

Example Report

192 Issues Identified



SUMMARY - TOP ISSUES LEADING TO POOR PERFORMANCE

❌ Problems	✅ Recommendations
■ Different, poor performing insulation fitted.	■ Check insulation against design specification.
■ Insulation not installed correctly – gaps behind insulation around cavity closures.	■ Must be installed to BBA or manufacturer guidelines: no gaps, tight up against blockwork or roof/floor to ensure no air route behind insulation.
■ Product substitution for poorer materials: blocks, insulation, windows, lintels, boiler, controls, fans, windows, doors and lights all affect the energy efficiency of a new home.	■ Check materials are same as design specification or discuss with architect/designer and site manager.
■ Air leakage through small gaps in insulation, blockwork and plasterboard can lead to heat losses and condensation issues.	■ Make sure insulation has no gaps and is sufficiently sealed at joints/ends.
■ Ventilation fans not commissioned correctly. Domestic Ventilation Compliance Guide not checked.	■ Check against design specification. Commissioning of fans should be completed by a competent person.
■ Cold air blowing behind or through insulation.	■ Fit insulation close to structure, and ensure it is windtight. Seal accordingly.
■ Cold bridging: steel, concrete or timber structure going through insulation layer.	■ Consult with design team.
■ Site damage of fragile materials including insulation, blocks and windows. Rain and mud will worsen performance of materials.	■ Ensure that insulation and other fragile materials are not damaged by rain, wind and mechanical damage.
■ Services: ducting, TV aerial, lights can all disrupt insulation in roof causing heat loss / cold spots.	■ Check insulation in roof is continuous after all services have been installed. Ensure services in service zone to stop this. Label importance of insulation for homeowner.
■ Windows installed badly leading to airleakage and heat loss.	■ Ensure correct windows installed with less than 10mm tolerance.

Zero Carbon Builders Book

Assigned To Note

A variety of these issues have been noted throughout the subject property, later in the report.

The document is affiliated with the NHBC and LABC

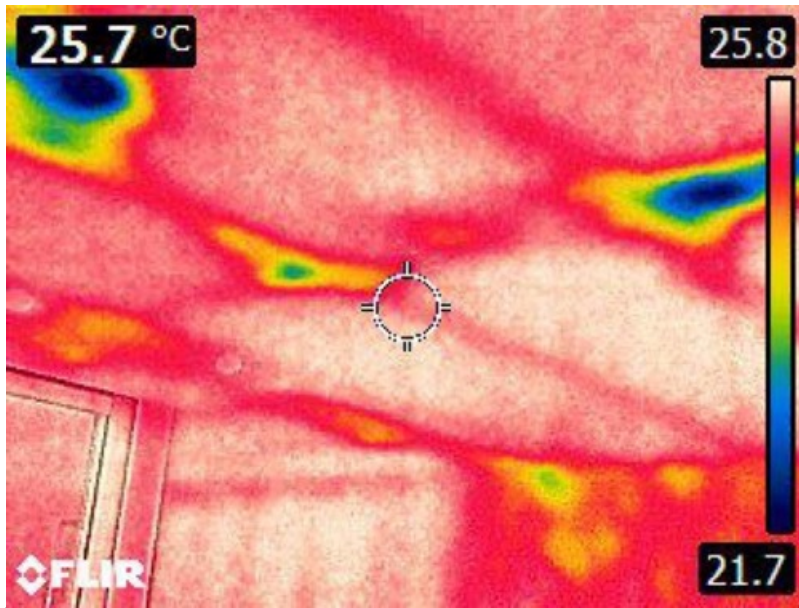


Master Bedroom

Assigned To Insulation

Relay insulation within the Loftspace, between and across ceiling joists in a perpendicular fashion to mitigate cold bridging

Adequately insulate over the cavity closers and into the eaves to mitigate cold bridging throughout the Loftspace



Master Bedroom

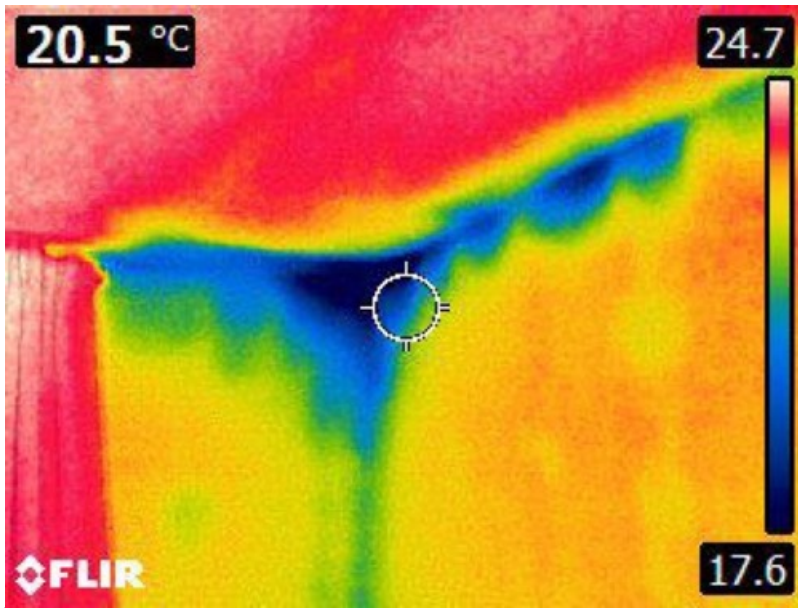
Assigned To Insulation



Bedroom 3

Assigned To Insulation

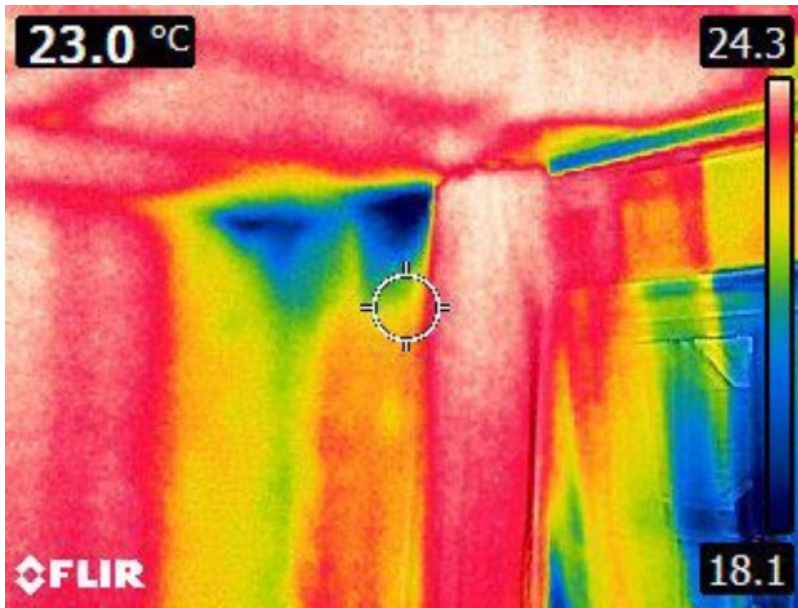
Adequately insulate over the cavity closers and into the eaves to mitigate cold bridging throughout the Loftspace



Bedroom 3
Assigned To Insulation



Bedroom 3
Assigned To Insulation
As above



Bedroom 3

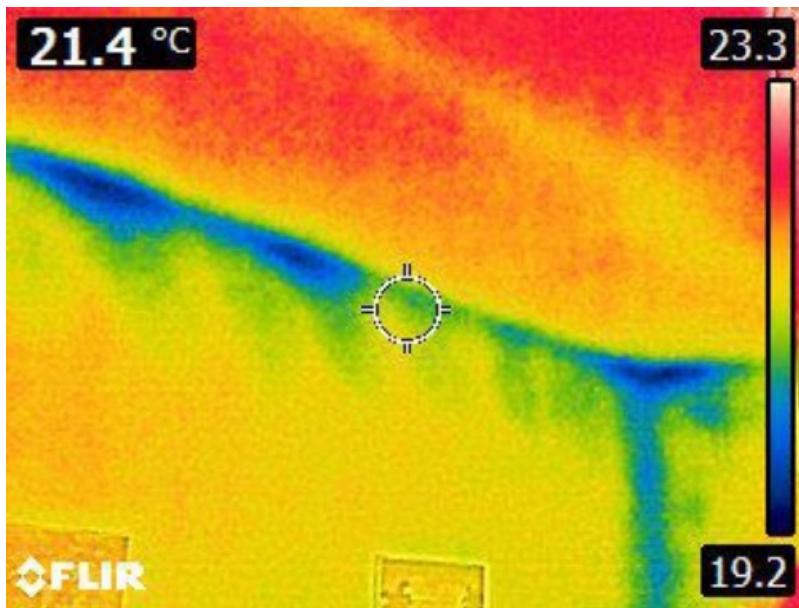
Assigned To Insulation



Bedroom 4

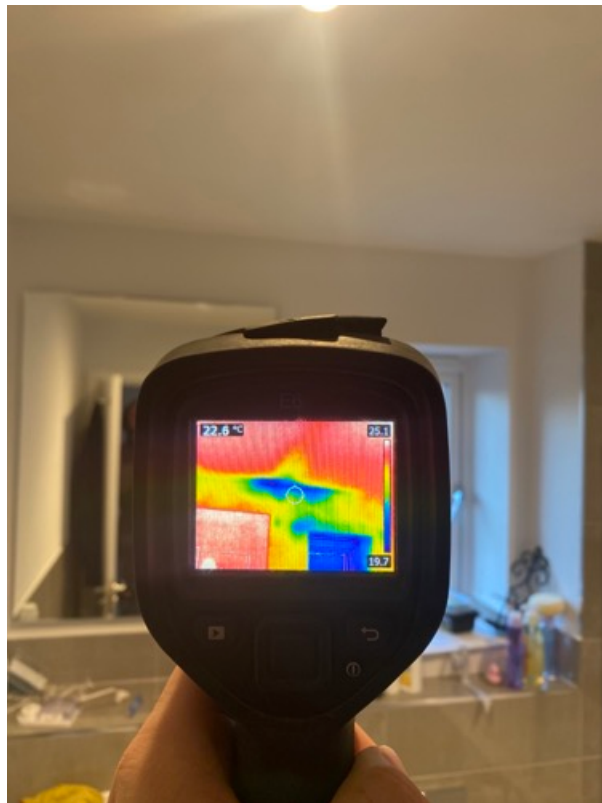
Assigned To Insulation

Adequately insulate over the cavity closers and into the eaves to mitigate cold bridging throughout the Loftspace



Bedroom 4

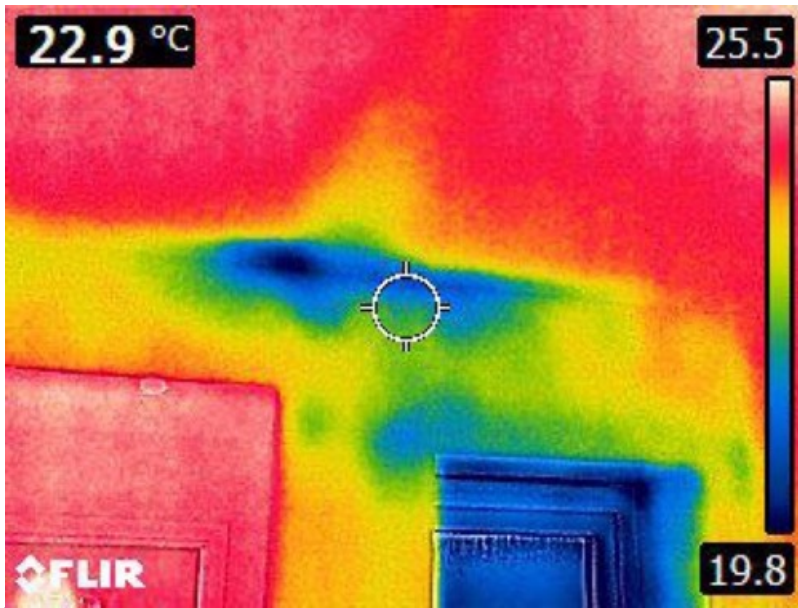
Assigned To Insulation



Bathroom

Assigned To Insulation

Adequately insulate over the cavity closers and into the eaves to mitigate cold bridging throughout the Loftspace



Bathroom

Assigned To Insulation



Landing

Assigned To Insulation

Minor cold bridging around the loft hatch



Landing

Assigned To Insulation



7.2

Landing

Assigned To NHBC reference

The thermal performance of the access hatch should contribute to the overall thermal performance of the ceiling or wall in which the hatch is located, and avoid cold bridging.

