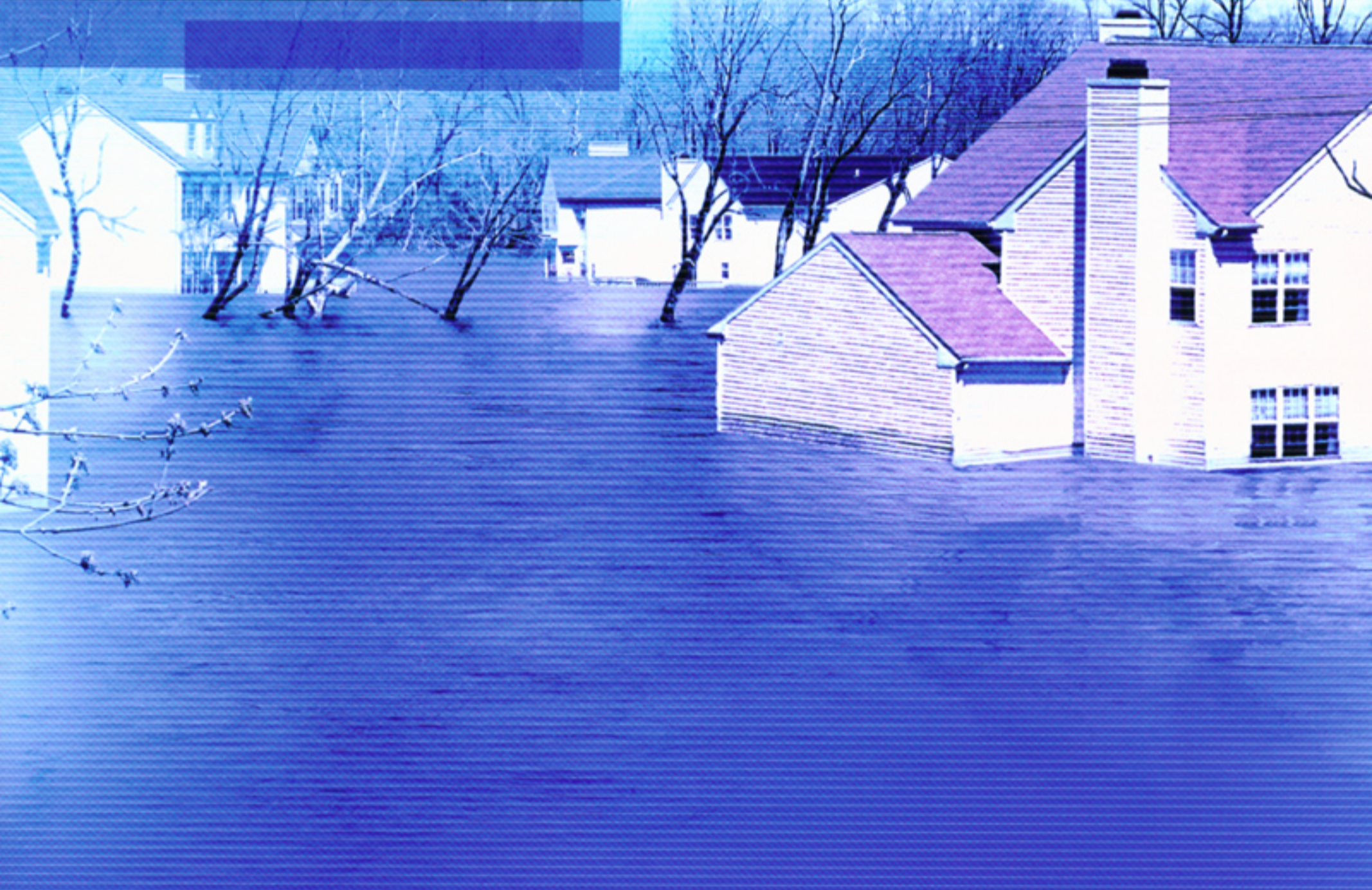
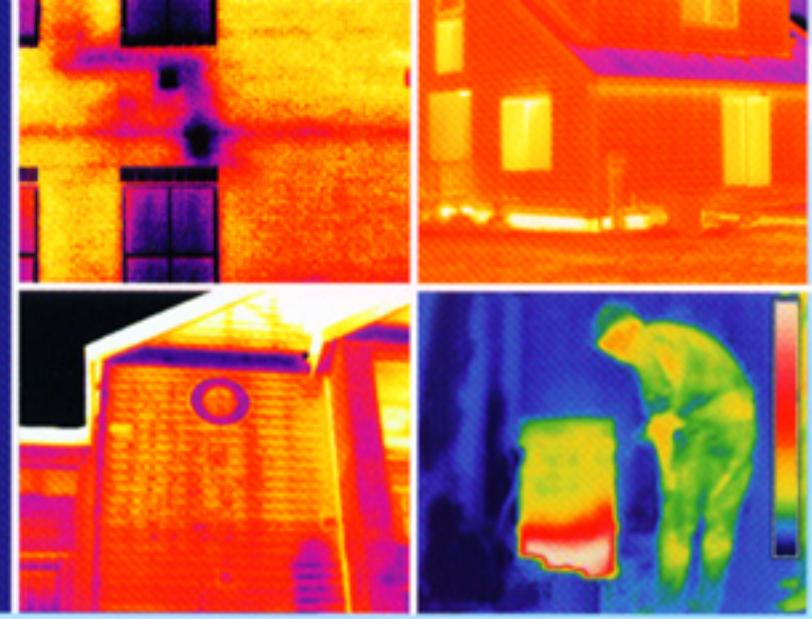


