Project	Example End Lane 80,82
Client Name	Example Client– Example Construction
Site Address	80,82 Example Lane, EX6 2LX
Date of Survey	23.02.26
Surveyor	Paul Connolly
In Attendance	Example C (Contractor). Example M (Manufacturer)
Equipment	Camera, Drill, Borescope, Core sample kit
Scope of Work	Intrusive survey of roofs to property no's 80 & 82. Visual survey 82e
Weather	Dry, overcast

Aerial View

Approximate core sample locations ■

1.0 Overview

This report has been prepared exclusively for Example Construction to support the refurbishment of the specified roof areas at the aforementioned properties. It is based on our site inspection of 23rd February 2026, and should be read in conjunction with the enclosed photographs.

2.0 Survey Scope & Constraints

This assessment was conducted to determine the current waterproofing build-up of the flat roof areas at numbers 80 and 82. The intrusive survey was extended to identify the specific deck type, the presence of any insulation below the deck, and to gather additional technical data required for engineering purposes.

Please note that this document is not a structural report and must not be used for structural purposes. It is premised on the assumption that the existing structure is suitable for the intended refurbishment, pending further advice and formal confirmation from a qualified structural engineer. This report is strictly limited to the findings and observations recorded during the survey.

This report is not a thermal analysis or system design. Example Manufacturer will be responsible for providing U-value calculations, Condensation Risk Analysis (CRA), and designing the waterproofing build-up.

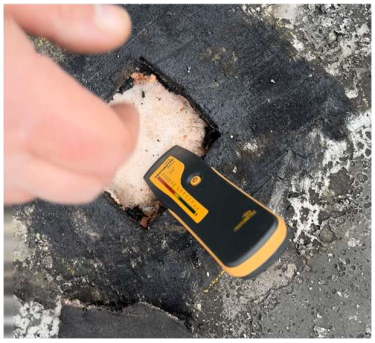
In accordance with Building Regulations Part 2A, Calex is acting as a surveyor and technical advisor and will not be coordinating the design works, and will not be acting as the Principal Designer in relation to these regulations or any associated duty holder requirements.

3.0 Core Sample Findings

3.1 Number 80

Two core samples were taken at a high and low point of the roof (refer to aerial view). The waterproofing was exposed, the deck and void below was inspected with a borescope.

Core Sample (High Point)

Layer	Depth	Photo	Condition
Waterproofing – Mastic Asphalt (Solar Reflective Paint)	Circa 20mm		No major defects noted. Solar reflective paint has deteriorated across the roof area
PIR (Polyisocyanurate) Insulation	Circa 50mm		No moisture was detected within the insulation
2 x 20mm Plywood boards	Circa 40mm		The core sample revealed there was a build up of two 20mm boards, adjacent to a build up of one 20mm board. We would recommend inspection from below to

			determine build up
Void (Timber construction)	Circa 200mm (void below underside of second plywood board)		No insulation present below deck

Core Sample (Low Point)

Layer	Depth	Photo	Condition
Waterproofing – Mastic Asphalt (Solar Reflective Paint)	Circa 20mm		No major defects noted. Solar reflective paint has deteriorated across the roof area
PIR (Polyisocyanurate) Insulation	Circa 50mm		Insulation was found dry. Did not penetrate the deck

3.1.2 Thermal Comments

Example Manufacturer are to run condensation risk analysis and u-value calculation to determine requirement for supplementary insulation within the proposed waterproofing system to comply with approved document Part L.

3.2 Number 82

Two core samples were taken at a high and low point of the roof (refer to aerial view). The waterproofing was exposed and the deck below was inspected with a borescope.

Core Sample (High Point)

Layer	Depth	Photo	Condition
Waterproofing – Mastic Asphalt (Solar Reflective Paint)	Circa 20mm		No major defects noted
Screeded Woodwool Slab	Circa 75-80mm		Dry – No major defects noted Reinforcement to underside of slab noted from borescope
Void (Timber construction)	Circa 700mm		Insulation was detected above ceiling. It was impossible to determine exact thickness. It is assumed circa 50mm

Core Sample (Low Point)

Layer	Depth	Photo	Condition
Waterproofing – Mastic Asphalt (Solar Reflective Paint)	Circa 20mm		No major defects noted
Screeded Woodwool Slab	Circa 75-80mm		Dry – No major defects noted Reinforcement to underside of slab noted from borescope
Void (Timber construction)	Circa 575-625mm (an internal investigation would be required to determine exact thickness.		Insulation was detected above ceiling. It was impossible to determine exact thickness. It is assumed circa 50-75mm

3.2.1 Thermal Comments

Example Manufacturer are to run condensation risk analysis and u-value calculation to determine requirement for supplementary insulation within the proposed waterproofing system to comply with approved document Part L.

