weather conditions.

1.3.6 If a Type 4 Fire Risk Assessment (FRA) was not completed or provided ahead of the survey limited conclusions can be made on the risk of the building and actions to be carried out.

1.3.7 Our report will state areas of compliance with advisory sub-clauses of the relevant Approved Document B (ADB). This does not guarantee compliance with the mandatory clause of B4(1) and our comments cannot be interpreted as such.

1.4 Specific Issues to be Addressed.

1.4.1 To identify if the existing system is fitted as per the original manufacturers installation instructions and using all materials specified in the original specification of the external wall system.

1.4.2 To provide an opinion on the combustibility of the materials within the external wall system (in the absence of the original paperwork for the system or product codes on the materials) based on the behavior of products of similar type.

1.4.3 To assess fire stopping within the system as required to align with internal compartmentation and compartmentation for any voids within the external wall system.

1.4.4 To assess surface spread of flame potential based on system type.

1.5 Desired Outcome

1.5.1 To comment on quality of workmanship of the façade system installation.

1.5.2 To provide assessment on the combustibility rating based on the PAS9980 standard of the materials used in the construction of the façade and provide recommendations of further investigatory or remedial works. Where manufacturer branding and manufacturer product codes are not available on the materials within the external wall system these will need to be subjected to calorific testing for reassurance as to the combustibility of the material types.

1.5.3 To verify fire stopping within the system (around penetrations and to any voids as well as internal compartment walls) and to provide remedial recommendations if required.

1.5.4 To establish whether a FRAEW is required by a competent fire engineer.

1.5.5 It is important to understand that building regulations do not apply retrospectively, and comments made will be in line with the current regulations.

2.0 – Scope of Works

2.0 The customer requires an investigation of the external wall systems and knowledge of the cladding parts that may not meet an appropriate standard of safety and could pose a risk to the health and safety of residents, other building users or those in the proximity of the building.

2.1 The assessment of the external wall should consider the materials used, installation method, fire stopping, the building form, the geometry of the external wall and the overall design of the external wall system. This includes any spandrel panels and infill wall panels. Undertake a visual survey and create a record of all the types of cladding seen on specific buildings, specifically looking for Aluminium Composite Materials (ACM's), Non-Aluminium Composite Materials (Non-ACM's), High Pressure Laminate (HPL).

2.2 Undertake a sampling exercise on each building, utilising current best practice, to determine any risks posed by the cladding, its filler material or if there are identifiable risks based on its installation, post-installation damage or subsequent deterioration.

2.3 Provide a report identifying the reasonable mitigation option appraisal where risks, specifically fire risks, are identified. This is to be based on existing legislation, current best practice, building usage and existing fire safety measures.

3.0 – PAS 9980:2022

PAS 9980 provides guidance on the risk of fire spread via external wall construction. It sets out a methodology to conduct and record fire risk appraisals of external walls, which can be scaled up or down depending upon the complexity of individual buildings. The methodology for completion of an FRAEW is covered specifically in Clause 13 of the document and is broken into six distinct steps:

Step 1: Does the building require an FRAEW?

In this step the available documentation is reviewed, and an initial intrusive investigation is conducted to conclude whether an FRAEW is appropriate for the façade construction present on site. In some cases, an additional review by fire engineer may be required to determine the requirement.

Step 2: Gathering all necessary information to complete the FRAEW

If it is confirmed that an FRAEW is required, the next step is to gather all relevant information on the building and its external wall construction. This needs to cover all the different external wall build-ups and attachments, what materials and components the system is constructed with, the extent of each of the cladding on each elevation and all relevant building documentation including FRA's O&M's and construction drawings.

Step 3: Identify and group factors that are significant in determining the risk rating.

Using the information gained on the building and its external wall construction, the third step is to determine and collate, from knowledge of the external wall construction and the building's fire safety features and attributes, the factors that are influential and relevant to the risk posed by fire spread over the external walls.

Step 4: Consider each group of risk factors to determine their potential contribution to the overall risk.

This step requires consideration of the influence that the various positive, negative, and neutral risk factors have on the perception of where the overall risk lies for each group of factors.

Step 5: Review the risk factor analysis against the benchmark for success to determine an outcome.

Step five involves overlaying the findings from step 4 for each group on the low to high scale to establish where this positions the overall risk.

Step 6: Application of fire engineering analysis as part of further technical assessment

Where the conclusion for step 5 is inconclusive further assessment may be required by an appropriately competent fire engineer. This may involve but is not limited to further review of the evidence gathered previously or potentially further investigations carried out of the building.

