

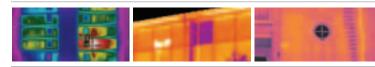
# Start Seeing the World In Infrared



- > Applications
- > Infrared Cameras
- > Service & Training
- > Rental & Pre-Owned Systems
- > Accessories

Inspection

Building Diagnostics & Inspection

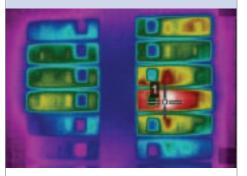


Energy Auditing

Restoration

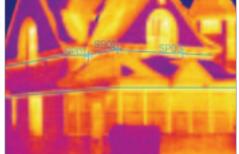
# You Can't Correct What You Don't Detect

#### Locate Electrical Problems



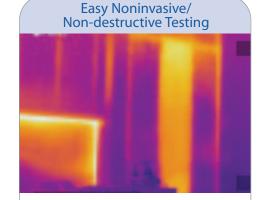
Issues with electrical connections, wiring or other system components are clearly highlighted as "hot spots" with infrared imagery — making them easy to locate and repair as part of an ongoing restoration project or building addition.

#### Quickly Diagnose Building Conditions



Buildings may be quickly and thoroughly scanned via infrared, identifying problem areas that can't be seen by the naked eye - ensuring the integrity of both structural and environmental systems for building inspection, repair verification and insurance purposes.

#### > Commercial & Residential Inspection <</p>



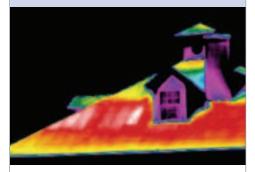
Facilitate repairs quickly, easily and safely as infrared minimizes the need for building disassembly - for minimal repair time, labor costs and disturbance of habitants, as well verification of a job well done. Missing insulation is clearly detected in the image above. Detect Plumbing Issues

Blockages in pipes may be quickly located and addressed via infrared – enabling immediate response if required. The use of this nondestructive technology provides for proactive action to be taken before the problem worsens..

# Energy Auditing

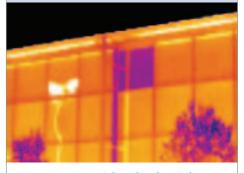
## >Energy Auditing

#### **Check Energy Efficiency**

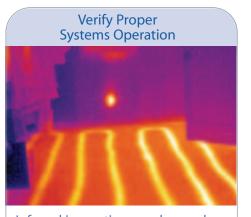


Locate and address heating and cooling losses in residential, commercial and industrial buildings with ease and pinpoint accuracy, enabling not only repairs and adjustments to be made, but accurately verified after the fact.

#### Quickly Locate Areas of Cost Savings

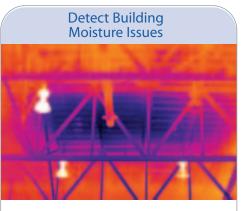


Many commercial and industrial organizations can easily locate and address ways to save money on energy costs through infrared analysis as shown in this image depicting a double pane window versus single pane windows.



Infrared inspection may be used to inspect and verify heating and cooling systems — for example to ensure the proper operation of radiant heating pipes located in the flooring to check for crimps in tubing and post-installation validation concerns.

#### >Restoration



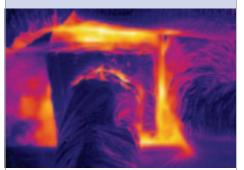
Accurately locate building moisture issues and track to their source. Inspect places that can't physically be reached with moisture meters. Once repaired, monitor the drying process, and confirm when moisture is gone.

#### **Termite Nest Discovery**

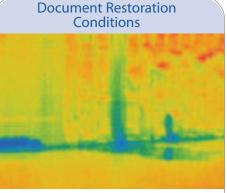


Infrared cameras in building inspection can even be used for rodent and pest discovery, as their lairs emit heat greater than the surrounding area – a great method to identify yet another hidden problem area when looking to purchase, lease or restore a building.

