Roof Survey **Report**

Calderglen Early Learning & Childcare
Wester Hailes Road, EDINBURGH
EH11 4NG, United Kingdom

12 February 2026
Project Reference: B260838/1

PREPARED FOR:
[redacted]
Skanska

PREPARED BY:
[redacted]
Area Technical Manager
[redacted]@bauder.co.uk

Contents

1 Introduction

Further to our site inspection we have prepared the following survey report based on the current condition of the existing roof/s. This survey report is based on our visual inspection of the roof/s together with our exploratory core test samples. It should be noted that core test samples are taken to identify the existing roof construction to deck level and to provide an indication of the roof condition. Due to the limited number of core samples that can be practically taken on a roof, Bauder Ltd cannot be held responsible for any changes in roof build-up in areas where core samples have not been taken.

1.1 Description of Building and Weather Conditions

Building use – Educational
Height in Storeys: - 1

The weather conditions at the time of our survey inspection were dry
The Roof surface at the time of our survey was damp though dried with a torch for core samples

1.2 Roof Access

Roof access was gained externally using a single storey surveyor's ladder.

1.3 Confirmation of Client brief

To carry out an evaluation and produce a condition report for the roof areas concerned.

1.4 Roof Plan

1.4.1 Lower Roof, Main Roof

Any measurements displayed on the map above are approximated and are therefore not to be used in tenders.

2 Existing Roof Construction

2.1 Core Sample Analysis

Core samples are taken as a method of confirming the existing deck and waterproofing system construction and provide indicative feedback regarding general condition. Please note that the findings are representative only of the particular location tested and this is used to give general guidance as to the likely overall condition and deck construction.

2.1.1 Main Roof and Lower Roof

No. of core samples taken:	4
Construction Type:	Warm Roof
Waterproofing:	BS747 Built-up bituminous membrane system
Insulation:	Cork tapered
Vapour Control:	Bituminous membrane vapour control layer
Roof Deck:	Timber boarding
Internal inspection:	Plasterboard ceiling - glass quilt insulation - no void ventilation present.
Condition of core sample:	Insulation on the lower roof was soaking, the insulation on themain roof has degraded and was not fully bonded to the felt cap sheet

Existing Roof Construction

Core on lower roof shows cork saturated

Cork on the main roof was dryer though has debonded in places from the cap sheet

Core in high point of the roof shows cork is 110mm deep

Cork in low point of the roof shows cork is 40mm deep

Timber T&G decking confirmed from the internal survey

All cores sealed using a felt cap sheet

3 Issues and Considerations

3.1 Lower Roof and Main Roof

3.1.1 Decks

From our visual inspection internally there has been water ingress into the building, this could effect the performance of the existing deck

3.1.2 Existing Waterproofing

The existing waterproofing system is constructed as a warm roof, comprising built-up bituminous membranes incorporating taper cork insulation and a bituminous vapour control layer, installed onto the timber roof deck.

There have been previous repairs attempted on both roofs using mineral and bare faced felt, recently given the failures cold applied liquid has been installed to the laps giving the system a little bit more protection

Issues and Considerations

Partial ceiling collapse internally and water ingress shows the existing waterproofing system and drainage has failed

Loose laps were found over the roof area

Repairs were noted on both the main and lower roofs to have historically been carried out with many different materials

Different mineral cap sheets noted in the picture above shows a historic repair

Bare faced felt repairs were also evident to have been carried out on the roof areas

Water was found under some of the repairs, these have also failed

3.1.3 Falls

BS6229:2018, the relevant code of practice for continuously supported flexible membrane coverings states all flat roof surfaces (including gutter beds) should be designed to ensure a finished fall of 1:80 is achieved.

The existing falls are provided by tapered insulation within the existing waterproofing system build-up which has degraded. The insulation will need to be replaced using a tapered scheme to provide adequate falls to comply to BS6229:2018.

3.1.4 Drainage

The existing drainage requires to be reviewed as it may be part of the issues these roof areas have had due to the narrow outlets and blocked drains/pipework

Ponding in the gutters was evident on inspection

Additional ponding just outside the gutters was also noted

The current outlets are very narrow and poorly detailed

3.1.5 Upstands and Details

Requirements for waterproofing at upstands and details

Codes of Practice (BS 8217: 2005) dictate that the minimum height for waterproofing upstand detailing is 150 mm, taken from the finished surface. Perimeter kerbs should be a minimum

height of 50 mm above the finished surface and detailed with a welted drip detail or edge trim.

There should be no mechanical penetrations to kerb waterproofing or need for secondary weathering. Kerbs that are weathered with mechanically fixed metal capping or concrete copings are categorised as 'abutment upstands' and must comply with the minimum height requirement of 150 mm.

This minimum height rule applies equally to upstands to roof lights, pipes, vents and door and window thresholds.

Waterproofed upstand detailing is usually weathered with lead or metal counter-flashings, metal capping and cladding. Termination bars should only be used when fixing to concrete abutments, where no provision exists for other forms of secondary weathering.