Proprietary hatches should be fitted and sealed to the surrounding construction in accordance with the manufacturer's instructions.

Insulation should be of sufficient thickness to meet the requirements of Building Regulations, and laid over the whole loft and wall plate.



Landing

Assigned To Insulation

Adequately lay insulation between and then across ceiling joists in a perpendicular fashion to mitigate cold bridging



Landing

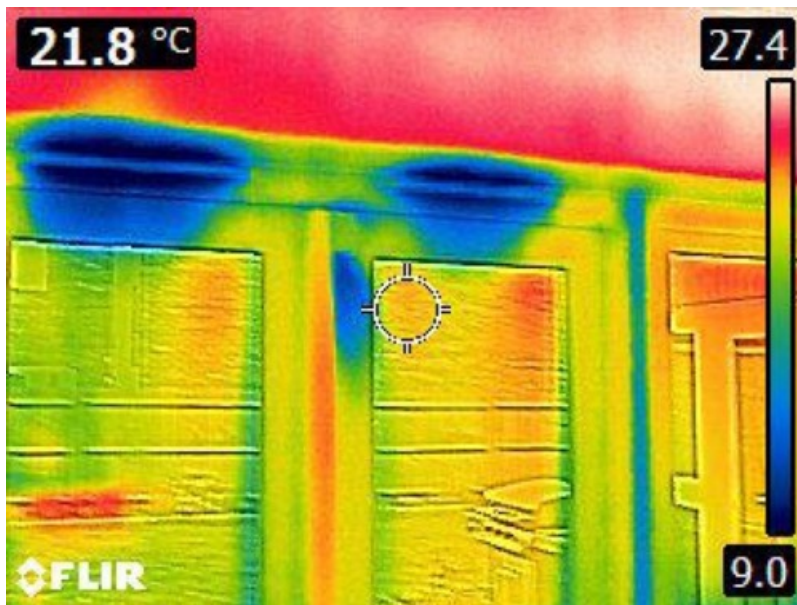
Assigned To Insulation



Living Room

Assigned To Window Fitter

Cold bridging noted between the doors



Living Room

Assigned To Window Fitter



Kitchen

Assigned To Window Fitter

Cold bridging noted between the doors



Kitchen

Assigned To Window Fitter



Kitchen

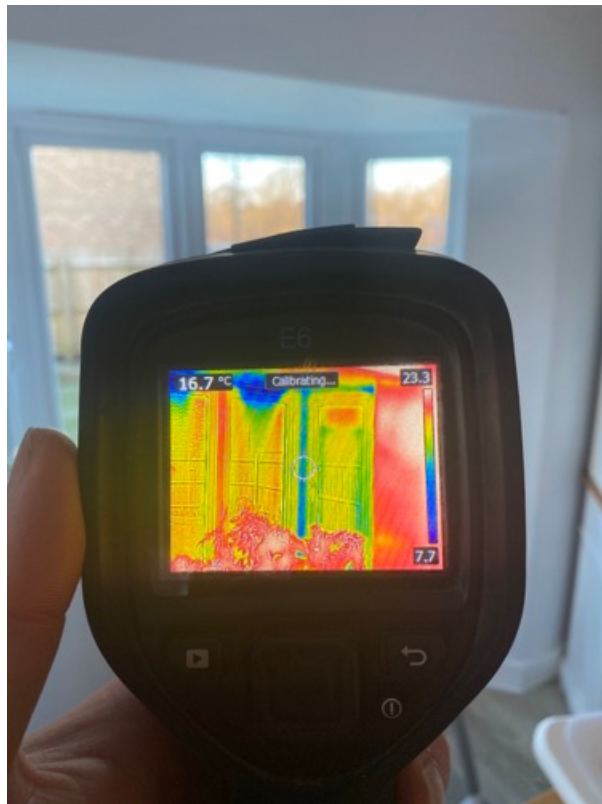
Assigned To Window Fitter

As above



Kitchen

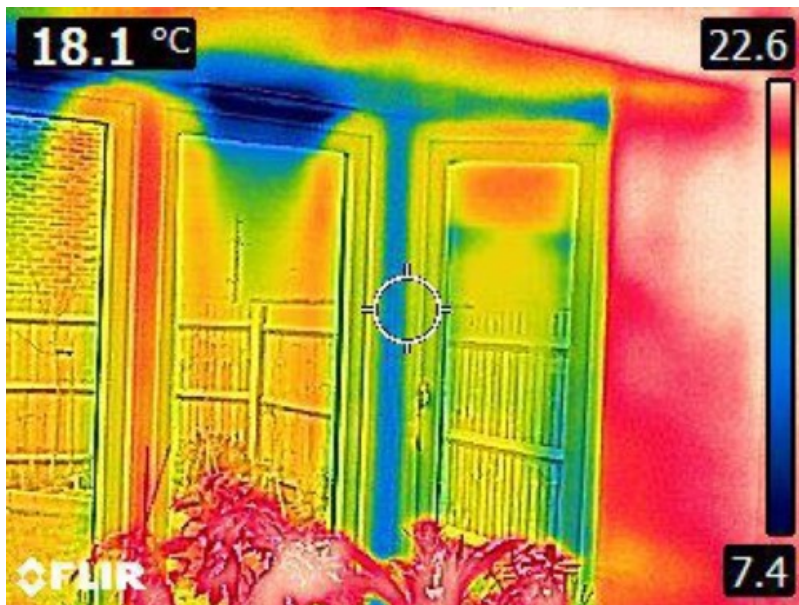
Assigned To Window Fitter



Kitchen

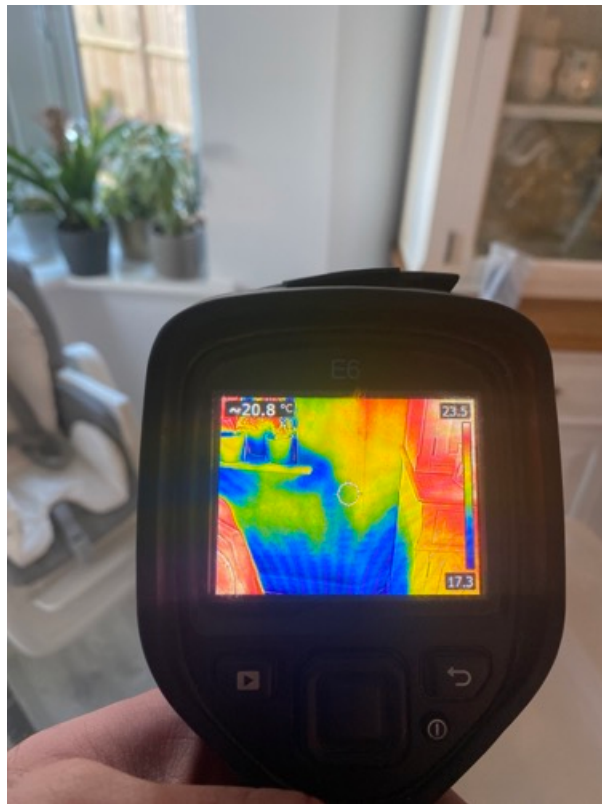
Assigned To Window Fitter

Cold bridging noted down the covered structural members of the opening, where assumed not suitably foam/ insulated



Kitchen

Assigned To Window Fitter



Kitchen

Assigned To Dry Liner

Cold bridging noted around the opening
and external floor lines

Detailed later in the report, ensure all floor
to wall junctions are suitably sealed/
foamed along to mitigate cold bridging and
draught ingress behind the dot and dab dry
lining



Kitchen

Assigned To Dry Liner

PROBLEM TO AVOID AIR-LEAKAGE



NOT SEALING SERVICES



WHAT TO DO?

- Foam fill all penetrations/gaps before drytining
- Stagger ceiling boards and over door openings to minimise future cracking
- Mark continuous ribbon of adhesive to be applied around all openings, along the top and bottom and at internal and external corners of walls, and over service chasers



