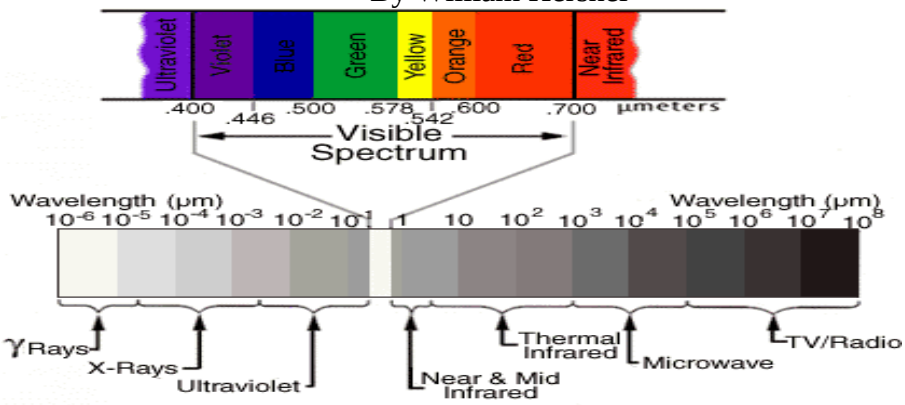
Infrared Thermographic Report
For

Report done by
John Cannamela
Level II Thermographer

What is Infrared?

- IR is part of the electromagnetic spectrum discovered in the 1800's
  - By William Hershel



IR 101

- The IR imager sees emitted energy in the IR spectrum range from (shortwave) 3-5 microns (longwave)7-13 microns.
- The amount of energy is seen through the imager. The reason everything thing is colored is to give the eye something to interpret.
- Interpretation is key with Thermography.

How Infrared can help Commissioning

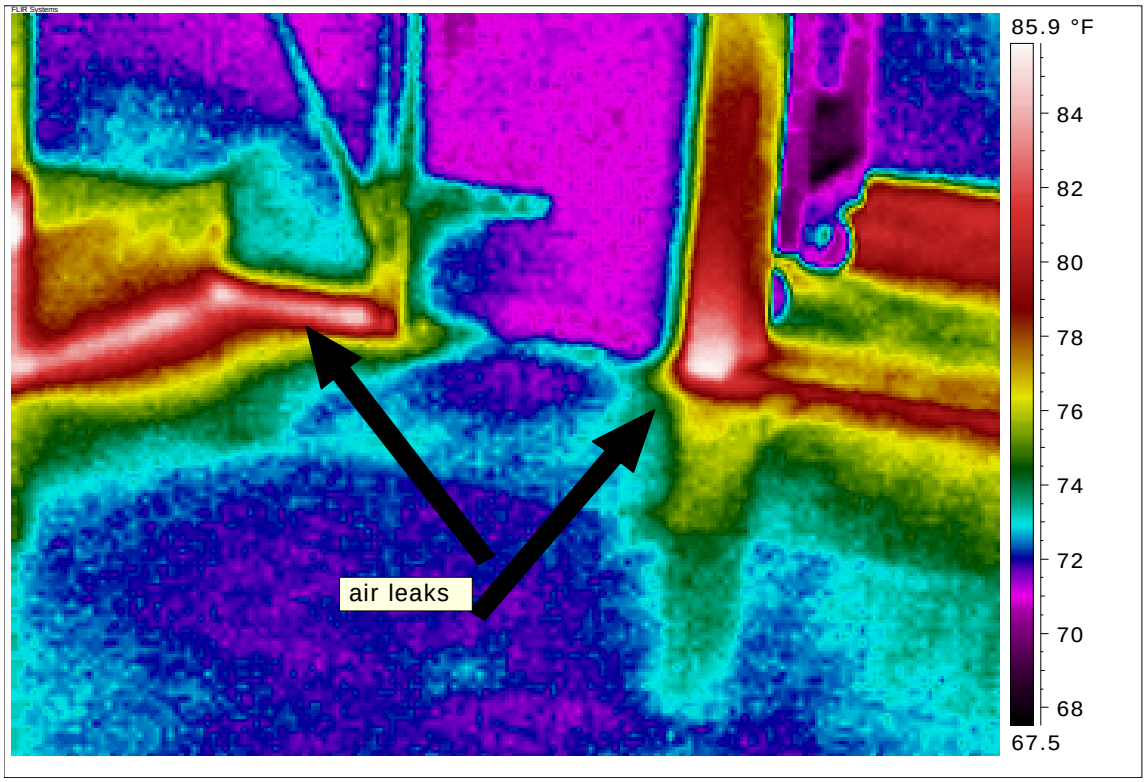
Commissioning is the process where by the system is put through its sequence of operation at its design. There are many tools and techniques to start up and check out systems. Buildings all have their own special issues not in the design, that's why we commission.

- Infrared Thermography can help as a great tool to help locate and even show why certain things don't work properly.

Building HVAC 101
Heating Ventilation & Air Conditioning

Buildings are conditioned by adding or removing heat from a given space through a medium. In this case the medium is air. The air is circulated through a refrigerated coil or DX coil or chilled water coil, which removes heat and transfers the heat through the refrigerant/water to the condenser coil/cooling tower, via a fan/pump. Dirty filters or poor air flow causes coils to freeze and compressor failure.

