

President's Message



"The secret to success is to do the common thing uncommonly well."

John D. Rockefeller Jr.

Over the past thirty years, infrared thermography has become a common tool for predictive and preventive maintenance. Inspections of electrical, steam, and roof systems are part of a facility's annual maintenance schedule and have their own budget line. Additionally, infrared surveys are now commonly performed on mechanical systems, underground piping and building envelopes, as well as specialized projects. Although a commonly accepted technology has advantages, there are a few disadvantages.

All too often, facility managers are led to believe that infrared imagers are fully automatic instruments that require nothing more than "point and shoot" operation, or that a "special" imager can perform beyond the industry accepted standards. While thermography is a science, it is also an art or craft requiring a skilled human operator to conduct the inspection and interpret the results. Thermographers need to have an understanding of infrared theory, heat transfer concepts, equipment capabilities and limitations, and environmental conditions, as well as being knowledgeable about the system(s) being inspected.

Jersey Infrared Consultants are committed to providing our clients with service that is beyond "common". Our employees pass advanced infrared training courses, receive safety training, attend technical conferences, author papers, and contribute to the development of standards. Our personnel are always available to answer questions or provide advice on best practices that will help you achieve maximum benefit from your Infrared Surveys.

Certification for Infrared Thermographers

In professional fields, certification refers to a person's formal training, education, and skills assessment. Currently, there are three levels of certification for Infrared Thermographers:

1. Level I introduces infrared theory, heat transfer concepts, equipment operation and selection, standards compliance, image analysis, and report generation.
2. Level II discusses advanced infrared theory, equipment calibration, error sources, advanced equipment operation, assigning temperature limits and repair priorities, and quantitative report generation.
3. Level III covers advanced topics including latest applications, hardware and software, current industry standards and specifications, OSHA and NFPA safety standards, and thermography as legal documentation.

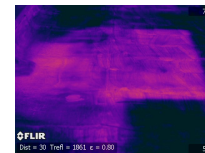
In addition to completing the highest level of certification available, it is important that the thermographer performing your facility's Infrared Survey understands the components being inspected and meets your facility's specific needs.

All Infrared Surveys performed by Jersey Infrared Consultants are conducted by Level III Infrasppection Institute Certified Infrared Thermographers®, in accordance with current industry practices and published standards. Certifying our personnel to the highest level possible and providing regular continuing education underscores our commitment to provide our clients with the best service available.

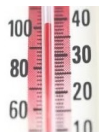


[More information](#)

Infrared Thermography is the leading test to locate moisture in a roof system in the Mid-Atlantic area. During the day, solar energy heats the surface of a roof system uniformly. As the roof surface begins to cool at the end of the day, areas of the roof that contain moisture retain the built-up heat for a longer period of time. These areas will show up as thermal anomalies.



When an area with an unusual temperature pattern is located, a moisture probe is performed to confirm the presence of moisture. If moisture is present, the surface of the affected area of the roof is outlined and the thermal image recorded.



The success of an Infrared Flat Roof Moisture Survey is dependent on many site conditions. The Site Condition Requirements comply with current industry procedures and standards including ASTM and Infraspection Institute.

Dry Roof Membrane – roof membrane must be dry at Sunrise

Solar Loading – day of the Survey should be mostly sunny with good solar loading

Minimum Daytime Temperature – high temperatures should be at least 40° F

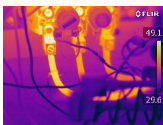
Winds less than 15 mph – daytime and evening winds should be less than 15 mph

No precipitation on the day of the Survey – roof membrane must not get wet

[More details on Required Site Conditions](#)

Was My Infrared Electrical System Survey Complete?

The success of any PPM program is dependent on many factors. When planning your Infrared Electrical System Survey, it is important to consider ALL the electrical equipment in your facility and how a possible failure of a component would affect your facility.



The incoming service or main switchgear is usually at the top of the list since it is commonly the highest voltage in your system and could cause a power interruption affecting the entire facility. However, small stand-alone panels should not be ignored. An incident in a low voltage lighting panel that controls only a single piece of machinery could stop an entire production line.

If an Infrared Electrical System Survey has been performed in the past, the Database or Routes covered provide a starting point for the next survey. A quick review of this information with staff prior to the IR Survey can point out areas with added or changed equipment, or areas not previously included in the Survey.

For a facility that does not have an equipment list for reference, your experienced in-house staff, along with our [Suggested Electrical Equipment Check List](#), provides a solid starting point. Jersey Infrared Consultants have experienced personnel to speak with you or visit your facility to plan your Survey.

[More information](#)
