JOB REFERENCE: ES42828/RBS/NT1/MH/JAN2

RESIDENTIAL BUILDING SURVEY

British Iron and Steel Federation (BISF)
Constructed House
Wales

FOR

Mrs X

Prepared by:

INDEPENDENT CHARTERED SURVEYORS

Marketing by:

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CONTENTS

INTRODUCTION

Firstly, may we thank you for your instructions of Date; we have now undertaken an independent Building Survey (formerly known as a Structural Survey) of the aforementioned property. This Survey was carried out on Date.

The Building Survey takes the following format; there is an introductory section (which you are currently reading), which includes a synopsis of the building, and a summary of our findings.

We then go through a detailed examination of the property starting with the external areas working from the top of the property down, followed by the internal areas and the buildings services. We conclude with the section for your Legal Advisor and also attach some general information on the property market.

We are aware that a report of this size is somewhat daunting and almost off-putting to the reader because of this. We would stress that the purchase of a property is usually one of the largest financial outlays made (particularly when you consider the interest you pay as well).

We recommend that you set aside time to read the report in full, consider the comments, make notes of any areas which you wish to discuss further and phone us.

We obviously expect you to read the entire report but we would suggest that you initially look at the summary, which refers to various sections in the report, which we recommend you read first so that you get a general feel for the way the report is written.

As part of our service we are more than happy to talk through the survey as many times as you wish until you are completely happy to make a decision. Ultimately, the decision to purchase the property is yours but we will do our best to offer advice to make the decision as easy as possible.

REPORT FORMAT

To help you understand our Report we utilise various techniques and different styles and types of text, these are as follows:

GENERAL/HISTORICAL INFORMATION

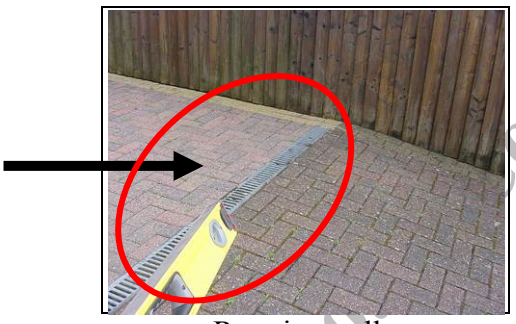
This has been given in the survey where it is considered it will aid understanding of the issues, or be of interest. This is shown in "italics" for clarity.

TECHNICAL TERMS DEFINED

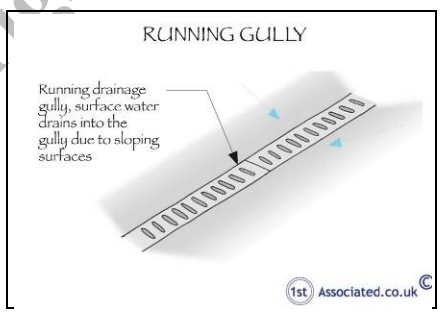
Throughout the Report, we have endeavoured to define any technical terms used. This is shown in "Courier New" typeface for clarity.

A PICTURE IS WORTH A THOUSAND WORDS

We utilise photographs and sketches to illustrate issues or features. In some photographs a pencil, pen, circle or arrow has been used to highlight a specific area. We also use sketches to give guidance and clarity on various issues in the property and we use them to help you understand the issues, scenarios and situations better.



Running gully



Example sketch

ORIENTATION

Any reference to left or right is taken from the front of the property, including observations to the rear, which you may not be able to physically see from the front of the property.

ACTION REQUIRED AND RECOMMENDATIONS

We have used the term **ACTION REQUIRED** where we believe that there are items that you should carry out action upon or negotiate upon prior to purchasing the property. Where a problem is identified, we will do our best to offer a solution. However, with most building issues, there are usually many ways to resolve them dependent upon cost, time available and the length of time you wish the repair/replacement to last.

SYNOPSIS

SITUATION AND DESCRIPTION

This is a two storey semi-detached property, with gardens to the front and rear, all sitting on a sloping site.

The property is well presented and is in a residential area of similar size and style of houses.

There is a driveway to the right side, with garage to the rear right. There is also parking on the roadside on a first come first serve basis; room was available on the day of the survey.

The house is of a non-traditional metal framed construction, we believe, commonly known as a BISF house which stands for British Iron and Steel Federation. There were various different types of these houses:

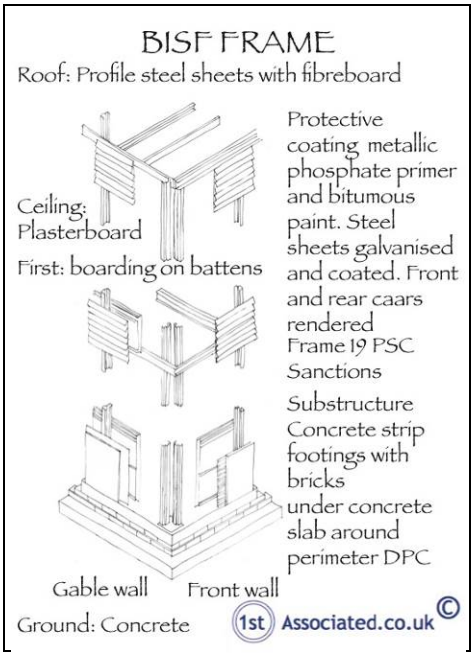
BISF Type A and BISF Type A1 were built between 1944 and 1950.
There were approximately 35,000 built.

There were also BISF Type B and BISF Type C, of which less were built.

They were all designed by Frederick Gibberd.

From this we will assume it is a BISF Type A1. The house would have looked quite different when it was built with a shallow pitched profile asbestos cement sheet roof with external walls rendered to first floor level and vertical profile steel sheets above this. Many mortgage lenders are not happy to lend on this type of property.

Example of a typical non-traditional house (Not your property)



BISF frame

This type of property was built just after the War Years by the local authorities to help with the re-housing of people, typically in the 1940s/1950s. The owner believes it to have been built in 1955.

If the exact age of the property interests you your Legal Advisor may be able to find out more information from the Deeds.

> **ACTION REQUIRED:** Your legal advisor needs to check and confirm all of the above.

Putting Life into Perspective!

Some of the things that were happening around the time the property was built:

1939 – 1945	World War II
1941	The National Fire Service is established during WWII
1943	William Morris established the Nuffield Foundation
1948	Olympic Games held in London, known as the Austerity Games
1950	The concept of artificial intelligence for computers was developed by Alan Turing (MOD)
1952	Princess Elizabeth becomes Queen at the age of twenty five.
1954	Roger Bannister breaks the four minute mile barrier.
1956	The TV remote control is invented by Robert Adler
1959	UK postcodes introduced after a trial run in Norwich

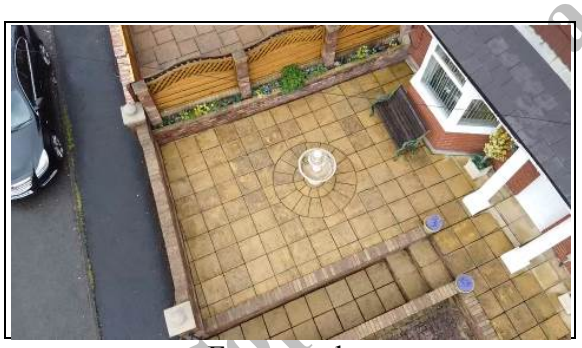
LOCATION MAPS

EXTERNAL PHOTOGRAPHS

Front view
Aerial view – 360 photo

Rear view

Street view



Front garden
Aerial view – 60 photo

Right view
Aerial view – 360 photo

Rear garden

Rear garden

ACCOMMODATION AND FACILITIES

(All directions given as you face the front of the property)

Ground Floor

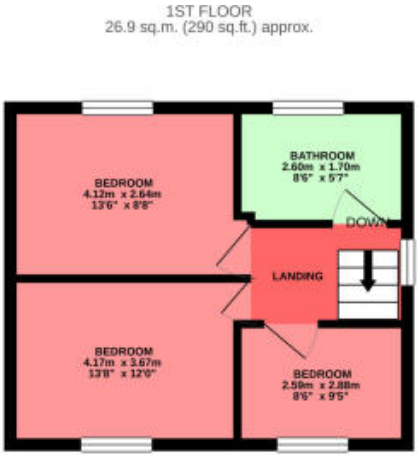
The ground floor accommodation consists of:

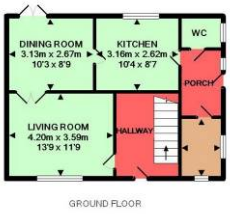
1) Right side entrance hallway
2) Front lounge, with staircase
3) Front right utility
4) Rear kitchen/diner
5) Far rear left conservatory
6) Rear WC (without wash hand basin)

First Floor

The first floor accommodation consists of:

1) Landing
2) Front left bedroom
3) Front right bedroom
4) Rear left bedroom
5) Rear right bathroom





Typical original layout plan of the ground floor of a non-traditional house
(Not your property)

Layout plan where walls removed/amended and door infilled, highlighted with ovals
(plan is not your property)

Walls have been removed in your property (red ovals in above sketch), which will reduce the structural strength of the property, unless the existing owners can provide evidence that additional structural support was put in when the walls were removed.

Another area identified is where a set of doors have been infilled (orange oval)

Outside Areas

There are gardens to the front and rear, on a sloping site.

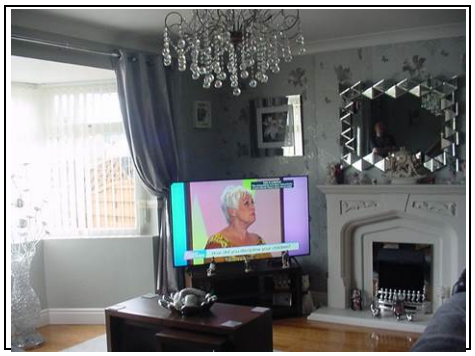
There is a brick paved driveway to the right side, with rear right garage, plus roadside parking on a first come first serve basis.

Finally, all these details need to be checked and confirmed by your Legal Advisor.

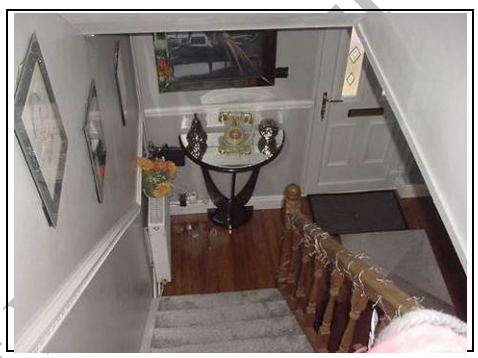
INTERNAL PHOTOGRAPHS

The following photos are of the internal of the property to help you recall what it looked like and the general ambience (or lack of). We have not necessarily taken photographs of each and every room.

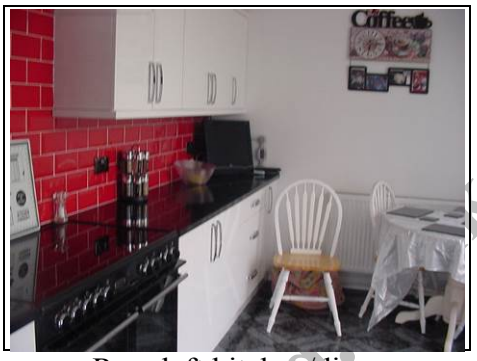
Ground Floor



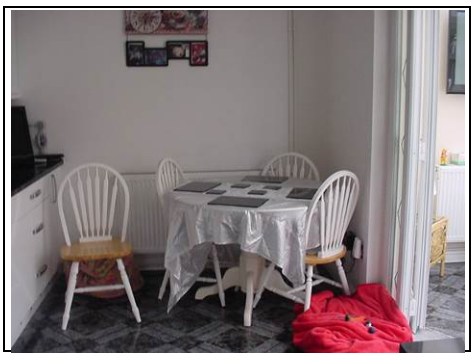
Front left lounge



Entrance door and staircase in lounge



Rear left kitchen/diner



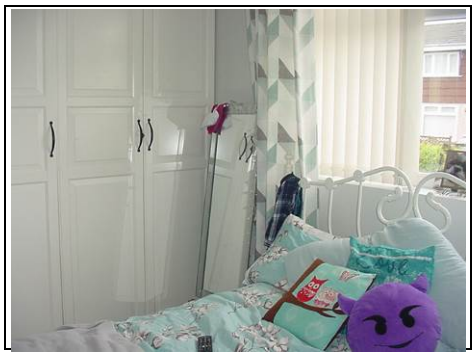
Dining area

Rear conservatory

Right side utility

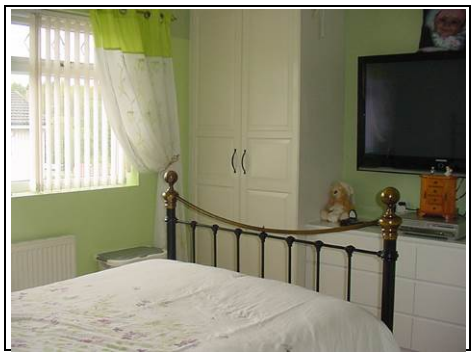
Rear right WC

First Floor

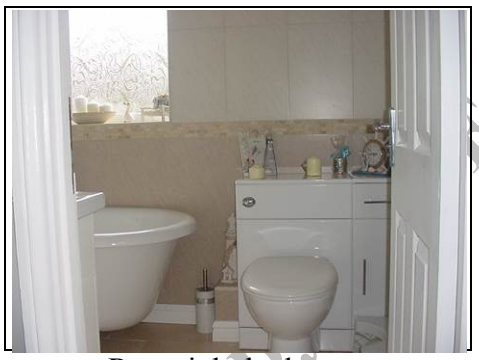


Front left bedroom

Front right bedroom

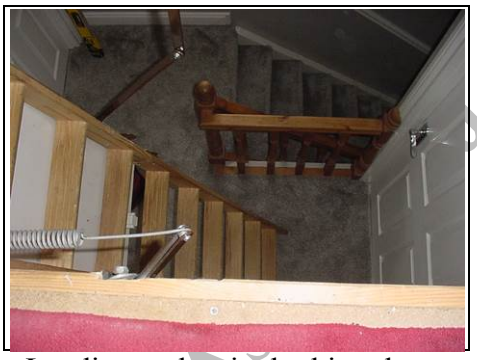


Rear left bedroom



Rear right bathroom

Shower cubicle



Landing and stairs looking down from loft

Loft hatch on landing

Loft lined/boarded out for storage

SUMMARY OF CONSTRUCTION

External

Chimneys:	Removed
Main Roof:	Pitched, clad with pressed metal tiles
Main Roof Structure:	Tubular metal roof truss
Front Single Storey Roof:	Shallow pitched, clad with pressed modern slate
Right Side Single Storey Roof:	Shallow pitched, clad with pressed metal tiles
Rear Conservatory Roof:	Pitched, clad with polycarbonate plastic
Gutters and Downpipes:	Plastic
Soil and Vent Pipe:	Internal
Walls:	
High level:	Pressed metal tiles (assumed)
Low level:	Brick slips/tiles (assumed)
Wall Structure:	Assumed metal frame (not opened up – please see our comments on this) See BRE Information sheet in the Appendices.
Fascias and Soffits:	Plastic over-cladding
Windows and Doors:	Plastic double glazed windows, without trickle vents, with exception of ground floor WC

Internal

Ceilings:		Typically fibreboard, hardboard and stramit board linings to the ceilings /plasterboard or proprietary material (there are some variations of ceilings, difficult to identify without opening up), finished with textured paint (all assumed)
Perimeter Walls:		Dry lining (assumed)
Internal Walls:		Studwork, finished with modern plaster. (assumed)
Floors:	Ground Floor:	Solid under foot, assumed concrete
	First Floor:	Metal and timber joists with floorboard sheets or boarding (again not opened up) (all assumed)

Services

We believe that the property has a mains water supply, mains drainage, electricity and gas (all assumed).

Heating:	There is a wall mounted Ariston boiler located in the utility
Electrics:	The electric fuse board is 1980s-2000s and is located under the stairs. There is a similar aged fuse board in the garage.
Drainage:	The manhole is located to the right side, set within the brick pavers of the driveway (not able to open)

We have used the term ‘assumed’ as we have not opened up the structure.

ACTION REQUIRED: Your Legal Advisor needs to check and confirm the above and advise us of anything they require further clarification on before legal commitment to purchase the property.

EXECUTIVE SUMMARY

Summaries are not ideal as they try to précis often quite complex subjects into a few paragraphs. This is particularly so in a summary about someone's future home when we are trying to second-guess what their priorities are, so it is important the Report is read in full.

It is inevitable with a report on a building of this nature that some of the issues we have focussed in on you may dismiss as irrelevant and some of the areas that we have decided are part of the 'character' of this property you may think are very important. We have taken in the region of 300 photographs during the course of this survey and many pages of notes, so if an issue has not been discussed that you are interested in or concerned about, please phone and talk to us before you purchase the property (or indeed commit to purchasing the property), as we will more than likely have noted it and be able to comment upon it; if we have not we will happily go back.

We have divided the Executive Summary into 'The Good', 'The Bad' and 'The Ugly', to help distinguish what in our mind are the main issues.

Once you have read the report we would recommend that you revisit the property to review your thoughts on the building in light of the comments we have made in this survey.

The Good

Survey reports often are full of only the faults and general 'doom and gloom', so we thought we would start with some positive comments on the property!

1.0) Generally non-traditional buildings can be purchased cheaper on a metre squared basis than traditional buildings. There are obviously difficulties with this type of property, as many mortgage lenders are not prepared to lend upon it. This in turn puts off many purchasers, as does the non-traditional construction.

2.0) The property is well presented, albeit this is all superficial.

3.0) It has a good sized garage and associated driveway.

We are sure you can think of other things to add to this list.

The Bad

Problems / issues raised in the 'bad' section are usually solvable, but often need negotiation upon. However, a large number of them may sometimes put us off the property.

1.0) Non traditional building - The overview

You need to be fully aware that you are purchasing a non-traditional house; this is our overview:

1.1) Mass Building after the War Years

After the war there was a shortage of housing which led to the use of many innovative ways to build houses quickly. It is rumoured that some of the companies that were building aeroplanes and bombs, etc one day were very quickly turning their hand to building houses. This resulted in what is now known as non-traditional construction. We believe this to be a metal frame building known as a BISF house.

1.2) Types of non-traditional building

There are many different types of non-traditional buildings. These are generally split into the following main categories:

1. Metal frame – a metal frame supporting the structure.
2. Pre-cast concrete - cast in a factory and then brought to the site.
3. In-situ concrete - cast at the site.
4. Timber frame – a timber frame supporting the structure.

Each of these main categories then has many, many different types.

1.3) Mortgages on non-traditional houses

One of the interesting/difficult facts is that many mortgage companies will not lend on them. We would add further that their lending criteria changes from time to time, due to all kind of things, from the economy, to general bad news events, such as the Coronavirus (Covid-19), which does mean they will lend on non-traditional houses some of the time and sometimes they will not.

Much of the buying population seems to be put off by non-traditional buildings (as opposed to traditional brick and stone walls and tile and slate roof buildings).

Cash market

During difficult times it will mean that non-traditional properties are a cash only market, as the majority of people purchase using mortgages this does limit who can buy this type of house.

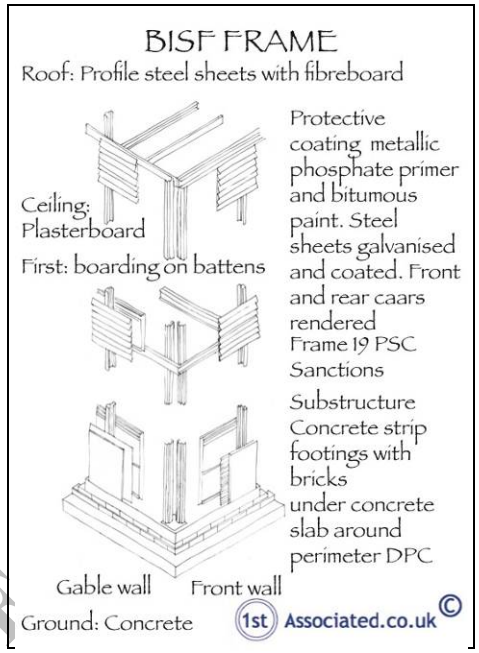
ACTION REQUIRED: You need to be absolutely certain that you understand the risks of buying a non-traditional construction house.

Please see the information sheets within the Appendices that give a better understanding by the Building Research Establishment of these buildings however you should be aware that this information is dated and not regularly updated.

1.4) BISF houses

We believe this property is a BISF house which is an abbreviation for British Iron and Steel Federation, which means it is built from a metal frame.

Example of typical BISF house
(Not your property)



BISF frame

Please see further information on BISF Houses within the Appendices.

1.5) Construction of this type of non traditional house – BISF House

The original construction of this type of property generally consists of:

1. Asbestos roofs
2. Profile metal sheeting at high level.
3. Render to low level.
4. Single glazed metal windows.
5. Services appropriate for the time, with a back boiler and 1960s electric wiring system.

We believe the Building Research Establishment often known as the BRE are generally considered to have carried out the best research on this type of construction and have identified the following problems:

1. Minor to severe corrosion of the rolled steel angle (RSA) and rolled steel channel (RSC) stanchions, particularly at the bases and the corners.

