

Use of Infrared cameras in building shell analysis and correction in the Home Performance with Energy Star Program

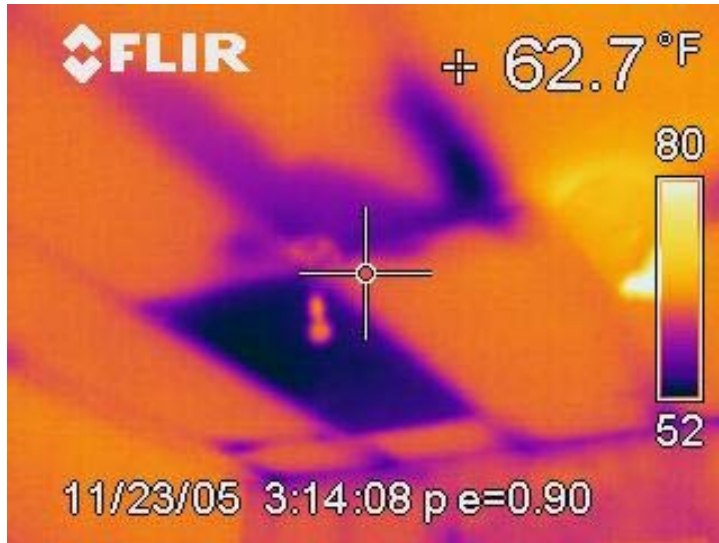


Presented by
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Owner Energy Construction

