**JOB REFERENCE: XXXXX** 

# RESIDENTIAL BUILDING SURVEY

# XXX Roxton Bedfordshire MK44 XXX



FOR Mr X

Prepared by: XXXX

INDEPENDENT CHARTERED SURVEYORS



Marketing by:

#### **CONTENTS**

INTRODUCTION REPORT FORMAT **SYNOPSIS EXECUTIVE SUMMARY** SUMMARY UPON REFLECTION

#### **EXTERNAL**

CHIMNEY STACKS ROOF COVERINGS AND UNDERLAYERS ROOF STRUCTURE AND LOFT SPACE GUTTERS AND DOWNPIPES AND SOIL AND VENT PIPES EXTERNAL WALLS FASCIAS AND SOFFITS AND WINDOWS AND DOORS **EXTERNAL DECORATIONS** 

#### **INTERNAL**

CEILINGS, WALLS, PARTITIONS AND FINISHES CHIMNEY BREASTS, FLUES AND FIREPLACES **FLOORS DAMPNESS** INTERNAL JOINERY TIMBER DEFECTS INTERNAL DECORATIONS THERMAL EFFICIENCY OTHER MATTERS

#### **SERVICES**

**ELECTRICITY** OIL PLUMBING AND HEATING **BATHROOMS** MAIN DRAINS

#### **OUTSIDE AREAS**

**OUTBUILDINGS / PARKING EXTERNAL AREAS** POINTS FOR LEGAL ADVISOR

#### **APPENDICES**

LIMITATIONS **ELECTRICAL REGULATIONS** GENERAL INFORMATION ON THE PROPERTY MARKET

> — Marketing by: — www.1stAssociated.co.uk

0800 298 5424





## INTRODUCTION

Firstly, may we thank you for using our services once again and your kind instruction of XXXX; we have now undertaken an Independent Building Survey (formerly known as a Structural Survey) of the aforementioned property. This Survey was carried out on XXXX.

As you may recall 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.

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

As always we recommend that you set aside time to read the report in full, consider the comments, make notes of any areas that 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 house is yours but we will do our best to offer advice to make the decision as easy as possible.

— Marketing by: —



# 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.

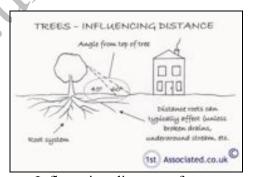
#### TECHNICAL TERMS DEFINED

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. The sketches are not 100% technically accurate; we certainly would not expect you to carry out work based upon the sketches alone.





Influencing distance of trees

### **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

The property is a two storey link detached house linked to the garages to the rear. We are advised the property was extended with a first floor extension in December XXX.

The property has large gardens to the front and also a workshop area. The property has its boundary directly on the adjacent properties to the right hand side and to the rear. The owners advised that they were unsure of where the boundaries were.

This property is accessed via a long drive. We are advised that the driveway is owned by this property but number 20 has a right of way (ownership of this and the boundaries needs to be confirmed).

We believe that the property was built in the Victorian era, the owners advised 1834, which does seem a bit early. If the age of the property interests you your Legal Advisor may be able to find out more information from the Deeds.

We have carried out a brief inspection to ascertain if the building is listed via the BritishListedBuildings.co.uk website. We have found it not to be recorded as listed.

**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:

1833	School days - government funds education for the poor in
X	churches
1840	The first adhesive postage stamp the Penny Black is issued,
	worth much more than a penny today!
1857	It's a girl! Queen Victoria gives birth to her daughter Princess

Beatrice





# **Location** Plans







Marketing by: ——



# **EXTERNAL PHOTOGRAPHS**



Front view



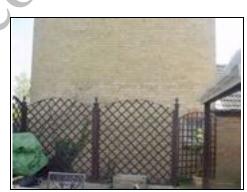
Rear view (next doors garage)



Front of property viewed from the left



Right view upper



Right view lower



Garden



Garden

— Marketing by: ——





Note; changes of windows and the extensions to the left hand side



How property was



How property is now

- Marketing by: ----



# **ACCOMMODATION AND FACILITIES**

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

#### **Ground Floor**

The ground floor accommodation consists of:

- 1) Dining Room to the right hand side
- 2) Lounge with the stairs to the middle
- 3) Kitchen to the left hand side
- 4) Boiler room with a Worcester Oil Boiler
- 5) Cloakroom to the left hand side

#### **First Floor**

The first floor accommodation consists of:

- 1) Bedroom to the right hand side
- 2) Bedroom to the middle
- 3) Stairs to the middle that gives access to the roof
- 4) Bedroom to the far left hand side
- 5) Bathroom to the far left hand side

### **Outside Areas**

A longish driveway and gated entrance into the property, a workshop and garden. The rear and the right hand side are bound by other properties.

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

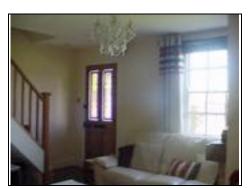




# **INTERNAL PHOTOGRAPHS**

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).

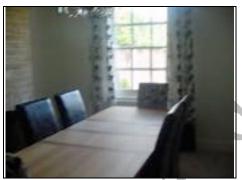
#### **Ground Floor**



Lounge and stairs



Lounge and chimney



Dining Room



Kitchen



Kitchen



Cloakroom

Marketing by: —



# First Floor



Front left hand bedroom



Right hand bedroom



Middle bedroom



Fireplace in middle bedroom



Bathroom rear left



Bathroom rear left

— Marketing by: ——





# **SUMMARY OF CONSTRUCTION**

### **External**

Two brick chimneys Chimneys:

Main Roof: Pitched and clad with concrete tiles

Pitched and clad with concrete tiles with lead Two left hand side Roofs:

flashings where they join the main building

Main Roof Structure: Cut timber roof

**Plastic** Gutters and Downpipes:

Soil and Vent Pipe: Internal

Walls: A mixture of Flemish Bond brickwork and

Stretcher Bond Brickwork

Fascias and Soffits: Timber

Modern double glazed timber sliding sash windows Windows and Doors: 

Marketing by: —



#### **Internal**

Ceilings: Lath and plaster visible but they look to have been

overclad with a plasterboard

Walls: Wet plaster and a modern gypsum plaster

Floors: Ground Floor: A mixture of Suspended floor to the middle of the

property and possibly to the right hand side and

concrete floors to the left hand side

First Floor: Joist and floorboards with embedded timbers

### **Services**

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

Heating: There is a Worcester Bosch boiler located in a

cupboard on the ground floor but we could not actually see it due to the amount of stored items.