2. Minor to severe corrosion of the sheeting rails

3. Cracking of ground floor slabs, particularly at the corners

4. Corrosion of metal lathing and failure of render

5. Corrosion of profile steel sheets and steel flashings

6. Corrosion of cast iron flue pipes and metal cowlings

7. Deterioration of profiled asbestos cement sheet roof covering.

In our experience we have come across:

1. Deterioration of asbestos roofing.

2. General deterioration of asbestos materials used.

3. Corrosion of metal structural frame.

4. Corrosion of profile metal sheets.

It needs to be understood that there are limitations to a visual inspection and you can only see much of the above by physically opening up the structure.

1.6) Key areas on non-traditional buildings

In our experience key areas are generally at ground level, first floor level and roof level where the structural frame is joined together which should be checked for deterioration (which we have not done in this instance). This could be caused by water discharging onto the base of the property to condensation into the structural frame.

Sloping site

In this particular case, we believe problems are likely to be present at the base of the property (see our later comments on sloping sites).

1.7) Is the structural frame sound?

The risk with buying any steel framed property is if the structural frame is sound or not. The only way to see this is by opening up the structure which we would be happy to do, and we would recommend in this case, however you do need to get permission from the existing owners and also ensure that you have a builder who can open up and replace the openings to a satisfactory standard.

Example of opening up of a property
(Not your property)

1.8) Our comments on the structural frame where we could see it

We could only examine the structural frame of this property within the roof, of which we only had approximately 5% of the roof where we could see the structural frame, therefore our view was very limited. This is why we would recommend the following, and it is very important.

Area of roof not hidden
(highlighted in yellow)
Aerial view – 360 photo

ACTION REQUIRED: The only way to be one hundred percent certain as to the condition of this structural frame is to open up the structure. As mentioned you will need to obtain permission from the owners to carry out this work but we are more than happy to return and inspect once the structure has been opened up and you need to have a builder close it up satisfactorily.

ANTICIPATED COST: This varies; please obtain quotations.

1.9) Removal of part of the structural frame

As discussed, at the time of the survey walls had been removed in this property, which means the structural integrity is not as it originally was designed. You need to be careful with alterations of this type of property and we feel that removing walls should have had a structural engineer's approval.

ACTION REQUIRED: Ask the existing owners if there was any structural engineer's approval to remove walls and be very wary if they have had not had professional advice in writing on this.

Remember, when buying a property it is 'caveat emptor', which means buyer beware.

1.10) Dangers with Non-Traditional Construction

Most non-traditional buildings of the major categories that have been identified by the Building Research Establishment have known weak areas however we (the whole of the construction profession) are still in the investigation stage/finding out stage with non-traditional buildings.

1.11) Non-traditional houses, can they be made into mortgageable houses?

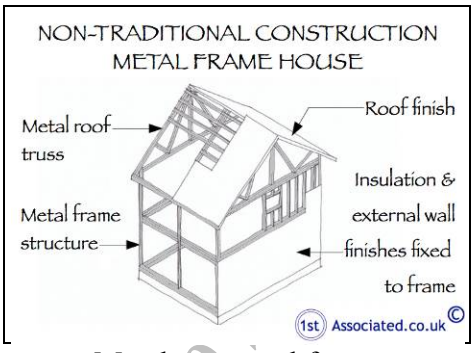
As the property is a non-traditional construction this does limit companies who will give mortgages on them and as the vast majority of people buy properties with mortgages it limits the market you can sell into.

Some companies do specialise in carrying out work to non-traditional houses to make them mortgageable. We have however found that where the neighbouring property (as you are semi-detached) does not join in with this work there will still be an adverse effect on the property and the property value, and the value of doing the conversion is adversely affected.

1.12) How does a metal structural frame property work?

A metal structural frame works in the same way as many multi-storey buildings work.

The best way to understand this, we feel, is to understand that a traditional construction utilises the walls to give strength to support the roof and the floors, whereas a non-traditional building uses a structural frame, which in this instance is metal. This frame is then used to hold the cladding in place and the roof sits upon it.



Metal structural frame

1.13) Whatever else you find will very much depend upon what the owners have done after the original construction

It is what work the owners of the property have carried out, and also the local authority and/or housing association who probably had ownership of/management of any work, which is unknown. One of our concerns is that there has been significant alterations in this property and we do not know who has carried them out.

We would list these as:

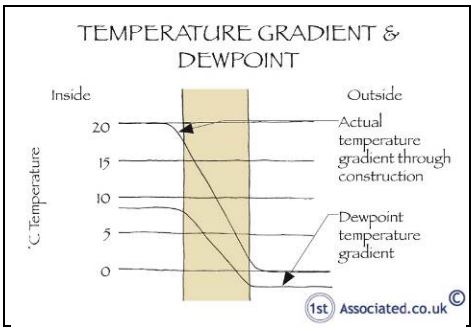
1. Replacement of roof with a pressed metal tile

2. Pressed metal tiles to the walls.

We believe with this there is likely to be insulation added, which can in turn cause interstitial condensation.

Interstitial Condensation Defined

This is where moisture is present within the structure of a building. The more moisture it contains, the bigger the vapour pressure and the smaller amount of moisture, the less vapour pressure.



Interstitial condensation in a solid wall

Metal frame and insulation

As we have not opened up the property we cannot see if insulation has been added or not but typically where we have opened up other properties in the past we have found this.

ACTION REQUIRED: Your legal adviser needs to specifically ask the present owners in writing if insulation has been added by them or if they know of any insulation that has been added.

As mentioned elsewhere within this report we would ideally like to open up the property. If insulation has been added it can lead to an increase and risk of condensation/rust/deterioration.

If it has been added without opening up the structure we would not recommend purchasing the property without opening up of the structure.

Walls – internal cladding

The walls internally are then clad with a plasterboard, proprietary boarding or asbestos. Again, unfortunately unless samples are taken it is not possible to identify by eye however, we do expect to find some asbestos in the property, such as to the fascias and soffits and around the ductwork.

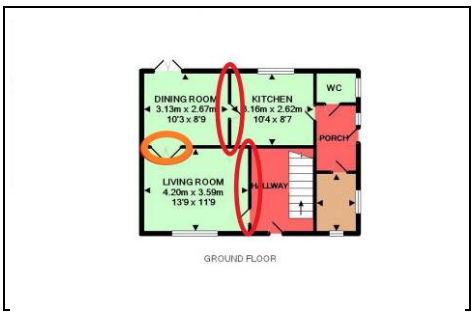
Our insurance company requires us to advise we are not asbestos surveyors and advises us to recommend asbestos surveyors are instructed and that you have your own asbestos survey carried out.

ACTION REQUIRED: Your legal adviser needs to specifically ask in writing if there is an asbestos report and if so what date it is and whether it took samples. They should request a certificate stating that this property is clear of asbestos.

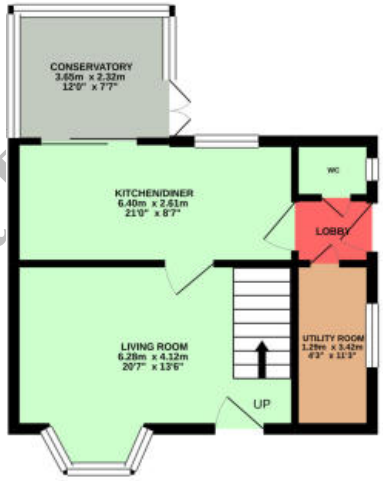
Walls – internal walls removed

As mentioned, internal walls have been removed in this property, will affect the structural integrity of the building.

The owner advised they had had not structural alterations, however we believe they have. They did not answer our question with regard to planning permission and building control approval.



Typical original layout plan where walls removed/amended and door infilled, highlighted with ovals (plan is not your property)



Your property where walls have been removed

2.0) Chimney removed

The chimney has been removed. We are never particularly keen on this happening unless it was removed when this property was re-roofed, if it is carried out at a later date this can lead to problems in this area and water getting in.

In this case originally there would likely have been asbestos tiles, which we believe have been removed and replaced with a pressed metal roof.

Pressed metal roof, a chimney would have once been present
Aerial view – 360 photo

ACTION REQUIRED: Your legal adviser to ask the owners if they have replaced the roof or whether it was carried out previously.

Please see the Chimneys Section of this Report.

Area of roof space where we believe the chimney once was

3.0) Damp stains in the roof

As you are aware, it was a rainy day on the day of the survey, although it only rained for a short time during the course of the inspection, however we would see what looks like damp staining within the roof space. We are not sure whether these are old or new and we were waiting for it to rain again but unfortunately it did happen.

Damp stains in roof space, which we believe have been there a while

More staining in roof space

Roof covering

As we discussed, the roof covering in this area is a pressed metal roof covering, which can deteriorate over time; see adjoining example picture.

Example of weathering to pressed metal roof (Not this property)

Protective underlayer/sarking felt

We can see there is some displacement of the protective underlayer/felt, which could be allowing rainwater to get through at the joints of the pressed metal roof.

Pressed metal roof
Aerial view – 360 photo

Displacement of protective underlayer

Pressed metal roof defined

A metal sheet that is pressed to look like a tile from ground level.

Roof Structure

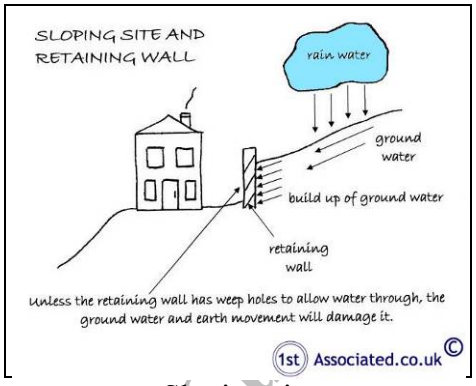
As discussed, the structure is lightweight and as such cannot usually take the weight of normal concrete or clay tiles, therefore this has been re-roofed with a pressed metal tile. We have not opened up the roof so cannot 100% confirm this but we feel it is very likely. We have actually seen this type of tile become quite shiny, where the top coat gets weathered away (see previous photo of a weathered roof).

ACTION REQUIRED: Your legal adviser to check and confirm with the existing owners exactly what work was carried out to the roof, or for them to make enquiries to the local authority/local housing association/statutory body, such as Coal Board, Steel Works, etc if they had anything to do with the building of these properties.

Please also see our comments in the Roof Section of the report regarding adding vents in the roof.

4.0) Sloping site

The property sits on a sloping site, which means rainwater runs from the top of the property to the bottom. In this case there is some dampness to the rear left side in the conservatory, although it was minor at the time of our inspection.

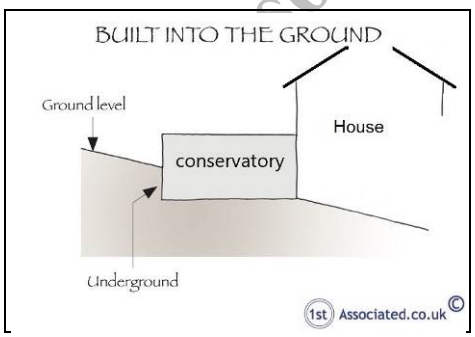


Sloping site

Sloping site running towards rear of property
Aerial view – 360 photo

4.1) Rear conservatory

The rear conservatory is partly built into the ground and we obtained slightly high damp readings in this area.



Conservatory built into the ground

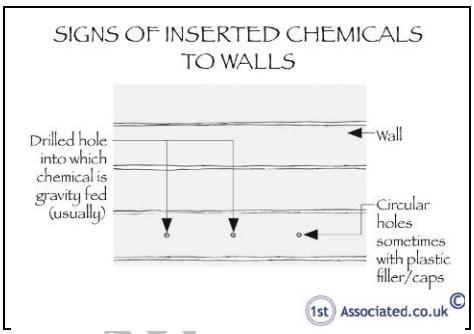
Conservatory built into the ground

High damp meter readings in conservatory

Conservatory walls

The walls are render finished, possibly built in brick or blockwork. We can see they he have had a damp proof course inserted the walls previously but we do not believe this will help in this instance.

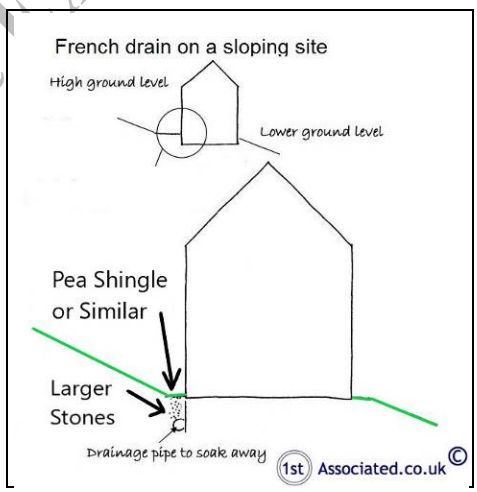
Inserted DPC



A lot of the pointing has weathered in the rear paving slabs

ACTION REQUIRED: We recommend you add a French drain that leads to the manhole to the rear right corner.

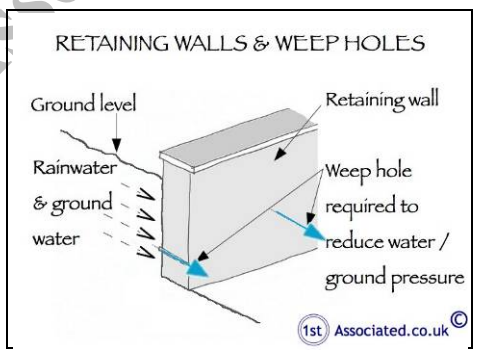
ANTICIPATED COST: Costs in the region of £750 to £1,500 if it is done properly and drained into the rear right manhole.



French drain

4.2) Retaining wall

There is also a garden wall there that would benefit from having weep holes added to allow the water to travel through.



Weep holes

Rear retaining wall needs weep holes adding

ACTION REQUIRED: We recommend you add weep holes to the wall, however we think you should wait and see with regard to the conservatory.

ANTICIPATED COST: For the weep holes, using a diamond drill or similar, a few hundred pounds.

Please see Outside Areas Section of the report.

5.0) Weathered mortar to the paving stones

The entrance pathway and area around the front door is fairly weathered. We assume this relates to the water travelling over the paving.

A lot of the pointing has weathered in the rear paving slabs

Paving slabs not bedded

ACTION REQUIRED: Repoint paving slabs.

ANTICIPATED COST: Few hundred pounds; please obtain quotes.

Please see the Outside Areas Sections of this Report.

6.0) Rainwater goods - downpipes

The downpipes are not particularly well positioned, discharging against and close to the building and not fixed to the wall properly.

Rear downpipe not fixed properly

Rear downpipe discharging close to wall

Downpipe by conservatory discharging in wrong area

ACTION REQUIRED: General repairs to the gutters and downpipes, making sure they are all secured and ensure they are pointing away from the building so dampness does not occur.

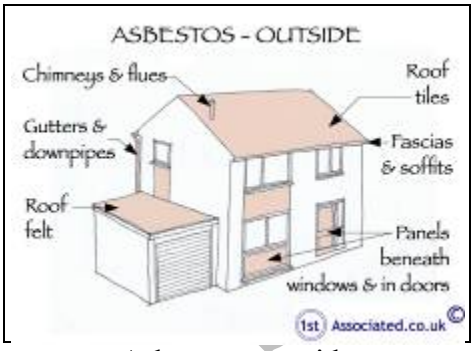
Please also see our comments specifically relating to the dampness getting in the garage, which we believe is probably related to the gutters.

ANTICIPATED COST: Set aside the sum of £250 to £500 for the repairs, clearing gutters etc. Please obtain quotes.

Please see the Gutters and Downpipes Section of this Report.

7.0) Asbestos

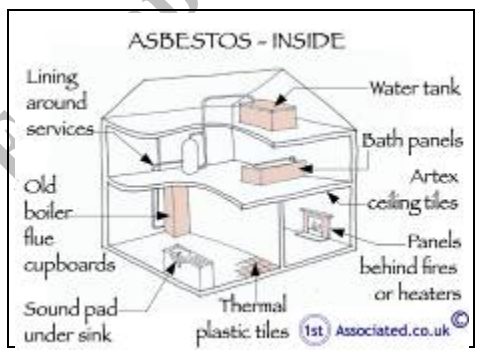
When this property was built asbestos was a common popular material which was used almost as commonly as wood. As mentioned it formed the original roof material and it also generally formed such things as the fascias and soffits (which have now been over-clad with plastic), the gutters and downpipes.



Asbestos - outside

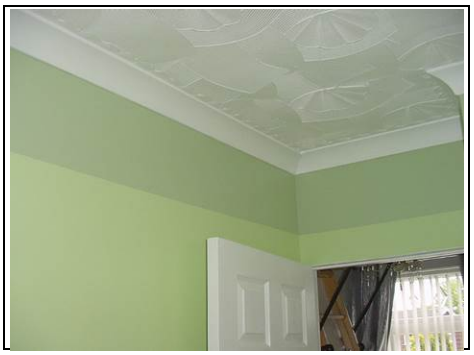
The generic sketches show typical areas where asbestos can be found in these properties.

Internally, there are textured painted ceilings, the older style often contains an element of asbestos, although this does look to be quite modern.



Asbestos - inside

Textured painted ceiling


Textured paint in fan pattern

Our insurance company requires us to advise we are not asbestos surveyors and advises us to recommend asbestos surveyors are instructed and that you have your own asbestos survey carried out.

ACTION REQUIRED: The only way to be one hundred percent certain with regards to Asbestos in a property is to have an Asbestos report with samples taken and the recommended action carried out.

We would always recommend any asbestos is removed from a property as it can not only be dangerous, it can affect the value of the property.

ANTICIPATED COST: Asbestos costs can vary considerably; we are forever surprised at the variety in quotes. Please obtain quotations.

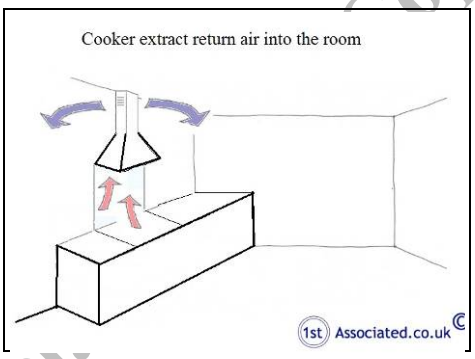
Please see the Other Matters Section of this Report.

8.0) Higher than average possibility of condensation

With this type of building they tend to have condensation if you do not get rid of the humidity at source. We noticed very minor black mould in the bathroom.

Note, the extract in the kitchen is just an air filter and not a humidity controlled extract to external air.

Very slight black mould in bathroom



Kitchen air filter

Kitchen air filter is not an extract fan

ACTION REQUIRED: For this reason we recommend adding large, good quality humidity controlled extract fans in the kitchen and bathroom areas and any areas that are used for drying clothes internally during winter months (we would assume that clothes will be dried externally during the warmer months). By large extract fans we mean 150mm.

ANTICIPATED COST: We would anticipate costs between £250 - £500 per extract fan depending upon the wiring required. We always recommend quotes are obtained before work is agreed/commenced.

Please see the Dampness Section of this Report.

9.0) Older style windows

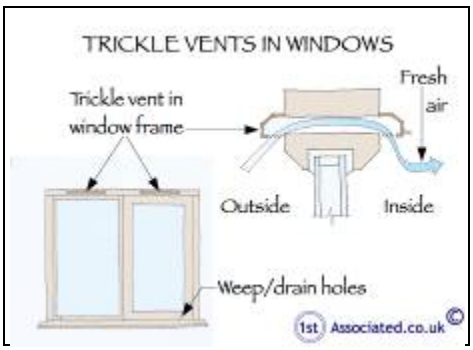
We noted that you have older style double glazed windows without trickle vents, which will add to the likelihood of condensation in the property and we recommend these are added. The only trickle vent in the property is in the ground floor WC.

Only trickle vent in the windows is to the ground floor WC

Trickle Vents Defined

Trickle vents allow a trickle of air through, therefore stopping/reducing the likelihood of condensation occurring within the property.

ACTION REQUIRED: We recommend the adding of trickle vents to the plastic double glazed windows.



Trickle vents

ANTICIPATED COST: As discussed, we have not personally had experience of these being retro-fitted, we would expect costs in the region of a few hundred pounds per window, but you do need to check this and we would get the person to carry out one to see what you think the quality of the work would be. We would be more than happy to comment on any photos you take of this work.

Please obtain quotations.

Please see the Windows Section of this Report.

10.0) Garage

Dip in garage roof to the rear and there may be deterioration in this area

If you recall, we looked at the dampness getting in the garage, which seems to be worst on the right hand side, coming in via the roof. It could be as simple as clearing out the gutters, or more complex if it has been a long term problem. There is also a dip in the roof to the rear.

This needs checking from your neighbour's side; we would normally knock on the neighbour's door and have a chat with them and ask them if we could see the area but obviously it is not possible at the moment due to the Coronavirus requirements.

Dampness coming in through garage roof

ACTION REQUIRED: We would start with the general clearing of the gutters to see if that gets rid of any dampness coming in.

Also monitor the area, which you can do by putting paper here (rolls of old wallpaper are quite good) and you can see if any water is still coming through.

It maybe that the gutters are not laid properly in taking the water away and it could be there are problems in the very base of the roof.

ANTICIPATED COST: We would allow the sum of £750 to £1,500, assuming some work has to be done other than clearing the gutters/checking the joints of the guttering and downpipes, which of course is a DIY/couple of hundred pound job. Please obtain quotations.

Please see the Outside Areas Section of this Report.

Services

11.0) Dated electrics

The electrics are 1980s-2000s and we recommend they are upgraded and we noted DIY electrics in the roof space and are slightly dated and better are now available. There are also electrics of a similar age in the garage that would also benefit from upgrading.

The owner advised the electrics were last tested about two years ago when a Smart meter was added. We have not seen this test and would be surprised if it was a full test of the electric system if it was just a Smart meter being added.


