JOB REF: xxxxxxxxxxxxxxx

SPECIFIC DEFECTS REPORT

Relating to Dampness

xxxxxxxxx,
Luton,
Bedfordshire,
LU3 xxx

FOR

Mr N

Prepared by:
xxxxxxxxxx
INDEPENDENT CHARTERED SURVEYORS

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

CONTENTS

INTRODUCTION AND INSTRUCTION

We have been instructed by xxxxxxxxx to prepare an independent report on the Dampness in the property.

We have carried out a visual inspection (non evasive) of the property on xxxxxxxxx.

The weather was a cool, spring day at the time of the inspection.

We are Independent Chartered Building Surveyors and professional members of:-

The Royal Institution of Chartered Surveyors (RICS)
and
The Independent Surveyors and Valuers Association (ISVA).

The work has been carried out as per our standard Terms and Conditions of Contract which have been emailed to you as part of the confirmation of our instructions. If you would like further clarification please do not hesitate to contact us.

SYNOPSIS

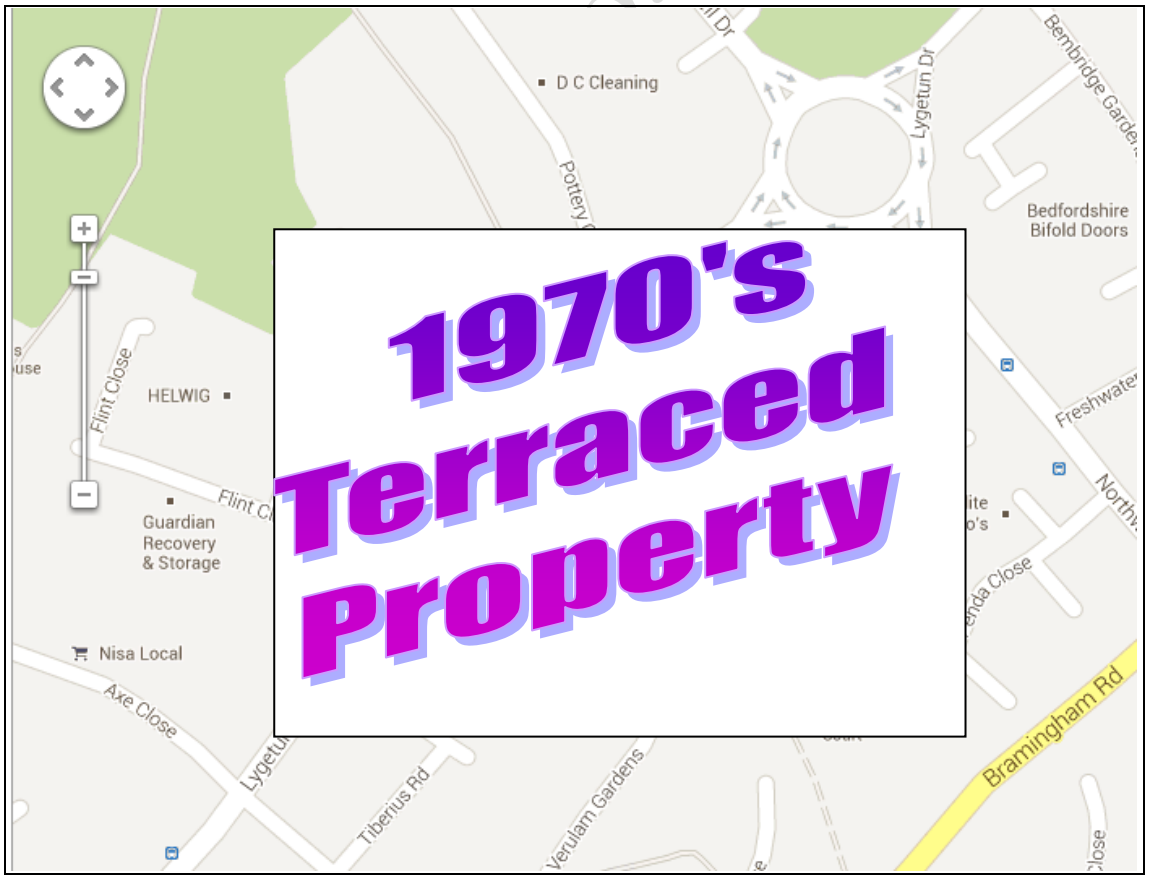
As we understand it you have lived in the property for many years and it is only in more recent times that you have noticed the smell and dampness in the property which you would like to know how to resolve. You are looking to place the property on the market in the autumn of 2013.