GOOD PRACTICE

Use a parge coat or plaster on block work to improve airtightness

Kitchen

Assigned To Dry Liner

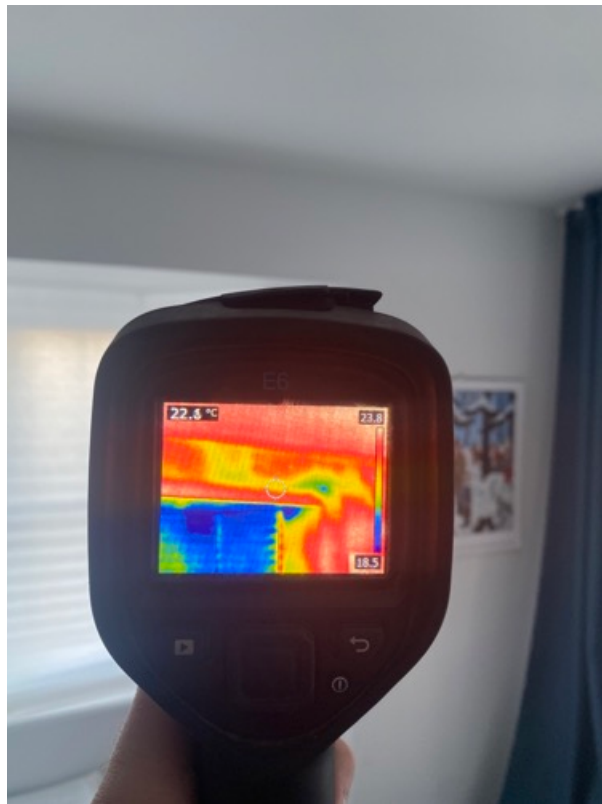
Kitchen

Assigned To Dry Liner

Example

As above, around bay opening cills

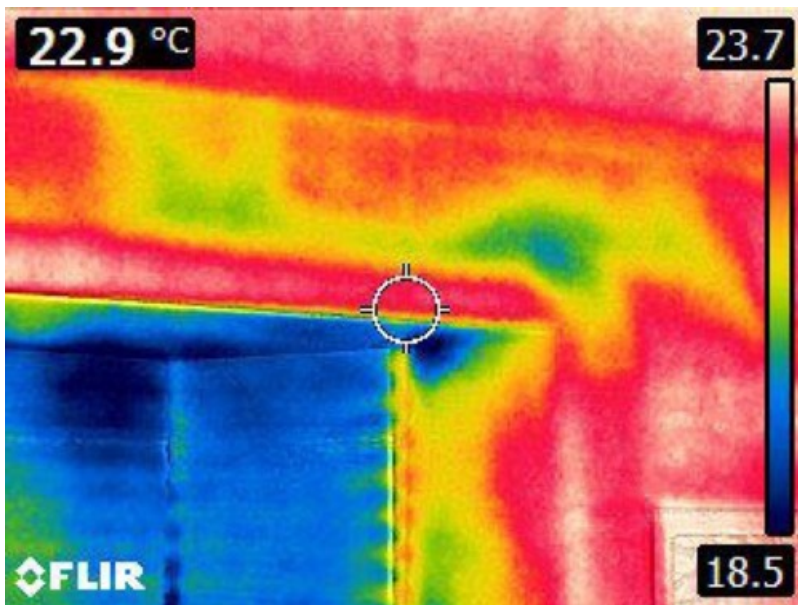




Dining Room

Assigned To Dry Liner

Cold bridging noted around the bay ceiling and opening reveals



Dining Room

Assigned To Dry Liner



Dining Room
Assigned To Dry Liner
As above



Dining Room
Assigned To Study

BAY WINDOWS

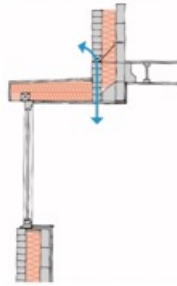


10.0

❌ PROBLEM TO AVOID COLD BRIDGING



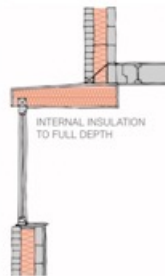
THICK FRAME AND POSTS INCREASES HEAT LOSS



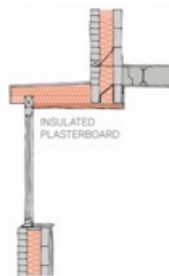
✅ WHAT TO DO?

- Reduce cold bridges of steel or concrete or timber through insulation layer
- Continuous insulation inside
- Install slimmer frames to be more energy efficient
- Less than 10mm tolerance between window frame and opening

OPTION 1



OPTION 2

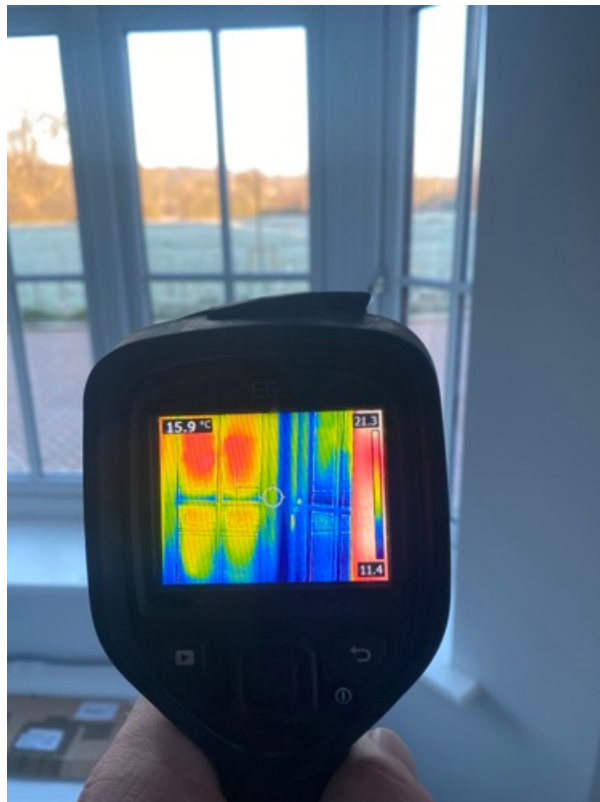


GOOD PRACTICE

Continuous insulation throughout bay window

Dining Room

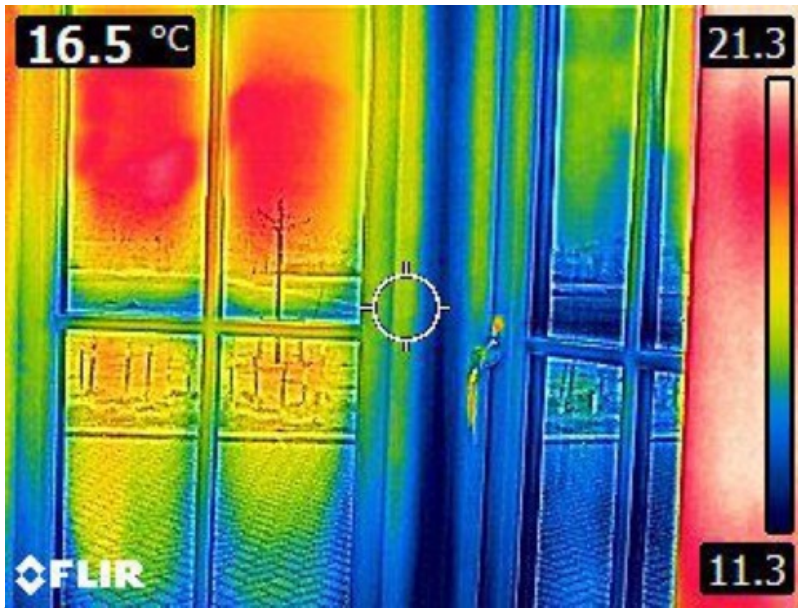
Assigned To Dry Liner



Dining Room

Assigned To Window Fitter

Cold bridging noted down the covered structural members of the opening, where assumed not suitably foam/ insulated



