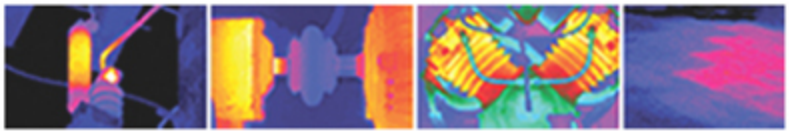
Infraspection Institute Newsletter



News and Information for Professional Thermographers

Volume 14 Issue 3 - March 2025

Director's Message

When used as a tool for Preventive/Predictive Maintenance, thermography can detect and document evidence of thermal patterns and temperatures across the surface of an object. Thermal anomalies are often caused by incipient failures within inspected systems and structures. Because thermography alone cannot determine the cause of an exception, other diagnostic tools must be employed to determine the root cause of observed exceptions.

Although thermography is inconclusive, thermographers frequently provide opinions as to the cause of exceptions without having the benefit of confirming test information. Such opinions are frequently accompanied by elaborate recommendations for repair. When such observations/recommendations are incorrect, they can cause repair efforts to be misdirected.

Unless a thermographer has performed or has access to confirming tests, providing opinions regarding the cause of exceptions and subsequent recommendations for repair is unwise. When confirming test data are unavailable, a prudent thermographer should make only one simple recommendation: “Investigate exception for cause and perform appropriate repair.”

Infraspection Introduces New Course for Drone Operators

Infraspection Institute have announced the introduction of a new training and certification course for drone operators, sUAS Thermography. This course is the latest in the series of Infraspection Institute certification courses for infrared thermographers.

Designed with the professional drone operator in mind, sUAS Thermography covers infrared theory, heat transfer concepts, equipment operation, and temperature measurement using drone-based thermal imaging equipment. It also covers several applications including infrared inspections of electrical systems, mechanical systems, photovoltaic installations, underground piping, building envelopes, low-slope roofing systems, and environmental studies. The course is presently available through Infraspection Institute’s Distance Learning program.

Upcoming Courses

Online Distance Learning

Level I Certified Infrared Thermographer®

- Mar 3 - 6 Edmonton
- Mar 3 - 7 San José
- Mar 3 - 7 Boulder
- Mar 3 - 6 Brisbane
- Mar 5 - 6 Brisbane *
- Mar 10 - 13 Calgary
- Mar 17 - 20 Sydney
- Mar 19 - 20 Sydney *
- Mar 24 - 28 Honolulu
- Mar 24 - 27 Rosharon
- Mar 24 - 28 Quezon City
- Mar 31 - Apr 3 Melbourne
- Apr 2 - 3 Melbourne *
- Apr 7 - 10 West Windsor
- Apr 14 - 17 Rosharon
- Apr 21 - 25 Henderson
- Apr 28 - May 1 Perth
- Apr 30 - May 1 Perth *
- May 12 - 15 Rosharon
- May 12 - 15 Adelaide
- May 12 - 15 Adelaide *
- May 19 - 23 Denver
- May 26 - 30 Quezon City

* Flexible Learning

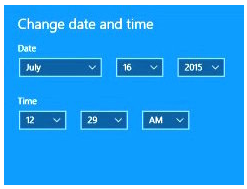
Level II Certified Infrared Thermographer®

- Mar 17 - 20 West Windsor

Students who successfully complete the course receive an sUAS Thermographer certification from Infraspection Institute which will qualify them to further their training via Infraspection Institute's Level II and Level III thermography courses.

More Information

Do You Have the Correct Time?



Most modern thermal imagers have the ability to record time and date along with thermal images. Taking a moment to ensure that the correct time and date are displayed on your imager before you begin your inspection can help to avoid wasted time and the collection of inaccurate data.

Having the correct time associated with your imagery is important for several reasons. With correctly time-stamped imagery, it is possible to:

- Accurately document when an inspection was performed
- Easily store and uniquely reference image files
- Record the duration of a thermal event

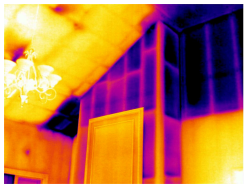
It is always good practice to consciously check your imager's clock each time you start your imager and make any necessary adjustments. Be certain to check the clock periodically during each inspection and whenever the imager is restarted, such as after a battery change or power interruption.

If your imager frequently displays incorrect time, it may be indicative of a defective or dead internal battery. To avoid this problem, arrange for replacement of internal clock batteries whenever you have your imager serviced or repaired.

More Information

Using Wide Angle Lenses

Using a standard lens to perform infrared inspections at close distances can be particularly difficult. This situation is quite common when inspecting building envelopes, motor control centers, and some types of mechanical equipment.



When using a normal lens at close range, it may be impossible to include an item of interest and a reference component within a single frame. For larger objects, you may be able to image only a portion of the target.

Wide angle lenses increase an imager's visual field of view allowing a thermographer to image a wider target area without having to move farther away from the target. Wide angle lenses are available for most imagers in multipliers of either 2x wide or 3x wide. Spot measurement size will increase proportionately to the width multiplier for the lens.

- Apr 21 - 25 Quezon City
- May 26 - 29 Melbourne

Level III Certified Infrared Thermographer

- Mar 24 - 26 West Windsor
- Jun 16 - 18 West Windsor

Full 2025 Schedule

Upcoming Conferences

Infraspection Institute invite you to see us at the following upcoming conferences. Be sure to stop by and say Hello!

IIBEC Convention & Trade Show

March 6 - 9, 2025
Orlando, FL

NETA PowerTest Conference

March 11 - 15, 2025
Orlando, FL

NFMT

March 25 - 27, 2025
Baltimore, MD

Vibration Institute

August 6 - 8, 2025
Newport News, VA

IR/INFO Conference

February 1 - 4, 2026
Orlando, FL

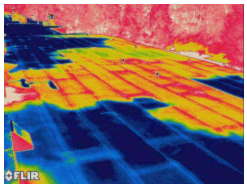
Links of Interest

IRINFO.ORG

If you are taking temperatures, be sure that your wide angle lens has been calibrated for use with your imager.

More Information

Spring is the Time for Infrared Roof Inspections



With the onset of warmer weather, the harshness of winter is but a fading memory for most. Left undetected, the damage caused by winter's fury is a reality that can lead to premature roof failure. Fortunately, an infrared inspection of your roof can detect evidence of problems before they get out of hand.

Performed under the proper conditions with the right equipment, an infrared inspection can detect evidence of latent moisture within the roofing system often before leaks become evident in the building.

The best candidates for infrared inspection are flat or low-slope roofs where the insulation is located between the roof deck and the membrane and the insulation is in direct contact with the underside of the membrane. Applicable constructions are roofs with either smooth or gravel-surfaced, built-up or single-ply membranes. If gravel is present, it should be less than ½" in diameter and less than 1″ thick.

For smooth-surfaced roofs, a short wave (2-5.6 µ) imager will provide more accurate results especially if the roof is painted with a reflective coating. All infrared data should be verified by a qualified roofing professional via core sampling or invasive moisture meter readings.

More Information

Thermography's Academy Award

Become an Infraspection Institute Master Thermographer®

TI-Reporter.com

Thermographer Directory

NORMI.TV

A-Rent