#### Locate HVAC Problem Areas

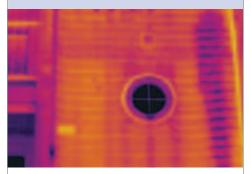


Loose, ill-fitting or disconnected heating, ventilation and cooling (HVAC) system fittings can lead to moisture issues and poor building airflow, as well as wasted energy and money! Early detection and correction of these issues via infrared imagery should be a high priority.



Track and easily record as-built or post-repair restoration conditions - documenting cause and origin data and images. Infrared thermography also provides a competitive advantage for restoration firms that market its use.

#### Pinpoint Problem Areas



Infrared Technology enables the location of problem areas with extreme accuracy, taking the guesswork out of trying to find issues hidden within walls and ceilings/roofs - saving time and money over traditional visual inspection methods.

# FLIR's B-Series Infrared Cameras The Choice for Building Professionals

New Space			WEW CONTRACTOR	NEW Strip
<ul> <li>► ThermaCAM<sup>®</sup> BCAM Series</li> <li>120 x 120 Resolution</li> <li>USB Connectivity</li> <li>3.5 inch Color LCD</li> <li>Only 1.2 lbs</li> <li>QuickReport Software</li> <li>New SD Model also includes:</li> <li>Improved image quality</li> <li>Stores up to 1000 Radiometric JPEG</li> <li>Images</li> <li>Removable Compact SD Card</li> <li>Easily Downloads to any PC</li> <li>Long 7-Hour Battery Life</li> </ul>	>       ThermaCAM® B2       <         160 x 120 Resolution       Interchangeable Lenses         Stores up to 200 JPEG Images       Built-in Laser LocatIR™         USB Connectivity       Only 1.5 lbs         QuickReport Software       Dew Point & Color Alarm	> ThermaCAM® BX320       <         320 x 240 Resolution	ThermaCAM® B360320 x 240 ResolutionSimultaneous IR & Visible CamerasFusion TechnologyAuto/Manual Focus w/ 2X ZoomMicrosoft® Word/JPEG CompatibleInterchangeable LensesVisual Alarm Technology5 Temperature SpotsQuickReport SoftwareOptional Reporter 8.2 Software	Sim Fus Aut Con Mid Inte 5 To In-0 Voi Qu Op
Ideal for home inspectors, home energy auditors, real estate appraisers, restoration contractors, HVAC contractors, and air quality professionals. Lease for only <b>\$99</b> per month!*	Affordable and ultra-compact, the B2 is the lightest IR and imaging storage camera in the world. Clip the B2 to your belt or place in your toolbox, and you're ready to go!	Ideal for the building professional who desires more features and functionality than a "starter camera."The BX320 gives four times the resolution of any IR camera in its size and price range.	The B360 offers exceptional ergonomics and advanced features at a more affordable price.	The and pay

\* Please call for leasing rates. All leases and monthly payments will vary depending upon down payment, lease term, credit history, and terms and conditions. Technical product specifications are subject to change.

All prices are quoted in US funds for the United States market only. For Canadian prices, please call the Canadian office directly.

For additional technical specifications and product information, please visit www.goinfrared.com/buildingcatalog or call us at 1 800 464 6372 IN CANADA: www.flir.ca • 1 800 613 0507



#### ThermaCAM® B400

320 x 240 Resolution Simultaneous IR & Visible Cameras Fusion Technology Auto/Manual Focus w/ 8X Continuous Digital Zoom Microsoft® Word/JPEG Compatible Interchangeable Lenses Audible & Visual Alarm Technology 5 Temperature Spots w/Delta T Mode In-Camera Video Storage Touch Screen Technology Voice, Text & Sketch Annotation QuickReport Software Optional Reporter 8.2 Software

The B400 offers state-of-the-art features and benefits for those who want want to pay a little more for a full-featured offering.