INFRARED BUILDING SCIENCE

TRAINING AND CERTIFICATION COURSES



WHAT IS INFRARED BUILDING SCIENCE?

Infrared building science is the application of infrared (IR) thermographic inspection techniques as a powerful and noninvasive means of monitoring and diagnosing the condition of buildings. IR cameras in the hands of trained thermographers can provide immediate documentation of as-built, pre- and post-restoration conditions, post-casualty Cause and Origin data, plumbing and building envelope water leakage, post-flood and fire water-damaged material assessment, energy use inefficiency, and electrical problems.

Insurance companies, restoration firms, building owners, and thermographers already involved in building maintenance and operations require a thorough applications training curriculum leading to certification in infrared building science. In response, the Infrared Training Center (ITC) — the global leader in infrared training — and the Building Science Institute (BSI) have developed three courses for technicians, supervisors, and those wishing to receive Building Science Certification. These courses address the Best Practices of the cleaning and restoration industry with content drawn from extensive field experience in thermography and building construction. They include references to actual cases illustrating how IR thermography has pinpointed sources of building moisture, provided definitive Cause and Origin data, enabled energy savings, and prevented incipient catastrophes. Like all ITC courses, the Building Science series emphasizes practical real-world skill-building, and includes infrared theory relevant to these skills.

Courses will be offered in Fremont, Sacramento and Los Angeles, California; Houston, Texas; Las Vegas, Nevada; Ft. Myers, Florida; Bensenville, Illinois; and Boston, Massachusetts — or at a site of your choosing.

ADVANTAGES OF INFRARED BUILDING DIAGNOSIS

- Fast, noninvasive, safe – minimizes need for building disassembly
- Find moisture sources and structural problems quickly
- Locate heating & cooling losses with pinpoint accuracy
- Minimize disturbance of occupants and ongoing operations
- Generate reports of inspection results in seconds
- Facilitate the selection of agencies and trades for restoration
- Repair with maximum speed and assurance
- Document as-built or post-repair/restoration conditions
- Protect against frivolous complaints
- Provide evidentiary basis for fair settlements
- Provide competitive advantage for restoration firms

IRBS-101

Introduction for Technicians to Infrared Thermography in Water Intrusion and Restoration of Buildings

This one-day, hands-on course focuses on the detection of moisture and mold-growth conditions using the infrared camera. It is designed specifically for the experienced water damage/restoration technician who is a first-time infrared camera user.



This course teaches the technician how to use an infrared camera to inspect commercial and residential water damaged buildings. The student will learn how to recognize and document thermal patterns associated with traditional building problems, and to evaluate and verify the cause and extent of water intrusion in the context of property damage investigation and restoration. Lecture and laboratory components cover the basics of infrared camera operation, building fundamentals, including building design and construction, how to detect and evaluate moisture in building components, and how to dry structures effectively and efficiently. The instruction is geared to the first-time infrared camera user. No infrared thermography experience is necessary. However, students are required to provide their own infrared camera.