Electrics: The electrics are 1990's/2000's and are located in the

left hand side entrance area

Oil: Plastic oil tank to left hand side

Drainage: The manholes are located to the left hand side of the

property.

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.

——— Marketing by: ———







# **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) The property is very well presented which equally means that it is difficult to identify problem areas.
- 2.0) The property is secluded.
- 3.0) Good sized garden and benefit of a workshop.

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) Main Roof

The original roof covering would have been slate. This has been replaced with a heavier concrete tile. Modern Building Regulations require a traditional structural support is provided where this takes place. We can't see any obvious additional support that has been added and equally we cannot see any significant movement in the timbers



Main roof

We did note that the purlins were running a long length without getting support.

ACTION REQUIRED: Your Legal Advisor to check and advise when the property was re-roofed and if Building Regulations permission was approved/obtained. We will advise further.



Long purlin without support

# **ANTICIPATED COST:** Depending upon

the findings of your legal advisor but to add propos is likely to be in the region of a few hundred pounds. please obtain quotations.

Please see the Roof Section of this Report.

### 2.0) Timber Windows

We noticed that some of the paint was flaking on the timber windows and bare timber was visible. We also noticed some areas had been filled in.



Flaking paint to timber windows

——— Marketing by: ———





**ACTION REQUIRED:** Ideally repair, prepare, and redecorate in the summer of XXXX. We certainly wouldn't leave it longer than the summer of XXXX.

Please see the Windows Section of this Report.



Deterioration to windows

### 3.0) Dampness/Cold Bridging

We are getting slightly high damp readings in the front right hand corner bedroom (all directions given as you face the front of the property). This could be due to the need for some repointing at high ground or it could be due to lack of air movement in the area due to the nearby tree.

There may also be cold bridging occurring in the corner of the property as we noticed that washing was being dried here.



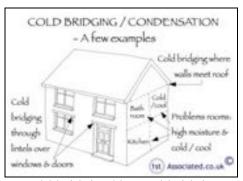
Damp to the right hand side



Washing drying in the right hand bedroom

#### Cold Bridging Defined

bridging Cold a colder is caused by element in the structure coldness to pass through the structure much quicker when warm moist 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 condensation which results in the element.



Cold bridging/thermal bridging

——— Marketing by: ———





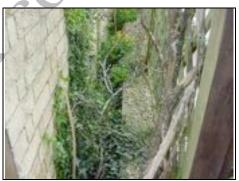
**ACTION REQUIRED:** Improve the extraction to areas of high humidity with the installation of good large humidity controlled extract fans to the bathroom (we appreciate it has already got one but better are available) and the kitchen.

If the room is regularly used for the drying of clothes (it was being used at the time of the survey) and you intend to do the same then you need to make sure this room is well aired with a good large humidity controlled extract fan!.

**ANTICIPATED COST:** We would anticipate costs between £150 - £250 per extract fan depending upon the wiring required. We always recommend quotes are obtained before work is agreed/commenced.

# 4.0) Dampness to the right hand side (all directions given as you face the front of the property)

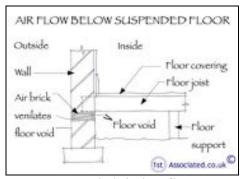
We believe there are some high ground levels to the property. We are recording high damp meter readings to the right hand side of the property. If you recall we visited next door and the existing owner, we believe, agreed to reduce the ground level in that area. The vegetation also needs to be cleared out.



Vegetation to right side area

# 5.0) Airflow under the suspended timber floor

As discussed whilst at the property, there should be an airflow under the suspended timber floor. We can see the ground level has increased to the front of the property hiding some of the airbricks. These need to be exposed and cleared and checked they are venting; this is a relatively easy operation.



Suspended timber floor





#### Rear airbricks

The difficulty comes with the rear airbricks where you need to have a 'cup of tea' meeting with both your neighbours (ideally before you commit to the purchase of the property) and advise them that there are high ground levels causing minor dampness into your property and probably causing dampness into the timber floor and that the ground needs to be lowered. probably possible in some areas, however there is also a garage to part of the property.



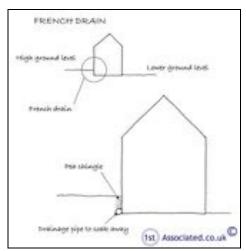
Hidden airbrick



Airbrick acts as gutter

**ACTION REQUIRED**: Ideally a French drain should be added to the rear of the property. As mentioned this is complicated by the garage to the rear which we have not seen inside. You do need to check this to see if there are airbricks within and if there is a concrete floor because a concrete floor will act like blotting paper against the property.

Please see the Damp Section of this Report.



French drain

 Marketing by: www.1stAssociated.co.uk 0800 298 5424



#### **6.0)** Trees

There is a conifer tree in the rear neighbour's garden. It is bigger than we would like given its proximity and also there is a change in levels in the area.

ACTION REQUIRED: Have another 'cup of tea' meeting with the rear neighbours (the neighbours with the high ground level and garage to rear) and ask them about the tree and advise that the Surveyor was concerned about it (there looks to have been some historic cracking that could relate to this on the gable end).

We would advise that we lifted the drains and have not found any significant root system from the tree, but you do need assurances that it will be maintained and we would say that you are even happy to



Large bush / tree



Base of large tree

contribute towards it either paying the cost of the labour or some other contribution. At the end of the day, the tree could affect your property significantly and anyone else's.

