

News and Information for Professional Thermographers

Volume 12 Issue 8 - August 2023

Director's Message



During the past thirty-five years, a number of organizations have published temperature severity guidelines for infrared inspections of electrical and mechanical components. When using these guidelines, a thermographer may compare the temperature of similar components under similar load to each other OR compare the temperature of a component

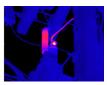
to ambient air temperature. The former of these approaches is recommended since ambient temperature can swing widely over time. Furthermore, it is often impossible to obtain an accurate ambient temperature for devices located within an enclosure once the enclosure has been opened for an infrared inspection.

One of the most conservative temperature guides can be found in the Standard for Maintenance Testing Specifications, published by the InterNational Electrical Testing Association headquartered in Portage, Michigan. According to the NETA MTS, temperature differentials greater than 15 Celsius degrees are categorized as, "Major discrepancy; repair immediately."

Other organizations publish less conservative temperature guidelines than the NETA MTS. Some guidelines require Delta T's of 70 Celsius degrees or higher to qualify as items of immediate concern. When setting temperature limits, one should remember that temperature differentials cannot be utilized to predict time to failure for an electrical device. Therefore, all thermal anomalies detected during an infrared inspection should be investigated and proper corrective measures undertaken as soon as possible.

Focus, Focus, Focus

Proper image focus is one of the most important aspects of performing an infrared inspection. A clear image not only allows for optimal problem diagnosis, but it is also critical for accurate temperature measurement.



Clear focus is not difficult to achieve if you follow a few simple steps:

- Get as close as safely possible to your target.
- Take time to carefully focus for optimum clarity. This may take some practice if you have a motorized focus mechanism.
- · Ascertain that your target is stationary.

Upcoming Courses

Online Distance Learning

<u>Level I Certified Infrared</u> <u>Thermographer</u>®

- Aug 7 11 Colorado Springs
- Aug 14 18 Kuala Lumpur
- Aug 14 18
 Melbourne
- Aug 16 18
 Melbourne *
- Aug 21 25
 Cheyenne
- Aug 21 25 Saskatoon
- Sep 11 15
 Albuquerque
- Sep 18 22 Houston
- Sep 18 22 Brisbane
- Sep 20 22 Brisbane
- Sep 25 29
 Bakersfield
- Sep 25 29 Calgary
- Sep 25 29 Sydney
- Sep 27 29 Sydney
- Oct 2 6 West Windsor
- Oct 9 13 San Diego
- Oct 9 13 Perth
- Oct 11 13 Perth *
- Oct 23 27 Palm Springs
- Oct 23 27 Mississauga
- * Flexible Learning

<u>Level II Certified Infrared</u> <u>Thermographer</u>® Only shoot from a stable platform. If imaging from a motor vehicle, it may be desirable to shut off the engine to avoid vibration

Be sure your imager is steady as you capture the image. Gently push the store button rather than punching it. If using a handheld imager, consider using a tripod or monopod to help stabilize your imager.

Once you've stored an image, recall and check for clarity. If the results are less than perfect, start over. In addition to greater accuracy, capturing clear images makes it easier to convey information to the end user and/or the person who will eventually perform corrective actions.

More Information

Free Online Training Courses



For a limited time, Infraspection Institute is offering two free online training courses. These courses are available through SuccessIRies™ – a series of web-based short courses for thermographers and inspection professionals. SuccessIRies™ courses are

available 24/7 via an internet connection and cover a wide variety of topics.

Typically 30 to 60 minutes in length, SuccessIRies™ are narrated short courses that are the perfect way to keep abreast of the latest developments in the rapidly evolving field of thermography. SuccessIRies™ also meet continuing education requirements for professional inspectors.

Normally priced at \$79, SuccessIRies™ 101, Infrared Thermography – What's Hot in PdM and SuccessIRies™ 102, Infrared Inspections for Home & Building Inspectors are currently being offered for free. These courses provide an introduction to infrared thermography and how it may be used for a wide variety of applications. Both courses provide an excellent introduction to thermography.

More Information

Early Registration Bonus for IR/INFO Exhibitors

Infraspection Institute are pleased to announce an early registration bonus for exhibitors at our annual IR/INFO Conference. Exhibitors that register and pay for their booth prior to September 15 are eligible to bring a second person at no additional charge. Valued at \$695, this



bonus provides full conference access and conference proceedings.

Now in its 34th year, IR/INFO is the original Advanced Infrared Training Conference, Technical Symposium, and Technology Expo. IR/INFO features four days of networking, learning, and fun in a professional, relaxed, family atmosphere. IR/INFO is the largest annual gathering of thermographers.

- Sep 11 15 West Windsor
- Sep 11 15 Kuala Lumpur
- Nov 21 25 Melbourne
- Nov 28 Dec 2 Trinidad

<u>Level III Certified Infrared</u> <u>Thermographer</u>[®]

 Sep 18 - 20 West Windsor

Full 2023 Schedule

Upcoming Conferences

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

NECA

September 29 - October 2, 2023 Philadelphia, PA

SMRP Conference

October 16 - 19, 2023 Orlando, FL

IR/INFO Conference

January 14 - 17, 2024 Orlando, FL

NETA PowerTest Conference

February 26 - March 1, 2024 Dallas, TX

NFMT

March 12 - 14, 2024 Baltimore, MD

Links of Interest

IRINFO.ORG

TI-Reporter.com

NORMI.TV

A-Rent

IR/INFO is scheduled for January 14 – 17, 2024, in Orlando, FL. IR/INFO is a must-attend event for all manufacturers and distributors of infrared equipment, condition-based monitoring tools and services, reporting software, and those who provide products or services of interest to thermographers.

More Information

It's Time to Go All In



Become an Infraspection Institute Master Thermographer®

