

Qualitative Infrared Report  
Residential Condominium  
Roof System: Foam Roof on Concrete Deck

5/16/2019 7:45:07 PM



Building\_6\_Front.jpg

Thermal Imaging Date: Thursday May 16th, 2019  
Time of Thermal Imaging: Approx. 8:00 P.M EST.  
Sky Conditions: Sunny and clear at time of scan.  
Daytime Temperature High: 83 Degrees Fahrenheit  
Temperature at time of Infrared Imaging: 72 Degrees Fahrenheit  
Wind Speed: 7mph ESE  
Humidity: 63%  
Imaging Performed by: Todd A. Hillhouse (Level III Thermographer)  
Roof Surface: Foam on Concrete  
Infrared Camera Type: Zenmuse XT2 Powered by FLIR 30hz 640x512 13mm  
Imaging Altitude: 100 ft AGL - 200 ft AGL

Visible and Infrared Images were taken 5/16/19 of Building 6.  
Analysis of IR images will be further detailed on the following pages specific to each building.

**MOISTURE VERIFICATION:** Infrared Thermography is a powerful tool for nondestructive Testing and Analysis of flat roofing systems. However, to insure complete accuracy of the survey results, it is necessary to physically verify the presence of moisture within the roofing system. All indicated anomalies marked with a red zebra pattern on the report images should be physically examined.

**PHYSICAL TESTING:** A core sample if taken should begin at any locations of concern marked with arrows or a red zebra pattern to verify moisture presence and water penetration. Physical testing and analysis can also be accomplished through the use of a moisture meter with electrically charged pin probes.

5/16/2019 7:42:34 PM



Building\_6\_Top\_Down\_1.jpg

### Geolocation

Location	N 28° 7' 42.82", W 80° 34' 50.89"
<a href="http://maps.google.com?z=17&amp;t=k&amp;q=28.1286,-80.5808">http://maps.google.com?z=17&amp;t=k&amp;q=28.1286,-80.5808</a>	

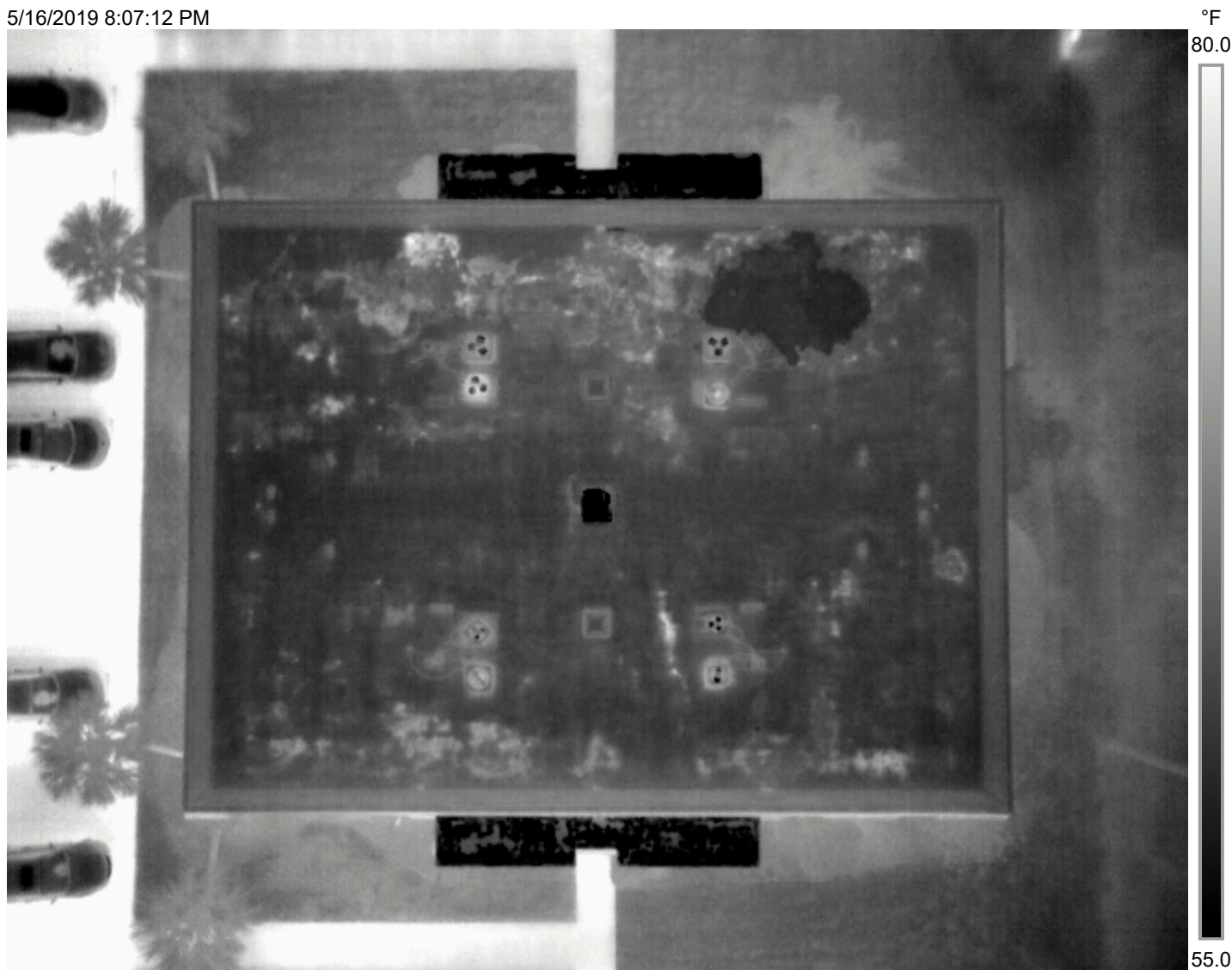
Pictured here is a visible top down image of Building 6. This roof construction is foam on concrete.