Dining Room

Assigned To Window Fitter



Dining Room

Assigned To Study

As above



Dining Room

Assigned To Window Fitter

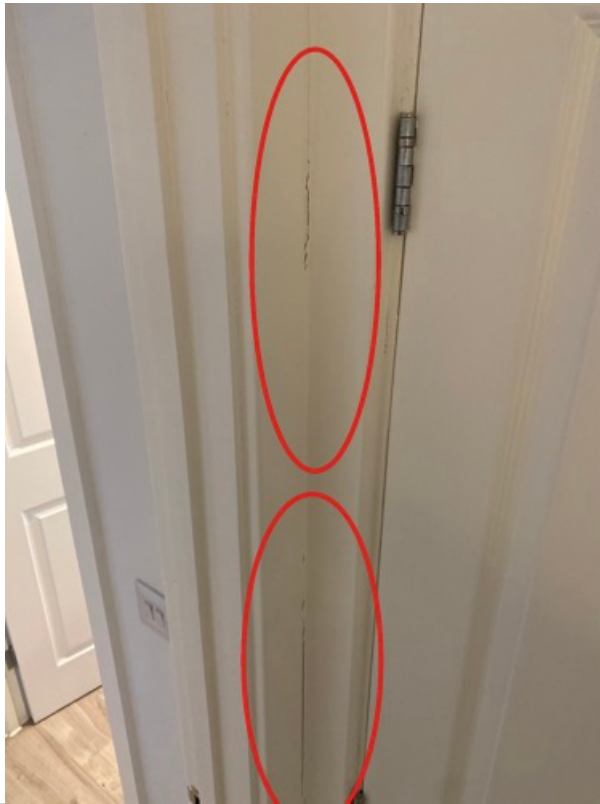


Master Bedroom

Assigned To Painter

Generally throughout the entire property

Make good shrinkages to door liners/
architraves and the like



Master Bedroom

Assigned To Painter

Example

As above



Master Bedroom

Assigned To Joiner

Supply and fit door stop

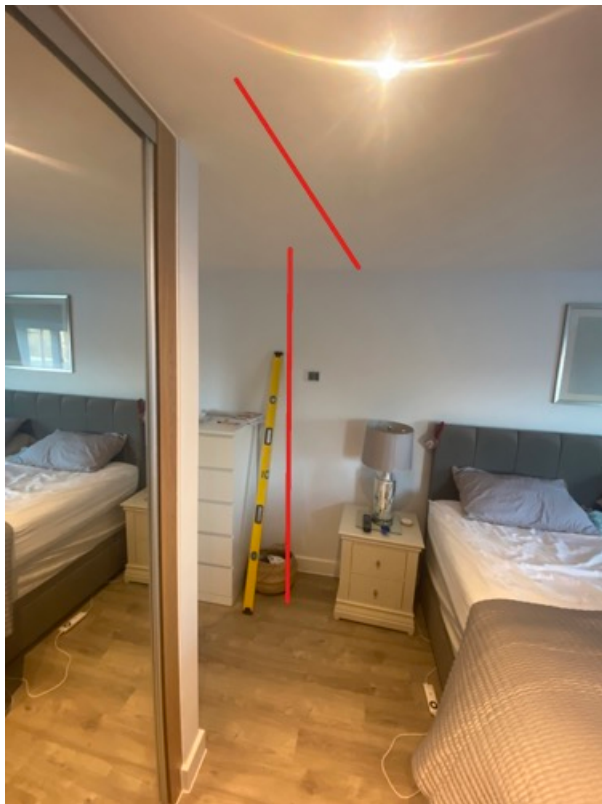


Master Bedroom

Assigned To Painter

Generally throughout the entire property

Make good shrinkages around skirtings



Master Bedroom

Assigned To Painter

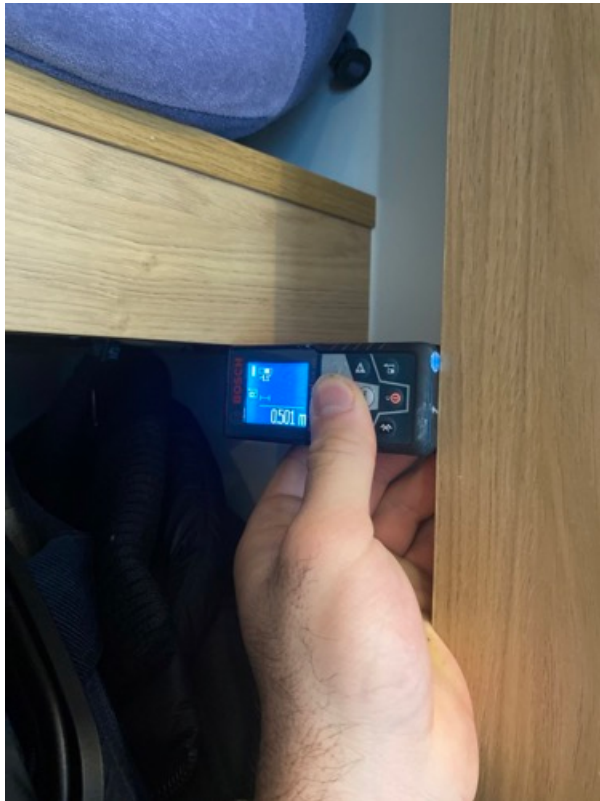
Shrinkages noted



Master Bedroom

Assigned To Joiner

Vaired fitted wardrobe depths



Master Bedroom

Assigned To Joiner

As above



Master Bedroom

Assigned To Joiner

As above



Master Bedroom

Assigned To Painter

Shrinkages noted around ceiling line in wardrobe



Master Bedroom

Assigned To Plasterer

Ceiling lines visibly deviate throughout

Previously agreed to skim throughout



Master Bedroom

Assigned To Plasterer

Examples

As above



Master Bedroom

Assigned To Painter

Generally - external seals splitting around external cills



Master Bedroom

Assigned To Window Fitter

RHS window latch not catching

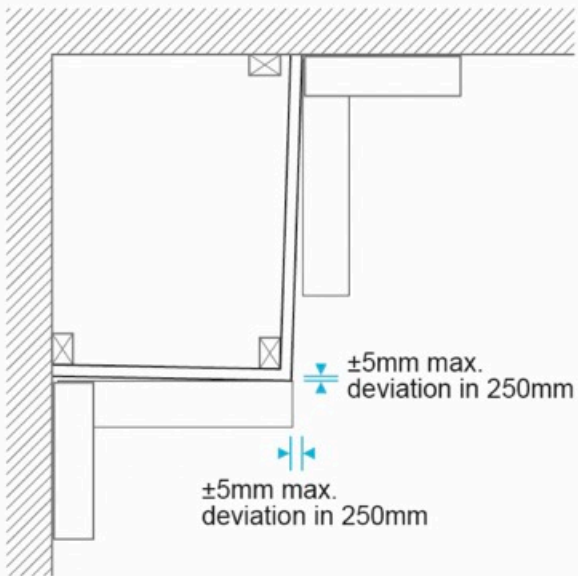


Ensuite

Assigned To Dry Liner

Dry lining not square

>10mm out over a 250mm span



Ensuite

Assigned To NHBC reference



Ensuite

Assigned To Painter

Seal around sink as per other Ensuite



Ensuite

Assigned To Painter

As previously noted

Mastics splitting around cills



Ensuite

Assigned To Painter

Seal around plumbing runs under sink



Ensuite

Assigned To Window Fitter

Window handle stiff to operate



Ensuite

Assigned To Painter

Nail pops

Shrinkages noted



Ensuite

Assigned To Painter

Seal down RHS architrave



Ensuite

Assigned To Painter

Shrinkages noted



Ensuite

Assigned To Plumber

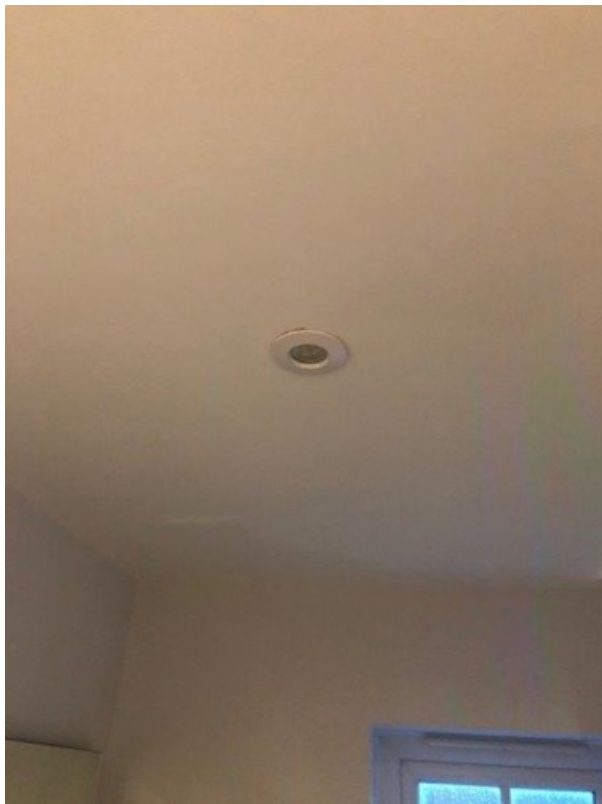
Stopper damaged



Ensuite

Assigned To Plumber

As above



Ensuite

Assigned To Electrician

Previously repaired ceiling

Downlight defective, flickering. Replace

Bedroom 2/ Study

Assigned To Dry Liner

Gaps noted between flooring and external



walls, allowing air to freely flow between floors and behind dot and dabbed dry lining

SUGGESTED REMEDIAL WORKS TO WALLS

- seal the gaps at the bottom of the walls. This could be done by removing the skirting boards and fully foaming the gap between the bottom of the plaster board and the wall.
- seal the gaps at the top of all the ground walls and those at the top of the first floor walls too

SUGGESTED REMEDIAL WORKS TO FLOORS

- On removing an upstairs skirting it will become immediately apparent that there are problems, draughts will be easy to feel and see, gaps can be observed sometimes right into the cavity, and fingers can be pushed into the gap between the plasterboard and the blockwork. Seal any gaps.
- Once the first floor skirting and a floor board have been removed there will now be relatively easy access to the top of the ground floor wall/ceiling junction, and it is a good opportunity to seal this and foam can be used this time.
- seal along skirting boards on the ground floor



Bedroom 2/ Study

Assigned To Painter

As previously noted

Make good shrinkages to door frames/
liners



Bedroom 2/ Study

Assigned To Window Fitter

Screw missing



Bedroom 2/ Study

Assigned To Flooring

Change in floor level across the property,
varied distances from under cills to finished
flooring



Bedroom 2/ Study

Assigned To Dry Liner

Returns not square



Bedroom 2/ Study

Assigned To Dry Liner

As above



Bedroom 2/ Study

Assigned To Dry Liner

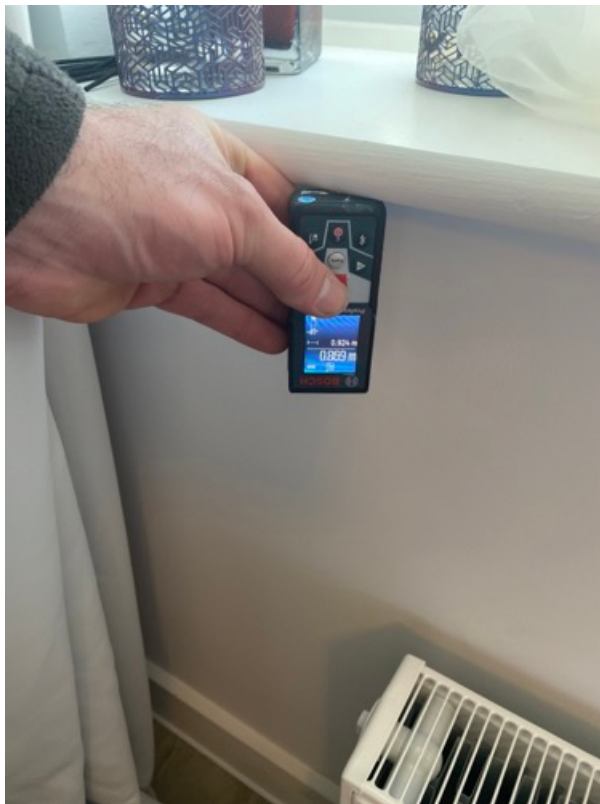
As above



Bedroom 2/ Study

Assigned To Dry Liner

As above



Bedroom 3

Assigned To Flooring

As above

Differing cill height to bedrooms at the front of the property

Same height windows

Change >15mm across span of reference



Bedroom 3

Assigned To Roofer

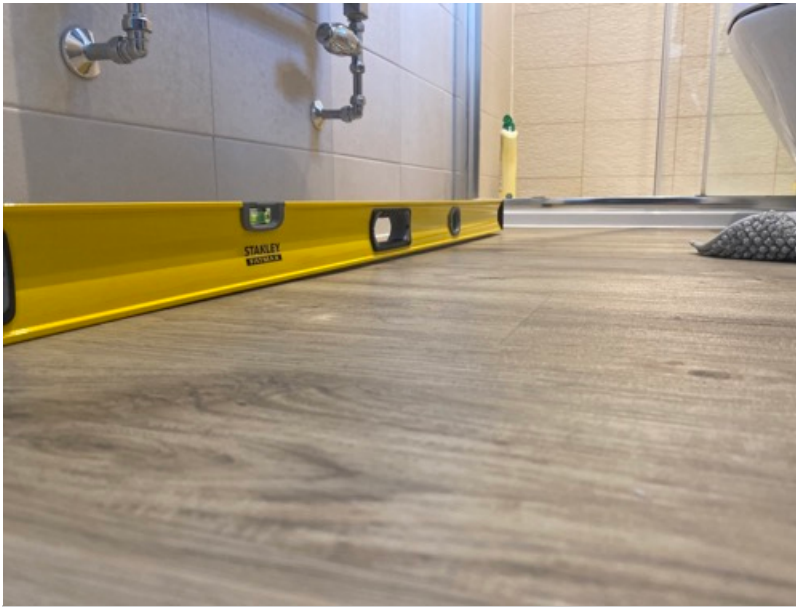
Hanging tiles/ soffit and fascia do not run parallel



