

JP Diagnostics *Leak Detection Report*



Inspection prepared for:

Date of Inspection: 6/20/2022 Time: 0900 Size: Brick / Masonry

Weather: Clear / Warm/85dF

Full Building Infrared Audit (FB.IR.AUD)

Inspector: Jarrod Parslow

Analysis Completed By: Nia P. / Jarrod P. / Greg W.

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JP DIAGNOSTICS

Inspection Disclaimer

This report is the exclusive property of JP Diagnostics and the client whose name appears herewith, and its use by any unauthorized persons is strictly prohibited.

The observations and opinions expressed within this report are those of JP Diagnostics and supersede any alleged verbal comments made on-site during time of original water leak detection/inspection. We inspect all of the structural systems, components and conditions related and only related to the current water leak situation within the property.

An infrared water leak detection analysis is intended to assist in providing a proper and exact source & origin for the cause of the current water leak damage found within the property inspected. The report is not intended to be utilized as a tool to discredit any previous contractor(s) work during the original build of the structure and all of its internal components. Further, this infrared water leak detection analysis will not reveal every condition that exists or ever could exist within the property, but only those material defects that were observed during time of inspection.

In accordance with the original infrared water leak detection analysis, the overall investigation and service recommendations that we make in this leak detection report should be completed within the allotted warranty period described in the associated warranty documentation, by qualified, licensed specialists who may well identify additional defects or recommend some upgrades in addition to our original recommendations for repair to mitigate/eliminate the current water leak situations.

By relying on this inspection report, you have agreed to be bound by the terms, conditions and limitations as set forth in the original water leak detection agreement, contained within the invoice and warranty documentation, which was presented to you during time of original on-site infrared analysis of the current water leak situation. If you do not have a copy of these documents please contact JP Diagnostics and a copy will be provided to you electronically via email. If you do not agree to be bound by the original water leak detection agreement in its entirety, you must contact JP Diagnostics immediately upon receipt of this completed report. In addition, all electronic and paper copies of the infrared water leak detection analysis report must be deleted and destroyed, and may not be used in whole or in part for any future warranty requests.

JP Diagnostics' Warranty

JP Diagnostics Water Leak Detection Service guarantees its findings with a standard warranty process as described in the original documentation provided during time of on-site infrared water leak analysis. The warranty is to protect against any and all errors in JP Diagnostics' recommendations for repairs of any structural components which are believed to be defective and allowing the current water entry causing damage within your property.

Any and all warranties provided within the original warranty documentation cannot be changed, modified or upgraded in any way unless otherwise indicated by representatives of JP Diagnostics. Further, it is strongly recommended that all repairs outlined within this report be completed in a timely manner so as to allow for a period of time to pass where structural repairs can be water tested organically during rain storms and to insure there are no further water leaks in the original area identified as the problematic source and origin of water entry into the structure.

If structural area(s) outlined in this report are repaired properly and water leak returns outside of the original warranty termination date, and customer requests an "infrared rescan" of the area, it will be treated as a new leak detection and warranty from original infrared water leak detection analysis will be voided.

For further warranty information, please see associated JP Diagnostics Warranty Terms and Conditions documentation provided to you, the client, issued to you during original infrared water leak detection inspection.

Understanding Your Report

Your report includes many infrared and regular photographs as well as possible video taken on site during time of infrared water leak detection inspection. All pictures contained within are of ONLY problem areas where water intrusion has been located via infrared imaging analysis as well as visual inspection of affected area. However, pictures issued within this report does not necessarily mean that the water leak situation was limited to the area(s) indicated only, but may be a representation of a condition that is in multiple internal areas which cannot be identified unless area is excavated in its entirety.

JP Diagnostics' Process

We are a non-invasive infrared water leak detection analysis company and do not excavate structural components of your property "in search of" a water leak source. Through our proprietary analytical platform designed by representatives of JP Diagnostics, we are able to determine source & origin by compiling all data recorded on site such as but not limited to; (1) Infrared imaging of affected area; (2) Staining patterns within affected area; (3) Overall Structural Layout of affected area; (4) Symptoms of current water leak issue described by customer.

The final determinations based on the compilation of all data on site during time of original inspection has resulted in the findings contained within this report. All findings and repair recommendations are carefully reviewed by our team and are not taken lightly. Our purpose of inspection is to mitigate overall cost to the customer by "pin pointing" exact water leak entry points within the building's structure and providing the absolute minimum level of repairs necessary to stem the flow of water and stop the current water leak.

The infrared water leak detection process is completed in two separate but equal, sections. The first section is the gathering of all data on site which, depending on the leak scenario, may take anywhere from (30) minutes to (2) hours. The second section is processing all infrared images taken on site by analyzing specific temperature gradients and infrared imaging graphical signature contours in order to trace back the path of water taken through the structure from its damage point seen by the customer to its exact structural entry point. The second section of the process takes approximately (1) to (3) business days depending on current call volume and scope of water leak situation inspected for the customer.

Report Nomenclature and Graphical Representation

All images contained within this report, infrared or otherwise, will have a very specific graphical representation of water concentration points and flow patterns.

Yellow and **Black** arrows represent path of water flow through the surrounding structure. **Yellow** and **Black** circles represent water concentration points with a temperature differential of at least 5dF indicating definite water entry into the overall area. The difference in color between **yellow** and **black** within our final images is only for contrast purposes within the images so as to provide an easy to read graphical representation of our overall findings.

Red arrows and **Red** squares/rectangles indicate specific repair points necessary to stop water entry from continuing into the building's structure causing water damage within as observed by the customer.

If draft flow issues were requested for analysis within the structure, they will be represented by **purple** arrows.

Infrared Water Leak Detection Summary

The summary below consists of potentially significant findings. These findings can be a safety hazard, a deficiency requiring a major expense to correct or items we would like to draw extra attention to. Please review all pages of the report as the summary alone does not explain all of the issues. All repairs should be done by a licensed tradesman or qualified professional. We recommend obtaining a copy of all receipts, warranties and permits for the work done. Please contact JP Diagnostics should you need one of our network contractors for repairs.

Water Leak Source and Origin Findings / Recommended Repairs

1. **Unit 1 Living Room Wall Leak Source and Origin: Rear Brick / Masonry Facade.** Heavy wind-driven rain water is entering through the rear masonry facade, backflowing into the substrate and cascading down into the internal wall area below causing minor damage to the surrounding AC sleeve area.

Repairs / Scope of Work

- a. Patch all masonry openings.
 - b. Waterproof area accordingly.
-

2. **Unit 1 Basement Ceiling Leak Source and Origin: Shower Stall Tile Wall.** During shower stall operation, water is entering through the deteriorated grout joints of the shower stall tile wall, backflowing into the substrate and cascading down into the ceiling area below causing minor damage to the surrounding area.

Repairs / Scope of Work

- a. Excavate tile from shower stall walls.
 - b. Waterproof area accordingly.
 - c. Install new tile system.
-

3. **Unit 1 Office Wall Leak Source and Origin: Rear Facade / Deck Connection Point.** Heavy wind-driven rain water is entering through the rear facade where the deck structure connects to the masonry facade, backflowing into the substrate and cascading down into the internal wall area below causing minor damage to the surrounding area.

Repairs / Scope of Work

- a. Remove deck planks from rear facade area.
 - b. Waterproof rear facade area around deck connection point.
 - c. Reinstall planks as necessary.
-

4. **Unit 2 Living Room Ceiling/Wall Leak Source and Origin: Rear Facade / Parapet Wall.** Heavy rain water is entering through the parapet wall coping stone joints as well as the inner and outer brick system, cascading down into the rear facade and backflowing into the internal ceiling/wall area causing minor damage to the surrounding area.

Repairs / Scope of Work

- a. Seal inner and outer brick parapet wall area with RD Elastoflex or Silane Siloxane sx5000.
- b. Install aluminum flashing cap over parapet wall coping stone system.

5. **Unit 2 Office Wall/Ceiling Leak Source and Origin: Parapet Wall / Brick Facade.** Heavy rain water is entering through the parapet wall coping stone joints as well as the inner and outer brick system, cascading down into the rear facade and backflowing into the internal ceiling/wall area causing minor damage to the surrounding area.

Repairs / Scope of Work

- a. Seal inner and outer brick parapet wall area with RD Elastoflex or Silane Siloxane sx5000.
- b. Install aluminum flashing cap over parapet wall coping stone system.
- c. Seal entire side facade accordingly.

6. **Unit 2 Office Wall/Ceiling Leak#2 Source and Origin: Parapet Wall / Brick Facade / Roof Membrane.** Heavy wind-driven rain water is entering through the parapet wall brick and coping stone as well as the upper roof parapet wall / roof membrane connection point, cascading down through the side facade and depositing into the wall/ceiling area below causing minor damage to the surrounding area.

Repairs / Scope of Work

- a. Seal inner and outer brick parapet wall with RD Elastoflex or Silane Siloxane sx5000.
- b. Install aluminum flashing cap over parapet wall coping stone system.
- c. Install aluminum flashing cap over upper roof parapet wall system.
- d. Seal entire side facade accordingly.

7. **Stairwell Wall Leak#1 Source and Origin: Side Facade / Roof Membrane System.** Heavy wind-driven rain water is entering through the roof membrane system connection point to the coping stone of the upper roof parapet wall. Water is seeping into the membrane system, cascading down along the roof pitch and entering into the internal facade system. Once inside the masonry side facade, water is continuing down and depositing into the first floor stairwell wall area, not yet causing damage to the surrounding area. Further, during the infrared scanning process of the roofing system, significant moisture was found entering into the membrane system but not yet causing damage to the internal structure. It is hard to say whether the water entry is only due to the coping stone/membrane joint or widespread water entry into the roof membrane joints.