Asset Information

Property Type

Apartment Block

Building Era / Age

Assumed 1950 - 1979

Building Height

45m

Approx Floor Area Per Floor

1300m2

Floor Area Ration (FAR)

40m x 38m floor plate

Number of Storeys Above Ground

16

Number of Flats Flat Types

39

Single Storey

Structural Wall Material

Brick / Block

Structural Floor Material

Concrete

Structural Stairs Material

Concrete

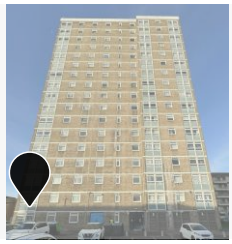
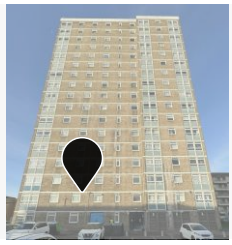
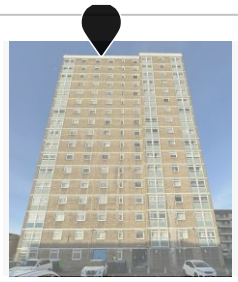
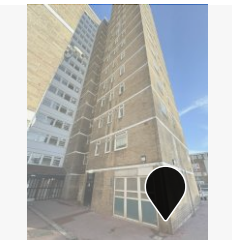
Construction (Details)

Traditional concrete frame and brick construction

Elevations

Photo	Name
	EAST
	SOUTH

Inspections

Elevation Location	Inspection	Elements
	**Inspection: THXLJQ** EAST Window infill panel	• Surface Finish (Sheet Metal) • Insulation (XPS Insulation) • Inner Leaf (Sheet Metal)
	**Inspection: XBR6V1** EAST Below compartmentation floor slab, adjacent to window opening	• Surface Finish (Brickwork) • Cavity • Insulation (XPS Insulation) • Inner Leaf (Brickwork)
	**Inspection: VK54AF** EAST Parapet cladding at roof level	• Surface Finish (Reinforced concrete)
	**Inspection: 9CZ778** SOUTH Floor zone	No elements identified
	**Inspection: VKCB7Q** SOUTH Window infill panel	• Surface Finish (Sheet Metal) • Insulation (XPS Insulation) • Inner Leaf (Sheet Metal)

Elevation Location	Inspection	Elements
 Inspections	**Inspection: NF82QT** SOUTH Below compartmentation floor slab, adjacent to window opening	No elements identified

Inspection: THXLJQ

Elevation • Location
EAST • Window infill panel

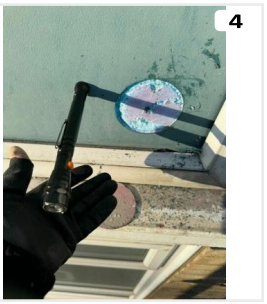
Build-Up

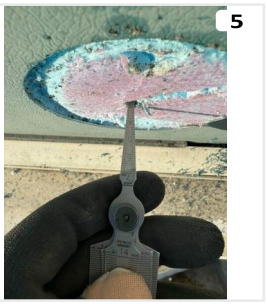
3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	1mm	Sheet Metal	3, 4	A1 - Non-Combustible
Insulation	30mm	XPS Insulation	5	C - Combustible
Expanded polystyrene board				
Inner Leaf	1mm	Sheet Metal		A1 - Non-Combustible

Cavity Barriers

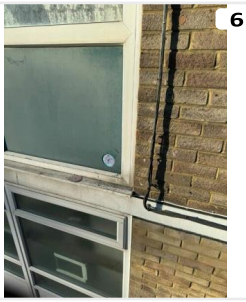
None

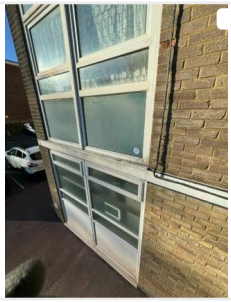
Build-up Photos





Inspection Photos





Inspection: XBR6V1

Elevation • Location
EAST • Below compartmentation floor slab, adjacent to window opening

Build-Up

4 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	102mm	Brickwork	8, 9	A1 - Non-Combustible
Cavity	80mm		10	
Insulation	80mm	XPS Insulation	11	C - Combustible
Blown expanded polystyrene beads				
Inner Leaf		Brickwork	12	A1 - Non-Combustible

Cavity Barriers

2 Cavity Barriers	Material	Photo Ref.
Window Aperture	Brick	13, 14
Cavity closed by brick wall		
Horizontal Cavity Barrier	Concrete	15, 16
Cavity closed by concrete		