Dated fuse board under the stairs


DIY electrics in roof space


Dated fuse board in garage

ACTION REQUIRED: Add new fuse boards.

We recommend an Institution of Engineering and Technology (IET) test and report to be carried out by an NICEIC registered and approved electrical contractor or equivalent.

ANTICIPATED COST: A few hundred pounds for a new fuse board and £250 - £500 for a test and report plus costs for any work recommended; please obtain quotations.

12.0) Dated boiler

There is a wall mounted Ariston boiler located in the utility. The owner advised it was last serviced in Date and that the boiler is 10 years old and is therefore nearing the end of its useful life.


Ariston boiler

ACTION REQUIRED: Budget for a replacement boiler. Some of the radiators may need changing as well as modern boilers generally have a higher pressure level than older boilers.

ANTICIPATED COST: In the region of £2,500 to £3,500; please obtain quotations.

Please see the Services Section of this Report.

The Ugly

We normally put here things that we feel will be difficult to resolve and will need serious consideration.

Walls Removed

As mentioned earlier, walls in the property have been removed. This can be particularly problematic in this type of structural frame property, we would term it as a lightweight structural frame, especially when sitting in a sloping site such as this.

As mentioned, the owner advised they had had not structural alterations, however we believe they have. They did not answer our question with regard to planning permission and building control approval.

ACTION REQUIRED: We have mentioned elsewhere within the report that your legal adviser needs to check and confirm if a structural engineer was consulted when the walls were removed or Building Regulations/Planning Permission approval gained.

Opening up the structure

As mentioned, we would like to open up the structure as the property sits on a sloping site; typically this will require three openings.

Where we have been able to see the structure, which is half of the roof (a very small area) we only found the rusting to be slightly poorer than average.

High risk purchase

We consider this property to be at the higher risk end of this particular higher risk market of non-traditional properties. If you do proceed with the purchase you need to make sure you are absolutely happy with the characteristics of this type of property and associated work that may be necessary.

We have mentioned that in a worst case scenario repairs to the metal frame may be necessary and we have also discussed that this type of property can be a cash only purchase property, which is how we believe you are buying it.

More than the average number of items

We have found more than the average number of things that we would classify as requiring further investigation and we would ask that you re-read the report and we will be more than happy to discuss this with you further.

Other Items

Moving on to more general information.

Maintenance

There is the basic maintenance that you would associate with any building such as clearing gutters, checking that the gutters are not leaking and are falling towards the downpipes and redecoration etc. A budget for such work must be allowed to ensure it is maintained in a good condition. This will prevent undue and unnecessary deterioration.

Specific maintenance relating to non-traditional buildings

There are also important elements relating specifically to non-traditional buildings, such as ensuring that your extract fans are well maintained.

> **ACTION REQUIRED:** We recommend they are replaced with good quality large humidity controlled extracts to ensure any humidity is taken out of the building at source.

Services

Whilst we have carried out a visual inspection only of the services within the property we would always recommend you have your own specific testing for each of the services.

Electrics

The electric fuse boards are slightly dated and are located under the stairs and also in the garage. The Institution of Engineering and Technology (IET) recommend a test and report whenever a property changes occupancy. This should be carried out by an NICEIC registered and approved electrical contractor or equivalent.

> **ACTION REQUIRED:** Upgrade electrics.

Heating

There is a wall mounted Ariston boiler located in the utility. We would recommend that the system be tested and overhauled before exchange of contracts and that a regular maintenance contract be placed with an approved heating engineer.

> **ACTION REQUIRED:** Upgrade heating.

Drainage

Whilst we ran the tap for 15 minutes without any build up or blockages but we were unable to lift the manhole as it had a brick paving covering it, which are always difficult to open unless you have a specific lifting device.

> **ACTION REQUIRED:** The only way to be one hundred percent certain of the condition of the drains is to have a closed circuit TV camera report.

Water Supply

There is danger in older properties of having a lead water supply; we would recommend that you speak to the water company to ask them if they have carried out such replacement.

> **ACTION REQUIRED – SERVICES:** We would reiterate that we recommend with regard to all services that you have an independent check by a specialist contractor.

DIY/Handyman Type Work

There are numerous other items that we would class as DIY or handyman type work such as the clearing of the gutters and we also discussed the drilling of the weep holes to the retaining wall, plus also the redecorating in your own style to turn the property into your home. It really does depend how much of a DIYer you are. We have detailed these and other issues within the main body of the report.

Purchase Price

We have not been asked to comment upon the purchase price in this instance, we have however referred you to sources of general information on the housing market within the Information on the Property Market Section, which can be found in the Appendices at the end of the Report.

Every Business Transaction has a Risk

Every business transaction has a risk, only you can assess whether that risk is acceptable to you and your circumstances. You should now read the main body of the Report paying particular attention to any "**ACTION REQUIRED**" points.

Estimates of Building Costs

Where we have offered an estimate of building costs please remember we are not experts in this area. We always recommend you obtain quotations for the large jobs before purchasing the property (preferably three quotes). The cost of building work has many variables such as the cost of labour and estimates can of course vary from area to area when giving a general indication of costs. For unskilled labour we currently use between £75 and £125 per day (the higher costs in the city areas) and for tradesmen we use between £100 and £200 per day for an accredited, qualified, skilled tradesman. Other variations include the quality of materials used and how the work is carried out, for example off ladders or from scaffold.

If you obtain builders estimates that vary widely, we would advise the work is probably difficult or open to various interpretations and we would recommend a specification is prepared. It would usually be best to have work supervised if it is complex, both of which we can do if so required.

SUMMARY UPON REFLECTION

The Summary Upon Reflection is a second summary so to speak, which is carried out when we are writing the second or third draft a few days after the initial survey when we have had time to reflect upon our thoughts on the property. We would add the following in this instance:

We would reiterate our comments that you need to be absolutely certain that you understand you are buying a non-traditional building and the characteristics and issues that can go with these inherent problems and also future potential difficulties of selling the property. We can only envisage it will become harder over time.

When you do come to sell you need to be aware that you will have problems with interested parties not being able to get mortgages. We have no way of crystal ball gazing to advise how the market is likely to be in the future, all we can say from our experience in the past is that regulations for what you can and cannot lend on and the criteria is generally getting stricter as years go by.

We would refer you to our comments in the Executive Summary, 'Good', 'Bad' and 'Ugly' Section and ask that you re-read these.

As a general comment for any work required we would always recommend that you obtain at least three quotations for any work from a qualified, time served tradesperson or a competent registered building contractor prior to legal completion.

We would ask that you read the Report in full and contact us on any issues that you require further clarification on.

AERIAL VIEW – 360 PHOTOS

Where permission has been obtained from the owners we have carried out aerial photographs using an aerial drone, stationary drone or a mono-pod pole (where the environment and weather is suitable).

Drone and mono-pod pole

Pressed metal roof
~ Aerial View - 360 Photo ~

Polycarbonate conservatory roof
~ Aerial View - 360 Photo ~

Front garden
~ Aerial View - 360 Photo ~

Front right driveway
~ Aerial View - 360 Photo ~

Rear garden
~ Aerial View - 360 Photo ~

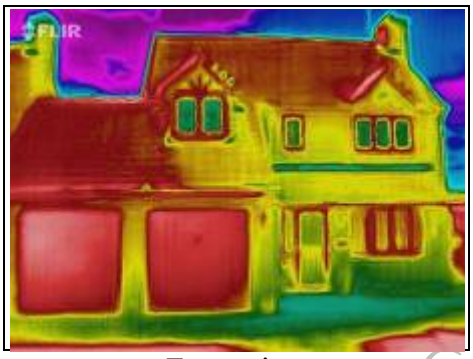
Rear right garage
~ Aerial View - 360 Photo ~

THERMAL IMAGE PHOTOGRAPHS

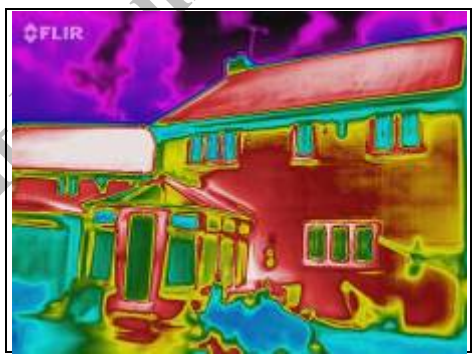
Thermal imaging photography can establish warm and cold areas, it also helps us identify materials within the property. In this case we have not carried out any thermal imaging as the property was not pre-heated and the weather was quite mild and we did not feel we would obtain beneficial results but we would be happy to return if you so wish during the colder months to carry out thermal imaging.

Below are example thermal image photographs (not your property).

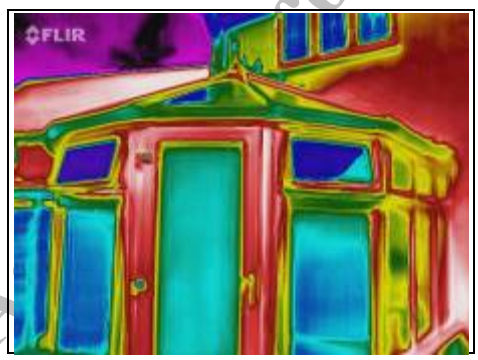
(Key to the colours; blue = cold, red = warm, green/yellow = cool)



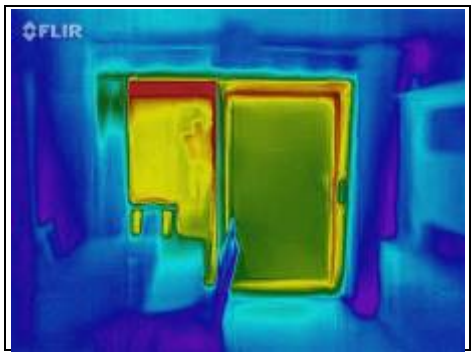
Front view
Heat from roofs, plastic window frames and metal garage doors
(Not your property)



Rear view
Heat from roof, plastic windows and bricks
(Not your property)



Heat from open windows
(Not your property)



Heat coming through into building from conservatory even though doors closed
(Not your property)

MORE ABOUT THE REPORT FORMAT

Just a few more comments about the Report format before you read the actual main body of the Report.

TENURE – FREEHOLD (OR AS GOOD AS)

We have assumed that the property is to be sold Freehold or Long leasehold, with no unusual or onerous clauses and that vacant possession will be available on completion. Your Legal Advisor should confirm that this is the case.

ESTATE AGENTS – FRIEND OR FOE?

It is important to remember that the estate agents are acting for the seller (usually known as the vendor) and not the purchaser and are therefore eager to sell the property (no sale – no fee!). We are employed as Independent Chartered Surveyors and offer an independent point of view.

SOLICITOR/LEGAL ADVISOR

To carry out your legal work you can use a solicitor or a legal advisor. We have used both terms within the report.

TERMS OF ENGAGEMENT/LIMITATIONS

This report is being carried out under our terms of engagement for Building Surveys, as agreed to and signed by yourselves. If you have not seen or are not happy with the terms of engagement please phone immediately 0800 298 5424 or email the secretary from which this survey came from.

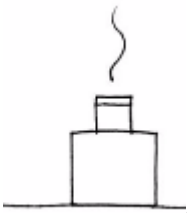
OUR AIM IS ONE HUNDRED PERCENT SATISFACTION

Our aim is for you to be completely happy with the service we provide, and we will try and help you in whatever way possible with your property purchase - just phone us.

THE DETAILED PART OF THE REPORT FOLLOWS, WORKING FROM THE TOP OF THE PROPERTY DOWNWARDS

EXTERNAL

CHIMNEY STACKS



Chimneys developed originally from open fires placed within buildings. From this, the chimney has developed to its present day format where it is used as an aesthetic feature and focal point rather than purely just to heat the room.

Removed Chimney

The original chimney has been removed. This may have happened when the original asbestos roof was replaced with pressed metal.

Pressed metal roof, a chimney would have once been present
Aerial view – 360 photo

Holes in metal roof purlin which may be where the chimney was once secured

Protective underlayer not bedded particularly well which may have been an area affected by removing the chimney

We noted holes in the metal purlin which may have been where the chimney was once secured, or it could have been where a water tank was one housed, although we normally find these sit on ceiling joists.

ACTION REQUIRED: Please see our comments in the Executive Summary.

Party Walls

The party wall relates to shared items, such as the firewalls. If you do any work on these you will need to deal with the Party Wall Act. Here is a brief explanation of it.

Party Structures Defined - Party Wall Etc. Act 1996

A structure that both parties enjoy the use of or benefit from. An example of this would be where both parties gain support from a wall or utilise a chimney or chimneys.

Any work to party structures, such as party walls or party chimney stacks, require agreement under the Party Wall Act. We would be more than happy to offer you help and advice in this matter.

ROOF COVERINGS AND UNDERLAYERS

The Roof Coverings and Underlayers section considers the condition of the outer covering of the roof. Such coverings usually endure the extremes of climate and temperatures. They are susceptible to deterioration, which ultimately leads to water penetration.

Dependent upon the age of your property and the type of construction a protective underlayer may or may not be present, please read on:

We will consider the roofs in three areas:

1) Main roof

2) Front and right side single storey pitched roof

3) Rear conservatory roof

Main Roof

The main roof is pitched and covered with pressed metal, which we believe has replaced the original asbestos roof. From ground level, this looks in average condition considering the roof's age, type and style. We also flew a drone over the roof and in the areas we could see it also looked in average condition.

Pressed metal roof
Aerial view – 360 photo

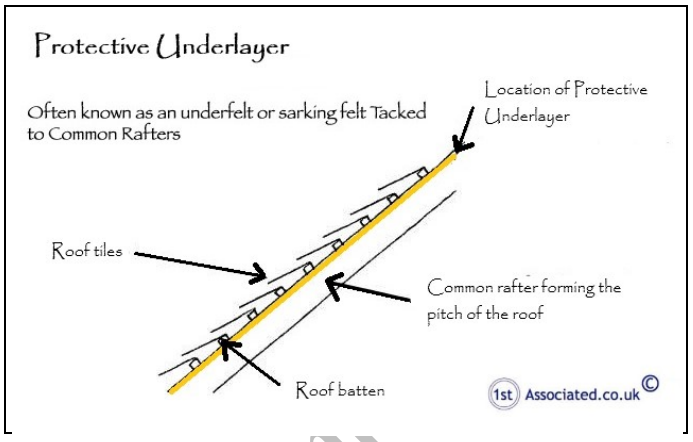
An inherent defect with pressed metal roofs is the top coat can deteriorate/weather over time.

Close up
Aerial view – 360 photo

ACTION REQUIRED: Please see our comments in the Executive Summary.

Protective Underlayer (Often known as the sarking felt or underfelt)

From the 1940s onwards felts were used underneath tiles/slates to stop wind damage and water penetration, these in more recent years have been replaced with plastic equivalents. These are commonly known as underfelts but now the name is not really appropriate, as felt is not the only material used.



Protective underlayer

When we inspected the loft space we found a Hessian base Bitumen membrane. This type of membrane has been used since the 1960s. We generally found it to be in average condition, with damage in some areas which is what we typically find.

In this instance it is not bedded particularly well.

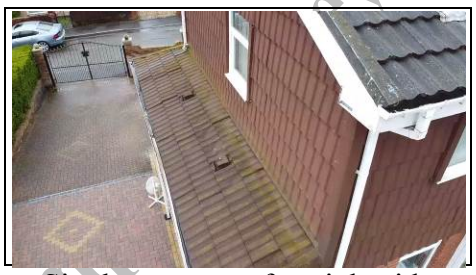
This photo shows the common rafters (the ones that form the pitch of the roof) and the dark area between is the underlayer, which is not bedded particularly well

Single Storey Pitched Roofs

There is a single storey pitched roof to the front and right side of the property. To the front it is slate covered and to the side we believe it to be a pressed metal tiles. It looks to be relatively new as it has air vents.

Front right single storey roof
Aerial view – 360 photo

Corner where front and right single storey roofs meet
Aerial view – 360 photo



Single storey roof to right side
Aerial view – 360 photo

Air vents in pressed metal roofs

We can see air vents in the pressed metal roof to the right side single storey extension. These we believe have been added due to the problems that can occur with condensation within this type of roof.

ACTION REQUIRED: You need to periodically check the main roof to see if condensation is occurring and if it is then it may be necessary to add vents within the roof structure.

Entrance pillars

There are two Roman style entrance pillars to the front entrance beneath the low level roof.

Pillars to front of property beneath the low level roof

Conservatory Roof

The conservatory roof is hipped and covered with polycarbonate plastic.

Polycarbonate conservatory roof
Aerial view – 360 photo

Looking up at the polycarbonate roof

We find that these roofs tend to have problems sooner or later, as polycarbonate plastic fittings expand at different levels themselves and they also expand at different levels to the structure as a whole; known as differential movement, although at the time of the survey there was no significant signs of dampness.

All the roofs were inspected from ground level with the aid of a x16 zoom lens on a digital camera and/or aerial photographs.

Finally, we were only able to see approximately sixty to seventy percent of the main roof properly from ground level or via any other vantage point that we managed to gain. We have made our best conclusions based upon what we could see, however a closer inspection may reveal other defects.

For further comments with regard to ventilation please see the Roof Structure and Loft Section.

ROOF STRUCTURE AND LOFT

(ALSO KNOWN AS ROOF SPACE OR ATTIC SPACE)

The roof structure or framework must be built in a manner which is able to give adequate strength to carry its own weight together with that of the roof covering discussed in the previous section and any superimposed loads such as snow, wind, foot traffic etc.

Main Roof

Roof Access

The main roof is accessed via the loft hatch located on the landing. There is a loft ladder, electric light and secured floorboards. Half of the loft had been boarded.

The loft perimeter has been viewed by torch light, which has limited our viewing slightly.

Loft ladder

Black circle around half of roof which is not boarded and lined (the only place we could see the roof structure)

Roof Structure

A BISF non-traditional roof structure typically has tubular steel roof trusses and rolled steel angle (RSA) purlins.

Right side of roof lined

The right side of the roof is lined and the walls are boarded out which limited our inspection considerably. There is a hatch to the front which we opened up, however this represents less than 5% of the roof area.

In the adjacent photo the red oval indicates lower level trusses, green oval to the area we were able to gain access into the covered area of the roof (about 5%) and black oval indicates the part of the roof that is lined and boarded.

Pressed metal roof
Aerial view – 360 photo

Loft hatch in lined and boarded area

Staining in lined area

Stored items in lined area

Roof Truss (left side only)

In the left side of the roof where we could see the metal truss (about 5% of the roof viewed only) we have inspected the roof truss for:

1. Structural cracking
2. Rusting
3. Distortion


Metal truss

Our examination was limited by the general configuration of the roof, the lining of the roof and the boarding of the side walls, plus the mass of stored items.

What we could see of the roof structure was generally found to be in slightly below average condition for its age, type and style, with rusting to the truss and staining in the lined area.


Rust where red oxide is showing through

We could not see any major signs of structural rusting, any rusting we saw is to the bottom part of the roof.


Damaged timber batten in the unlined area of the roof


Holes in one of the brackets close to where we believe the chimney used to be


Stored items within the normal roof area

ACTION REQUIRED: See our comments in the Executive Summary.

Fire Walls

The property has one blockwork firewall which is located to the left side (all directions given as you face the property). The firewalls are also Party Walls.

Fire Walls Defined

Fire walls help prevent the spread of fire through roofs and are a relatively recent Building Regulation requirement.

Water Tanks

We did not see any water tanks, it may be hidden by the stored items. If they are we would always recommend that water tanks be drained down and cleared of any debris etc. (we have seen dead birds and other unmentionable things in these tanks). As you are often cleaning your teeth with this water it is best that it is as clean as possible!

Ventilation

There was not ventilation in the main roof. Please see our comments with regard to the low level side roof requiring ventilation.

> **ACTION REQUIRED:** This main roof needs to be monitored to check and ensure it does not need ventilation. The stains we have mentioned in the Executive Summary may relate to condensation as opposed to roof leaks.

Insulation

Please see the Thermal Efficiency Section of this Report.

Electrical Cables

We can often identify the age of an electrical installation by the age of wiring found in the roof. In this case the loft has been boarded over in part of the roof. There was some DIY cabling visible in the left side of the roof. We make this comment because the cabling was not in any conduit.


DIY electrics in roof space

ACTION REQUIRED: Your legal adviser check and confirm if there are any certificates or reports on the electrics within the roof space.

Please see our further comments in the Services Section of this Report.

Finally, we would ask you to note that this is a general inspection of the roof, i.e. we have not examined every single piece of timber. We have offered a general overview of the condition and structural integrity of the area.

GUTTERS AND DOWNPIPES

The function of the gutters and downpipes is to carry rainwater from the roof to the ground keeping the main structure as dry as possible.

Defective gutters and downpipes are a common cause of dampness that can, in turn, lead to the development of rot in timbers. Regular inspection and adequate maintenance are therefore essential if serious problems are to be avoided.

Gutters and Downpipes

The gutters and downpipes are plastic. They are in slightly below average condition for their age, type and style, particularly relating to how the downpipes discharge and we do not believe this has been thought through. Also they are not secured properly.

Gutters
Aerial view – 360 photo

There may be some minor leaks but most people would be happy to live with these providing repairs are carried out within the next six to twelve months, with the exception of course of the garage gutters and downpipes.

Rear downpipe not fixed

Downpipes discharging onto the ground

The downpipes are not particularly well positioned, discharging against and close to the building. This is a practice we are not particularly keen on; we would much prefer a gully.

