



Infrared Inspection Report Roof System

For

Jefferson County Board of County Commissioners

445 W Palmer Mill Rd
Monticello, FL 32344

At

Jefferson County Jail

171 Industrial Park
Monticello, FL 32344



Report Date: February 26, 2021

Job Number: 20210210JCBCC

Weller Infrared Services, Inc.

(888) 461-1115 Toll-Free

mark@wellerir.com

February 26, 2021



Jefferson County Board of County Commissioners
Attn: Shannon Metty
Jefferson County Planning Official
445 W Palmer Mill Rd
Monticello, FL 32344

Dear Ms. Metty,

The building roof(s) at the Jefferson County Jail, 171 Industrial Park, Monticello, FL 32344, was subject to an infrared (IR) survey on the night of February 24, 2021. The weather was dry with some clouds and moderate surface winds, providing adequate infrared imaging conditions.

Weller Infrared Services was retained to conduct an infrared survey of the flat roofs in an attempt to identify areas of suspected moisture but not to locate or identify leak sources. This survey meets the documentation requirements of the Infrasppection Institute Standard for Infrared Inspection of Insulated Roofs, as well as standards, practices, and specifications published by ASTM C-1153.

This report is for the exclusive use of our Client and is not intended for any other purpose. The report is based on the information available to us at this time, as described in the report. Should additional information become available later, we reserve the right to determine the impact and amend the report's information. Some of the thermal anomalies marked in this report were verified using a Tramex RWS moisture meter and roof cores checked with a Delmhorst BD-2100 moisture meter. Not all the anomalies shown in this report were marked on the roof. There may be specific areas inaccessible during the survey, and make no representations regarding those areas conditions. With access and an opportunity for inspection, other reportable conditions may be discovered. Examination of the inaccessible areas will be performed at an additional charge after providing access.

Analysis and Recommendations:

We recommend that you carefully review this report. With reference to the images within, these areas should be physically located and given a thorough visual inspection. When warranted, these areas should be subjected to destructive testing (core sample) to confirm the analysis. A knowledgeable roofing expert should perform services such as evaluation of thermal patterns documented in this report.

If there is anything you would like us to explain, or if there is additional information you need, please feel free to call us as we would be happy to answer any questions.

Sincerely,

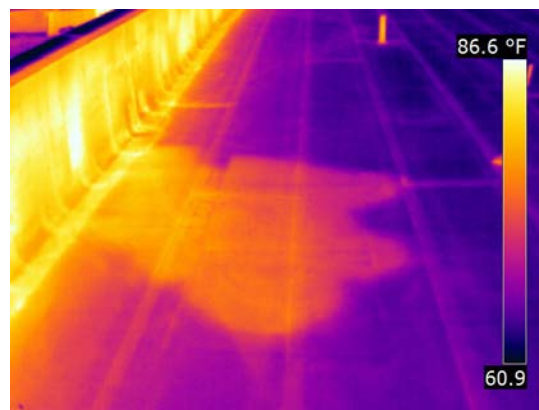
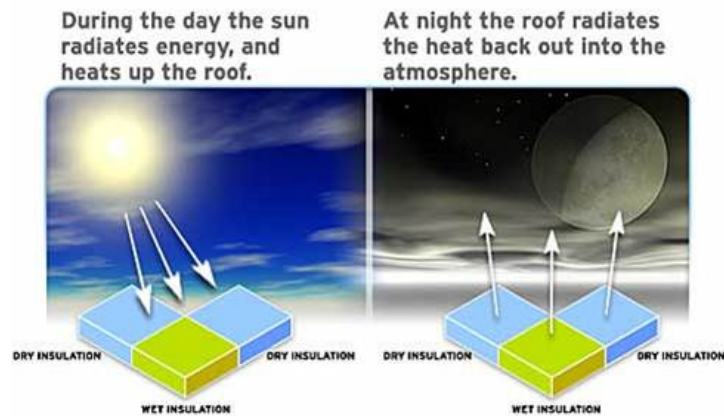
A handwritten signature in black ink that reads "Mark Weller".

Mark Weller
Weller Infrared Services, Inc.

Level 3 Certified Infrared Thermographer
#8339 Infrasppection Institute
Certified Building Science Thermographer
#30937 FLIR

How Infrared Thermography Works

Infrared imagers “see” the heat radiated from your roof or equipment in real time, just like a video camera sees visible light. In black/white thermograms (pictures of heat), white is hot and black is cold unless stated otherwise. When thermograms are in color, colors in the scene are matched to the reference bar. Colors appearing closer to the top of the reference bar indicate higher temperatures. Colors appearing closer to the bottom of the reference bar indicate lower temperatures. Usually, dry insulation has a lower mass and appears cooler. Wet insulation appears hotter because of higher mass due to being wet.





Report Summary

Job Number: 20210210JCBCC

Report Date: February 26, 2021

Type of Inspection: Roof System

Purpose of Inspection: Condition Assessment

Date of Inspection: February 24, 2021

End-User: Jefferson County Board of County Commissioners
Attn: Shannon Metty

Project Location: Jefferson County Jail
171 Industrial Park
Monticello, FL 32344

Thermographer: Mark K. Weller

Certification Number: 8339

Certification Level: III

Qualified Assistant(s): Benjamin 'Glen' Bishop – Burnette Roofing

Equipment Used: FLIR P620 S/N 404001162
Tramex RWS S/N RWS 909811
Delmhorst BD-2100

Tramex RWS Setting Yellow, Red - 4

Weather Data

Day	Fair	Night Skies:	Fair
Skies:			
Day	74° F	Day Lows:	36° F
Highs:			

Last Precipitation: February 19, 2021

of Items Inspected: 3 – 1 Dry, 2 wet.

of Thermograms: 14

Comments:



Jefferson County Board of County
Commissioners
Jefferson County Planning Official
445 W Palmer Mill Rd
Monticello, FL 32344

Job Number: 20210210JCBCC

ROOF DATA SHEET

Location

Jefferson County Jail
171 Industrial Park
Monticello, FL 32344

Roof Construction

Deck:	Concrete
Vapor Retarder:	Unknown
Insulation:	2" Polyisocyanurate Insulation with ½" Perlite Cover Board
Membrane:	Base sheet with a granulated cap sheet
Flood Coat:	N/A
Aggregate:	Granules