#### ThermaCAM® B20HSV

320 x 240 Resolution Interchangeable Lenses CompactFlash<sup>®</sup> Memory Card USB Connectivity QuickReport Software Isotherm Measurement Built-in & Detachable LCDs Built-in Laser LocatIR<sup>™</sup> Dew Point & Color Alarm Visual Camera Capabilities

The B20HSV offers 320 x 240 resolution with a detachable large-screen display, remote control and visual camera capabilities.

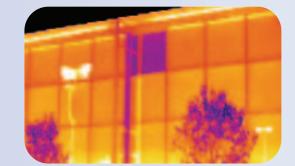
# Infrared in Action B-Series Cameras on the Job



Locate electrical problems with infrared. In the example shown here, circuit breaker phase exceeds 80% ampacity, and the temperature exceeds breaker rating. Aside from not adequately meeting power needs, this issue poses a potential electrical fire hazard.

## **Commercial & Residential Inspection**

Infrared inspection with a FLIR B-Series camera enables a powerful noninvasive method to monitor and diagnose the condition of buildings. Quickly identify problem areas that can't be seen by the naked eye – eliminating destructive probing methods. Results are captured and documented instantly into professional reports – providing tangible proof of your findings. FLIR infrared inspection helps you save time and money, and provides you with a unique competitive advantage for all your residential or commercial inspections.

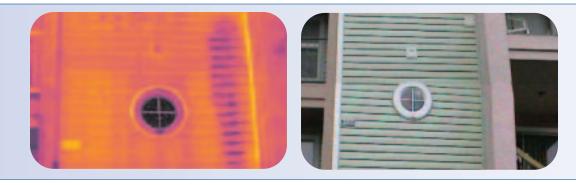




This thermal image clearly demonstrates the energy efficiency difference between single and double pane windows with the darker window showing significant energy loss in this summer time thermal image. Infrared offers the best technology to quickly and accurately locate areas of energy inefficiency – enabling cost savings for your home or business as well as better use of limited energy resources.

#### **Energy Auditing**

Infrared thermography is a well-accepted method of imaging and evaluating the thermal efficiency of building insulation, doors, windows and other penetrations, as well as the efficiency and condition of heating and cooling systems. Temperature anomalies reveal problems instantly, enabling needed repairs to be made with accuracy and confidence.



The thermogram of this vinyl-sided 3-floor apartment house clearly shows the path of a serious water leak–completely hidden within the wall–from a washing machine on the third floor. The thermographer used FLIR's Image Builder software to automatically "stitch" the three individual thermographs into one fully thermographic collage.

#### Restoration

Thermographic imagery provides immediate documentation of as-built or post-restoration quality, post-casualty cause and origin data, plumbing and building envelope water leakage, post-flood and fire water-damaged material assessment and electrical problems. FLIR ThermaCAM B-Series cameras instantly capture and record high-resolution infrared images providing fast detection for fast action. Plus, once the cause of a moisture issue is repaired, infrared can be used to monitor the drying process, and confirm when moisture is gone.

By making a few small changes, you can reduce your energy costs by 10% to 50%, and, at the same time, help reduce air pollution and dependence on foreign fuel imports.

> - "Energy Efficiency and Renewable Energy" U.S. Department of Energy, September 2005

# What's the difference between getting the job done and getting the job done right?

# The Difference is Training

There's no better way to get the most out of your FLIR IR camera investment than worldclass instruction through our Infrared Training Center (ITC)—the largest dedicated infrared applications training organization in the world.

All ITC courses are developed and taught by highly qualified instructors and meet or exceed ASNT SNT-TC-1A guidelines. Level I and Level II certifications are accepted by NETA (International Electrical Testing Association, an accredited standards developer for the American National Standards Institute, ANSI). And, ITC is the only ISO 9001 certified infrared training organization.

#### TO REGISTER FOR CLASSES: 1 866 872 4647 Canada: 1 800 613 0507, ext. 25

Visit www.infraredtraining.com for course descriptions, schedules and registration.



