Thermal Imaging Report

Inspection Ref. TI BUILDING DEMO (BUILDING)

TI LTD / TI BUILD DEMO

17th Feb 2014

Client	TI LTD
Site	TI BUILD DEMO Suite 118, Trident Court 1 Oakcroft Road Chessington KT9 1BD
Contacts	Demo Demo demo@demo.co.uk

Inspection Data	
Purpose of Survey	INTEGRITY ASSESSMENT OF BUILDING ENVELOPE AND ENERGY LOSS INVESTIGATION
Reason for Survey	BREEAM ASSESSMENT
Applicable Formulas	YES - THERMAL INDEXING
Inspection Commencing	07:00
Weather	DRY
Wind Speed	<5MPH M/S
Mean Ambient Temperature Internal °C	17.0 °C
Mean Ambient Temperature External °C	6.0 °C
Temperature Delta between Internal and External °C	11.0 °C
Thermographer, Certification and ID	RICHARD WALLACE - LEVEL 2 THERMOGRAPHY - 49595
Camera	FLIR THERMACAM P640
Software	TICOR™ ANDROID DATA CAPTURE AND REPORTING APPLICATION LINKED TO WEBCOR™ ONLINE CAMPAIGN MANAGER - BUILDING MODULE
Company Accreditation	ISO9001-2008 - GB2003936
Building Reference Documents	IP1/06, BRE443, BSRIA BG39/2100
Survey BS Accordance	BS EN 13187:1999 THERMAL PERFORMANCE OF BUILDINGS

Summary	
Problems Associated With This Inspection	1) PATHS OF AIR LEAKAGE AROUND BUILDING FENESTRATIONS 2) INSULATION INCONTINUITY FOUND WITHIN THE BUILDING ENVELOPE ELEVATIONS 3) THERMAL/COLD BRIDGING ACROSS AREAS OF THE BUILDING ENVELOPE
Remedial Recommendations	2) ADD OR REFIT EXISITNG INSULATION IN THE EFFECTED AREAS 3) UTILISE INSULATION AROUND THE THERMAL/COLD BRIDGE WITH A HIGH R-RATING REDUCING THE THERMAL CONDUCTIVITY OF THE AFFECTED AREA 1) IMPROVE SEALS AROUND DOORS AND WINDOWS TO MINIMISE AIR LEAKAGE
Suspected Fault Found - Incorrect use of central heating	NONE
Suspected Fault Found - Insulation Incontinuity	EITHER ADD ADDITIONAL INSULATION TO THE AREA IF FOUND TO BE MISSING. OLD OR DAMAGED INSULATION MAY REQUIRE REPAIR OR REPLACEMENT DEPENDING ON ECONOMIC ASSESSMENT SHOWING THE MOST COST EFFICIENT AND EFFECTIVE FORM OF ACTION
Suspected Fault Found - Energy loss through windows/doors	NONE
Suspected Fault Found - Spectral found in glazing	NONE
Suspected Fault Found - Paths of air leakage	IF THE BUILDING HAS PASSED AN AIR TEST THEN PATHS OF AIR LEAKAGE ARE FOR INFORMATION PURPOSES ONLY AND CAN BE USED FOR REFERENCE AT A LATER DATE IF REQUIRED. SEALS SHOULD BE ASSESSED FOR THEIR INTEGRITY AND THEN EITHER REPAIRED, REPLACED OR ADDED IF THEY ARE FOUND TO BE NOT PRESENT. ANY DAMAGE FOUND SHOULD BE REPAIRED ACCORDINGLY OR PARTS REPLACED IF FOUND TO BE DEFECTIVE OR BEYOND REPAIR
Suspected Fault Found - Thermal/cold bridging unrelated to window/door frames	NONE
Suspected Fault Found - Thermal/cold bridging found at window/door frames	IF THE WINDOWS/DOOR FRAMES ARE WITHIN SPECIFICATION THEN THE MANUFACTURERS SPECIFICATION SHOULD BE REFERRED TO FOR U-VALUES AND THE FAULT IS DEEMED IRRELEVANT AND FOR INFORMATION PURPOSES ONLY. IF NOT WITHIN SPECIFICATION, ASSESSMENT MUST BE CARRIED OUT TO DETERMINE IF THE WINDOWS/DOORS CAN BE ADJUSTED TO REDUCE ENERGY LOSSES VIA THE THERMAL BRIDGE OR OF A COMPLETE REPLACEMENT IS REQUIRED
Suspected Fault Found - Damp	NONE
Suspected Fault Found - Delamination	NONE
Other Problems	NONE

Introduction to your Thermographic Building Inspection

Welcome to your thermographic building inspection which is designed to assist with problem identification and diagnostics asscociated with building energy performance and other commonly found building defects. This inspection closely follows protocols and surpasses standards required to satisfy the demands of the most stringent thermographic guidelines.

The specification utilised includes high resolution thermal imaging cameras, advanced level II thermographic certifications, bespoke Android based tablet software TICOR™ for instantaneous report generation and delivery through our online portal WEBCOR™.

This is a guide which should help you to fully understand how the inspection was performed and how the results were achieved

- The framework to this inspection can either be generated onsite during the inspection, building the list during the survey or a list exported to MS Excel can be imported into the Android tablet to provide comprehensive information such as item locations, tag numbers, work orders etc.
- Images are captured of all areas within the specified remit and a record is kept of temperature data to enable a trending or comparitive programme to begin. Subsequent inspections will see the addition of a new image for each inspection so that temperatures can be monitored.
- Anomalous items have been recorded as problems categorised as one of two types of problem:
    - Thermal – This covers temperature related anomalies
    - Visual – This covers all visual findings only
- All item trending images are taken in the same inspection period so that temperatures are relatively stable for the inspection.
- A complete inventory will be built of the equipment giving Test Status at the time of the inspection allowing transparency to the inspection and what occurred with each piece of equipment. These Test Status include:

TBT	To Be Tested	These appear in bold on the thermographers tablet to identify which items are still to be tested
TESTED	Tested	Marked as Tested once images and faults have been documented
NTLO	Not Tested Locked Out	Selected if the item could not be opened safely
NTNL	Not Tested No Load	Selected if the item was offline at the time of inspection and could not be started
NTNA	Not Tested Not Available	Selected if the item is no longer available
NTNS	Not Tested Not Specified	Selected if an item is found to be unspecified
NTUR	Not Tested Under Repair	Selected if an item is currently under a repair procedure
NSFI	Not Scheduled For Inspection	Selected if an item is not due or needed to be tested
NTTC	Not Tested Time Constraint	Selected if the inspection has not been allocated enough time or access problems have cause it to overrun.