The only way to be one hundred percent safe would be for the existing

The only way to be one hundred percent safe would be for the existing owners to take out an insurance claim, advising that the cracking has been noted by a structural surveyor (this should cost them nothing other than time to write the letter). This usually means that the insurance company will carry out a monitoring exercise (the Building Research Establishment recommend monitoring any cracks for a minimum of one year) to establish if there is any progressive movement. Your future liability will be limited to the cost of the excess on the insurance providing the insurance company is happy for you to take over the insurance claim.

Your solicitor needs to legally confirm that this is an acceptable way of dealing with the structural problems.

Please see the Trees Section of this Report.





#### 7.0) First floor extension and alterations

More a requirement to find out further information than a problem. Building on the first floor of an existing property can cause problems to the foundations and it is often a requirement that the property is underpinned.

**ACTION REQUIRED**: You need to check to see if the property is underpinned as many people when they hear a property has been underpinned this may put them off it or want a reduction in the price. We would be more than happy to comment on any drawings you wish to forward to us.

# 8.0) Planning permission and building regulations

We would like to see a copy of the planning permission and building regulation drawings. We would also like to know if there is any sort of warranty with regard to the building work that has been carried out.

# The Ugly

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

Characteristics of this type of property

There is nothing, which we feel falls within this section providing you are happy with the characteristics and associated costs of the property which we have mentioned throughout the report and that you are happy to carry out the work and the investigations that we have recommended.



# **Other Items**

Moving on to more general information.

#### Maintenance

It should be appreciated that defects which would normally be highlighted in a modern property, effectively form part of an older property's overall character and style. Such defects are considered acceptable and may not have been specifically referred to as defects within the context of this Report.

#### **Services**

Whilst we have carried out a visual inspection only of the services within the property and we would always recommend you have your own specific testing for each of the services. We also need to advise you of the following:

#### **Electrics**

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.

### **Heating**

We are advised the boiler is relatively new, we could not see it due to the amount of stored items in the cupboard. We were pleased to see a plastic oil tank, typically these are double lined. 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.



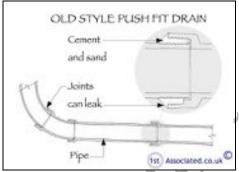
Stored items in boiler cupboard





#### **Drainage**

In older properties, such as this, drainage was often push fitted together rather than bonded together which means that they may leak over the years. Whilst we ran the tap for 15 minutes without any build up or blockages the only way to be 100% certain of the condition of the drains is to have a closed circuit TV camera report.



Push fit drain

# **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, as you will be re-piping much of the water used in the building it gives an ideal opportunity to also check for any remaining lead pipes.

**ACTION REQUIRED:** 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 redecorating to turn the property into your home in your own colours. 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 aai 1 so reg 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.

> Marketing by: www.1stAssociated.co.uk

0800 298 5424



# **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. add the following in this instance:

The areas that we have focused on, as we feel they are most difficult to solve and ultimately could be problematic are:

- Getting an airflow underneath the suspended floor and also reducing the 1) ground levels for which you have to meet with the neighbours.
- Discussions with the neighbours about the tree. 2)
- Confirmation of planning permission/building regulations, etc being 3) approved.

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.

Marketing by: —



# 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.

> Marketing by: www.1stAssociated.co.uk 0800 298 5424





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





Marketing by: —



# **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.

There are two chimneys to this property they are located to the front left and front right side (all directions given as you face the property).

### **Chimney One located front left**

This chimney is brick built with two chimney pots. There is some moss at the top, at some stage this should be cleared off and some repointing carried out.

ACTION REQUIRED: In the next few years have a close inspection of the chimney.

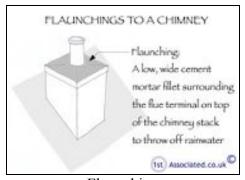


Left hand chimney



Minor moss

Unfortunately we were unable to see the flaunching properly, we therefore cannot comment upon them.



Flaunching





### Chimney Two, located to front right

This chimney is brick finished with a lead flashing and two decorative chimney pots. From what we could see from ground level it looked in average condition considering its age, type and style. There is some moss at the top and there is a slight lean to the chimney.

> **ACTION REQUIRED:** As per the left chimney.



Right hand chimney



Right hand chimney

#### Flashings Defined

Flashings prevent dampness from entering the property, usually at junctions Such a junction is the one between the chimney and the where materials change. roof.

#### Flaunchings Defined

A low, wide cement mortar fillet surrounding the flue terminal on top of the chimneystack to throw off rainwater.

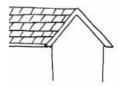
Finally, we have made our best assumptions on the overall condition of the chimney stacks from the parts we could see we could see above roof level. The inspection was made from ground level within the boundaries of the property (unless otherwise stated) using a x16 zoom lens on a digital camera. A closer inspection may reveal latent defects.

Please also see Chimney Breasts, Flues and Fireplaces Section of this Report.

Marketing by: www.1stAssociated.co.uk 0800 298 5424

1st Associated.co.uk

# **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 two areas; the main roof and the low level pitched roofs.

### Main Roof Right

The main roof is pitched and clad with concrete tiles and, from ground level, this looks in average condition considering the roofs age type and style.

A heavier concrete tile has replaced the original slate (we did find some old slate tiles underneath the insulation in the right hand roof) and therefore there should be additional roof support which there isn't in this case.



Main Roof

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

### **Main Roof Left**

There are two pitched roofs to the left hand side, clad with concrete tiles and, from ground level, this looks in average condition considering the roofs age type and style. They have a lead flashing where they meet the main building.

**ACTION REQUIRED**: Carry out periodic inspections and maintenance of the roof, as required. Watch out for moss gathering.

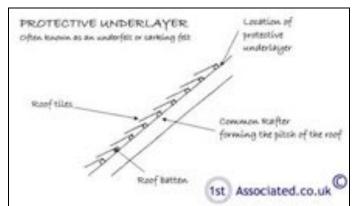
— Marketing by: ———





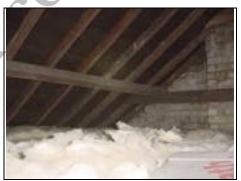
#### Protective Underlayer (Often known as the sarking felt or underfelt)

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 to the right hand side. 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.