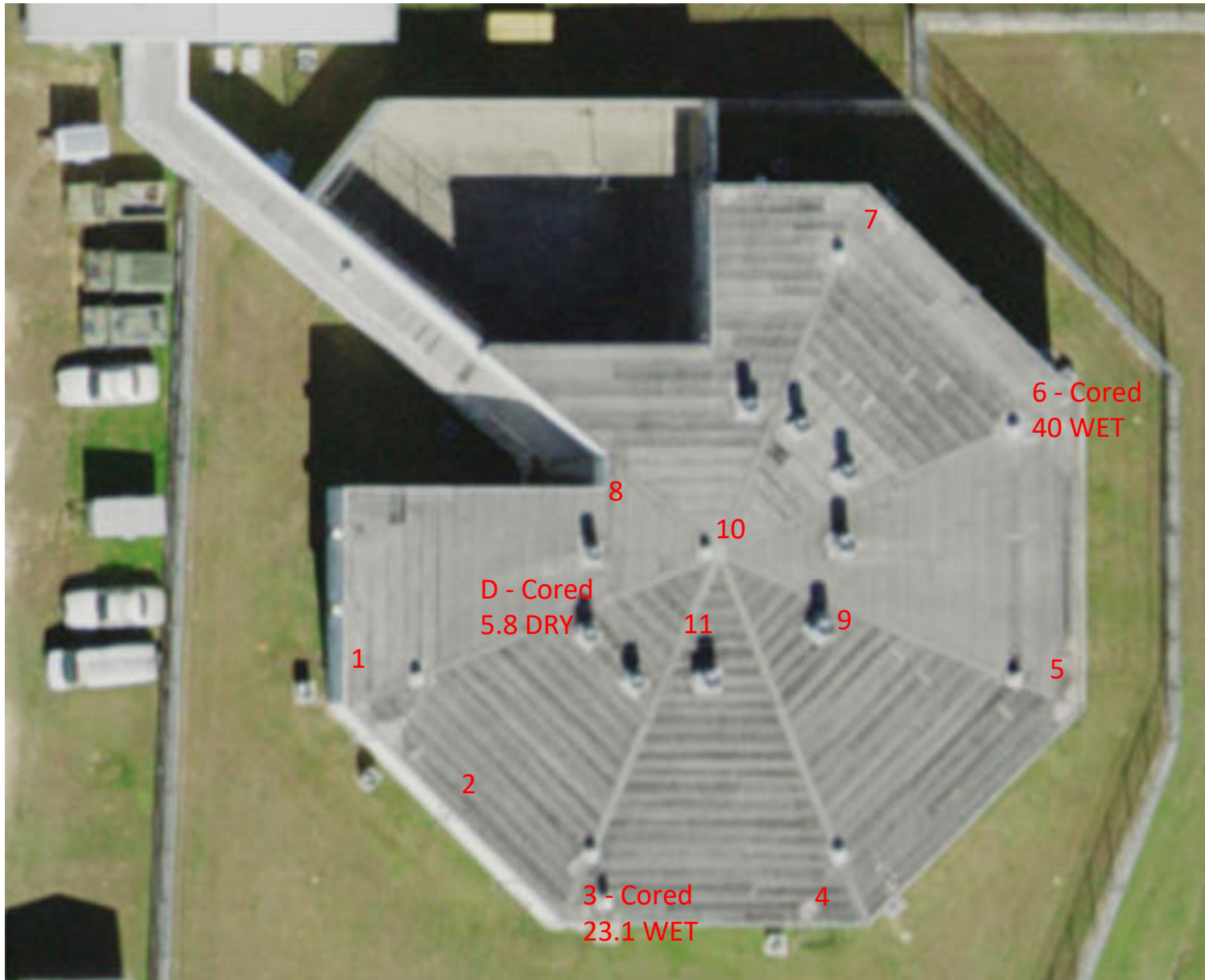
Core Sample Data

Designated on Roof Surface:	Yes
Core Sample Size:	2"
Core Sample Taken By:	Mark Weller – Weller Infrared Services, Inc.
Moisture Present:	#2 & #3 – See location and results on the image page.
Date Taken:	February 24, 2021

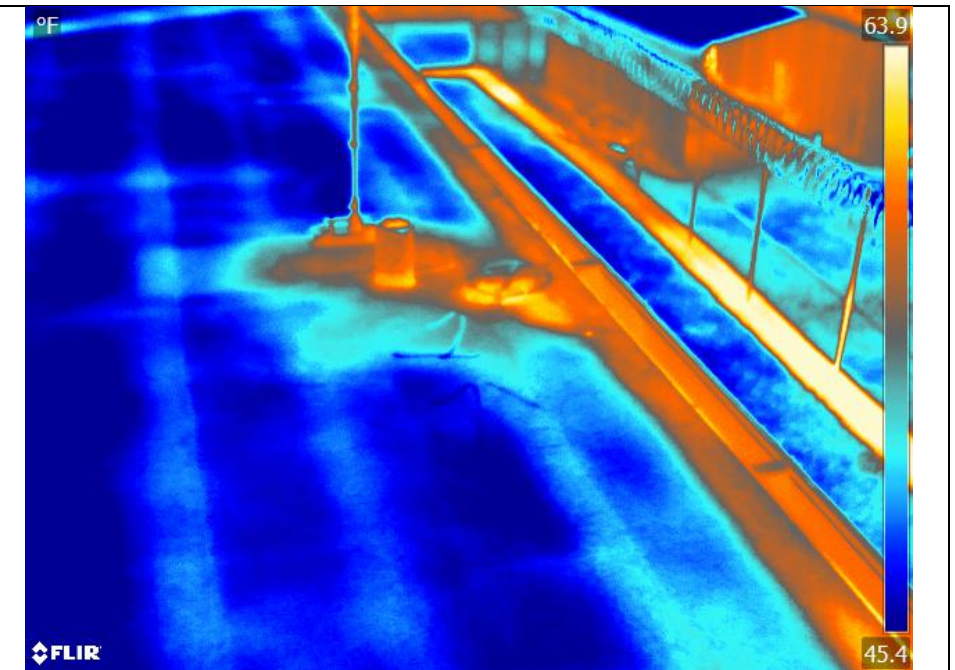
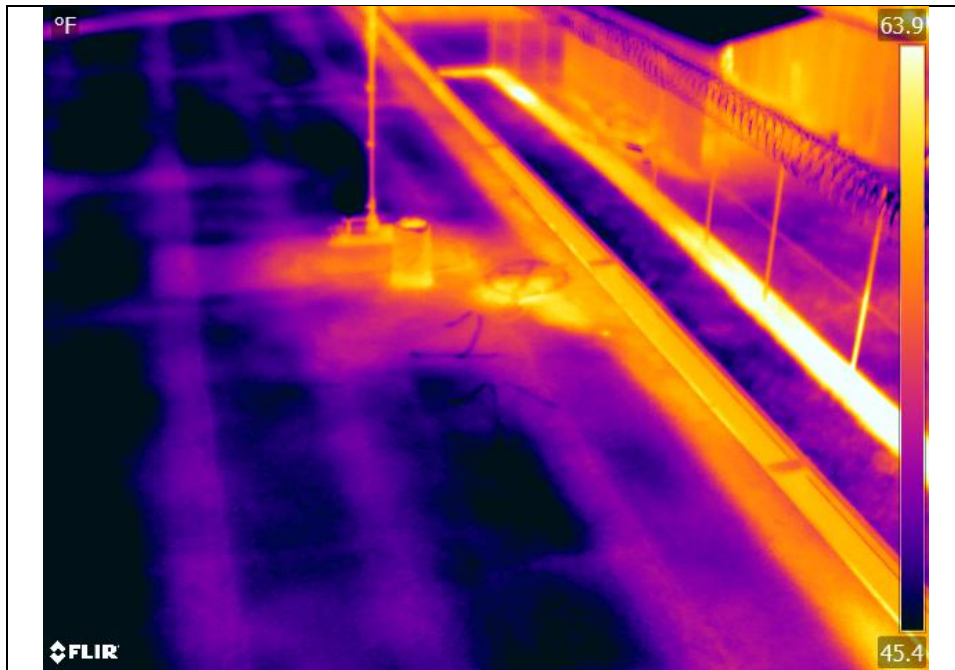
General Roof Data

Age:	12+/- years
Condition of Membrane:	Fair – upper roof, Poor – Lower roof
Patched Areas:	Yes
Blistered Areas:	None Noticed
Drainage Condition:	Some Ponding
Roof Surface Dry:	Some wet areas
Debris Present:	No
Materials/Equip Present:	No
Roof Size:	12,700 SF +/- combined upper and lower roofs
Number of Anomaly Areas:	Multiple
Total Area Moisture Damage:	Approximately 200 Sq. Ft. +/- upper and approximately 250 Sq. Ft. +/- lower roof.
Percentage Moisture Damage:	3 ½ % +/-
Reported Leaks:	Yes
When Do Leaks Occur: How	Unknown
Long Do Leaks Last:	Unknown