Infrared Camera Use During a Home Audit



Inspection of Shell Insulation

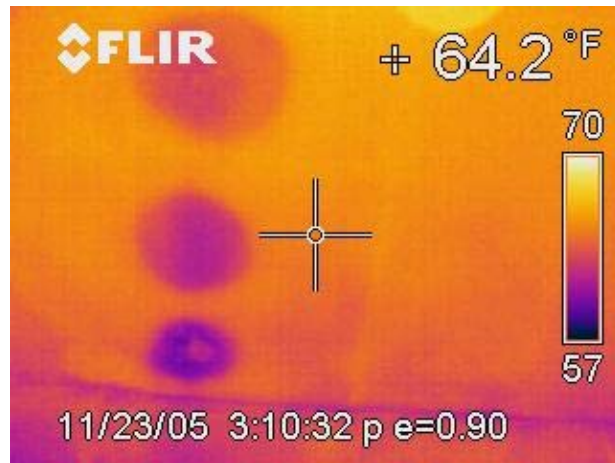


- Missing fiberglass in new construction



- No insulation in walls of 1920 structure

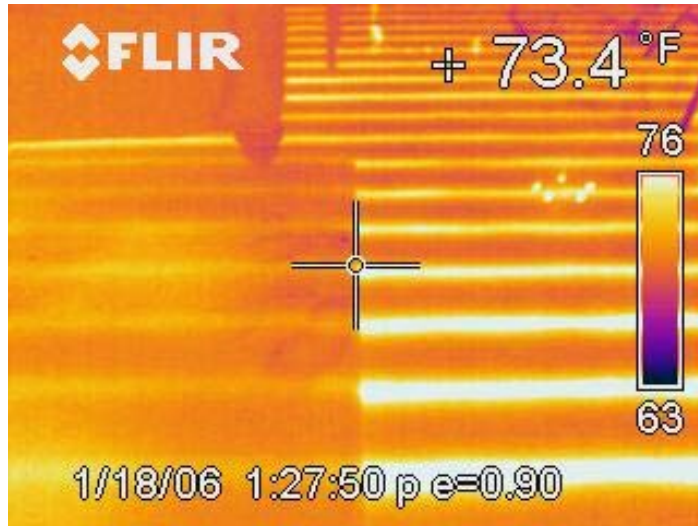
Identifying Moisture Issues



- Moisture evaporation causes cooling which shows up clearly in infrared images



Analyzing Heating Systems

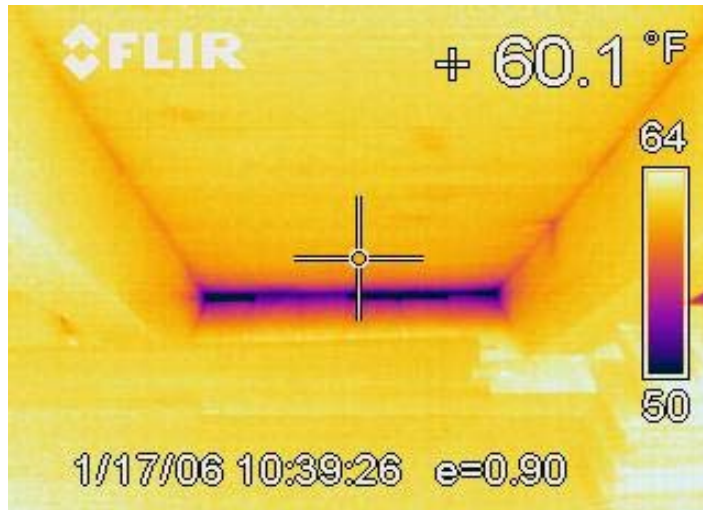


- Diagnose and document problems in radiant systems

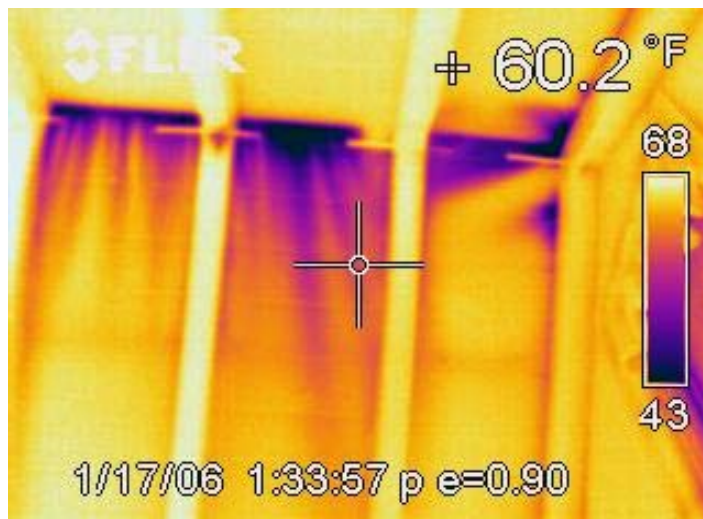


- Diagnose and document heat loss in ductwork

Analyzing Air Infiltration Without and With Blower Door

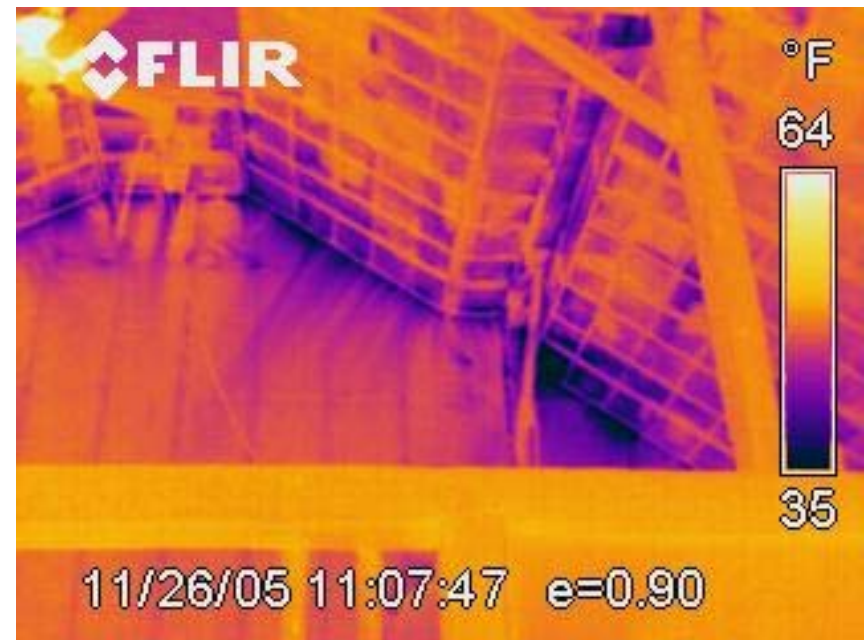
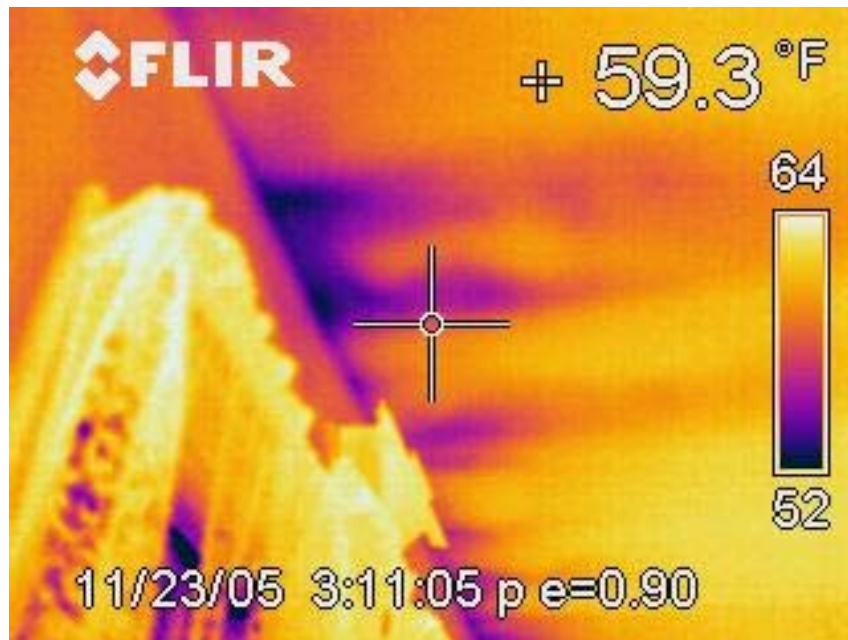


