Infrared Survey Report

Home of:
Mr. and Mrs. Sample Client
926 Main Street
Your Town, USA 12345

Prepared by:
Qualified Contractor
Your Town, USA
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www.EnergyScanIR.com

August 12, 2008

Mr. and Mrs. Sample Client
926 Main Street
Your Town, USA 12345

Dear Mr. & Mrs. Client:

Please find below, the report from the infrared (IR) survey of heat loss that was conducted today.

This report is designed to be clear, easy to understand and helpful. If there is anything you would like for us to explain, or if there is other information you would like, please feel free to call me at 888-722-6447.

We thank you for the opportunity to be of service to you.

Sincerely,

Peter Hopkins
Authorized EnergyScanIR® Contractor
Certified Infrared Thermographer

Survey Information

Survey Report #:	PH-081208-2
Survey date:	08-12-08
Thermographer:	Peter Hopkins
Weather:	Sunny
Outdoor temperature:	94 °F
Indoor temperature:	75 °F
Temp diff In-Out (Δt):	19 F °

Your EnergyScanIR® Survey

General

This survey report reflects the conditions of the property at the time of the survey. Hidden or concealed defects cannot be included in this report, therefore no warranty is either expressed or implied, however an earnest effort was made to discover defects.

Understanding Infrared Thermography

Infrared imagery is often a grayscale picture whose scales (or shades of gray) represent the differences in temperature and emissivity of objects in the image. As a general rule, objects in the image that are lighter in color are warmer and darker objects are cooler. No object in the IR images attached is detected via visible light wavelengths (400-700 nanometers) rather, only from infrared wavelengths of 3000-14000 nanometers. Lights and other relatively hot objects are very evident, but as a result of their heat, not light emissions.

When an image is taken by our infrared camera, it is recorded on the internal memory of the camera and later converted to a digital image file with the help of a computer. The image may be then modified in a number of ways to enhance its value to the end user. In the case of this report, the images were digitized and then adjusted for contrast and brightness before being scaled and placed into our custom program and later converted to this PDF file.

Survey Analysis

We were contracted to find areas of wasted energy. Given the time frame, this survey of your home was focused on the heat loss, by finding insulation that is missing, misplaced or damaged in the exterior walls and ceilings and by finding air leakage by reducing the internal pressure with the blower door.

Every attempt was made to image the home according to the ASTM-C1060 Standard, however, due to circumstances beyond our control, this might not have been possible. For example, because of inaccessible areas, such as areas behind furniture or an appliance that covers a wall, ceiling or floor, we may not have been able to obtain 100% coverage of all inside surfaces.

Recommendations

We recommend all areas showing anomalies be tested to find out the cause (s) and when warranted, these areas should be repaired. Our recommendations are not intended as criticisms of the building - but rather as professional opinions regarding the conditions that we found.

We are often asked how to prioritize the anomalies that have been identified in our reports. Below, find the three categories:

- Conditions which affect performance and life safety issues (if any) are of course, of the highest priority. (These will be show with an astericks.)

- Next are conditions that do not appear to pose any threat to the safety of the occupants of the building, but that need repair because they create a condition that affects the performance of the building or could deteriorate the building itself. Examples would be items that appear to be large areas of heat loss or air infiltration. These areas should be tested by a qualified repairman to determine the appropriate corrective action.

- Finally, lower priority conditions that have a low impact on performance of the thermal, air and/or moisture barriers, but have reached the level of a reportable anomaly. These should be evaluated to determine if it is cost-effective to conduct repairs.

Building Orientation in this Report

We will describe the locations of the various features of this property, left or right, etc., as though we were standing in street looking at the front of building and/or give the room that you gave us.

