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# Report Document

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## Project: 43129

Project Name: Regina Road 1-87  
Project Address: Regina Road  
London  
SE25 4TW

## Client:

Client Details: Ridge & Partners LLP

## Report written by:

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The logo for Ridge, consisting of the word "RIDGE" in white, serif, all-caps font centered within a solid green square.

RIDGE

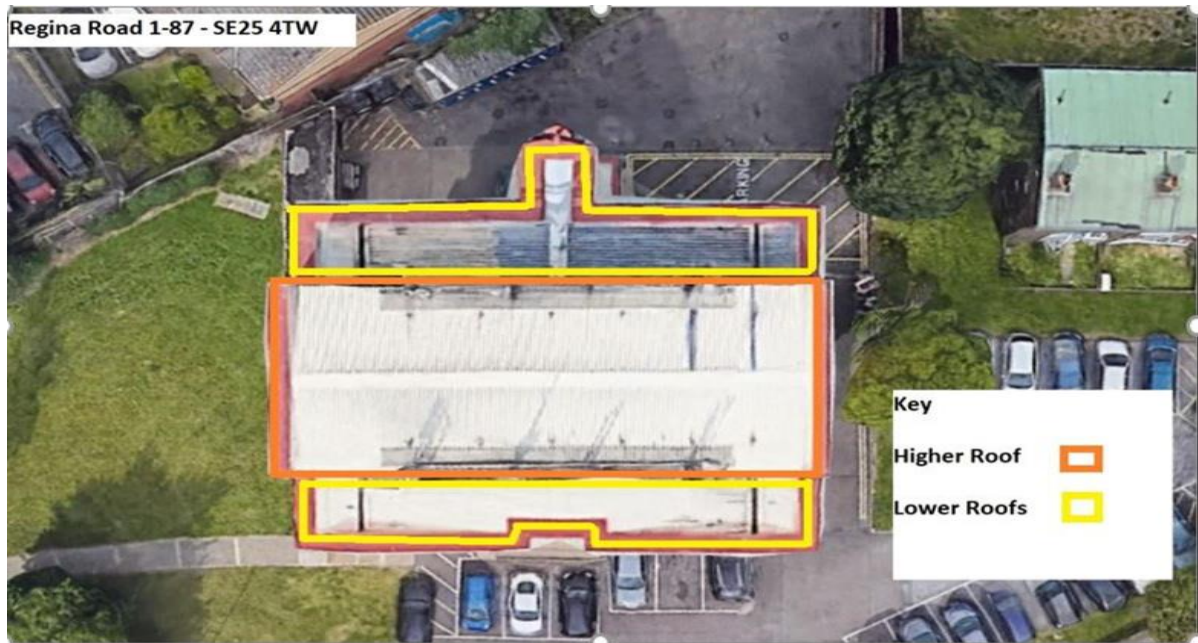
**CROYDON  
COUNCIL**

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## Roof Survey Report & Recommendations

Roof area covered by this report: Existing Main Roof, Profiled Metal Roof (Higher Level) , Profiled Metal Roof (Lower Level)



### 1. Outline Description

This report has been produced for Ridge & Partners LLP for the express use in the refurbishment of the designated roof areas of the property stated above. It is based on our site inspection of Regina Road, London, SE25 4TW and should be read in conjunction with the enclosed photographs.

### 2. Scope of Report

This report is not a structural survey.

Any comments on roof structure or other building related issues in this report should not be taken to imply that its integrity has been assessed or deemed acceptable. A qualified party should verify any concerns relating to the integrity and/or capabilities of any part of the structure.

All the Langley Waterproofing Systems Ltd reports are written on the basis that the substrates, roof deck and structure are sound and durable. We cannot accept responsibility for the consequences of the latent defects in the roof deck and structure.

Listed Building Status: It is the responsibility of the building surveyor and/or client to ascertain the status of the building/s in question.

### 3. Roofs

Core Samples: These are taken for guidance purposes and indicate the construction only at the sample locations. Condition or levels of degradation affecting the coverings are only applicable at the time of inspection. Both construction and condition may vary throughout the roof area.

#### 3.1. Profiled Metal Roof (Higher Level)

##### Thermal Properties

- No core samples were taken in this area. The full build up can be seen to the underside of the metal roof, therefore no samples were required.