This photo shows the common rafters (the ones that form the pitch of the roof) and the dark area between is the underlayer

To the left hand side there is a modern breathable sarking felt. This type of sarking felt, as far as we are aware, has been used since 2002.



Modern breathable felt





#### **Pitched Front Porch Roof**

The pitched front porch roof is clad with slates. There are no gutters.



Pitched front porch roof

#### Pitched Rear Low Level Roof

There is a pitched low level roof to the rear, which is clad with concrete tiles with a lead flashing.



Pitched rear low level roof

All the roofs were inspected from ground level with the aid of a x16 zoom lens on a digital camera.

Finally, we were only able to see approximately ninety percent of the main roof 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.

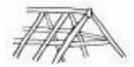
For further comments with regard to ventilation please see the Roof Structure and Loft Section.

- Marketing by: ----





# **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.

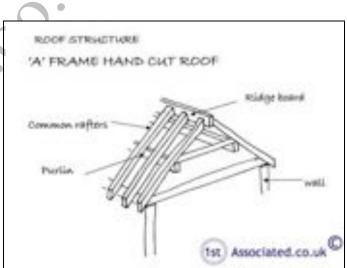
#### **Main Roof**

#### **Roof Access**

The property has two loft hatches, one in the middle bedroom and one in the left hand bedroom. There is a light in the right hand loft, it was awkward to get on as we had to climb onto some of the units (we did get permission). We would always recommend secure floor boarding so spaces can be used.

#### **Roof Structure**

This type of roof structure has what is known as an 'A' Frame cut timber roof. This is a roof that is purpose made and hand built on site. Without the original design details we cannot categorically confirm that there are no defects; however it is in line with what we typically see with the exception that we would have expected more supports to the purlins particularly as there has been a concrete tile added.



'A' frame roof

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



Long length of purlins without

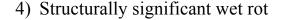
— Marketing by: ——



#### **Roof Timbers**

We have inspected the roof structure for:

- 1) Serious active woodworm
- 2) Structurally significant defects to the timbers
- 3) Structurally significant dry rot





General view of inside of roof

Our examination was limited by the general configuration of the roof and the mass of insulation. What we could see was generally found to be in average condition considering its age. It is, however, feasible that there are problems in the roof that are hidden.

**ACTION REQUIRED**: The only way to be 100 per cent certain is to have the roof cleared and checked.

#### Ventilation

No ventilation was noted to the right hand side of the roof, the left hand side has a breathable protective underlayer.

#### **Insulation**

Please see the Thermal Efficiency Section of this Report.

### **Electrical Cables**

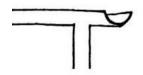
We can often identify the age of an electrical installation by the age of wiring found in the roof. In this case we could not see it due to the mass of insulation.

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 property has plastic gutters and downpipes and are fairly typical of what we see; they are in average condition for their age, type and style.

All the water from the main roof is surcharging onto the smaller roof to the rear of the property. We believe that the guttering may have trouble coping and may overflow.



Surcharging gutters and downpipes

ACTION REQUIRED: We would recommend you stand outside the property next time it rains heavily particularly to the rear of the property (obviously gaining permission from the neighbours first) 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.



Overloading of gutters and downpipes



Downpipe

—— Marketing by: ———





### Soil and Vent Pipe

The property has internal soil and vent pipes.



Soil and vent pipe within roof

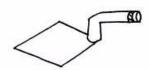
Finally, gutters and downpipes have been inspected from ground level. As it was not raining at the time of the inspection it is not possible to confirm 100 per cent that the rainwater installation is free from blockage, leakage etc. or that it is capable of coping with long periods of heavy rainfall. Our comments have therefore been based on our best assumptions.

—— Marketing by: — www.1stAssociated.co.uk

0800 298 5424



# **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 predominantly in Flemish Bond brickwork, with Stretcher bond brickwork to the newer areas.

#### **Brickwork**

The property is predominantly in Flemish bond brickwork, which is a solid wall construction with a cement mortar although originally it would have been lime mortar. There is an almost random brick coursing in some areas.

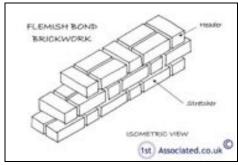


Flemish bond brickwork to right side, random brickwork to left side



Weathered pointing

The term Flemish Bond relates to the way the bricks are bonded together and have a pattern visible from the outside of the property that shows the end of the brick (header), then the side of the brick (stretcher), then the end of the brick, then the side of the brick, and this pattern repeats course after course, i.e. header-stretcher, header-stretcher.



Flemish bond brickwork

—— Marketing by: — www.1stAssociated.co.uk

0800 298 5424





#### Timber lintels and bonding timbers

Before the 19th Century, the practice of building timbers into external walls was almost universal. These were known as bonding timbers. They are of course prone to rot as solid walls allow dampness through. Unfortunately, without opening up the structure, we are unable to confirm if this is the case.

#### Condition

Generally Flemish Bond brickwork is liable to penetrating dampness internally, dependent upon the condition of the brickwork and the exposure to the weather. It is essential that external faces be kept in good condition. In this case the brickwork has some weathering.

> **ACTION REQUIRED**: We would budget for some repointing to be carried out in the summer of XXXX.

#### New extension

The new extension has followed the Flemish bond brickwork in some areas, we assume it has building regulation permission and as such may well be a cavity wall construction with insulation within.



New extension

# Extra weight on the footings

The extra weight of building the extension has possibly meant that the building has been underpinned. Please see our comments in the Executive Summary regarding underpinning.

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 brickwork / plasterwork we cannot comment on their construction or condition. In buildings of this age timber lintels, concrete lintels or metal lintels are common, which can be susceptible to deterioration that is unseen, particularly if in contact with dampness.

> Marketing by: www.1stAssociated.co.uk 0800 298 5424

Our comments have been based upon how the brickwork / plasterwork has been finished. We have made various assumptions based upon what we could see and how we think the brickwork / plasterwork 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.