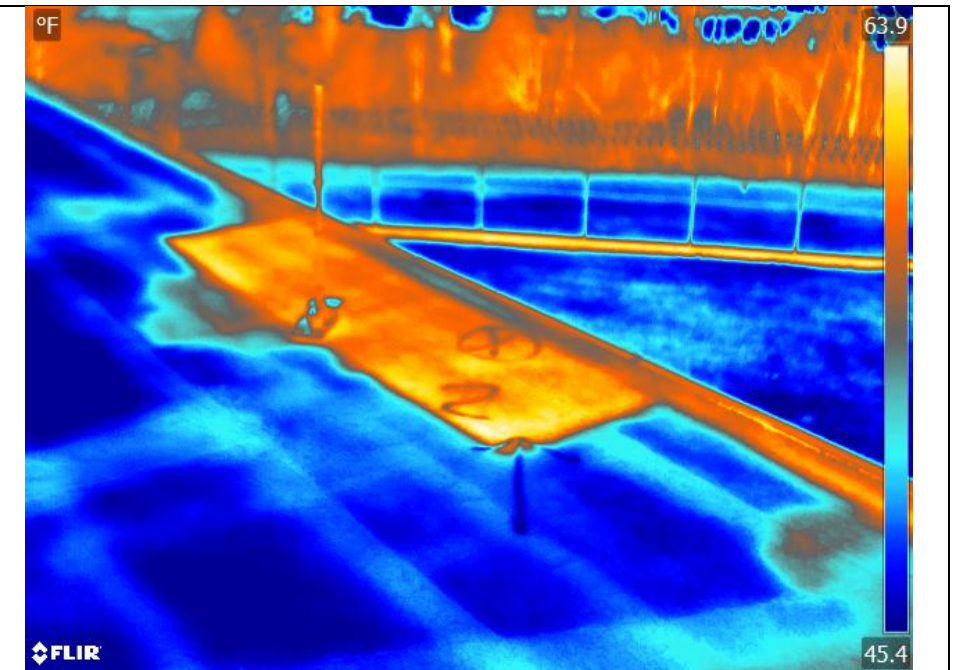
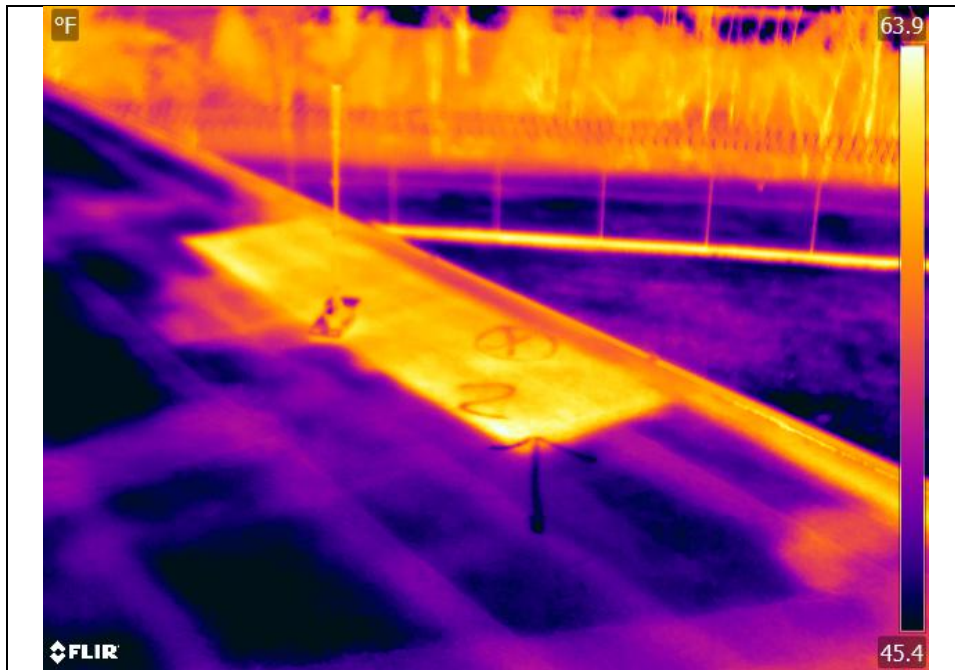
INFRARED LOCATIONS



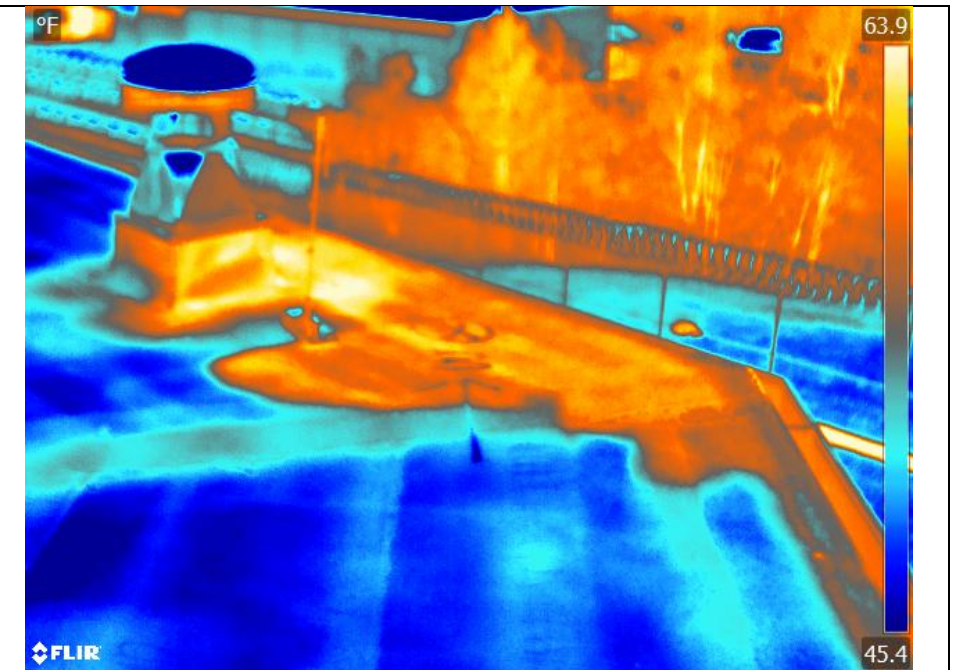
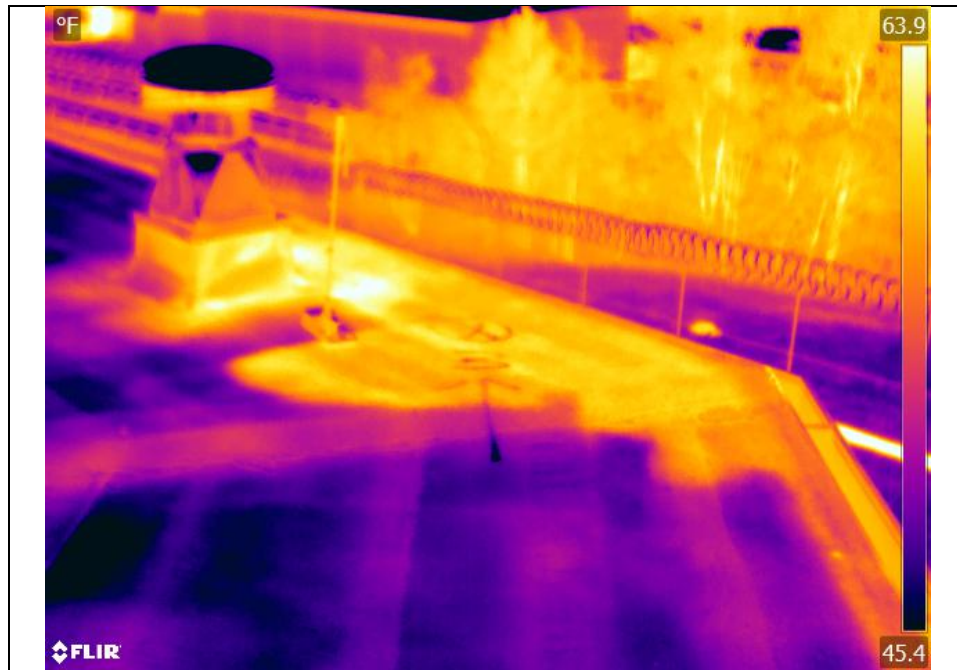
No. 1.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:			



