

# Urban Building Inspectors, Inc.

## INSPECTION NEWS

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### IN THIS ISSUE:

Thermal Image Scanning

### -Thermal Image Scanning:

Thermal Image scanning is offered as an add-on service to any standard ASHI® Home Inspection, and also as a stand alone service.

Thermal Image scanning uses infrared technology to aid in the detection of problem areas in the home. This technology is useful not only to identify potential problems, but to also verify that insulation has been properly installed.



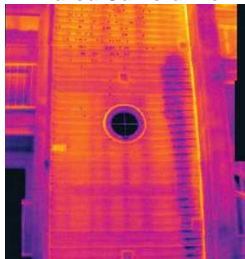
Flir B-Cam Infrared Camera

The pictures below show how the thermal camera has pin-pointed a suspected leak that was later determined to have been caused by a leaking clothes washer.

Regular View



Infrared Camera View



Notice the dark streak to the right of the small window.

Thermal scanning provides a powerful, non-invasive method for diagnosing the condition of a home, allowing us to find things that may go unnoticed by some standard home inspections. The color variations in the thermal images represent differences in hot and cold temperatures. These differences can indicate electrical or moisture problems. The results are captured and are documented into the inspection report.

**What is thermal imaging?** Thermal imaging uses infrared technology to detect very small differences in temperature. Every material has a unique thermal signature. When moisture, heat, or cold are introduced into the structure the thermal signature changes and these changes are often detectable to a thermal imaging camera.

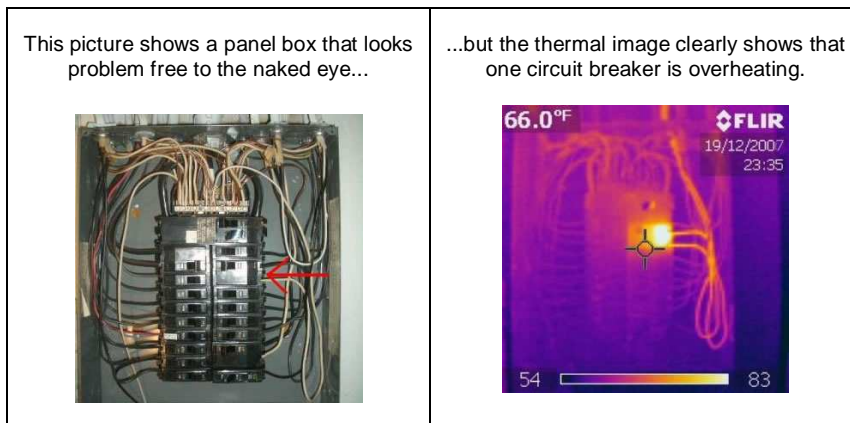
### What Thermal Image Scanning is Not:

- 1) The infrared thermal imaging camera is NOT a moisture meter.
- 2) The infrared thermal imaging camera is NOT an X-ray vision scope.
- 3) The infrared thermal imaging camera does NOT completely remove the risks of concealed damage, but it GREATLY increases the thoroughness of your home inspection.

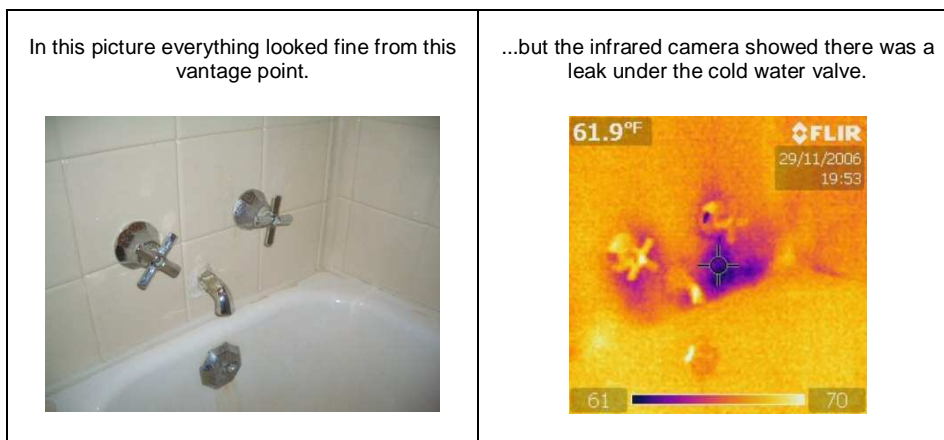
Listed below are some of the areas where thermal imaging can be used and some limitations of each:

**Moisture Detection in Walls and Ceilings** - Thermal imaging helps to identify water damage in walls, floors, and ceilings. However, areas like these may not be detectable if they have been dry for an extended period of time.

**Electrical Inspections** - Thermal imaging can detect hot spots in the electrical system that are not visible to the naked eye (e.g. overheating circuit breakers, or circuits). However, a load is not applied to all of the circuits during a home inspection, which means that it is not possible to view all circuits and circuit breakers while they are hot.



**Plumbing Inspections** - Thermal imaging greatly increases our inspection for leakage below plumbing fixtures. Yet even thermal imaging cannot guarantee that all small leaks, or drips will be found.

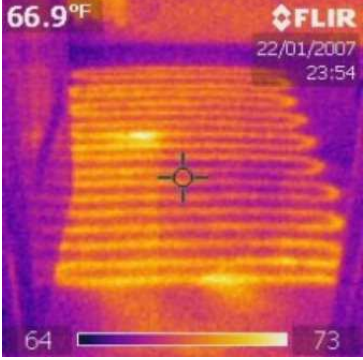


**Flat Roof Inspections** - Thermal imaging can be used to detect the precise location of flat roof leaks. Again, if the area has been dry for an extended period of time, the

leakage may not be visible. The obvious benefit here is that active leaks that are found can be marked so that repairs can be made to only the leaking areas. This obviously is much cheaper than replacing the entire roof. Of course, complete replacement is always recommended when the roof is old.

**Radiant Floor Heat** – Thermal imaging can be used to verify proper installation of the coils.

This image shows a tiled bathroom floor. Radiant, electric heat was installed below the tiles. For most inspectors, testing radiant floor heat means turning up the thermostat and feeling for heat.



But with the thermal imaging camera, we can now see exactly where the coils are. This allows us to look for even distribution of heat, signs of overheating, or areas where the coil placement was omitted. The result is a much more thorough evaluation.

**Stucco & EIFS Inspections** - While we do not perform stucco / EIFS moisture tests, we can now scan these materials and look for problems in areas where we suspect damage may exist. If there is rot behind the stucco it is often visible with thermal imaging in the form of heat anomalies. If you are concerned about moisture behind your stucco siding, we urge you to contact a moisture specialist. While thermal imaging can locate problems, probing into the wall is a more accurate way to test, which requires a moisture specialist.

NOTE: If thermal scanning is added to a home inspection, this should be indicated at the time of scheduling the inspection (Due to the extra time needed for this service, and that this scanning is done in conjunction with the Home Inspection).

I take pride in providing a very thorough home inspection whether it's a standard ASHI® Home Inspection, or an ASHI® Inspection with Thermal Scanning.

Please contact me anytime at **952-212-6266** or email me at [mike@urbanbuildinginspectors.com](mailto:mike@urbanbuildinginspectors.com) with any questions.

**-Color Flyer with price schedule can be downloaded from our Website. [www.urbanbuildinginspectors.com](http://www.urbanbuildinginspectors.com)**

All current inspection fees are listed in our website.

**Hard copies of flyers and/or tri-fold brochures can be mailed upon request.**



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