

Thermographic Water Leak Investigation at

Residential Property

January 2011

By

Pixel Thermographics Surveyor



Pixel Thermographics Ltd

Sunrise House
Hulley Road
Macclesfield
Cheshire
SK10 2LP

Tel: 08456 042 703

Web: www.pixelthermographics.co.uk

Email: info@pixelthermographics.co.uk

Report Details

Client

Address

Residential Property

Contact Person

Contact Person Address

Phone Number

Email Address

Thermographer

Pixel Thermographics Surveyor

Thermographer Certification

ITC Level 2 Certified Thermographer

Survey Equipment

Flir Thermacam SC640 Infrared Camera
Reporter 8.3 Software

Inspection Date

January 2011

Start Time

Finish Time

Environmental Details

External Temperature

6°C

Internal Temperature

15°C

Humidity

92%RH

This Thermographic water leak investigation was carried out on behalf of **confidential** at a Residential Property.

Information

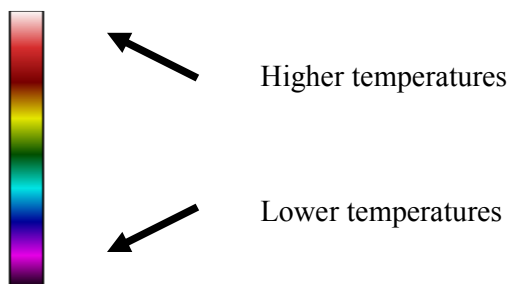
A FLIR Thermacam SC640 was used to capture the thermal data which is recorded within the report.

The report has been compiled to provide the client evidence and clarity of the location of any sub floor water leaks found within the property.

This report has been compiled in such a way that only the relevant images showing anomalies have been included into its pages. Unless otherwise stated, all areas inspected were free from thermal anomalies. The pages in the report have been designed as single page entries each of which carries its own information.

The job of the Thermographer is to interpret the thermal patterns shown in the images and comment on these for the client.

The thermal images included within the report are shown in a colour palette called 'rainbow' which is good for showing small temperature changes associated with water ingress. You will see by the scale on the right hand side of each image that cold areas are shown to be dark whilst warmer areas are shown to be red or white.



The survey was conducted at a time to allow thermal differences to develop which allow the thermographer to identify areas of water ingress or damp. The thermographer may have changed internal environmental conditions to also help highlight areas of damp or moisture ingress.

.....
Surveyor Signature
ITC Level 2 Certified Thermographic Engineer

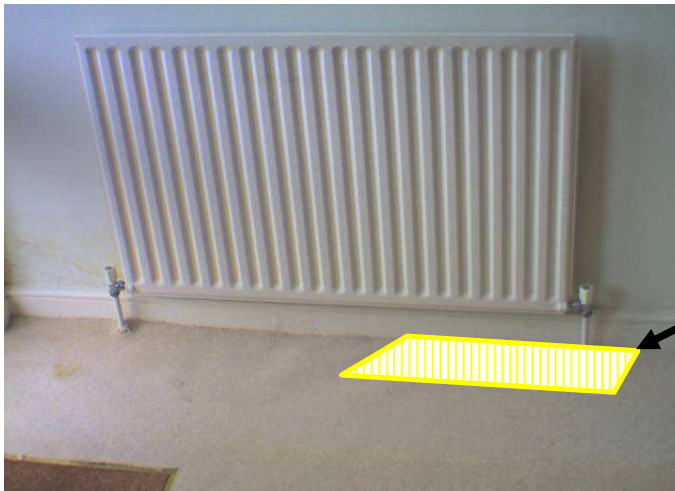
Disclaimer

Any recommendations given in this report are intended as a guide only. By issuing this report neither Pixel Thermographics Ltd or any of its employees make any warranty, expressed or implied, concerning the contents of this report. Pixel Thermographics Ltd cannot accept responsibility for inappropriate actions taken as a result of this report.