##### Roof Defects and Design Considerations

- **Main Area**  
**Details:** Existing profiled metal system installed above existing felt waterproofing.
- **Perimeters**  
**Details:** Perimeter edge draining into external gutters which discharge into rainwater pipes.  
**Defects:** Liquid repairs have been carried out in various locations.
- **Penetrations**  
**Details:** Mansafe posts.  
**Defects:** Liquid repairs have been carried out to the base of the Mansafe posts. The level of application would suggest a history of issues in this area.

##### Photographic Record



##### Main Roof Area - Description

Image of main field area with access walkway platform.



**Main Roof Area - Description**

Parapet wall with metal cappings.



**Perimeters - Description**

Roof falls towards the perimeter edge which is finished with a metal external gutter discharging into downpipes.



**Perimeters - Description**

Additional image of external gutter metal box gutter to perimeter edge.



#### Perimeters - Description

Liquid repairs have been carried out in this area indicating a history of issues involving water ingress.



#### Penetrations - Description

Liquid repairs have been carried out to the base of the defective Mansafe posts.

### 3.2. Profiled Metal Roof (Lower Level)

#### Thermal Properties

- No core samples were carried out in this area. The full build up can be seen to the underside of the metal roof, therefore no samples were required. We also recommend that a section of the existing profiled metal roof is removed to enable further investigative work into the areas beneath. Langley to liaise with the CA to make the necessary arrangements, subject to confirmation.

## Roof Defects and Design Considerations

- **Main Area**  
**Details:** Profiled metal roof structure has been installed upon steels above existing roof system.  
**Defects:** Liquid repairs have been carried out in designated areas.
- **Drainage/Falls**  
**Details:** Valley gutters between profiled metal upstand are discharging into internal outlets encapsulated within the external cladding.  
**Defects:** Numerous liquid repairs have been carried out in this location and ponding water is evident due to blockages.
- **Parapets**  
**Details:** Parapet wall with metal cappings.  
**Defects:** Cappings appear loose with gaps within the profiles leaving the area beneath exposed to the elements.
- **Skirtings**  
**Details:** Upstand to higher roof level with wall mounted plant items.  
**Defects:** Further liquid repairs have been undertaken in various locations on the upstand. This leads us to believe that ingress may be occurring at the junction points.
- **Penetrations**  
**Details:** Vent and overflow pipes penetrating the main field area and upstand.  
**Defects:** Base of soil vent pipe has received liquid repairs in an attempt to prevent ingress via the defects.
- **Handrails**  
**Details:** Handrail and walkway platform.

## Photographic Record



### Main Roof Area - Description

Image of main field area with parapet wall and metal cappings.



### Main Roof Area - Description

Additional image of main field area.



### Main Roof Area - Defects and Design Notes

Multiple liquid repairs have been carried out to defective areas.

As mentioned above, we recommend considerations are made to remove sections of the existing roof, mainly around the outlet locations in order to ascertain the condition of the areas below.



### Main Roof Area - Defects and Design Notes

Pipe penetration with liquid repairs



#### **Drainage Falls - Description**

Downpipes from higher roof level discharge into box valley gutters which drain into parapet chutes located within the cladding.



#### **Drainage Falls - Description**

Falls within the box gutter are inadequate and a build up of ponding water was evident during the survey.

Due to the amount of repairs carried out in this area we would recommend that more intrusive inspections are carried out in this area.



#### **Parapets - Defects and Design Notes**

Gaps within the metal cappings leave the area exposed to the elements.





**Parapets - Defects and Design Notes**

Junction between the metal cladding to the parapet shows a gap that has been temporarily filled with a mastic sealant.



**Skirtings - Description**

Upstand to higher roof level.



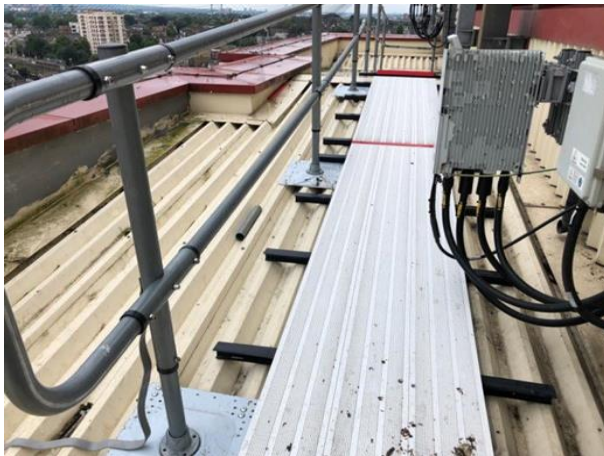
**Penetrations - Description**

Overflow and vent pipes penetrate the metal cladding to the upstand.