Bedroom 3

Assigned To Painter

Shrinkages noted



Bedroom 3 Ensuite

Assigned To Flooring

As previously noted

Change in floor level across the room spans



Bedroom 3 Ensuite

Assigned To Flooring

Floor level drops

Justifies change in cill height between bedrooms 2 and 3



Bedroom 3 Ensuite

Assigned To Roofer

Window opens close to hanging tiles



Bedroom 3 Ensuite

Assigned To Painter

Generally throughout the entire property

Reapply split mastics around openings



Bedroom 3 Ensuite

Assigned To Painter

Seals missing around external cill



Bedroom 3 Ensuite

Assigned To Plumber

Seal around plumbing runs



Bedroom 3 Ensuite

Assigned To Painter

Seal down RHS architraves



Bedroom 3 Ensuite

Assigned To Painter

Mastics splitting around the ceiling line



Bedroom 3 Ensuite

Assigned To Painter

Shrinkages noted



Bedroom 4

Assigned To Window

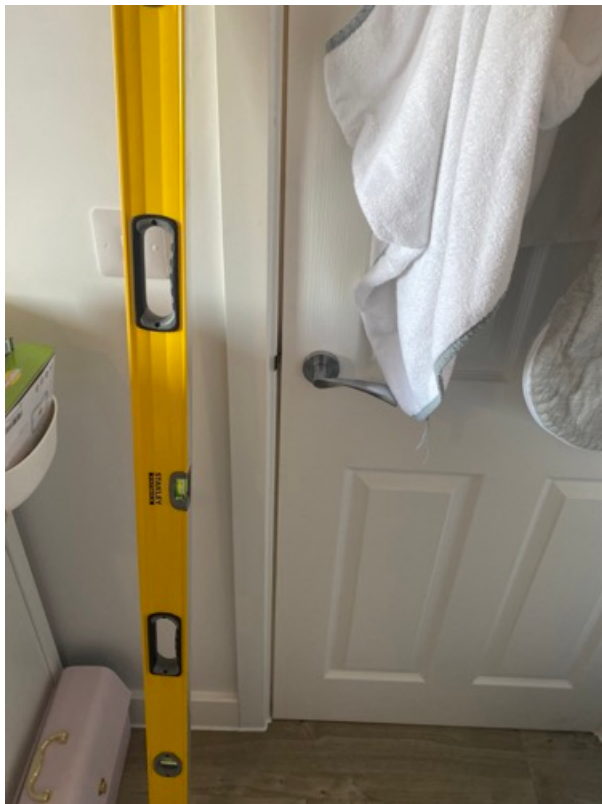
Latch not catching



Bedroom 4

Assigned To Window Fitter

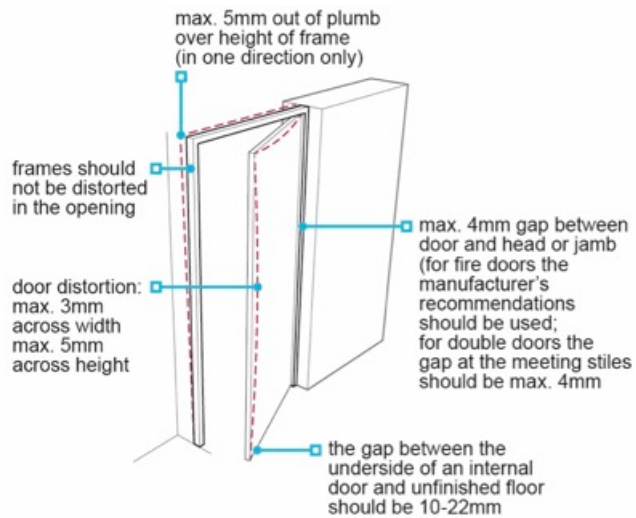
Frame damaged



Bedroom 4

Assigned To Joiner

Gaps around door to frame exceed 4mm



The max. gap should not exceed 22mm, however, homeowners will need to choose a covering to suit or adjust the door height accordingly.

In England and Wales, where the builder provides a floor finish there should be a gap of 10mm between the bottom of the door and floor finish (for a 760mm wide door)

the dimensions are without prejudice to satisfactory performance in terms of weathertightness, draught exclusion and fire resistance

Bedroom 4

Assigned To Joiner



Bathroom

Assigned To Window Fitter

Latch sticking



Bathroom

Assigned To Painter

Seal down RHS architrave



Bathroom

Assigned To Painter

Mastics splitting around the tile line



Landing

Assigned To Flooring

Flooring levels noticeable change and deviate as cross the landing, surrounding the staircase



Landing

Assigned To Flooring

As above

>10mm over a 1.8m span referenced

Floors

Floors shall be built to appropriate tolerances.

Floors should be:

- level within a 3mm deviation per 1m for floors up to 6m across (measured at the furthest points across the full width of the floor)
- a maximum of 20mm out of level for floors over 6m across
- flat within a ± 5 mm deviation, measured using a 2m straight edge with equal offsets.

Landing

Assigned To Flooring



Landing

Assigned To Plumber

Complete lagging of plumbing runs



Landing

Assigned To Painter

Shrinkages noted



Loftspace

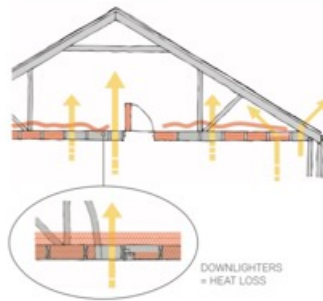
Assigned To Insulation

Adequately lay the insulation within the Loftspace between joists and then across them in a perpendicular fashion to mitigate cold bridging

ROOF

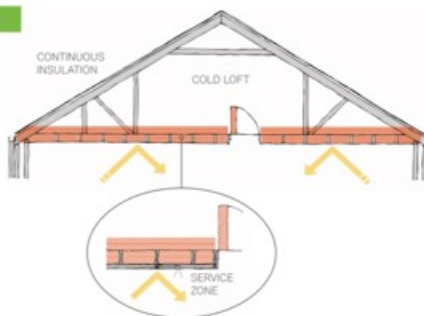


PROBLEM TO AVOID MISSING ROOF INSULATION



WHAT TO DO?

- Install roof membrane in line with the design i.e. breathable or standard with ventilator
- Install continuous insulation across the roof and into the eaves
- Insulate eaves before roof is closed up
- Use insulation support box above down-lighters to maintain insulation thickness and prevent burn
- Install loft hatch with appropriate insulation thickness



Loftspace

Assigned To Zero Carbon Builders Book
NHBC affiliated document in relation to
thermal bridging and heat loss

What to do

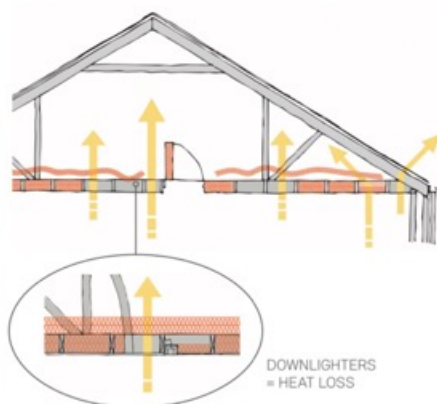
- install roof membrane in line with the design i.e. breathable or standard with ventilator
install continuous insulation across the roof and into the eaves

- insulate eaves before roof is closed up
use insulation

- support box above down-lighters to maintain insulation thickness and prevent burn

- install loft hatch with appropriate insulation thickness

PROBLEM TO AVOID MISSING ROOF INSULATION



Loftspace

Assigned To Zero Carbon Builders Book

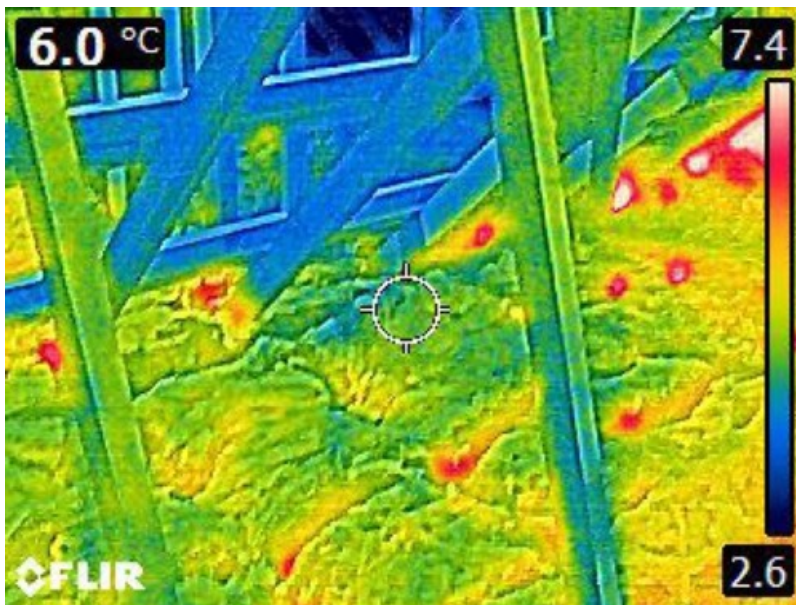


Loftspace

Assigned To Insulation

Example

Breaks in thermal barriers where joists haven't been adequately covered by additional layers of insulation