- Emissivity is the value in which an object emits it's infra-red radiation and is also directly proportional to it's reflectivity. For example if an item had 0.9 emissivity then it's reflectivity would be 0.1. This inspection uses an emissivity set between 0.8 and 0.96 because this is found to be suitable when assessing the temperatures of most building materials. Emissivity is only changed were absolutely necessary. An example of this would be for brickwork which has a lower emisiivity value known to be 0.83.
- Anomalous items are assessed using specific equations.

1. External inspection: With the use thermal indexing formula which relates internal and external surface temperature together with a critical temperature factor with a known value which can be subject to change based on changeable environmental conditions.

This adjustable value takes into account the variation in external boundry resistance layer at the building envelope. The value arrived at is known as the External Threshold Temperature or TCse. Any temperature found above this level will be shown by an isotherm included in the fault thermogram.

2. Internal Inspection: With the use thermal indexing formula which relates internal and external ambient temperature together with a critical temperature factor with a known constant of 0.75. This rises to 0.9 for environments which are particularly humid such as swimming pools. The value arrived at is known as the Internal Threshold Temperature or TCsi. Any temperature found below this level will be shown by an isotherm included in the fault thermogram.

Importnat Note: These formulae are not solely relied upon. They are used as guidelines to assist in fault finding. Image interpretation is also used to assess other thermal anomalies discovered during the survey.

- Using the above formula values it is possible to use a fault rating system to grade the severity of the fault. The following fault ratings and colour coding have been used:

Fault Ratings	Minor	Important	Serious	Critical
Temperature found either above TCse or below TCsi	0-2	2-4	4-8	8+

- Trending images are also supplied of all areas of the building envelope or of the required areas and these are unencumbered from the isotherms which can cover areas and reduce the ability for the reader to identify where the temperature anomalies lie.
- Scales are set to a single level for Internal and a single level for external images which allows for a comparison of the thermograms between areas relating to this inspection only. For example, if a thermogram is showing a

Formulas:

TCsi - fCRsi(Ti-Te)+Te
TCse - fCRsi(Tse-Tsi)+Tsi

TCsi - Internal Threshold Temperature

TCse - External Threshold Temperature

fCRsi - Critical Temperature Factor

Ti - Average Internal Air Temperature - Mean temperature taken from multiple surface temperature readings

Te - Average External Air Temperature - Mean temperature taken from multiple surface temperature readings

Tsi - Average Internal Surface Temperature - Mean temperature taken from multiple surface temperature readings

Tse - Average External Surface Temperature - Mean temperature taken from multiple surface temperature readings

Example:

fCRsi - 0.75 (constant)

fCRse - 0.93

Ti - 21

Te - 6

Tsi - 20

Tse - 5

0.75(21-6)+6=17.25

0.93(6-21)+21=7.05

In this example the thermal indexing formula has calculated that the internal threshold temperature is 17.25C and the external threshold temperature is 7.05C. This means that internal measurements should not fall beneath 17.25C and external measurements should not exceed 7.05C.

Those areas that breach these thresholds will be marked with a coloured isotherm. This is a colour not relevant to the InfraRed colour palette utilised for the thermogram, usually depicted by the colour green or grey.

For further information on any of the above information please contact our offices.

Summary

The Infrared Inspection was performed by TI Thermal Imaging, by a certified infrared Thermographer. All of the items inspected are listed in this TICOR report. Any anomalies are listed in order of priority based on the component's temperature rise, as measured from a reference component of equal type and load at the time of the inspection. TI Thermal Imaging assumes no liability directly or indirectly as a result of this inspection.

Priority	Current Inspection	Prior Inspection	Percent of Change
Thermal			
Not Specified	10 = 100%	0	N/A
Minor	0 = 0%	0	N/A
Important	0 = 0%	0	N/A
Serious	0 = 0%	0	N/A
Critical	0 = 0%	0	N/A
Visual			
Not Specified	0	0	N/A
Minor	0	0	N/A
Important	0	0	N/A
Serious	0	0	N/A
Critical	0	0	N/A
Ultrasonic			
Not Specified	0	0	N/A
Minor	0	0	N/A
Important	0	0	N/A
Serious	0	0	N/A
Critical	0	0	N/A

I hereby certify the project was inspected by myself or under my direction and that the enclosed data is the result of this inspection.

TICOR
Wallace, Rich

Inventory

Equipment Description	Item ID	Area Specific	Work Order	Problem #s	Status
FOUR STOREY REFURB					
EAST		NONE	N/A	9	T
WEST		NONE	N/A	10	T
MAIN BUILDING					
NORTH					
BLOCK A		NONE	N/A		T
BLOCK B		NONE	N/A		T
BLOCK C		NONE	N/A		T
SOUTH					
BLOCK A		NONE	N/A	4	T
BLOCK B		NONE	N/A	3	T
BLOCK C		NONE	N/A	2	T
BLOCK C STAIRWELL		NONE	N/A	1	T
WEST					
WEST END		NONE	N/A	5	T
BLOCK C STAIRWELL		NONE	N/A	6	T
EAST		NONE	N/A		T
NORTH EAST CORNER		NONE	N/A		T
THREE STOREY REFURB					
EAST		NONE	N/A	8	T
WEST		NONE	N/A	7	T