#### Penetrations - Description

Base of the soil vent pipes have received liquid repairs.



#### Handrails - Description

Metal platform has been fixed to existing structure to provide safe access for maintenance.

Wall mounted telecoms units are located in this area.

### 3.3. Existing Main Roof

#### Thermal Properties

- No core samples were taken in this area; therefore, we recommend further investigations including core samples are carried out to ascertain the full build up and condition of the existing waterproofing.

#### Roof Defects and Design Considerations

- **Main Area**  
**Details:** Existing RBM system with liquid overcoat to original roof area. Roof has since become an internal area following the installation of a steel structure extension. Note- no core samples were taken in this area.

**Defects:** Loose laid insulation evident, located in enclosed area below profiled metal. Numerous liquid repairs have been carried out. Door providing access to the opposing lower roof level has been wired shut due to ongoing deterioration. We recommend considerations are made to replace the doors.

### Photographic Record



#### Main Roof Area - Description

Image of main field area with door threshold and evidence of previous repair works carried out using a liquid compound.



#### Main Roof Area - Description

Additional image of main field area.



#### **Main Roof Area - Description**

Steel beams used to support the profiled metal structure have been fixed to the original parapet wall.

Wooden steps used to provide access for maintenance.



#### **Main Roof Area - Description**

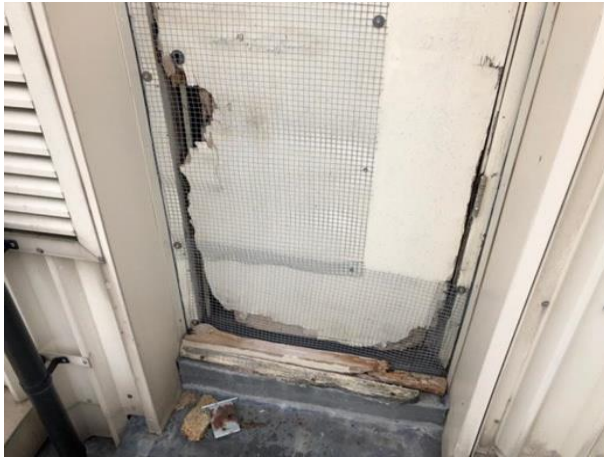
Image of original tank house and lift motor room.

Area provides access on to the profiled metal roofs.



#### **Main Roof Area - Description**

Loose laid insulation identified below the profiled metal upstands and on top of the original waterproofing.



#### **Main Roof Area - Description**

Excessive damage to the access door has rendered it unsafe to use and the outside area inaccessible to one side.

## **4. Summary**

### **Profiled Metal Extension (Lower Level)**

The current roof covering is in poor condition with signs of deterioration, and with the noted defects and attempted liquid repairs, lead us to the conclusion that the roof is past its serviceable life. We recommend the sections of the profile metal sheeting is temporarily removed and the area below investigated further.

No formal recommendations can be made for any proposed works at this stage until the above-mentioned inspections are carried out. However, should the existing metal structure remain in situ then we would suggest a cold applied liquid system overlay is considered based on our initial findings.

### **Profiled Metal Extension (Higher Level)**

The current roof covering is in reasonable condition, however, there are signs that the roof surface is coming to the end of its serviceable life. There are areas on the roof where liquid repairs have been carried out, suggesting issues relating to ingress, therefore we would recommend that the existing profiled metal sheeting remain in situ and the area coated with a new cold applied liquid system. Option is subject to CA confirmation.

### **Existing Main Roof**

The current roof covering is in poor condition with signs of deterioration, and with the noted defects and attempted liquid repairs, lead us to the conclusion that the roof is past its serviceable life. No core samples were taken at the time of the survey; therefore, we recommend further investigation, including core sampling is carried out prior to any formal recommendations.

## 5. Recommendations

### Key design notes and recommendations

- Section of the profiled metal roof is to be removed and the area below investigated further. Langley to recommend an approved contactor to support with this process.
- Further investigations, including core sampling to be carried out to the existing main roof. Langley to return to site on a date agree with the CA.
- Considerations should be made to renew existing doors providing access to lower roof level.
- All plant, telecommunications, and associated item to be decommissioned and temporarily removed to allow for any proposed works.

