

Sample Thermal Imaging Report



Company	Cotswold Efficient Energy Centre Down Barn Cherington	Tester: Cotswold Efficient Energy Centre Phone: 01285 841 466 E-Mail: buch-an-heating@tiscali.co.uk
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Device	testo 875-2	Serial No.: 1914140
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Customer	Sample Thermal Imaging Report
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Measuring Date: 26/11/2010

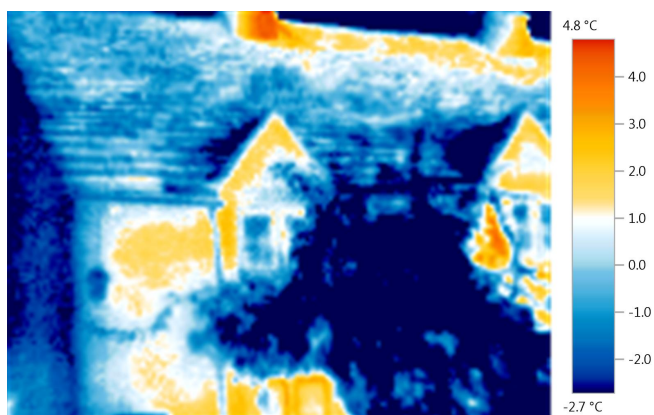
Task	This is a sample report for a thermal imaging survey done to identify areas of heat loss for a property in Gloucestershire
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Sample Thermal Imaging Report

File:
IV_00037.BMT

Date:
26/11/2010

Measuring Time:
15:00:19



Picture parameters:

Emissivity: 0.95

Refl. temp. [°C]: 20.0

Remarks:

This first image of the property has highlighted the following issues:

- Heat leaking out of the top of the roof.
- Heat leaking out of the top of the dormer windows.
- Heat leaking out of the windows.

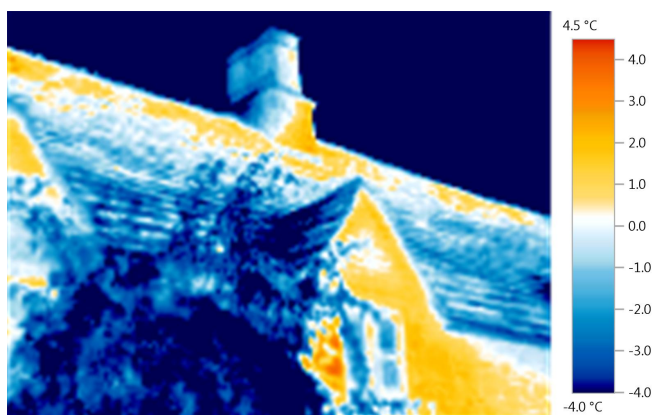
Once the issues have been identified then it is possible to address the areas of concern.

Sample Thermal Imaging Report

File:
IV_00052.BMT

Date:
26/11/2010

Measuring Time:
15:11:00



Picture parameters:

Emissivity: 0.95

Refl. temp. [°C]: 20.0

Remarks:

This thermal image shows where heat is leaking out of the roof where the property is poorly insulated.

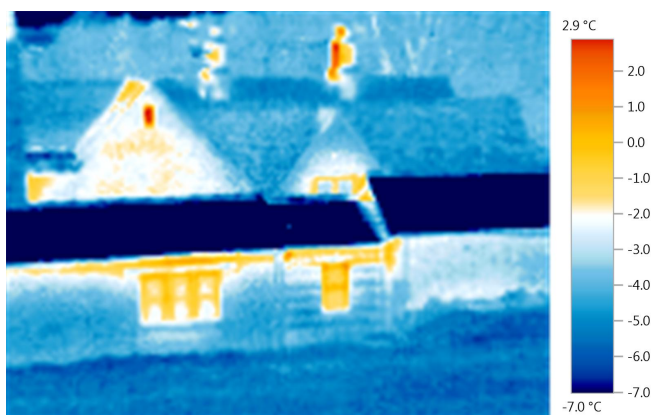
The photo associated with this image was taken later in the year after a heavy snowfall and it can clearly be seen where the escaping heat has melted the snow on the roof.

Sample Thermal Imaging Report

File:
IV_00051.BMT

Date:
26/11/2010

Measuring Time:
15:09:24



Picture parameters:

Emissivity: 0.95

Refl. temp. [°C]: 20.0

Remarks:

This thermal image has highlighted various issues with this property.

Heat can be seen to be leaking out from all the windows in this property. This indicates that the windows have been poorly fitted and have not been sealed properly. The part of the property at the front of the photo is also missing insulation as can be seen by the long horizontal strips or orange where heat is leaking out of the property underneath the eaves. Now the problems have been identified it is possible to rectify the issues.

