

Infrared Camera by Finn Home Inspectors

Infrared Camera: Measures the surface temperature, it does not see in walls and it is not a moisture meter. The accuracy of the temperatures measured depends on the texture and color of the surface, called the surface emissivity.

A properly trained inspector can use the camera to detect active water leaks IF there is water on the surface and if conditions are such that the water is evaporating at a rate that creates a noticeable temperature difference. If weather conditions had not caused leakage and the conditions for noticeable evaporation are not present the leak will not be found with an IR camera. So the IR camera can find certain current leakage, but one cannot say there will be no leak. Even if it has been raining, some leakage only occurs during certain conditions, wind direction etc.

So the IR camera is very useful for finding active leakage if the conditions are right at the moment of the inspection.

Other uses of the camera are to detect heat loss/gain. This can be air leakage or missing insulation.

Heat differences can also be found for heating system function and problems, a failed hot air furnace heat exchanger may heat the outside of the furnace enclosure which the infrared camera may find.

The heat differences can also show over heated electrical system components, wires/circuit breakers etc.



Above – Ceiling below skylight has water stains, the skylight flashing had been repaired, But did the repair work? The IR scan may be able to determine the repair did not work if there had been recent weather conditions creating water entry. The IR scan could NOT say that the repair was adequate.

Above – IR photo below the skylight shown in the photo to the left. The dark stains indicated likely water leakage, a moisture meter was used and verified moisture present. So in this one the inspector was able to tell the buyer that the roof repair for the skylight flashing did not correct the leakage.



Above – The black cables were the main power feeds into the electric panel main breaker. Visually there was no apparent problem, however see IR photo to the right.

Above – IR photo indicates one of the power entry cables into the main breaker is overheating, temperature of 279 Degrees F, which is a fire Hazard! Follow up, by an electrician, determined it was due to a loose lug connection at the main breaker.