## Langley Waterproofing Systems Ltd Guarantee

All the specified systems come with Langley Waterproofing Systems Ltd, unique single premium, independent insurance-backed guarantee. The premium is pre-paid, in full, for the guarantee period stated in the specification and covers the following:

- ✓ **Materials**
- ✓ **Labour**
- ✓ **System Design**
- ✓ **Consequential Loss**

In addition:

- **The guarantee is transferable between building owners**
- **Cover increases in line with an approved construction price index**
- **Each project is covered for the full value of reinstatement of materials including installation**
- **Insurance cover automatically reverts to the building owner should Langley and the roofing contractor fail to rectify defects for whatever reason**

## Langley Waterproofing Technical Support

The project/works will also be monitored by a Langley Technical Manager on a weekly basis, who will provide a written report on the progress and any issues arising. This monitoring service is provided to ensure full compliance with the specification and to approve the completed works for guarantee purposes and includes:

- A detailed final inspection highlighting any snagging items.
- A joint 6 or 12 month defects inspection.

## Appendices

- Glossary of Terms
- Bibliography



## GLOSSARY OF TERMS

A/C units	Air conditioning plant.
ACM	Asbestos Containing Material.
Attachment layer fixed/nailed)	An underlay used to isolate the new system from the substrate (usually mechanically).
Bunding	Internal waterproofing creating a 'tank' to contain potential leaks from water tanks.
BUR	Built-up felt roofing.
Cap sheet	Top layer of a built-up membrane system.
Cat ladder	Fixed (vertical) access ladder.
Cold roof	Roof structure designed with the insulation on the warm side (inside) of the roof deck.
Composite deck	A hybrid structural deck of rigid foam insulation with a factory bonded plywood top.
Cut-to-falls insulation	Insulation boards manufactured with a built-in fall.
Dew point (condensate).	Temperature at which moisture laden air releases the moisture as liquid water.
Free-draining edge	Roof perimeter that allows water to drain over, usually to an external gutter.
Free-standing	Not affixed to or through the structure.
Granule finish	Factory applied protective layer of fine granules to cap sheet.
Hard edge	A timber batten installed at exposed edges of insulation as a support to prevent damage to the insulation.
Hybrid deck	A structural deck that is also an insulant.
Inverted roof	A warm roof structure designed with the insulation placed over the waterproofing system.
LMR	Lift Motor Room.
Mushroom vent	Roof penetration used as a pressure release to the substrate.
OSB	Oriented Strand board.
Partial bonding layer	See venting layer.
Pour & Roll	Method of bonding of bituminous membranes using hot bitumen.
PIR	Rigid polyisocyanurate.
Protected membrane roof	See Inverted Roof.
PUR	Rigid polyurethane.
RWO	Rain water outlet.
Refurbidrain	A purpose made rainwater outlet designed to fit inside an existing outlet.
Sandwich construction	A warm roof configuration, where the insulation is sandwiched between a vapour control layer and the waterproofing.
Scupper	Low level over-flow outlet from a banded area such as a tank room etc.
Stramit	Trade name for a 'hybrid' supporting deck of compressed straw board.
SVP	Soil vent pipe.
SBS	Styrene-Butadiene-Styrene.
Tapered insulation	Insulation boards manufactured with a built-in fall.
Temperature gradient	The path of temperature change through a (roof) structure from inside to outside, plotted on a graph.
Timber deck	Either close boarding or tongue and grooved boards. (Not panelled material such as plywood, OSB board etc).
Torching	Method of bonding of bituminous membranes using propane gas torches.
Vapour barrier	See Vapour Control Layer. Bituminous membrane designed to prevent the passage of moisture laden air. Usually with an aluminium core.
Vapour check	See Vapour Control Layer. Bituminous membrane designed to restrict the passage of moisture laden air.
Vapour control layer	Underlay used below insulation to control the passage of moisture laden air.
Vapour barrier	See Vapour Control Layer. Bituminous membrane designed to prevent the passage of moisture laden air. Usually with an aluminium core.
Venting layer	Bituminous felt underlay with regular holes at predetermined centres to allow partial bonding of membranes on certain types of substrate.
Underlay	Interim layer of a multi-layer built-up membrane system.
Upside-down roof	See Inverted roof.
WBP	Water and Boil Proof (plywood).
Warm roof	Roof structure designed with the insulation on the cold side (outside) of the roof deck.

Welled drip  
Woodwool slab

Felt membrane edge detail.  
Hybrid structural deck of cement coated wood shavings.

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