

News and Information for Professional Thermographers

Volume 11 Issue 4 - April 2022

## **Director's Message**



It has been said that any job worth doing is worth doing right. This is especially true for infrared inspections of electrical distribution systems.

Infrared inspections of electrical system components require a clear line of sight between the imager and the item of interest.

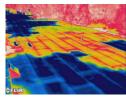
In the absence of IR transmissive windows, panel covers must be opened or removed in order to perform a complete infrared inspection of electrical components. Further disassembly of plastic barriers or removal of dead fronts may be required in order to image all electrical connections.

Over the past few years, a popular fallacy has developed within the thermographic community that panel covers only need be removed for panels which appear 'warm'. Sadly, nothing could be further from the truth. Failing to open panel covers can cause significant problems to go undetected during an infrared inspection. This can lead to unexpected downtime and catastrophic failures. It can also create a false sense of security among facility managers.

Prior to an infrared inspection of electrical equipment, it is always a good idea to meet with facility managers and support personnel to ascertain what equipment is to be inspected and how to safely prepare subject equipment. For route-based inspections, any equipment that cannot be accessed or properly inspected should be clearly indicated in the thermographer's final report.

# Spring is the Time for IR Inspections of Roofs

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.

## **Upcoming Courses**

## **Online Distance Learning**

## Level I Certified Infrared Thermographer®

- Apr 4 8 Trinidad
- Apr 18 22 West Windsor
- Apr 18 22 Portland
- Apr 25 29 Twin Falls
- May 9 13 Las Vegas
- May 16 20 Perth
- May 18 20 Perth\*
- Jun 6 10 Ketcham
- Jun 6 10 Portland
- Jun 13 17 Kuala Lumpur
- Jun 20 24 Palm Springs
- \* Flexible Learning

## <u>Level II Certified Infrared</u> <u>Thermographer</u><sup>®</sup>

- Apr 25 29 Kuala Lumpur
- Apr 25 29 Trinidad
- May 6 10 West Windsor

## <u>Level III Certified Infrared</u> <u>Thermographer</u><sup>®</sup>

- Sep 19 21 West Windsor
- Dec 5 8 Trinidad

#### Full 2022 Schedule

# **Upcoming Conferences**

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  $(2-5.6 \,\mu)$  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**

## 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**

## Save Big on TI Reporter™ Software

In addition to streamlining your infrared report writing, now you can save even more with TI Reporter™ software. For a limited time, annual subscriptions are available at a 15% discount versus our monthly pricing.



Combining cloud technology with state-of-the-art features, TI Reporter™ is the world's first cloud-based thermography reporting software that works with all thermal imagers. Reports can be generated quickly and easily from one's office or while in the field. Because it is cloud-based, TI Reporter™ works with all computer

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

### **IEEE PES T&D**

July 25 - 28, 2022 New Orleans, LA

#### **Reliable Plant**

July 25 - 28, 2022 Orlando, FL

## Thermal Imaging Conference

September 19 - 22, 2022 South Lake Tahoe, NV

### **SMRP Conference**

October 17 - 21, 2022 Raleigh, NC

### **IR/INFO Conference**

January 15 - 18, 2023 Orlando, FL

## Links of Interest

#### **IRINFO.ORG**

The RAM Review

**TI-Reporter.com** 

IRFeverScreen.com

Electric Power Reliability Alliance

operating systems and there is no need to install any type of program or software onto your computer.

Written by practicing thermographers, TI Reporter™ contains preformatted templates for a wide variety of infrared inspection applications including, but not limited to: electrical systems, mechanical systems, building envelopes, flat roofs, underground piping, and steam systems. TI Reporter™ automatically calculates temperature limits for electrical and mechanical equipment and can provide cost savings reports. The software is designed for in-house thermographers as well as thermographic consultants.

## **More Information**

## Join the Elite



Become an Infraspection Institute Master Thermographer®