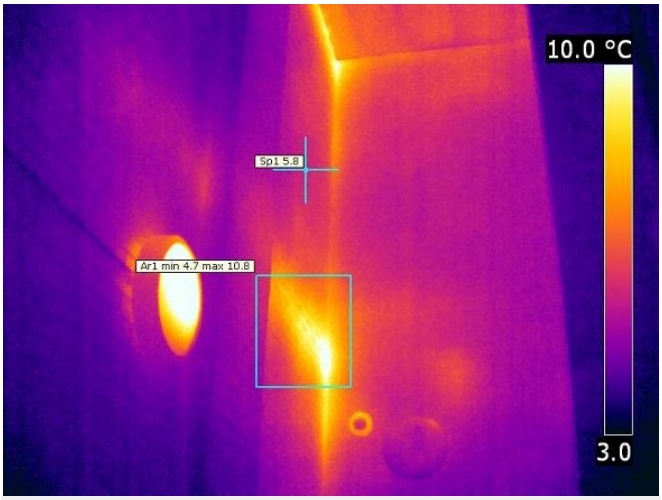
Problems

Problem #	Equipment	Item ID	Area Specific	Root Cause	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly	Type	Fault Rating	Status
1	MAIN BUILDING > SOUTH - BLOCK C STAIRWELL		NONE	SUSPECTED THERMAL BRIDGE FROM INTERNAL DETAIL	°C	7.0 °C	THERMAL	NO ISSUE	OPEN
2	MAIN BUILDING > SOUTH - BLOCK C		NONE	SUSPECTED AIR LEAKAGE AND INSULATION INCONTINUITY	°C	6.0 °C	THERMAL	NO ISSUE	OPEN
3	MAIN BUILDING > SOUTH - BLOCK B Component: AT SOFFIT AND WINDOWS		NONE	SUSPECTED AIR LEAKAGE AND INSULATION INCONTINUITY	°C	6.0 °C	THERMAL	NO ISSUE	OPEN
4	MAIN BUILDING > SOUTH - BLOCK A		NONE	SUSPECTED AIR LEAKAGE	°C	6.0 °C	THERMAL	NO ISSUE	OPEN
5	MAIN BUILDING > WEST - WEST END		NONE	SUSPECTED INSULATION INCONTINUITY	°C	5.0 °C	THERMAL	NO ISSUE	OPEN
6	MAIN BUILDING > WEST - BLOCK C STAIRWELL		NONE	SUSPECTED THERMAL BRIDGE FROM INTERNAL DETAIL	°C	11.0 °C	THERMAL	NO ISSUE	OPEN
7	THREE STOREY REFURB - WEST		NONE	SUSPECTED THERMAL BRIDGE FROM INTERNAL DETAIL	°C	8.0 °C	THERMAL	NO ISSUE	OPEN
8	THREE STOREY REFURB - EAST		NONE	SUSPECTED AIR LEAKAGE, INSULATION INCONTINUITY AND THERMAL BRIDGE	°C	7.0 °C	THERMAL	NO ISSUE	OPEN
9	FOUR STOREY		NONE	SUSPECTED AIR LEAKAGE AND	°C	5.3 °C	THERMAL	NO ISSUE	OPEN

	REFURB - EAST			INSULATION INCONTINUITY					
10	FOUR STOREY REFURB - WEST		NONE	ENERGY LOSS THROUGH WINDOWS	°C	8 °C	THERMAL	NO ISSUE	OPEN

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	1	THERMAL	NO ISSUE	OPEN



File: IR_44992A.jpg **Photo Date:** 17/02/2014

File: DC_44993.jpg **Photo Date:** 17/02/2014

Location/Equipment Information	
Location	MAIN BUILDING > SOUTH
Component	BLOCK C STAIRWELL
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

Problem	
Anomaly	ELEVATED AR1
Root Cause	SUSPECTED THERMAL BRIDGE FROM INTERNAL DETAIL
Remedial	CHECK DETAIL IS TO PRESCRIBED STANDARD, IF REQUIRED ADD APPROPRIATE INSULATION TO REDUCE THERMAL/COLD BRIDGE

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.3 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	7.0 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	2	THERMAL	NO ISSUE	OPEN

File: IR_44996A.jpg **Photo Date:** 17/02/2014

File: DC_44997.jpg **Photo Date:** 17/02/2014

Location/Equipment Information	
Location	MAIN BUILDING > SOUTH
Component	BLOCK C
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

Problem	
Anomaly	ELEVATED AR1
Root Cause	SUSPECTED AIR LEAKAGE AND INSULATION INCONTINUITY
Remedial	CHECK SEALS AND REPAIR OR REPLACE WHERE NECESSARY

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	6.0 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	3	THERMAL	NO ISSUE	OPEN

File: IR_44998A.jpg **Photo Date:** 17/02/2014

File: DC_44999.jpg **Photo Date:** 17/02/2014

Location/Equipment Information	
Location	MAIN BUILDING > SOUTH
Component	BLOCK B
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	AT SOFFIT AND WINDOWS

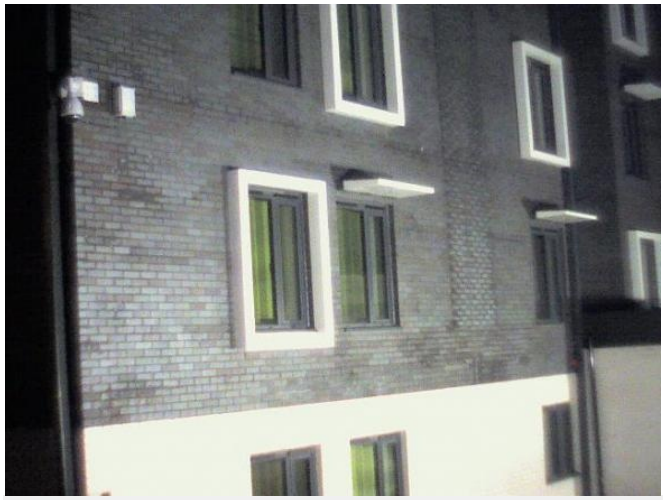
Problem	
Anomaly	ELEVATED AR1 AND AR2
Root Cause	SUSPECTED AIR LEAKAGE AND INSULATION INCONTINUITY
Remedial	CHECK SEALS AND REPAIR OR REPLACE WHERE NECESSARY