Key topics

- How to use your infrared camera
- Introduction to thermal imaging systems for building inspection
- Basics of building construction designs, terminology, and materials
- Typical thermal patterns associated with traditional building defects
- Moisture verification methods (penetrating/non-penetrating)
- Water damage evaluation and drying methods
- Safe building inspection methods and techniques
- Indoor and outdoor building inspection methods
- Photo documentation techniques
- Practicing skills with custom-built laboratory experiments

"We are receiving a remarkably high interest in this curriculum, which we developed in response to high demand from insurance companies, restoration firms, building owners, and thermographers involved in other aspects of building and plant maintenance and operations." Bob Madding, PhD, ITC Director

INFRARED IN ACTION

IRBS-201

Application Course for Supervisors Using Infrared Thermography in Water Intrusion and Restoration of Buildings

This two-day hands-on course teaches how to use the infrared camera to detect moisture and mold-growth conditions in buildings. It is designed for the water damage/restoration project manager who is a first-time thermographer.

This advanced course includes all the material in IRBS-101 plus lecture and laboratory components that cover concepts of conductive heat transfer, thermal capacitance, and moisture and air movement due to natural and induced pressure differences. It focuses in greater depth on building fundamentals in the context of using and interpreting IR thermography to solve problems related to water intrusion, drying structures effectively and efficiently, performing energy audits, and troubleshooting potential building defects, with an emphasis on safety and efficiency. Students will learn how to use infrared camera software to prepare reports. Tips on marketing and selling infrared inspection services are also covered. Participants who successfully complete the training will be able to utilize infrared cameras to perform qualitative surveys of building enclosures and their internal structures. The instruction is geared to the first-time infrared camera user. No infrared thermography experience is necessary. However, students are required to provide their own infrared camera.

Key topics

- How to use your infrared camera
- Introduction to thermal imaging for building inspection
- Basics of building construction, designs, terminology, materials
- Basics of building science, including stack effect, moisture control, and principles of air control heating & cooling
- Typical thermal patterns associated with traditional building defects
- Heat transfer physics as it specifically applies to buildings
- Moisture verification methods (penetrating/non-penetrating)
- Water damage evaluation and drying methods
- Safe building inspection methods and techniques
- Indoor and outdoor building inspection methods
- Interpreting thermograms using heat transfer concepts
- Avoiding mistakes: hot spots vs. reflections and direct vs. indirect readings
- Photo documentation techniques including 35 mm, digital, and video
- How to report findings with IR reporting software
- Practicing skills with custom-built laboratory experiments

IRBS 351

Certification in Infrared Building Science

This three-and-a-half day course includes all lecture and laboratory components taught in IRBS-101 and IRBS-201, plus intensive one-on-one instruction in camera operation and building fundamentals as required by individual students to achieve certification level skills.

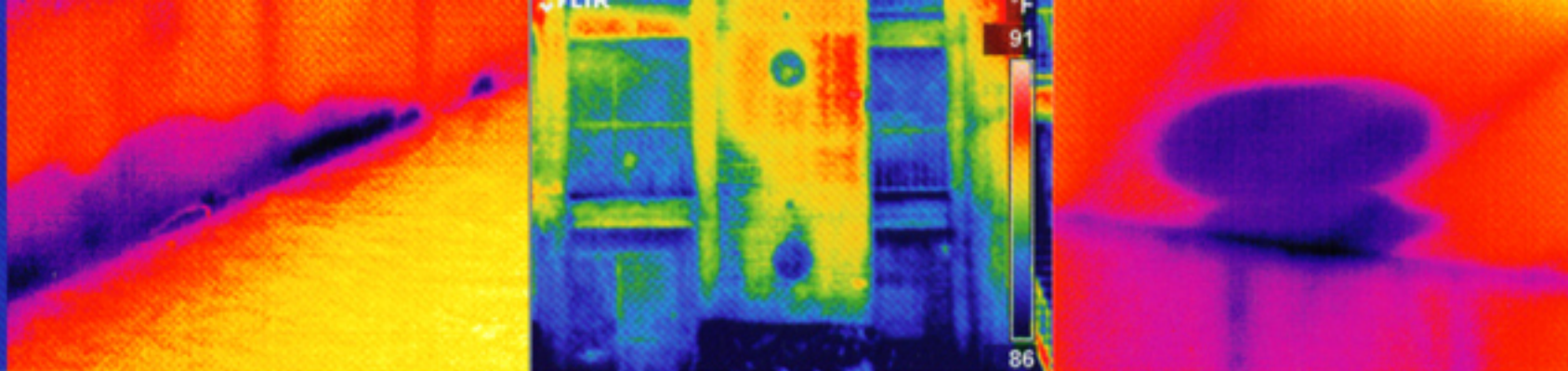
This course provides an intensive level of theory and hands-on operation of the infrared camera in building inspections. It covers basic building design and construction, principles of air control, heating and cooling, moisture evaluation and control, energy use, and electrical problems, and includes tips on marketing and selling infrared inspection services. The course is designed to enable both new infrared camera users and practicing thermographers to become certified in commercial and residential building inspection. No previous infrared thermography experience is necessary. Some knowledge of basic building construction is helpful, but not required. Students are required to provide their own infrared camera.