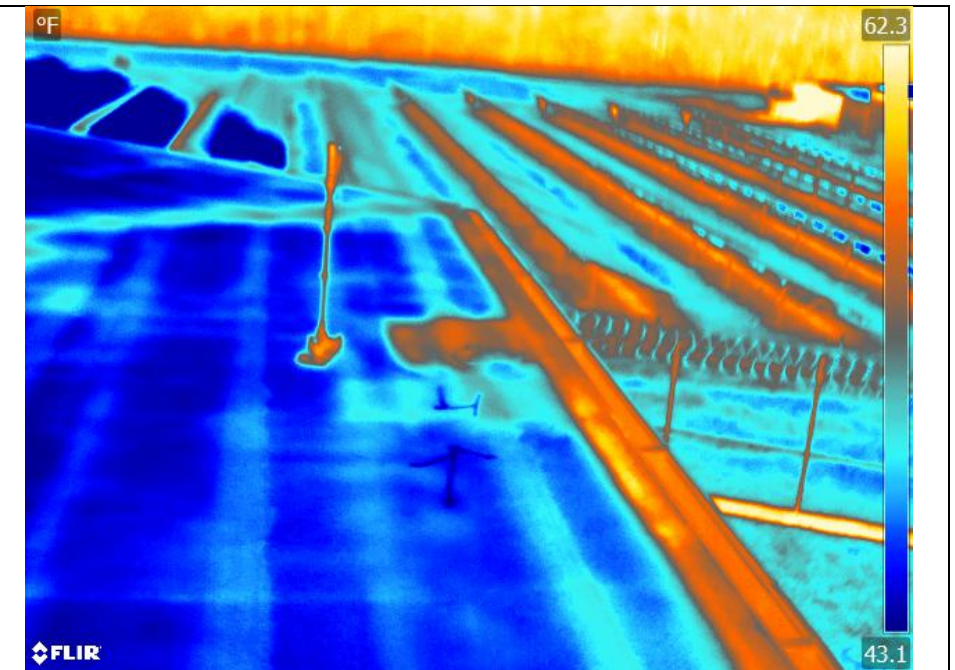
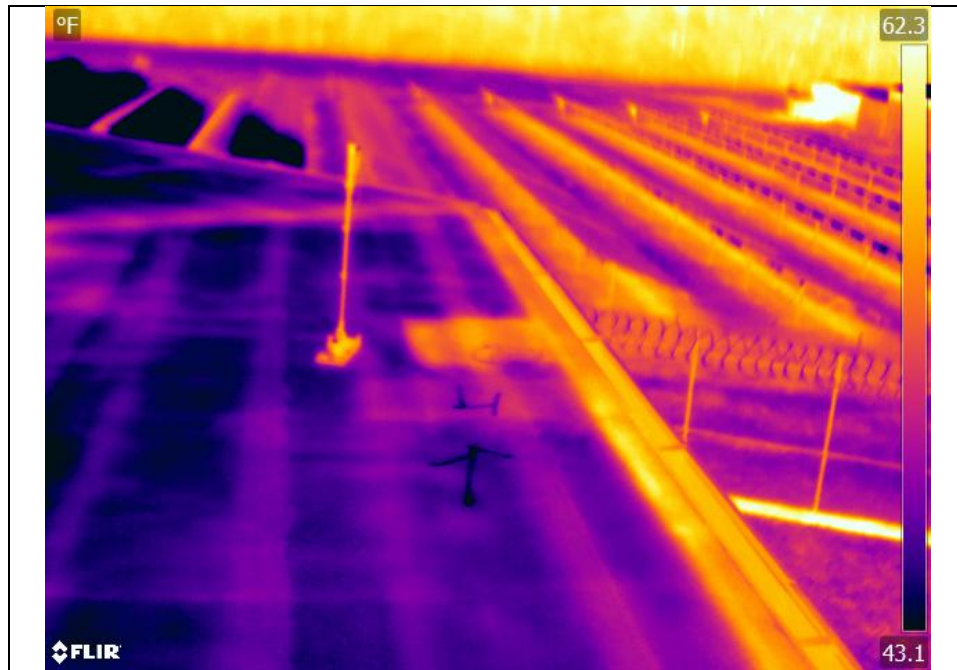
No. 2.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:			



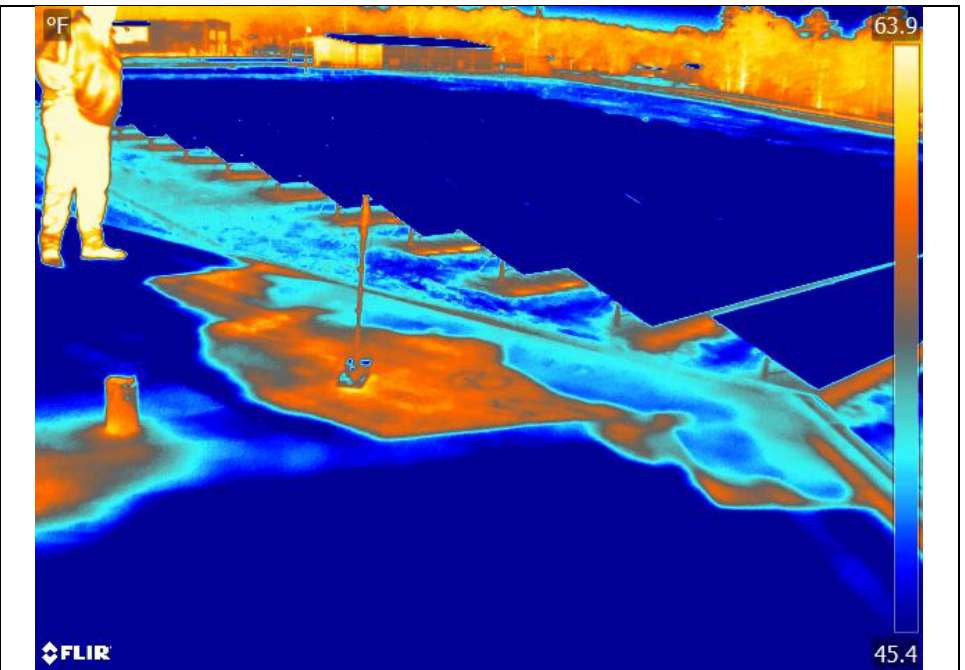
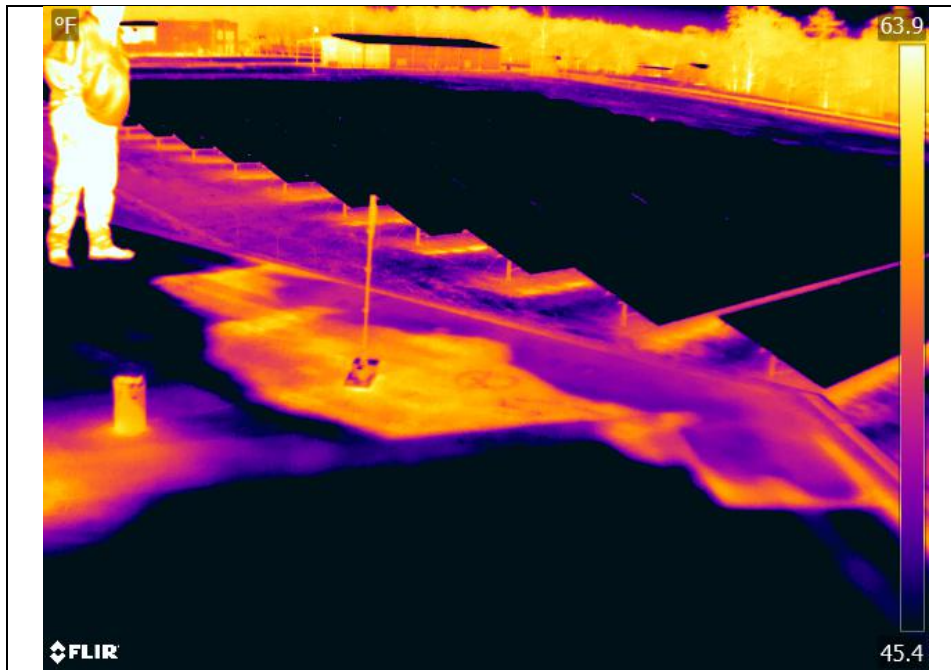
No. 3.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: 23.1 - RED	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:	#2 core was wet to the touch.		