Front view of the property

Situation and Description

This is a mid-terraced modern property set within a residential estate sitting on a sloping site.

Location Map



EXECUTIVE SUMMARY

Summaries are not ideal as they try to précis often quite complex subjects into a few paragraphs. Here we give a summary of the problem and our various suggestions on how to solve it and all costs it relates to.

As with many property problems we feel there are a number of issues that may relate to the smell/dampness in the property. We believe that initially you need to eradicate the following:-

1.0) Gas safe test

Although you advised there has been a Gas Safe test on the boiler in the roof there is also a gas fire in the through lounge that we would recommend is tested.

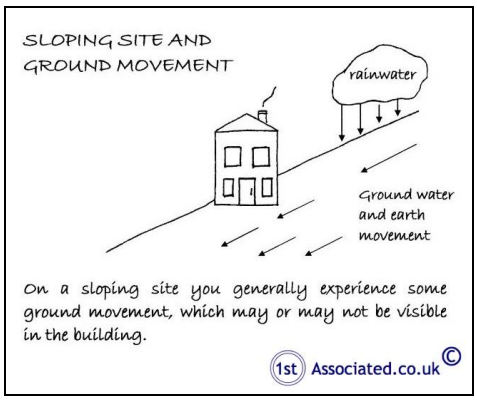
ACTION REQUIRED: We would recommend a Gas safe test is carried out on the fire in the front room to ensure it is venting properly and a carbon monoxide monitor is secured to the wall and in working order.

ANTICIPATED COST: In the region of £100 to £200; please obtain quotations.

Have the gas fire checked

2.0) Sloping site

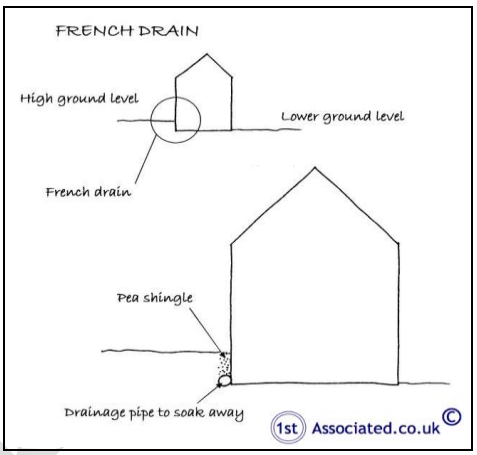
The property sits on a sloping site where we believe rainwater and surface water travels down to the property and sits against/ is absorbed by the concrete foundations and is drawn in to the house. Of course with the recent spell of wet weather the area will have had more rainwater/ ground water than usual.



Sloping site

2.1) Mock/false French Drain

When we first viewed the rear of the property we were pleased to see there was a French Drain; however, our basic investigations revealed this to be a mock/false French Drain which is only approximately 100mm (four inches) deep. A real French Drain involves pea shingle, a perforated pipe underneath that feeds into the drainage system which takes away any rainwater.



Real French Drain

False French drain.
Be careful when digging as earth cable is buried here

ACTION REQUIRED: Add a real French Drain around the property. There are wires/cable currently buried in the area so care should be taken when work is carried out.

ANTICIPATED COST: £750 to £2,000 to add a French drain to the rear and left hand side of the property (all directions given as you face the property); please obtain quotations.

We do believe that adding a French Drain will reduce the dampness into the property which in turn may reduce the smell. We cannot be certain where the smell was originating from as at the time of our survey we personally did not find the smell to be that strong.

