

Two Moons Thermal Imaging Services

We see what others can't – finding problems quickly and accurately through the use of today's advanced infrared technology

Building Diagnostics and Preventative Maintenance Survey

How is infrared thermal scanning used for building diagnostics and preventative maintenance?

Infrared thermography (IR) is without question the most effective predictive maintenance technology available to quickly, accurately, and without interruption of operations, locate problems in various types of systems prior to failure. As a valuable and not destructive investigative tool, infrared thermography can cost-effectively detect abnormal thermal patterns in electrical, mechanical, roofing and structural systems. Regular inspections can be set up as component of a preventative maintenance system to avoid costly and unexpected repairs.

- **Roofing** – It is estimated that 30% of commercial roofs will develop problems within the first year of service. Commercial roofing systems can last as long as 30 years if properly maintained. By using IR you can detect water damage and leaks beneath the surface of the roofing system allowing the opportunity to repair the specific section before it continues to spread. Localized spot or partial repair vs. entire roof system tear off and replacement can result in huge savings.
- **Electrical, Mechanical and HVAC Systems** – IR is very effective at detecting overloaded circuits, faulty wiring, and loose electrical connections. Early detection allows for the repair or replacement of a component before failure, eliminating fire potential, costly downtime, or further damage to the electrical systems or downstream appliances.
- **Structural** – IR can ensure that the thermal envelope and structural integrity of the building performs as designed. It is the best tool for the surveying of a masonry wall to find deficiencies in the structural components and/or the building envelope.
- **EFIS** - The increased use of Exterior Insulation and Finish Systems, stone, stucco and brick veneers and siding as facades on residential as well as commercial buildings invites the possibility of water intrusion if they are not properly installed. IR can detect evidence of moisture infiltration in these weatherproofing 'barrier' systems, usually the result of insufficient detailing such as inadequate or improperly applied flashing or sealants. In addition, IR can monitor and track moisture migration paths within the wall cavity.

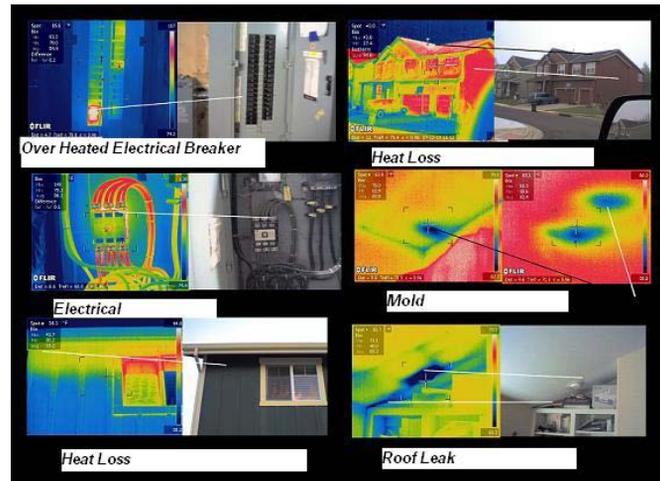
Who is it best for?

- Residential (apartments, condominiums, dwellings)
- Commercial (office buildings, retail stores)
- Light manufacturing

What do I get?

The initial assessment will take approximately 1 1/2 to 2 hours, depending on the building size and complexity. You will receive a final report detailing the findings and any recommended actions to be taken.

- Infrared Thermographic survey of the building.
- Photographic documentation of noted items.
- A written report to document the site observation findings and general recommendation regarding causes and potential solutions.



Here's how an infrared survey benefits you in building diagnostics and preventative maintenance applications:

- Fast, noninvasive, safe - minimizes need for building disassembly or forms if invasive testing
- Facilitate the selection of agencies and trades for restoration
- Allows for repair with maximum speed and assurance
- Document as built or post-repair /restoration condition

How much does a building infrared audit cost?

No two buildings are exactly the same therefore all professional inspections are specific and individualized prices are based upon:

- Age of the building and its size
- Location
- Systems Inspected

Commercial properties cost \$250 for the first 2 hours and then is charged a \$75 hourly rate for the actual time involved. Partnering relationships are available at reduced costs.

Who performs the building infrared scan?

Since the technology is advanced and there are so many elements to take into consideration when performing these inspections, it's best to have them done by a trained professional. Tom Mooney, a Level I Thermographer, certified to perform thermographic inspections, interpret results, and generate reports. He is a IICRC certified technician in odor control, water restoration and is certified in Applied Structural Drying (ASD) and Fire & Smoke Restoration. He also holds a State of Michigan Department of Environmental Quality Storm Water Management certification, Tom is a long time developer and builder in the Tawas area with considerable experience in the building construction industry.