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	6.0 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	4	THERMAL	NO ISSUE	OPEN

File: IR_45002A.jpg **Photo Date:** 17/02/2014



File: DC_45003.jpg **Photo Date:** 17/02/2014

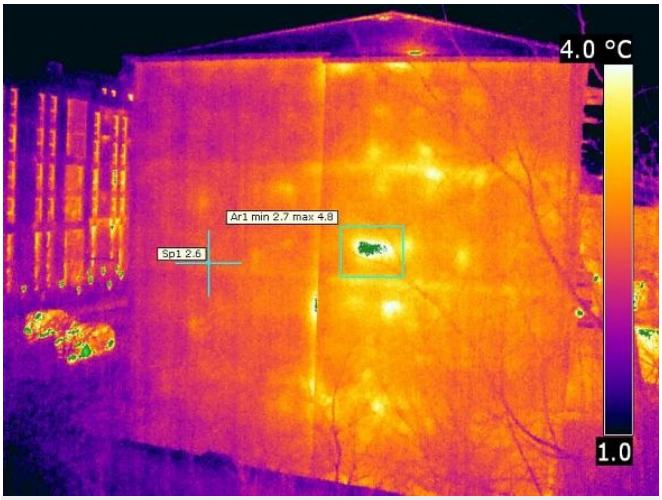
Location/Equipment Information	
Location	MAIN BUILDING > SOUTH
Component	BLOCK A
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

Problem	
Anomaly	ELEVATED AR1
Root Cause	SUSPECTED AIR LEAKAGE
Remedial	CHECK SEALS AND REPAIR OR REPLACE WHERE NECESSARY

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	6.0 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	5	THERMAL	NO ISSUE	OPEN



File: IR_45018A.jpg **Photo Date:** 17/02/2014

File: DC_45019.jpg **Photo Date:** 17/02/2014

Location/Equipment Information	
Location	MAIN BUILDING > WEST
Component	WEST END
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

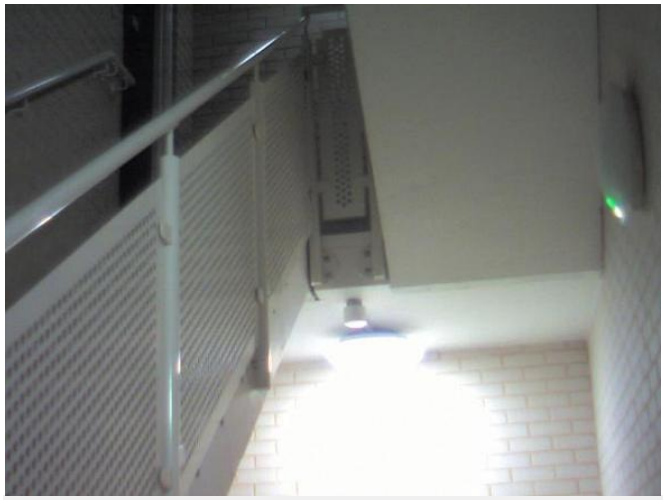
Problem	
Anomaly	ELEVATED AR1
Root Cause	SUSPECTED INSULATION INCONTINUITY
Remedial	REPAIR, ADD OR REPLACE INSULATION AS REQUIRED FOLLOWING INVESTIGATION

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	5.0 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	6	THERMAL	NO ISSUE	OPEN

File: IR_44994A.jpg **Photo Date:** 17/02/2014



File: DC_44995.jpg **Photo Date:** 17/02/2014

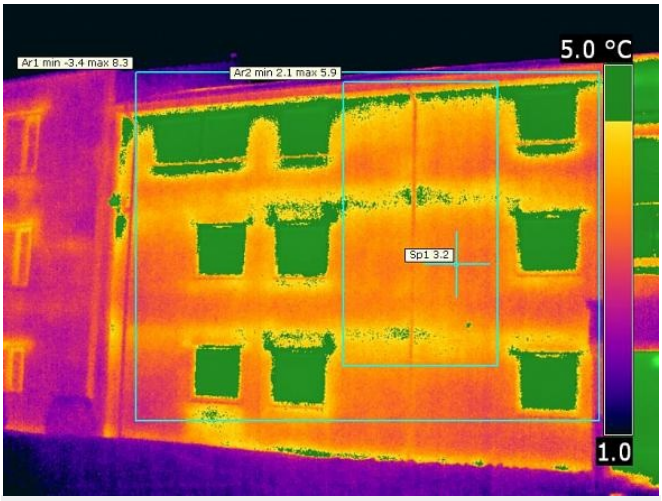
Location/Equipment Information	
Location	MAIN BUILDING > WEST
Component	BLOCK C STAIRWELL
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

Problem	
Anomaly	ELEVATED AR1
Root Cause	SUSPECTED THERMAL BRIDGE FROM INTERNAL DETAIL
Remedial	REPAIR, ADD OR REPLACE INSULATION AS REQUIRED FOLLOWING INVESTIGATION

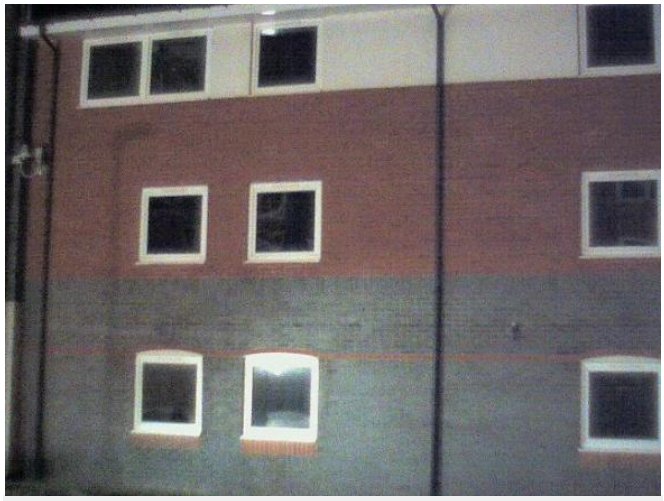
Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	11.0 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	7	THERMAL	NO ISSUE	OPEN