Noticeable stains can be seen along with a visible dark area in the South East corner. This dark area appears to be asphalt or similar material and possibly a previous patch and/or repair. This area did not show a rise in temperature or thermal anomaly.

Areas of concern that should be physically investigated will be marked on pages 4 and 5 and includes an IR image of this roof and another visible image with a red zebra pattern marking indicating areas where temperature anomalies were observed and should be physically examined.



5/16/2019 8:07:12 PM



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XT2

297391

### Parameters

Emissivity	0.8
Refl. temp.	68 °F

### Geolocation

Location	N 28° 7' 42.88", W 80° 34' 51.00"
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<http://maps.google.com?z=17&t=k&q=28.1286,-80.5808>

### Note

White areas are hotter than dark.

Pictured here is an Infrared top down image of Building 6. This roof construction is foam on concrete.

In this IR image the palette displayed is White/Hot.

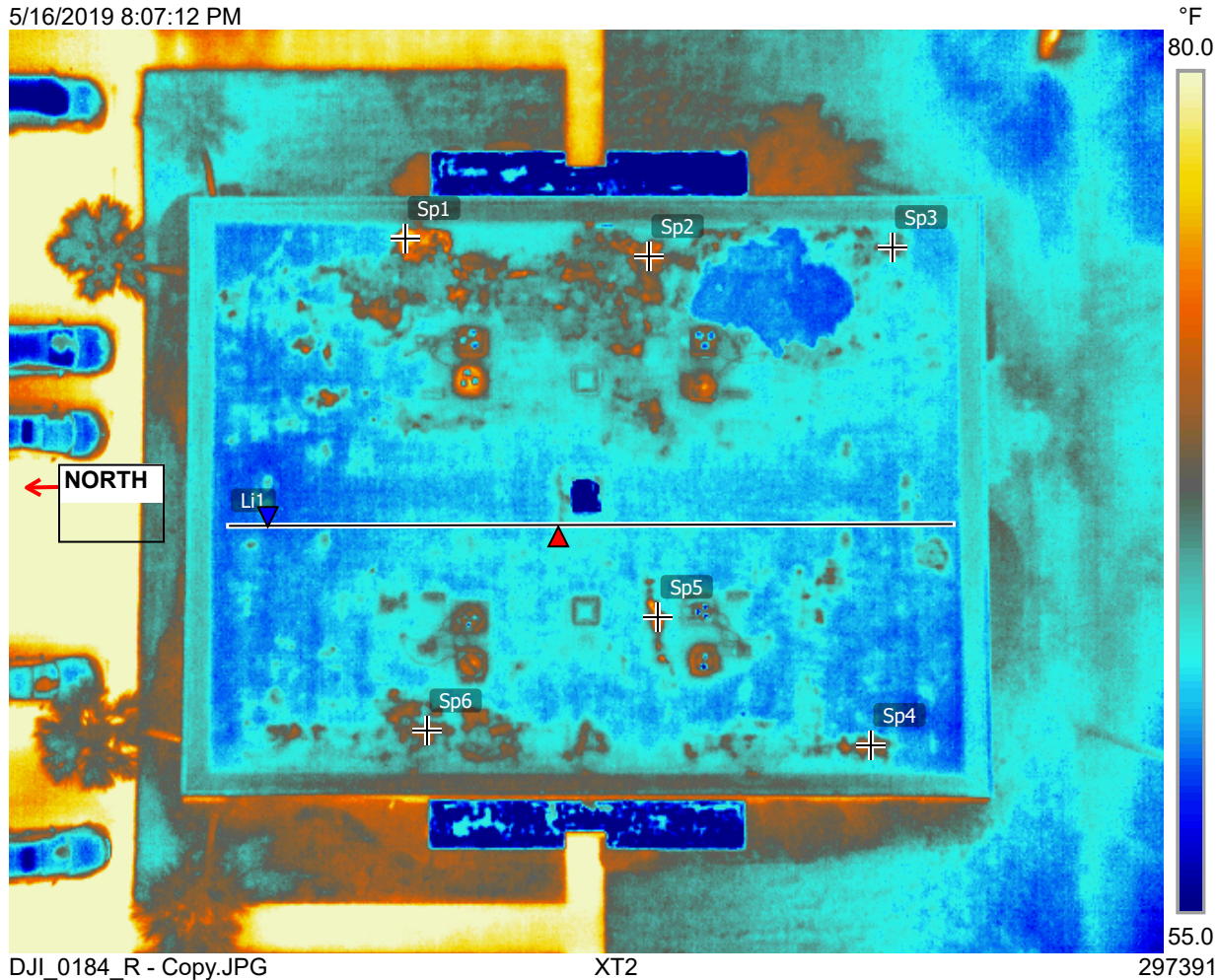
Areas of lighter color are warmer than darker areas.

# Qualitative Infrared Report

## Residential Condominium

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5/16/2019 8:07:12 PM



#### Measurements

Sp1		79.4 °F
Sp2		73.1 °F
Sp3		72.8 °F
Sp4		71.9 °F
Sp5		74.8 °F
Sp6		70.7 °F
Li1	Max	63.9 °F
	Min	58.6 °F
	Average	61.7 °F

#### Parameters

Emissivity	0.8
Refl. temp.	68 °F

Pictured here is an Infrared top down image of Building 6. This roof construction is foam on concrete. In this IR image the palette displayed is Arctic.

A temperature measurement line placed across the roof from North to South shows an average temperature of 61.7 degrees on the roof surface.

Spot meter checks on several areas showing anomalies indicated a rise in temperature of more than 10 degrees.

These areas with increased temperature readings will be marked on the following page with a red striped zebra pattern and would need to be physically investigated to verify the presence of any moisture penetration.



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5/16/2019 8:07:12 PM



Building\_6\_Zebra\_Visible.jpg

These areas with increased temperature readings are marked above with a red striped zebra pattern. These areas would need to be physically investigated to verify the presence any moisture penetration.