Information Contained On the Thermographic Report Pages

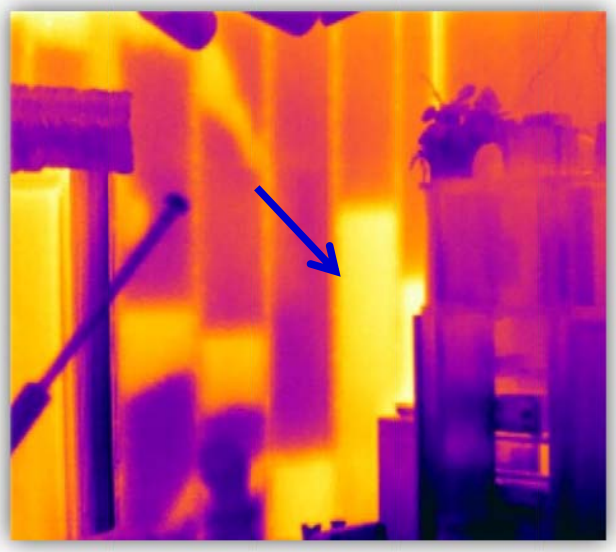
Through the use of thermal imaging, we have found areas with anomalies. These anomalies have been notated on the individual thermographic reports that follow (typically, two per page). Infrared thermographs and visual photographs were taken during survey. If we did not find a reportable anomaly, we did not create an individual thermographic report.

Interpretation

When viewing IR images, anomalies commonly present where the conditions exist and/or where our reference (arrows or area boxes) are located. When IR images are taken during colder months (winter), the areas of deficient insulation look darker. When IR images are taken during warmer months (summer), the areas of deficient insulation look lighter.

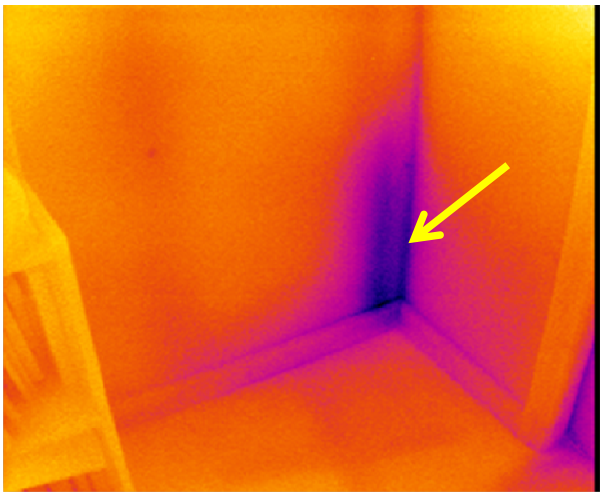
SUMMER

Infrared Image shows warm areas that are missing insulation.

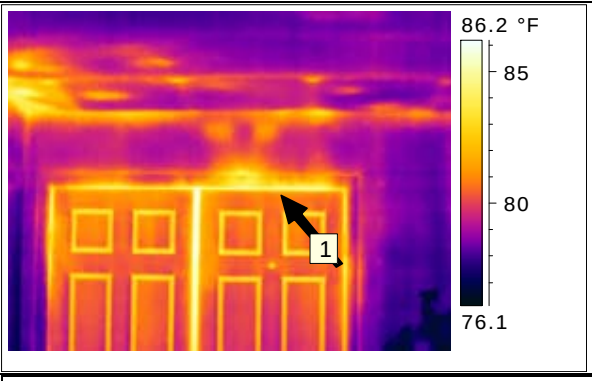


WINTER

Infrared Image shows cool areas that are missing insulation.



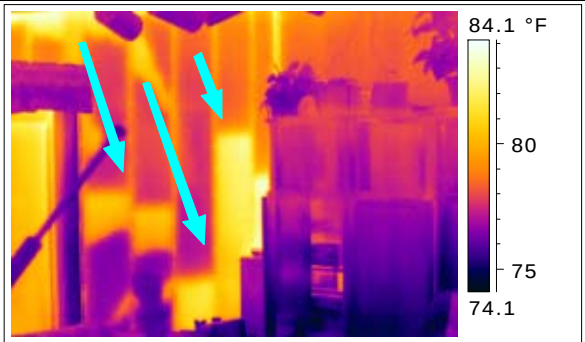
Thermographic Report Pages below...