File: IR_44986a.jpg **Photo Date:** 17/02/2014



File: DC_44987.jpg **Photo Date:** 17/02/2014

Location/Equipment Information	
Location	THREE STOREY REFURB
Component	WEST
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

Problem	
Anomaly	ELEVATED AR1 AND AR2
Root Cause	SUSPECTED THERMAL BRIDGE FROM INTERNAL DETAIL
Remedial	CHECK SEALS AND REPAIR OR REPLACE WHERE NECESSARY

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.6 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.0 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.0 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	8.0 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	8	THERMAL	NO ISSUE	OPEN

File: IR_45006A.jpg **Photo Date:** 17/02/2014

File: DC_45007.jpg **Photo Date:** 17/02/2014

Location/Equipment Information	
Location	THREE STOREY REFURB
Component	EAST
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

Problem	
Anomaly	ELEVATED AR1 AND AR2
Root Cause	SUSPECTED AIR LEAKAGE, INSULATION INCONTINUITY AND THERMAL BRIDGE
Remedial	REPAIR, ADD OR REPLACE INSULATION AS REQUIRED FOLLOWING INVESTIGATION

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	7.0 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	9	THERMAL	NO ISSUE	OPEN

File: IR_44988a.jpg **Photo Date:** 17/02/2014

File: DC_44989.jpg **Photo Date:** 17/02/2014

Location/Equipment Information	
Location	FOUR STOREY REFURB
Component	EAST
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

Problem	
Anomaly	DECREASED AR1 AND AR2
Root Cause	SUSPECTED AIR LEAKAGE AND INSULATION INCONTINUITY
Remedial	CHECK SEALS AND REPAIR OR REPLACE WHERE NECESSARY

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	15.9 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	5.3 °C

Fault Pages

Client	Asset	Report Date	Problem #	Problem Type	Fault Rating	Problem Status
TI LTD	TI BUILD DEMO	18/06/2015	10	THERMAL	NO ISSUE	OPEN

File: IR_45004A.jpg **Photo Date:** 17/02/2014

File: DC_45005.jpg **Photo Date:** 17/02/2014

Location/Equipment Information	
Location	FOUR STOREY REFURB
Component	WEST
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A
Fault Item/Description	

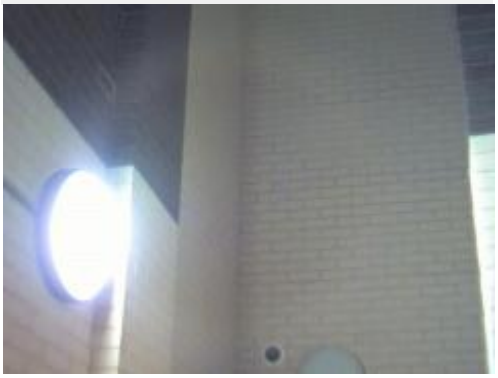
Problem	
Anomaly	ELEVATED AR1
Root Cause	ENERGY LOSS THROUGH WINDOWS
Remedial	CONSIDER UPGRADING TO MORE ENERGY EFFICIENT GLAZING

Trending Data	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	15.90 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.47 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.3 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	8 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	1
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_44993.jpg



MAIN BUILDING > SOUTH - BLOCK C STAIRWELL

File: IR_44992.jpg

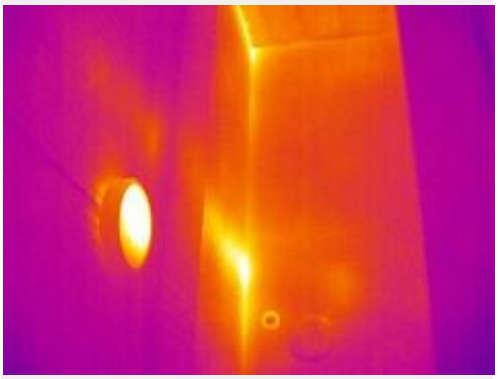


Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.3 °C	°C	7.0 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	2
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_44997.jpg

MAIN BUILDING > SOUTH - BLOCK C

File: IR_44996.jpg

Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.4 °C	°C	6.0 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	3
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_44999.jpg

MAIN BUILDING > SOUTH - BLOCK B

File: IR_44998.jpg

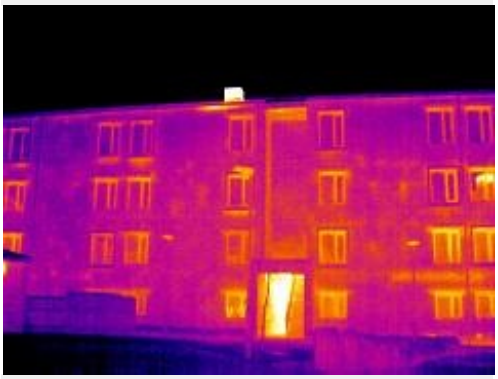


Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.4 °C	°C	6.0 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	4
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45003.jpg

MAIN BUILDING > SOUTH - BLOCK A

File: IR_45002.jpg

Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.4 °C	°C	6.0 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	5
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45017.jpg

MAIN BUILDING > NORTH - BLOCK A

File: IR_45016.jpg

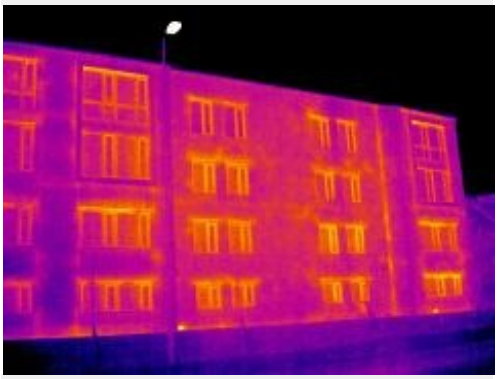


Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	°C	°C	°C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	6
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45015.jpg