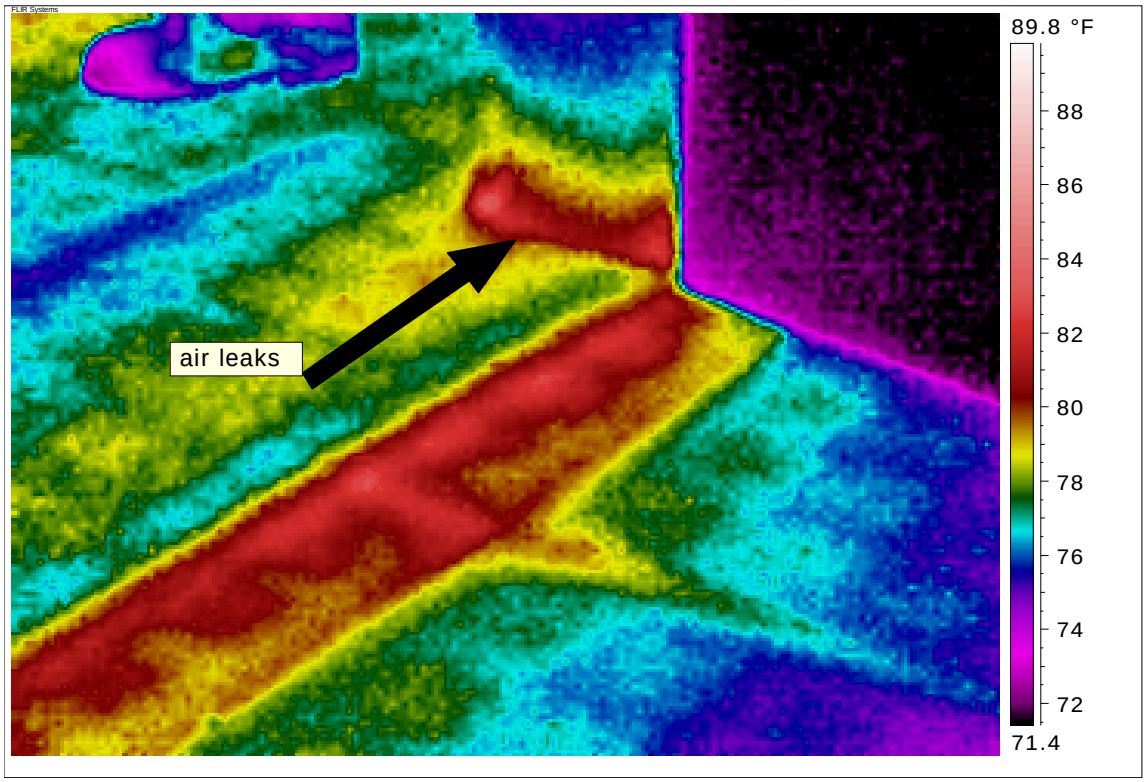
Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela



Description: Mechanical room anomaly at door jam and discharge

System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

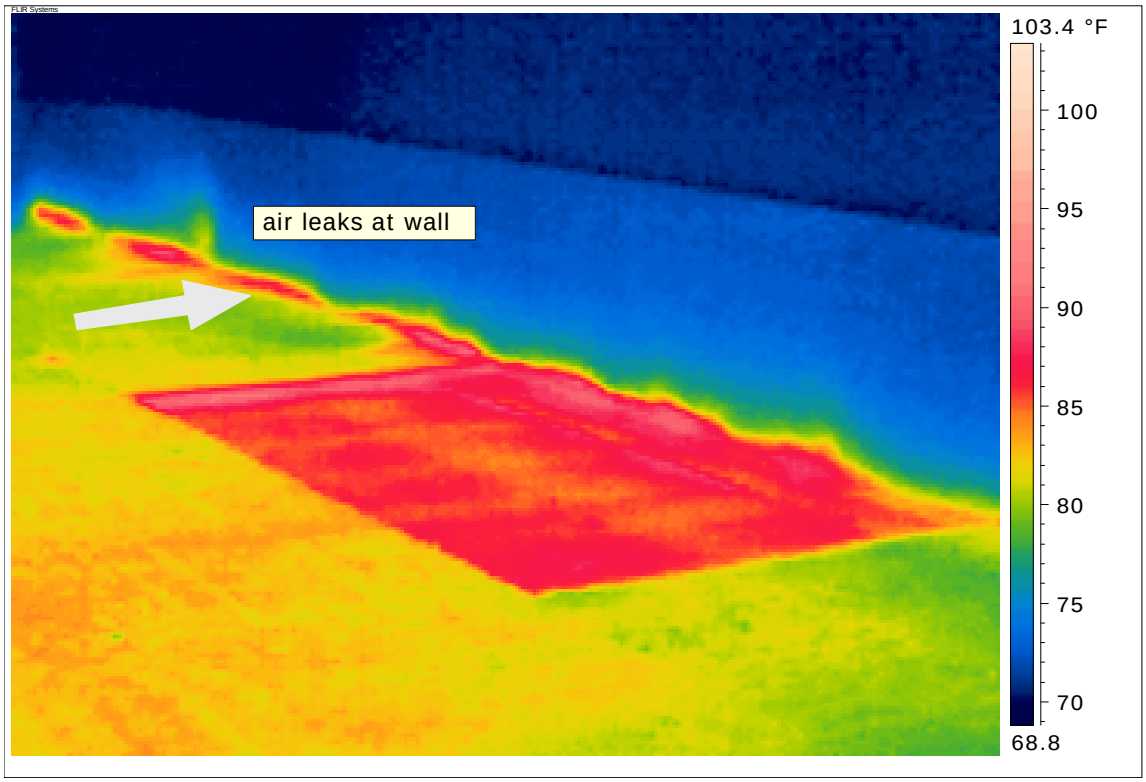
Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela



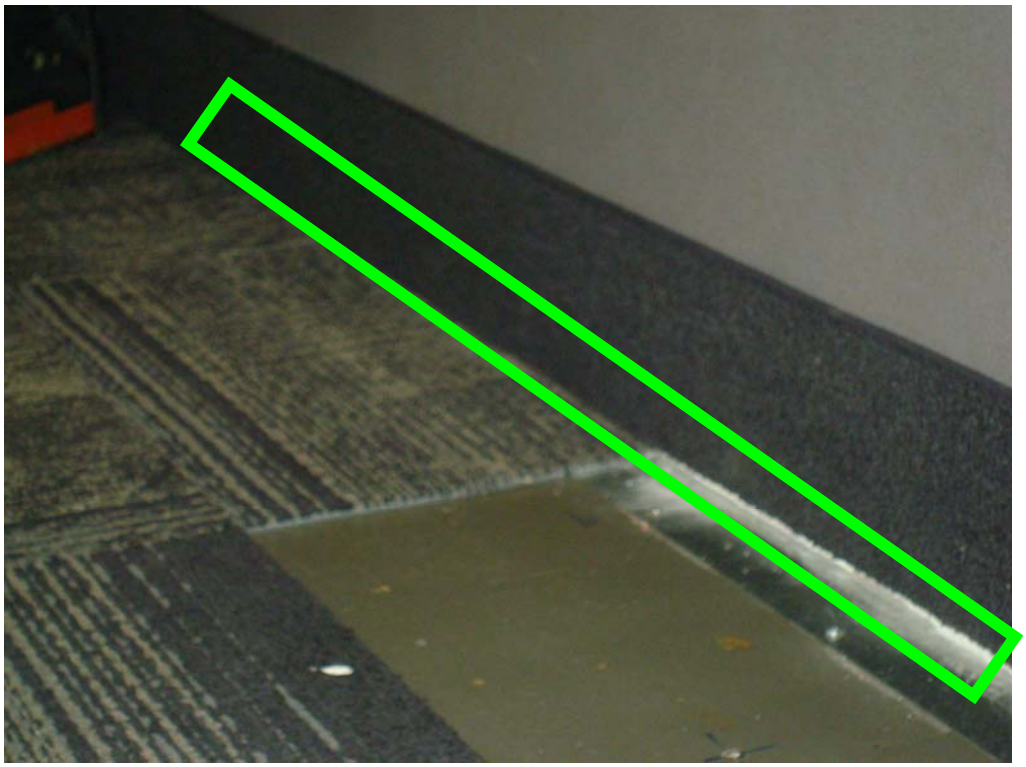
Description: Mechanical room door entry

System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela

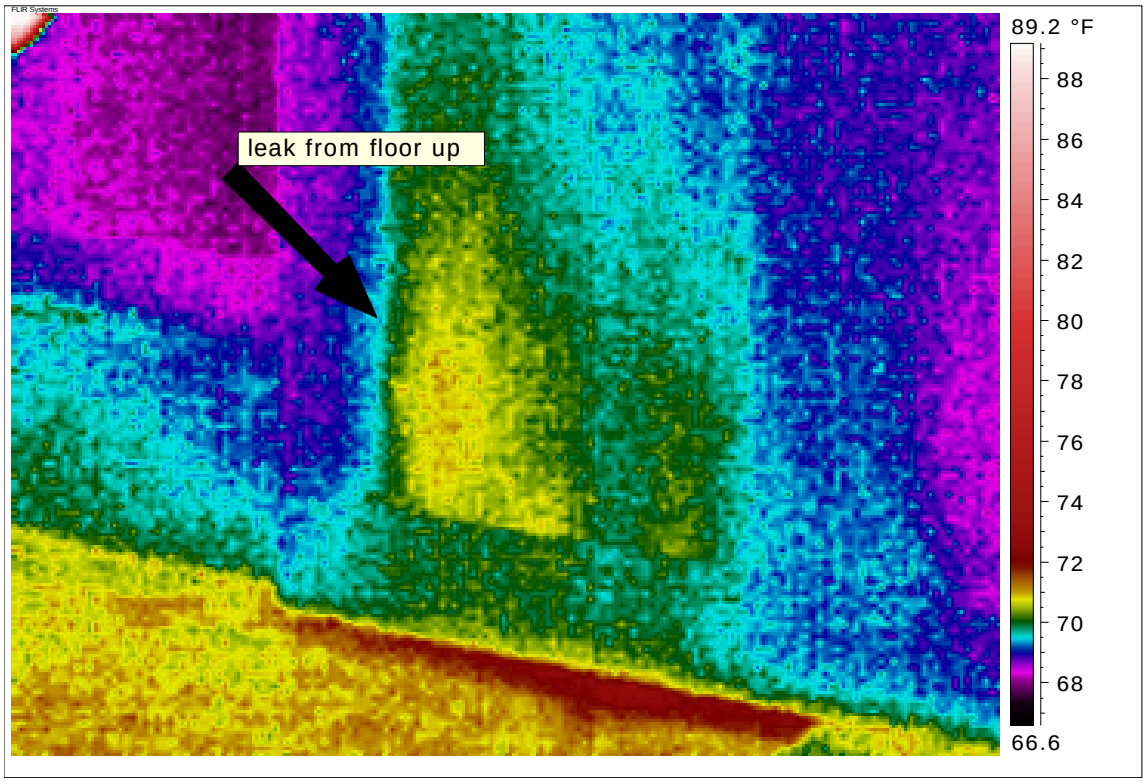


Description: anomaly at wall in hallway in front of AHU highway



System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