Repairs / Scope of Work

- a. Inspect upper roof membrane system for overall integrity due to significant moisture entry into the membrane system.
- b. If roof membrane is viable, install aluminum flashing cap over parapet wall system to prevent water entry into roof membrane connection point to coping stone.
- c. If roof membrane system is not viable, recommend full roof replacement.
- d. Seal entire side facade accordingly.

8. Stairwell Wall Leak#2 Source and Origin: Roof Membrane / Parapet Wall / Side Facade. Heavy wind-driven rain water is entering through the upper roof membrane system connection point to the parapet wall coping stone, seeping into the roof membrane system and cascading down along the roof pitch where it is consolidating at the edge of the roof behind the gutter system. Once within this corner area, water is backflowing into the substrate and cascading down into the internal wall area causing significant damage to the surrounding drywall system.

Repairs / Scope of Work

- a. Inspect upper roof membrane system for overall integrity due to significant moisture entry into the membrane system.
- b. If roof membrane is viable, install aluminum flashing cap over parapet wall system to prevent water entry into roof membrane connection point to coping stone.
- c. If roof membrane system is not viable, recommend full roof replacement.
- d. Seal entire side facade accordingly.

9. Unit 4 Living Room Ceiling/Wall Leak Source and Origin: Roof Membrane / Parapet Wall. Heavy wind-driven rain water is entering through the upper roof membrane system connection point to the parapet wall coping stone, seeping into the roof membrane system and cascading down along the roof pitch where it is consolidating at the edge of the roof behind the gutter system. Once within this corner area, water is cascading out through the edge of the roof, backflowing into the substrate and cascading down into the internal ceiling / wall area, not yet causing damage to the surrounding drywall system.

Repairs / Scope of Work

- a. Inspect upper roof membrane system for overall integrity due to significant moisture entry into the membrane system.
- b. If roof membrane is viable, install aluminum flashing cap over parapet wall system to prevent water entry into roof membrane connection point to coping stone.
- c. If roof membrane system is not viable, recommend full roof replacement.
- d. Seal entire side facade accordingly.

MOLD PROBABILITY RATING (MPR): Given the length of time the current water leaks have occurred within the areas scanned as well as the medium level of moisture within the structure observed via infrared imaging and analysis, based on JP Diagnostics' Models the **Mold Probability Ratings (MPR)** have been set as follows:

1. Unit 1 Living Room Wall Area MPR: **10%**
2. Unit 1 Basement Ceiling Area MPR: **35%**
3. Unit 1 Office Wall Area MPR: **25%**
4. Unit 2 Living Room Ceiling/Wall Area MPR: **15%**
5. Unit 2 Office Wall/Ceiling Area MPR: **20%**
6. Stairwell Wall Area MPR: **40%**
7. Stairwell Wall Area#2 MPR: **80%**
8. Unit 4 Living Room Ceiling/Wall Area MPR: **30%**

Any rating at or higher than 30% we suggest hiring a mold remediation team to test for airborne and internal wall spores within the area to detect if mold is, in fact, growing within the structure. If below 30% mold testing is not warranted except as a precautionary measure. A 5% rating is the minimum we provide as our scale is from 5% -100%.

DISCLAIMER: JP Diagnostics is, in no way, an expert in mold growth, remediation or definitive determination of mold presence. All mentioning of mold and its probability of its presence are based off of infrared analysis through our own analytical platform examining temperature differentials, level of water concentration and details provided by the customer on site as to how long the problem has occurred. For more detailed information concerning mold growth, please contact a mold remediation specialist who can further assist in helping you identify different breeds of mold growth, identifying its definitive possibility of growth within your structure as well as overall remediation, if necessary.

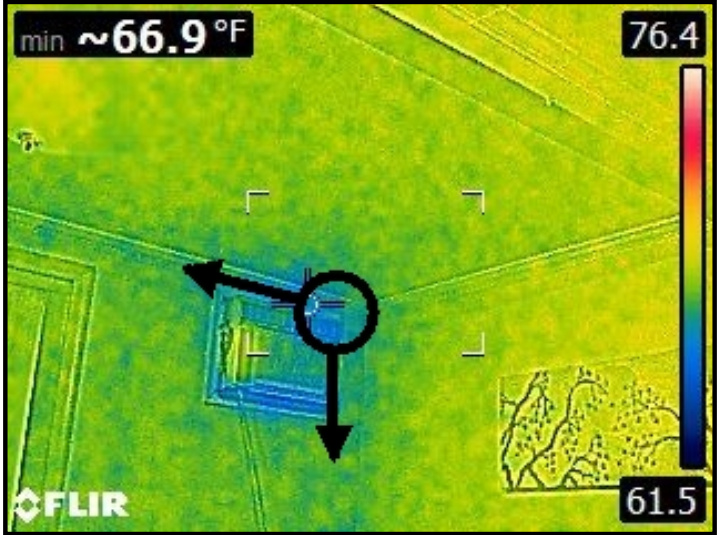
NOTE: Any infrared and regular pictures without directional flow patters is an indication of either wide spread water leak entry through the entire structure scanned or no moisture presence at all and is not a representation of a mistake in any way.

Unit 1 Living Room Wall Leak

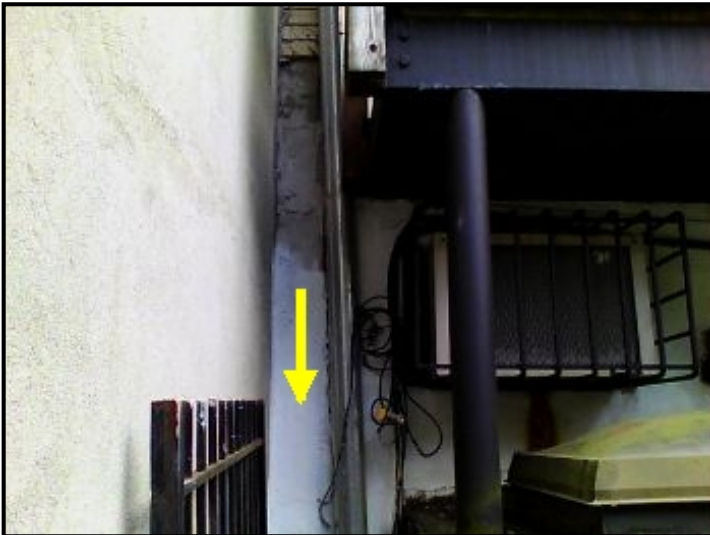
1. Water Leak Source / Origin: Rear Brick/Masonry Facade



Water entry into corner wall area.



Infrared imaging of water entry into corner wall area.



Water entering through rear facade and backflowing into the internal wall area.



Infrared imaging of water entering through rear facade and backflowing into the internal wall area.



Water entering through rear facade and backflowing into the internal wall area.



Infrared imaging of water entering through rear facade and backflowing into the internal wall area.

2. Repairs / Scope of Work



Repair Point: Patch masonry joints. Waterproof area accordingly.



Repair Point: Patch masonry joints. Waterproof area accordingly.



Repair Point: Patch masonry joints. Waterproof area accordingly.

Unit 1 Basement Ceiling Leak

1. Water Leak Source / Origin: Shower Stall Tile Wall



Water entry into ceiling area.



Infrared imaging of water entry into ceiling area.



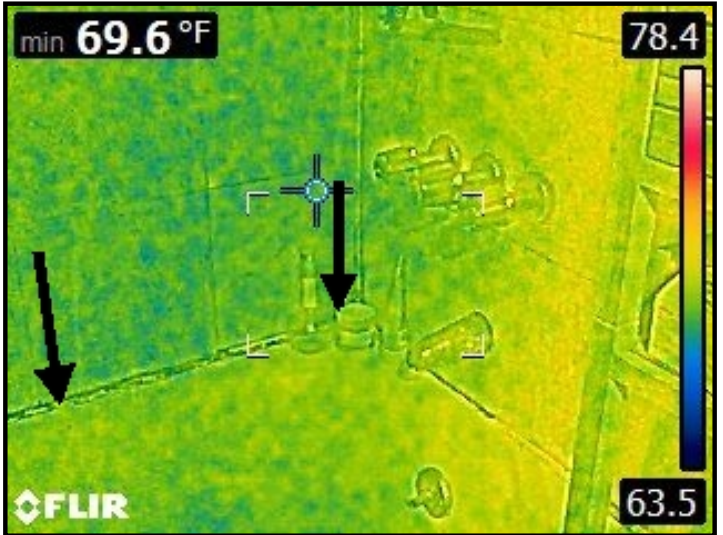
Water entry into ceiling area.



Infrared imaging of water entry into ceiling area.



Water entering through shower stall tile wall area and cascading down into the ceiling area below.



Infrared imaging of water entering through shower stall tile wall area and cascading down into the ceiling area below.

2. Repairs / Scope of Work



Repair Point: Excavate tile from wall. Waterproof area accordingly.