MAIN BUILDING > NORTH - BLOCK B

File: IR_45014.jpg

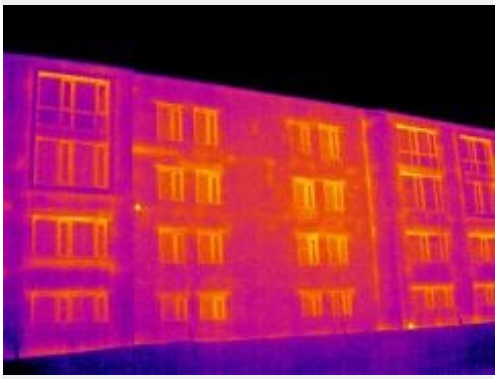


Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	°C	°C	°C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	7
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45013.jpg

MAIN BUILDING > NORTH - BLOCK C

File: IR_45012.jpg

Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	°C	°C	°C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	8
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45019.jpg

MAIN BUILDING > WEST - WEST END

File: IR_45018.jpg

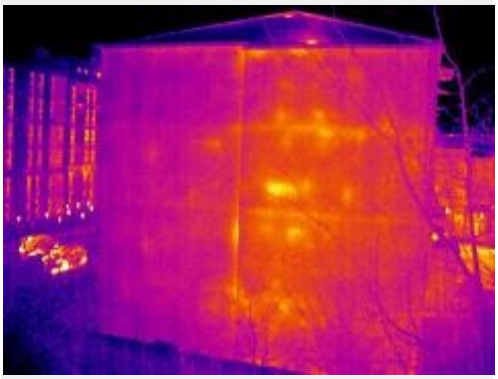


Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.4 °C	°C	5.0 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	9
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_44995.jpg

MAIN BUILDING > WEST - BLOCK C STAIRWELL

File: IR_44994.jpg

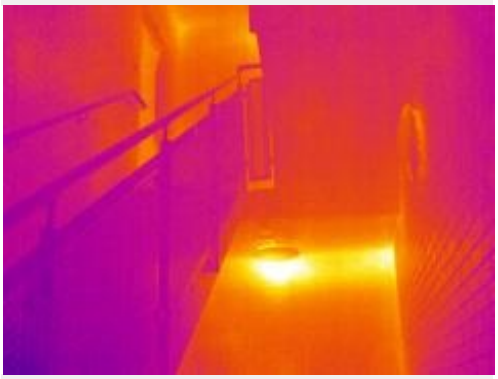


Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.4 °C	°C	11.0 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	10
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45009.jpg

MAIN BUILDING - EAST

File: IR_45008.jpg

Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	°C	°C	°C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	11
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45011.jpg

MAIN BUILDING - NORTH EAST CORNER

File: IR_45010.jpg

Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	°C	°C	°C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	12
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_44987.jpg

THREE STOREY REFURB - WEST

File: IR_44986.jpg

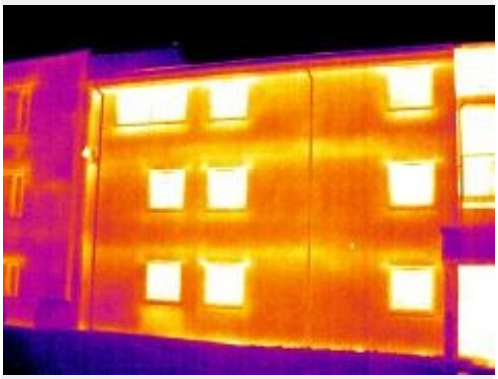


Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.0 °C	°C	8.0 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	13
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45005.jpg

THREE STOREY REFURB - EAST

File: IR_45006.jpg

Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.4 °C	°C	7.0 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	14
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_44989.jpg

FOUR STOREY REFURB - EAST

File: IR_44988.jpg

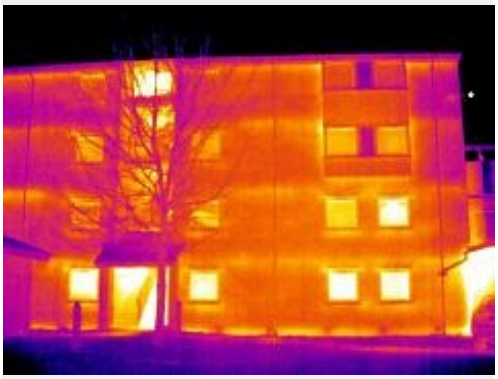


Photo Date: 17/02/2014

Inspection History

Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.4 °C	°C	5.3 °C

Trending Data

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Item No	15
Item ID	
Status	T
Area Specific	NONE
Work Order	N/A

File: DC_45005.jpg

FOUR STOREY REFURB - WEST

File: IR_45004.jpg

Photo Date: 17/02/2014

Inspection History

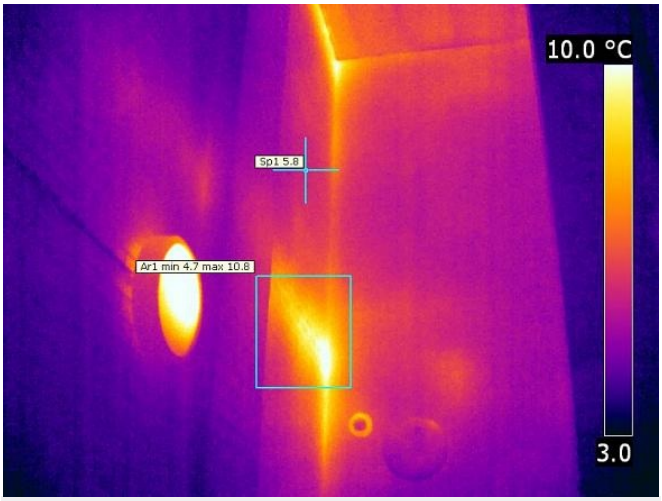
Inspection Reference	Date Inspected	Area Specific	Calculated Internal Threshold Surface Temp. (Isotherm below)	Calculated External Threshold Surface Temp. (Isotherm above)	Internal Surface Temp. (Tsi) measured anomaly	External Surface Temp (Tse) measured anomaly
TI BUILDING DEMO	17th Feb 2014	NONE	°C	4.3 °C	°C	8 °C

