

# COMMERCIAL GUIDE

## TOP TIPS TO SEEK MORE SAVINGS IN COMMERCIAL APPLICATIONS

### PRO SERIES CAMERA SPECS

- 320 x 240 Thermal Sensor
- 32° Field of View
- Accuracy +/-5C or 5% (at 25C)
- 15 cm to 550 meter Distance
- Works Day & Night

Seek  
thermal  
thermal.com

Building systems are often the largest single potential for energy inefficiency. Many of the common losses in commercial buildings and industrial facilities can easily be controlled through quick preventive measures using an affordable and pocket-sized portable Seek thermal imaging camera. Thermal imaging tools are the perfect versatile tool for locating and identifying failures because they allow you to see what the human eye cannot often using non-destructive testing methods. To get you started, we've provided a few helpful hints to maximize your investment and start identifying cost savings sooner than later.

Key benefits to using a Seek Thermal imager for maintenance and repair:

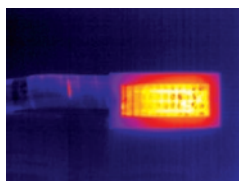
- Quickly locate and visualize the problem
- Measure temperatures from a single point to an entire scene
- Find faults before problems occur saving valuable time and money
- Capture, store, save, and document your findings as reference points
- Reliably validate your solution after repair



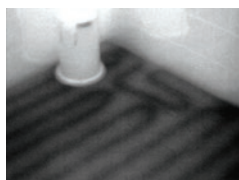
## HVAC SYSTEMS

The health of your heating, ventilation and air conditioning systems are often difficult to track and monitor with the naked eye. One simple tool can help you find problems quickly and reliably before downtime occurs. These systems typically consume or ultimately lose more than 30% of the energy in a building. Easy-to-scan preventative measures on a regular basis will ensure you maximize savings.

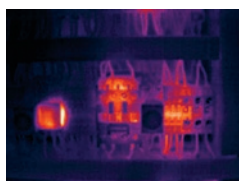
### QUICK PREVENTATIVE TIPS & REMINDERS FOR A HEALTHY SYSTEM:



**Registers and ductwork:** Significant energy is consumed and lost in many systems. Look for duct leakage and improper installation or loss of insulation.



**Radiant floors:** A quick test of the tubes and pipes is easy to conduct with a thermal imager. The heat of the pipes radiates through the surface making the pattern simple to detect once fired up. Scanning and inspecting the total floor surface to look for hot spots along the lines can easily provide a visual image of any pinches, leaks, or punctures in order to quickly begin work with confidence.



**Electrical connections / faults:** A Seek thermal camera lets you see circuits that have blown fuses or bad connections. If left unchecked, electrical problems can potentially cause high temperatures. Start by checking for loose or corroded connections or overheated bearings and components. The naked eye often misses what a thermal imager can see and verify.



**Compressors and coils:** Your condenser's coils can often get blocked, leak Freon, or even be ultra low – causing inefficiency. With a portable, handheld thermal imager from Seek thermal, you can quickly check coil temperatures and quickly make sure these systems are operating as intended.

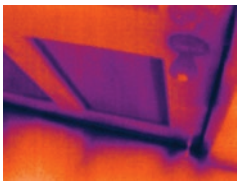
## BUILDING APPLICATIONS

All aspects of your building provide data important in determining the overall health and condition of the total envelope from indoor air quality, moisture and mold prevention, to roofing and structural design. A building diagnostics inspection can quickly be performed and documented on a routine basis to identify problems early, allowing documentation and correction before becoming a serious downtime issue.

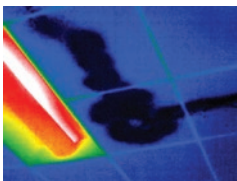
With a Seek thermal portable imaging camera you can:

- Visualize energy losses
- Detect mold and poorly insulated areas
- Locate thermal bridges
- Locate water and moisture infiltration in flat roofs, walls, and other internal structures
- Source major and minor air leaks
- Detect construction failures

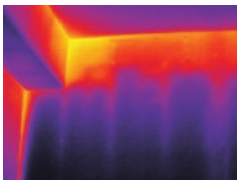
### QUICK PREVENTATIVE TIPS & REMINDERS FOR BUILDING APPLICATIONS:



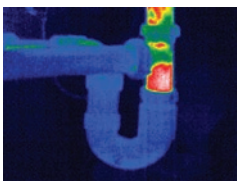
**Missing insulation and detection of air leaks:** Air leaks are a primary cause of energy loss and often cause further problems with the ventilation system. Locate building defects or framework construction problems including missing insulation or condensation that the eye cannot see. To detect air leaks, always conduct the inspection from the point of negative pressure.



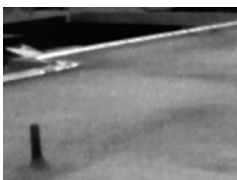
**Moisture detection:** Moisture can be difficult to spot and is easily a strong contributor to health issues. Problems such as common deterioration from air leakage causes condensation to form inside walls, ceilings or floors. If wet, this moisture will take a long time to dry and become early mold and mildew if not found or treated. Use our thermal camera to quickly find the source and see where it is forming.



**Thermal bridges:** Typically thermal bridges are an area of the building envelope that can have lower thermal resistance. Heat likes to follow the easiest path from the source to the outside – the path of least resistance. If you are suddenly experiencing significant increases in heat loss and cold areas within a building, like decreased wall surface temperatures, we recommend you scan roof beams and walls, corners, and even between floors.



**Blocked or broken pipes:** Even if a pipe is laid under the floor or inside a wall, its much easier to see the source of the problem by running hot water through the pipes. The heat will radiate and provide a nice visible image for inspection.



**Flat roofs and water infiltration:** The majority of buildings have flat roofs and over time, they can retain water in pocket areas. Seek thermal imagers used in the late evening hours or after the roof has cooled down from the day's sun and heat will easily pick up wet areas.

To learn more about how Seek thermal imaging cameras can help you, visit [thermal.com](http://thermal.com)