Key topics

- How to use your infrared camera
- Basics of building construction designs, terminology, materials
- Heat transfer physics as it specifically applies to buildings
- Indoor and outdoor building inspection methods
- Typical thermal patterns associated with traditional building defects
- Basics of building science, including stack effect, moisture control, and principles of air control heating & cooling
- Moisture verification methods (penetrating/non-penetrating)
- Water damage evaluation and drying methods
- Avoiding mistakes: hot spots vs. reflections and direct vs. indirect readings
- Safe building inspection methods and techniques
- How to report infrared analysis findings with IR reporting software
- Photo documentation techniques, including 35 mm, digital and video
- Interpreting thermograms using heat transfer concepts
- Developing skills to certification level with custom-built lab experiments

To Register

Please call **1-866-TrainIR (872-4647)** or **978-901-8291** for further details or to register. You can also register on line at: <http://www.infraredtraining.com/courses/registration.asp>



Infrared
Training
Center **itc**

ITC USA Boston
16 Esquire Road
N. Billerica, MA 01862, USA
tel: +1-978-901-8405
toll free: +1-866-TRAINIR (+1-866-872-4647)
fax: +1-978-901-8832

ITC International, Sweden
Rinkebyvägen 19
SE-182 111 Danderyd, Sweden
tel: +46 (0) 8 753 25 00
fax: +46 (0) 8 753 26 01



4302 SOLAR Way
Fremont, CA 94538
tel: +1-510-796-5900
toll free: +1-800-255-3333
fax: +1-510-438-0636



A UNIQUELY QUALIFIED TRAINING ORGANIZATION

Bringing together the world-class instructional assets of the Infrared Training Center (ITC) and the Building Science Institute (BSI) provides a uniquely qualified instructional organization.

With over 100 man-years of practical thermography experience, the ITC is the world's finest and only ISO 9001-certified infrared training and certification organization. All ITC courses are developed by highly qualified instructors with ASNT Level III and EPRI Level III certifications, advanced academic degrees to the PhD level, and extensive field experience. All ITC Infrared Course Certifications meet or exceed ASNT SNT-TC-1A guidelines. ITC Infrared Thermography Level I, II, and III Certifications are globally recognized and are designed to exceed the requirements of international infrared certification standards. Level I and Level II thermography training courses are certified by NETA (InterNational Electrical Testing Association, an accredited standards developer for the American National Standards Institute, ANSI).

BSI instructors are all actively involved licensed general building contractors with proven expertise in the assessing, remediating and repairing of construction defects and smoke, fire and water damaged properties and Level 1 Thermography certification. They are specialists in building damage restoration with certifications including ASCR Certified Restorer and Water Loss Specialist, IICRC Master Restorer, Master Cleaner, Applied Structural Drying Specialist, Fire & Smoke Restoration, Water Damage Restoration; Carpet Cleaning, Upholstery and Fabric Cleaning; Carpet Repair and Reinstallation; and Odor Control Technician, IAQA Certified Mold Remediator, Certified Indoor Environmentalist, and AmlAQ Certified Microbial Remediation Supervisor (CMRS).

To Register

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