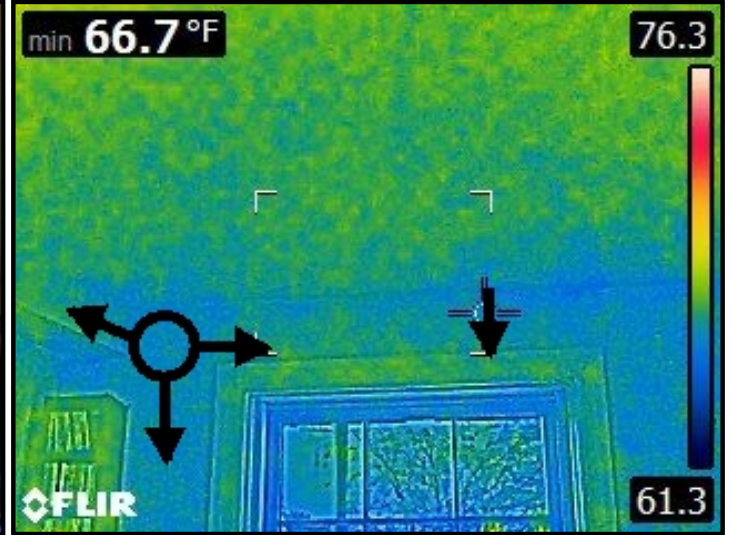
Repair Point: Excavate tile from wall. Waterproof area accordingly.

Unit 1 Office Wall Leak

1. Water Leak Source / Origin: Rear Facade/Deck Connection Point



Water entry into wall/ceiling area.



Infrared imaging of water entry into wall/ceiling area.



Water entry into wall/ceiling area.



Infrared imaging of water entry into wall/ceiling area.



Water cascading down through rear facade and backflowing into the internal wall/ceiling area.

Infrared imaging of water cascading down through rear facade and backflowing into the internal wall/ceiling area.



Water entering through rear facade connection point to the deck system and cascading down into the wall/ceiling area below.

Infrared imaging of water entering through rear facade connection point to the deck system and cascading down into the wall/ceiling area below.

2. Repairs / Scope of Work



Repair Point: Remove deck planks from around facade. Waterproof area accordingly.



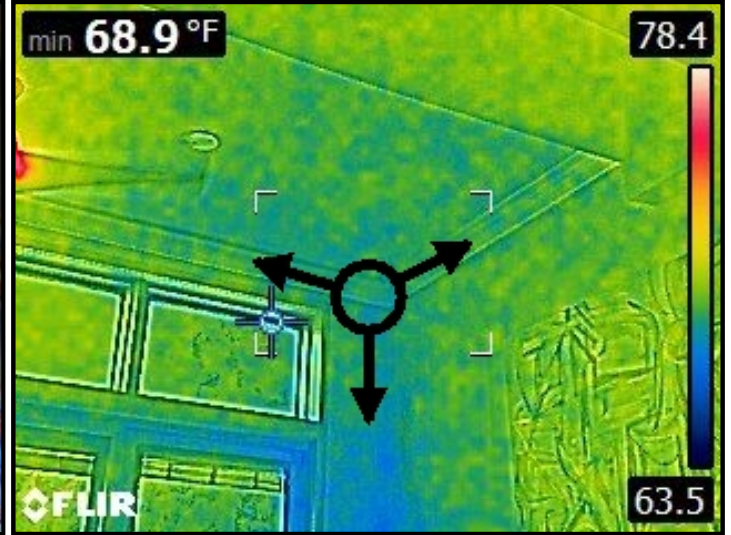
Repair Point: Remove deck planks from around facade. Waterproof area accordingly.

Unit 2 Living Room Ceiling/Wall Leak

1. Water Leak Source / Origin: Rear Facade / Parapet Wall



Water entry into corner wall/ceiling area.



Infrared imaging of water entry into corner wall/ceiling area.

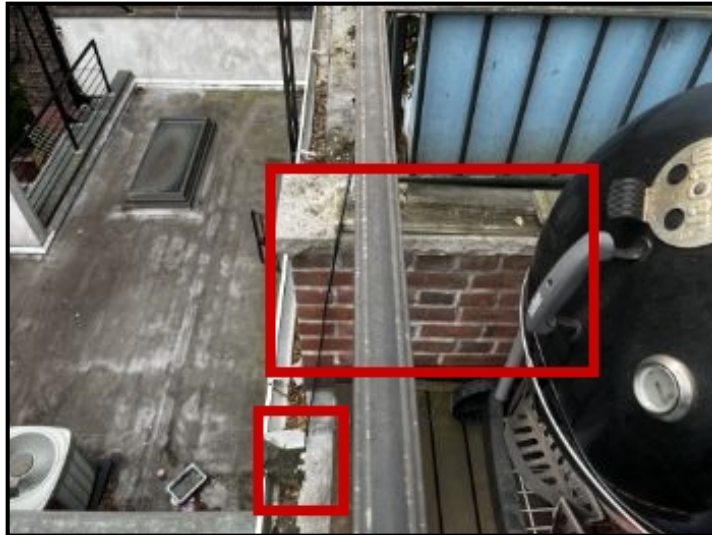


Water entering through the rear facade between the gutter trays and through the brick parapet wall above.



Infrared imaging of water entering through the rear facade between the gutter trays and through the brick parapet wall above.

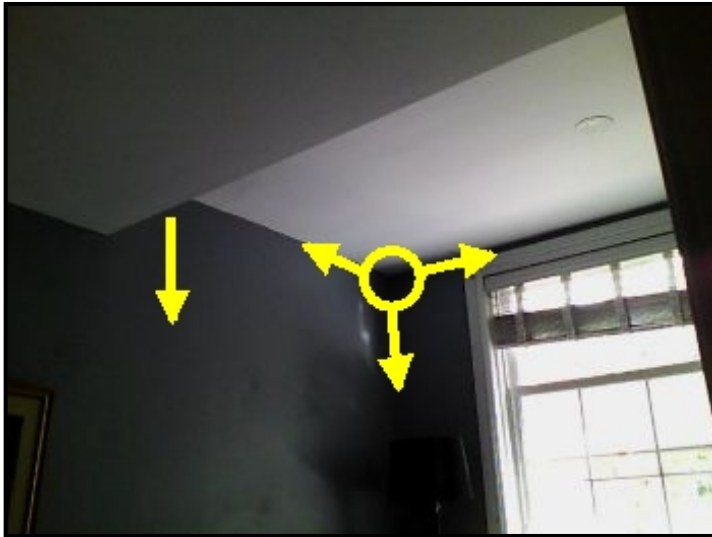
2. Repairs / Scope of Work



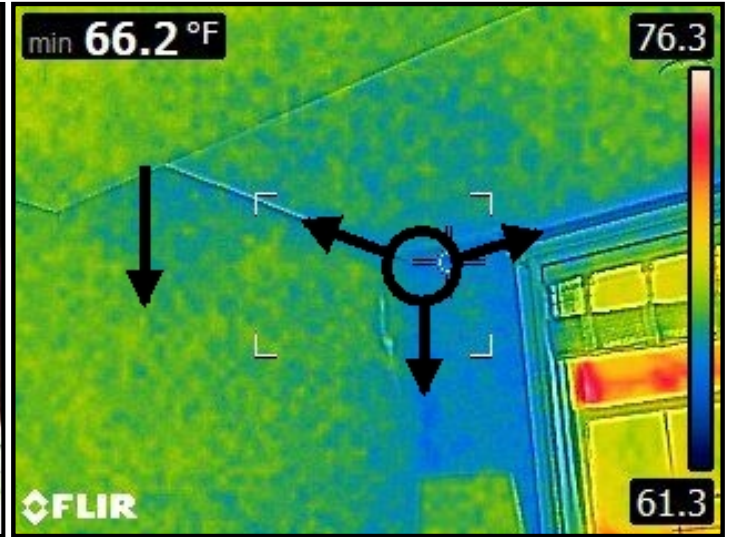
Repair Point: Waterproof parapet wall. Waterproof rear facade between the gutter trays.

Unit 2 Office Wall/Ceiling Leak

1. Water Leak Source / Origin: Parapet Wall / Brick Facade



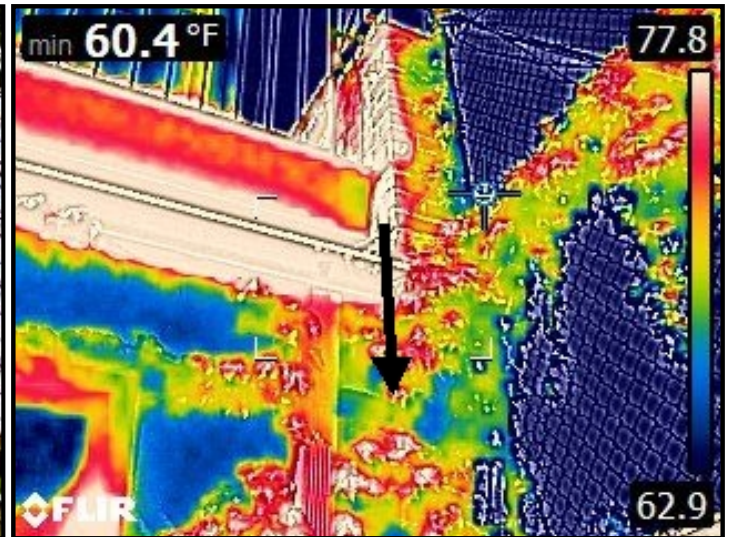
Water entry into ceiling/wall area.



Infrared imaging of water entry into ceiling/wall area.



Water entering through parapet wall and cascading down into the ceiling/wall area below.



Infrared imaging of water entering through parapet wall and cascading down into the ceiling/wall area below.



Water entering through parapet wall and cascading down into the ceiling/wall area below.



Infrared imaging of water entering through parapet wall and cascading down into the ceiling/wall area below.