- Infrared image doesn't show air leakage at top of cathedral ceiling



- Using Blower door, air leakage becomes obvious

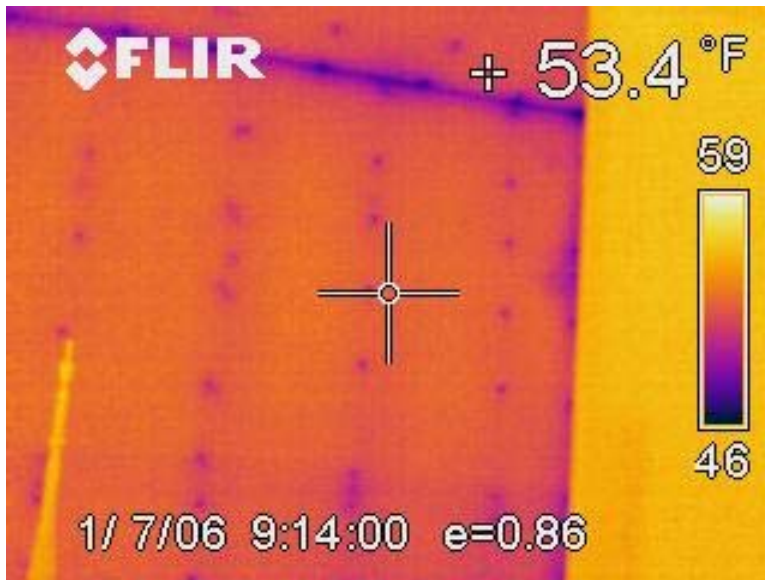
Blower Door Enhanced Images



Infrared Camera Use During Shell Correction and Post-Testing



- Insulation crew misses wall cavity tops. Find while crew is still on site

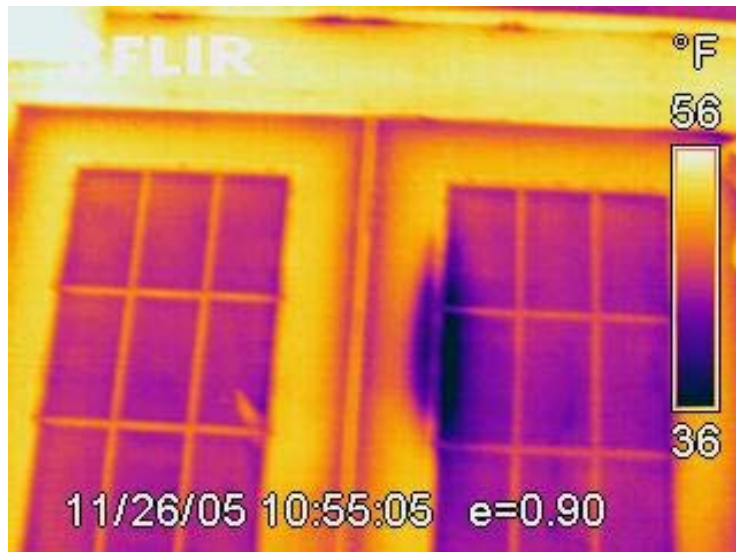


- Go back and re-insulate to properly insulate cavity

Diagnosing Post-Test Problems



- Poorly blown cellulose in ceiling



- New door with faulty glazing

Then there is always Infrared as Art

