Junior Aerial Thermal Survey Report

URN: JA-20072026-0001

Job Sheet

Section 1.)

Client Details:

Name & company:

REDACTED

Client Address:

REDACTED

Telephone Number: *REDACTED*

Email Address: *REDACTED*

Best times to contact: Daylight Hours

Preferred Contact Method: Mobile

Section 2.)

Product(s) Ordered:

	QTY:
Thermal	1
Orthomosaics	
Photogrammetry	
Li-DAR	
Standard Aerial Photos	1

Products Specific to Multiple Properties.
Continue on Page 3 if required:

N/A

Agreed Upon Price : £0

Complete Job Information:

Junior Aerial has approached Escot House and have offered to conduct a thermal roof survey.

Client has authorised the use of the data gathered within this survey for the purposes of Junior Aerial providing proof of work to further potential clients, social media use and for use on Junior Aerial's website portfolio. In return, Junior Aerial will conduct and provide the thermal report free of charge to assist in any potential repairs/replacements to their roof in the future.

*****END OF JOB INFORMATION*****

Desired Date(s) & Times for Shoot:

14/07/2026 at 1300 for standard photoshoot
20/07/2026 at 2200 for thermal survey

A different date for standard aerial photos and thermal survey have been chosen due to Junior Aerial availability and current high temperatures potentially degrading the integrity of thermal data.

DISCLAIMER

This report has been prepared by Junior Aerial using aerial thermal imaging and unmanned aircraft systems (UAS) to identify and document observable thermal anomalies present at the time of survey.

Thermal imaging is a non-invasive screening tool and should not be regarded as a definitive assessment of the structural condition or integrity of any building or asset. Observations, comments and recommendations contained within this report are based solely on the data captured during the survey, prevailing environmental conditions, and the professional judgement of the Junior Aerial pilot.

Junior Aerial is not a chartered surveyor, structural engineer, roofing contractor or accredited building inspector. Any thermal anomalies, temperature differentials or areas of interest identified within this report should be considered indicative only and must be investigated further by an appropriately qualified professional before any repair, replacement or financial decision is made.

Environmental conditions including, but not limited to, solar loading, weather, wind, precipitation, surface moisture, internal heating, building materials and the time of survey may significantly influence thermal imagery and its interpretation.

This report represents the condition of the surveyed asset at the time the survey was undertaken only and should not be relied upon as evidence of future performance or condition.

Overall Report

This report, conducted by James Ellyatt concluded on 20/07/2026 showed that the roof is of good condition overall. Areas of the roof that are in good condition with no recordable anomalies have not been included in the report. Only those areas that have recordable anomalies have been included. Please note, that anomalies are not necessarily a cause for concern. There are many reasons why anomalies may be present on roofing, including but not limited to:

- **Moisture in the roof system.** Wet insulation or roofing materials retain heat differently than dry materials. This is one of the most common reasons thermal imaging is used, but it requires confirmation with other testing because similar patterns can have other causes.
- **Differences in insulation.** Missing, compressed, or uneven insulation can create hot or cold spots without any damage to the roof covering.
- **Structural elements.** Steel beams, concrete supports, joists, or fasteners conduct heat differently and may appear as thermal anomalies.
- **Different roofing materials or repairs.** Patches, membranes of different ages, coatings, or changes in construction can produce different thermal signatures.
- **HVAC systems and vents.** Heat escaping from ducts, exhaust vents, flues, or mechanical equipment can warm nearby roof areas.
- **Solar loading and shading.** Areas that receive different amounts of sunlight or are shaded by rooftop equipment may cool or heat at different rates.
- **Air leakage.** Warm or cool air escaping from the building through gaps in the roof assembly can create localized temperature differences.
- **Reflective or emissivity differences.** Different surface finishes, dirt, moisture on the surface, or reflective materials can affect the thermal camera's readings without indicating a defect.
-