Rear downpipe discharging close to wall

Downpipe by conservatory discharging in wrong area

ACTION REQUIRED: Please see our comments in the Executive Summary.

We would always recommend you stand outside the property next time it rains heavily and see how well the drains cope with the rainwater particularly looking at the guttering and the joints.

We also recommend that the gutters and downpipes are cleaned out, the joints are checked and the alignment checked to ensure that the gutters fall towards the downpipes.

Soil and Vent Pipe

The property has internal soil and vent pipes, which are plastic, as seen at roof level, with the top part being metal, which is rusting.

Top of internal soil and vent pipe to rear of property
Aerial view - 360 photo

Close up

ACTION REQUIRED: Re-paint the top part of the soil and vent pipe whenever you are next redecorating.

Finally, gutters and downpipes and soil and vent pipes have been inspected from ground level. It did rain during part of the survey, however it is not possible to confirm one hundred percent that the rainwater installation is free from blockage, leakage etc. or that it is capable of coping with long periods of heavy rainfall. Our comments have therefore been based on our best assumptions.

WALLS

External walls need to perform a variety of functions. These include supporting upper floors and the roof structure, resisting dampness, providing adequate thermal and sound insulation, offering resistance to fire and being aesthetically presentable.

The property is constructed in a structural frame clad with vertical pressed metal tiles to the first floor level and brick finished to ground floor level (these are likely to be a brick tile).

Whilst this looks like a traditional house it acts far differently as it has a structural frame from which elements are clad onto. In theory these could be removed (and some people do remove them) and replaced with other materials.

Pressed metal tiles to first floor and brick tiles to ground floor

Originally this property would have had profile metal cladding to the first floor level as in this photo, as per the adjacent photo of a nearby house when we had a walk around the area.

Nearby property

Non-traditional building

Sorry to repeat ourselves but this really is so important, this house is of a non-traditional construction commonly known as a BISF house which stands for British Iron and Steel Federation who manufactured this type of house system. It was one of the more popular types. This type of system build house effectively means the building is built on a foundation with a structural frame and then cladding added to the roof and to the walls.

Non-traditional construction

ACTION REQUIRED: Please see our comments in the Executive Summary and our articles in the Appendices.

Structural frame

Please see our comments in the Executive Summary which refers you to the limitations we have of viewing the structural frame. In this particular case walls have been removed.

Upper Walls

Vertical pressed metal tiles

The external walls at high level with vertical pressed metal tiles at high level. We would comment they look in average condition, with a slight mossing to the base, particularly where they meet the single store pitched roof.

Vertical pressed metal wall tiles

Lower Walls

Brickwork

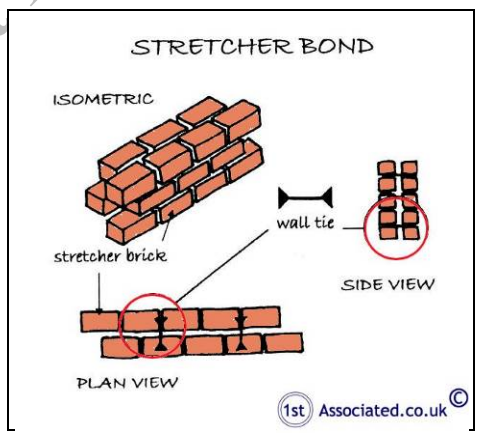
The lower walls are finished with a Stretcher bond brickwork pattern, however we do not believe this is a traditional cavity wall, with the possible exception of the single storey extension, although even that we think is more likely to be an external brick tile cladding.

Brickwork to ground floor level

Cavity walls

Cavity walls were first used in late Victorian times, particularly in the wetter areas of the country (the north) to try and stop water getting into buildings.

As mentioned, we believe these walls are a copy of that system and look similar visually externally but are not the same as there is a metal frame behind the structure.



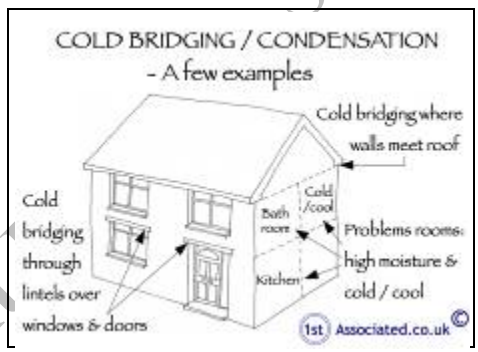
Stretcher Bond brickwork

Cold Bridging

As this property has a metal structural frame and various other metal elements it may suffer from cold bridging. Please see our general article on Cold Bridging within the Appendices but this property has very specific problems due to the metal frame and condensation occurring on it.

Cold Bridging Defined

Cold bridging is caused by a colder element in the structure allowing coldness to pass through the structure much quicker when warm moist air is present in the property, often caused by things like having a shower or a bath, cooking or washing, particularly if you are drying washing on the radiators. This is also caused by the general climate which results in condensation on the element.



Cold bridging / thermal bridging

Air bricks

We often find an airbrick underneath this type of property, which we have always thought was to allow water to pass underneath it, however we have not been able to find one in this instance. Therefore this may be a variation of the typical design, which we sometimes come across as the BISF house evolved.


We usually find an airbrick here in this type of property

Finally, the external walls have been inspected visually from ground level and/or randomly via a ladder. Where the window and door lintels are concealed by vertical pressed metal tiles / brick finish / proprietary boarding we cannot comment on their construction or condition. In buildings of this age metal lintels are common, which can be susceptible to deterioration that is unseen, particularly if in contact with dampness.

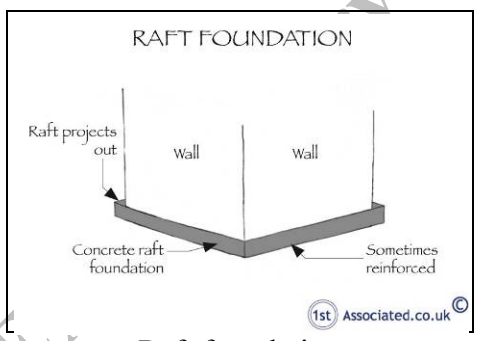
Our comments have been based upon how the vertical pressed metal tiles / brick finish / proprietary boarding has been finished. We have made various assumptions based upon what we could see and how we think the vertical pressed metal tiles / brick finish / proprietary boarding would be if it were opened up for this age, style and type of construction. We are however aware that all is not always at it seems in the building industry and often short cuts are taken. Without opening up the structure we have no way of establishing this.

FOUNDATIONS

The foundations function is, if suitably designed and constructed, to transfer the weight of the property through the soil. As a general comment, many properties prior to the 19th Century have little or no foundations, as we think of them today, and typically a two-storey property would have one metre deep foundations.

Foundations

Given the age of the property you may find different depths of foundations. We would expect to find a raft foundation with a thickened perimeter.



Raft foundation

Raft foundation defined

These were designed to allow spread of the weight allowing the building to float on the ground, with a thickening around the perimeter to hold the extra weight of the structural frame.

Building Insurance Policy

You should ensure that the Building Insurance Policy contains adequate provision against any possibility of damage arising through subsidence, landslip, heave etc.

It is your responsibility to check out prior to commitment to purchase that insurance is available on the property on the basis of the things we have reported in the survey. Much as we would like to we are unable to keep up with the changing insurance market and give you advice with regard to this.

We would always recommend that you remain with the existing insurance company of the property.

We would refer you to our comments with regard to building insurance throughout this report.

Finally, we have not excavated the foundations but we have drawn conclusions from our inspection and our general knowledge of this type, age and style of property.

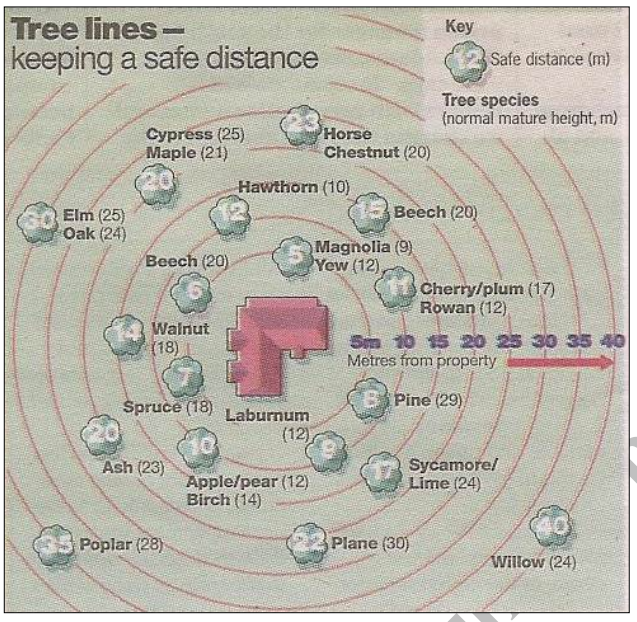
We would always recommend that you remain with the existing insurance company of the property.

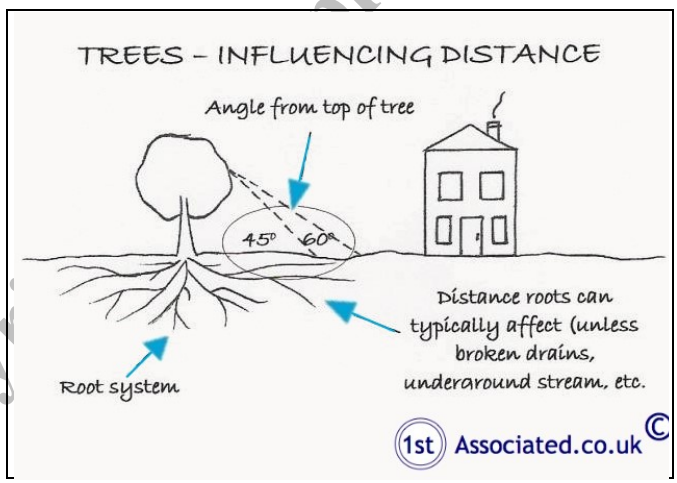
As no excavation has been carried out we cannot be one hundred percent certain as to how the foundation has been constructed and we can only offer our best assumptions and an educated guess, which we have duly done.

TREES

Trees within influencing distance of a property can affect the foundations by affecting the moisture content of the soil.

There are no trees within what we would term as influencing distance but you do need to speak to your insurance company as they may have a different interpretation for insurance reasons.





Influencing distance of trees to a property

Influencing Distance Defined

This is the distance in which a tree may be able to cause damage to the subject property. It is not quite as simple as our sketch; it depends on the tree, its maturity, the soil type etc., etc.

Finally, insurance requirements with regard to trees have varied over the years and in our opinion have got ever more onerous. We have seen the notifiable distance of a tree away from a property to have been reduced over the years and we reiterate our comments elsewhere within this report that you need to make enquiries with regard to the insurability of your property in relation to trees and other features when you purchase the property.

Please also refer to the External Areas Section.

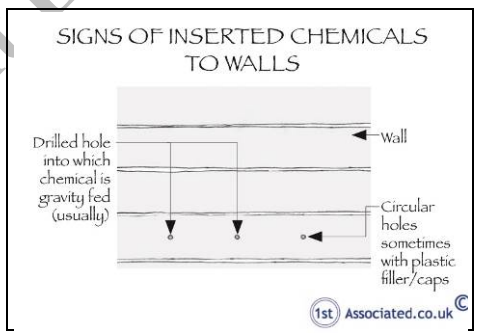
DAMP PROOF COURSE

The Building Act of 1878 required a damp proof course to be added to all newly built properties within the London area. It also required various other basic standards. These requirements were gradually taken up (or should that be grudgingly taken up) throughout London and then the country as a whole, although this took many years for it to become standard practice.

All modern properties should incorporate a damp proof course (DPC) and good building practice dictates that a differential of 150mm (6 inches) should be maintained between the damp proof course and ground levels. In this case the main building would originally have had a DPC built in as work proceeded.

In the case of the conservatory extension we can see there has been dampness problems and a DPC has been inserted.

Inserted DPC



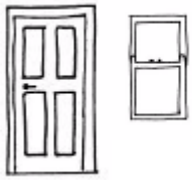
A lot of the pointing has weathered in the rear paving slabs

ACTION REQUIRED: Please see our comments in the Executive Summary.

Your attention is also drawn to the section of the report specifically dealing with dampness.

Finally, sometimes it is difficult for us to identify if there is a damp proof course in a property. We have made our best assumptions based upon our general knowledge of the age, type and style of this property.

FASCIAS AND SOFFITS AND WINDOWS AND DOORS

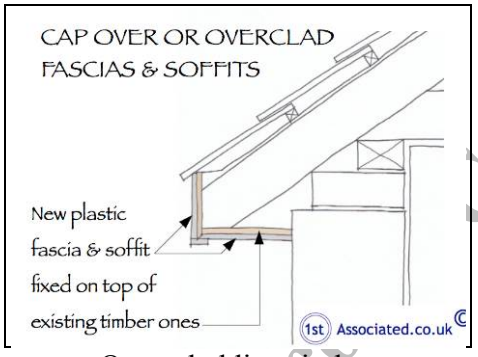


This section covers fascias, soffits and bargeboards and windows and doors, and any detailing such as brick corbelling etc.

Fascias and soffits offer protection to the rafter feet and also allow the securing of the guttering. Windows primary functions are to admit light and air, but they also have thermal and sound properties. The doors allow access and egress within the property.

Fascias and Soffits

The fascias and soffits are plastic, we believe they over over-cladding the original timber.

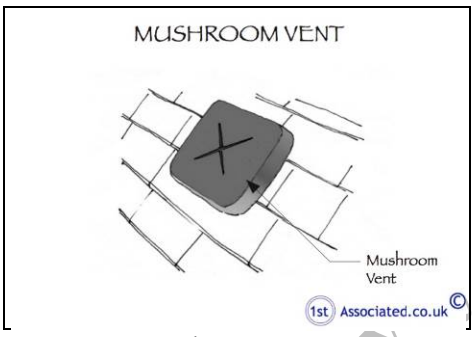


Over-cladding timber fascias and soffits

Plastic fascias and soffits over-cladding timber on the single storey roof

There is a trickle vent in the soffits of the main roof, however this may not be giving sufficient ventilation to prevent condensation (which may be what the staining in the roof is to the floor of the boarded area of the roof) and you therefore may have to add further ventilation to the roof. Please see our earlier comments regarding ventilation in the roof.

Trickle vent



Mushroom vent

ACTION REQUIRED: Ultimately we would recommend removing the plastic over-cladding and removing the timber beneath and replacing with a solid plastic or good quality painted timber fascias and soffits.

Windows and Doors

The property has plastic double glazed windows without trickle vents, with the exception of the ground floor WC, which generally look to be of an average quality.

Only trickle vent in the windows is to the ground floor WC

We would draw your attention to the fact that sealed double glazed units can fail, particularly as a result of poor workmanship during installation. Failure of the seal leads to condensation between the two panes of glass and simply replacing the affected units may not provide a satisfactory long-term solution.

In this case we have not seen any misting of the windows but the windows are relatively old. Building Regulations have been requiring trickle vents in new build properties for a few decades now.

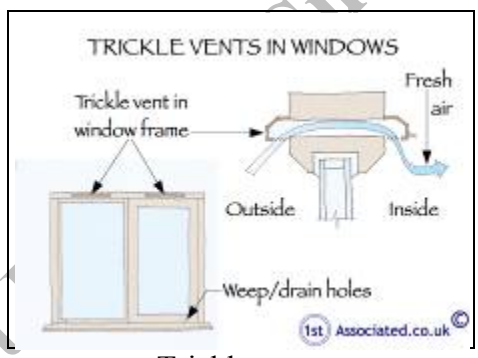
ACTION REQUIRED: We recommend adding trickle vents to the windows. Please see our comments in the Executive Summary.

Transferable Guarantees

The windows are fairly old and/or of a poor quality where the installers did not add trickle vents. Enquiries should be made as to the existence of any transferable guarantees by your legal advisor. Generally it is considered that double glazed units have a life of about ten years.

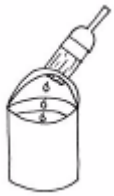
Trickle Vents Defined

Trickle vents allow a trickle of air through, therefore stopping/reducing the likelihood of condensation occurring within the property.



Trickle vents

Finally, we have carried out a general and random inspection of the external joinery. In the case of the fascias and soffits it is typically a visual inspection from ground level. With the windows and doors we have usually opened a random selection of these during the course of the survey. In this section we are aiming to give a general overview of the condition of the external joinery. Please also see the Internal Joinery section.



EXTERNAL DECORATIONS

The external decorations act as a protective coat for the building from the elements. Where this protective covering has failed, such as with flaking paintwork, the elements will infiltrate the structure. This is of particular concern as water is one of the major factors in damage to any structure.

There is very little requiring external redecoration. The main areas are the timber decking, fencing and the ironwork to the fence and the gate.

Finally, ideally external redecoration is recommended every four to five years dependent upon the original age of the paint, its exposure to the elements and the materials properties. Where painting takes place outside this maintenance cycle repairs should be expected. Ideally redecoration should be carried out during the better weather between mid-April and mid-September.

Please see our comments in the External Joinery section.

INTERNAL

CEILINGS, WALLS, PARTITIONS AND FINISHES

In this section we look at the finish applied to the structural elements such as the plasterwork applied to the ceiling joists, walls or partitions, together with the construction of the internal walls and partitions.

Ceilings

The research carried out by the Building Research Establishment advises that BISF ceilings are typically lined with plasterboard. In this case there is a textured paint finish so it is hard to be certain, although we have come across other variations that have fibreboard, hardboard, stramit board and asbestos being used on the metal frame that forms the underside of the floor and ceiling to the roof.

> **ACTION REQUIRED:** Your legal advised should request a certificate stating that this property is clear of asbestos.

Stramit board defined

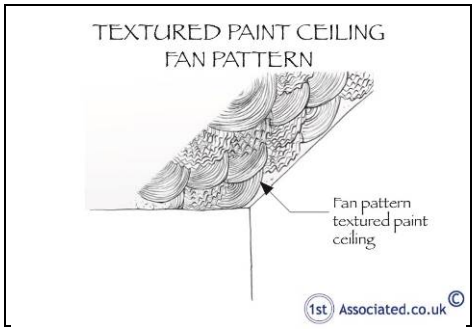
Straw like board. The main problem with stramit boards are that they are not keen on water and tend to lose its structural integrity with water.

Plasterboard Defined

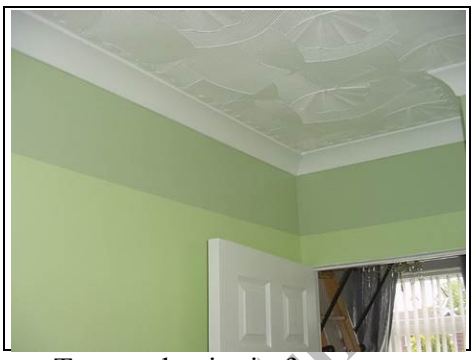
The usual name for Gypsum plasterboard which is building board with a core of aerated gypsum, usually enclosed between two sheets of heavy paper, used as a dry lining.

Textured paint

Some of the ceilings have textured paint in a fan pattern. Older textured paint sometimes contains and element of asbestos. However, it does look fairly modern in this case.



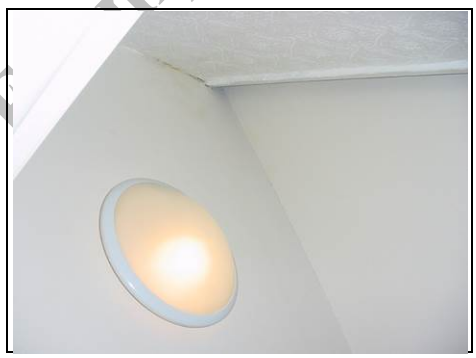
Textured painted ceiling


Textured paint in fan pattern

We also noted textured paint under the stairs.

Please note we are not asbestos surveyors and if you want to be 100% certain there is no asbestos the only way is to have your own asbestos test and report carried out.

ACTION REQUIRED: Please see our comments in the Executive Summary.


Textured paint under the stairs

Internal Walls and Partitions

The internal walls are studwork. The walls look to be plasterboard but we have not opened them up. The Building Research Establishment research again states they are likely to be plasterboard but they could also be fibreboard, hardboard and stramit board.

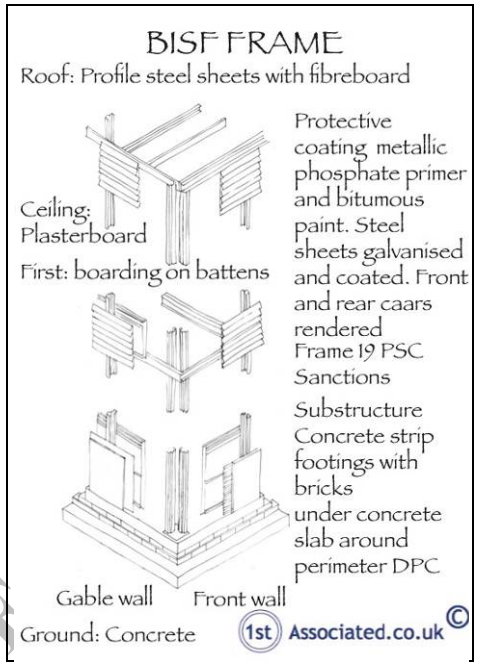
It is impossible to determine the construction without opening up the walls and we have therefore taken an educated guess as this is typical in this type of BISF construction. We do believe that in some cases asbestos has been used for the walls.

Perimeter Walls

From what we understand, there are three types of internal cladding used in BISF properties namely fibreboard, hardboard or stramit board linings on a metal frame (as taken from the BRE guidance notes). There is an outside chance that this is asbestos.