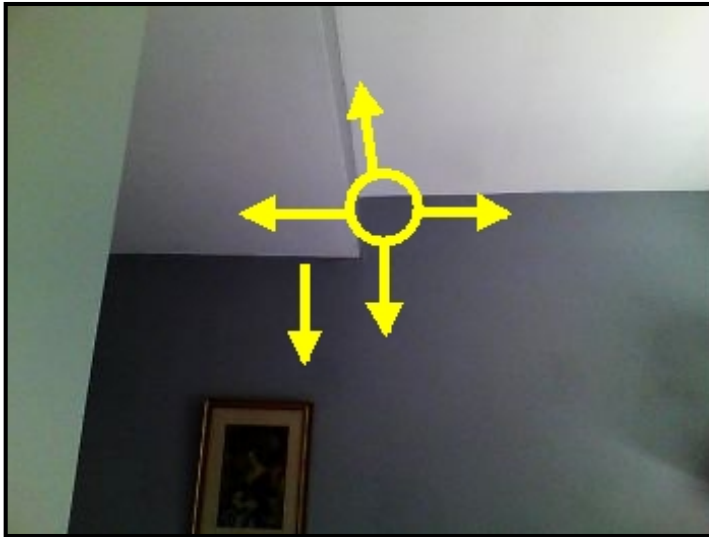
2. Repairs / Scope of Work



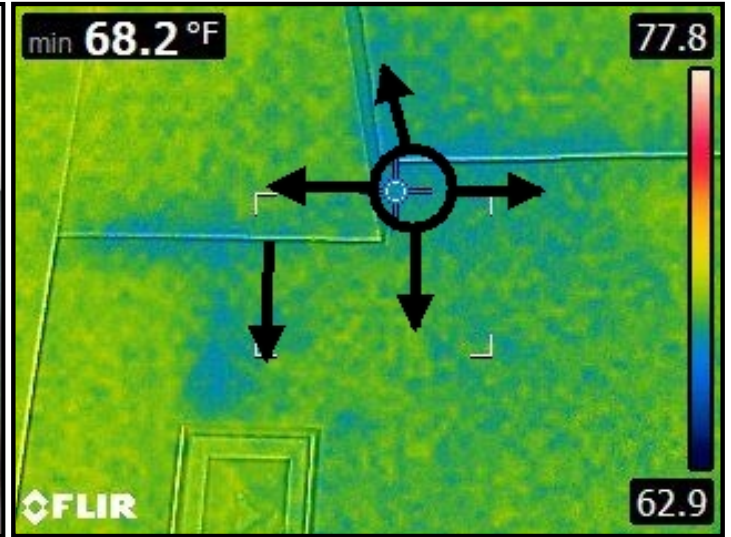
Repair Point: Waterproof inner and outer parapet wall brick system. Install aluminum flashing cap over parapet wall coping stone.

Unit 2 Office Wall/Ceiling Leak#2

1. Water Leak Source / Origin: Parapet Wall / Brick Facade / Roof Membrane



Water entry into ceiling/wall area.



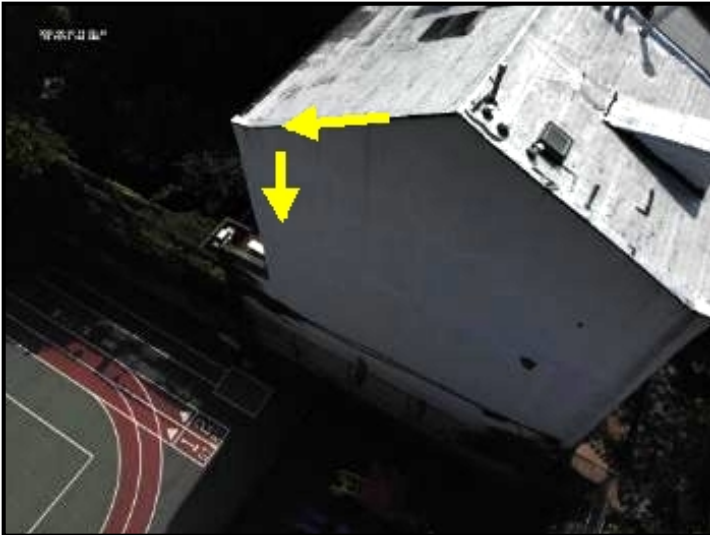
Infrared imaging of water entry into ceiling/wall area.



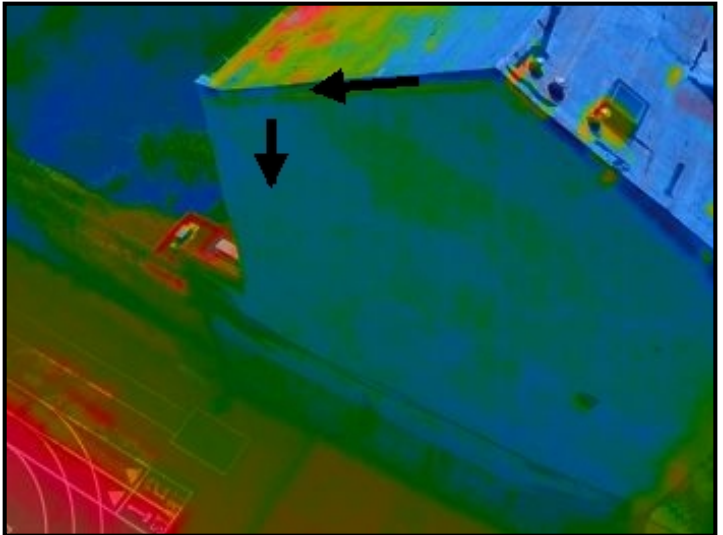
Water entering through parapet wall coping stone system and cascading down into the ceiling/wall area below.



Infrared imaging of water entering through parapet wall coping stone system and cascading down into the ceiling/wall area below.



Water entering through the roof membrane/upper roof parapet wall coping stone and cascading down through the side facade eventually depositing into the ceiling/wall area below.



Infrared imaging of water entering through the roof membrane/upper roof parapet wall coping stone and cascading down through the side facade eventually depositing into the ceiling/wall area below.

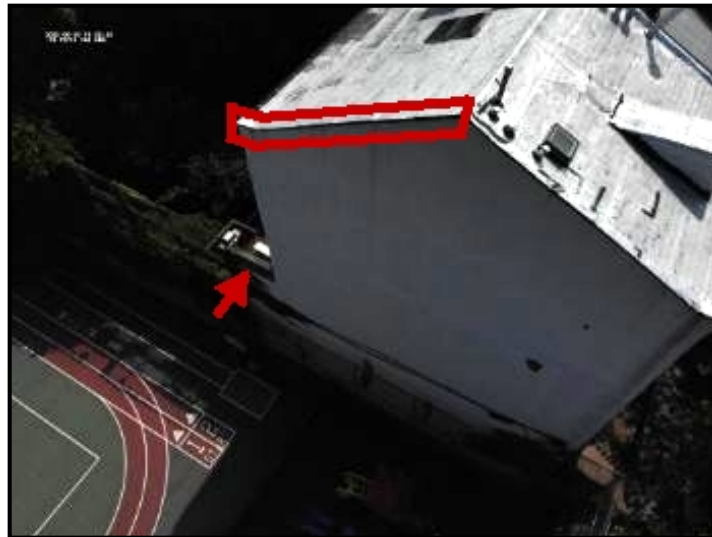
2. Repairs / Scope of Work



Repair Point: Waterproof parapet wall brick. Install aluminum flashing cap over parapet coping stone. Seal outer brick.



Repair Point: Waterproof parapet wall brick. Install aluminum flashing cap over parapet coping stone. Seal outer brick.



Repair Point: Install aluminum flashing cap over upper roof membrane/parapet wall area.

Stairwell Wall Leak#1

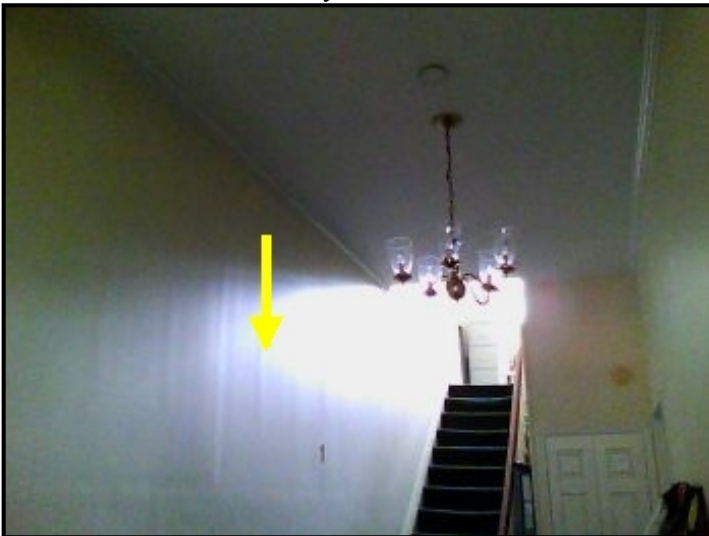
1. Water Leak Source / Origin: Side Facade / Roof Membrane System



Water entry into wall area.



Infrared imaging of water entry into wall area.