Floor Slab

Outside and backing walls sit on the floor slab

Build-up Photos

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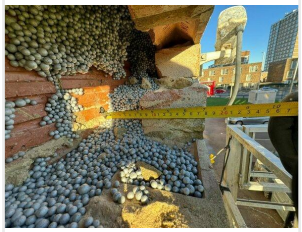

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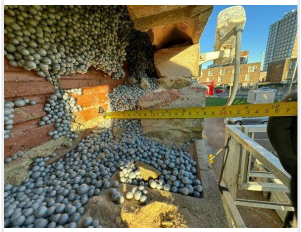

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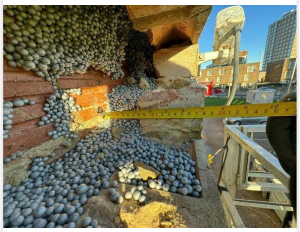

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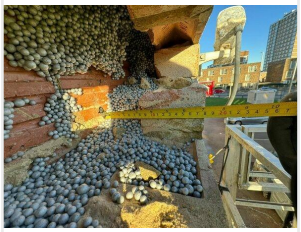

Cavity Barrier Photos

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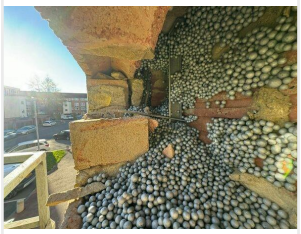

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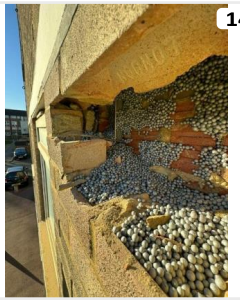

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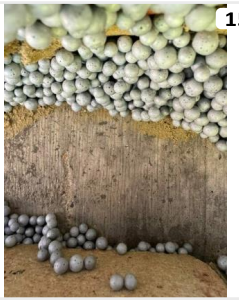

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Inspection Photos

17

Inspection: VK54AF

Elevation • Location

EAST • Parapet cladding at roof level

Build-Up

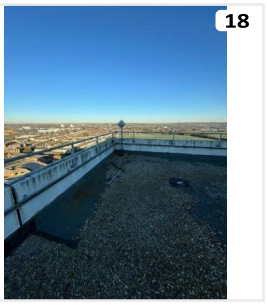
1 Element	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Surface Finish	180mm	Reinforced concrete	18, 19, 20, 21, 22, 23, 24	A1 - Non-Combustible

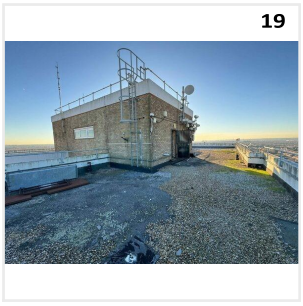
Reinforced concrete upstand

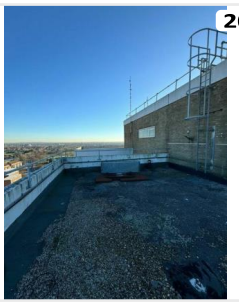
Cavity Barriers

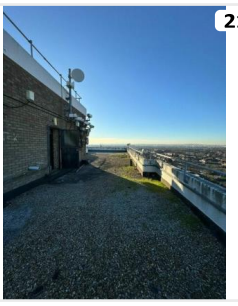
None

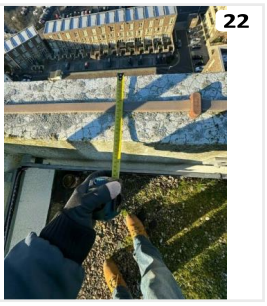
Build-up Photos

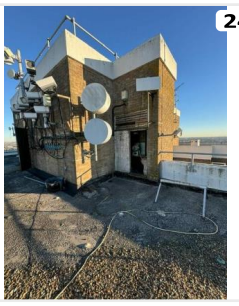












Inspection Photos

Inspection: 9CZ778

Elevation • Location
SOUTH • Floor zone

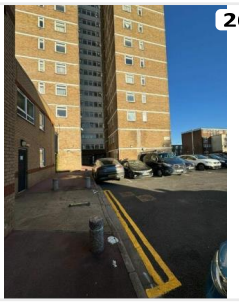
Cavity Barriers

None

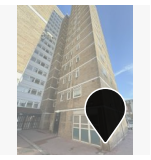
Description

Unable to carry out inspection due to no exclusion zone available for the works

Inspection Photos



Inspection: VKCB7Q



Elevation • Location
SOUTH • Window infill panel

Build-Up

Surface Finish	1mm	Sheet Metal	27	A1 - Non-Combustible
Insulation	30mm	XPS Insulation	28	C - Combustible