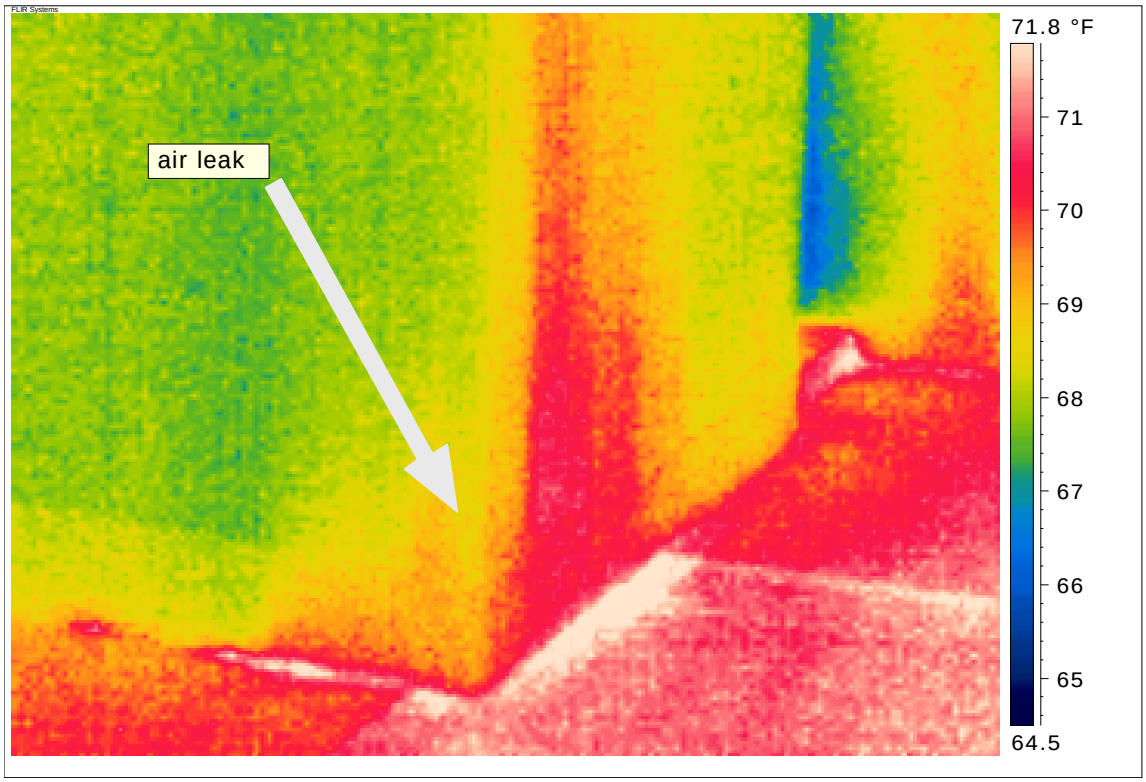
Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela



Description: Conference room outside of Mechanical room

System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

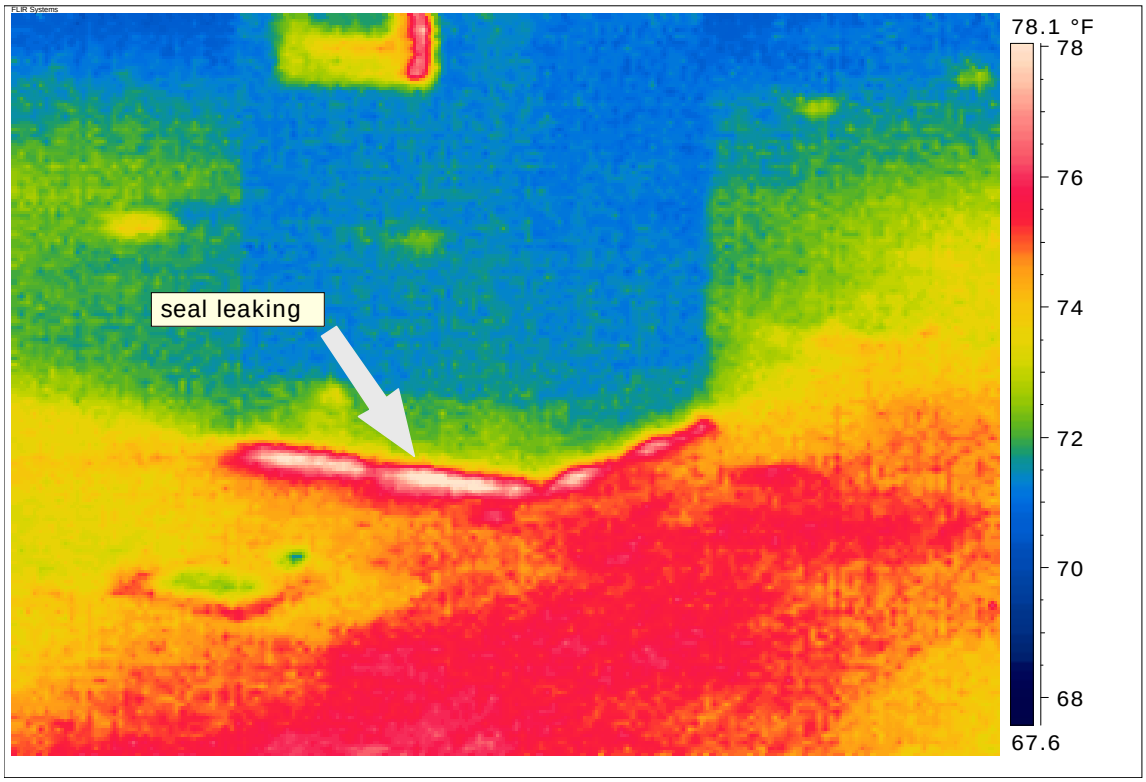
Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela



Description: Conference room at a different angle. The hot floor air is causing an anomaly at the wall and floor joint

System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

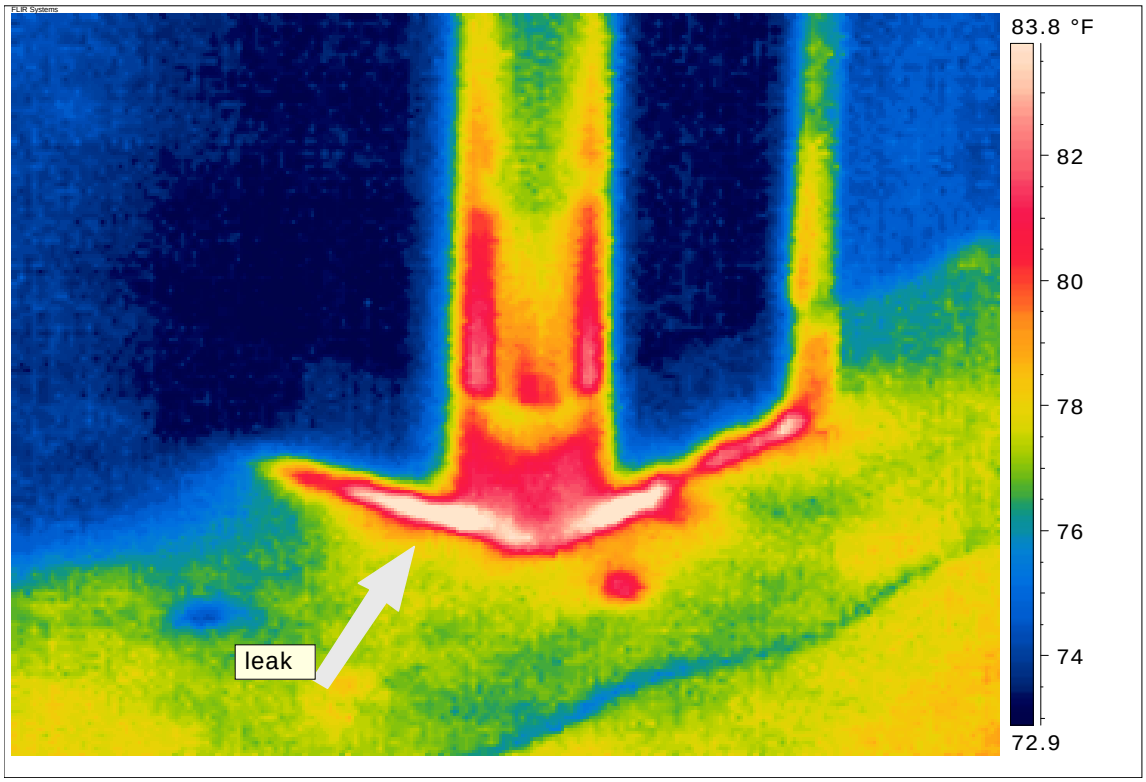
Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela



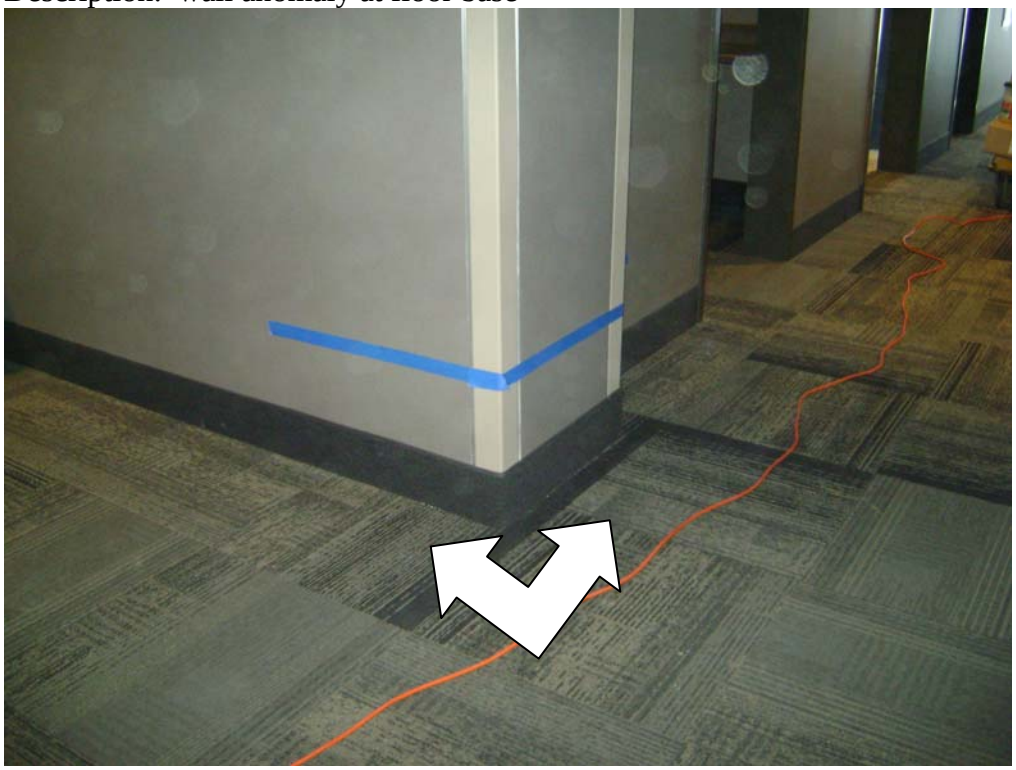
Description: Column, anomaly from floor base in red

