

President's Message – Change brings opportunity!



Already it is Labor Day – the unofficial end of Summer and the start of Fall. Although it is comforting to look back on vacation trips, sunshine at the beach and relaxed schedules, one should not be afraid to look forward to Fall: the start of football games, colorful leaves in crisp air and preparation for the holidays.

For businesses, the end of Summer is the end of vacations and plant shutdowns; and the start of preparation for the end of the year and the Winter. Electrical demands may change, as well as new or repaired equipment coming on-line. Upcoming seasonal conditions, and shortening repair window, may force the leaking roof to become a priority. Soon dropping temperatures will put demand on the steam system.

Infrared Surveys can help prepare your facility for each of these changes. A follow-up IR Electrical System Survey can verify recent repairs or check equipment previously not under load; Infrared Flat Roof Moisture Surveys may identify the location of moisture in a roof system; and an InfraSonic™ Steam System Survey can yield huge energy savings. [Contact us](#) to discuss any challenges or concerns you have for your site. We encourage each of you to take the opportunity to enjoy the changes the Fall brings!

[More Information](#)

IR Windows 101 – What, How & Where

What – An infrared window is an engineered optic designed to permit infrared inspections of electrical components located in switchgear enclosures. IR windows consist of a metal or plastic frame that supports an infrared transmissive optic, and usually have a protective cover over the optic when they are not in use. Depending upon the window, optics may be made from crystal or polymer material.

How – Because thermal imagers cannot see through solid materials, switchgear panel covers must be opened or removed to provide line-of-sight access to components. In most cases, panel cover removal and replacement is the most labor intensive part of an infrared inspection. Installed at strategic locations on switchgear enclosures, IR windows permit infrared inspections to be conducted without having to open or remove panel covers, thereby saving time and money and improving safety.

Where – Proper placement of infrared windows is a critical consideration that goes beyond visual aesthetics of the final installation. To maximize effectiveness, window placement must take into account several factors including location of components, internal obstacles such as arc barriers, and required field of view. Working with a professional installer or thermographer who is familiar with the electrical devices will often yield the best results for window placement.

With over 30 years experience in thermal imaging, Jersey Infrared Consultants are uniquely qualified to answer your questions related to IR windows. As nationwide distributors for IRISS, we offer the widest selection of infrared windows and ports and can provide custom window solutions for any application. As one of the area's only IRISS Certified Installers, Jersey Infrared Consultants can also provide the expertise necessary to ensure the safe and successful installation of your IR windows.



[More Information](#)

What are the Required Site Conditions for an Infrared Flat Roof Moisture Survey?

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 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 effected area of the roof is outlined and the thermal image recorded. The thermogram, control photograph, roof drawing and area information are compiled into a report that is available in hardcopy and digital formats.

The success of an Infrared Flat Roof Moisture Survey is dependent on many site conditions. These Site Conditions have been developed to 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 a mostly sunny day, providing good solar loading

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

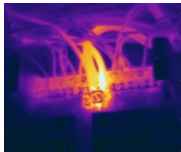
Winds less than 15 mph – daytime and evening winds should be >15 mph

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

For a full copy of the Required Roof Conditions or discuss how an Infrared Flat Roof Moisture Survey may provide information about your roof, please [contact us](#).

[More Information](#)

What electrical equipment should be covered in an IR Inspection?



The success of any PPM program is dependent on many factors, the least of which is inspecting the proper equipment. 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 the component would affect your facility. The incoming service or main switchgear is usually at the top of the list since it is usually the highest voltage in your system and could cause a power interruption affecting the entire facility. However do not ignore small, stand-alone panels: an incident in a low voltage lighting panel that controls 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 any areas with added or changed equipment, or areas not previously included in the Survey.

For a facility that does not have an equipment list to refer to, 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](#)