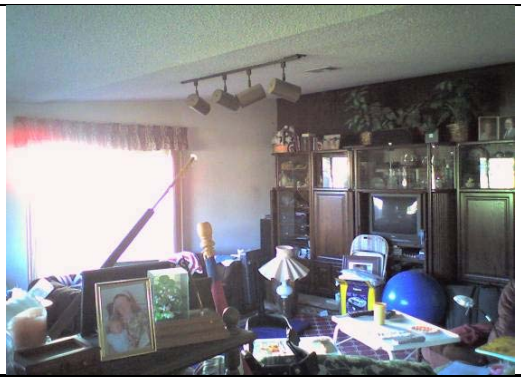


Date 08-12-08 | **Image.File name IR_1059.jpg**

Location: Entry Area
Where: Exterior door
Condition: Weatherstripping at exterior doors appear to have air infiltration from gaps / missing sections.
Recommendation: We recommend further investigation of this area and repair as needed.

CORRECTED BY: _____ DATE ____-____-_____

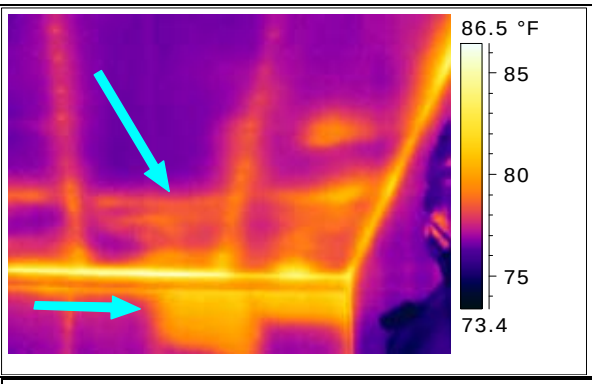




Date 08-12-08 | **Image.File name IR_1069.jpg**

Location: Living Room
Where: Left wall
Condition: Appears to be missing or loose insulation
Recommendation: We recommend further investigation of this area and repair as needed.

CORRECTED BY: _____ DATE ____-____-_____



Date 08-12-08 | **Image.File name IR_1075.jpg**

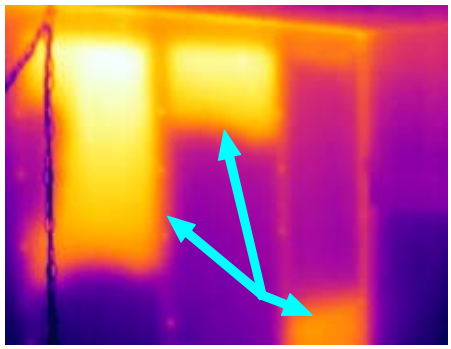
Location: Kitchen
Where: Ceiling
Condition: Appears to be missing or loose insulation
Recommendation: We recommend further investigation of this area and repair as needed.

CORRECTED BY: _____ DATE ____-____-_____

Date 08-12-08 | **Image.File name IR_1079.jpg**

Location: Kitchen
Where: Rear wall
Condition: Appears to be missing or loose insulation
Recommendation: We recommend further investigation of this area and repair as needed.

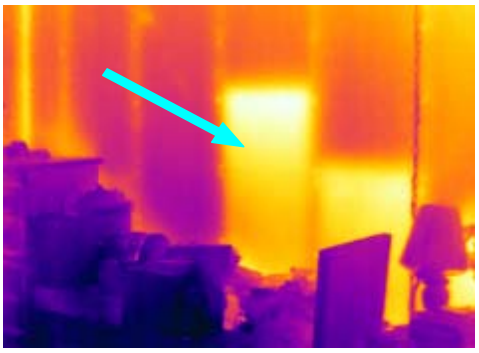
CORRECTED BY: _____ DATE ____-____-_____



Date 08-12-08 | **Image.File name IR_1099.jpg**

Location: Guest Bedroom 2
Where: Right wall (top)
Condition: Appears to be missing or loose insulation
Recommendation: We recommend further investigation of this area and repair as needed.