In this case the walls are dry lined/false walls.

Again, it is impossible to determine the construction without opening up the walls and we have therefore taken an educated guess as this is typical in this type of BISF construction.



BISF frame

Opening up

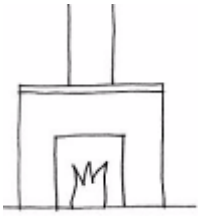
Without opening up we cannot confirm what the construction is.

> **ACTION REQUIRED**: The only way to be one hundred percent certain is to open up the structure, we recommend opening up in three areas.
>
> As mentioned you will need to obtain permission from the owners to carry out this work but we are more than happy to return and inspect once the structure has been opened up and you need to have a builder close it up satisfactorily.

Finally, ceilings, walls and partitions have been inspected from floor level and no opening up has been undertaken (unless permission has been obtained by yourselves). In some cases the materials employed cannot be ascertained without samples being taken and damage being caused.

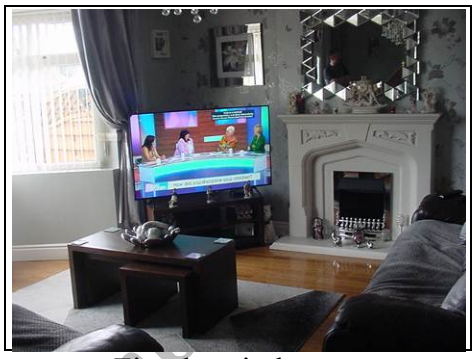
We cannot comment upon the condition of the structure hidden behind plaster, dry lining, other applied finishes, heavy furniture, fittings and kitchen units with fitted back panels.

CHIMNEY BREASTS, FLUES AND FIREPLACES



With the advent of central heating fireplaces tend to be more a feature than an essential function in most properties.

The chimney breasts are located to the middle left side (all directions given as you face the front of the property). The fireplace is still visible as a feature, although this is false.



Fireplace in lounge

We note the chimney has been removed at roof level and also within the roof space. This type of chimney are not generally structural and its removal should not therefore affect the structure of the building.

Finally, we will comment on the condition of the chimney breast where we can see the chimney breast. If we can see a chimney breast has been removed we will inspect for signs of movement and advise. However, often the chimney breasts are hidden so we cannot comment. Also additional support can be concealed very well when chimney breasts are hidden particularly when plastered over.

Your Legal Advisor needs to specifically check with the Local Authority for removed chimneys and associated chimney breasts and Building Regulations Approvals and advise by e-mail immediately if chimney breasts are found to have been removed. We would recommend opening up the structure to check the condition. If we are not advised we will assume the relevant Building Regulations Approval has been obtained.

It is strongly recommended that flues be cleaned and checked for obstructions prior to use to minimise the risk of hazardous fumes entering the building.

Please also see the Chimney Stacks, Flues Section of this report.

FLOORS

Functionally floors should be capable of withstanding appropriate loading, preventing dampness, have thermal properties and durability. In addition to this upper floors should offer support for ceilings, resistance to fire and resistance to sound transfer.

Ground Floor

The floors felt solid under foot so we have assumed that they are constructed with a concrete perimeter on a raft foundation. We did not note any airbricks outside which is unusual.

First Floor

We have assumed that the first floor construction is rolled steel joists with timbers sitting into it as this is typical in this type of property.

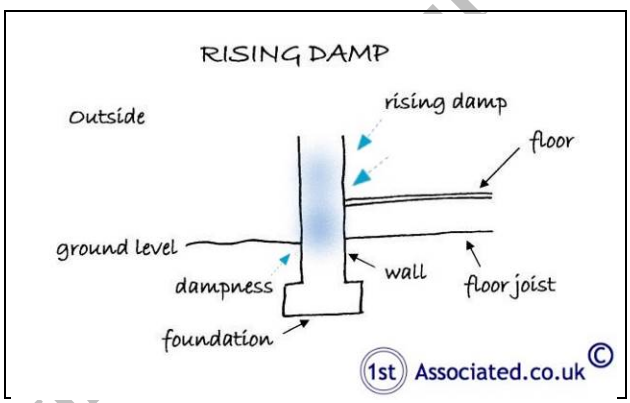
Finally, we have not been able to view the actual floors themselves due to them being covered with fitted carpets, floor coverings etc. The comments we have made are based upon our experience and knowledge of this type of construction. We would emphasise that we have not opened up the floors in any way or lifted any floorboards.

DAMPNESS

In this section we look at any problems that are being caused by dampness. It is therefore essential to diagnose the source of the dampness and to treat the actual cause and not the effect of the dampness.

Rising Damp

Rising damp depends upon various components including the porosity of the structure, the supply of water and the rate of evaporation of the material, amongst other things. Rising damp can come from the ground, drawn by capillary action, to varying degrees of intensity and height into the materials above. Much evidence points towards there being true rising damp in only very rare cases.



Rising damp

A visual inspection and tests with a moisture meter have been taken to the perimeter walls. In this particular case we have found slightly high damp meter readings in the rear conservatory.

This is based on our damp meter readings, as well as our knowledge and skill in identifying dampness in this age, type and style of property.


Slightly high damp meter readings in conservatory

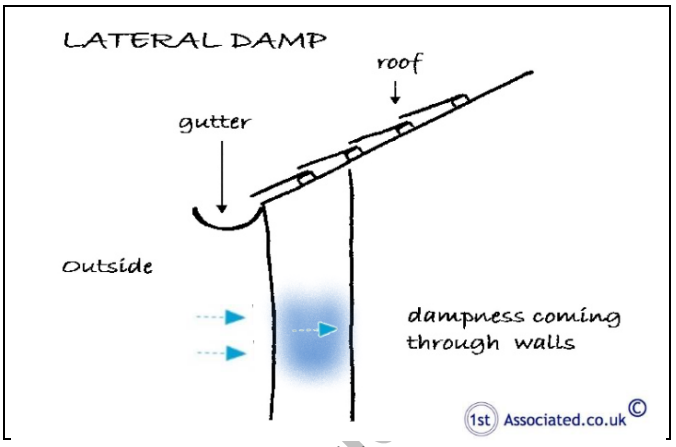
ACTION REQUIRED: There are several ways of resolving the dampness in this area, from trying to resolve it externally by adding a French drain, or you can 'cover up' the problem internally by redecorating more regularly or adding a false wall.

Please see the Executive Summary regarding the conservatory and sloping site.


Area behind the sofa in the conservatory

Lateral or Penetrating Dampness

This is where water ingress occurs through the walls. This can be for various reasons such as poor pointing or wall materials or inadequate gutters and downpipes, such as poorly jointed gutters.



Lateral damp

We used a resistance meter on the external walls. We have found dampness in line with what we typically see for this age, type and style of property.

This is based on our damp meter readings, as well as our knowledge and skill in identifying dampness in this age, type and style of property.


Testing for lateral dampness

Condensation – higher than average chance

This is where the humidity held within the air meets a cold surface causing condensation.

At the time of the inspection there were very minor signs of condensation in the form of minor black mould in the bathroom. There may also be condensation staining within the roof space, identified elsewhere within this report.

Typically condensation will be worse in the humidity creating areas such as the kitchen and bathroom and any rooms that you typically dry washing in and the roof space. Condensation depends upon how you utilise the building. If you do your washing and then dry it in a room without opening a window you will, of course, get condensation. You need to have a balance between heating, cooling and ventilation of properties and opening windows to air the property regularly.

Extract fans in kitchens, bathrooms and drying areas

A way of helping to reduce condensation is to have good quality large extract fans with humidity controlled thermostats within the kitchens and bathrooms and also in any areas where you intend to dry clothes which are moisture generating areas.

> **ACTION REQUIRED:** We would recommend good large humidity controlled extract fans be added to kitchens, bathrooms and any rooms where you intend to dry clothes.
>
> Please see our comments in the Executive Summary.

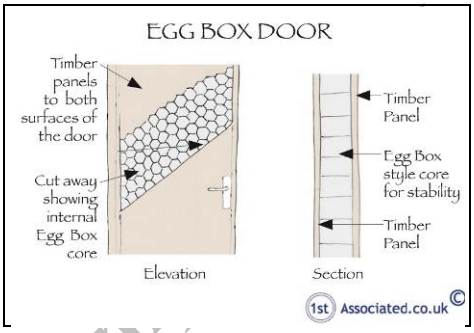
Finally, effective testing was prevented in areas concealed by heavy furniture, fixtures such as kitchen fittings with backboards, wall tiles and wall panelling. We have not carried out tests to BRE Digest 245, but only carried out a visual inspection.

INTERNAL JOINERY

This section looks at the doors, the stairway, the skirting boards and the kitchen to give a general overview of the internal joinery's condition.

Doors

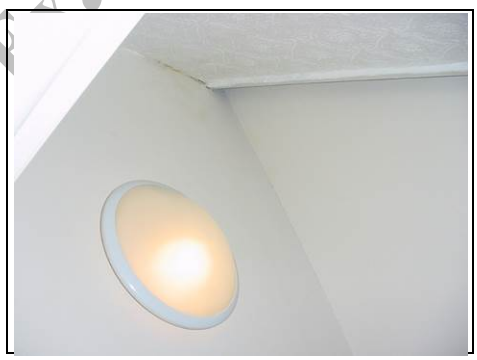
The doors are pressed doors, often known as egg box doors.



Egg box doors

Staircase

We were unable to examine the underside of the stair timbers due to it being lined where we could see it, which precluded our inspection, so we cannot comment further upon the stair structure. We can, however, say that the lining gives a resistance to the spread of fire if such circumstances were to occur.



Stairs lined

Kitchen

We found the kitchen in average condition, subject to some wear and tear as one would expect. Do be aware that walls have been removed to make this such a large kitchen area.

We have not tested any of the kitchen appliances.

Finally, it should be noted that not all joinery has been inspected. We have viewed a random sample and visually inspected these to give a general over-view of the condition. Please also see the External Joinery/Detailing section.

TIMBER DEFECTS

This section considers dry rot, wet rot and woodworm. Wet and Dry rot are species of fungi, both need moisture to develop and both can be very expensive to correct. We would also add that in our experience they are also often wrongly diagnosed.

As this is a steel framed building it doesn't rely on timber in the usual way and as such the likelihood of dry rot and wet rot that causes structurally significant damage is considerably reduced, some would argue almost eliminated altogether. However we still do check for dry rot and wet rot.

Dry Rot/White Rot

Dry rot is also sometimes known by its Latin name Serpula lacrymans. Dry rot requires constant dampness together with a warmish atmosphere and can lead to extensive decay in timber.

Dry rot is unlikely as most of the timber elements have been removed with the roof structure just having battens and the ones we could see were in average condition, with the exception of the damaged batten and this looked more like impact damage than dry rot damage.

We would advise that we have not opened up the floors and we had a limited view of the roof.

Wet Rot/Brown Rot

Wet rot, also known by its Latin name Contiophora puteana, is far more common than dry rot. Wet rot darkens and softens the wood and is most commonly seen in window and doorframes, where it can relatively easily be remedied. Where wet rot affects the structural timbers in a property, which are those in the roof and the floor areas, it is more serious.

Wet rot can occur in this type of building, for example to fascias and soffits if they are timber, but in this case they have been clad over with plastic and we think the timber is underneath. Normally they are over-clad because the timber is in a poor condition.

We noted timber fascias and soffits beneath the over-cladding at low level and we suggest you open this area up and look to see what condition the timber is in and make a decision on whether you need to do the main roof. We would be more than happy to comment upon this is you send us a photo in due course.

Again, we would advise that we have not opened up the floors and we had a limited view of the roof.

Woodworm

Active woodworm can cause significant damage to timber. There are a variety of woodworm that cause different levels of damage with probably the worst of the most well known being the Death Watch Beetle. Many older properties have woodworm that is no longer active, this can often be considered as part of the overall character of the property.

In a non-traditional building we look in both the roof and at the floors where we can view them to see if there is any woodworm. Woodworm is not a common problem as the main structure is in steel. In this instance we did not note any woodworm.

> **ACTION REQUIRED:** If you wish to be one hundred percent certain that there is no woodworm the only way would be to check the property when is emptied of fixtures and fittings etc.

Finally, when you move into the property, floor surfaces should be carefully examined for any signs of insect infestation when furniture and floor coverings are removed together with stored goods. Any signs that are found should be treated to prevent it spreading. However, you need to be aware that many damp and woodworm treatment companies have a vested interest in selling their products and therefore have fairly cleverly worded quotations where they do not state if the woodworm they have found is 'active'. You should ask them specifically if the woodworm is active or not.

We would also comment that any work carried out should have an insurance backed guarantee to ensure that if the company does not exist, or for whatever reason, the guarantee is still valid. More importantly it is essential to ensure that any work carried out is carried out correctly.

INTERNAL DECORATIONS

With paints it should be remembered that up to 1992 lead could be used within paint and prior to this most textured paints (commonly known as Artex) contained an element of asbestos up to 1984, so care should be taken if the paintwork looks old and dated.

Internal decorations are in average condition, the owner advised it was last redecorated in June 2019. You may wish to redecorate to your own personal taste.

It is very difficult to advise on how frequently redecoration should take place. This very much depends upon the use and abuse the decoration gets, for example, within hallways this tends to be greater than for example within a spare bedroom.

Finally, we would draw your attention to the fact that removal of existing decorative finishes may cause damage to the underlying plasterwork necessitating repairs and making good prior to redecoration.

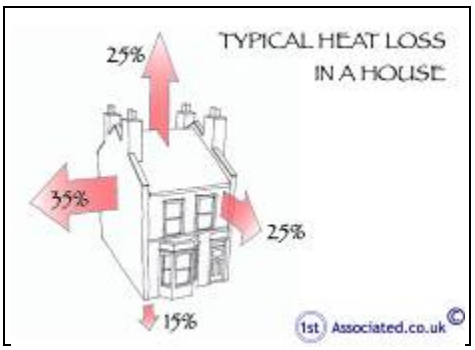
THERMAL EFFICIENCY

Up until the mid 1940's we did not really consider insulation in properties, for example it was only in the 1960s that we started putting insulation in the roof and then it was about 50mm, in the 1970s this was upgraded to 100mm. Then we started to think about double glazing and cavity wall insulation. Since then insulation standards have increased considerably and today we are looking at typically using insulation not only in the roof but also in the walls, floors and windows and more recently considerable work has been carried out on how efficient boilers are within properties. Care has to be taken that properties are not insulated disproportionately to the ventilation as this can cause condensation and you should be aware that you need to ventilate any property that is insulated.

Zoopla (and others may do similar) show an energy assessment of how much typical energy bills will be on a property. We have not had feedback on how accurate this is as yet however we feel it is an interesting step forward in looking at energy efficiency of a property, although there are all sorts of arguments as to how the energy efficiency calculations are carried out.

Roofs

Some roof insulation was present although not to current Building Regulations requirements of 300mm. In this case there is boarding to the right side of the roof and we would anticipate there is about 100mm insulation, possibly a bit more.



Typical heat loss

In this type of property you have to be very careful if you insulate not to create a condensation situation as this is when we feel you get most accelerated rusting and deterioration to the roof frame and the structural frame.

Walls

The walls to this property are pre-fabricated and from our understanding did not originally have insulation, unless this has been added at a later date.

ACTION REQUIRED: We recommend the walls are opened up to see if there is any insulation. Your Legal Adviser to specifically request any information in relation to insulation from either the present owners or the original builders.

Windows

The windows are double glazed and therefore will have reasonable thermal properties.

Services/Boilers

Service records should be obtained for the boiler and the electrics. It is essential for the services to be regularly maintained to run efficiently.

ACTION REQUIRED: We would recommend you ask the owners for energy bills and service records for the past few years.

Summary

Assuming the above is correct, this property is poor compared with what we typically see. Please note we have not seen the Energy Performance Certificate.

Further information can be obtained with regard to energy saving via the Internet on the following pages:

HTTP//www.est.org.uk, which is by the Energy Saving Trust and includes a section on grant aid.

or alternatively www.cat.org.uk (Centre for Alternative Technology)

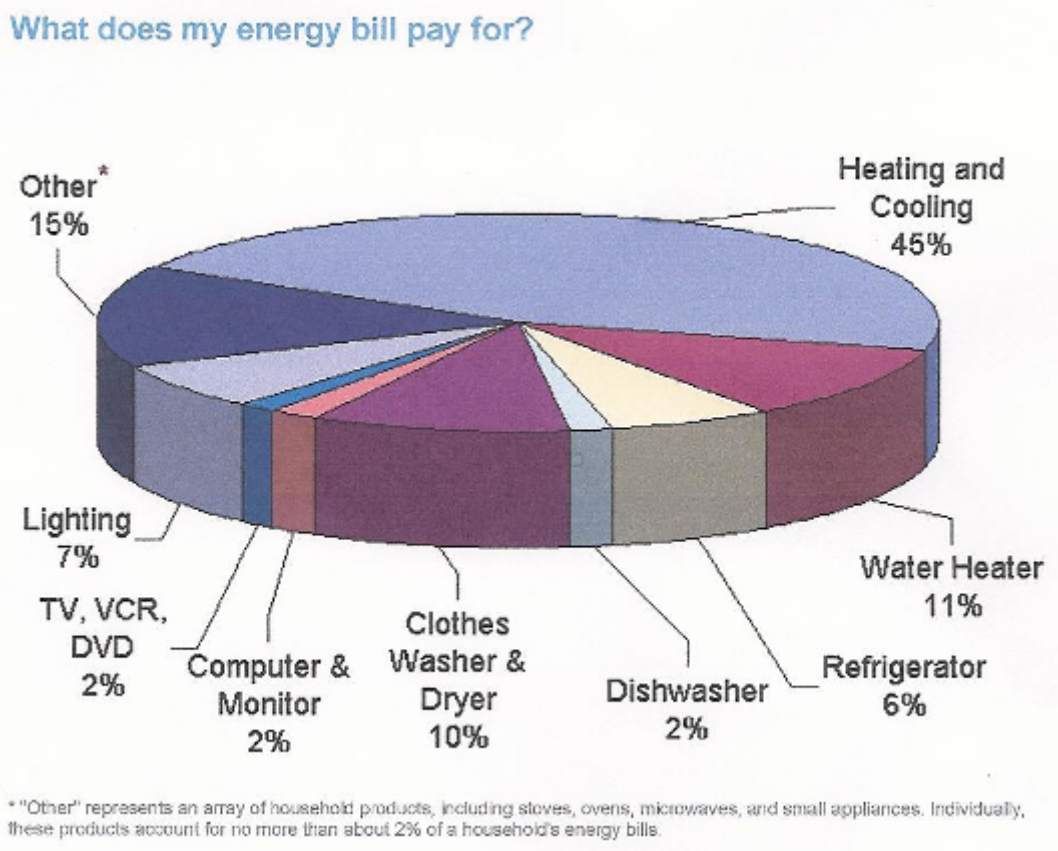
or Sustainable Energy Without the Hot Air by David J C MacKay HTTP//www.withouthotair.com/Videos.html to download for free or buy a paper copy as we did.

It is worth watching the video How Many Light Bulbs? by David J C MacKay – can be viewed on YouTube

HIPs

We understand that HIPs were suspended from 20th May 2010. Energy Performance Certificates are required before a sale completes.

Finally, we would comment that energy we feel will become a major consideration in years to come, particularly with the greater focus in modern buildings on energy efficiency.



OTHER MATTERS

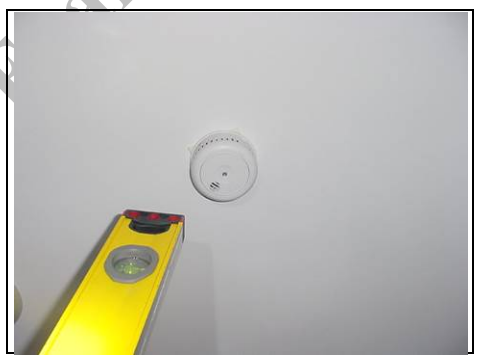
In this section we put any other matters that do not fit under our usual headings.

Security

No security system was noted. It is a personal decision as to whether you feel one is necessary. We are not experts in this field and therefore cannot comment further. We suggest you contact a member of NSI (National Security Inspectorate), obtainable through directory enquiries, or your local Police Force for advice on a security system.

Fire / Smoke Alarms

Some smoke detectors were noted, we were disappointed to see these were battery operated. The current Building Regulations require that they be wired into the main power supply.


Smoke alarm

ACTION REQUIRED: We would recommend, for your own safety, that additional smoke detectors are installed. We would always recommend a hard wired fire alarm system and are also aware that some now work from a wireless signal which may be worth investigating. Whilst fire is relatively rare it is in a worst case scenario obviously devastating.

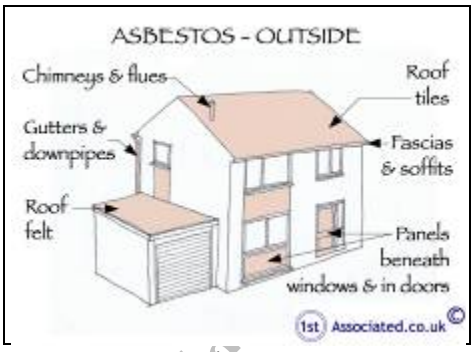
Insurance

We would always recommend staying with the existing insurance company, and then if there are any problems you should not have the difficulty of negotiating with two insurance companies passing the blame between each other.

We would refer you to our comments with regard to building insurance throughout this report.