#### **BUILDING DIAGNOSTIC COURSES**

#### **Building Sciences**

ITC has partnered with the Building Science Institute to develop this  $3\frac{1}{2}$  day course which demonstrates real-world thermographic inspection techniques, and includes infrared theory relevant to these skills. This course is ideal for building owners, maintenance technicians, or anyone working within restoration firms or insurance companies. You will learn how infrared technology is a powerful and noninvasive means of monitoring and diagnosing the condition of buildings, and provides 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.

#### Infrared Home Inspection

Come learn how infrared thermography has revolutionized home inspection, and discover how you can gain a competitive advantage in your local market while increasing your earnings potential. This one-day course will cover an introduction to infrared thermography with an emphasis on delivering an easy-to understand and practical focus on the electromagnetic spectrum and fundamentals of heat transfer. Techniques on how to best operate an infrared camera will be covered, including how to compensate for environmental conditions and the occurrence of reflected light. In addition, you will learn how to incorporate your thermal images into professional inspection reports to provide your customers with clear, sharp and relevant documentation of their home.

#### Infrared Roofing Inspection

This two-day training course focuses on roof moisture detection and roof inspection surveys. You will discuss roofing types, typical problems, and how to perform infrared inspections to detect roof moisture. Details on thermal imaging equipment, procedures, and safety issues will be covered, along with effects of weather conditions. New infrared camera users as well as practicing thermographers will benefit from instruction covering limitations based on roof construction, insulation type, and how to recognize thermal patterns associated with roof leaks.

#### Infrared Electrical Inspection

See how infrared electrical inspection can prevent unscheduled downtime and keep your facility proactively maintained. This two-day training course covers indoor and outdoor electrical equipment inspection methods- showing you how to recognize typical thermal patterns associated with electrical faults. Enhance your skills in our electrical application lab, and learn from the experts how to collect quality data, document infrared survey results, and prepare maintenance reports.

OCTOBER2007		
22 - 25	LEVEL I	Toronto, ON
23 - 26	LEVEL I	York, PA
23 - 26	LEVEL I	Kansas City, KS
23 - 26	LEVEL II	Denver, CO
23 - 26	WEATHERIZATION	Syracuse, NY
25	SOFTWARE	Toronto, ON
29 - 31	GASFINDIR	Dallas, TX

NOVEMBER2007			
5 - 8	LEVELI	Moncton, NB	
5 - 9	LEVEL I	Billerica, MA	5 - 8
5 - 8	WEATHERIZATION	Warren, MI	5 - 8
6 - 9	LEVEL III	Los Angeles, CA	12 - 1
6 - 9	BUILDING SCIENCE	Burbank, CA	<u>11 - 1</u>
12 - 15	LEVEL II	San Diego, CA	<u>12 - 1</u>
12 - 15	LEVEL I	Vienna, VA	<u>12 - 1</u>
13 - 16	LEVEL I	Edmonton, AB	18 - 2
13 - 16	BUILDING SCIENCE	Billerica, MA	19 - 2
26 - 29	LEVEL I	Vancouver, BC	26 - 2
27 - 30	LEVEL III	Billerica, MA	26 - 2

	DECEMBEI	2007
- 6	BUILDING SCIENCE	Boca Raton, FL
- 6	LEVEL I	Honolulu, HI
- 6	LEVEL I	Las Vegas, NV
- 7	LEVEL II	Billerica, MA
- 6	LEVEL I	Toronto, ON
0 - 13	LEVEL I	Denver, CO
0 - 13	LEVEL I	Montreal, NB
0 - 14	LEVEL I	Billerica, MA
7 - 20	LEVEL II	Toronto, ON

JANUARY2008			
8 - 11	BUILDING SCIENCE	Fremont, CA	
8 - 11	LEVELI	Miami, FL	
9 - 11	GASFINDIR	Dallas, TX	
14 - 18	LEVEL I	Billerica, MA	
15 - 18	LEVEL II	Phoenix, AZ	
21 - 24	LEVEL I	Phoenix, AZ	
23 - 25	RTOOLS - SC6000/4000	Billerica, MA	
28 - 31	LEVEL III	Billerica, MA	