Marketing by: —



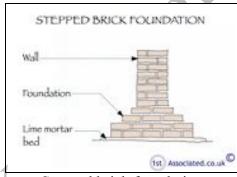
# **FOUNDATIONS**



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 stepped brick foundation possibly with a bedding of lime mortar. To the newer first floor extension there may be underpinning carried out.



Stepped brick foundation

#### Clay

This property stands on clay. Clay has two properties; one of which is it retains water and the other is that it moves depending upon its water content. It is therefore more susceptible than most conditions should drains leak or trees be allowed to overgrow, or if it is within a water course, etc. It is not unusual to have some settlement in properties built in clay.

# **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.

#### **Cracks**

Please remember to talk about any cracks identified within the property. Often insurers will refer to progressive and non-progressive cracking. Unfortunately this is

----- Marketing by: -----www.1stAssociated.co.uk
0800 298 5424



#### XXX Roxton, Bedfordshire, MK44 3XXX

something we are unable to comment upon from a one-off inspection; the Building Research Establishment recommend a year of monitoring of any cracking.

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 100 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.

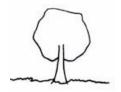
Marketing by: —

www.1stAssociated.co.uk 0800 298 5424



St. Sociated.

# **TREES**



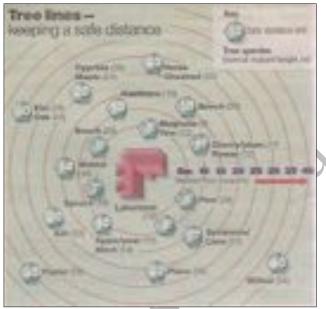
Trees within influencing distance of a property can affect the foundations by affecting the moisture content of the soil.

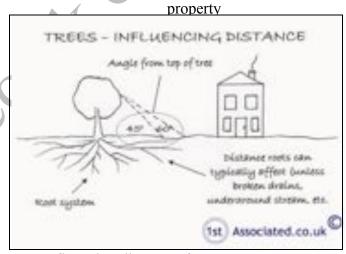
There are trees within what we would term as influencing distance but you do need to speak to your insurance company as they may have a different interpretation for insurance reasons.

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



The tree is located in next doors garden but is right next to your





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.

Please also refer to the External Areas Section.

— Marketing by: ——





# **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.

In properties of this age it is unlikely that a damp proof course would have been built in originally. However, often they have had damp proof courses added at a later date. In this case we can see a DPC in some areas with the thickening of the ground indicating there is a slate or similar present.

There is a metal electric damp proof course to the left hand side of the property. These were popular at one time. From the information we have read in relation to them, we generally find that they do not work. They are in the area of the boiler room which we should imagine is kept fairly warm and dry.

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



Damp proof course



Metal electric damp proof course

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.

——— Marketing by: ———



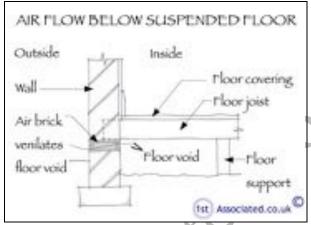


# **AIRBRICKS**



In properties with suspended floors you need to have an airflow beneath to stop deterioration. The air is allowed to pass under the property by the use of airbricks. Generally the rule of thumb is that airbricks are spaced every metre and a half approximately, but this depends upon the specific circumstances of the property.

Air bricks are essential to have a through flow of air as this helps to reduce the chances of wet rot, dry rot and woodworm. In this case the airbricks are acting as gutters and certainly not venting the floor.



Suspended timber floor



Air brick – ground level needs to be reduced

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

Finally, we have made our best assumptions based upon our visual inspection of the outside of the property and our general knowledge of this age, type and style of construction. We have not opened up the floor, unless we have specifically stated so in this section.

——— Marketing by: ———

www.1stAssociated.co.uk





# 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**

We believe there is a fascia board hidden behind the gutters; it is very difficult to see.



Fascia

#### **Windows and Doors**

The property has modern double glazed timber sliding sash windows. The modern version of these sliding sash windows does not tend to have the problems of the older version unless it has been put in badly. These look in reasonable condition although there are some areas of soft rot.



Modern sliding sash window with double glazing

**ACTION REQUIRED**: Redecorate the windows in the summer of XXXX.

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.

— Marketing by: ——



# **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.

Redecoration is required to the windows in the summer of XXXX.

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.

— Marketing by: ———





# **INTERNAL**

# I I

# **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**

In the older part of the property on the right hand side there was originally lath and plaster ceilings; when we lifted the insulation in the roof space we could see the lath and plaster. It is not in very good condition and had loosened the grip on the lath.



Lath and plaster

The left hand side of the roof we believe a modern plasterboard may well have been tacked over the lath and plaster. The problem with doing this is

that if it is not done properly the entire ceiling can come down. However we could see no visual signs to indicate that there were problems in the ceilings such as bowing.

# <u>Timber in the lounge – is it real?</u>

We are not one hundred percent certain but it seems it is a very unusual detail.



Timber in the lounge

— Marketing by: —





#### XXX Roxton, Bedfordshire, MK44 3XXX

#### Lath and Plaster Defined

Laths are thin strips of timbers which are fixed to the structure. Wet plaster is applied to the laths, usually in several layers. The plaster forms a key as it is forced between the laths. This plaster, once dry, is given further coats and often a decorative finish. ???

#### 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.



Lath and plaster ceiling overclad with plasterboard

#### **Internal Walls and Partitions**

These are, we believe a mixture of solid and studwork construction. It is of course impossible to determine the construction without opening up the walls and we have therefore taken an educated guess.

# **Hairline Cracking Internally**

The hairline cracking was predominantly vertical and predominantly above the doors and around the doors which we believe relates to a mixture of natural settlement and differential settlement with a new extension.

We can see a vertical crack between the new and old that looks to have been filled and painted over. This is effectively the focal point of any movement.