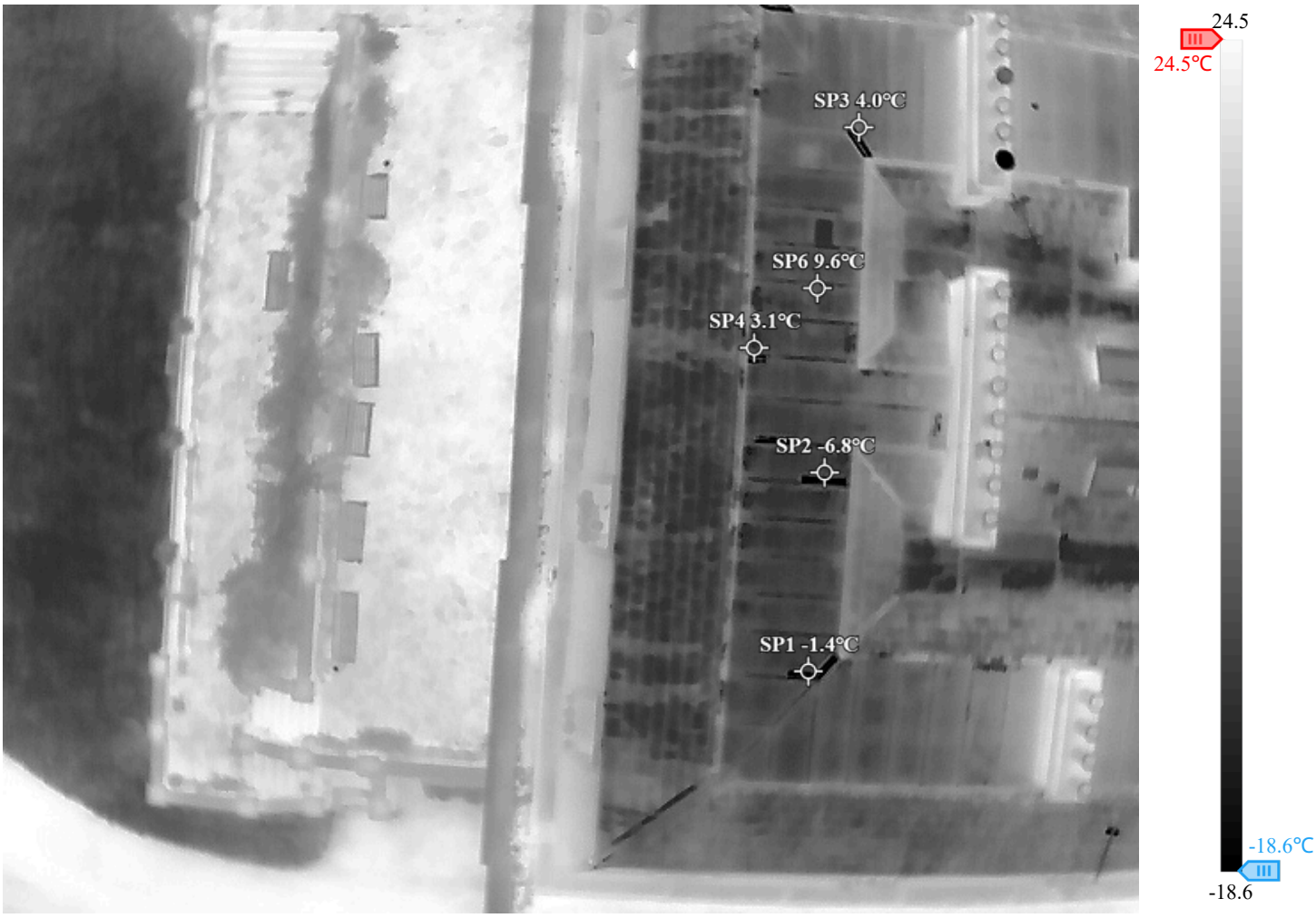


Image Info

Model	M3T
Serial Number	1581F5FJB22A700A0EEN

DJI_20260720220141_0004_T.JPG

2026/07/20 22:01:41

Measurements

SP1	VALUE	-1.4℃
SP2	VALUE	-6.8℃
SP3	VALUE	4.0℃
SP4	VALUE	3.1℃
SP6	VALUE	9.6℃

Parameters

Distance	5 m
Humidity	50%
Emissivity	0.95
Reflected Temp	25.0℃

Remarks

Anomalies identified between survey points SP1/SP6 and the surrounding roof structure, with a maximum observed differential of approximately 16.4°C.

