

# 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

## Energy Audit/Survey

**What is an energy audit?** An energy audit is a survey of an existing house/building to determine where potential energy losses could be in terms of efficiency and how that building operates. The Inspector will scan the following:

- Roof, vents, flashings, and trim
- Skylight, chimney and other roof penetrations
- Electrical panels, breakers and fuses
- Fireplace damper door and hearth
- Cladding/siding, windows, doors, and walls
- Ceiling, and floors
- Entire exterior building envelope
- Heating and cooling system and duct work
- Lighting
- Water heater and pipes
- Doors, ceiling, floors, windows and wall vents
- Insulation, attic hatch seals, lighting and wall insulation
- Basement and crawl space

Upon completion of the audit an energy efficiency assessment report is prepared which describes where your energy dollars are being wasted. The report provides a detailed energy improvement plan prioritizing the most cost effective energy enhancement opportunities for your home/building. This allows the owner to yield the maximum energy savings from the money they invest into energy upgrades. The assessment will take approximately 1 1/2 to 2 hours, depending on the home size and complexity. Initial report will include recommendations of suggested retrofits and the energy efficiency and cost effectiveness of each.

### Who is it best for?

- Residential (houses, apartments, condominiums, dwellings)
- Commercial owners (office buildings, retail stores, building properties)
- Light manufacturing
- Building construction developers and contractors

### Here's how an infrared energy audit/survey can benefit you:

With ever-rising energy costs and ongoing environmental concerns, these days nearly everyone is focused on conserving energy. Heated air escaping during the winter months and cooled air leaking out during the summer months are sure signs utility bills will soar. Finding the source of energy loss--whether it's poor insulation in the walls and ceilings or shoddy construction around the windows and doors--can be a costly, time-consuming and intrusive endeavor. Other benefits of an energy audit that you can expect:

- Locate heating & cooling losses with pinpoint accuracy
- Lower energy bills. If you follow through on the recommendations from the energy scan, you may be able to reduce your energy costs by as much as 20% to 30%, especially if your house is older and hasn't been retrofitted for energy efficiency.
- Increased home or building resale value
- Qualifies for discounts and incentives (mortgage, mortgage insurance, current and future government, etc.
- Contributes to a cleaner environment



### How does infrared thermal scanning work?

Because the human eye cannot detect thermal energy, infrared cameras are typically used to instantly display an area's thermal performance. Using an infrared camera is like having thermal vision. Infrared cameras can reveal damaged insulation in ceilings and behind walls, uncover bad wiring and overloaded circuits, and pinpoint the source of roof leaks. They go beyond measuring surface issues, without requiring the demolition of walls or direct inspection of insulation.

### How much does a building infrared audit cost?

No two properties 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

In general, energy audits for an average home will cost in the \$250 – \$350 range. Commercial properties cost \$250 for the first 2 hours and then is charged a \$75 hourly rate for the actual time involved.

### 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.