Hairline cracking

**ACTION REQUIRED:** Monitor.

—— Marketing by: — www.1stAssociated.co.uk 0800 298 5424





#### **Perimeter Walls**

Originally these would have been constructed with a wet plaster, possibly a lime plaster. We now believe they are gypsum plaster.

Again, we cannot be 100% certain of the wall construction without opening them up which goes beyond the scope of this report. These were solid and very smooth when tapped and are likely to have had a skim coat of gypsum plaster.

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.

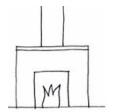
We cannot comment upon the condition of the structure hidden behind plaster, dry .um lining, other applied finishes, heavy furniture, fittings and kitchen units with fitted

Marketing by: —





# 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 left and right hand sides (all directions given as you face the front of the property). The property had what we would term as a feature fireplace in the lounge which looked to have a wood burner.

At the time of the survey no chimneys were in use. Any chimneys that you do not propose to use should be capped and ventilated to prevent dampness.



Feature fireplace

We were advised the chimneys were last swept in 2014. Any chimneys you do intend to use should be swept and a check should be carried out that a lining is in place.

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 and Parapet Walls section of this Report.

—— Marketing by: ——
www.1stAssociated.co.uk
0800 298 5424



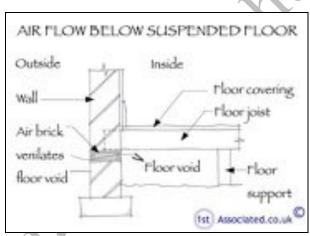
# **FLOORS**



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**

There is a mixture of a suspended timber floor to the middle of the property and possibly the right side, which require air movement underneath to minimise wet rot, dry rot and woodworm. Our concern with regard to the airflow is that it will be difficult to get effective airbricks to the rear of the property due to the way the garage has been built against the building. In the Executive Summary we have mentioned about putting a French drain to the rear of the We would have a meeting building. with the neighbours and get permission before you legally commit to purchase.



Suspended timber floor

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

The left hand side felt solid under foot so we have assumed this is concrete.



Marks to the floor in the lounge

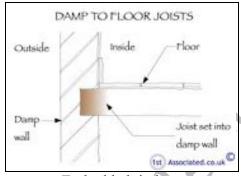
—— Marketing by: ——





# **First Floor**

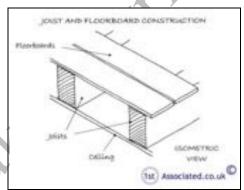
We have assumed that the first floor construction is joist and floorboards with embedded timbers, as this is typical in this age of property.



Embedded timbers

Joist and Floorboard Construction Defined

These are usually at first floor level consisting of a joist supported from the external walls, either built in or, in more modern times, sitting upon joist hangers, sometimes taking additional support from internal walls, with floorboards fixed down upon it.



Joist and floorboards

#### **Feature timbers**

We are still undecided whether the feature timbers are real. There is no real reason for the timbers to be present from a construction point of view as far as we can see.

Finally, we have not been able to view the actual floors themselves due to them being covered with fitted carpets, tiling, 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.

— Marketing by: ———







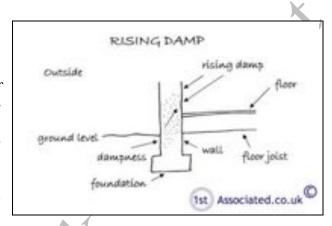
# **DAMPNESS**

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**

SLASSO

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 significant rising damp to the right hand side of the property.

**ACTION REQUIRED:** Please see the Executive Summary.



Testing for rising damp at the step in the construction between the kitchen and the main building.

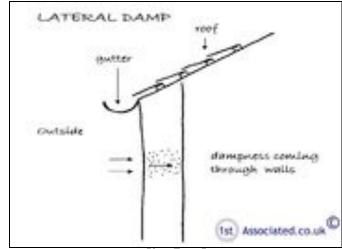
- Marketing by: ----





# **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 found it to be in line with what we would expect for this age, type and style of property.



Testing for lateral dampness

# **Condensation**

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

At the time of the inspection we think we did see condensation occurring within the far right hand bedroom where the clothes were being dried.

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

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. Common sense is needed and a balance between heating, cooling and ventilation of properties and opening windows to air the property regularly.



Washing drying in the right hand bedroom

----- Marketing by: -----www.1stAssociated.co.uk
0800 298 5424





#### Extract fans in kitchens, bathrooms and drying areas

A way of helping to reduce condensation is to have good 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 large humidity controlled extract fans be added to kitchens, bathrooms and any rooms where you intend to dry clothes.

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.

Marketing by: —

www.1stAssociated.co.uk 0800 298 5424





est. Associated.

# **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 property has a mixture of new doors and reclaimed timber panel doors.



Timber panel door

#### 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.

# Kitchen

We found the kitchen in good condition. We have not tested any of the kitchen appliances.

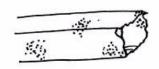
Finally, it should be noted that not all joinery has been inspected. We have viewed a random sample and visually inspected these to give a general over-view of the condition. Please also see the External Joinery/Detailing section.

— Marketing by: ———





# **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.

# **Dry 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.

We have not visually seen any significant dry rot during the course of our inspection. There is an outside possibility it is under the floor.

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

#### Wet 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.

We have not visually seen any signs of significant wet rot during the course of our inspection. Again, there is an outside possibility it is under the floor which is why we would like to see under the floor.

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

— Marketing by: —





#### 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.

The roof is the main area that we look for woodworm. Within the roof we found no obvious visual signs of significant woodworm activity or indeed past signs of significant woodworm activity that has caused what we would term 'structurally significant' damage. In many properties there is an element of woodworm that is not active. Our inspection is usually restricted by insulation covering some of the timbers and general stored items in the roof, as it is restricted throughout the property by general fixtures and fittings.

**ACTION REQUIRED:** If you wish to be 100 per cent certain that there is no woodworm the only way would be to check the property when is emptied of fixtures and fittings etc.