3.0) Lack of air movement

From what we can see of the property as a whole there appears to be a lack of air movement caused by a variety of issues including:-

1. Lack of trickle vents to windows
2. Lack of mechanical extraction to humidity creating areas
3. Positioning of radiators

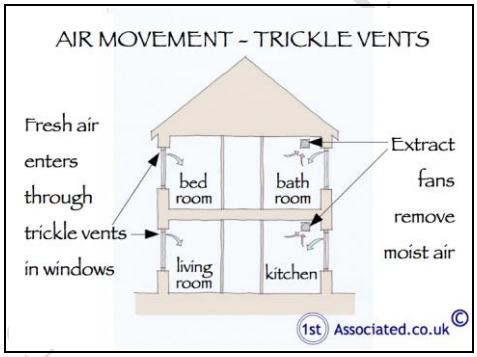
Looking at each of these issues in turn:-

3.1) Lack of trickle vents in double glazed windows

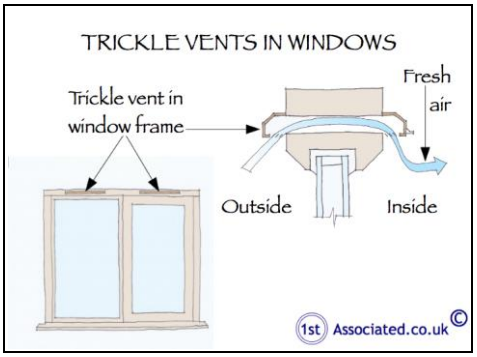
The double glazed plastic windows that are in the property do not have a trickle vent so the air flow and air movement in the property is minimised.

Trickle Vents Defined

Trickle vents are small vents to the windows to allow air movement inside the property to stop/reduce a build-up of fumes or humidity.



Air movement with trickle vents



Trickle vents

3.2) Lack of extraction fans to humidity creating areas

There is a lack of mechanical extraction in the property in areas such as the bathroom and kitchen which would help to reduce moisture/condensation.

ACTION REQUIRED: We would recommend large humidity controlled extract fans are added to the bathroom, kitchen and any rooms used for drying clothes. This will help reduce condensation in these areas.

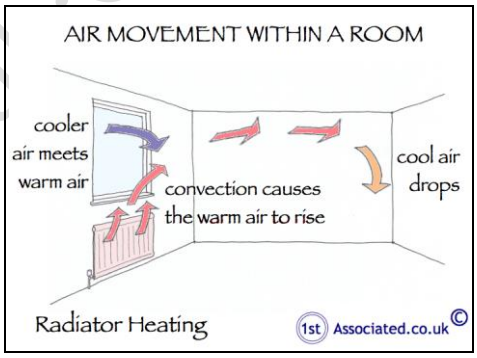
ANTICIPATED COST: Approximately £200 to £400 per extract fan dependent upon wiring required; please obtain quotations.

3.3) Positioning of radiators

Also we noted in your lounge that there is no radiator under the front window which means that air is not circulating as well as it should be in the room.

Internal Radiators defined

An internal radiator is one that is located on an internal wall rather than an external wall or under a window. Radiators located underneath windows help air flow in a property as warm air rises and hits the cooler air above the windows it then circulates around the room and helps the air circulation in the property as a whole.



Air movement

ACTION REQUIRED: Where possible move radiators under windows**.**

4.0) Cold bridging and condensation

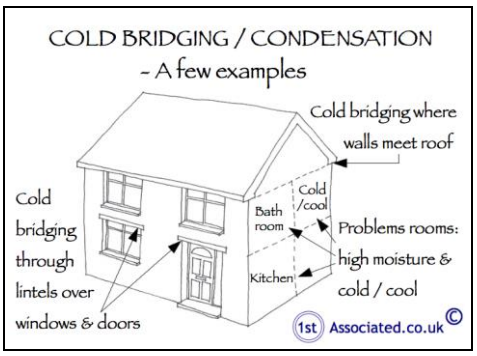
This is a 1970's property (you advised 1972) and is what is known as a cross wall construction. This type of construction can suffer from condensation problems and cold bridging more than most properties.