Asbestos

In a property of this type there was asbestos particularly to the roofs. There may also be other asbestos elements such as fascias and soffits, cladding, internal walls and ceilings and ductwork around services.



Asbestos

Asbestos was commonly used post war until it was banned only in the UK relatively recently. It is rumoured that it was still used after this point in time where products were imported from countries where it is not banned.

We are Building Surveyors and not Asbestos Surveyors and as such the only way to be a hundred per cent certain with regards to Asbestos in a property is to have an Asbestos report carried out.

Asbestos - inside

ACTION REQUIRED: If you wish to confirm you are one hundred percent free of asbestos you need to have an asbestos survey carried out. The existing owners should have had some form of report stating that any asbestos has been fully removed. Please see our comments in the Executive Summary.

SERVICES

This survey does not include any specialist reports on the electricity supply and circuits, heating or drainage, as they were not requested. The comments that follow are based upon a visual inspection carried out as part of the overall Building Survey.

Services and specialist installations have been visually inspected. It is impossible to examine every detail of these installations without partially dismantling the structure. Tests have not been applied. Conclusive tests can only be undertaken by suitably qualified contractors. The vendor/seller should be requested to provide copies of any service records, test certificates and, ideally, the names and addresses of the installing contractors.

ELECTRICITY

It is strange to think that electricity only started to be used in domestic properties at the turn of the 19th century with gas lighting still being the norm for a good many years after.

Periodic inspections and testing of electrical installations is important to protect your property from damage and to ensure the safety of the occupants. Guidance published by the Institution of Engineering and Technology (IET) recommends that inspections and testing are undertaken at least every 10 years (we recommend every five years) and on change of occupancy. All electrical installation works undertaken after 1st January 2005 should be identified by an Electrical Installation Certificate.

Fuse Board

The electric fuses and consumer units were located under the stairs. The fuse board is 1980s-2000s and better are now available. There is also a fuse board of a similar age in the garage.


Dated fuse board under the stairs


Dated fuse board in garage

ACTION REQUIRED: Replace fuse boards.

See our comments in the Executive Summary.

Earth Test

We carried out an earth test in the kitchen area to the socket point that is normally used for the kettle, this proved satisfactory.


Earth test

ACTION REQUIRED: As the property is changing ownership an Institution of Engineering and Technology (IET) test and report and any recommendations should be carried out by a NICEIC registered, or equivalent, approved electrical contractor or similarly approved.

In addition to this your Legal Advisor is required to make full enquires with the owners to establish if any electrical installation work has been carried out and to provide suitable certification for any works carried out after 1st January 2005. Any comments made within this report or verbally do not change this requirement.

For basic general information on this matter please see the appendices at the end of this report.

Roof space

We would also reiterate that your legal adviser needs to check and confirm if there are any certificates or reports on the electrics within the roof space.

BROADBAND CONNECTIVITY

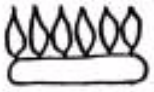
We are sometimes asked regarding the broadband connectivity in the area. We have identified some websites which we believe are useful for this:

https://www.broadband.co.uk/
Advises whether there is phone line broadband or superfast or ultrafast broadband in an area.

https://www.ofcom.org.uk/
Allows you to check broadband availability, check mobile availability and run a speed test.

However, we would always recommend speaking to the occupiers of properties as to what they have used.

GAS



There is very little we can check for in a gas installation, we do inspect to make sure there is one and that it has a consumer unit and that the boilers are vented. Ideally you should have a service inspection carried out by an independent Gas Safe registered plumber.

We believe that the property has mains gas. The owner advised that the consumer unit is located externally close to the front door.

All gas appliances, pipework and flues should be the subject of an annual service by a competent engineer, i.e., a member of Gas Safe; works to gas appliances etc., by unqualified personnel is illegal. Unless evidence can be provided to confirm that there has been annual servicing we would recommend that you commission such a service prior to use to ensure safe and efficient operation.

ACTION REQUIRED: As a matter of course it is recommended that the entire gas installation is inspected and made good, as necessary, by a Gas Safe registered contractor. Thereafter the installation should be serviced annually.

Carbon Monoxide

No carbon monoxide monitors were noted.

ACTION REQUIRED: It is recommended that an audible carbon monoxide detector is fitted (complying with British Standard EN50291) within the property. Carbon monoxide detectors are no substitute for regular servicing of gas installations and their flues.

PLUMBING AND HEATING

In this section we do our best from a visual inspection to look at how the water is supplied to the property, how the supply is distributed around the property, how it is used to heat the property and how it is discharged from the property.

Water Supply

The controlling stopcock was not located. The owner advised that externally it is in the pavement and internally it is in the cupboard next to the kitchen sink.

It is important that its presence is established in case of bursts or leaks.

Water Pressure

When the taps were run to carry out the drainage test we checked the pressure literally by putting a finger over the tap and this seemed average. The Water Board have to guarantee a certain pressure of water to ensure that things like boilers, particularly the instantaneous ones have a constant supply of pressured water (they would blow up if they didn't!).

Cold Water Cistern

Please see our comments in the Roof Section.

Plumbing

The plumbing, where visible, comprises copper piping. No significant leakage was noted on the surface, although most of the pipework is concealed in floors, walls and ducts.

Heating

The wall mounted Ariston boiler was located in the utility. The owner advised it is about 10 years old and was last serviced in November 2019.

Ariston boiler

It is coming to the end of its useful life and you should budget for a replacement.

ACTION REQUIRED: Please see our comments in the Executive Summary.

Our limited inspection of the hot water and central heating system revealed no evidence to suggest any serious defects but we would nevertheless recommend that the system be tested and overhauled before exchange of contracts and that a regular maintenance contract be placed with an approved heating engineer.

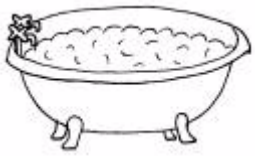
Ten Minute Heating Test

The heating was on at the time of the survey and the radiators felt warm.

Finally, it should be noted that the supply pipe from the Water Company stopcock to the internal stop tap is the responsibility of the property owner.

We cannot comment on the condition of the water service pipe to the building. It should be appreciated that leaks can occur for some time before signs are apparent on the surface.

BATHROOM



In this section we consider the overall condition of the sanitary fittings such as the bathroom, the kitchen, the utility room and the cloakroom.

Ground Floor WC

There is a WC on the ground floor. There is no wash hand basin in this room.

Bathroom

The property has a four piece bathroom suite, consisting of a roll top bath, shower cubicle, wash hand basin and WC, which looks in average condition, subject to some day-to-day wear and tear, as one would expect.

No extract fans noted

There was very minor black mould in the bathroom. We did not note any extract fans.

> **ACTION REQUIRED:** Add good quality large humidity controlled extract fans. See our earlier comments.

Finally, although we may have already mentioned it above we would reiterate that it is important to ensure that seals are properly made and maintained at the junctions between wall surfaces and baths and showers etc. We normally recommend that it is one of the first jobs that you carry out as part of your DIY on the property, as water getting behind sanitary fittings can lead to unseen deterioration that can be costly, inconvenient and difficult to repair.

MAIN DRAINS

The sanitary system, as we know it now, came into being some 100 years ago during the Victorian era and works so successfully today it is often taken for granted. It is only in recent years that re-investment has taken place to upgrade the original drainage systems.

It is assumed that the foul drains from the property discharge into a public sewer; this should be confirmed by your Legal Advisor prior to exchange of contracts, who should also provide information in respect of any common or shared drains including liability for the maintenance and upkeep of the same.

The cold taps have been run for approximately quarter of an hour in the bathroom. No build up or back up was noted.

Inspection Chambers / Manholes

For your information, inspection chambers / manholes are required to be provided in the current Building Regulations at each change of direction or where drainage runs join the main run.

We have identified one inspection chamber / manhole.

Manholes Defined

Access areas which usually fit a man (or woman) into them and are put in where the drains change direction.

Inspection Chamber / Manhole One, located to rear right

We were unable to open the manhole to check its condition.

ACTION REQUIRED: We recommend a closed circuit TV camera report of the drains.

ANTICIPATED COST: A few hundred pounds; please obtain quotes.

Rear right manhole

We have only undertaken a visual inspection of the property's foul drains by running water from the taps within the house.

Drains are normally shared in a property of this age as this was common practice in this era of property.

Finally, it must be emphasised that the condition of the property's foul drains can only be ascertained by the carrying out of a test; such a test has not been undertaken. Should there be leaks in the vicinity of the building then problems could occur, particularly with respect to the stability of the building's foundations. Drainage repairs are inevitably costly and may result in damage being caused to those areas of the property beneath, or adjacent to, which the drains have been run.

Rainwater/Surface Water Drainage

Whilst very innocent looking rainwater downpipes can cause lots of problems. If they discharge directly onto the ground they can affect the foundations and even if they are taken away to soak-aways they can attract nearby tree roots or again affect foundations.

Some rainwater drains are taken into the main drainage system, which is now illegal (as we simply do not have the capacity to cope with it), and can cause blockages to the main drains! Here we have done our best from a visual inspection to advise of any particular problems.

We have been unable to determine the ultimate means of rain/surface water disposal. In this era of property they are likely to be combined/shared drains which are where the foul water and the surface water combines. These can be a problem during heavy rainfall and peak periods, such as the 9 o'clock rush to work.

Finally, rain/surface water drains have not been tested and their condition or effectiveness is not known. Similarly, the adequacy of soak-aways has not been established although you are advised that they tend to silt up and become less effective with time.

Please also see our comments within the Gutters and Downpipes section.

OUTSIDE AREAS

GARAGE/PARKING

Parking

There is a driveway to the right side of the property.

Parking is also available on the roadside on a first come first serve basis.

Front right driveway

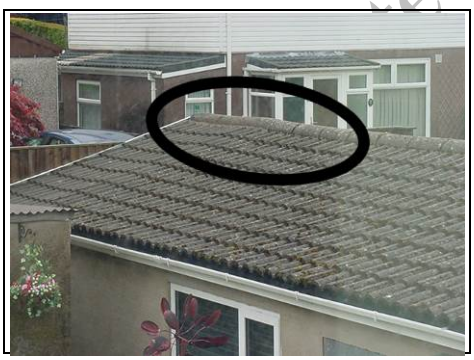
Garage

There is a detached garage to the rear right.

The roof is shallow pitched, clad with concrete tiles. We noted a dip in the roof to the rear. The walls are render with blockwork internally.

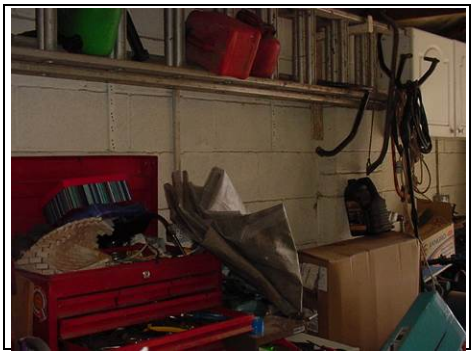
There is dampness internally coming in from the roof.

Rear right garage
Aerial view – 360 photo



Undulating ridge to the rear and there may be deterioration in this area

Dampness coming in through garage roof



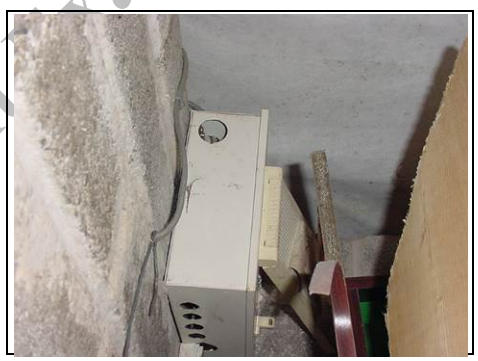
Blockwork internally

The automatic garage door is rusting. The slope of the site runs towards the garage.

Rusting automatic garage door

The garage is partially below ground and water will run into this area and then internally

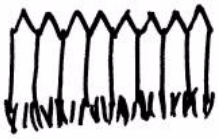
Internally there is electrics within the garage; better are now available.



Dated fuse board in garage

ACTION REQUIRED: It really depends upon what you want to use the garage for and the standard of the things you wish to improve.

EXTERNAL



Front Garden

The front garden is paved over, with large concrete pavers. The pointing is coming away/not bedded in.

Front Garden
Aerial view – 360 photo

Paving slabs not bedded

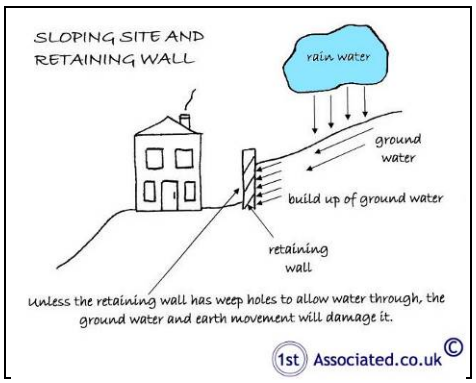
ACTION REQUIRED: Please see our comments in the Executive Summary.

Rear Garden

The rear garden is part paved, part lawn.

The whole garden sits on a sloping site falling towards the property. The retaining wall would benefit from having weep holes added.

Rear Garden
Aerial view – 360 photo



Sloping site


Sloping site running towards rear of property
Aerial view – 360 photo

ACTION REQUIRED: Please see our comments in the Executive Summary.

Decking

There is an area of decking to the rear of the garden, which we noted had slight gaps in it.

We are finding decking becomes slippery when not regularly maintained and tends to be an ideal space for wildlife/rodents to live under. This one did have a brickwork surround which makes it slightly harder for them to get in but these do tend to rot sooner or later.

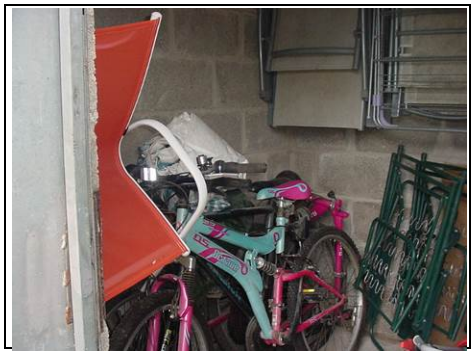

Decking to rear of garden


Gaps in decking

Outbuilding

There is an outbuilding in the rear garden, which looks similar to an old air raid shelter. It is blockwork built with a modern protective underlayer.


Outbuilding


Inside outbuilding, being used as a store


Modern underlay

Boundaries

The left hand boundary (all directions given as you face the property) is usually the responsibility of the subject property.

The timber fencing will need redecorating from time to time.


Right side timber fence

Efflorescence

We noted some efflorescence to the front boundary wall. This can happen where a wall is exposed on both sides.


Efflorescence to front brick wall

Efflorescence Defined

Efflorescence is the white salt found on brickwork/stonework. It is a natural phenomenon which is where the minerals in water as they dry out come to the surface of stone or brick and leave a white crystallised powder, almost flour like. On a red brick it can stand out considerably, almost appearing bright white on a lighter white or yellow brick it can almost disappear.

Finally, whilst we note the boundaries, these may not be the legal boundaries. Your Legal Advisor should make further enquiries on this point and advise you of your potential liability with regard to any shared structures, boundary walls and fences.

Neighbours

We would normally chat to nearby neighbours, but in this instance we have not spoken to any due to the Coronavirus (Covid-19) situation.

POINTS FOR YOUR LEGAL ADVISOR

If you wish to proceed with your purchase of the property a copy of this report should be forwarded to your Legal Advisor and the following points should be checked by him/her:

a) Responsibility for boundaries.

b) Rights for you to enter onto the adjacent property to maintain any structure situated near or on the boundary and any similar rights your neighbour may have to enter onto your property.

c) Obtain any certificates, guarantees or approvals in relation to:

i) Removal of any chimneys in part or whole.
ii) Certificates regarding removal of the chimney
iii) Roof and similar renewals.
iv) Wall construction and removal of any walls/structural engineers reports
v) Amendments/removal of any walls in part or whole.
vi) Information with regards to over-cladding
vii) Double glazing or replacement windows.
viii) Drainage location, maintenance and repairs.
ix) Timber treatments, wet or dry rot infestations.
x) Rising damp treatments.
xi) Asbestos
xii) Boiler and central heating installation and maintenance.
xiii) Electrical test and report.
xiv) Planning and Building Regulation Approvals.
xv) Have there been any structural problems referred to insurance companies, any insurance claims, monitoring or underpinning, etc.
xvi) Any other matters pertinent to the property.

d) Confirm that there are no defects in the legal Title in respect of the property and all rights associated therewith, e.g., access.

e) Rights of Way e.g., access, easements and wayleaves.

f) Liabilities in connection with shared services.

g) Adjoining roads and services.

h) Road Schemes/Road Widening.

i) General development proposals in the locality.

j) Conservation Area, Listed Building, Tree Preservation Orders or any other Designated Planning Area.

k) Confirm from enquiries that no underground tunnels, wells, sewers, gases, mining, minerals, site reclamation/contamination etc., exist, have existed or are likely to exist beneath the curtilage of the site upon which the property stands and which could affect the quiet enjoyment, safety or stability of the property, outbuildings or surrounding areas.

l) Our Report assumes that the site has not been put to contaminative use and no investigations have been made in this respect.

m) Any outstanding Party Wall Notice or the knowledge that any are about to be served.

n) Most Legal advisors will recommend an Environmental report or a similar product is used by you to establish whether the area falls within a flood plain, old landfill site, radon area etc. If your Legal Advisor is not aware of Environmental reports or similar please ensure that they contact us and we will advise them of it. Any general findings should be brought to their logical conclusion by using appropriate specialist advisers.

However, with regard to Environmental reports or similar general reports on the environment please see our article link on the www.1stAssociated.co.uk Home Page.

o) Any other matters brought to your attention within this report.

LOCAL AUTHORITY ENQUIRIES

Your Legal Advisor should carry out Local Authority searches to ascertain whether the property is a Listed Building and whether it is situated in a Conservation Area. They should also find out any information available with regard to Planning Applications and Building Control. We have not made any formal or informal Local Authority enquiries.

Finally, your Legal Advisor should carry out any additional enquiries they feel necessary and if they find anything unusual or onerous then we ask that they contact us immediately for our further comments.

It is our policy not to offer a conclusion to ensure that the Building Survey is read in full and the comments are taken in context.

If you would like any further advice on any of the issues discussed or indeed any that have not been discussed!

Please do not hesitate to contact us on 0800 298 5424 or send an email directly to whoever produced the report.

For and on Behalf of

Independent Chartered Surveyors

This Report is dated: Date

REFERENCES

The repair and maintenance of houses
Published by Estates Gazette Limited

Life expectancies of building components
Published by Royal Institution of Chartered Surveyors and Building Research Establishment

Surveying buildings
By Malcolm Hollis
Published by Royal Institution of Chartered Surveyors Books.

House Builders Bible
By Mark Brinkley
Published by Burlington Press

LIMITATIONS

Our limitations are as the agreed Terms and Conditions of Engagement.

CONDITIONS OF ENGAGEMENT

The report has been prepared in accordance with our Conditions of Engagement dated Date and should be regarded as a comment on the overall condition of the property and the quality of its structure and not as an inventory of every single defect. It relates to those parts of the property that were reasonably and safely accessible at the time of the inspection, but you should be aware that defects can subsequently develop particularly if you do not follow the recommendations.

ENGLISH LAW

We would remind you that this report should not be published or reproduced in any way without the surveyor's expressed permission and is governed by English Law and any dispute arising there from shall be adjudicated upon only by the English Courts.

SOLE USE

This report is for the sole use of the named Client and is confidential to the Client and his professional advisors. Any other persons rely on the Report at their own risk.

APPROVALS/GUARANTEES

Where work has been carried out to the property in the past, the surveyor cannot guarantee that this work has been carried out in accordance with manufacturers' recommendations, British/European Standards and Codes of Practice, Agreement Certificates and statutory regulations.

ONLY HUMAN!

Although we are pointing out the obvious, our Surveyors obviously can't see through walls, floors, heavy furniture, fixed kitchen units etc. they have therefore made their best assumptions in these areas.

As this is a one off inspection, we cannot guarantee that there are no other defects than those mentioned in the report and also that defects can subsequently develop.

LAYOUT PLAN

We have used the estate agents floor plan as a guide to the layout of the building. We have not checked it for scale and accuracy.

WEATHER

It was a showery spring day at the time of the inspection. The weather did not hamper the survey.

As you are probably aware there has been some record breaking weather recently:

2018 being the driest start to a summer.
December 2015 was the wettest month
August 2004 the wettest August on record in many areas.
2003 was the driest year on record
2000 was the wettest year on record

This may have adverse effects on many buildings in years to come or the not too distant future.

NOT LOCAL

It should be noted the surveyors may not be local to this area and are carrying out the work without the benefits of local knowledge on such things as soil conditions, aeroplane flight paths, and common defects in materials used in the area etc.

OCCUPIED PROPERTY

The property was occupied at the time of our survey, which meant that there were various difficulties when carrying out the survey such as stored items within cupboards, the loft space and obviously day-to-day household goods throughout the property. We have, however, done our best to work around these.

JAPANESE KNOTWEED

We have not inspected for Japanese Knotweed. We would advise that we are finding that some mortgage valuation surveyors are setting valuations at zero on any property with Japanese Knotweed and are reluctant to lend where it is present.

A BBC news report dated April 2018 states that the latest research has been carried out by Swansea University, where they carried out trials near Cardiff and Swansea and tested 19 main methods of controlling the plant and they found that none of these methods eradicated it. See our article:

https://buildingsurveyquote.co.uk/japanese-knotweed-buildings-and-resveratrol/

ACTION REQUIRED: You need to carry out your own research on this matter/due diligence before you legally commit to purchase the property and be aware that it could be in neighbouring properties which you do not have direct control over.