4.0 Observations

4.1 Number 80

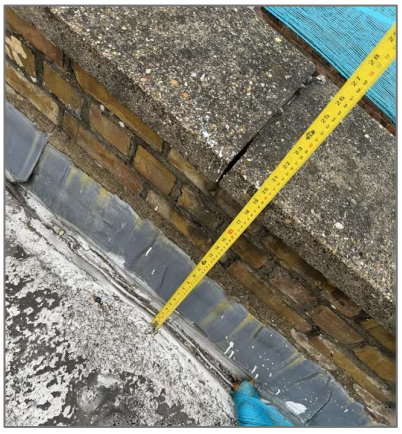
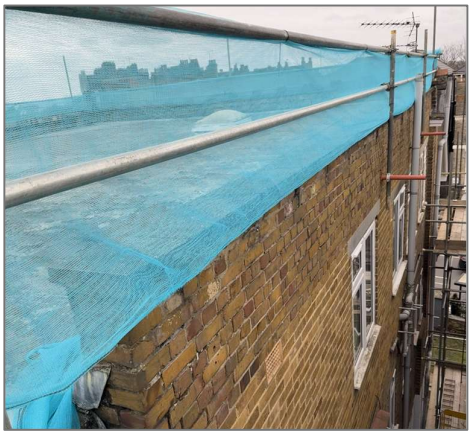
4.1.1 Drainage


Rainwater drains from front to back of the roof into an external gutter. Falls are effective.

4.1.2 Rooflights

Example Manufacturer to incorporate new rooflight into their specification to comply with building regulations. We advise the fire officer is consulted to confirm suitability in relation to Part B of the building regulations.

4.1.3 Parapet Walls

A robust detail is required to the parapet wall and will be incorporated within the Example Manufacturer Specification. Planning is to be taken into consideration i.e raising / covering the coping stone may not be permitted.

It is recommended that the scaffolding is adjusted to allow waterproofing works to the parapet wall / copings.

4.1.4 Abutments

Pitched Roof Tiles to be tested as they are suspected asbestos containing material.

4.2 Number 82

4.2.1 Drainage

Rainwater drains from front to back of the roof into an external gutter. Falls appear adequate with one small section potentially holding water.

4.2.2 Rooflights



Example Manufacturer to incorporate new rooflight into their specification to comply with building regulations. We advise the fire officer is consulted to confirm suitability in relation to Part B of the building regulations.

4.2.3 Parapet Walls


A robust detail is required to the parapet wall and will be incorporated within the Example Manufacturer Specification. Planning is to be taken into consideration i.e raising / covering the coping stone may not be permitted.

It is recommended that the scaffolding is adjusted to allow waterproofing works to the parapet wall / copings.

4.2.4 Abutments

Decorative crested ridge tiles to be temporarily removed and robust detail to mansard roof prior to reinstating inline with Example Manufacturer specification. Planning is to be taken into consideration i.e raising / covering the ridge tiles may not be permitted.

4.3 Number 82e

No access available to carry out the survey. Example Manufacturer will make assumptions and allow for within their specification.

5.0 Executive Summary & Next Steps

Structural Integrity & Loading: While the waterproofing is suitable for an overlay, a structural engineer must formally investigate and confirm the roof's suitability to carry the additional weight. This is critical for the photovoltaic (PV) frame and panels to be supplied by Example Manufacturer.

Thermal & Condensation Analysis: Example Manufacturer will provide a full specification for a 20-year system. This will include specific U-Value and interstitial condensation risk analysis to determine the exact insulation thickness required for compliance.

Fire Safety Compliance: All proposed rooflights must be reviewed and approved by the appointed fire officer. This ensures they align with the building's Fire Strategy and Part B of the Building Regulations.

Planning & Consents: Clarification is required from planning officers regarding the proposed works to the parapet walls (80 & 82) and the ridge tile design (82) to ensure there are no local constraints or heritage requirements.

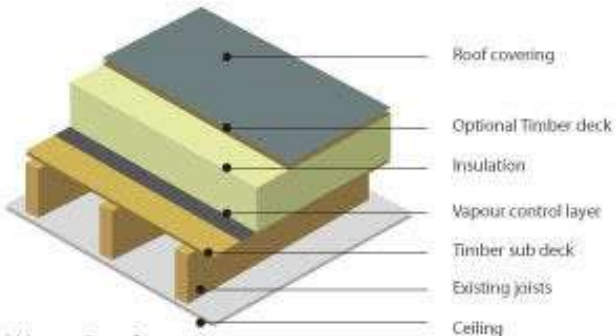
Access & Logistics: Existing scaffolding must be altered to provide safe, compliant access for the parapet wall works. Assumptions made for the inaccessible area (82e) will be formalised within the final Example Manufacturer specification.

Hazardous Materials: The pitched tiles on property 80 are suspected of containing asbestos. Testing is mandatory; if positive, removal must be executed by a licensed contractor in strict accordance with the Asbestos Act and HSE guidelines.

5.1 Example Manufacturer System

Based on Example Manufacturers recommended specification for a high-performance warm roof, the following is a typical buildup using Example system with PIR insulation (insulation thickness to be confirmed within their specification).

Example Diagram



Warm Roof

The flat roof insulation is located above the joists