Cross wall construction defined

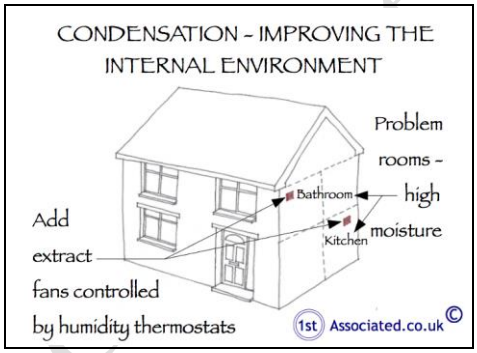
The definition of cross wall construction is that the side walls take the weight with the front and rear walls being non-supporting.

Cold bridging defined

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



Cold bridging



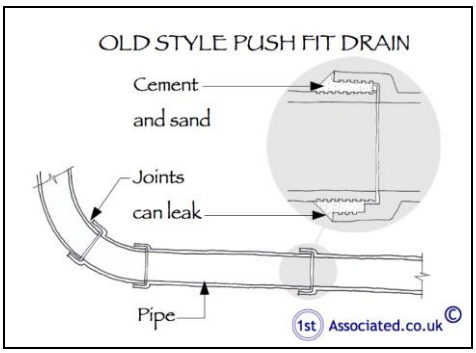
Improving the internal environment

5.0) Other things that may affect the dampness getting into the property.

5.1) Leaking Drains

You explained how your neighbour had high pressure cleaned the drains. We do find in older drains that this can damage the joints.

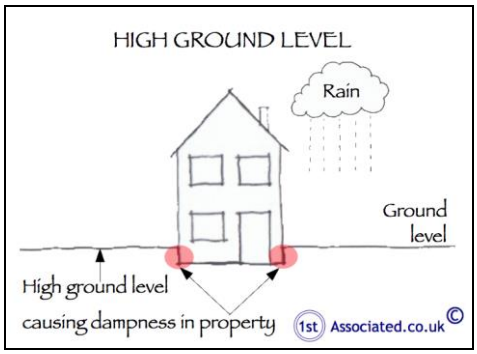
Drains are ok



Push fit drains

5.2) High Ground level

We also noted a high ground level to the left hand side of the property which could be encouraging dampness into the property and allowing it to stay in the walls rather than dissipate into the air. We would recommend, as mentioned, that you add a French Drain to the left hand side as well as the rear of the property.



High ground level can cause dampness

High ground level to left hand side

No quick fix

We would add that resolving dampness problems is not a quick fix issue and as it often involves a combination of problems can be very difficult to solve completely and rarely is the problem solved 100% in our experience.

It should be noted that dampness can take a relatively long time to dry out. This will, of course, depend upon the weather and how warm the property is internally.

One last thing!

Deteriorating flue

We need to mention the deteriorating flue and the dampness that may be coming in through this. We will talk about this further on in the report.

Selling your house, a few things to consider

During our discussions you advised that you wished to sell the property. Here are a few comments that we would make with regard to selling a house. Some of these comments may be very obvious but we would prefer to say it than not say it!

1.0) Picking the right Estate Agent

We can talk about this for ever! The best thing to do is to check that the Estate Agent has similar properties to yours to sell and also that you get on with the Estate Agent that is going to deal with the sale of your property.

2.0) Curb-side or click appeal

It has been said over the years that it takes three seconds for someone to make up their minds about a property. In years gone by the three seconds used to be used to look at a newspaper advertisement whereas today it tends to be more to click on a website. You then have the three seconds for curb appeal as they approach the property so make sure your garden is tidy, add some colour by using flowers in pots, hanging baskets etc. Make sure the bins are tidied away as this is the last thing that people want to see when they view a property.

3.0) Spring clean

Whatever the time of year a spring clean is a good idea. If this can include a coat of paint then all the better. It is often said that the smell of a property is very important when you are viewing it and the smell of fresh paint does give the impression of cleanliness. It is also said that the smell of fresh coffee and bread also helps. We have never personally used this approach when we have been involved in selling houses but we have certainly found the smell of fresh paint does help and also some scented air fresheners.

