

Thermal imaging camera (TIC): What is it?

Using a TIC to identify irregularities or anomalies in a building's electrical system is relatively easy because the device is designed to clearly and visibly highlight temperature differences that could indicate potential problems. As a value-added service to our property policyholders, UFG Insurance Risk Control Consultants will use the TIC to assess and identify temperature irregularities or anomalies.

Why use a thermal imaging camera?

Thermography is a safe non-contact measurement to identify possible loose connections, overloaded circuits, wiring mistakes, corroded connections and power quality issues such as: phase imbalance, harmonic distortion and insulation failures. UFG Risk Control consultants are not electricians and are only using the TIC to identify and investigate anomalies. If an unknown anomaly is identified, it will be recommended that a licensed electrician be contacted to further investigate and fix the problem.

Uses for the thermal imaging camera

The TIC can be used to identify temperature differences in multiple objects such as: breaker panels, electric motors, bearings, hydraulic pumps and reservoirs. The TIC can also be used to identify areas where water and moisture are collecting inside of building components.

Electrical applications

Abnormal heating associated with high resistance or excessive current flow is the main cause of many problems in electrical systems.

Thermography allows us to see these invisible thermal signatures before catastrophic damage occurs.

There may be a clear and understandable reason for the anomaly, but if it cannot be resolved, a recommendation to engage a licensed electrician will be issued.

Mechanical applications

Thermal imaging can also be used to identify possible issues in pumps and electrical motors that could cause a major breakdown and cease production.

Water leaks

Depending on the buildings construction, the TIC could be used to identify roof leaks, termite damage and trapped moisture within the structure.

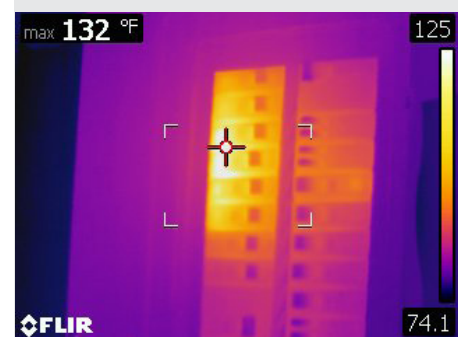
If your business has property coverage through UFG and you would like a cursory TIC survey, please contact our risk control department at riskcontrol@unitedfiregroup.com to schedule a visit.



This image shows a typical disconnect box. When observed by the naked eye, nothing appears to be wrong.



This is the thermal image of the same disconnect box. Note the abnormal heat level on the fuse clip.



The infrared image shows an elevated temperature on the breaker identified by the hot spot icon.

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