Executive Summary

The survey has highlighted an area of floor within the entrance hall of the property with a thermal anomaly which is indicative of a sub-floor water leak from the central heating system.

The digital image below shows the radiator and an area of floor has been highlighted which should be excavated to expose the location of the suspected leak site.



*Area of floor to be excavated to
expose the leak site.*

No other thermal anomalies were identified during the survey.

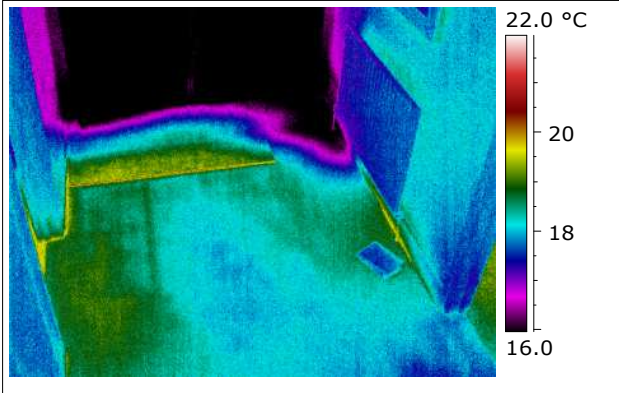
The following pages of this report contain thermal and digital images captured during the course of the survey which demonstrate the location of the anomaly.

Images have also been included for information which shows the locations and routes of the under-floor heating pipes within the floor.

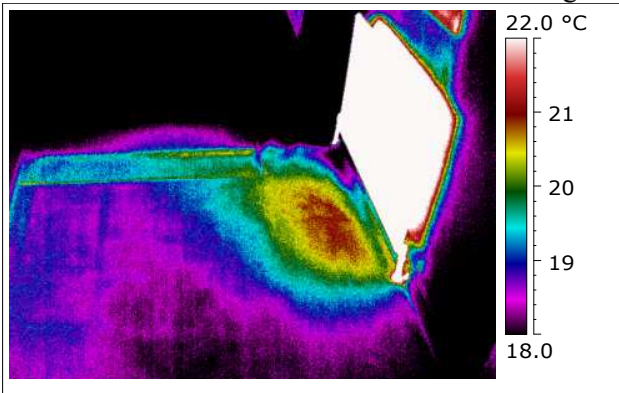
Index of Images

Area:	Page Number
Entrance Hall - Before Heating Switch On	6
Entrance Hall - 45 Minutes After Heating Switch On	6
Entrance Hall - 1 Hour After Heating Switch On	6
Entrance Hall - Radiator Leak	7
Entrance Hall - Location of Pipes	8
Dining Area - Location of Pipes	9
Utility Room - Location of Pipes	10
Utility Room - Location of Pipes	11

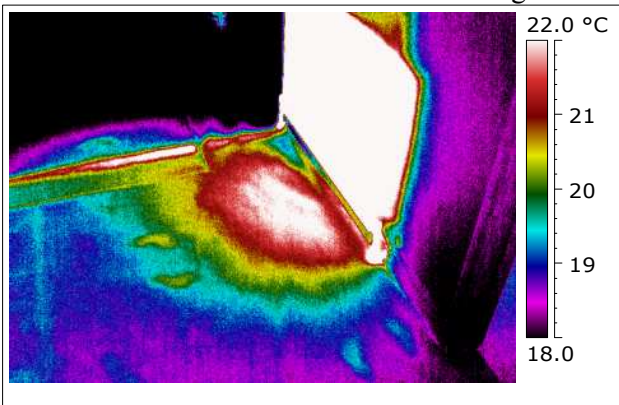
Area: Entrance Hall - Before Heating Switch On