Work Order Forms

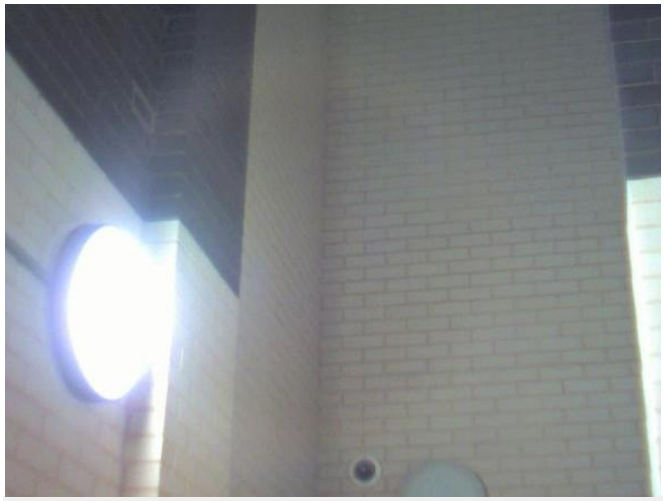
Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	MAIN BUILDING > SOUTH
Component	BLOCK C STAIRWELL
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.3 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	7.0 °C



File: IR_44992A.jpg **Photo Date:** 17/02/2014



File: DC_44993.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

Repair Action

Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	MAIN BUILDING > SOUTH
Component	BLOCK C
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	6.0 °C

File: IR_44996A.jpg **Photo Date:** 17/02/2014

File: DC_44997.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

Repair Action

Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	MAIN BUILDING > SOUTH
Component	BLOCK B
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	AT SOFFIT AND WINDOWS

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	6.0 °C

File: IR_44998A.jpg **Photo Date:** 17/02/2014

File: DC_44999.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

Repair Action

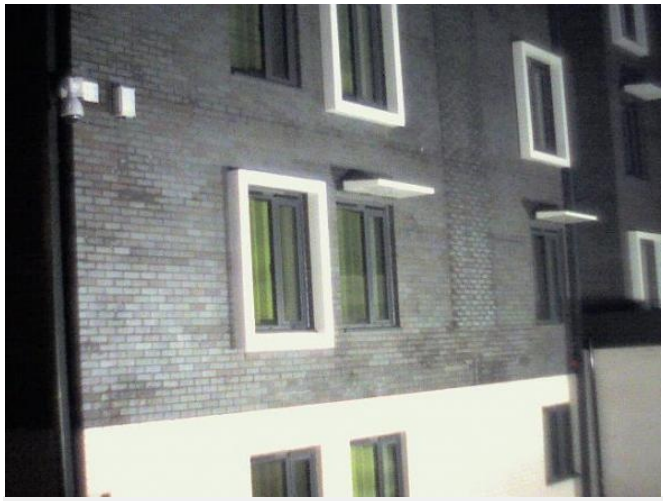
Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	MAIN BUILDING > SOUTH
Component	BLOCK A
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	6.0 °C

File: IR_45002A.jpg **Photo Date:** 17/02/2014



File: DC_45003.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

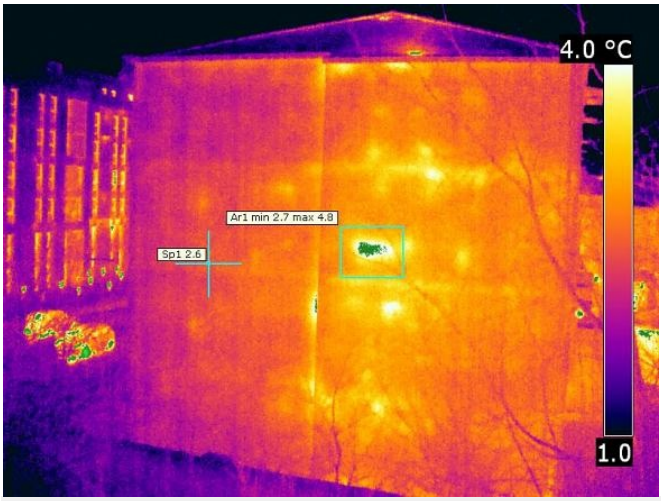
Repair Action

Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	MAIN BUILDING > WEST
Component	WEST END
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	5.0 °C



File: IR_45018A.jpg **Photo Date:** 17/02/2014

File: DC_45019.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

Repair Action

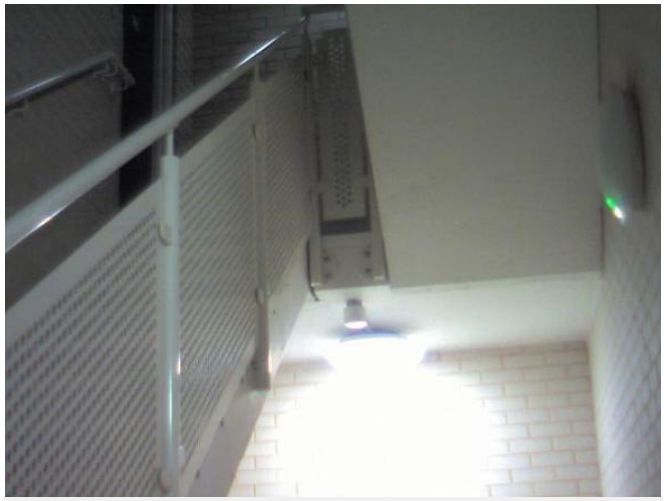
Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	MAIN BUILDING > WEST
Component	BLOCK C STAIRWELL
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	11.0 °C