3 Elements	Thickness/Depth	Material	Photo Ref.	Rating (BS EN13501)
Expanded polystyrene board				
Inner Leaf	1mm	Sheet Metal		A1 - Non-Combustible

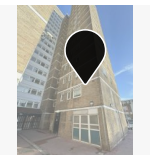
Cavity Barriers

None

Build-up Photos

Inspection Photos

Inspection: NF82QT



Elevation • Location
SOUTH • Below compartmentation floor slab, adjacent to window opening

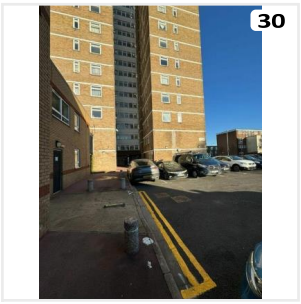
Cavity Barriers

None

Description

Unable to carry out inspection due to no exclusion zone available for the works

Inspection Photos



Attachments & Balconies

No attachments have been recorded Attachments &

Balconies

Penetrations

No penetrations have been recorded

External Windows

No external windows have been recorded

External Doors

No External Doors have been recorded

Plan: EAST

Plan: EAST

Plan: SOUTH

Plan: SOUTH

Photos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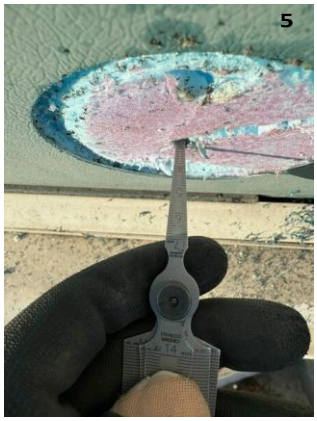
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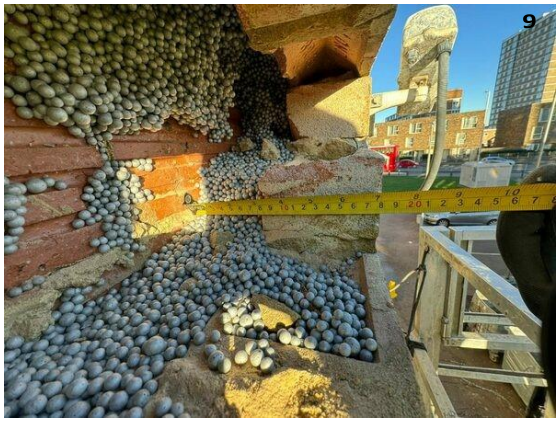