We were advised during our question and answer session with the owner that there had been woodworm treatment. We would recommend that you ask for a copy of this.

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.

- Marketing by: ----





# 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 to good condition. You may wish to redecorate to your own personal taste.

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.

Marketing by: —

www.1stAssociated.co.uk 0800 298 5424



St. Associated.

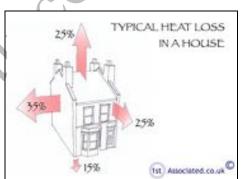
# THERMAL EFFICIENCY



Up until the mid 1940s 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.

#### Roofs

Some roof insulation was present although not to current Building Regulations requirements of 300mm. In this instance there is 300mm.



Typical heat loss

#### Walls

The walls are solid to the older part of the property and whilst they look solid (because they are Flemish bond pattern) we believe they may be cavity.

**ACTION REQUIRED:** We would be more than happy to advise if a copy of the drawings for the alterations were forwarded to us.

#### Windows

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

#### **Services**

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





#### **Summary**

Assuming the above is correct, this property is average 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)

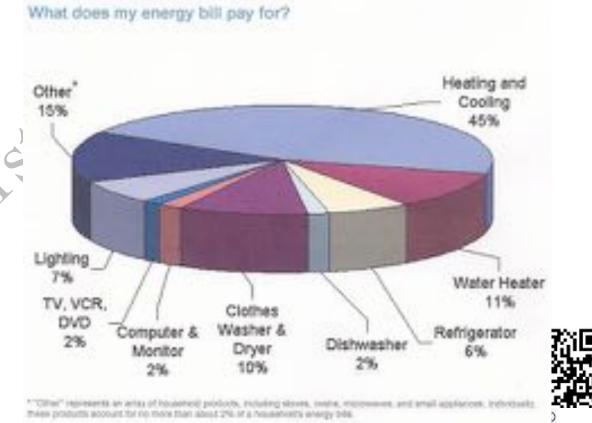
or Sustainable Energy Without the Hot Air by David J C MacKay HTTP//www.withouthotair.com/Videos.html to download for free or buy a paper copy as we did.

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.



#### XXX Roxton, Bedfordshire, MK44 3XXX

# **OTHER MATTERS**



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

#### **Security**

There was lots of security in this property including cameras, etc. If you recall the owner said that they are intending to take it with them but would be happy to chat about it.

#### Fire / Smoke Alarms

Some smoke detectors were noted. The current Building Regulations require that they be wired into the main power supply.

**ACTION REQUIRED**: We would recommend, for your own safety, that 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 age there may well be some asbestos. In this case we have not noted asbestos.

Asbestos was commonly used post war until it was banned only in the UK in the last ten years or so. It is rumoured that it has was still used after this point in time where products were imported from countries where it is not banned.

----- Marketing by: ----www.1stAssociated.co.uk
0800 298 5424



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:** If you wish to confirm you are 100 percent free of asbestos you need to have an asbestos survey carried out.

Marketing by: —

strassociated.co.ilk.cof



# **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.

Marketing by: —

www.1stAssociated.co.uk 0800 298 5424





strated.co.il

# **ELECTRICITY**



It is strange to think that electricity only started to be used in domestic properties at the turn of the 19<sup>th</sup> 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 in the left hand side entrance area. The fuse board looked 1990's/2000's and better are now available. We are advised the electrics were tested in 2009; certificate required.



Fuse Board

#### **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

— Marketing by: ——





**ACTION REQUIRED:** As the property is changing occupancy 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 1<sup>st</sup> 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. strated.co.i

Marketing by: —



**OIL** 



All appliances, pipework and flues should be subject to an annual service by a competent OFTEC registered engineer. 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.

#### Oil Tanks

We were pleased to see that the oil tanks are plastic. These usually replace the older metal tanks that can rust and they typically have a double lining, meaning that if they leak they leak into the outer lining.



Oil tank



Oil tank hidden behind fence to left side of property

— Marketing by: —





# 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**

We were advised by the owner that the controlling stopcock is located external at the front of the driveway to number twenty four and internally under the kitchen sink.

It is important that its presence is established in case of bursts or leaks. The stopcock and other controlling valves have not been inspected or tested for operational effectiveness.

#### **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!).

# **Plumbing**

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

—— Marketing by: — www.1stAssociated.co.uk

0800 298 5424





#### **Heating**

The wall mounted Worcester Bosch boiler was located in the ground floor cupboard. Unfortunately we could not see it due to all the stored items. We are advised the boiler was installed in 2007/2008.

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



Stored items in boiler cupboard

contracts and that a regular maintenance contract be placed with an approved heating engineer.

# **Ten Minute Heating Test**

SYLS

The owner / occupier at our request turned on the heating for approximately ten minutes. We checked the radiators and these were 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.

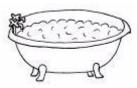
We cannot comment on the condition of the water service pipe to the building. It should be appreciated that leaks can occur for some time before signs are apparent on the surface.

— Marketing by: ———





# **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.

#### **Bathroom**

The property has a three piece bathroom suite, consisting of a bath, wash hand basin and WC, which looks in average condition.

#### Cloakroom

The property has a cloakroom on the ground floor.

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.

— Marketing by: —



# **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 reinvestment 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 kitchen. 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 two inspection chambers / manholes. We were particularly please to see there were no roots in the manholes bearing in mind the close vicinity of the nearby tree.

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 front left

We duly lifted the cover and found it to be free flowing at the time of our inspection.

From what we could see it is brick built.



Front left hand manhole

----- Marketing by: -----www.1stAssociated.co.uk
0800 298 5424



#### Inspection Chamber / Manhole Two, located rear left side

We duly lifted the cover and found it to be free flowing at the time of our inspection.

From what we could see it is brick built.



Rear left hand manhole

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

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.

- Marketing by: ----



# 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 soakaways 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.

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

> Marketing by: www.1stAssociated.co.uk 0800 298 5424



#### **OUTSIDE AREAS**

The main focus of this report has been on the main building. We have taken a cursory inspection of the outbuilding and would be happy to return and carry out a survey of so required.