FEBRUARY2008			
5 - 8	LEVELI	Atlanta, GA	
5 - 8	LEVELI	Denver, CO	
12 - 15	LEVEL I	Reno, NV	
11 - 15	LEVEL II	Billerica, MA	
12 - 15	LEVEL I	Sterling Heights, MI	
12 - 15	LEVEL II	Clarksville, TN	
18 - 22	LEVEL I	Billerica, MA	
19 - 22	LEVEL I	Clarksville, TN	
26 - 29	R&D	Billerica, MA	
26 - 29	LEVEL I	Vancouver, WA	

#### MARCH2008

- 7	LEVELI	Clarksville, TN
- 7	BUILDING SCIENCE	Sterling Heights, MI
0 - 13	LEVEL I	Las Vegas, NV
1 - 14	BUILDING SCIENCE	Billerica, MA
7 - 21	LEVEL I	Billerica, MA
7 - 20	LEVEL I	Las Vegas, NV
8 - 21	LEVEL I	Tampa, FL
4 - 28	LEVEL I	Lyndhurst, NJ
5 - 28	LEVELI	San Diego, CA
5 - 28	LEVELI	Dallas, TX

APRIL2008			
7 – 10	LEVEL I	Denver, CO	
7 – 10	BUILDING SCIENCE	Orlando, FL	
8 – 10	GASFINDIR	Houston, TX	
8 – 11	LEVEL I	Atlanta, GA	
8 – 11	LEVEL I	Miami, FL	
14 – 17	LEVEL I	Charlotte, NC	
15 – 18	LEVEL I	Minneapolis, MN	
21 – 25	LEVEL I	Billerica, MA	
22 – 25	LEVEL I	Plymouth, PA	
22 – 25	LEVEL I	Stevensville, MD	
28 – 2	LEVEL I	Billerica, MA	
29 – 2	LEVEL I	Denver, CO	
29 – 2	LEVEL II	Dallas, TX	

MAY2008			
5 – 6	ELECTRICAL	Billerica, MA	
6 – 9	LEVEL I	Minneapolis, MN	
6 – 9	BUILDING SCIENCE	Fremont, CA	
7 – 8	ROOFING	Billerica, MA	
13 – 16	LEVEL II	Las Vegas, NV	
19 – 22	LEVEL III	Billerica, MA	
19 -22	LEVEL I	Las Vegas, NV	
19 – 22	LEVEL II	Camas, WA	

# Now you can save both equipment and your budget FLIR can customize a payme nt plan that fits your budget!



As the largest manufacturer of infrared cameras in the world, it stands to reason that FLIR offers the widest selection for all skill levels and all budgets. Put our economies-of-scale to work for you – we'll offer you the best value for your dollar.



Want to try before you buy? FLIR offers an extensive rental program, offering both short and long term IR camera rentals. You can even apply 100% of your rental fees as credit towards the purchase of in infrared camera! www.infraredcamerarentals.com or call 1 866 477 3687



Do you have an old infrared camera? FLIR offers generous trade-in values. Give us a call to see how much your infrared camera is worth. We'll make a handsome offer to help you trade-up to the latest technology.



Want to buy Pre-Owned? FLIR is the only factory authorized reseller of used FLIR, Inframetrics and Agema infrared cameras—all with unlimited post-sale technical support and a full warranty! www.usedircamera.com or call 1 866 477 3687



You can lease for as little as \$99 per month and some programs offer no payments for 6 months. If you'd rather pay as you go, let us create a leasing program to fit your needs.

For more information on BUY, TRADE or LEASE, call 1 800 464 6372 or www.goinfrared.com

# **FLIR Factory Service**

# **Protect Your Infrared Came ra Investment**

with a service protection plan from FLIR Systems

"If I don't have my camera, I'm out of business. FLIR fixes problems quickly and keeps me working. I cannot tell you how pleased I am with the attention and care I received."