Loftspace

Assigned To Insulation

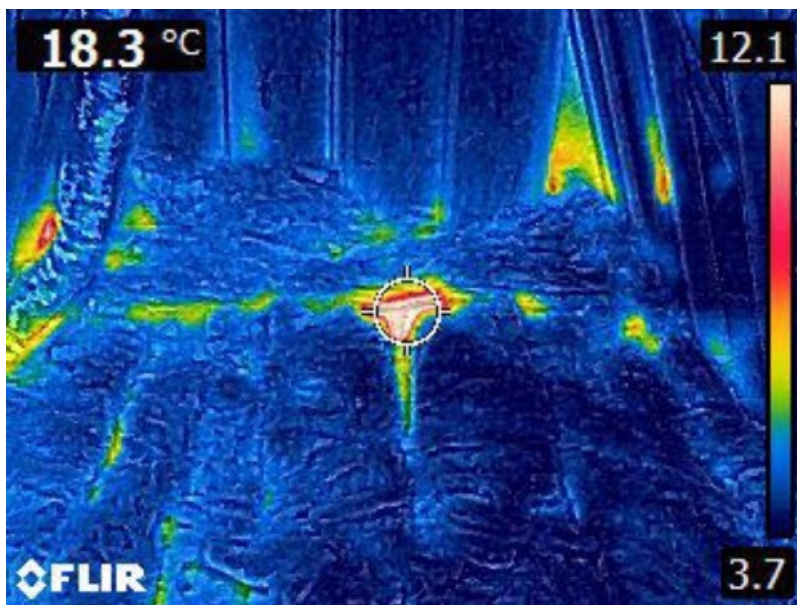


Loftspace

Assigned To Insulation

Examples

As above



Loftspace

Assigned To Insulation

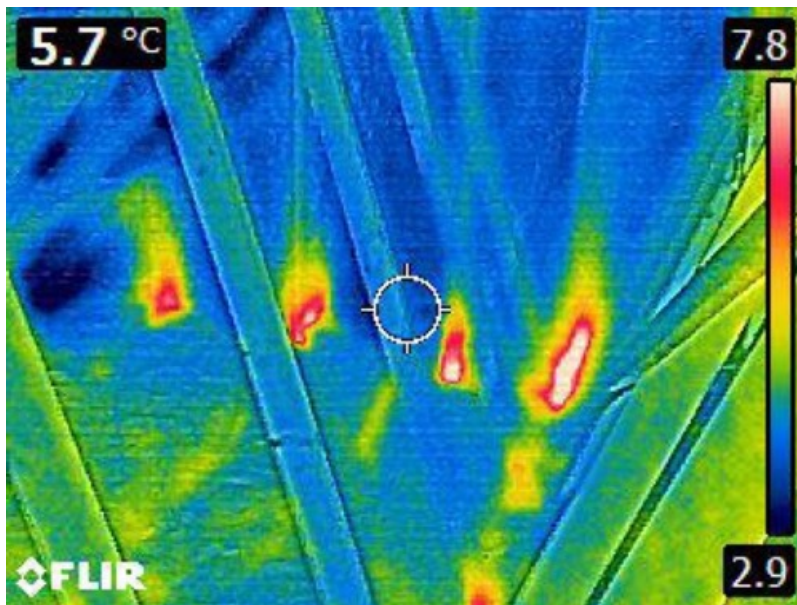


Loftspace

Assigned To Insulation

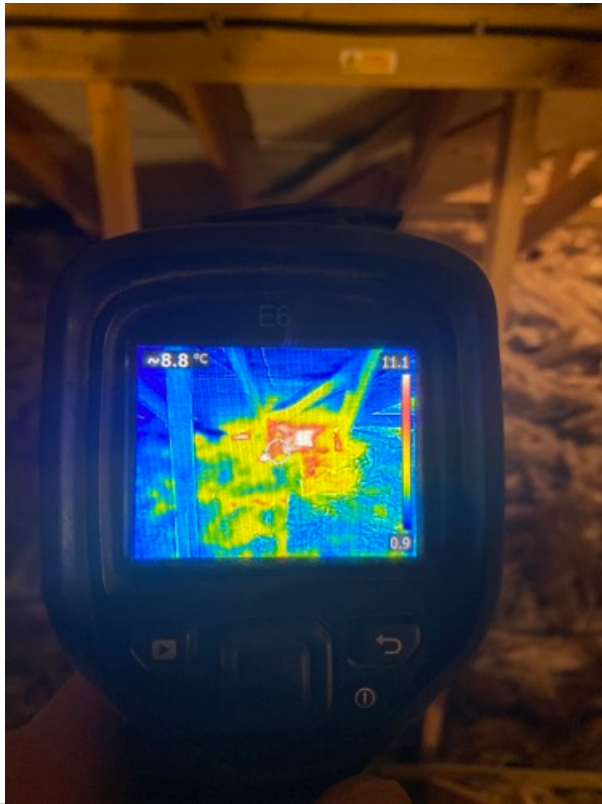
Examples

As above



Loftspace

Assigned To Insulation



Loftspace

Assigned To Insulation

As above

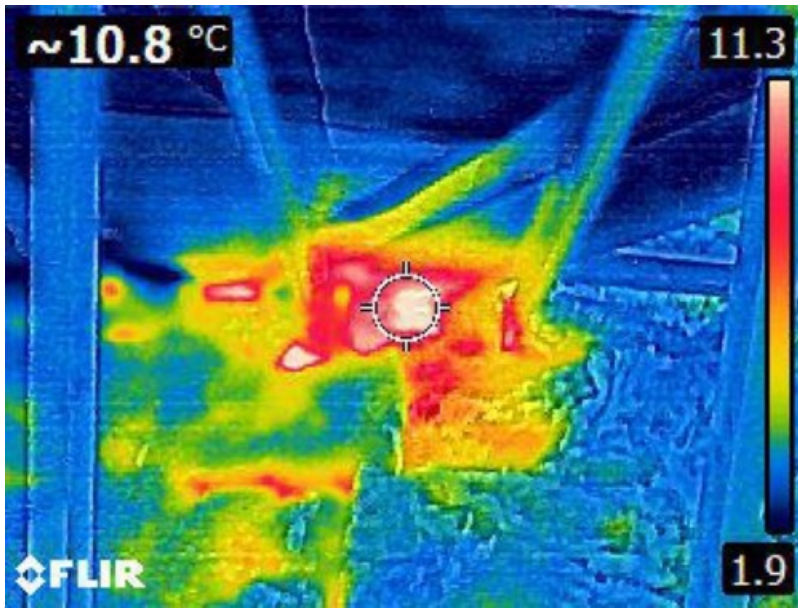
Example, boxing in not insulated over



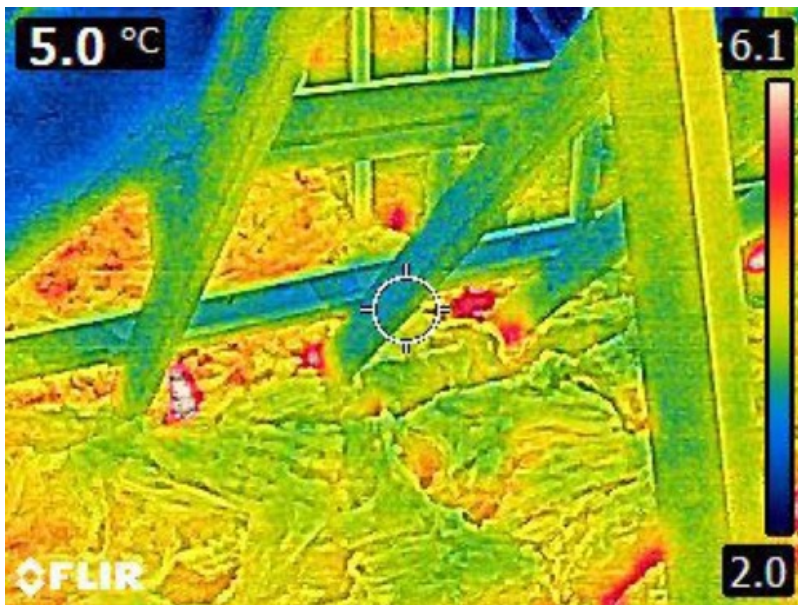
Loftspace

Assigned To Insulation

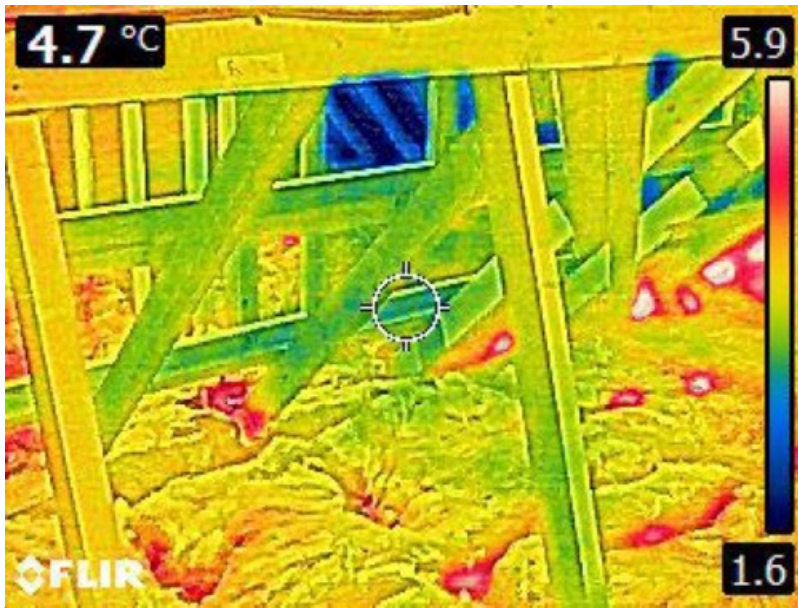
As above



Loftspace
Assigned To Insulation



Loftspace
Assigned To Insulation



Loftspace

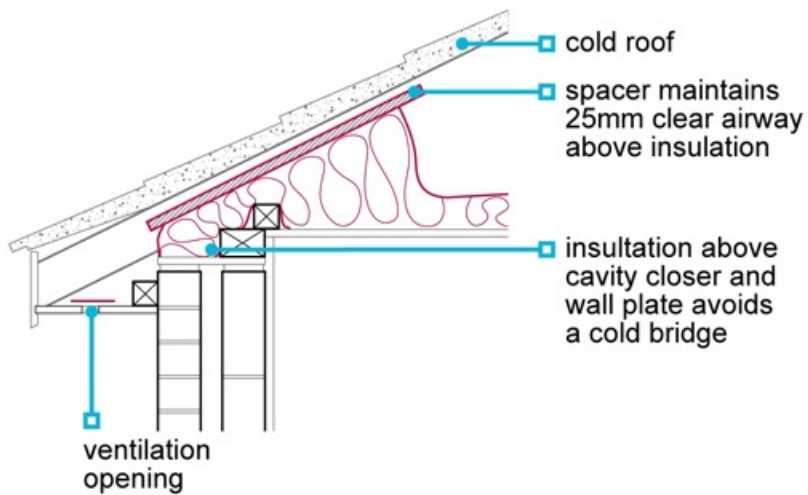
Assigned To Insulation



Loftspace

Assigned To Insulation

Ensure eaves ventilators in place. Some visible, others missing. Ensure a 25mm ventilation gap down to the eaves to ensure a constant flow of air and ventilation throughout, to mitigate condensation build up



Loftspace

Assigned To NHBC reference



Loftspace

Assigned To Insulation

Condensation throughout, where eaves inadequately insulated. No visible gaps externally to allow for sufficient airflow, as later noted within this report



Loftspace

Assigned To Insulation

As above



Loftspace

Assigned To Insulation

As above



Loftspace

Assigned To Insulation

As above



Cloakroom

Assigned To Painter

Timbers throughout have been
inadequately prepped prior to decorating



Cloakroom

Assigned To Painter

Generally throughout - make good shrinkages to door frames/ liners and the like



Cloakroom

Assigned To Dry Liner

Return noticeably not square



Cloakroom

Assigned To Dry Liner

As above



Cloakroom

Assigned To Painter

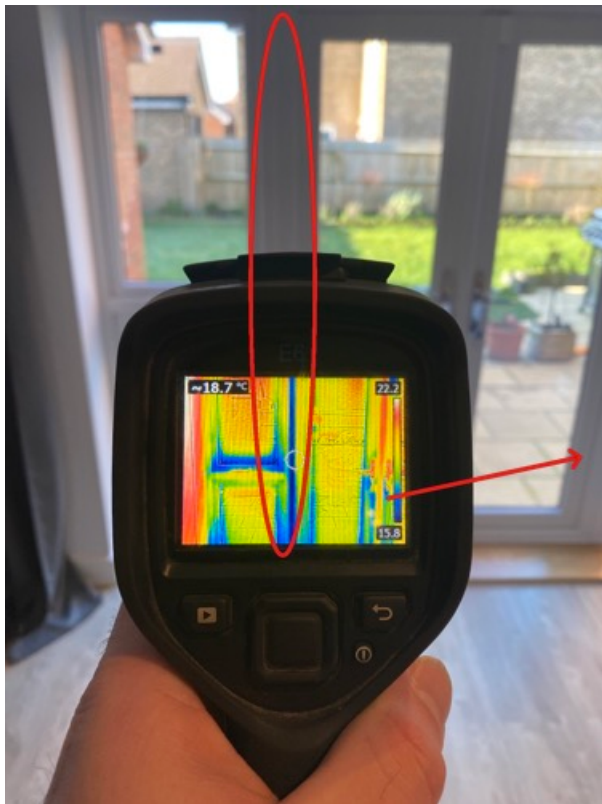
Mastics splitting around opening



Cloakroom

Assigned To Painter

Shrinkages noted



Living Room

Assigned To Window Fitter

Cold bridging noted down the covered structural members of the opening, where assumed not suitably foam/ insulated - both sides



Living Room

Assigned To Dry Liner

Cold bridging around the floor line/ skirtings
Adequately seal along the external floorlines before installing the finished flooring

✓ WHAT TO DO?