4.0) Know who your market is

Have a chat with the Estate Agent that is selling the property as to who the target market is likely to be for this property and set out the property to meet the markets expectations.

5.0) Potential buyers

Generally the majority of people have little imagination when viewing a property as to alternative uses rooms can have. Therefore do make sure that any spare rooms can clearly be seen to have a purpose as few people buy a property because it has a good storage room! They much prefer it to be shown as a bedroom or a study etc.

Other things to consider

Electrics

Whilst we only had the briefest of looks around your property and did not look in any of the bedrooms we would comment that it would be worth upgrading the electrics, as they are probably original, and the adding of a fuse board. Although this type of work does not often sell the house it does make it safer.

We would also look at obvious things such as moving the washing machine from the hallway back into the kitchen. The large humidity extract fans should improve the feel of the area.

SURVEY FINDINGS

The following is a brief summary of what was found and includes what has been inspected and a photographic record. We reserve the right to add additional information as required and requested.

EXTERNAL

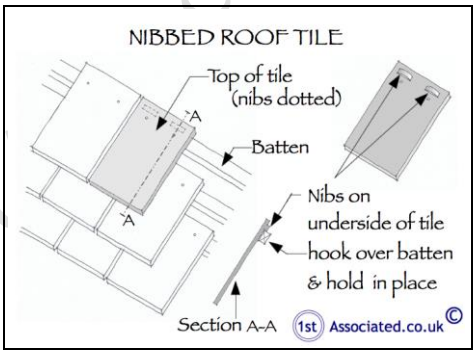
1. From our visual external inspection we noted:

1.1 Characteristic of this type of building

The property is a cross wall construction which means the side walls take the main weight with the front and back being cladding walls as opposed to a traditional house where all the walls take the weight. We would also add that this era of property can be prone to condensation known as cold or thermal bridging.

1.2 Roofs and associated elements

The roof is clad in a concrete tile which we believe to be nibbed and is sitting on the battens.



Nibbed tile

Concrete nibbed tiles on roof
Rusted flue visible

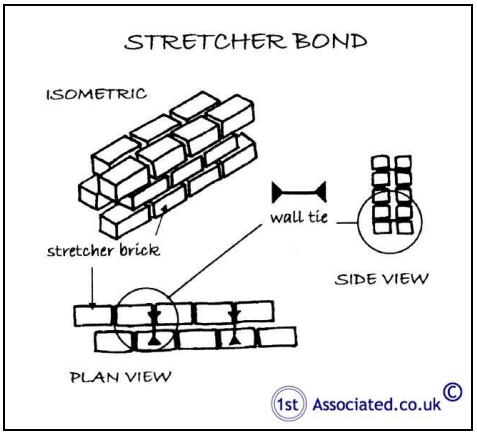
We noted a rusting flue pipe and it would be beneficial to remove it as we have come across rusted flues in the past where they have allowed water into the property and rust staining to

the walls. When it is removed you do need to make sure that tiles are placed there to make it watertight.

1.3 Walls

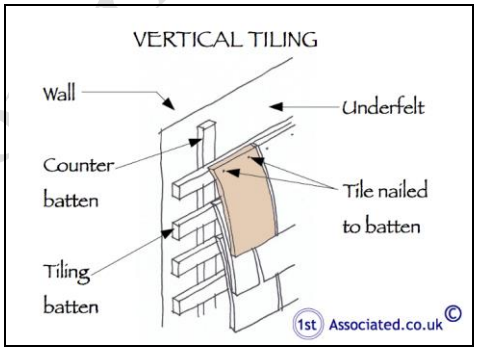
The walls are built in stretcher bond brickwork with vertical tiling at high level and render at low level to the rear.