File: IR_44994A.jpg **Photo Date:** 17/02/2014



File: DC_44995.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

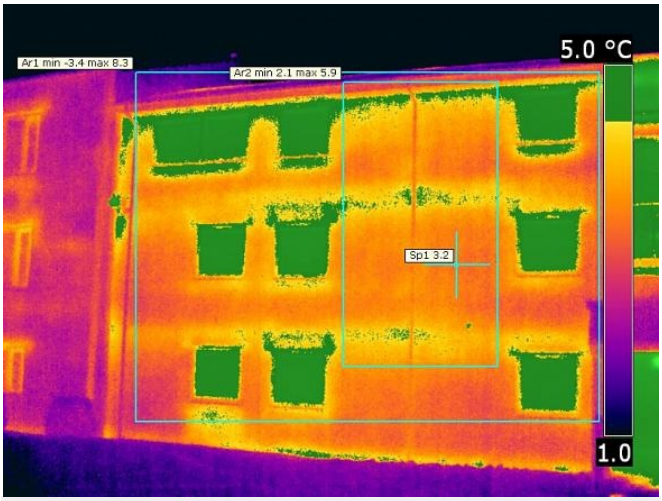
Repair Action

Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	THREE STOREY REFURB
Component	WEST
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.6 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.0 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.0 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	8.0 °C



File: IR_44986a.jpg **Photo Date:** 17/02/2014

File: DC_44987.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

Repair Action

Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	THREE STOREY REFURB
Component	EAST
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	16.0 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	7.0 °C

File: IR_45006A.jpg **Photo Date:** 17/02/2014

File: DC_45007.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

Repair Action

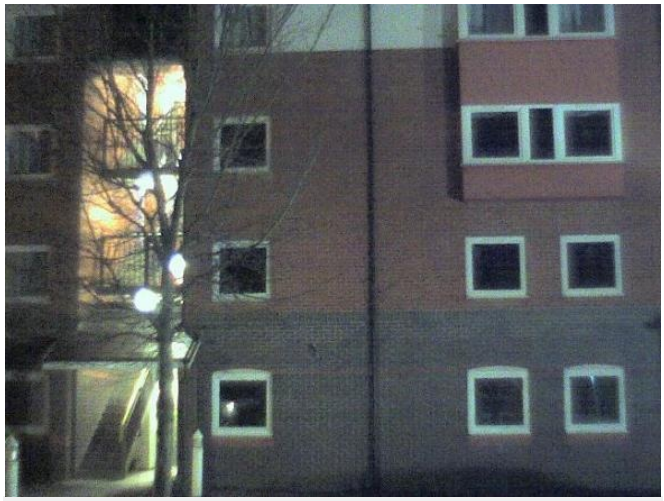
Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	FOUR STOREY REFURB
Component	EAST
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	15.9 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.5 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.4 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	5.3 °C

File: IR_44988a.jpg **Photo Date:** 17/02/2014



File: DC_44989.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

Repair Action

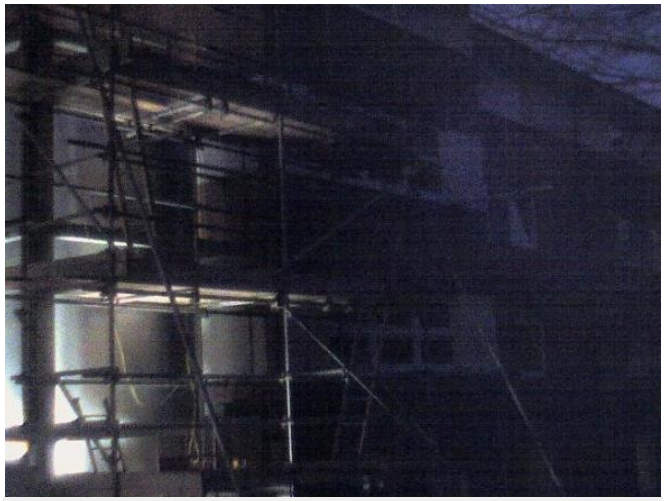
Work Order Forms

Current Inspection No	TI BUILDING DEMO
Report Date	18th Jun 2015
Work Order #	
Corrective Work Order #	
PLEASE ADD CORRECTIVE WORK ORDER ABOVE	

Location/Equipment Information	
Location	FOUR STOREY REFURB
Component	WEST
Item ID	
Area Specific	NONE
Work Order	N/A
Problem	

Thermal Information	
Internal Ambient Temp (Ti)	°C
Internal Surface Temp (Tsi)	15.90 °C
External Ambient Temp (Te)	°C
External Surface Temp (Tse)	3.47 °C
Calculated Internal Threshold Surface Temp. (Isotherm below)	°C
Calculated External Threshold Surface Temp. (Isotherm above)	4.3 °C
Internal Surface Temp. (Tsi) measured anomaly	°C
External Surface Temp (Tse) measured anomaly	8 °C

File: IR_45004A.jpg **Photo Date:** 17/02/2014



File: DC_45005.jpg **Photo Date:** 17/02/2014

Repair Information

Loss to Production

◯ Yes ◯ No ◯ Unknown

Consequences of Failure

Repair Date

Repaired By

Parts Req. Before Failure

Root Cause

Parts Req. After Failure

Repair Procedure

Repair Recommendation

Repair Action

Client Work Appraisal

We are continually trying to improve our service and ensure that our inspections are carried out to the highest standards. Please use the form below to add your comments, anonymously if you prefer, and send back to us at the address above or:

Email: demo@demo.co.uk

Service	Excellent	Good	Mediocre	Poor	Comments
Office					
Response time to enquiry					
Content of information sent on enquiry					
Telephone and email manner					
Price					
Value					
Engineer					
Time keeping					
Appearance					
Code of conduct					
Subject knowledge					
Method of work					
Engineer flexibility					
Inspection Specification					
Equipment and software					
Report content					
Report delivery time					
Report retrieval					
Other comments					