

Volume 10 Issue 6 - June 2021

## **Director's Message**



Using thermograms to document exceptions is a common practice in thermography. However, this practice can sometimes be cumbersome, especially with large structures.

Simply defined, thermograms are twodimensional hardcopy images that represent the thermal patterns across the surface of an

object. For years, thermographers have utilized thermograms to produce records of the imagery provided by their thermal imager. Traditionally, these work well for small objects or for exceptions that are small in size.

Documenting thermal patterns on large structures such as multistory buildings or flat roofs can prove to be a challenge. This challenge may be further compounded when observed exceptions are large in size. A simple solution to these challenges is to utilize architectural drawings, elevations, or schematics in place of, or in addition to, hardcopy thermograms. When utilizing drawings to document your infrared inspection, keep the following in mind:

- Prior to the infrared inspection, obtain drawings with sufficient detail
- Verify accuracy of drawings with the subject structure
- Compare site orientation with compass orientation
- During the inspection, mark the size and location of exceptions directly on drawings along with thermogram numbers, where appropriate

Whenever possible, obtain extra sets of drawings to be used as file copies or for field use. When utilized properly, drawings can serve as valuable reference tools enabling one to see "the big picture" that is often not possible with several small thermograms alone.

## IR Inspections of CMU Walls

Concrete Masonry Unit (CMU) walls are a common construction detail frequently used in single–story and low rise commercial block wall construction. An infrared imager can be used to quickly perform quality assurance inspections of reinforcing grout details which are critical to the strength of finished CMU walls.



# Upcoming Courses

### Online Distance Learning

### Level I Certified Infrared Thermographer<sup>®</sup>

- Jun 7 11 Salt Lake City
- Jun 21 25 Seal Beach
- Jul 5 9 Kuala Lumpur
- Jul 12 16 Melbourne
- Jul 12 16 Colorado Springs
- Jul 19 23 West Windsor
- Jul 26 30 Seal Beach
- Aug 9 13 Sydney
- Aug 9 13 Cheyenne
- Aug 23 27 PortlandSep 6 10 Kuala
- Lumpur Sep 13 - 17 Tacoma
- Sep 27 Oct 1 Las
- Vegas

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

- Jun 21 25 Kuala
  Lumpur
- Jul 26 30 Brisbane
- Sep 13 17 West Windsor

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

 Sep 20 - 22 West Windsor

### Full 2021 Schedule

During construction, concrete grout is used to fill the cavity spaces of the blocks in order to provide structural integrity. Vertical details extending from the foundation to the top of the wall are usually placed at regularly spaced intervals along the length of the wall. Reinforcing grout is also placed around openings for doors and windows or in areas where extra wall strength is required.

Because grout details change the thermal capacitance and conductance of the wall, temperature differentials will occur wherever grout details are present. Infrared inspections may be performed under solar loading, heat loss, or cooling conditions depending upon local climate and time of day. Properly installed grout details will appear as uniformly cool or warm unbroken lines in the subject wall areas according to time of day and whether the inspection is performed from the interior or exterior of the building.

More Information

### **Expert Witness Services**



As thermography has matured, its usage as legal evidence has increased. Due to its graphic nature, thermal imaging is now regularly utilized in criminal and civil cases by both plaintiffs and defendants. Whether you are defending a claim or seeking to use thermography as evidence, you need a

qualified expert on your team.

With nearly 40 years experience in thermography and non-contact temperature measurement, Infraspection Institute have the qualified experts that you need. Our personnel are highly experienced, Level III practicing thermographers with expertise across a broad range of infrared applications. In fact, they have co-authored many of the application and equipment standards that enjoy worldwide use today.

Whether you are an attorney or a party to a case involving thermography, we invite you to give us a call. We will review your case with you and answer any questions that you may have. We guarantee that you will not find more qualified experts anywhere else.

More Information

# Call for Papers for IR/INFO 2022

Infraspection Institute are pleased to announce that our annual Advanced Training Conference, Technical Symposium and Technology Expo, IR/INFO 2022, will be held January 16 – 19, 2022 in Orlando, FL. Now in its 32nd year, IR/INFO features four days of



networking, learning, and fun in a relaxed, yet professional, family atmosphere.

We are currently accepting papers and presentations for IR/INFO 2022. Invited topics include, but are not limited to: safety, emerging applications, building sciences, related NDT, case histories, as well as tips and tricks.

## Upcoming Conferences

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

### Thermal Imaging Conference

September 20 - 23, 2021 South Lake Tahoe, NV

### SMRP Conference

October 25 - 28, 2021 Saint Louis, MO

#### **IR/INFO Conference**

January 16 - 19, 2022 Orlando, FL

## Links of Interest

IRINFO.ORG

The RAM Review

TI-Reporter.com

IRFeverScreen.com

Presentations are typically 20-25 minutes with 5 minutes for questions and answers with the audience. All papers and presentations will be published in the IR/INFO Conference Proceedings. The deadline for abstract submissions is July 31.

More Information



# We're Waiting for You



Become an Infraspection Institute Master Thermographer®