Front and side



Stretcher bond

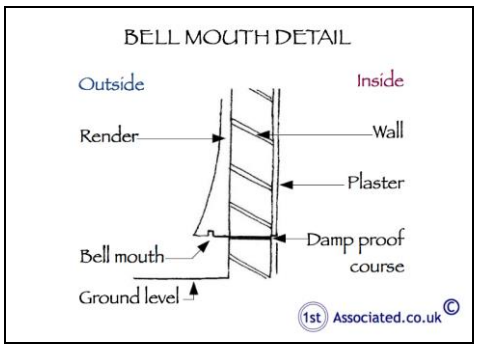
Red oval - stretcher bond brick
Green oval - vertical tiles



Vertical tiles

Rear

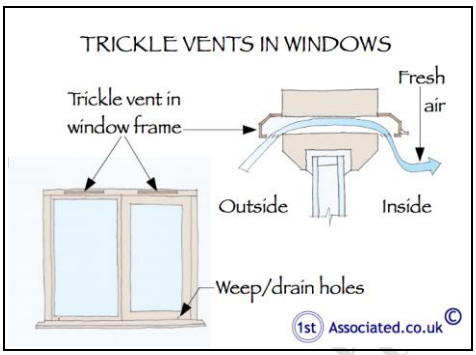
Green oval vertical tiles
Red oval - render



We like to see a bell mouth detail to the base of the render

1.4 Windows and doors

The windows are plastic double glazed and are the older style without trickle vents. Please see our earlier comments.



Trickle vents

1.5 Outside areas

The property sits on a sloping site.

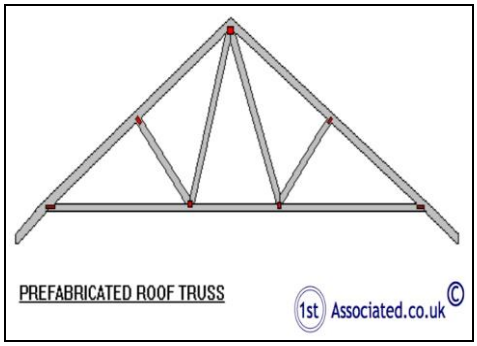
INTERNAL

1 From our visual internal inspection we noted

1.1 Roof Space

From our visual inspection within the roof space we noted a prefabricated roof truss.

General view of the roof



Prefabricated roof truss

1.2 Ceilings

The ceilings are plasterboard. There has been some water damage to part of the ceiling, this is not visible. What is visible is it looks as if the ceiling has been painted in matt and silk paint within the through lounge.

1.3 Walls

As these are stretcher bond walls they will have cavities. In this era of property they may or may not have been insulated. As you have lived in the property for many years you may know this?

1.4 Floors

The floor that was exposed in the lounge showed a concrete screed base and as mentioned this can absorb water.

Floor has been lifted and is very damp

The full areas inspected are identified within the Appendices in the Inspection section.

2 Resistance Damp Meter Readings and Surface Damp Meter Readings

We would generally comment the resistance damp meter readings were higher than what we typically find in this age, type and style of property.

We would advise we typically find the relative humidity to be in the early 40s with temperatures ranging from 17° to 20° typically.

Damp meter readings

Room	Readings Obtained	Typical Readings
Hallway		20- 40/50
Front wall left	39	
Front wall right	24	
Kitchen		
Rear left corner	69	
Rear area near door	80	
Through lounge Rear wall		
Left corner	72	

Before the radiator End of the radiator **Left hand wall** Left corner Left middle Front corner	90 63 49 59, 70, 53 39	20- 40/50

Surface temperature readings

Room	Readings Obtained	Typical Readings
Kitchen Wall Lintel	 62 62.4	We would expect all readings to be similar
Lounge Wall Lintel	 63 63.5	

From our investigations we have found that the humidity being created in the hallway, kitchen and through lounge has not been taken away and extraction/ventilation needs to take place.

ACTION REQUIRED: Again we recommend large humidity controlled extract fans are installed which means the extract fans will turn themselves on automatically when certain humidity levels are reached in the property.

ANTICIPATED COST: We would just add by large we mean at least 6" extract fan; please obtain quotations.

SUMMARY UPON REFLECTION

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

We feel you need to work through the various options that we have included in this report. Unfortunately we cannot guarantee a one hundred per cent success rate with this and cannot guarantee that changes will happen quickly.