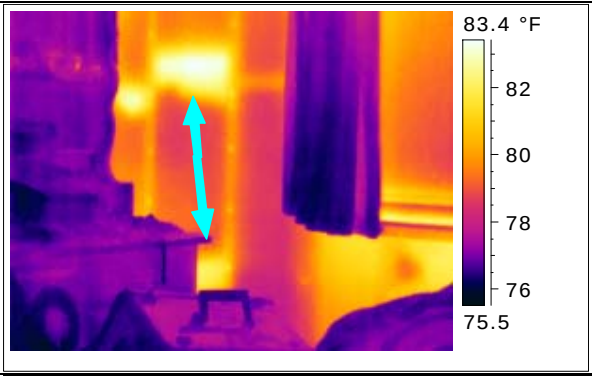
CORRECTED BY: _____ DATE ____-____-_____



Date 08-12-08 | **Image.File name IR_1103.jpg**

Location: Guest Bedroom 2
Where: Right wall (bottom)
Condition: Appears to be missing or loose insulation
Recommendation: We recommend further investigation of this area and repair as needed.

CORRECTED BY: _____ DATE ____-____-_____



Date 08-12-08 | **Image.File name IR_1109.jpg**

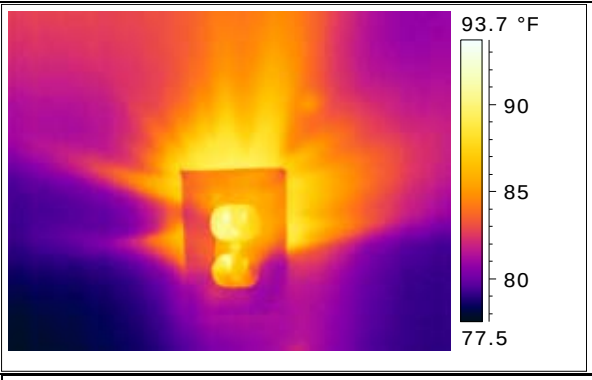
Location: Master Bedroom
Where: Right wall
Condition: Appears to be missing or loose insulation
Recommendation: We recommend further investigation of this area and repair as needed.

CORRECTED BY: _____ DATE ____-____-_____

Date 08-12-08 | **Image.File name IR_1119.jpg**

Location: Living Room
Where: Garage passage door
Condition: Air leakage noted during blower door test
Recommendation: We recommend proper weatherstripping at all exterior doors.

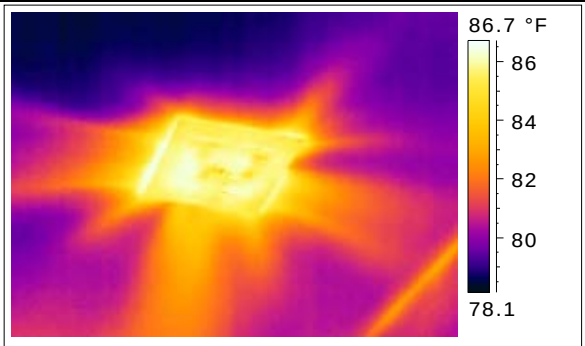
CORRECTED BY: _____ DATE ____-____-_____



Date 08-12-08	Image.File name IR_1131.jpg

Location: General image
Where: Common throughout home
Condition: Air infiltration at outlets & switches
Recommendation: We recommend a proper gasket or caulking as needed to help prevent air infiltration.

CORRECTED BY: _____ DATE ____-____-_____



Date 08-12-08	Image.File name IR_1137.jpg

Location: General Light fixtures
Where: Throughout residence at ceiling fixtures
Condition: Air infiltration
Recommendation: We recommend proper gaskets or caulking to help prevent air infiltration.

CORRECTED BY: _____ DATE ____-____-_____

Blower Door Test Report

Test

Direction	Depressurize
Standard	ASTM E779-03

Environmental Conditions

	After	Before
Barometric Pressure	101325 Pa	101325 Pa
Relative Humidity	25%	25%
Inside Temperature	76 °F	74 °F
Outside Temperature	90 °F	90 °F

Zone Dimensions

Net Floor Area	1700ft²
Zone Area	3069 ft²
Internal Volume	14450 ft³

Results

	Units	Depressurize
Air Flow Coefficient,CL	(cfm)	204.145
Air Permeability@ 50 Pa	(cfm/ft²)	0.75
Specific Leakage Rate @ 50 Pa	(cfm/ft²)	0.95
Air Changes/Hour @ 50 Pa	**(/hr)**	**9.588** (See Line Below)