INSPECTION LIMITED

Unfortunately in this instance our inspection has been limited as:

1) We did not have a full view of the roof due to the lining, the insulation covering the ceiling joists and general configuration of the roof.

2) We did not open up the walls as we could not see a way of doing this without causing damage.

3) We did not open up the ground floor or the first floor as we could not see a way to do it without causing damage. We would normally recommend opening up the structure and we do feel if we did open it up there is likely to be above average rusting to the rear of the property as it sits on a sloping site, this is based upon what we have seen over the years. We would normally be able to look at the render at the lower level but this has been covered with a brick tile, hiding any problems with it.

ACTION REQUIRED: The only way to be 100% certain is to have the structure opened up in about three areas, which is what we recommend.

THANK YOU

We thank you for taking the time to meet us during the survey.

BUILDING INSURANCE

We do not advise with regard to building insurance. You need to make your own enquiries. Some areas may have a premium, some buildings may have a premium and some insurers may be unwilling to insure at all in certain areas. You need to make your own enquires prior to committing to purchase the property. Please be aware the fact a building is currently insured does not mean it can be re insured.

We would comment that non-insurability of a building we feel will affect value. It is therefore essential to make your own enquiries with regard to insurance before committing to purchase the property and incurring fees.

ACTION REQUIRED: You need to contact an insurance company today to make enquiries with regard to insurance on this property.

TERMS AND CONDITIONS

Our computer system sends two copies of our Terms and Conditions to the email address given to us when booking the survey; one has the terms attached and the other has links to the Terms and Conditions on our website (for a limited time). If you have not received these please phone your contact immediately.

APPENDICES

1. The electrical regulations – Part P of the Building Regulations
2. Information on the Property Market
3. BISF House Information Sheet
4. How easy is it to get a mortgage on a BISF house
5. French Drain Article
6. Condensation and Cold Bridging Article

THE ELECTRICAL REGULATIONS
PART P OF THE BUILDING REGULATIONS

Here is our quick guide to the Regulations, but please take further advice from a qualified and experienced electrician.

From 1st January 2005, people carrying out electrical work in homes and gardens in England and Wales must follow new rules in the building regulations. All significant electrical work carried out in the home will have to be undertaken by a registered installer or be approved and certified by the local authority's building control department. Failure to do so will be a legal offence and could result in a fine. Non-certified work could also put your household insurance policy at risk.

If you can't provide evidence that any electrical installation work complies with the new regulations, you could have problems when it comes to selling the property.

There will be two ways in which to prove compliance:

1. A certificate showing the work has been done by a Government-approved electrical installer - NICEIC Electrical Contractor or equivalent trades body.
2. A certificate from the local authority saying that the installation has approval under the building regulations.

Homeowners will still be able to do some minor electrical jobs themselves. To help you, we've put together this brief list of dos and don'ts.

Work You Cannot do Yourself

- Complete new or rewiring jobs.
- Fuse box changes.
- Adding lighting points to an existing circuit in a 'special location' like the kitchen, bathroom or garden.
- Installing electrical earth connections to pipework and metalwork.
- Adding a new circuit.

INFORMATION ON THE PROPERTY MARKET

We used to include within our reports articles on the property market that we thought would be of interest and informative to you, however we were concerned that in some cases these did not offer the latest information. We have therefore decided to recommend various websites to you, however it is important to realise the vested interest the parties may have and the limits to the information.

www.landreg.org.uk

This records the ownership of interests in registered land in England and Wales and issues a residential property price report quarterly, which is free of charge. The Land Registry is a Government body and records all transactions as far as we are aware, although critics of it would argue that the information is often many months out of date.

www.rics.org.uk

The Royal Institution of Chartered Surveyors offer quarterly reports via their members. Although this has been criticised as being subjective and also limited, historically their predictions have been found to be reasonably accurate.

www.halifax.co.uk and www.nationwide.co.uk

Surveys have been carried out by these two companies, one now a bank and the other a building society for many years. Information from these surveys is often carried in the national press. It should be remembered that the surveys only relate to mortgaged properties, of which it is generally considered represents only 75% of the market. It should also be remembered that the national coverage of the two companies differs and that they may be offering various incentives on different mortgages, which may taint the quality of information offered. That said they do try to adjust for this, the success or otherwise of this is hard to establish.

www.hometrack.co.uk

This gives information with regard to house sale and purchase prices.

www.motleyfool.co.uk

We also like the Motley Fool website which is a general financial site and although it is selling financial services and other services they do tend to give a very readable view of the housing market.

www.rightmove.co.uk

This is probably the largest Internet search engine for estate agency sales and also has useful information with regard to prices of property (but it is not the same as having a chartered surveyor value it).

www.zoopla.co.uk

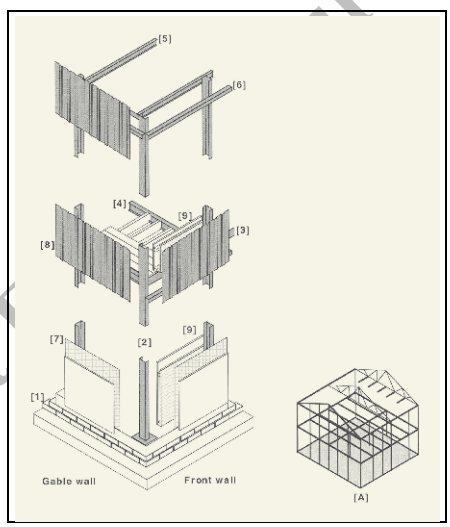
This is a good website for seeing the prices of properties for sale in a certain postcode area.

BISF House Information Sheet
British Iron and Steel Federation

This article has been written by a Chartered Surveyor based upon our findings and experience over the years of surveying these types of properties. If you would like to discuss BISF properties further with us please free phone 0800 298 5424 for a friendly chat.

Introduction to BISF Houses

BISF stands for British Iron and Steel Federation. The BISF house is a pre-fabricated steel structure originally built with a shallow pitched asbestos roof, panelling to higher level and render to lower level. Between the metal frames are timber struts and insulation with an inner plasterboard or hardboard which originally had a design life of between ten and twenty years.



BISF house structural detailing sketch

Non Traditional Constructions Overview

There are considered to be around one million properties built from non-traditional construction. The Building Research Establishment (BRE) have over 500 systems listed between 1900 and 1976 excluding RAT Trad and post 1976 timber framed construction. There were approximately 35,000 BISF houses built over a period of 6 years. It was only exceeded by non-traditional buildings of aluminium bungalows which were 55,000, Easy Form which was a concrete system which had 90,000 built and Wimpey No-fines which had 300,000 built. BISF buildings do tend to stand out. They are predominantly built by Local Authoirities.

BISF property with metal profile sheet roof (has asbestos roof been removed or has it been overclad?) and metal profile sheet at first floor level and render at ground floor level and older style double glazed windows. .

BISF house with a profile metal roof, (again has asbestos roof been removed?), plastic cladding at first floor level (is there insulation between the profile metal sheets and the plastic cladding that is causing condensation) with pebbledash render at ground floor level and modern double glazed windows

BISF Houses were built with a purpose and a set timescale in mind

It should be remembered when looking at these buildings that they were after the War to fulfill the requirements of a lack of housing. Equally they also fulfilled the need for work and allowed the factories that had been producing things for the war effort to then change and use these buildings.

Is a BISF house unmortgageable?
It depends on when you ask the question!

It is probably more true to say that they are difficult to mortgage.
With the Right to Buy Scheme in 1979 five million council house tenants were given the right to buy their homes under the Conservative Government proposal. Those who had lived in their house for three years got a discount of 33% and then it increased in stages, people who had been tenants for 20 years got a 50% discount. Michael Heseltine, the Secretary of State for the Environment said that the Bill laid the foundations of social revolution allowing people to own their own homes. Roy Hattersley of the Labour Party fought it. Most importantly the Government said they would offer tenants 100% mortgage from the Local Authorities. It was considered a vote winner for Margaret Thatcher in 1979 and 1983 and Labour dropped their official opposition to it in 1985 and by 2003 1.5 million council houses had been sold.
The reason why the properties are unmortgageable outside of Council mortgages are:

1. Corrosion and deterioration of the frame that is hidden by the structure

2. Properties are poorly thermally insulated for today's standards

3. Noise transfer between buildings

Improvements to bring up to current standards could involve a thorough check of the steel frame, replacement of the asbestos roof and increase in insulation without promoting condensation and a reduction in the noise transfer between the properties with the addition of new double glazed windows. We have had costs quoted at between £20,000 - £50,000 depending upon the alterations already taken place and mortgage company requirements.

Knowsley Housing Trust advise costs in 2004 (however bear in mind that they do not need to get a mortgage) as:

Structural render	£8k
Roof insulation	£4.3k
Windows	£2.1k
PVC doors	£1k
Fascias and soffits and rainwater goods	£0.5k
Bathrooms	£0.9k
Central heating	£2.3k

As the vast majority of houses sold in the UK are mortgaged it is essential that these properties are mortgageable to sell to the majority of the market.

Specific Problems on BISF Houses

BISF house asbestos roof problems

When deteriorating asbestos can be a health hazard, complete replacement recommended. The roof material has to be appropriate for the strength of the roof structure and in our experience they need replacing with a profile metal sheet and insulated. However this also needs to be ventilated to prevent corrosion from occurring.

BISF house steel structure problems

Risk of deterioration to the base of the steel structure and around the window areas and high humidity areas such as bathrooms and kitchens.

BISF house walling problems

Profile metal sheeting to the upper areas and a render on an expanded metal lath to the ground floor areas with a timber frame and a fibreglass insulation and plasterboard. The

frame is formed with rolled steel angles and channels. The roof is formed from tubular steel trusses which we believe are mock truss centrally (this needs to be checked and confirmed).

BISF house insulation problems

Improvements in the insulation can result in condensation. External structural insulation panelling is recommended which is difficult to do (unless both yourself and the neighbouring property are carried out otherwise there will be a step in the external wall). Structherm is often quoted as the only suitable insulation rendered panel system as this is accepted by ninety per cent of the mortgage companies (obviously subject to variations in the market) and is available with a long term guarantee.

BISF windows and doors problems

Originally steel frame timber glazed. Now the majority have been replaced with double glazed windows.

BISF party wall problems

The dividing wall between properties. We have seen quoted as 30mm thick or as a studwork.

Voice of Experience

We recently spoke to a contractor who has spent several decades renovating the steel framed properties for a range of clients from Local Authorities, property developers and individuals. It is refreshing to hear first hand the issues that they have come across over the years. We thought we would relay some of these in this article.

The first myth or urban rumour is that the BISF buildings were temporary buildings for only ten years, they are meant to have a design life of far longer. He concurred with our findings that originally they had asbestos roofs with metal cladding to the upper sections and render to the lower. Over the years they have done almost anything and everything to these properties. He had also been involved in some cases where he had looked at them for loss assessors where they had burnt down and they had renewed the structures inside out. It has been the main focus of their business over the past three plus decades. Interestingly he advised that he had come across asbestos which had been covered over in the roof but the majority of times it has been removed. He has come across the phenomena of insulating the underside of the roof, i.e. the pitched section which is what we have found. This is quite common although he is uncertain as to how effective it is and indeed thought that with the wind blowing through the rest of the structure it was better to

put the insulation actually in the ceiling void of the upper floor as we traditionally do. He made interesting comments that he had seen a variety of lightweight roof structures over the years. They do need to be lightweight due to the way the roof is constructed. The majority of them have metal sheeting as protective coating.

With regard to the wall cladding he advised that he had seen many different ways of looking at wall cladding over the years but the most cost effective was to use the existing cladding as a backing for insulation and then add a cladding onto that. He has seen everything from brick to stone to timber finishes. He commented that cladding was popular although he wouldn't recommend it due to it always seeming to discolour if it was plastic and/or need regular maintenance if it was timber. He also advised that the lower sections were often best in a different material although he wouldn't recommend render which was what they were originally carried out in. This was because of the differential movement between the steel frame and the render structure left cracks. It was often best to have some form of cladding or different materials to the upper parts and brick to the lower parts. He also commented that if they were working on a lot of houses for a landlord such as a Local Authority or Housing Association then they would tend to mix and match them as each house would have an individual look and overall made the general look more appealing. Interestingly he said whilst the steel frame structure is strong enough to resist fires (and remember he has actually seen these buildings after a fire) he commented that you do need to be careful with the amount of weight that you hang from them.

Of course he commented that he would be more than happy to come and view any BISF property to comment further. Most importantly we think is that he would actually be able to give a firm price on the amount of work due to their experience.

Inspection

Surveyor's inspections can take the form of a non intrusive visual inspection or in the form of an intrusive/destructive inspection where the walls are opened up exposing the framework. Some reports say the use of borescopes however in our experience borescopes do not give a suitable view of the area so we would recommend opening up of the structure.

BISF Information and Action Required

You need to establish the exact mortgage requirements on the property at the time that you wish to purchase as these will change from time to time.

BISF Type A1

Manufacturers: British Iron & Steel Federation
British Steel Homes Ltd

Alternative names: BISF

Designers: Frederick Gibberd
Donovan Lee

Period built: 1944–50

Number built: 35,000

IDENTIFICATION CHARACTERISTICS

2-storey semi-detached and terraced houses.
Shallow pitch gable roof covered with profiled asbestos cement sheets.
External walls rendered to first floor level and vertically profiled steel sheets above.
Large ground floor windows.
PS trims to windows and doors.
Some houses have single storey lean-to structure at gable wall.

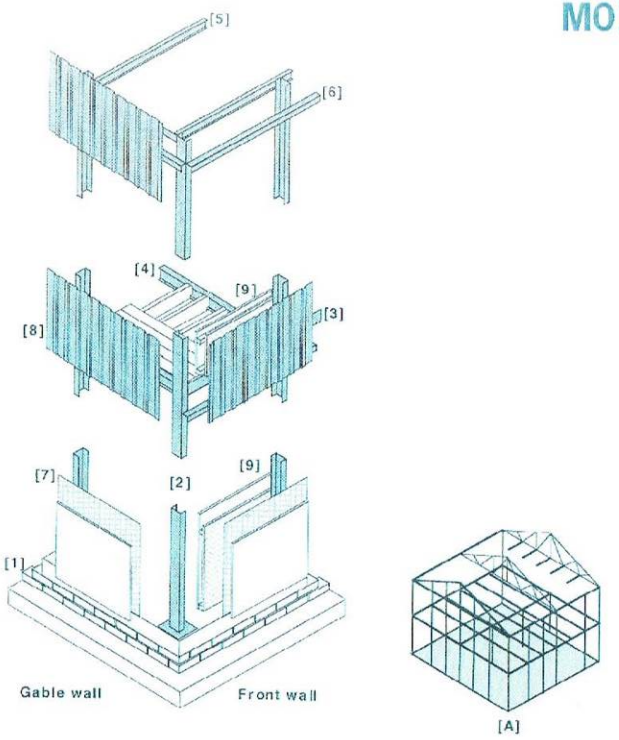
NOTES FOR SURVEYORS

Minor to severe corrosion of RSA and RSC stanchions, particularly at bases and corners.
Minor to severe corrosion of sheeting rails.
Cracking of ground floor slabs, particularly at corners.
Corrosion of metal lathing and failure of render.
Corrosion of profiled steel sheets and steel flashings.
Corrosion of cast-iron flue pipes and metal cowling.
Deterioration of profiled asbestos cement sheet roof cover.

Prototypes developed by BISF are Type A, Type B and Type C.

REFERENCES

BRE Report BR 77
PWBS No. 23
NTHSc



CONSTRUCTION

Substructure: Concrete strip footings. Brick underbuilding **[1]**. Concrete slab thickened around perimeter. DPC.
Frame: 17 RSC stanchions **[2]**, 3 double RSA single storey stanchions each forming hollow box, 1 RSJ floor support beam, 2 RSA floor joist supports **[3]**, 7 RSJ floor joists **[4]**, 7 RSJ ceiling joists **[5]**, RSA cladding rails **[6]**, bracings, 2 tubular steel roof trusses, 1 mock truss and RSA purlins, see frame layout **[A]**.
Protective coating: Red lead paint and black bituminous paint. Steel sheets galvanised and coated with red lead paint.
External walls: Rendered expanded metal lathing to first floor level **[7]** and vertically profiled steel sheets **[8]** above, cavity, glass fibre insulation blanket, timber framing lined with plasterboard **[9]**.
Separating wall: Breeze concrete block cavity wall faced with timber framing lined with plasterboard. Single leaf block in roof space.
Partitions: Timber stud lined with plasterboard.
Ground floor: Concrete.
First floor: T&G boarding on timber joists.
Ceilings: Plasterboard.
Roof: Profiled asbestos cement sheets.

VARIANTS

Trenchfill concrete foundation incorporating ground floor slab.
Fibreboard, hardboard and Stramit board linings to walls, partitions and ceilings.
RSA roof trusses.
Single storey lean to structure at gable wall.

Address, Wales

Examples of this type of non traditional metal frame house (not your house)

Originally the property would have had profile metal cladding

Rusting to profile metal cladding

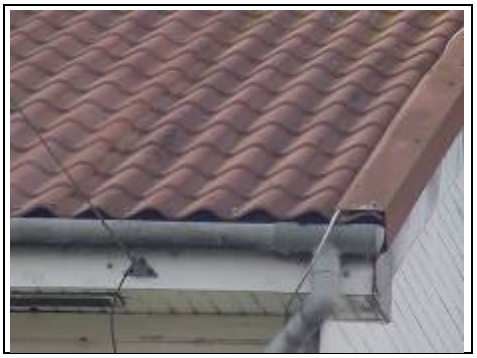
Metal frame house with profile metal sheeting at top and render at bottom. Roof has been changed.

How vertical tiling and new windows can considerably change the look of a property but underneath it is still a metal framed building

Pebbledash render in parts as well as plastic cladding and extensions but again the main part of the building is still a metal frame

Plastic cladding has been put on top of property

Example of plastic overcladding



Asbestos house that we looked at

Asbestos house

Close up of edge of profile metal roofing that looks like a tile

Weathering effect to roof

Rivet where you can see roof is riveted together

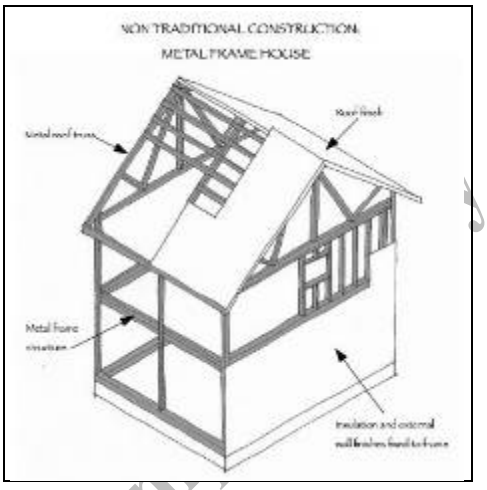
Example of rusting that we have seen in the roof of a metal framed building

Example of tubular metal frame within the roof of a metal framed property

Example of over insulation of a metal framed property which causes condensation

Metal Frame Structure

Below are photographs of a metal frame house that we have recently surveyed.



Original condition of non-traditional house with roof replacement

Close up of cladding on non-traditional house

Non-traditional metal frame house

Painted cladding to non-traditional property

Close up of old metal windows in a non-traditional house

Features to look out for in non-traditional houses

We thought we would give you some tips on the sort of things to look out for:

Chimneys

Asbestos was a very popular material (yes really) when non-traditional houses were being built.

Asbestos original chimney non traditional house

New chimney on a non-traditional house

Soil and vent pipe

Original asbestos soil and vent pipe on a non-traditional house

New plastic soil and vent pipe on a non-traditional house

Roof Construction

It is important to get in the roof and have a close look or for you to employ a chartered building surveyor that will get in the roof and have a close look (Valuers no longer need to view roofs when carrying out valuations – did you know that?). The below photos are what our surveyor saw on a recent survey:

Rusting to a lightweight metal frame or damage or deterioration to the metal frame of a non-traditional house

Some fixings replacements/repairs to a non-traditional house

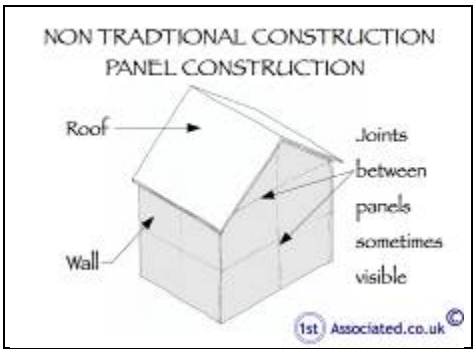
The adding of modern things can affect the building

It is very common these days to have a shower/ bathroom with an extract system. Does that extract system discharge into the roof or does it discharge out of the building? If it discharges into the roof then there can be problems with rusting and corroding of metal and dampness to timber.

Extract vent to outside often discharges into roof which is essential that they do not in this type of roof

Large panel construction

This, as the name suggests, is where rather than building small brick after small brick we used large panels, usually of concrete, which in themselves were a storey height and similar width, about two and a half metres square, and they literally interlocked. There have been problems with the reinforcement used in these and the connections of them, but we haven't come across these problems in the many years that we have been surveying.



Large panel concrete non-traditional house

Jointing to a non-traditional house

General view of a development of non-traditional houses

Innovatory construction

We couldn't think of a better title for this section, but we basically mean constructions that used innovation to look at building houses in a completely new way. An example is the Wimpey no fines concrete system, which is popular and, as far as we know, mortgage companies will lend upon it. It utilises almost a moulding system using form work. There is also pod construction, which is drilling pre-fabricated units, craned and positioned into place and then an outer protective shell put around them. Lots of this type of construction was originally carried out by local authorities, as they had the pressure on them to build a large number of houses,
and more recently by commercial companies,
which had the pressure on them to make profits or returns for their investors.