> Howard J. Henderson Certified Thermographer

#### Premier Service Package

The FLIR Customer Care Division is your factory-certified source for annual service and repair for all Agema, Inframetrics and FLIR brand infrared cameras.

#### **Exclusive 3-Day Guarantee**

With our Premier Service Package, we'll fix and return your camera within 3 days, or you get a loaner for FREE!

IN CANADA:

To learn more, contact: 1 866 354 7911 1 800 613 0507

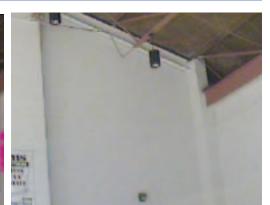
# NEW FLIR FUSION!



240 x 320 thermal resolution



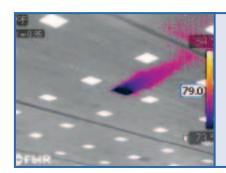
FLIR FUSION: pintpoint problems fast



1.3 mega pixel visible image



Moisture located on siding and wooden trim of house.



Facility AC vent cycling air in the incorrect direction.



Window sill leak noticeable from exterior of house.

# NEW! ThermaCAM<sup>®</sup> Reporter 8.2

- > Fusion Technology
- > Fully Integrated with MicroSoft<sup>®</sup> Word
- > Powerful Temperature Analysis
- > Available in Standard and Professional Versions
- > and many more features!

Create inspection reports instantly, review image analysis and get high speed data acquisitions—all with a click of a button. Learn about all our software packages:

# www.goinfrared.com/software







## Whatever your need, we've got an accessory that fits.

No other infrared camera manufacturer offers a wider variety of accessories than FLIR Systems.

FLIR offers the widest selection of accessories and supplies, from extra batteries to interchangeable optics and lenses. You'll also find an exclusive supply of LCD displays and remote control devices. We're taking technology and innovation to a whole new level!

www.goinfrared.com/accessories

Call and receive our **Accessories Catalog!** 1 800 464 6372



### Open Houses FREE Infrared Seminars

# InfraMation

The World's Best Infrared Camera Conference



#### Want to learn more about infrared? Attend our FREE Open House events!

The most important IR camera events in 45 years! You're invited to come see the latest product introductions and get hands-on time with a variety of infrared cameras! Learn how thermal imaging systems are used to find problems, improve safety, save money, make money and even advance your career.

Seating is limited – RSVP Required.

Take advantage of this once-a-year, largest and most informative conference that can help you get the highest return on investment from your infrared camera.

- > Attend valuable "How-to" Workshops
- > Learn from international expert presentations
- > Obtain ITC Re-certification credits
- > See the latest new products and technologies
- > Network with the world's largest infrared camera end-user group

# What makes FLIR the hottest selling infrared cameras in the world?

FLIR is the largest manufacturer of infrared cameras in the world, offering the widest selection, best post-sale technical support, and meaningful, hands-on training to ensure your success.

With over 30 years experience and a long history of innovation and leadership, you can trust FLIR to service all your needs now and long into the future. Call your local representative or authorized FLIR Building Distributor.

## Give us a call. We look forward to working with you.

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> TELEPHONE / EMAIL Contact us at 1 800 254 0633 seminar@flir.com

> MORE INFORMATION Get all the details at www.infraredseminars.com

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> ONLINE: www.inframation.org/registration and register instantly!

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> MORE INFORMATION www.inframation.org



For more information, contact:

**IN THE UNITED STATES** 1 800 464 6372 moreinfo@flir.com















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#### 1 800 464 6372 | www.goinfrared.com/buildingcatalog

Why do more people buy FLIR infrared cameras than all other brands combined?

FLIR Systems offers the highest quality products, top-notch service and the best training in the industry.



See the world with FLIR and see the difference.