

Visual and Thermal Areal Roof Inspection

Customer

Bob Williams 000 Old St Augustine, Doral, FL 32222

Provider

Integral Drone Services LLC Justin Scheiber 904-906-5095

Roof Information

Туре	Residential / Asphalt Shingle		
Age	15 Years		
Pitch	25°		

Summary

Several potential roof defects were detected in the thermal or visual images.

Anomaly Type	Defect Count	
Amorphous	7	
Board-Stock	0	
Picture-Framed	0	
Areas of Concern	2	

Service Conditions

How the service conditions match the industry standard for locating wet insulation.

	Thermal Service Conditions	AESTM C11543-10
Date	10/13/2025	
Time	20:00 (1 Hour after Sunset)	1 Hour After Sunset
Temperature	73F	
Cloud Cover	Fair	Fair
Wind Speed	N 0 mph	< 15.5 mph
Humidity	80%	
24 Hour Precip Level	0"	0"
Survey Type	Areal	Areal or Ground
Drone Make & Model	DJI Matric 4T	
Thermal Camera Spectrum	8-14 μm	2-14 µm

Visual Analysis

Overview



The visual analyses show 2 missing shingles from the hip on west corner of the house. Those shingles are still present in a valley above.

Anomaly Closeups

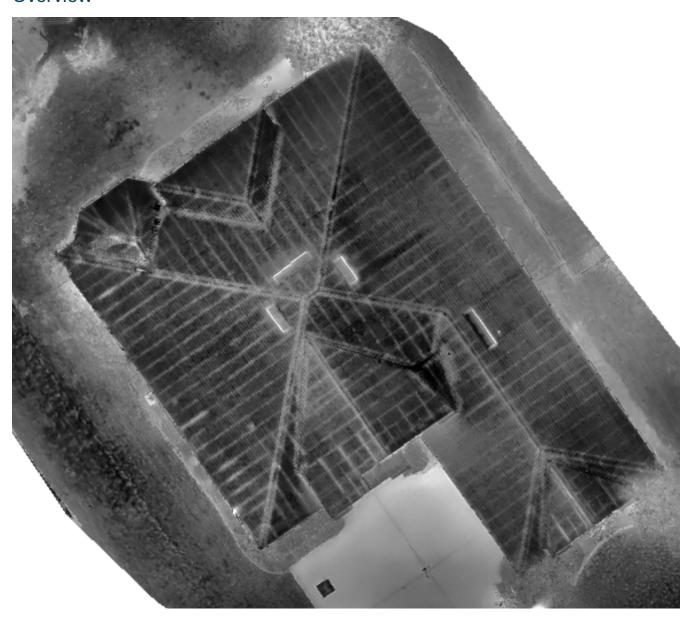


At least two missing shingles from the roof hip.

Thermal Analysis

The images below are in the white-hot palette, meaning the cooler areas are black and the hotter areas are white.

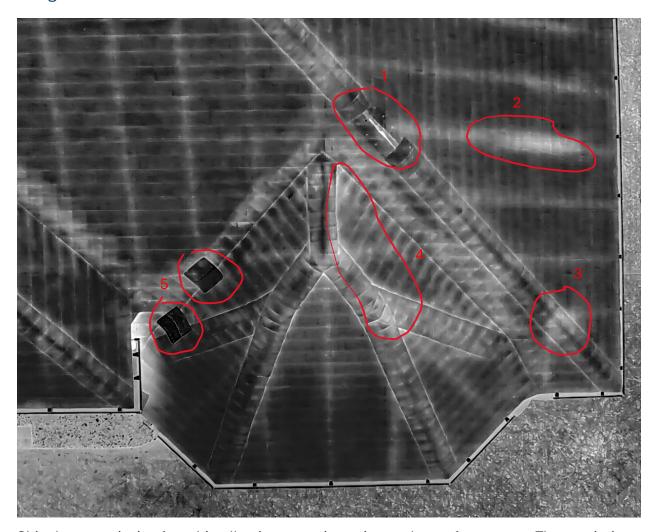
Overview



Anomaly Closeups

The images in this section are presumed to be a defect meaning a follow up is needed for verification. There are several conditions that may cause a part of the roof to appear warmer or colder which are not related to moisture intrusion.

Image 1: West Corner

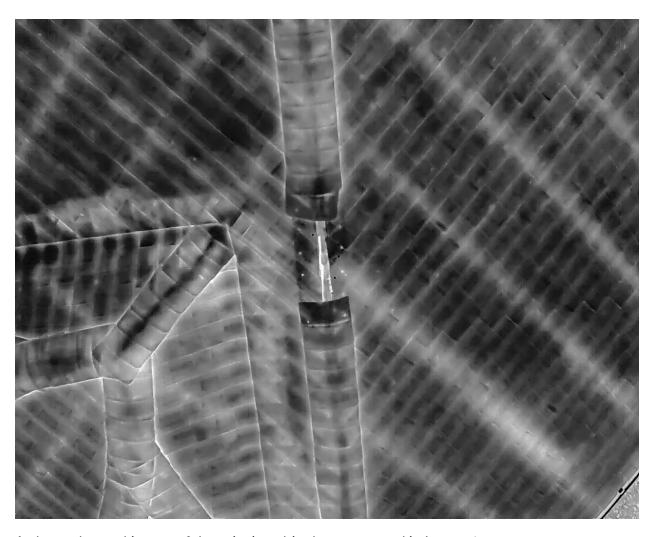


Shingles are missing from hip allowing water intrusion to the roof structure. The proximity of the amorphous anomalies 1 and 2 could be caused by water running down the roof structure. There is one area of concern (labeled 4) that presents warm relative to the rest of the roof.