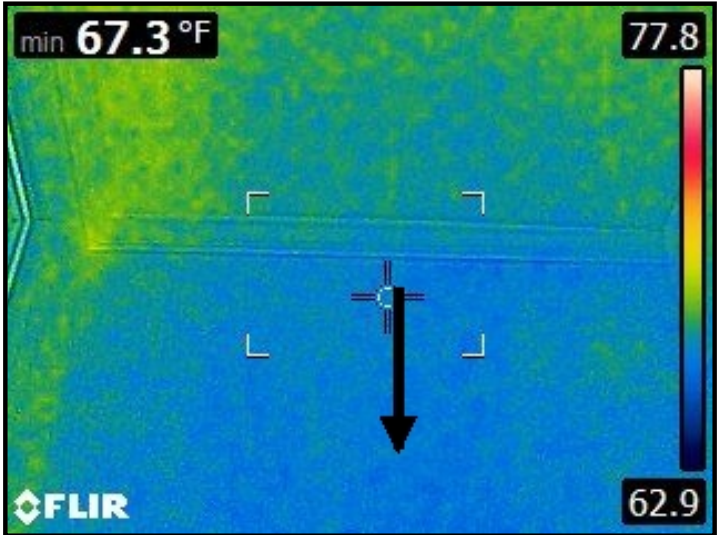
Water entry into wall area.



Infrared imaging of water entry into wall area.



Water entry into wall area.



Infrared imaging of water entry into wall area.



Water entering through roof membrane/parapet wall coping stone connection point, cascading down through the side facade and depositing into the internal wall areas below.



Infrared imaging of water entering through roof membrane/parapet wall coping stone connection point, cascading down through the side facade and depositing into the internal wall areas below.

2. Repairs / Scope of Work



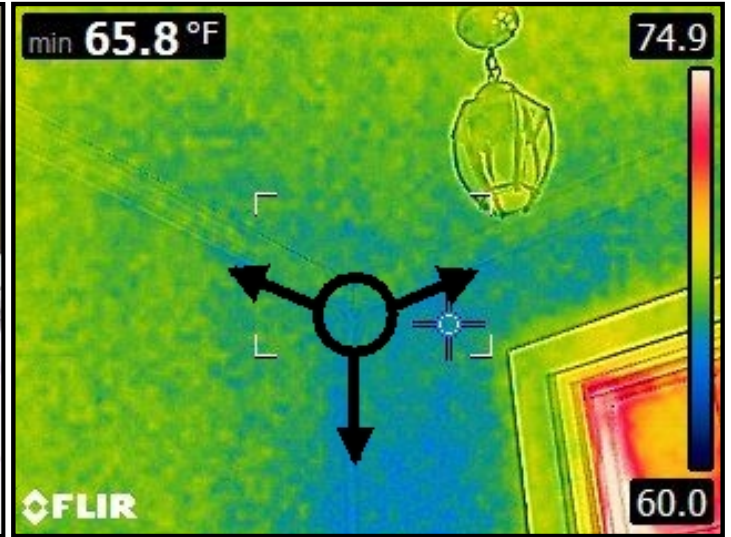
Repair Point: Inspect roof membrane system for continued viability. Install aluminum flashing cap over roof parapet wall.

Stairwell Wall Leak#2

1. Water Leak Source / Origin: Roof Membrane/Parapet Wall/Side Facade



Severe water entry into corner wall area.



Infrared imaging of severe water entry into corner wall area.



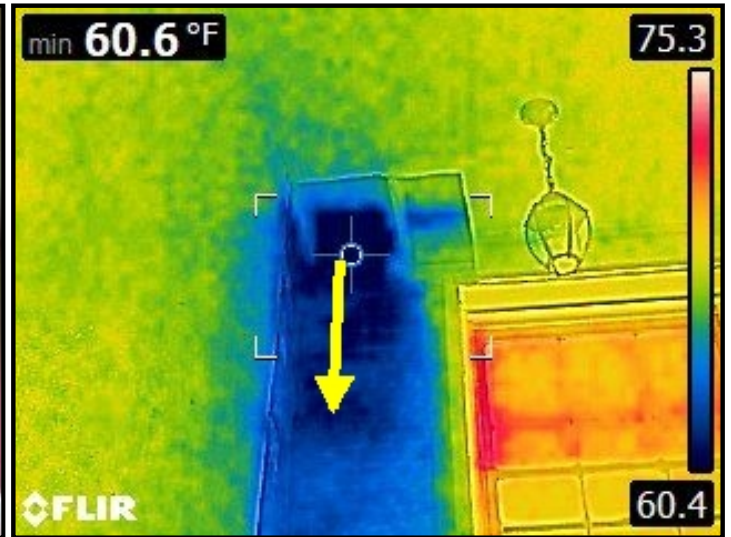
Water cascading down through wall area.



Infrared imaging of water cascading down through wall area.



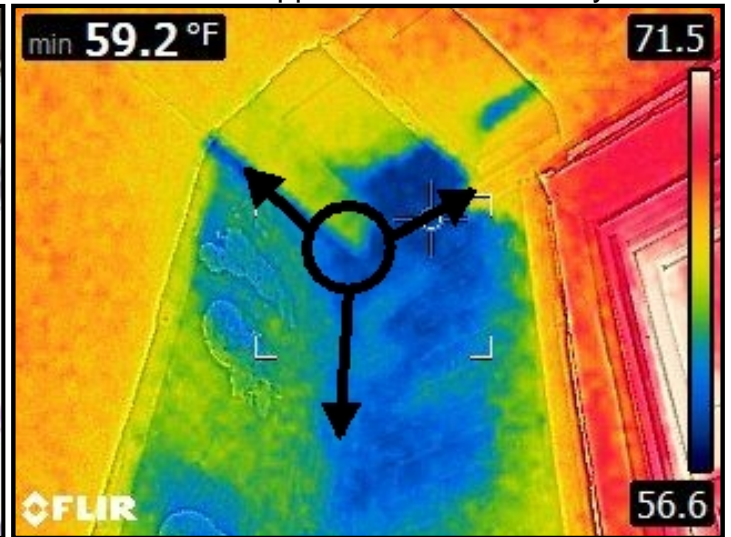
Severe water entry into corner wall area from upper roof membrane system.



Infrared imaging of severe water entry into corner wall area from upper roof membrane system.



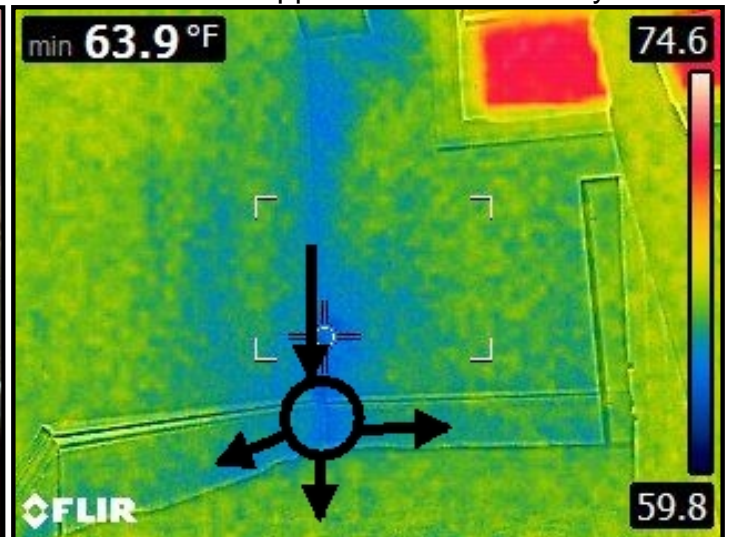
Severe water entry into corner wall area from upper roof membrane system.



Infrared imaging of severe water entry into corner wall area from upper roof membrane system.



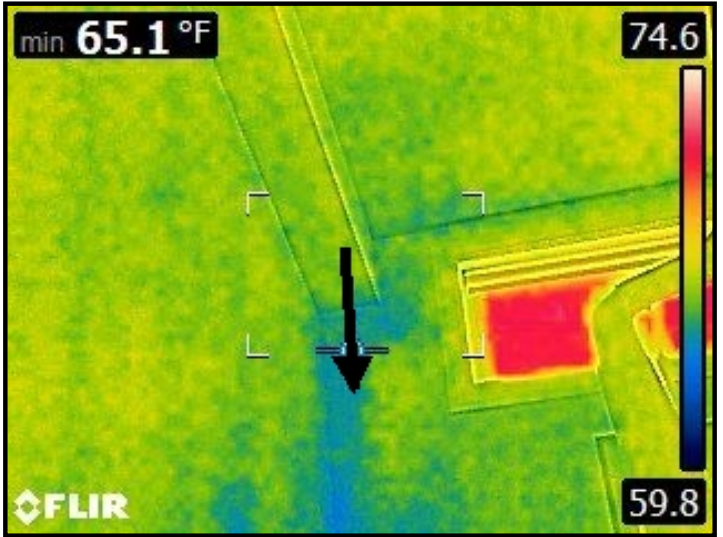
Severe water entry into corner wall area from upper roof membrane system.



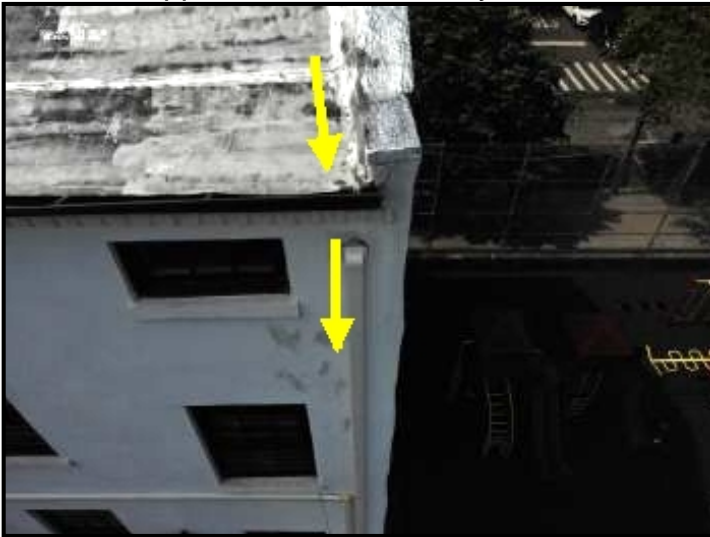
Infrared imaging of severe water entry into corner wall area from upper roof membrane system.



