



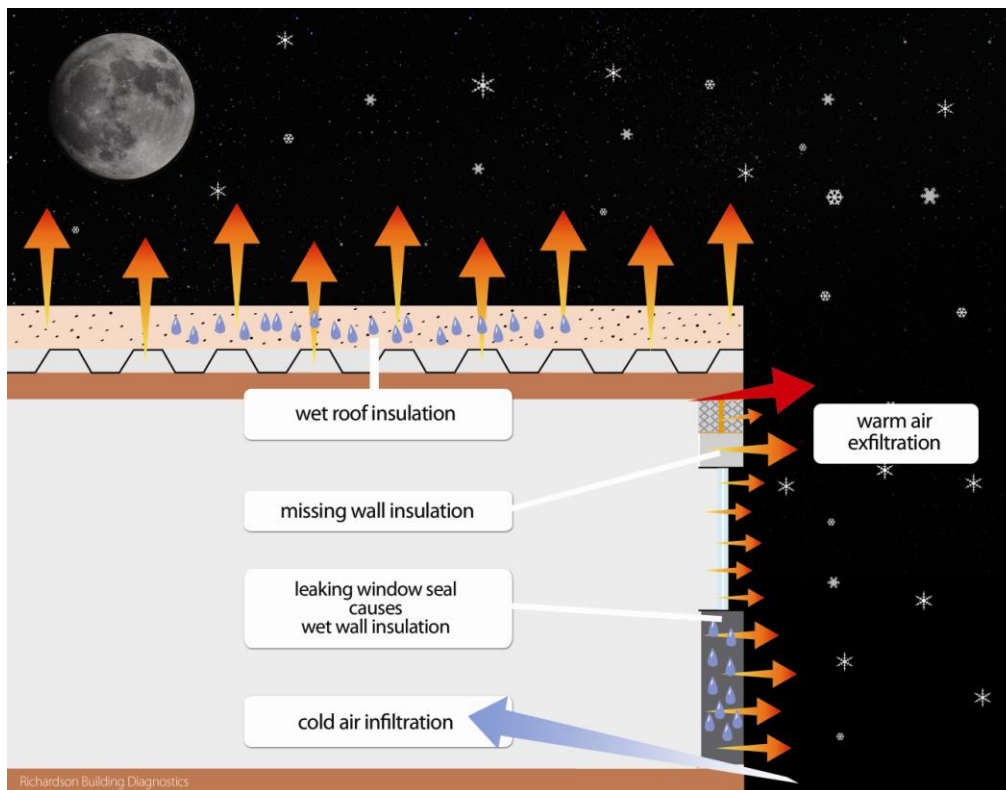
ITI BUILDING

Reducing operating costs, such as building maintenance expenses and heating and cooling bills, is a primary concern for managers of commercial, industrial, and institutional buildings. The only method proven successful for identifying energy losses is infrared thermal imaging.

Infrared thermal imaging, or Thermography, can provide a visual representation of the surface temperatures of any part of a building, including windows, walls, roofs, doors, and any construction joint. Differences in temperatures (Delta-T) can often reveal conditions that may contribute to wasted energy and significantly reduce operating costs.

Sources and Effects of Building Heat Losses

There are generally two ways for heat to escape from buildings, conduction and air leakage. Improper insulation, perhaps wet, missing, compressed, or poorly installed, can result in conduction losses. Other causes of conduction loss include thermal bridging of structural components, failure of door and window seals, damaged heating ducts, and leaking or failing pipes. Air leakage can result in condensation buildup inside walls and roofs, and can lead to damage and decreased R-values. Rotted wood, corroded metal and stained concrete will result. Without proper correction, dangerous fungal growth and mold can result from these critical problems.



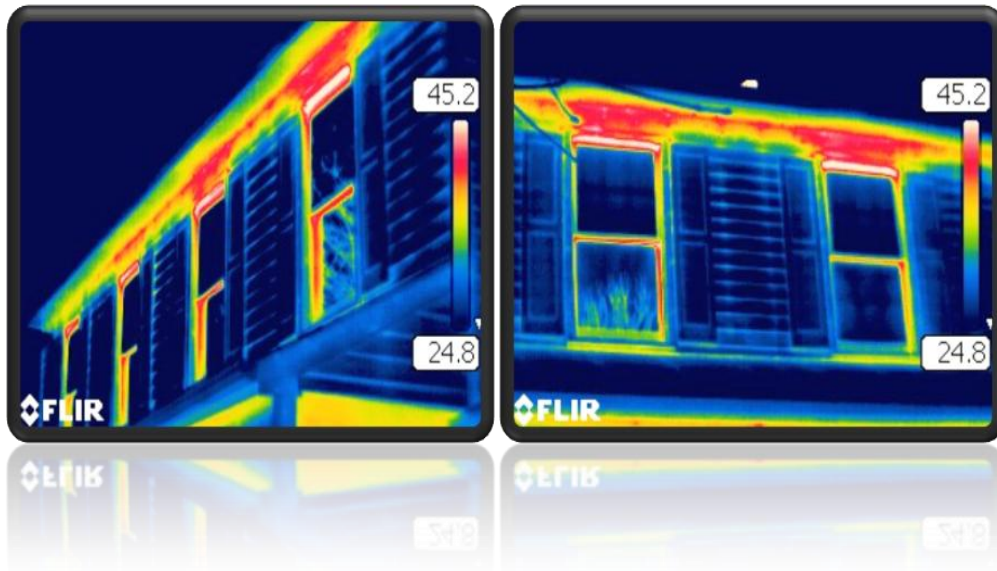
Large amounts of expensive heat energy are lost to conduction and air leakage.



RICHARDSON

BUILDING DIAGNOSTICS

COMPREHENSIVE ENERGY SOLUTIONS



THE BOTTOM LINE

Solid information guides smart repairs: Is the “guessing game” failing to stop your occupant complaints, ice dams, heat losses, and frozen pipes? These are caused by hidden aging, design, or construction problems that lead to moisture damage, uncomfortable occupancy, and increased heating costs.

Reduced energy costs: Moisture in building insulation significantly reduces its insulating properties (R-Value). This means higher heating costs during the winter and higher cooling costs in the summer. As energy costs continue to climb, more building owners are using infrared surveys to identify substantial money saving opportunities.