Area: Entrance Hall - 45 Minutes After Heating Switch On



Area: Entrance Hall - 1 Hour After Heating Switch On

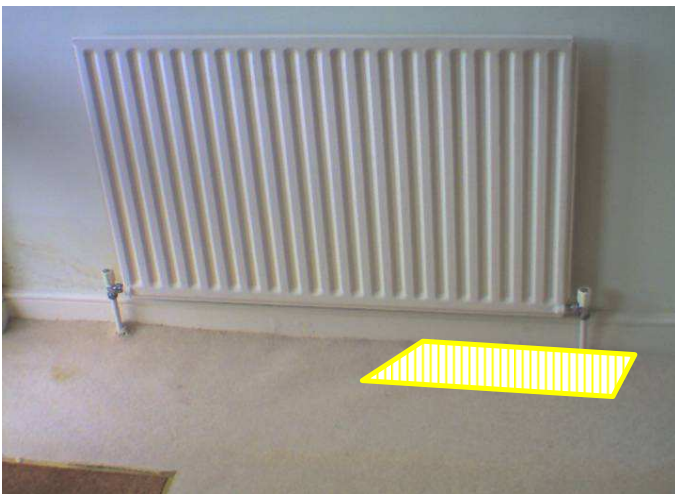
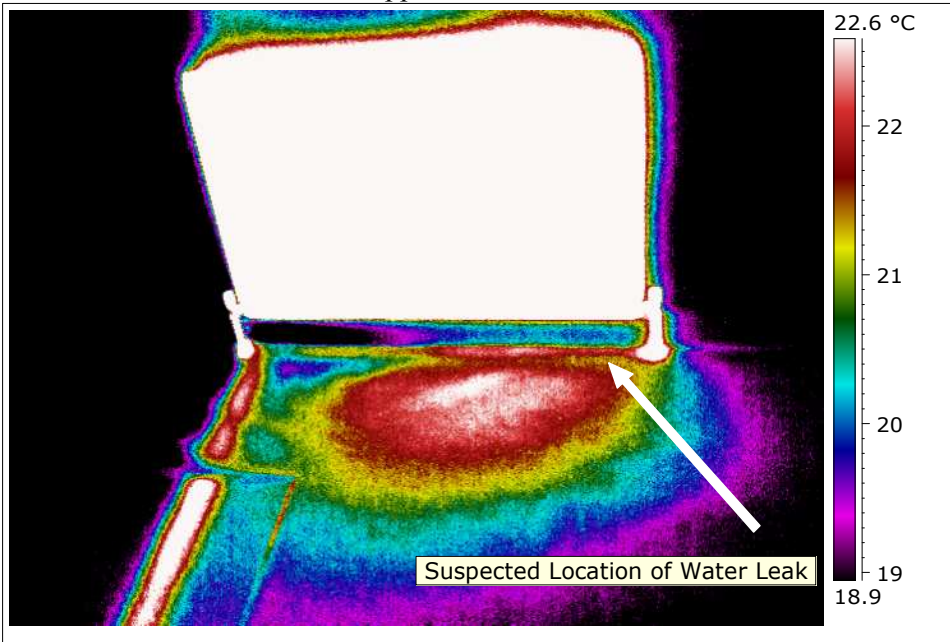


Comment:

The sequence of images clearly shows the growth of an irregular thermal anomaly in front of the radiator over a period of time indicating the presence of a sub-floor water leak from the heating system.

See next page for closer analysis and location of suspected leak.

Error! No document variable supplied.