- Check insulation in roof is continuous and installed correctly at eaves
- Do not rely on sealant as an air barrier – build tight and parge coat or plaster instead
- Trim all doors to achieve a clear gap between finish and door of 10mm; 25mm where no floor covering provided
- Inform SAP assessor of sales extras fitted that were not included in the design or specification e.g. fireplace, downlights, electric radiator



GOOD PRACTICE

Final inspection to use eyeball test to pick up on missing insulation
Notify SAP Assessor of changes to original design

Living Room

Assigned To Zero Carbon Builders Book



Living Room

Assigned To Painter

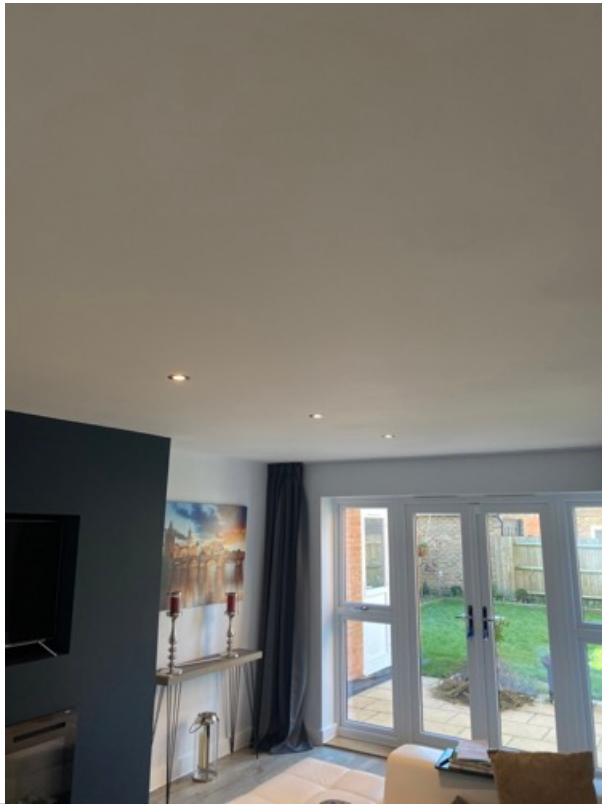
Generally throughout - make good shrinkages between/ around skirtings and architraves



Living Room

Assigned To Joiner

Latch not catching



Living Room

Assigned To Plasterer

Ceiling visibly deviates, previously agreed to re-skim the ceiling



Living Room

Assigned To Painter

As previously noted

Timbers not suitably prepped prior to decoration



Entrance/ Hallway

Assigned To Painter

As previously noted

Make good shrinkages between and around architraves



Entrance/ Hallway

Assigned To Painter

Shrinkages noted around the newel post



Entrance/ Hallway

Assigned To Joiner

Cold bridging around the letter box



Entrance/ Hallway

Assigned To Joiner



Entrance/ Hallway

Assigned To Painter

Paint patchwork



Entrance/ Hallway

Assigned To Dry Liner

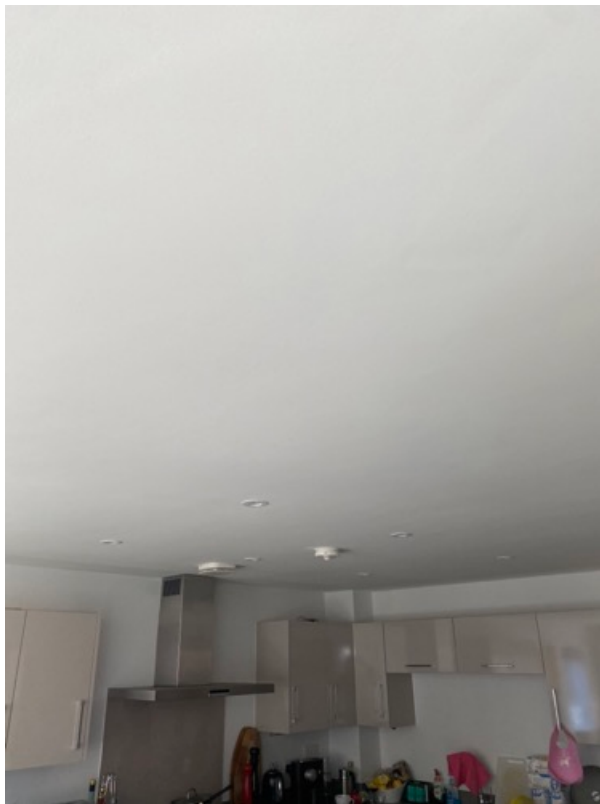
Return not square



Front Room

Assigned To Joiner

Gaps around door to frame exceed 4mm



Kitchen

Assigned To Plasterer

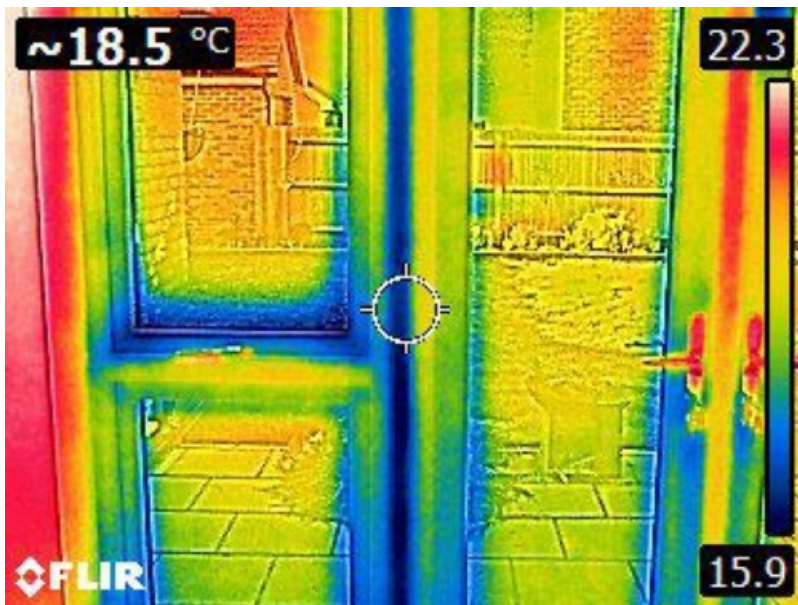
Ceiling visibly deviates, previously agreed to re-skim the ceiling



Kitchen

Assigned To Window Fitter

Cold bridging noted down the covered structural members of the opening, where assumed not suitably foam/ insulated



Kitchen

Assigned To Window Fitter

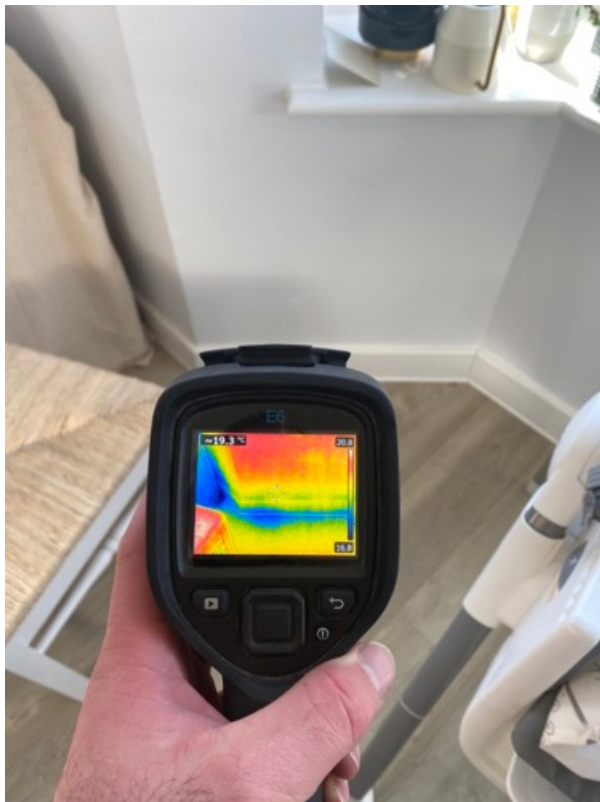


Kitchen

Assigned To Window Fitter

(Old image)

No visible insulation or suitable foaming around the windows structural members



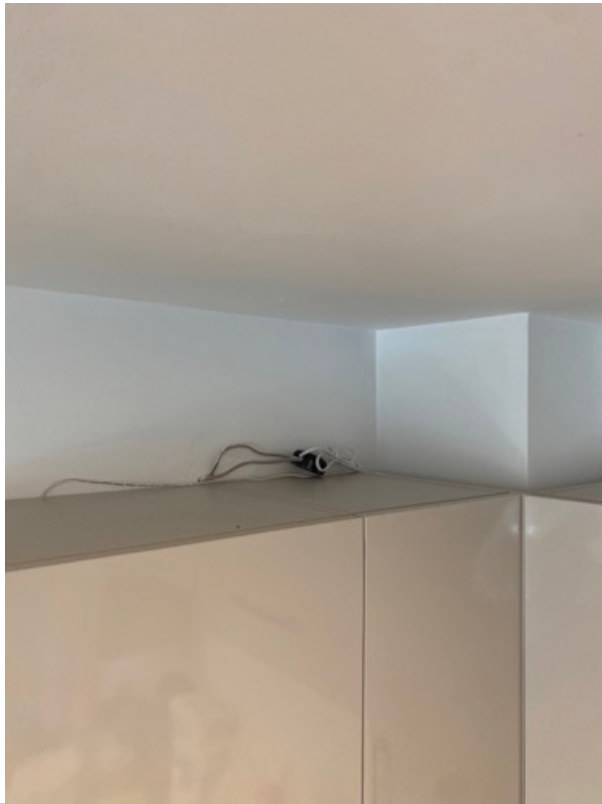
Kitchen

Assigned To Dry Liner

As previously noted

Cold bridging around the floor line/ skirtings

Adequately seal along the external floorlines before installing the finished flooring



Kitchen

Assigned To Electrician

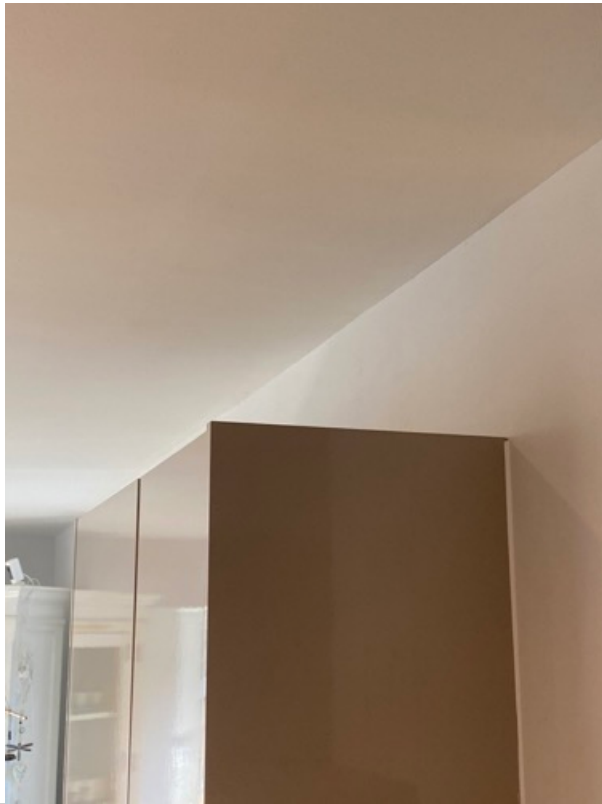
Tidy and secure cables above units to free up additional storage space