- 1. Missing shingles
- 2. Amorphous anomaly 1
- 3. Amorphous anomaly 2
- 4. Area of concern 1

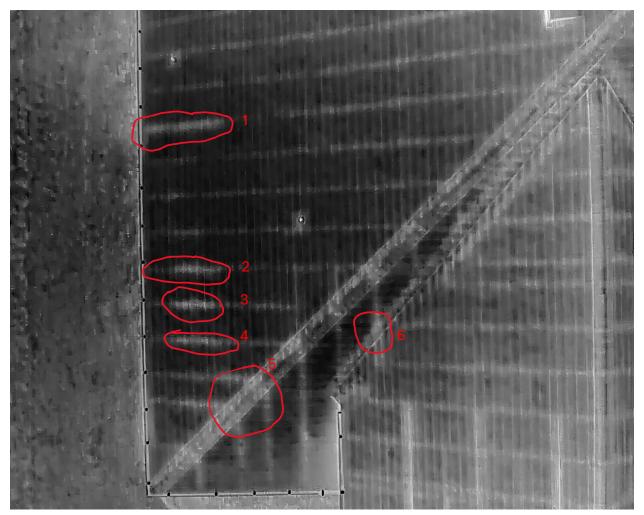
5. Loose shingles

Image 1-a: West Corner closeup



A closer thermal image of the missing shingles presented in Image 1.

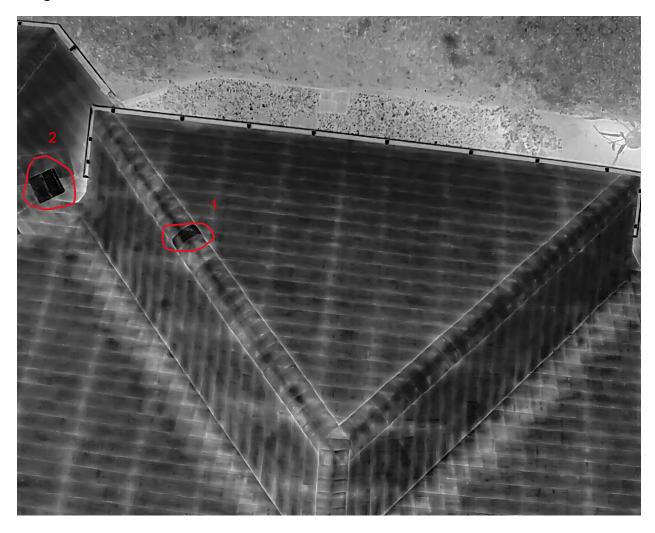
Image 2: Southwest Corner



Six thermal anomalies on the Southwest corner of the house. Thermal anomalies 1-4 are amorphous anomalies that generally follow a rafter. Thermal anomaly 5 is an area of concern. It presents hot relative to similar parts of the roof.

- 1. Amorphous anomaly 1
- 2. Amorphous anomaly 2
- 3. Amorphous anomaly 3
- 4. Amorphous anomaly 4
- 5. Area of concern 1
- 6. Amorphous anomaly 5

Image 3: North Wall

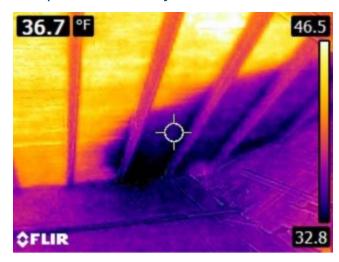


Two anomalies that present colder than the rest of the roof.

- 1. Loose shingle
- 2. Hip shingle

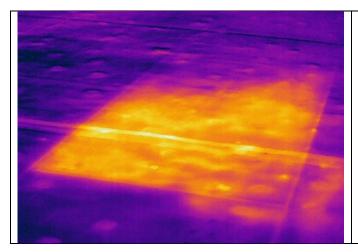
Terms

Amorphous Anomaly



A class of thermal anomaly which images as an irregular shape. Usually associated with water above or below insulation. The purple area in the image is an amorphous anomaly.

Board-Stock Anomaly



A class of thermal anomaly which images as a solid rectangular pattern usually associated with wet perlite, cork, wood fiber, glass fiber, or cellular plastic insulation.

Picture-Framed Anomaly

A class of thermal anomaly which images as an outlined rectangular pattern. Associated with insulation over boards, but not adjacent to them.