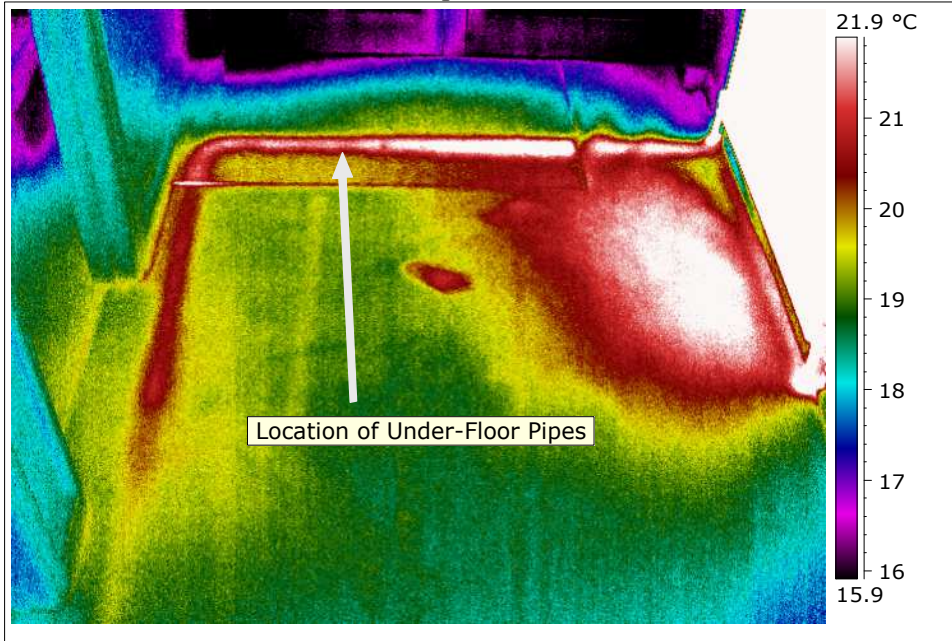
Comment:

The thermal image highlights an area of floor showing with a thermal anomaly which is indicative of the presence of a water leak.

The shape and growth of this area during the survey indicates that the location of the actual water leak is from the feed pipe to the radiator (right hand side).

It is recommended that the area of floor highlighted in the above image is excavated to expose the pipework to allow a repair to be carried out.

Area: Entrance Hall - Location of Pipes

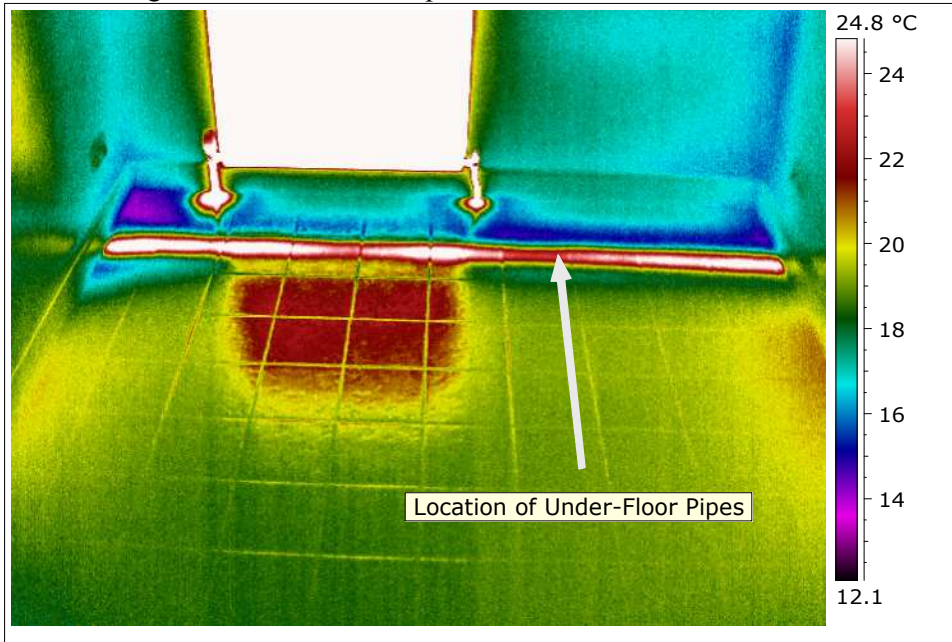


Comment:

Thermal image provided for information to show the location of the under-floor heating pipes which can be seen as the warm (white / red) line.