Kitchen

Assigned To Electrician

As above



Kitchen

Assigned To Painter

Shrinkages and nail pops visible across the ceiling



Kitchen

Assigned To Painter

Example

As above



Kitchen

Assigned To Plumber

Seal/ foam around the mains water and external floorlines under the kitchen units



Kitchen

Assigned To Cleaner

Sweep and clear debris from under units



Kitchen

Assigned To Cleaner

As above



Kitchen

Assigned To Electrician

Earth the mains water connection



Kitchen

Assigned To Electrician

RHS oven not secured



Kitchen

Assigned To Joiner

Generally / clips not secure

Clip missing



Kitchen

Assigned To Painter

As previously noted

Make good shrinkages around openings



Kitchen

Assigned To Window Fitter

Glass scratched

Cold bridging noted down the covered structural members of the opening, where assumed not suitably foam/ insulated



Kitchen

Assigned To Painter

Shrinkages noted



Kitchen

Assigned To Plasterer

Plaster blown



Kitchen

Assigned To Plasterer

No apparent ending beads around opening

Plaster crumbling



Kitchen

Assigned To Plumber

Make good decorative finish, ensure flue
suitably sealed around externally



Kitchen

Assigned To Joiner

Ensure all unit support legs in place



Kitchen

Assigned To Painter

Clean paint from detector



Kitchen

Assigned To Plasterer

Trowel marks/ plaster lines visible across



Kitchen

Assigned To Painter

Previously repaired



Kitchen

Assigned To Painter

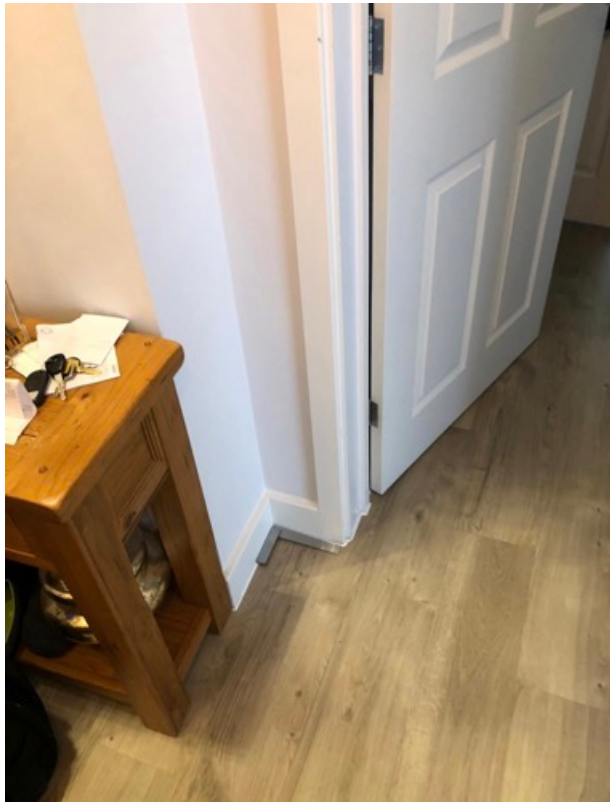
Previously repaired



Kitchen

Assigned To Dry Liner

Return not square



Kitchen

Assigned To Dry Liner

As above



Utility

Assigned To Dry Liner

Seal around plumbing runs and external floorlines behind the washing machine to mitigate cold bridging

Complete dry lining



Utility

Assigned To Plumber

As above

Pipes not lagged



External Rear

Assigned To Roofer/ Bricklayer

Garage external walls saturated, ensure any DPC hasn't been damaged, or guttering



External Rear

Assigned To Bricklayer

Garage saturated, ensure DPC not damaged



External Rear

Assigned To Painter

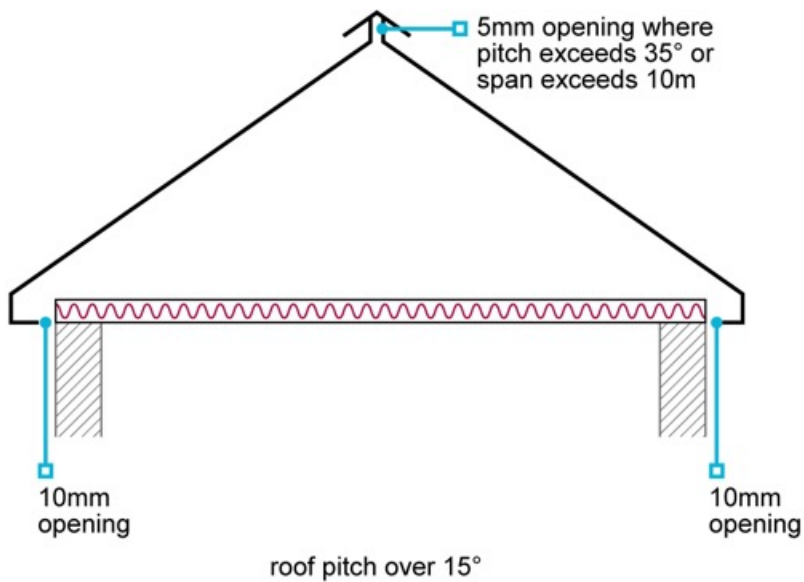
Complete mastic application around the opening



External Rear

Assigned To Roofer

No clear ventilation points to the eaves, noted around the property. Air circulation in the Loftspace limited which has resulted in excessive moisture and condensation build up internally



External Rear

Assigned To NHBC reference

External Rear

Assigned To NHBC reference

- where the roof pitch is 15° or more, ventilation equivalent to a 10mm slot running the full length of the eaves should be provided
- where the ceiling follows the slope of a roof, regardless of pitch, or where a cold roof has a pitch less than 15°, ventilation equivalent to a 25mm slot running the full length of the eaves should be provided (a nominal clearance of 50mm should be maintained between the insulation and the roof underlay)
- for mono-pitched roofs, cross ventilation should be in accordance with BS 5250 and have ventilation equivalent of a continuous high-level 5mm slot, in addition to eaves ventilation.



External Rear

Assigned To Plumber

As previously noted

Seal around the boiler flue



External Rear

Assigned To Bricklayer

Gaps visible under door openings, under cills



External Rear

Assigned To Groundworks

When dig down adjacent to the property, treated water swamps the foundations highlighting a potential leak

As mentioned, water previously tested and confirm that the water is treated



External Front

Assigned To Window Fitter

Gaps visible under bay windows, where the structural members haven't been insulated/foamed around



External Front

Assigned To Window Fitter

Example

As above



External Front

Assigned To Window Fitter

Gaps visible around bay openings



External Front

Assigned To Bricklayer

Example

As above



External Front

Assigned To Window Fitter

As above



External Front

Assigned To Bricklayer

Brick loose



External Front

Assigned To Painter

Rake out pointing and suitably seal around



External Front

Assigned To Bricklayer

Bricks marked/ burned



External Front

Assigned To Roofer

Seal along stepped flashings



External Front

Assigned To Bricklayer

Wall saturated, ensure DPC in tact

When garden was done, treated water found under the house - to avoid potential damage, drainage pipes were installed with access, to drain treated water - NHBC claim 20 / 21705



External Front

Assigned To Groundworks

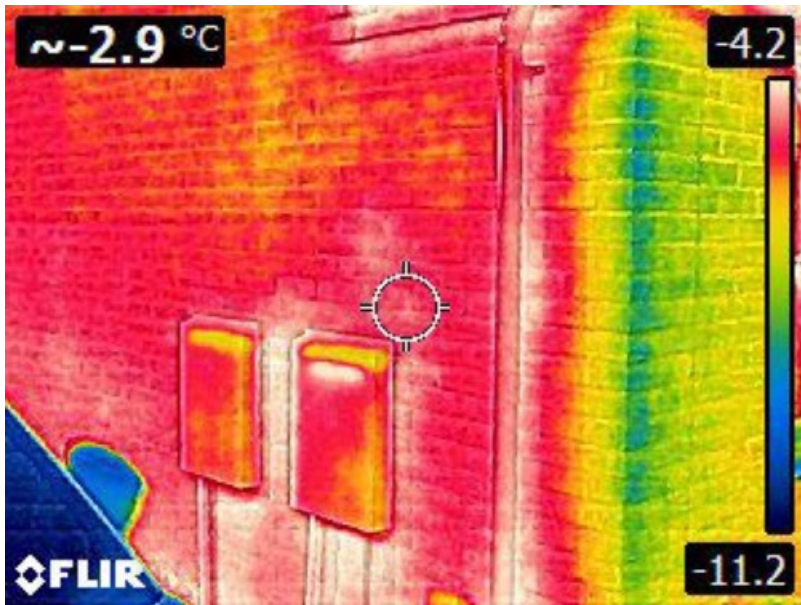
Pipe with treated water, pipe runs on all side of the house in depth of 1.7 meter, in the base of house - claim NHBC 20/21705



External Thermal Checks



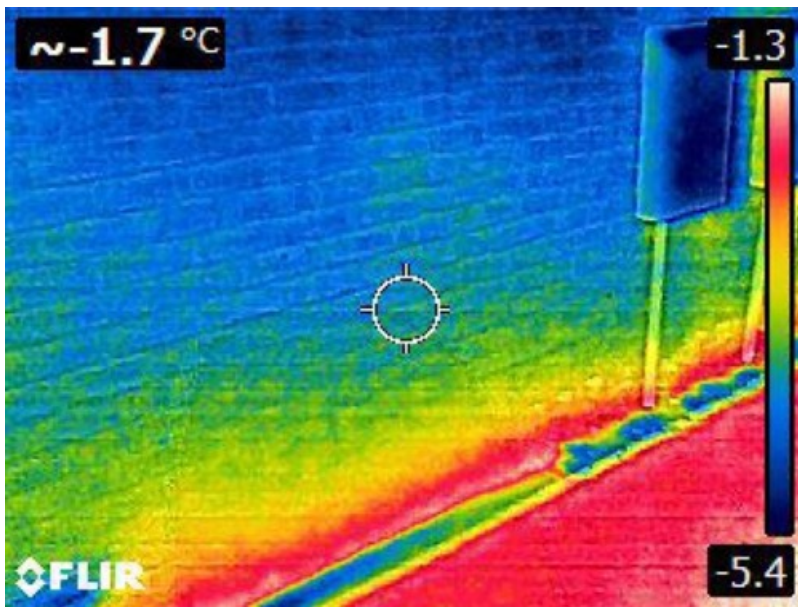
External Thermal Checks



External Thermal Checks



External Thermal Checks



External Thermal Checks



External Thermal Checks



External Thermal Checks



External Thermal Checks