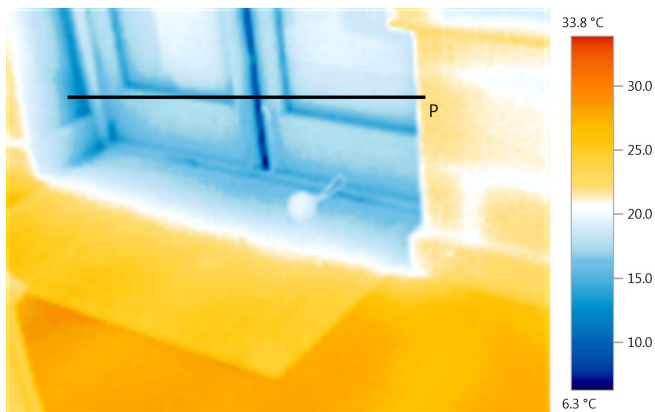
It is interesting to see that the chimney on the right of the property is showing as very hot as there is a wood burning stove lit in the property.

Sample Thermal Imaging Report

File:
IV_00055.BMT

Date:
26/11/2010

Measuring Time:
15:14:23

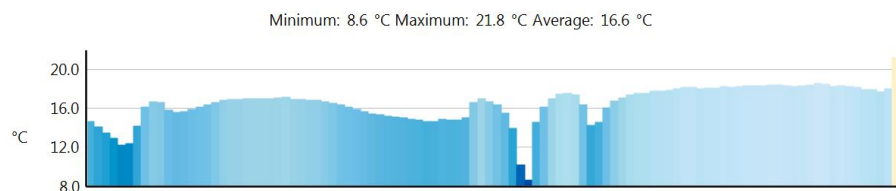


Picture parameters:

Emissivity: 0.95

Refl. temp. [°C]: 20.0

Profile line:



Remarks:

The floor in this thermal image is showing as orange as there is underfloor heating in this room.

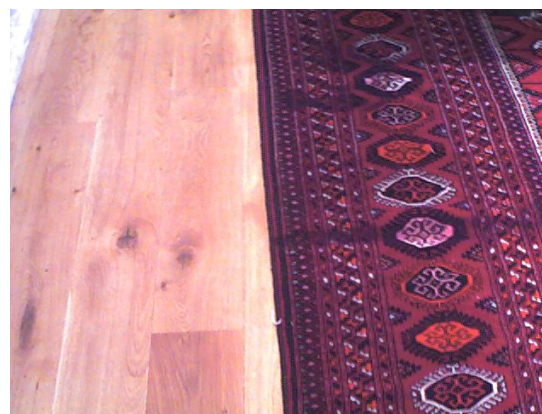
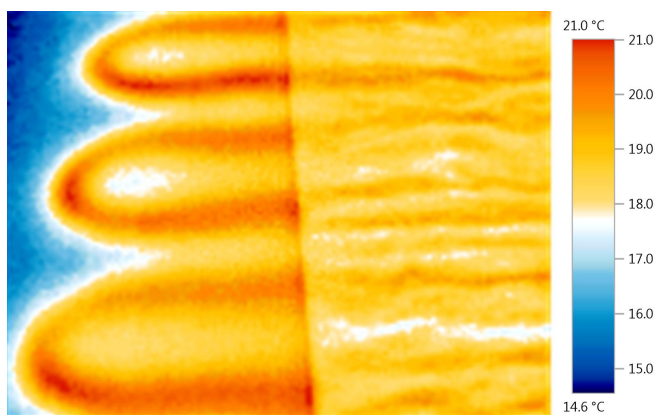
A temperature profile has been taken across these doors and is displayed on the graph. The temperature profile shows that there is a large amount of heat leaking out between the doors and also around the edges of the doors.

Sample Thermal Imaging Report

File:
IV_00097.BMT

Date:
26/11/2010

Measuring Time:
15:35:39



Picture parameters:

Emissivity: 0.95

Refl. temp. [°C]: 20.0

Remarks:

This is a thermal image of an area of floor with a 'suspended' underfloor heating.