Note: Leak site is also visible in this image.

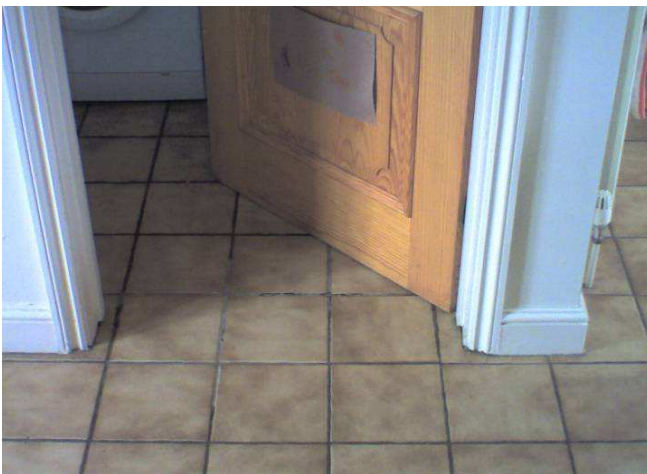
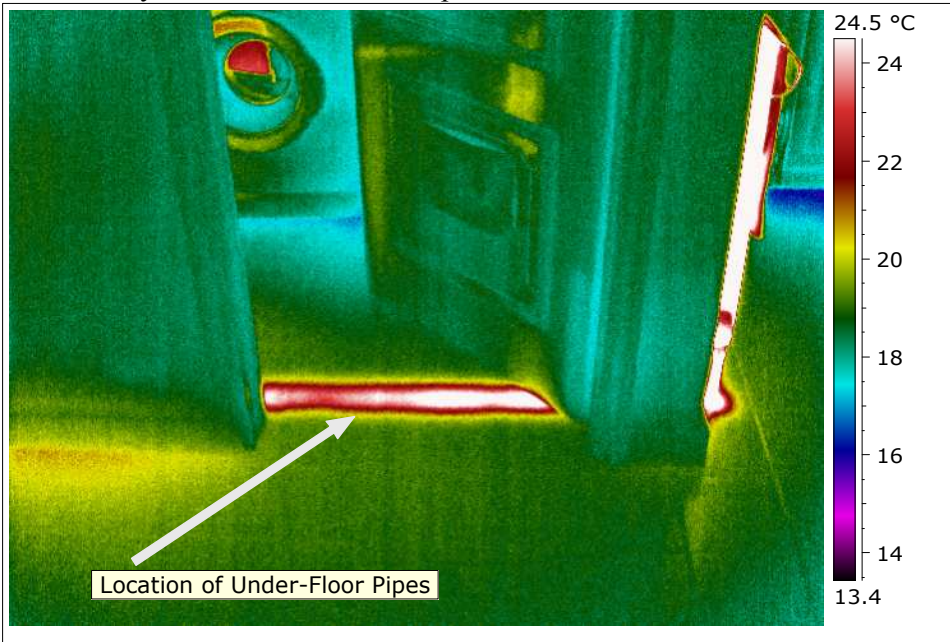
Area: Dining Area - Location of Pipes



Comment:

Thermal image provided for information to show the location of the under-floor heating pipes which can be seen as the warm (white) line.

Area: Utility Room - Location of Pipes



Comment:

Thermal image provided for information to show the location of the under-floor heating pipes which can be seen as the warm (white) line.

Area: Utility Room - Location of Pipes



Comment:

Thermal image provided for information to show the location of the under-floor heating pipes which can be seen as the warm (white) line.

Digital images showing water damage to base of walls where moisture appears to have been drawn up via a capillary action from the damp floor



Fig.1 Water Damage at Base of Wall in Hall



Fig.2 Water Damage at Base of Wall in Hall



Fig.3 Water Damage at Base of Wall in Hall



Fig.4 Water Damage at Base of Wall in Dining Room