#### **PARKING**



The property has a longish driveway and gated entrance. We are advised that the driveway is owned by this property but number X has a right of way.

**ACTION REQUIRED**: Your legal advisor needs to confirm ownership of this and the boundaries.

#### **OUTBUILDINGS**

There is a substantial garage/workshop area. We were shown that it has electricity and an outside water supply. The current owner has put a lean-to type structure around it; we discussed the roofing of this with them and they said they had found problems with the corrugated roof that they had used and that it sagged and seemed to need a lot of support.



Garage and workshop



Roof to lean-to



Garage/workshop

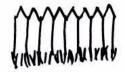


Garage/workshop

- Marketing by: ———



# **EXTERNAL AREAS**



#### Garden

The property has a reasonable sized garden.







Garden Garden

Access gate to next door property

**ACTION REQUIRED:** Your legal advisor needs to check that the access gate to next door property is not a right of way

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

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

# **Left Hand Neighbours**

We knocked at the time of the inspection but there was no response.

# **Rear Neighbours**

We knocked at the time of the inspection but there was no response.

—— Marketing by: ——





#### 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) Roof and similar renewals.
  - iii) Cavity wall insulation and cavity wall tie repairs and/or solid wall insulation.
  - iv) Removal of any walls in part or whole.
  - v) Double glazing or replacement windows.
  - vi) Drainage repairs
  - vii) Timber treatments, wet or dry rot infestations.
  - viii) Rising damp treatments.
  - ix) Central heating installation.
  - x) Planning and Building Regulation Approvals.
  - xi) Have there been any structural problems referred to insurance companies, any insurance claims, monitoring or underpinning, etc.
  - xii) 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.
- 1) 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 Envirosearch 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 Envirosearch 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 Envirosearch or similar general reports 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.



#### XXX Roxton, Bedfordshire, MK44 3XXX

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**.

est Associated. co. ilk cost

Marketing by: —



#### **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

– Marketing by: ———



# **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 XXXX 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.

- Marketing by: ----





#### **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.

#### **WEATHER**

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

In recent times our weather seems to be moving towards the extremities from its usual relatively mid range. Extremes of weather can affect the property.

#### **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

The Anti-Social Behaviour, Crime and Policing Act 2014 (and amendments) empowers local councils and the police to issue community protection notices to require someone to control or prevent the growth of Japanese knotweed which is rather an invasive non-native plant capable of causing serious problems to communities. We still believe that prevention is better than cure. Full checks should be carried out.





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.

**ACTION REQUIRED:** You need to carry out your own investigations on this matter before you 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 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.
- 4) Due to the amount of stored items in some of the cupboards.
- 5) We did not have the benefit of speaking to the neighbours, which we would recommend that you do.

# **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.

——— Marketing by: ———

strated.co.ilk.cox



# APPENDICE

- The electrical regulations Part P of the Building Regulations 1.
- Information on the Property Market 2.
- French Drain Article 3.
- Condensation and Cold Bridging Article 4.

Marketing by: -

www.1stAssociated.co.uk 0800 298 5424

(1st) Associated.co.uk



# 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 st. ssociated.co postcode area.

Marketing by: —





# French Drain

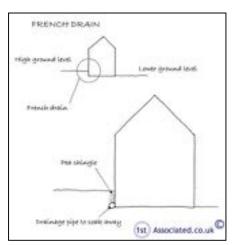
#### Using a French drain to resolve a dampness problem

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.

——— Marketing by: ———



#### 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.



# Victorian and Edwardian property problems with Condensation and Cold Bridging

Victorian properties that have been extended and altered over the years with new thermal properties can have cold bridging because of the mix of old and new standards.



Victorian properties

#### How does cold bridging 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.

#### **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.

#### Loft conversions and dormers

Loft conversion and dormer windows can allow heat to escape.



Loft conversion and dormer windows





#### Heat loss and sloping ceilings

Our original survey sketch adjacent shows how heat can be lost when sloping ceilings are present in properties such as in loft conversions and dormer windows.



Heat loss and sloping ceilings

#### Combination of issues can cause 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. 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.

#### Condensation and Cold Bridging in certain era properties

#### Here is our 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.





#### 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.

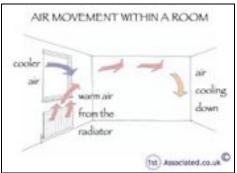
For example: Lounges and main bedrooms tend to be warmer than guest or spare bedrooms most of the time. Also sometimes rooms can warm up due to large areas of glass and thermal heat gain, which is very true in some conservatories also

- 3) Humidity internally is high
- 4) Where it is colder but by no means very cold outside

#### **How to solve Cold Bridging**

SIRS

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.

# Is your lifestyle a factor in Cold Bridging?

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.



Victorian property that has been modernised
Red oval is original sliding sash window
Green oval is new large window that has been added



Very old Victorian water heater

# Winter months and cold bridging

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.



Older style cylinder with loose insulation jacket





### Design problem or a lifestyle problem?

# Condensation and cold bridging explained further

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 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.

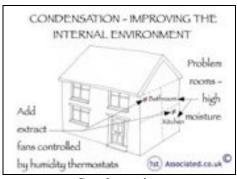


Inappropriate double glazed windows change the look of the property

Red circle is insulated roof indicated as snow is not visible

# **Design of the Building**

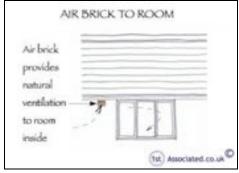
Sometimes it really is down to the design of the property. Where there are cold elements in it, such as a concrete structural frame or concrete lintels, when these are in contact with moist air condensation occurs. Sometimes this is impossible to stop but often it is possible to reduce it by having a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



Condensation

# 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 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





# Seasons change and condensation and cold bridging problems occur

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.

# Lifestyle can cause cold bridging

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).

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.



Classic Victorian Sliding sash windows where they have managed to put in one pane of glass



Sliding sash windows can swell in the winter months

— Marketing by: ———