System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela

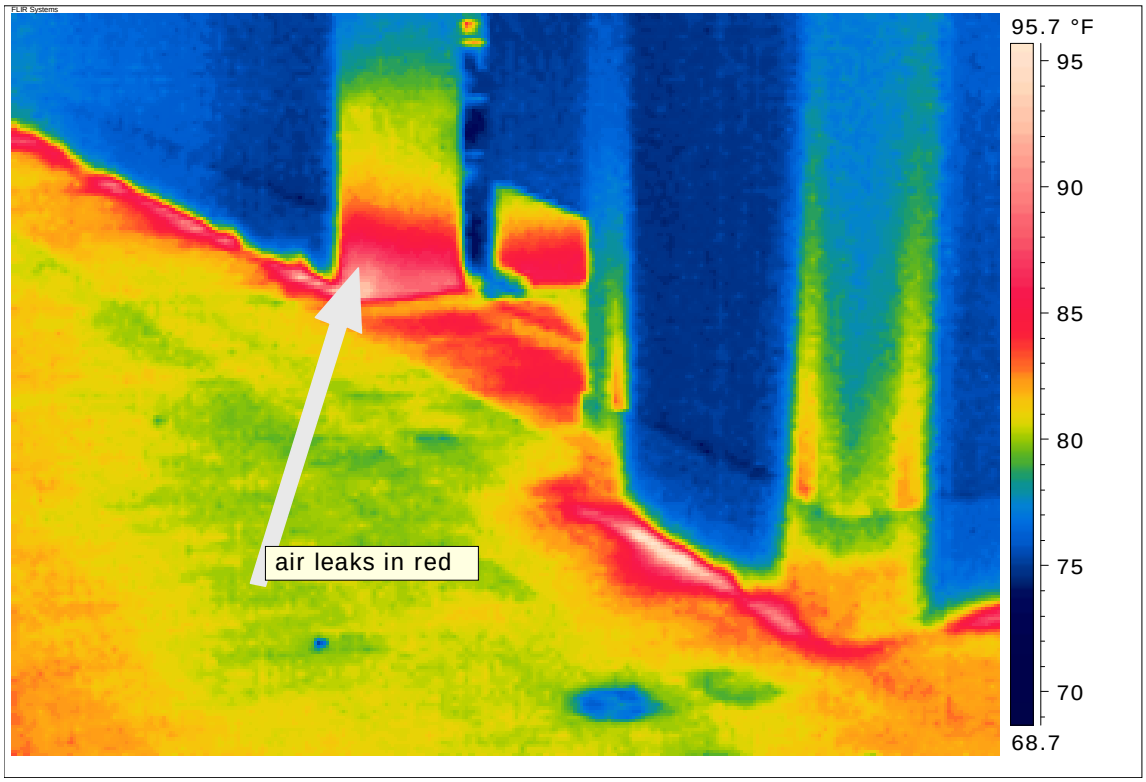


Description: wall anomaly at floor base

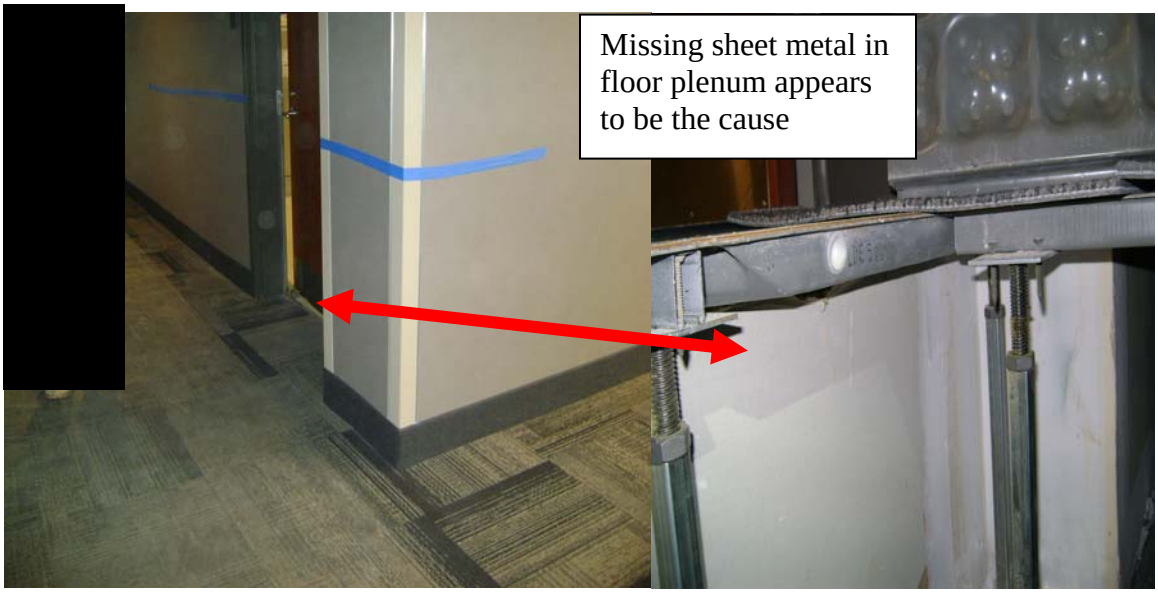


System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela

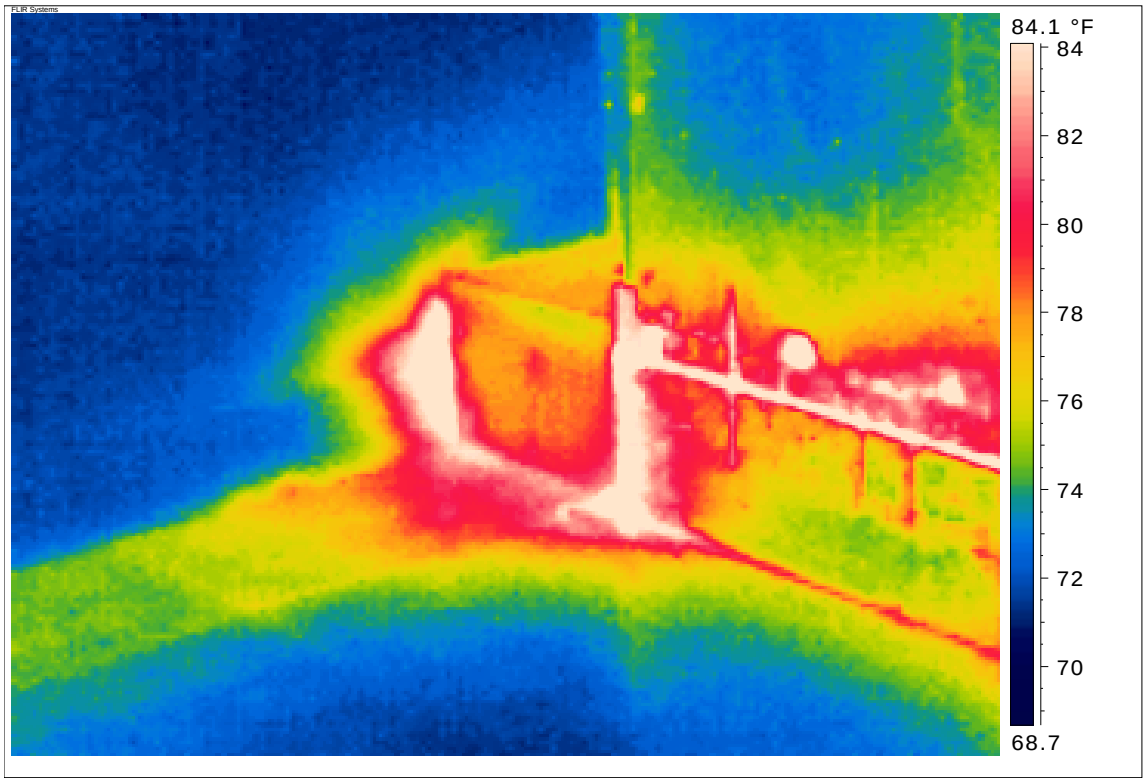


Description: Major anomaly across from electrical and bathrooms at door jam



System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

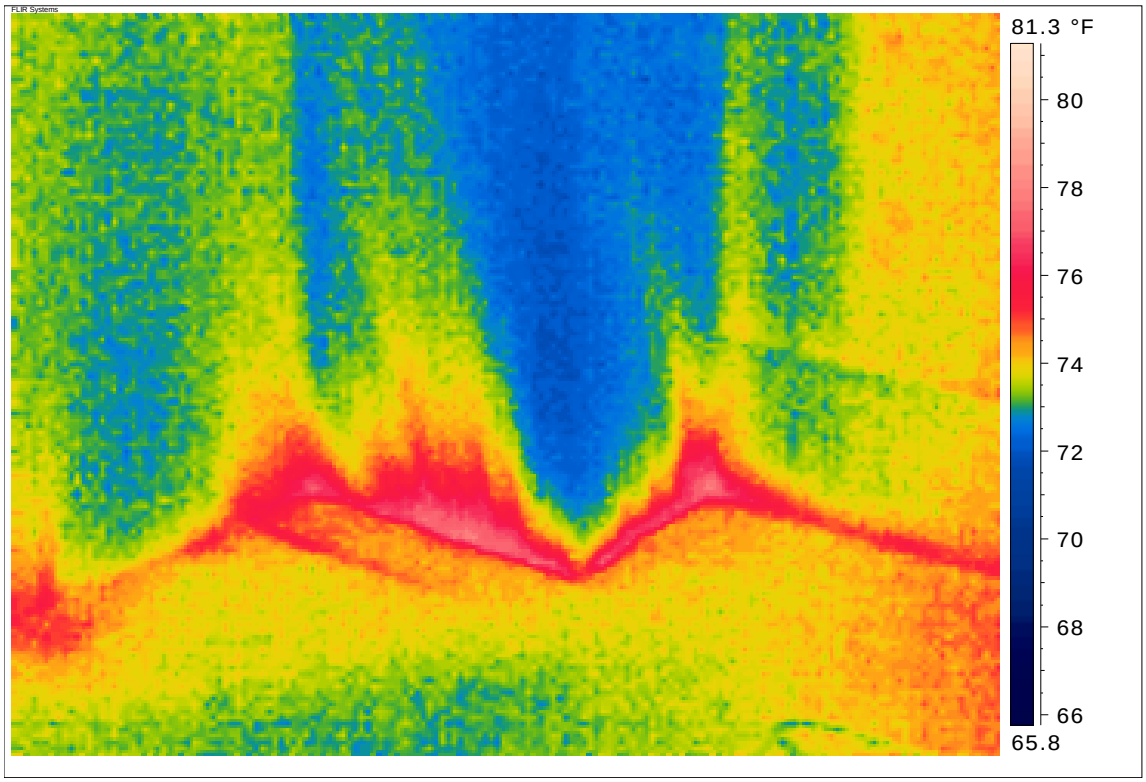
Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela



Description: Mechanical room anomaly at discharge of air handler

System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

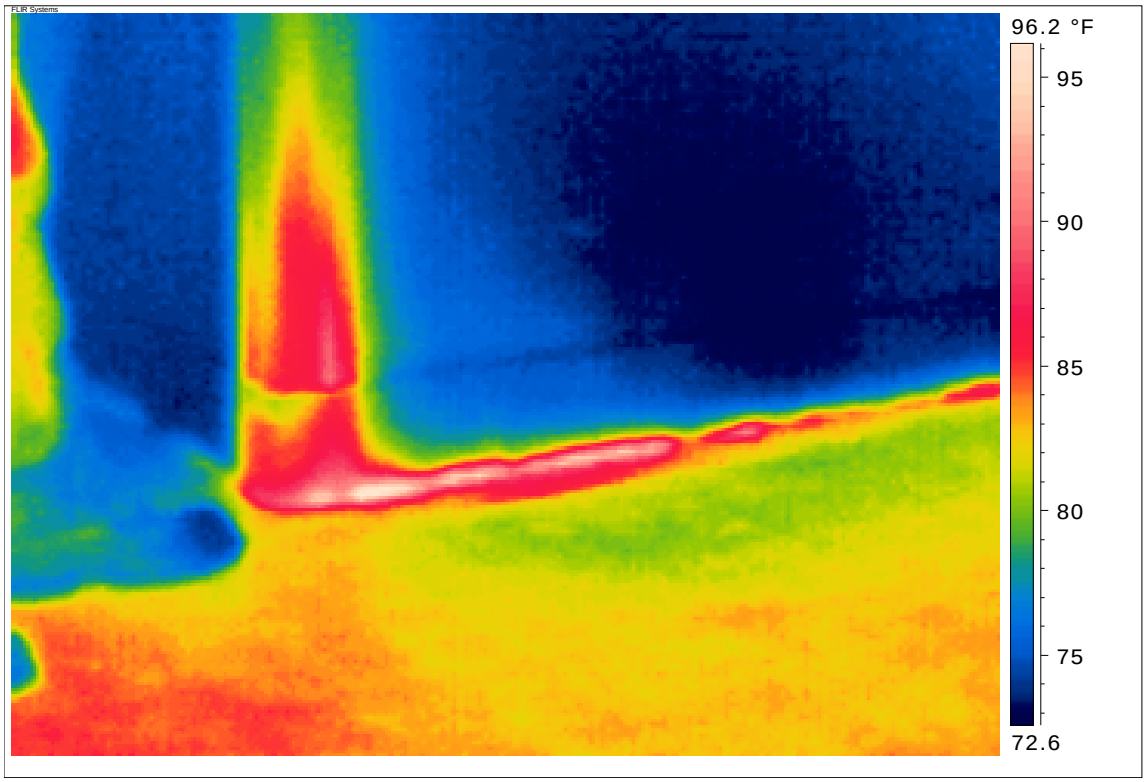
Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela



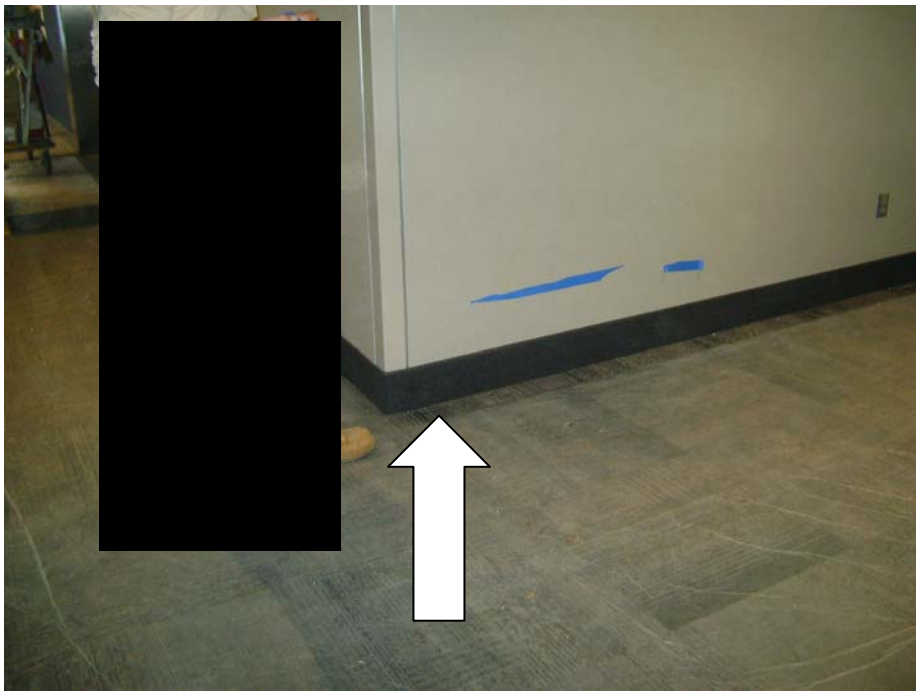
Description: Anomaly at wall base near south mech room hallway

System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.

Data floor12-18-08 supply air 110 degrees F @ 0.45 in Wg
www.infraredsurvey.com Level II Thermographer John Cannamela



Description: Southeast hallway anomaly at wall base



System was tested for floor seal leakage at 0.45 inches Wg and 100 degrees F. .Settings were by others. Anomaly's were marked and witnessed by General contractor representative, mechanical contractor representative and Engineer representative. Although many anomaly's were found some areas had no access. Verification may be needed by other tradesman.