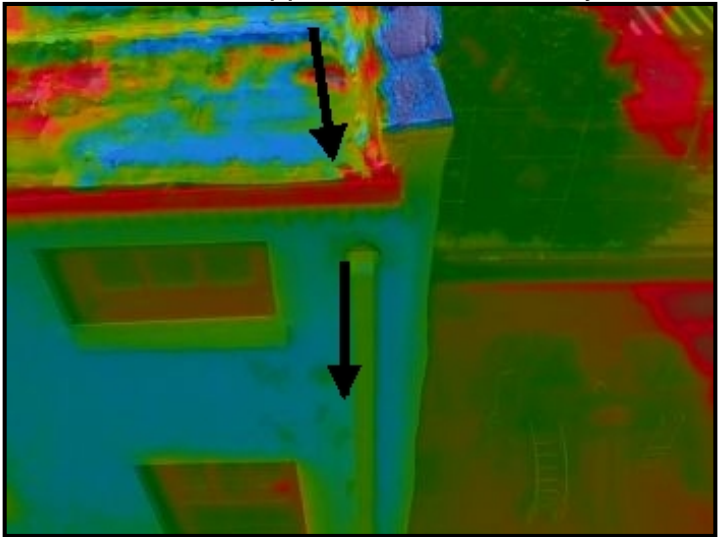
Severe water entry into corner wall area from upper roof membrane system.



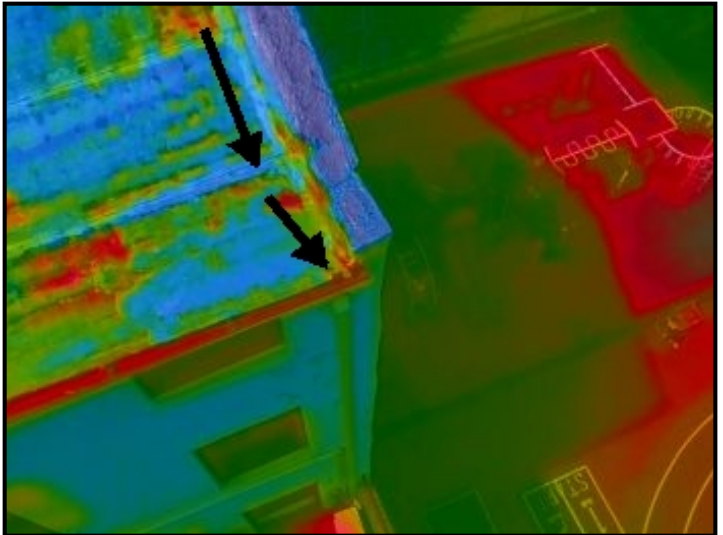
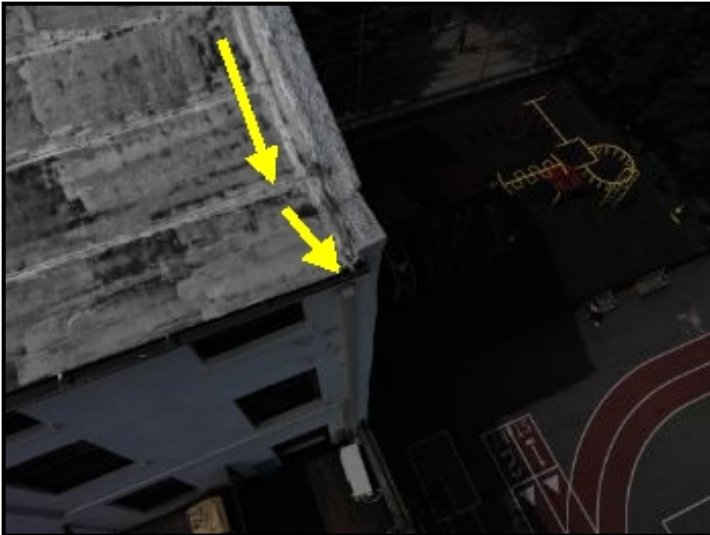
Infrared imaging of severe water entry into corner wall area from upper roof membrane system.



Water cascading down through the roof membrane system and depositing into the internal wall area below.

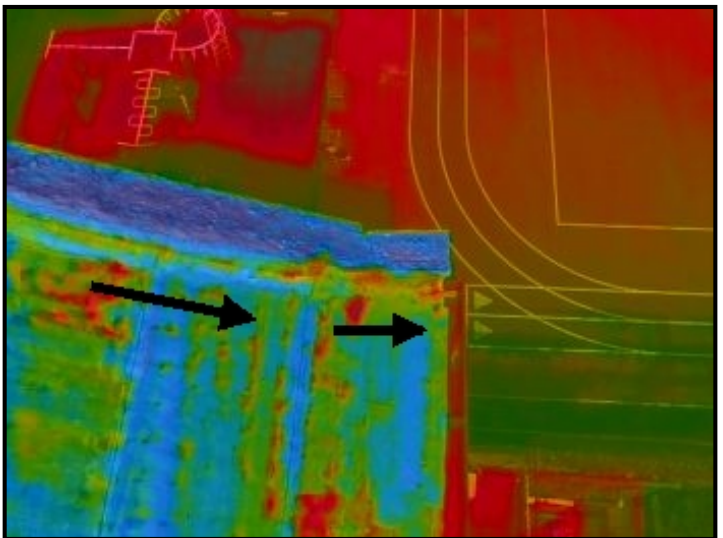
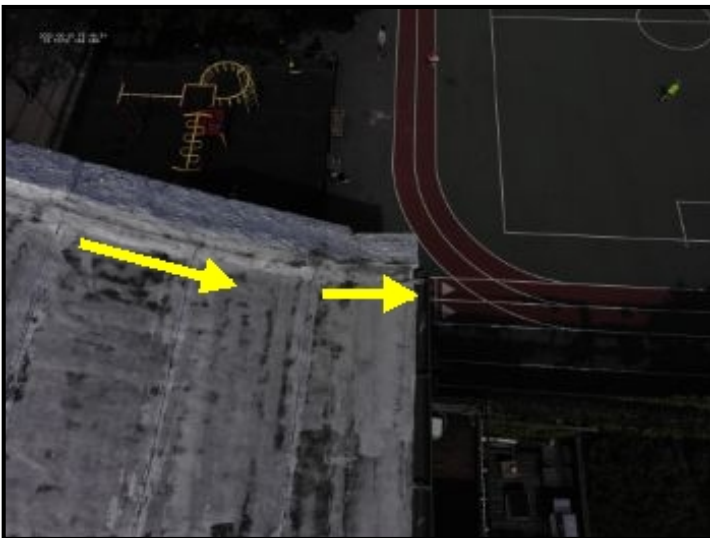


Infrared imaging of water cascading down through the roof membrane system and depositing into the internal wall area below.



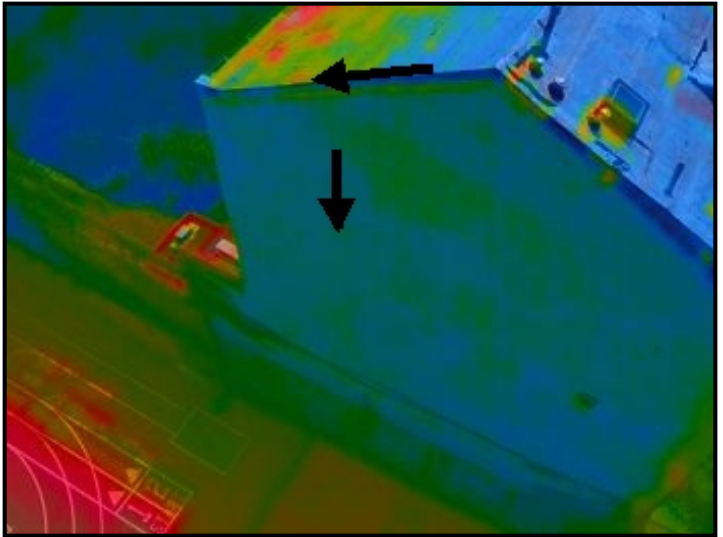
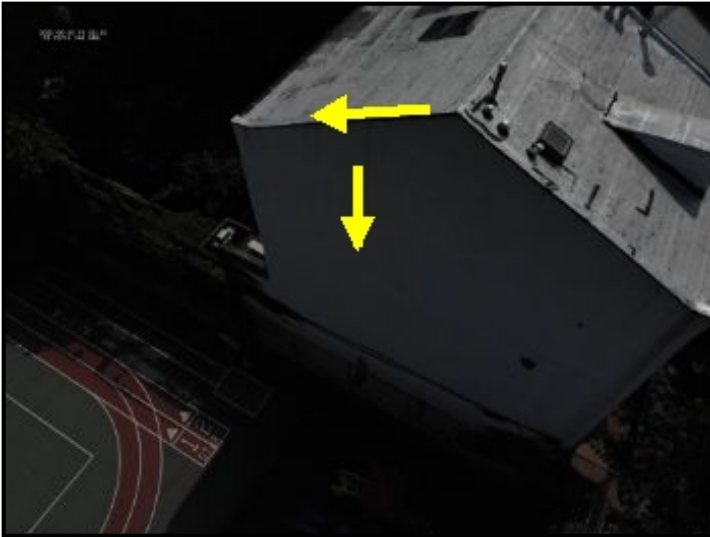
Water cascading down through the roof membrane system and depositing into the internal wall area below.