Telephoto For Reference (Read Landscape)

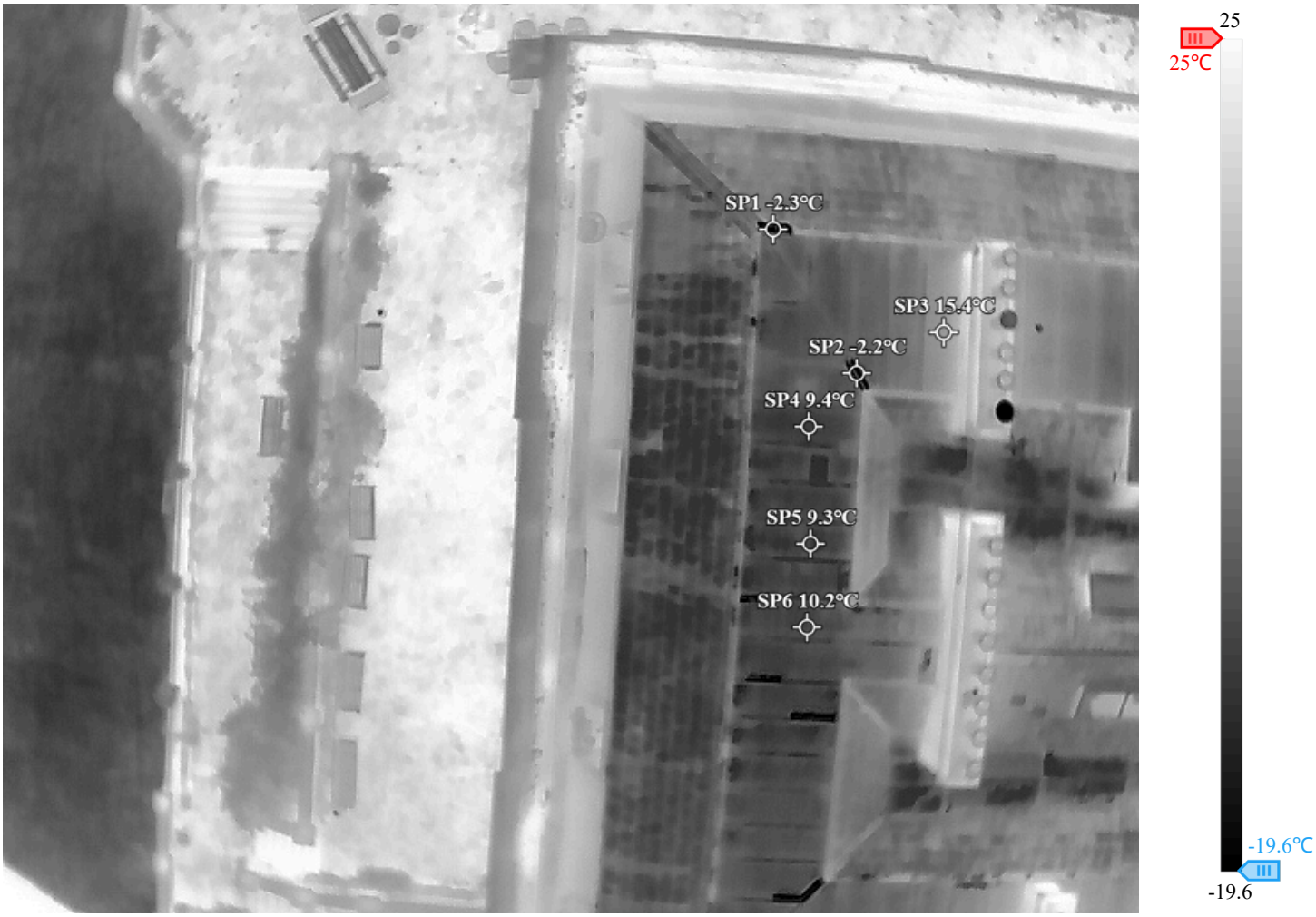


Image Info

Model	M3T
Serial Number	1581F5FJB22A700A0EEN

DJI_20260720220146_0005_T.JPG

2026/07/20 22:01:46

Measurements

SP1	VALUE	-2.3℃
SP2	VALUE	-2.2℃
SP3	VALUE	15.4℃
SP4	VALUE	9.4℃
SP5	VALUE	9.3℃
SP6	VALUE	10.2℃

Parameters

Distance	5 m
Humidity	50%
Emissivity	0.95
Reflected Temp	25.0℃

Remarks

Anomalies identified between survey points SP1/SP6 and the surrounding roof structure, with a maximum observed differential of approximately 17.7°C.