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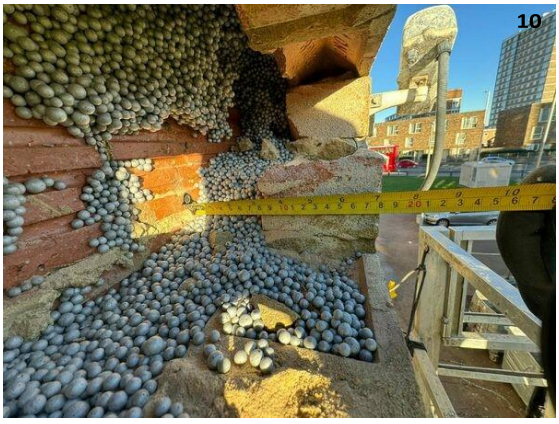
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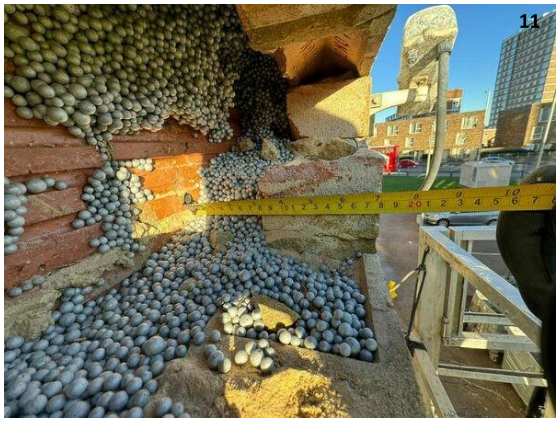
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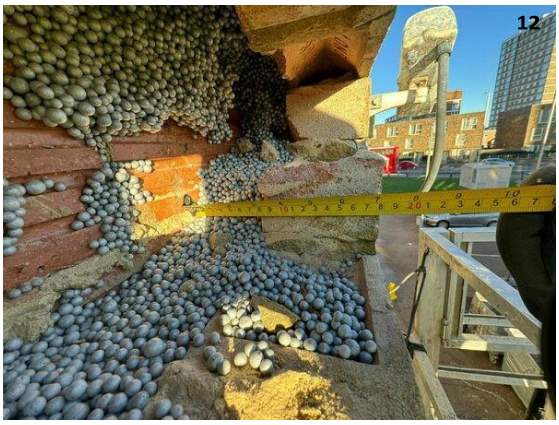
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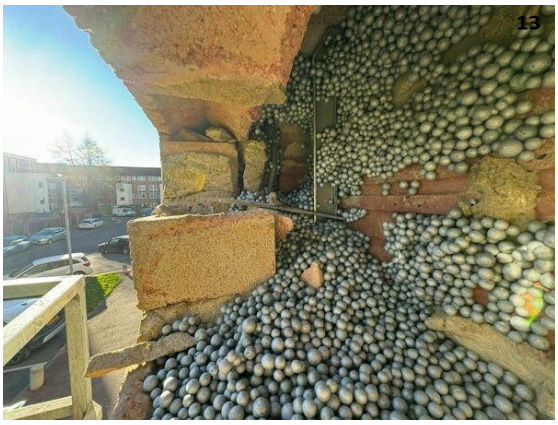
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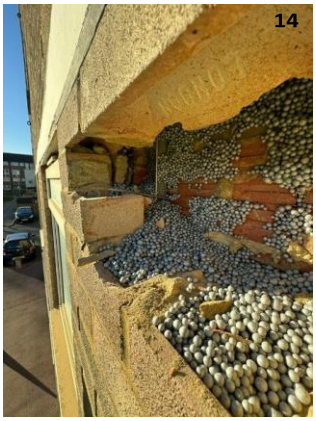
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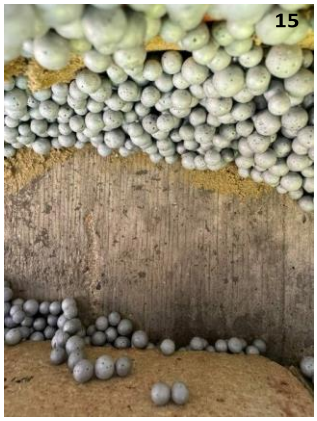
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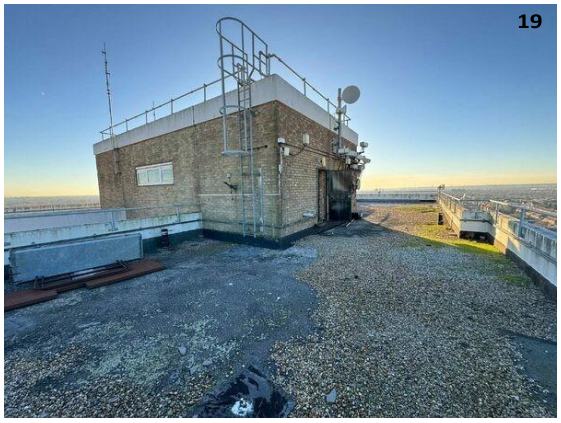
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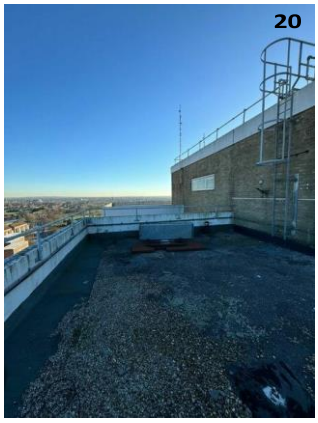
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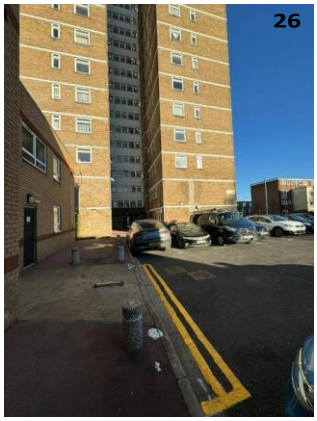
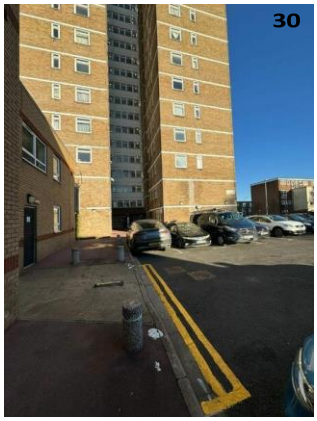
Photos Continued...





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