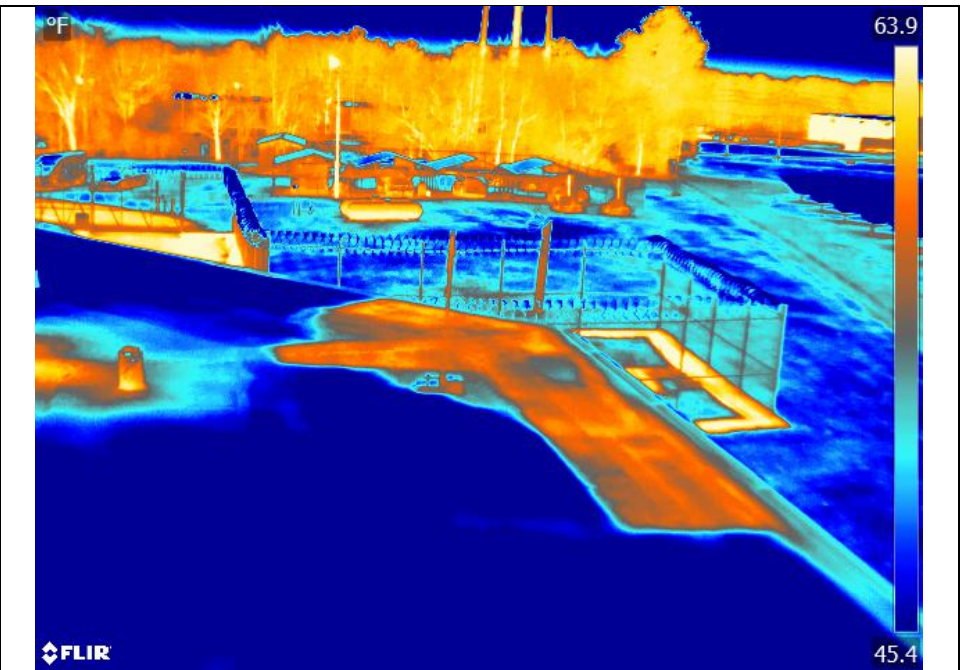
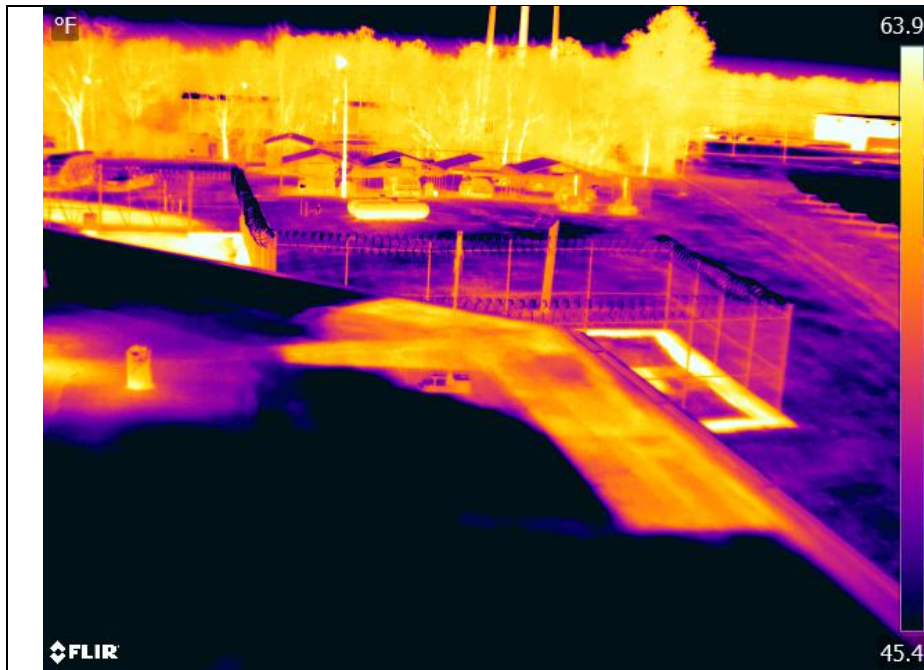
No. 4.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:			



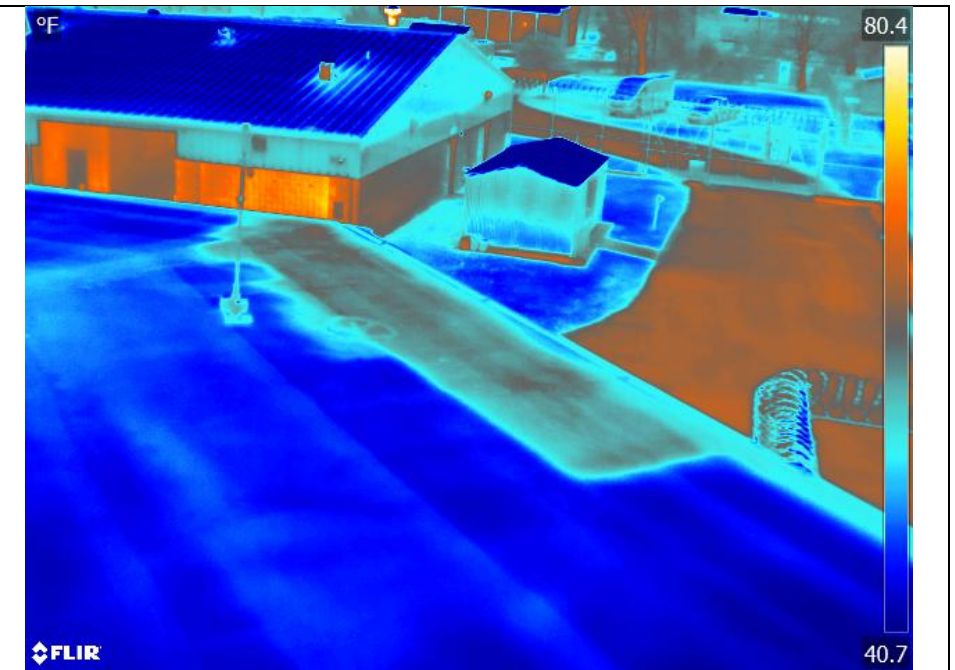
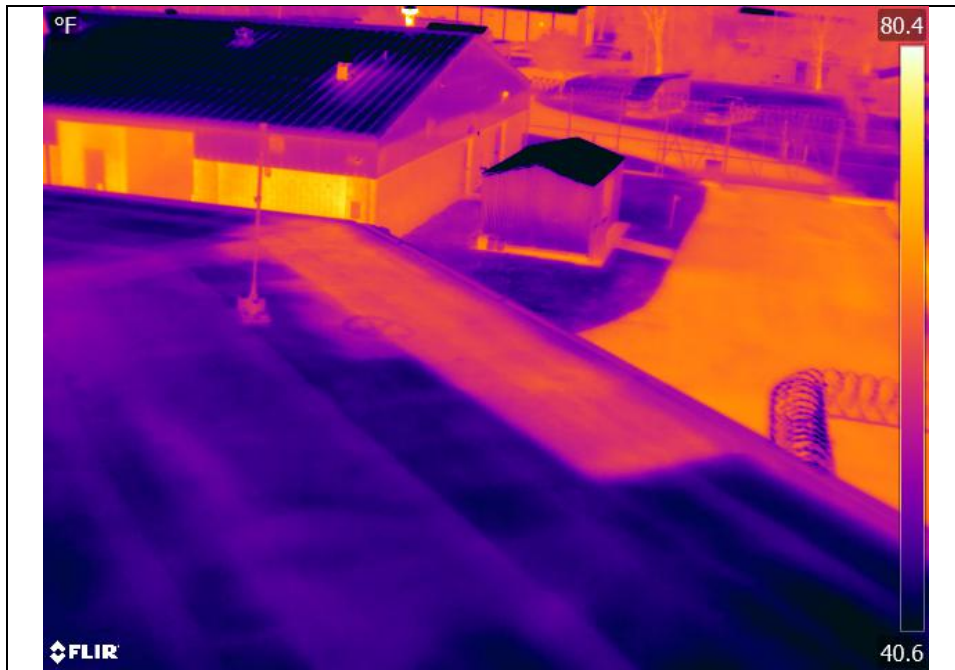
No. 5.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:			