Telephoto For Reference (Read Landscape)

Image Info

Model	M3T
Serial Number	1581F5FJB22A700A0EEN

DJI_20260720220310_0022_T.JPG

2026/07/20 22:03:10

Measurements

SP7	VALUE	-7.7℃
SP8	VALUE	-10.4℃

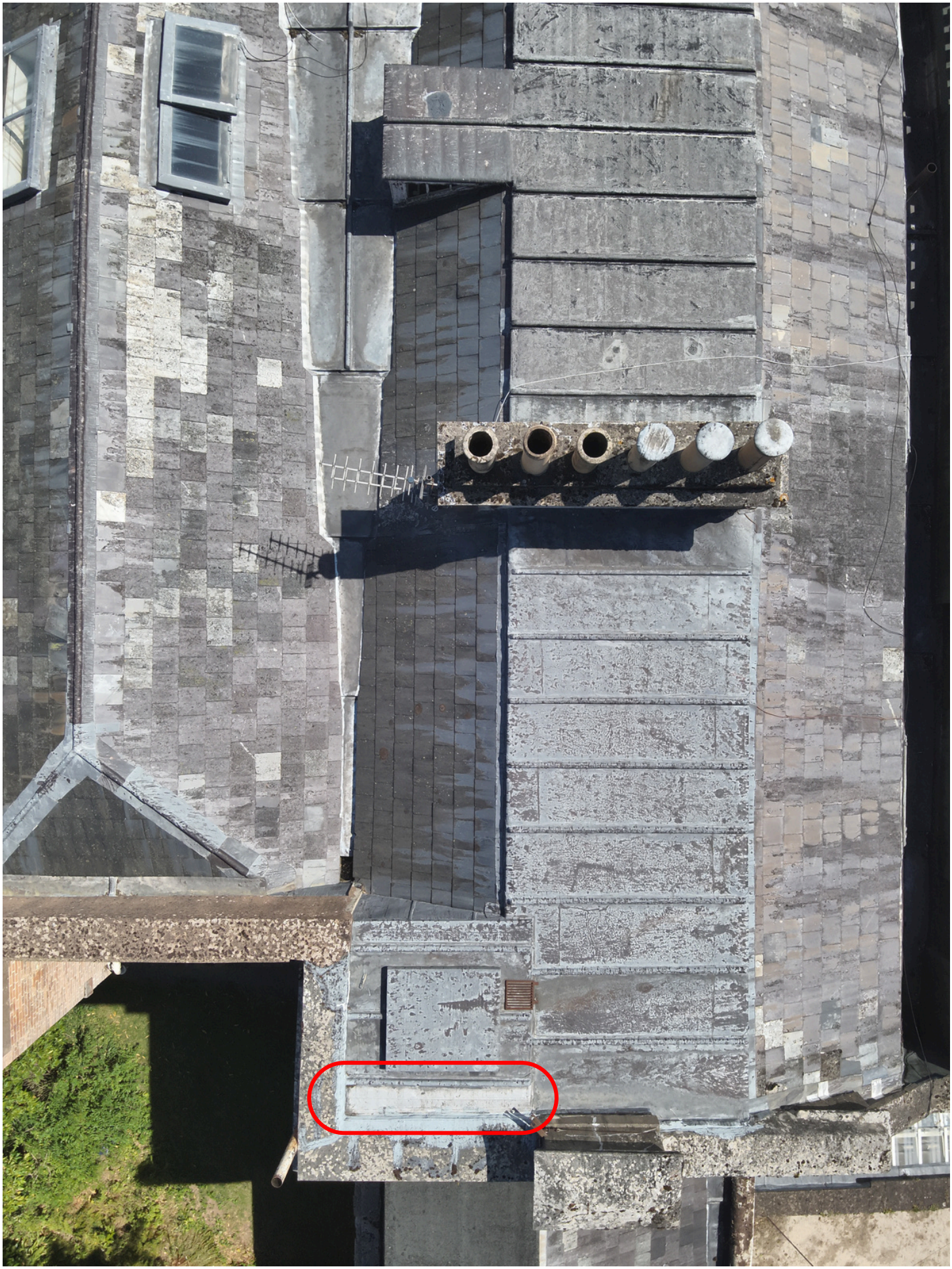
Parameters

Distance	5 m
Humidity	50%
Emissivity	0.95
Reflected Temp	25.0℃

Remarks

Anomalies identified between survey points SP1/SP6 and the surrounding roof structure, with a maximum observed differential of approximately 2.7°C.

Telephoto For Reference (Read Landscape)



END OF REPORT