Non-traditional houses becoming traditional houses?

We have seen during our surveys over the years there has been a need to convert non-traditional housing into traditional housing. It could be argued that the right to buy Council Housing stock made this an important factor, as it is those people who required a mortgage that required the amendments, as in many cases there was nothing physically wrong with the properties.

Also, large companies holding a large amount of housing stock, such as Council Housing and Housing Associations requiring the housing to be brought up to more modern standards for thermal efficiency, etc, have utilised innovative ways of upgrading (although we are not sure whether that's the right term). Their housing techniques normally involve a cladding system to improve thermal efficiency, along with the check on the structural elements. We have surveyed some of them where they practically re-build the original buildings, which ironically can be very difficult. Whilst we don't know the exact figures we imagine it would be almost as costly as building the property from scratch.

Whistle-stop tour of the non-traditional housing market

There are whole books dedicated to this area, so an article such as this can hardly present the subject of non-traditional housing in detail, but we hope this has given you a flavour and an interest for the subject.

If you truly do want an independent expert opinion from a chartered surveyor, or a chartered building surveyor and are particularly interested in carrying out work on modern timber frame properties and if you are buying such a property please look at our survey examples. We feel our surveys are quite unique, as they are written to your level of knowledge. The surveys include photos and sketches and definitions. The survey will also include an action required section and an estimate of costs in the executive summary. We are more than happy to meet you at the property whilst carrying out the survey to discuss any specific issues you may have or have a general chat about what we have found at the end of the survey. Please contact 0800 298 5424 for a chartered surveyor to give you a call back.

We hope you found the article on Non-Traditional Housing of use and if you have any experiences that you feel should be added to this article that would benefit others, or you feel that some of the information that we have put is wrong then please do not hesitate to contact us (we are only human).

How easy is it to get a mortgage on a BISF house, also known as British Iron and Steel Federation house?

We specialise in surveys on BISF British Iron and Steel Federation houses and have been working with these properties for many years. We offer a reasoned view, based upon our knowledge and experience. We don't make a mountain out of a molehill. Equally if we think the house has problems we say so in a clear, jargon-free manner. We also use sketches, photographs and digital images to clarify what we are saying within our detailed reports. We even give you prices on work required.

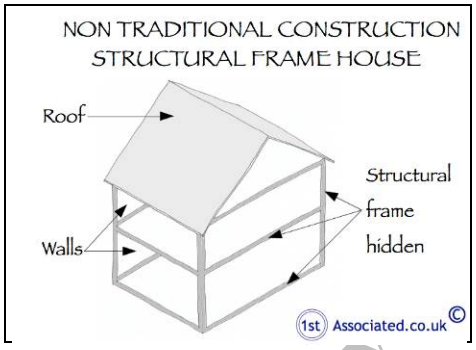
Lived in the property for 25 years and cannot get a mortgage, what an earth is that all about?!

Our client contacted us as she and her husband had been offered the Right to Buy the semi-detached council house they had lived in for 25 years and wanted us to carry out a full residential building survey. The 65 year old house was a non-traditional metal framed construction known as a British Iron and Steel Federation BISF house and was built just after the War years when there was a great need for housing.

A BISF house looks like a normal house, rendered on the outside, it has a shallow pitched roof, looks like a tile but when you look closely it isn't in fact a tile its metal as you would expect with something made by the British Iron and Steel Federation. Possible asbestos if it is in its original format.

Non-traditional house looks like any other house to the average person

The couple had decided to apply for a mortgage through the Halifax as their neighbours had recently been through the same process with the Halifax, which had all run smoothly.
The lender had already carried out our client's valuation and they were looking forward to very soon owning their own home. Little did we all know the problems that would arise!



Non-traditional frame construction

Our Independent Surveyor to the rescue

Our Independent Building Surveyor carried out a full visual residential building survey on the house where it was found none of the areas inspected could be termed as structurally affecting the property. Within the roof structure we even found the level of rust to be slightly below average, not bad or excessive although we did make our client fully aware they were buying a non-traditional house and the problems that can be inherent with them when or if they were to ever to want to sell the property.


Steel frame visible on a close inspection to the property which is why this is a BISF or non-traditional property

The clients seemed happy with the findings and felt they were a step closer to becoming house owners.

Do banks and building societies really know what they are doing? Then the problems started!

The Halifax thought there was a problem with the property as it was a non-traditional build even though they had given mortgages for other properties nearby and indeed the property next door we were told (we haven't done any legal checks on this we have just taken the word of the neighbours that we spoke to). The problem was the Halifax didn't have a policy in place to resolve it!

Our clients were advised by the valuer working on behalf of the Halifax that the Halifax had asked for the house to be opened up. We asked:-

1. Exactly how many openings were required?
2. The location of the openings?

3. What size openings were required?

Our clients were then told by the valuer the holes should be cut into the internal walls, close to the base of the vertical structural columns, to check for corrosion at the joint between the columns and floor slab. They also suggested investigation at first floor level to check column conditions at the point where when the house was built; originally there was a lipped joint between the render and steel cladding, which was a point of weakness.

This we believed did not answer our original questions so we contacted the valuer who told us he was only following guidance notes from the Halifax in requesting the house to be opened up and could not be any more specific. He advised we call his head office and ask them about another non-traditional property he had requested to be opened up and find out exactly where this was opened, how many openings and the size of the openings from the Surveyor that carried this out.

We then contacted his head office to be told they had not yet received the report back so had no idea!

Feeling frustrated?
1stAssociated Surveyors never give up!

Feeling like we were getting nowhere and feeling for the poor client who was getting very frustrated, we then made contact with a Technical Support Manager at Colleys the Halifax Surveyors who advised through the Mortgage Advisor that the Structural Engineer needed to confirm that he is happy with the steel frame of the property and that the corrosion, if any will not affect the future stability of the property going forward. He advised he does not require a specific number of holes or a specific size - just that he needs confirmation of the stability of the steel frame.

Non-traditional properties

Again this was not the answer we required so we emailed the Tech Support Manager at Colleys advising that we had already carried out a structural survey on this property and given our comments based upon what we could see of the roof structure and a visual inspection of the whole property, which is what we always do. We said we have never before been asked to open up a property without any guidance or any specific reason to open it up other than that this is a BISF house of non-traditional construction. We advised no one is able to guarantee the future stability of a non-traditional property, we simply don't have the history of them.

We gave them our proposal of how many areas we intended to open up using the Building Research Establishment BRE as guidance and asked them for their comments. We advised even with these areas opened up we would only be able to specifically comment on these areas and give an indication of any potential problems and advised them it is only with the opening up of the whole structure which we are not aware has ever taken place for a mortgage that we would be able to give assurance on the future stability of the property.

We wanted to understand specifically what concerns they had with this property over and above the other BISF houses as we could not see anything specific.

The normal process is to have guidance from the condition of the roof and we have never had our reports questioned previously. We have only opened up the structure of a property in the past:-
1. Where major works have been carried out or
2. Proposed to the property or
3. There has been a specific element identified by the mortgage valuer as a defect in the property

We can then focus our investigations in this specific area.
At this stage the client was feeling no matter what they did it would not be good enough to pass the mortgage requirements and considered pulling out altogether.

Another visit from a valuer!!

The client then had a call advising another valuer would be visiting the property. After this visit we were advised by Colleys that the lenders and Panel Surveyors are working together to resolve the issues with the lending on this property and they doubted we would have to go out to open up the property.

And as time ticks on we are still waiting!

A few days later we spoke again to our client who advised she had been left a voice message by the mortgage advisor advising the Panel Surveyors have passed it but to date the client is still awaiting for written confirmation of this! We think that any day now the property mortgage will get passed and they will be homeowners.

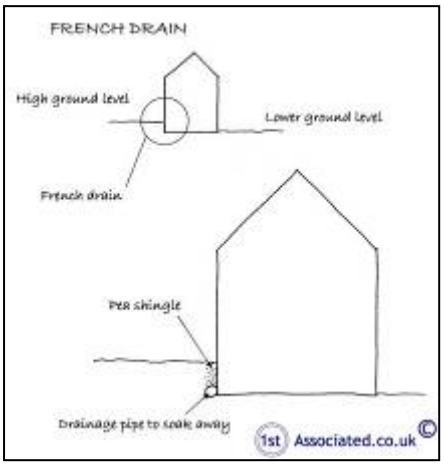
French Drain

Using a French drain to resolve a dampness problem

We are finding where we are asked to look at damp walls and damp floors or damp problems in general that commonly it is because the external ground level is higher than the internal ground level, or airbricks have been blocked, or simply paving slabs, decking or briquettes have been used to form a patio area. This then discharges any rainwater against the building. Quite often the solution is to add a French drain.

Whilst French drains are quite simple and are basically nothing more than trenches filled with gravel, a although there is a bit more to them, as we will explain, they are almost a D.I.Y. job for most people and they are relatively easy to install and are low cost, However, you do need some care and attention, otherwise you can install what we have heard referred to, as the French pond.

What use is a French drain?



A French drain is a trench, the width of approximately six inches or 300 millimetres wide, or the width of your spade, and is approximately twice the depth, i.e. 12 inches or 300 millimetres. In most cases this will suffice, however, where there is a great deal of ground water you may wish to make the trench wider and deeper.

The French drain acts as an area where water soaks away quickly. We often recommend them close to building, but not next to the building, as this helps reduce the ground level and/or take any water that is directed at that area away. For example, where a patio has been put in place which aims any rainwater at part of the wall. As mentioned, whilst a French drain is a D.I.Y. job, it does need some understanding of how it works.

French drains must be on a slope

The piping that goes at the base of a French drain should be perforated or, as we did years ago for land drains, there should be gaps between each pipe. It should be set onto a bed of firm ground and the pipes should on a fall to the drain. Whilst you should be able to ensure there is enough fall by sight, we also like the idea of rolling a marble from one end to the other.

You will then need to put the pipes down, fill the trench with half an inch, to an inch, of good sized gravel. You can leave it at that, or in addition you can cover with stand and then turf over. This is how a basic French drain is carried out.

The French drain system that we would recommend

This would be as described, although we would add to the base an inch or two of gravel on to which the perforated drainage pipe will rest. It will then wrap around that drainage pipe filter fabric. This is to stop the holes in the perforated pipe from blocking up. By the way, the drainage pipe should be four to six inches/100 millimetres to 250 millimetres. We would then fill with gravel. In addition to this, we would add a silt trap and this is added in the run of the pipe and is very similar to a road gully (not that's of much use if you don't understand how a road gully works). The silt trap is a rectangular box with a pipe opening at each end. The drained water passes onto this and any particles sink to the bottom of the box and then the water travels on to the other side of the box, enabling you to feed into a drain.

These are usually made of glass reinforced polyester and have been available in this form since the mid-1980's. They are normally reinforced with a steel frame for additional strength and re-bedded in concrete.

The French pond!

French drains will, over time, clog up, which is why we recommend using a filter fabric. However, even with this they will eventually clog up. Unfortunately, there is no dyno-rod equivalent, as it is normally fine sand, organic matter or clay that has clogged up the French drain. So, it is a case of digging it up and cleaning the pipework (or it may be quicker to just replace it), adding a filter fabric and re-filling the gravel.

Condensation and Cold Bridging in Non Traditional houses

What is cold bridging, how does it work?

Cold bridging is a term and a problem we believe will become more common in years to come. We are finding more and more examples of Cold Bridging. This happens in certain types of property and to some extent it could be argued that it is a characteristic of that type of property and quite a complex issue to resolve. Unfortunately it means condensation is more likely.

Non traditional house mainly asbestos

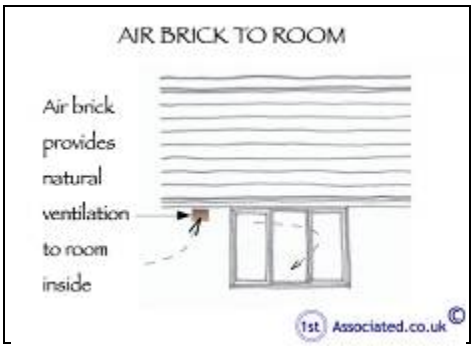
Cold Bridging

Cold bridging is caused by a colder element in the structure or fabric of the building allowing coldness to pass through. When warm moist air is present in the property and it passes through the colder elements of the structure we have what is known as Cold Bridging. This is often caused by a combination of issues. It can occur from things such as having a shower or a bath, cooking or clothes washing, particularly if you are drying washing on the radiators.

British Steel frame house (BISF)

Ventilation is important

It could, in commercial properties, be a large gathering of people breathing (this can cause a lot of humidity) in a building that has stood cold and empty for some time such as a church, village hall, sports centre or a crèche. These human atmospheres create a climate, which can result in condensation on the cold elements of the structure and fabric if the room is not ventilated properly.

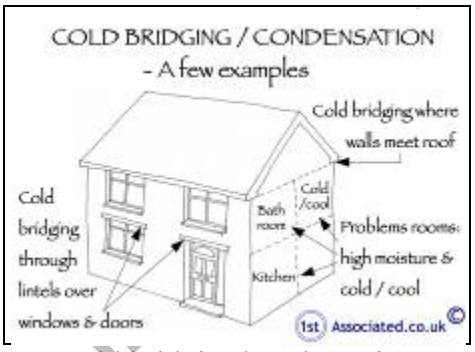


Airbrick provides ventilation

Condensation and Cold Bridging in certain susceptible constructed properties

Survey sketch on Cold Bridging

This is a good indication of the typical things that cause Cold Bridging in a house and how extraction from humidity generating areas such as the kitchen and the bathroom can reduce problems. You do need to look at how you live in the house.



Cold bridging/condensation

Cold Bridging isn't just about condensation on mirrors

Cold Bridging isn't just about condensation on mirrors. Not only can it be an original characteristic of the building it can be encouraged by all types of extension and alterations.

Cold bridging is far worse than condensation as it is caused by an element in the structure, which you can do very little to change without great expense.


Rusting within the roof between the insulation and plastic protective underlayer

Buying a modern building

If you buy a 1980's property for example, with concrete lintels that cause cold bridging, this is a characteristic of the property and it is very difficult to change. However not only could it be a characteristic of the building it could also be caused by alterations that you make to the building.

Metal frame non traditional construction

When is Cold Bridging Likely?

In our experience we have seen cold bridging occurring in:

1) Eras of properties where there are warm elements and colder elements to the building.

2) Where you have a mixture of warm rooms and cold rooms.

   For example: Lounges and main bedrooms tend to be warmer than guest or spare bedrooms most of the time. Also sometimes rooms can warm up due to large areas of glass and thermal heat gain, which is very true in some conservatories also.

Black mould and high damp meter readings

3) Humidity internally is high

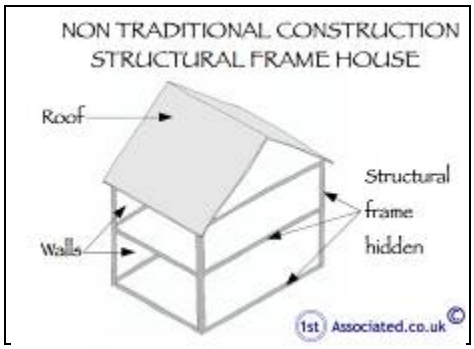
4) Where it is colder but by no means very cold outside

Problems with 1970/1980 era properties relating to Cold Bridging

Let us take a look at the 1970's/1980's era of property to give an example of the problems we have come across with this era.

The 1970's is an era where we had just begun to think about insulating due to the oil crisis and where we added insulation into our structures

For example with:

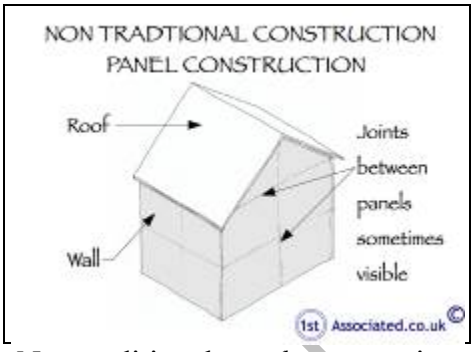


Non traditional structural frame house

1. cavity wall insulation or

2. double glazed windows.

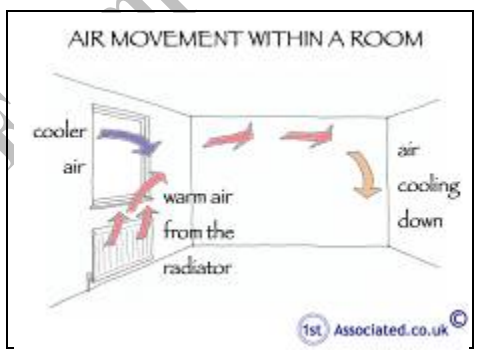
This meant they were warmer which has meant the significance of a lintel, over a door or window, being colder and allowing the transfer of coldness becomes much more important. This results in condensation that we commonly see above windows in this age and era of property.



Non traditional panel construction

How to solve Cold Bridging

The difficulty is resolving cold bridging. Normally, where condensation is involved, if you get the balance of warm and coolness of the air, ventilation and movement you can reduce considerably the chances of condensation. Airing the room by opening the windows, which seems to have gone out of fashion, can help considerably.



Air movement within a room

Where do we most commonly find Cold Bridging?

Our thoughts on this have very much changed as we used to say that cold bridging was typically found in properties from the 1960's/1970's. However we are increasingly finding it in a broader range of properties, particularly Victorian properties, where people are trying to live to modern standards of heating and insulation without understanding that the properties need to breathe as well. We have also found cold bridging in properties where extensions have been carried out and where the extension has been built to a different standard to the original property.


Metal cladding roofs

Can lifestyle be a factor in Cold Bridging?

Cooking produces steam and requires ventilation

This is often a contentious and difficult question, particularly where the occupier is a tenant and there is a disagreement between the landlord and the occupier as to why there is mould in the property. In our experience the major factor is the size of the family living in a property. This is especially the case with large families with young children and where in turn there is a lot of washing of clothes being done. This is particularly the case in the winter months, with the wet washed clothes being dried on radiators. Also general hygiene washing and not to mention cooking to feed everyone all lead toward a more humid atmosphere.

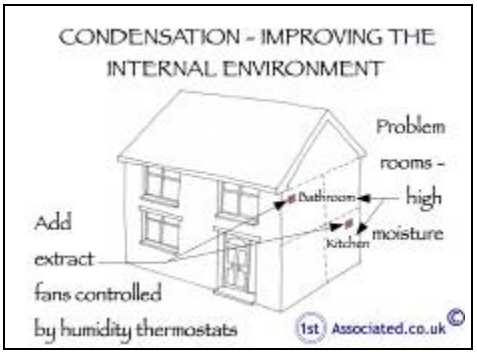
This is generally known as the lifestyle of occupants and can be a major factor particularly where there are legal cases as to the problems within a property.

Is Cold Bridging and Condensation a design problem or a lifestyle problem?

Non traditional BISF property

This really is a difficult question to answer. We have been involved in a number of cases as expert witnesses or advocates and the answer can vary. We would comment that there are factors that can be changed and factors that can't be changed. For example, the occupiers' lifestyle can in most cases can be amended. This may involve the occupier having an understanding of the problems they are causing. For example, drying lots of washing on a radiator inside may be causing excessive moisture in the atmosphere. Equally not opening the windows and closing or sealing up vents can be a problem.

Design of the Building

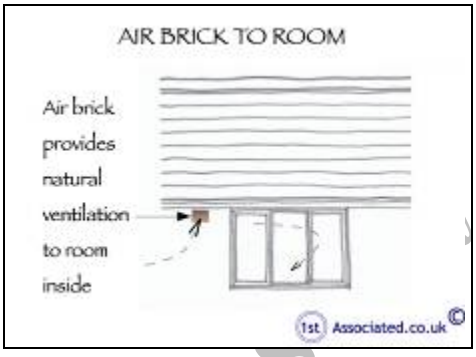


Condensation

Sometimes it really is down to the design of the property. Where there are cold elements in it, such as a concrete structural frame or concrete lintels, when these are in contact with moist air condensation occurs. Sometimes this is impossible to stop but often it is possible to reduce it by having a better circulation of air with a better heat and coolness balance and the removal of any moist air.

Things to remember about an air brick

If you are thinking about adding an air brick then you need to be aware that airbricks don't actually allow that much air through. Although externally a nine by three inch air brick has a lot of gaps, as these gaps taper, it is generally considered that only about one inch square of air regularly passes through the grills.



Air brick may not ventilate room enough

In the winter we have condensation problems but in the summer we don't

The different seasons mean that the building reacts differently. Anyone who has lived in an old property will know that windows and doors, particularly sliding sash windows, will swell during the winter months.

There can be similar issues with a property where, regardless of your lifestyle, during some of the different seasons, for example the winter or a wet spring, taking a shower can relate in condensation even with extract fans running (although this is far less likely).

Removing electric points to view construction

It also depends on what the humidity level is outside as this can be greater than inside. The moisture/humidity will then seek out colder rooms such as spare bedrooms and the corners of cupboards. When you open these at a later date you will be surprised to find black mould.

Cold bridging what can we do?

There are limited things you can do with regards to cold bridging as it is about the original design of the property and needs to be considered as a characteristic. However, we do always recommend large humidity controlled extract fans are added into the bathrooms, kitchens and any areas that you intend to carry out drying of clothes to ensure moisture is removed as quickly as possible.