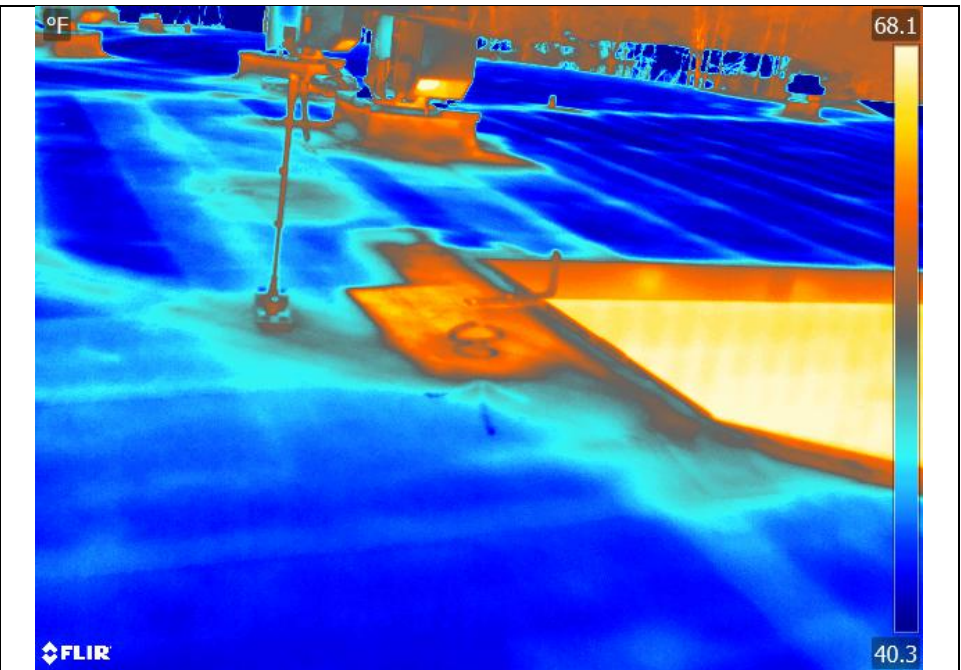
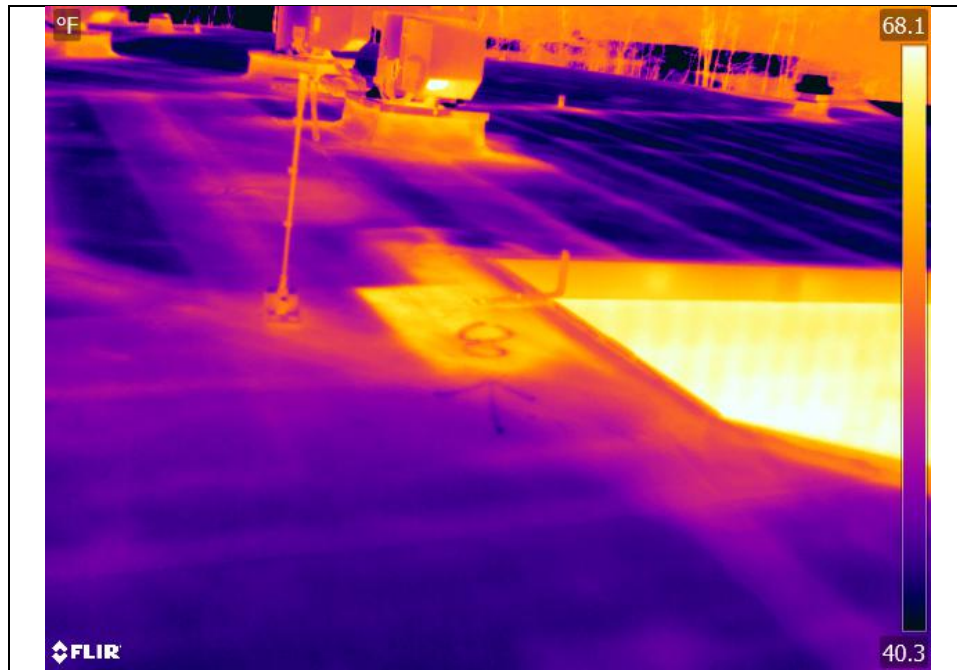
No. 6.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: 40 - RED	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:	#3 core was wet to the touch.		



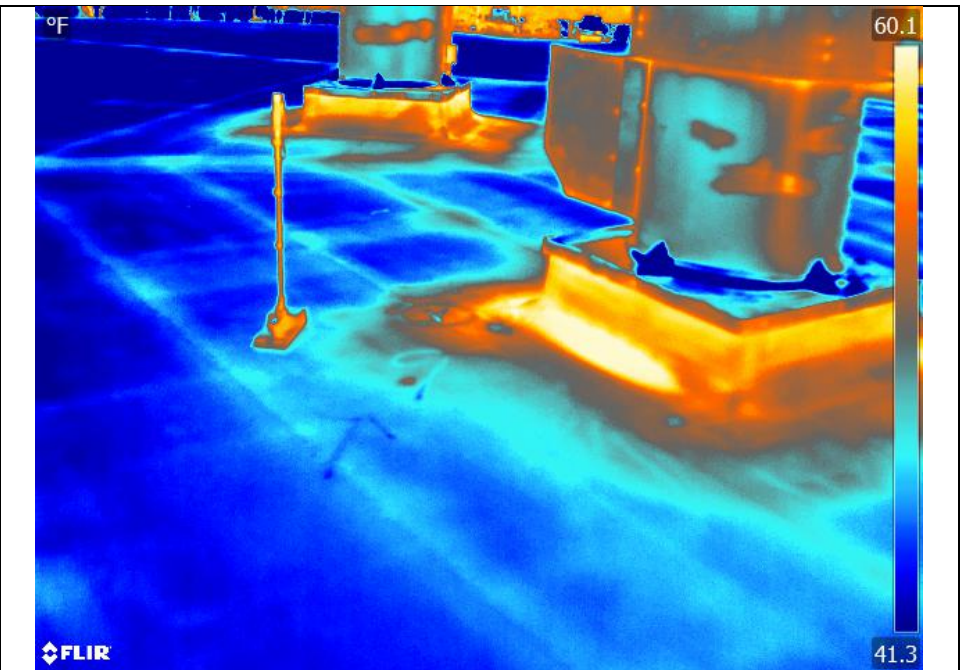
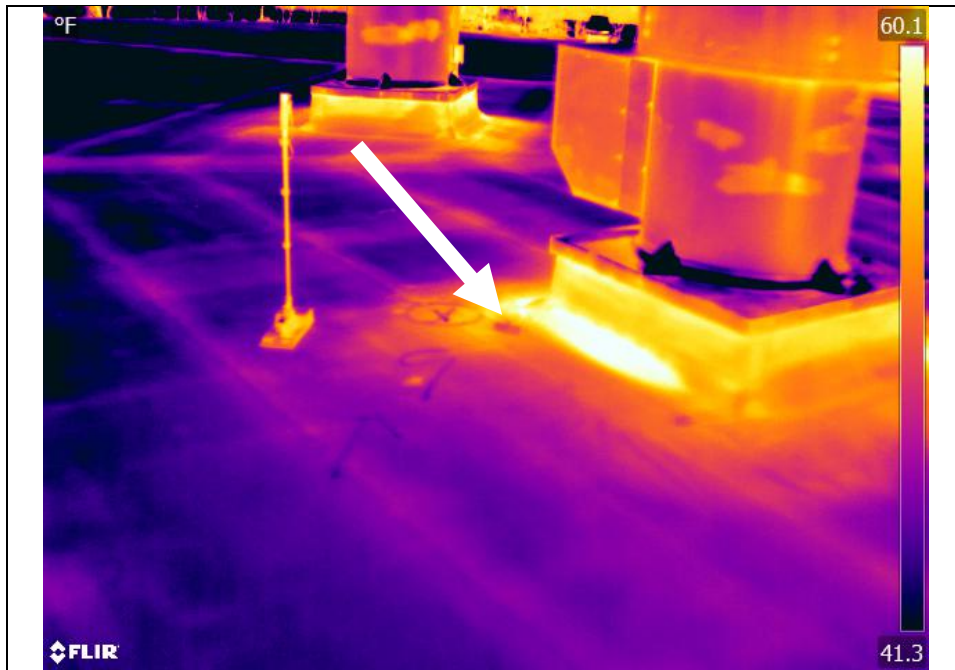
No. 7.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:			