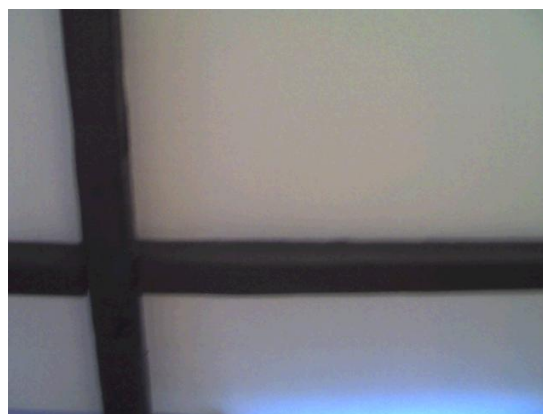
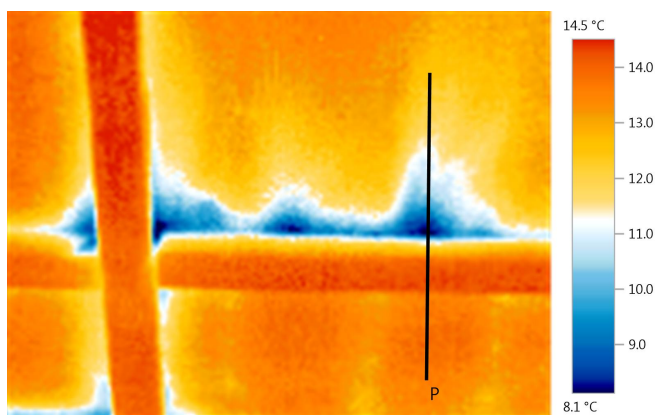
The thermal imaging camera allows us to see through the floor boards and if there was a blockage in the underfloor heating pipework then we would be able to identify where this is and rectify the problem.

Sample Thermal Imaging Report

File:
IV_00079.BMT

Date:
26/11/2010

Measuring Time:
15:29:09

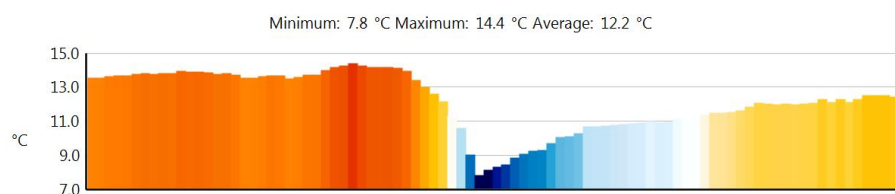


Picture parameters:

Emissivity: 0.95

Refl. temp. [°C]: 20.0

Profile line:



Remarks:

this thermal image has been taken of a beam in a sloping ceiling.

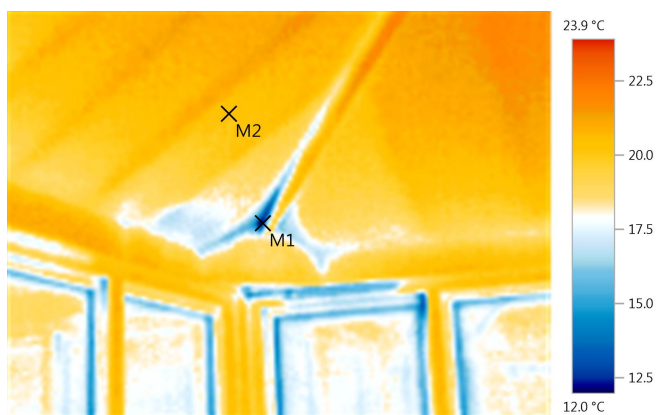
This blue areas of this image show that these areas of the ceiling poorly insulated as there is significant heat loss.

Sample Thermal Imaging Report

File:
IV_00108.BMT

Date:
26/11/2010

Measuring Time:
15:41:05



Picture parameters:

Emissivity: 0.95
Refl. temp. [°C]: 20.0

Picture markings:

Measurement Objects	Temp. [°C]	Emiss.	Refl. temp. [°C]	Remarks
Measure point 1	12.8	0.95	20.0	-
Measure point 2	20.2	0.95	20.0	-

Remarks:

This thermal image has identified an area of the ceiling where the property is poorly insulated.

There is a significant heat loss in the area marked M1 (compared with M2). The reporting software allows us to measure the temperature at any of the 19,500 points of the image, and as the thermal imaging camera saves the raw data for the image the temperature at any point can be interrogated once we have left the site.

Review:

For a thermal imaging survey to be most effective it should be cold outside and warm inside the property. The images in this report were taken with an ambient air temperature of around 1 degree centigrade, and the heating was turned up in the property to ensure good results.

It should be noted that when images are taken from the outside of the property then areas where heat is leaking out show as orange and red, while well insulated areas show as blue. The opposite is true for images taken from inside the property where blue areas show where heat is leaking out of the property. The thermal imaging camera incorporates a digital still image camera to allow the various thermal images to be easily identified.

Without a thermal imaging survey it would not have been possible to identify the issues exposed in this report with a large amount of invasive work such as removing ceilings to identify where insulation is missing or using smoke bombs to show where windows and doors are leaking air. This also means that only the affected areas of ceilings need to be removed to rectify these issues dramatically cutting down the expense and disruption of any remedial works.

Most homeowners are unaware of how much heat they are loosing from their property and from where. By identifying problem areas and addressing them it is possible to dramatically reduce your fuel bills and cut down on your Carbon emissions.

For more information on Thermal Imaging please contact our offices on 01285 841 466.



Sample Thermal Imaging Report

23/12/2010 , _____

Cotswold Efficient Energy Centre