Waterproofing height to brickwork upstand requires increasing
To comply with codes of practice the waterproofing should be dressed up the brickwork upstand to a minimum height of 150mm above the new finished roof level. This will impact on the position of any counter-flashings which also need to be raised accordingly.

A new raggle and counter flashing will either require to be installed or if this is currently dormant it should be encapsulated by the waterproofing

Either a term bar of a raggle should be cut

Raise existing rooflight kerbs
The existing rooflights mounted upon builders kerbs will need removing in order to allow the kerb height to be raised to the required minimum height and then re-waterproofed.

Removing existing extractor vents to increase the kerb height
The existing powered extractor vents need to be removed to allow the kerb to be raised to provide the required minimum height.

Extending the existing soil vent pipes
The change in surface level, once the new waterproofing system is installed, will necessitate extending the existing soil vent pipes. This is to ensure there is sufficient provision for forming the waterproof upstand detailing to the pipes and fitting any secondary weathering collars.

SVPs to be extended

Vent kerb will require to be raised to meet BS6229

Confirmation if the downpipes are still in use and what their task is

3.1.6 Rooflights

The existing rooflights should renewed with new as part of the works

The existing rooflights should upgraded as part of the works

4 Proposals

4.1 Main Roof and Lower Roof

- Given the water ingress, there may be areas or sections of the current deck that require to be replaced
- Due to its condition, the existing waterproofing system should be completely removed and replaced.

  Note - an adequate provisional sum should be set aside to cover for any unforeseen issues related to the removal of the existing waterproof covering that may necessitate localised repairs to the existing deck
- The client is going to propose and investigate the potential to remove the current outlets and perimeter kerb with a view to draining the roof areas to an external gutter, this would make the drainage external and make remedial works or clearing potentially easier in the future
- The waterproofing upstand is to be raised to achieve the minimum required height of 150mm. Counter-flashings are to be positioned to suit.
- The existing rooflights must be removed to enable the upstand kerb to be raised to comply with the required minimum upstand height. Raising the kerbs will affect the internal linings and provision should be included for any consequential extension and re-decorating work to the linings.
- The existing powered extractor vents mounted on builders kerbs will need to be decommissioned and temporarily removed in order to allow the kerb to be raised to the required minimum height and then re-waterproofed. Provision should be made for modifying any internal linings etc.
- Provision should be made for extending the existing soil vent pipes in order to accommodate the increase in the finished surface level resulting from the thickness of the new waterproofing system.
- The existing rooflights should be replaced with new modular Bauder Rooflight units that offer improved thermal and light transmittance performance and are classified as being non-fragile These will complement the performance of the replacement waterproofing system during its serviceable life. Please advise your requirements and we will include these within our separate schedule and specification for replacement Bauder Rooflights.

5 Health & Safety and Construction Design Management

Bauder believes in promoting a strong safety culture at all times. Our Staff will adhere to the appropriate risk assessments and method statements as required under the Health and Safety at Work Act 1974 and Work at Height Regulations 2005. It is the client's duty of care to advise of any specific health and safety issues pertaining to the project as required under the Work at Height Regulations 2005.

As part of our duty of care we would like to draw attention to the following information:

The HSE Guide H&S in Roof Work (HSG33) states that **all** roofs should be treated as fragile unless declared otherwise by a competent person. Please refer to the Work at Height Regulations 2005 provision 9 for information on working with fragile/suspected fragile roof areas. Under the Health and Safety at Work Act 1974 Sections 3 and 4, it is the responsibility of employers and anyone who controls the work of others to ensure so far as it is reasonably practicable that persons are not exposed to risks that impact on their health and safety. Appropriate control measures must be in place before any work or contact with a fragile/suspected fragile roof area commences.

Safe access and egress to a roof is a major risk and requires careful planning. In particular, the following are likely to be fragile:

- Non reinforced fibre cement sheets e.g. asbestos
- Corroded metal decking
- Woodwool slabs
- Rotten chipboard or similar
- Stramit
- Slates or tiles
- Old roof lights
- Glass (including wired)

Specifying non fragile rooflights will help reduce the risk of falls from height. A non-fragility rating is required by the HSE (Health and Safety Executive) in order to comply with CDM (Construction Design and Management) Regulations 2015.

We draw your attention to your duties under the Construction (Design and Management) Regulations 2015. Regulation 4, Client's duties in relation to managing projects states that the client must make suitable arrangements for managing a project, including the allocation of sufficient time and other resources. Regulation 5, Appointment of the Principal Designer and the Principal Contractor states that where more than one contractor will be working on a project at any time, the client must appoint a Principal Designer and a Principal Contractor.

Please note that although Bauder will assist with the roof waterproofing system design, we will

not undertake the role of Principal Designer.

It is always the responsibility of the contractor to carry out a risk assessment on all aspects of the contract. The 'Safe2Torch' checklist is solely for guidance for the safe installation of torch-on reinforced bitumen membranes and use of gas torches in the workplace.