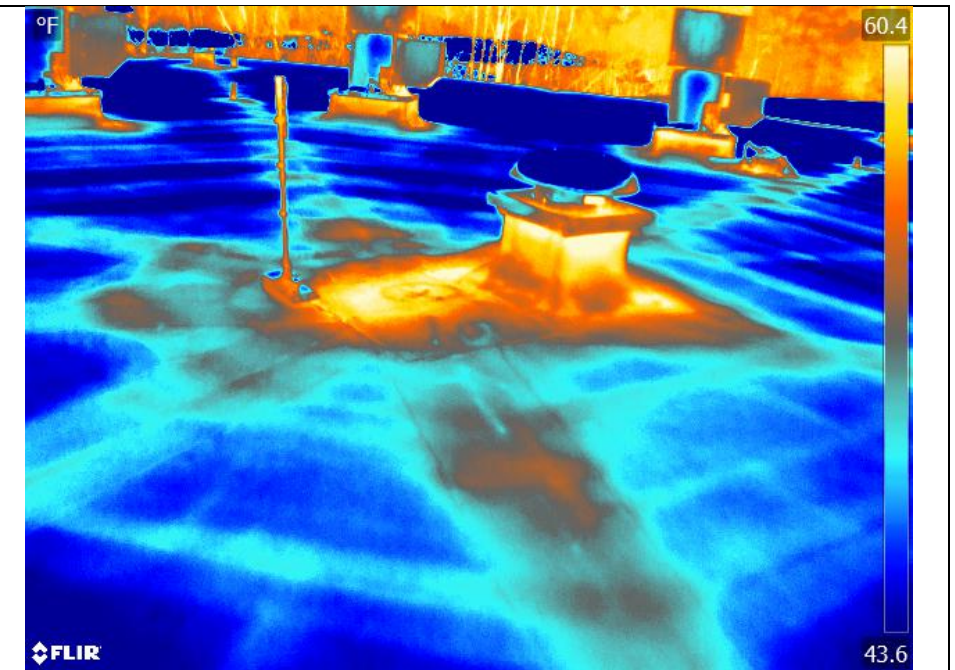
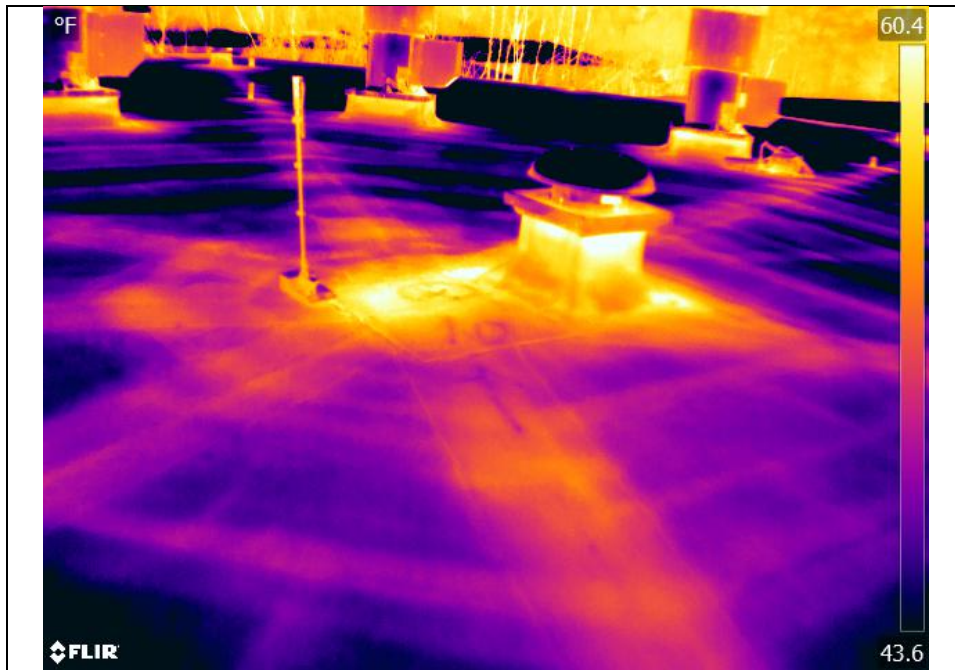
No. 8.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:			



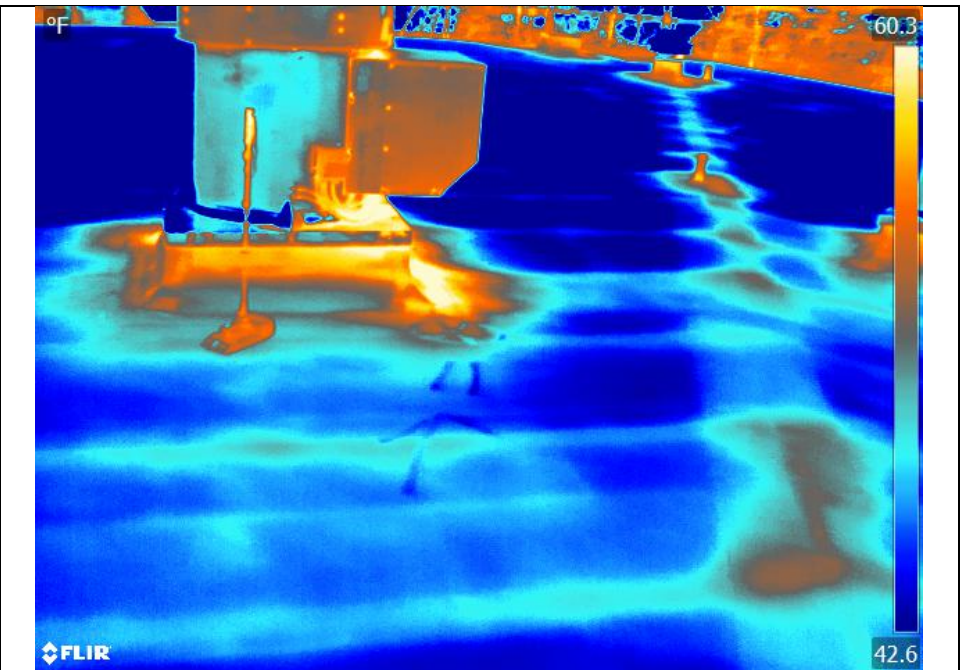
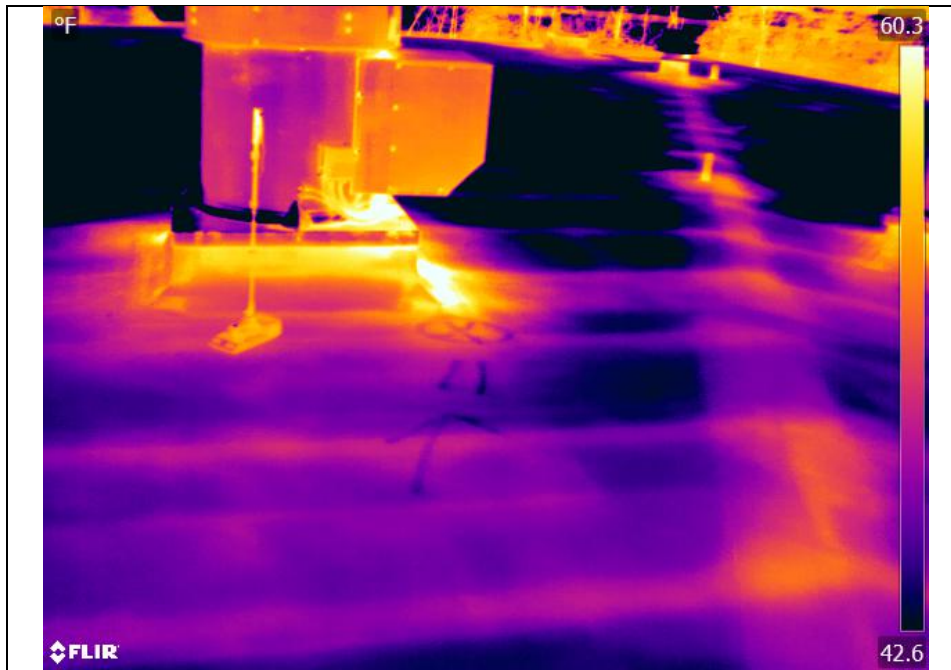
No. 9.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:	The arrow denotes water leaking out of the membrane in this area.		