Infrared imaging of water cascading down through the roof membrane system and depositing into the internal wall area below.



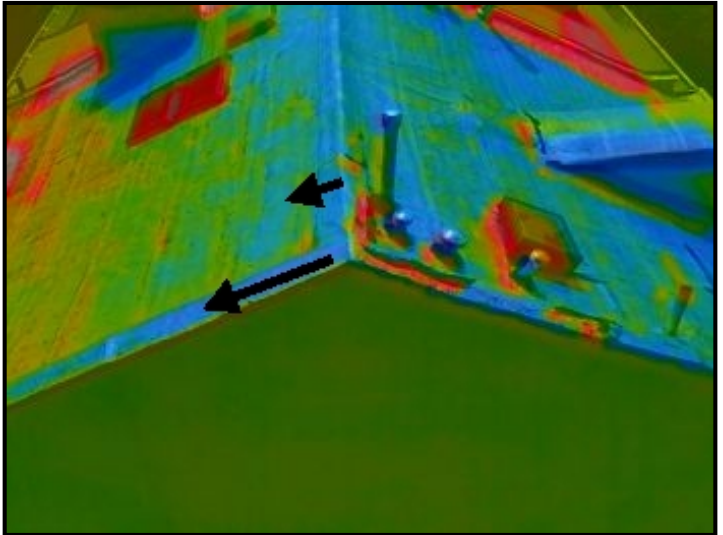
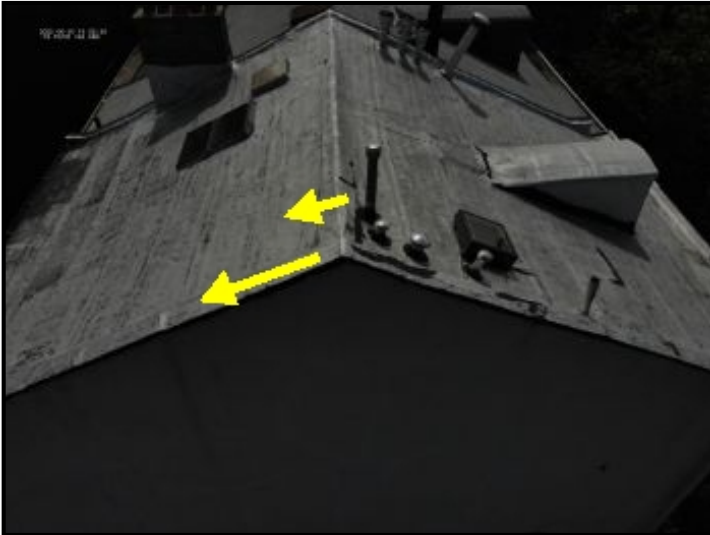
Water cascading down through the roof membrane system and depositing into the internal wall area below.

Infrared imaging of water cascading down through the roof membrane system and depositing into the internal wall area below.



Water entering through roof membrane system/coping stone connection point, cascading down through the roof and depositing into the rear facade and internal wall area below.

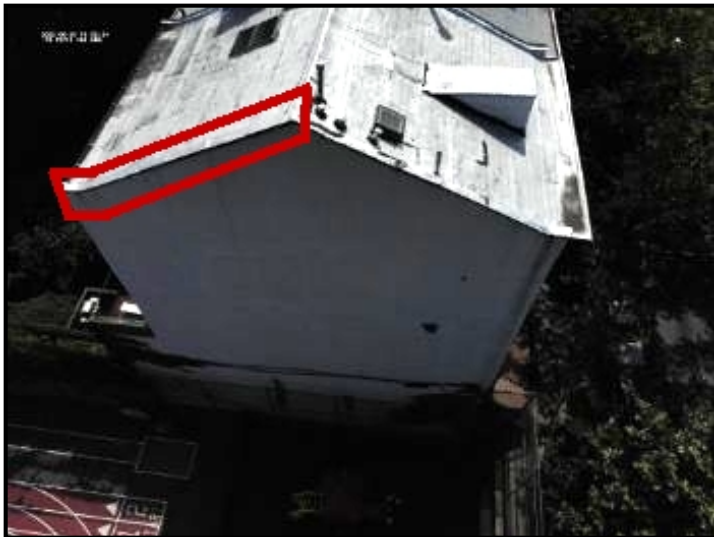
Infrared imaging of water entering through roof membrane system/coping stone connection point, cascading down through the roof and depositing into the rear facade and internal wall area below.



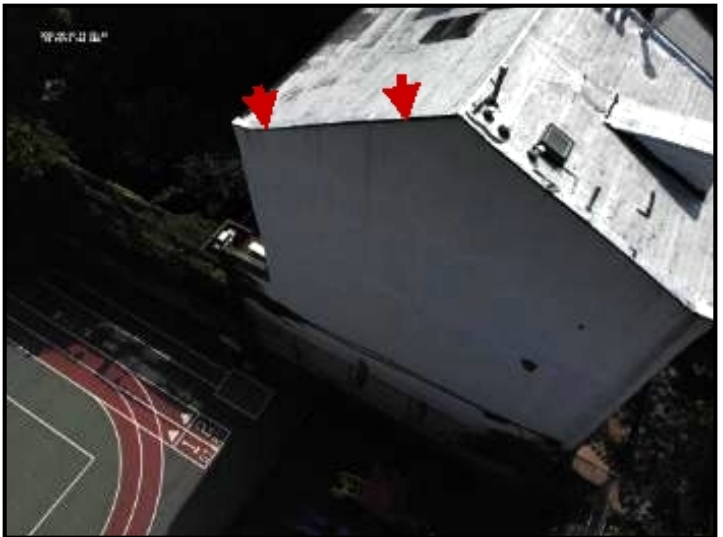
Water entering through roof membrane system/coping stone connection point, cascading down through the roof and depositing into the rear facade and internal wall area below.

Infrared imaging of water entering through roof membrane system/coping stone connection point, cascading down through the roof and depositing into the rear facade and internal wall area below.

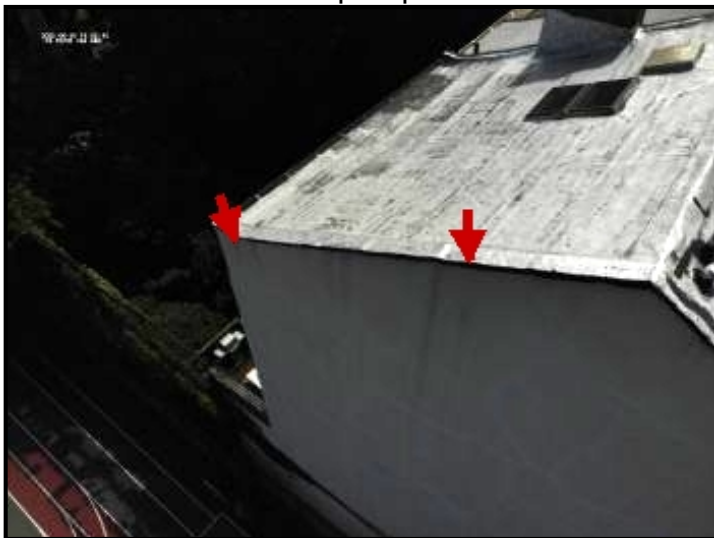
2. Repairs / Scope of Work



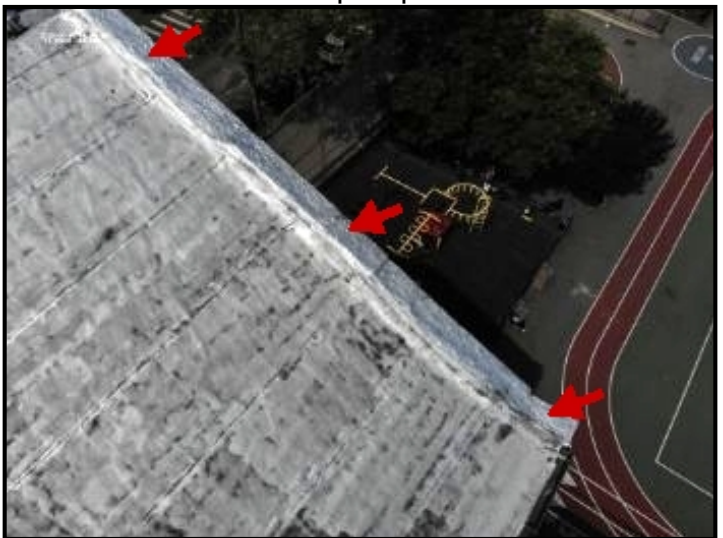
Repair Point: Inspect roof membrane system for continued viability. Install aluminum flashing cap over roof parapet wall.



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Unit 4 Living Room Ceiling/Wall Leak

1. Water Leak Source / Origin: Roof Membrane/Parapet Wall



Water entry into wall area.



Infrared imaging of water entry into wall area.



Water entry into ceiling/wall area.



Infrared imaging of water entry into ceiling/wall area.



