

Volume 3 Issue 4 September/October 2016

Trick or Treat?



"Trick or treat" is a phrase we hear children screaming with joy and anticipation on Halloween. The little ghosts, goblins and princesses have no intention of performing a trick; they are hoping to get their favorite snack treat. In the business world, "trick or treat" can have dire consequences.

It is important when planning an Infrared Survey that you avoid the "tricks". Be sure the thermographer is trained and certified; the survey is performed following all current industry standards; and the survey is performed by an insured, experienced firm.

All surveys conducted by Jersey Infrared Consultants are performed by Infraspection Institute Certified Level III Infrared Thermographers® following current industry standards and guidelines. Our company has been performing infrared surveys for over 32 years; provides full commercial insurance coverage; and provides proof of background clearances, safety compliance and OSHA training.

Our staff is available and ready to help ensure that your Infrared Survey is a "treat".

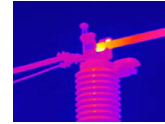
Case Studies from the Field

A 2015 survey of national roofing contractors indicated that single-ply roof systems (EPDM, TPO, PVC, etc.) accounted for almost 49% of the roofs installed nationwide. These roofing systems can present challenges for thermographers who inspect them due to reflectivity of the roof membrane. Should reflectance be sufficiently high, areas of latent moisture may be undetectable to a thermal imager.

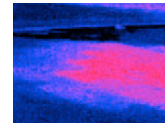
Most infrared inspections of flat or low slope roofing systems are conducted at night by walking across the roof surface using a handheld thermal imager. This technique often results in a relatively shallow viewing angle thereby lowering the emittance of the subject roof membrane. Depending upon site conditions and roof



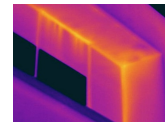
Infrared Electrical System Survey



Infrared Flat Roof Moisture Survey



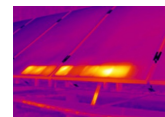
Infrared Building Envelope Survey



InfraSonic™ Steam System Survey

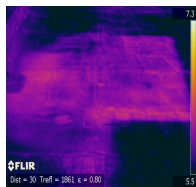


Infrared Photovoltaic System Survey



Infrared Mechanical Survey

materials, roof membranes can appear to be as reflective as polished metal surfaces. Membrane reflectivity will be especially noticeable on cool, clear nights that permit the cold night sky to be reflected from the roof surface. It will also be significant on roofs that have been coated with aluminum paint.



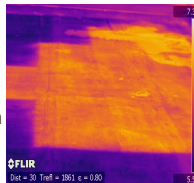
The way to deal with the reflectivity of smooth roof membranes is to utilize a thermal imager with short wave (2 to 5.6 micron) spectral response. This will help to eliminate reflections from the roof and can increase inspection accuracy. Although long wave imagers can be used for smooth membranes, they can largely understate the size of moisture-damaged areas or miss them entirely.

Jersey Infrared Consultants have a wide selection of infrared imagers, including many short wave imagers. The proper selection of equipment and the training and experience of our thermographers ensure your clients the best infrared flat roof moisture survey possible.

[More Info](#)

Which Moisture Test is Best for My Roof?

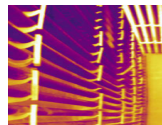
Currently, there are three types of tests that are commonly used to identify the location of moisture in a commercial roof: Infrared, Nuclear, and Capacitance. Each test relies on specific physical or chemical properties related to water and has advantages and disadvantages.



Understanding how each test works will determine which test is best for your roof.

- Infrared thermography identifies temperature patterns on the roof surface; areas of the roof with moisture will retain heat build-up longer than dry areas.
- Nuclear survey measures the amount of hydrogen in a specific location; higher levels of hydrogen may correlate to presence of moisture.
- Capacitance detects changes in electrical properties; areas of the roof with moisture will have a different conductivity than dry areas.

For an overview of these tests, advantages and disadvantages, and how they may apply to your roof, please refer to [Common Flat Roof Moisture Tests](#) or contact us to discuss your specific project.



[Infrared Maritime Surveys](#)



[Jersey Infrared Brochure](#)
[Contact Us](#)