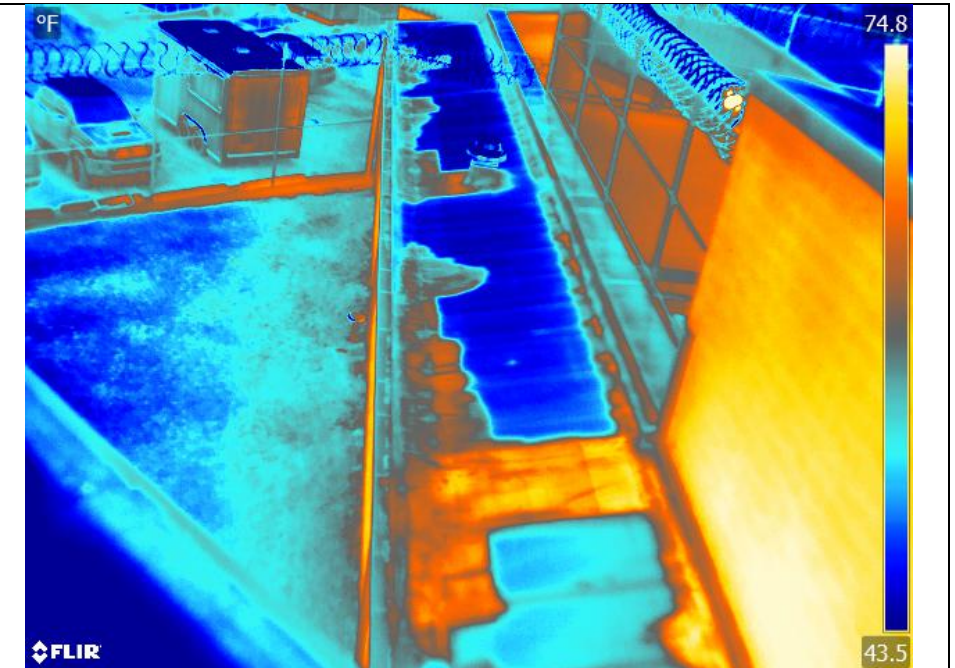
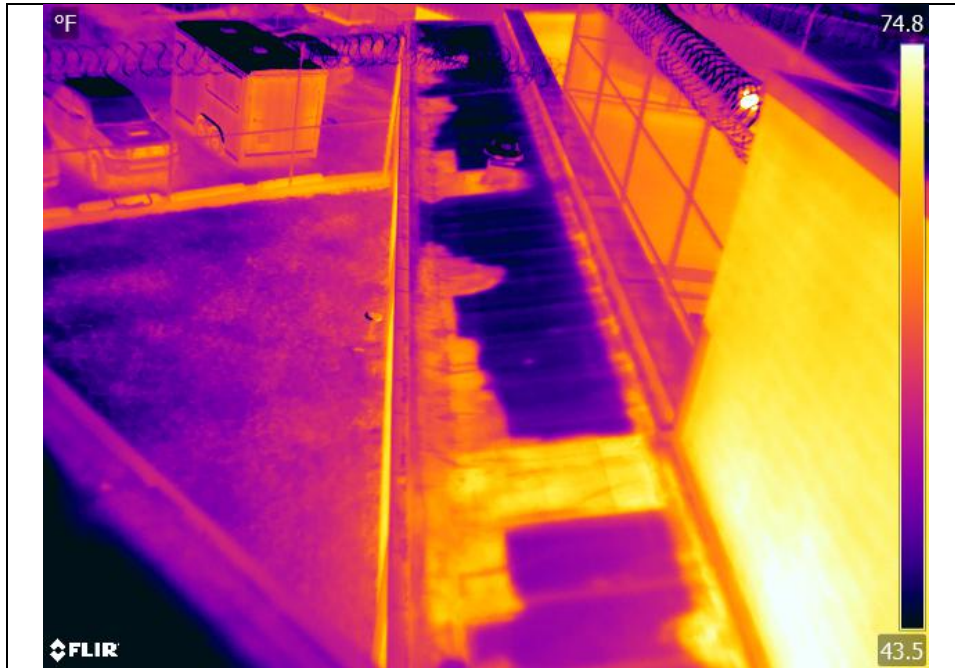
No. 10.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:			



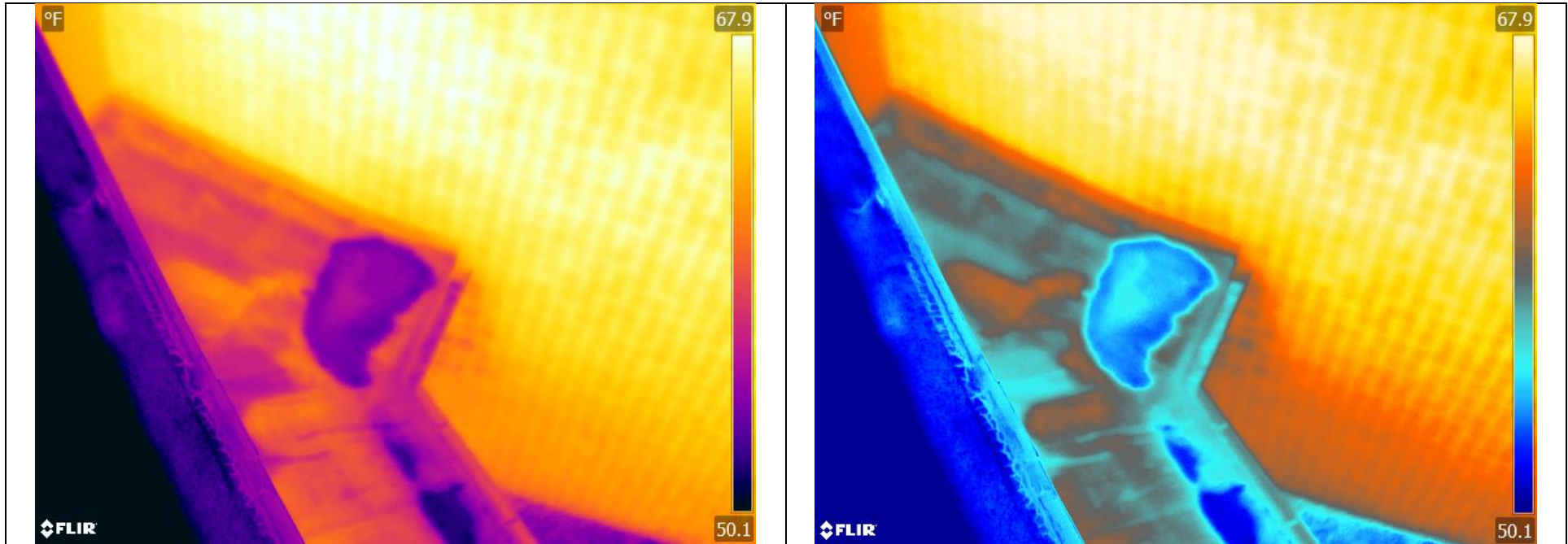
No. 11.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter Positive
Comments:			



No. 12.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Lower Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter: N/A
Comments:	Unable to verify thermal anomalies with the moisture meter.		



No. 13.	Job No. 20210210JCBC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Lower Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: N/A	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter: N/A
Comments:	Unable to verify thermal anomalies with the moisture meter.		



No. 14.	Job No. 20210210JCBCC	Date: 02/24/2021	Image Times: 7:50 PM – 9:18 PM
Location: Main Roof	Ambient Temp: 58 °F	Damage Type: Suspect Moisture	
Area Description:		Moisture Test Results: 5.8 - GREEN	
Overall Size:	N/A	Moisture Probe	N/A
Previously Patched:	N/A	Core Sample:	N/A
Blisters Present:	No	Other:	Moisture Meter: N/A
Comments:	The core was dry to the touch.		