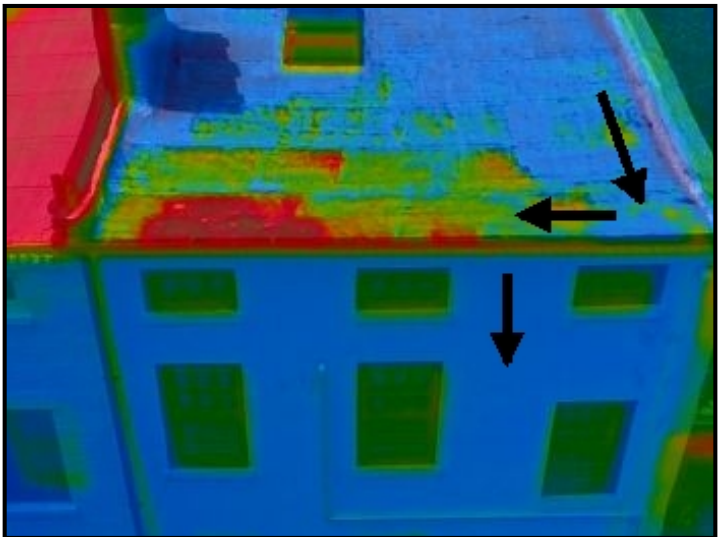
Water entry into ceiling/wall area.



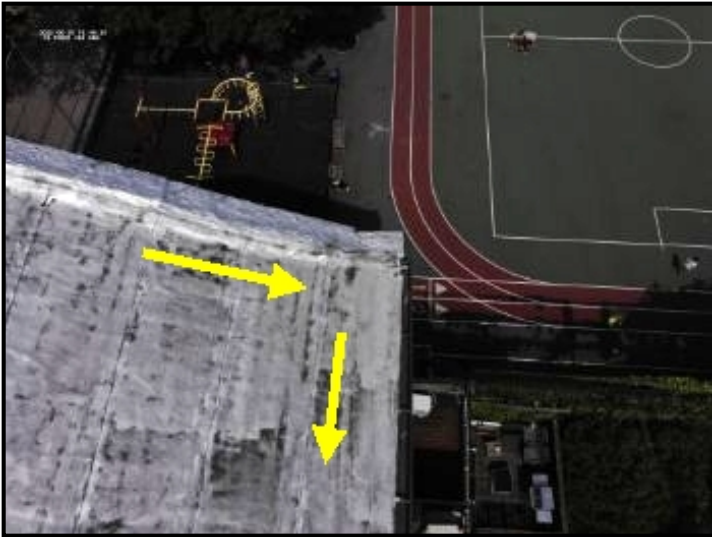
Infrared imaging of water entry into ceiling/wall area.



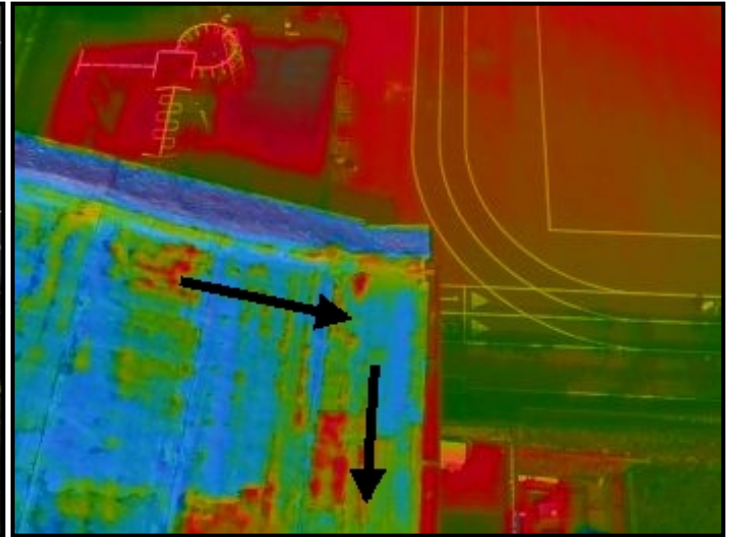
Water entering through the roof membrane system and cascading down into the rear facade.



Infrared imaging of water entering through the roof membrane system and cascading down into the rear facade.



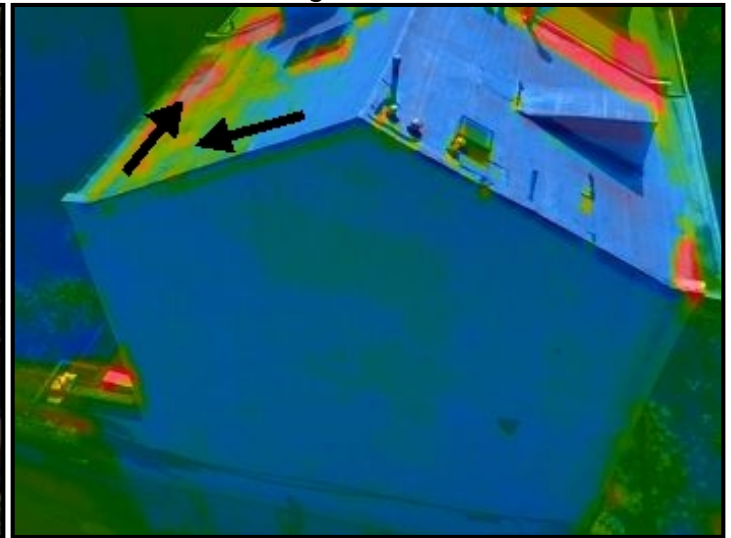
Water entering through roof membrane system connection point to the coping stone and cascading down into the rear facade.



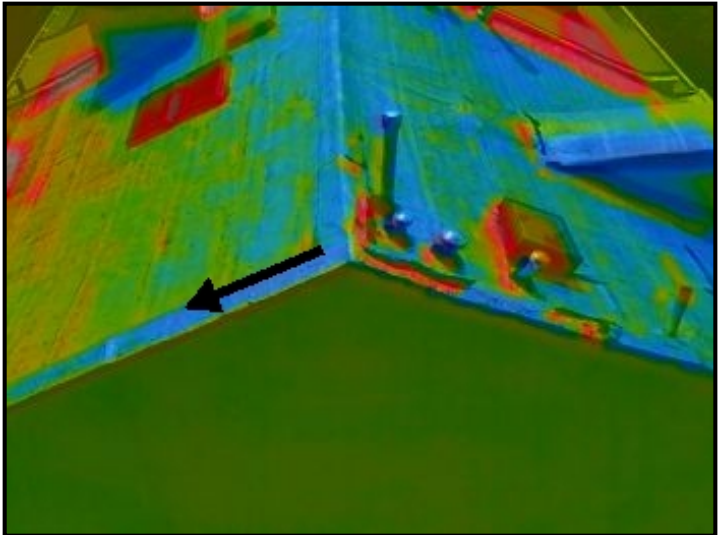
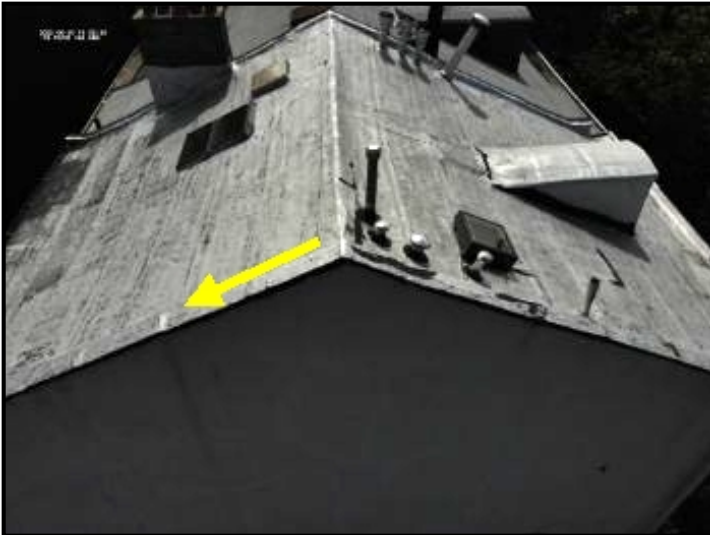
Infrared imaging of water entering through roof membrane system connection point to the coping stone and cascading down into the rear facade.



Water entering through roof membrane system connection point to the coping stone and cascading down into the rear facade.



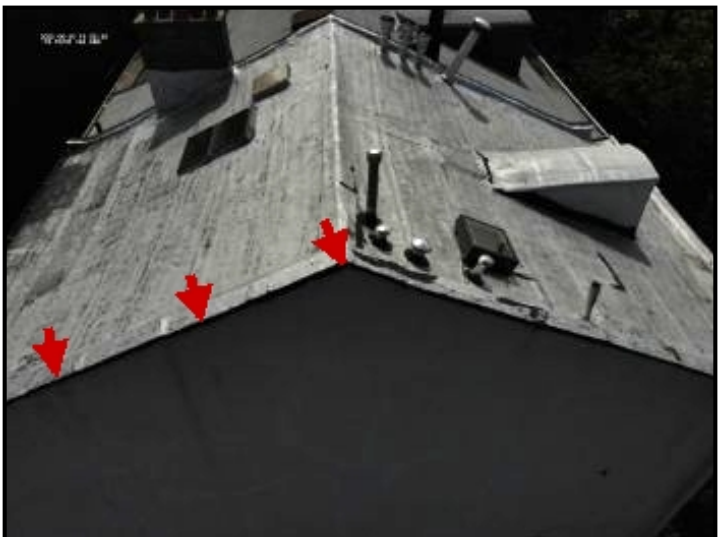
Infrared imaging of water entering through roof membrane system connection point to the coping stone and cascading down into the rear facade.



Water entering through roof membrane system connection point to the coping stone and cascading down into the rear facade.

Infrared imaging of water entering through roof membrane system connection point to the coping stone and cascading down into the rear facade.

2. Repairs / Scope of Work



Repair Point: Inspect roof membrane system for continued viability. Install aluminum flashing cap over roof parapet wall.

Repair Point: Inspect roof membrane system for continued viability. Install aluminum flashing cap over roof parapet wall.