As mentioned we do feel the best course of action is to firstly be completely certain that your gas is safe and then work through the other various options to reduce the dampness. The question we are often asked with regard to properties that people have lived in for a long time is 'why is the problem occurring'. Our answer to this is that 'this problem can build up over a period of time. Also we now seem to have a more extreme weather system where we have moved out of the mid-range weather and can now have the warmest summer and the wettest summer all in the same year.

The other alternative to these options of course is to leave all of these things for the purchaser but from what you were saying you are uncomfortable living in the property. So we would advise that you begin with the gas checks and then for the quickest improvement we would then add large humidity controlled fans (make sure they are large).

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.

For and on Behalf of
Independent Chartered Surveyors

This Report is dated: xxxxxxxxxx

APPENDICES

INSPECTION

Our inspection has been specifically related to the Dampness issues detailed below:

Front of property

Visual Inspection

Our inspection has taken the format of a visual inspection:

External

1. External of the property of the

    1.1 Front
    1.2 Rear
    1.3 Left hand side
    1.4 Front and rear garden

    We have had the benefit of a x 16 lens on a digital camera

Internal


Lounge

2. Internal of the property

    We have viewed:

    Ground Floor

    2.1 Hallway (front right)
    2.2 Kitchen (rear right)
    2.2 Through lounge (left)

    First Floor

    2.3 Landing
    2.4 Bathroom

Roof Space

In this instance we have viewed the roof space.

3 Damp resistance meter readings

Dampness resistance meter readings using a Gann Meter have been taken.

We refer you to the survey findings section.

Damp meter reading

4 Surrounding areas

4.1 Front area
4.2 Rear area
4.3 We also had a quick walk around the area

5 Owner/occupier

We have had a question and answer session with yourself.

6 Neighbours

We have not had the benefit of talking to the neighbours

7 Surface temperature

Surface temperature readings have been taken all at high level to test for condensation.

8 We have used a thermal imaging camera, manufactured by Flir, to obtain the best readings we can given the fact there was no pre-preparation of the structure. Ideally you need at least a ten degree differential between the inside and the outside of a property. These images showed coldness to the floor perimeter and the wall edge where they meet.

PHOTOGRAPHIC RECORD

External

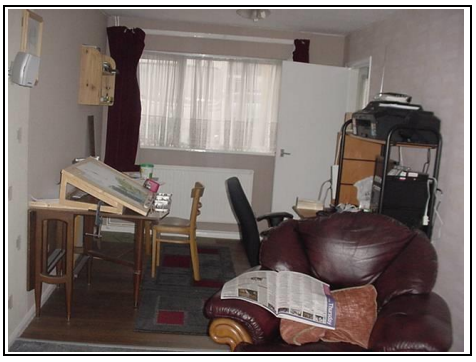
Front view

Left view

Left side high ground level

Internal

Hallway



Through lounge

CONSTRUCTION SUMMARY

External

Main Roof:	Pitched, clad with concrete tiles
Roof Structure:	Prefabricated roof truss
Gutters and Downpipes:	Plastic
Soil and Vent Pipe:	Plastic
Walls:	Stretcher Bond Brickwork(assumed) Vertical tiling Render
External Detailing:	Plastic double glazed windows without trickle vents
Foundations:	Not inspected

Internal

Ceilings:		Plasterboard (assumed)
Walls:		Mixture of solid and hollow(assumed)
Floors:	Ground Floor:	Solid (assumed)
	First Floor:	Joist and floorboards with joist hangers (assumed)

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

Time Line – A brief history of the structure

This has been based upon email correspondence with xxxxxxxx on xxxxxxxxx

DATE	DESCRIPTION
1972	Property built
April 1984	Date you moved into the property
December 2012	Dampness became much worse after a spell of very wet weather. Present for many years previously, particularly in back wall.
December 2012	Smell was first noted

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 £100 per day (the higher costs in the city areas) and for tradesmen we use between £100 and £200 per day for an accredited, qualified, skilled tradesman. Other variations include the quality of materials used and how the work is carried out, for example off ladders or from scaffold.

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

Condensation and Cold Bridging
What is Cold Bridging?

What is cold bridging and how does it work?

Cold bridging is a term and a problem we feel will become much 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.

Post war / 1950's property that cold bridging can be a problem in.

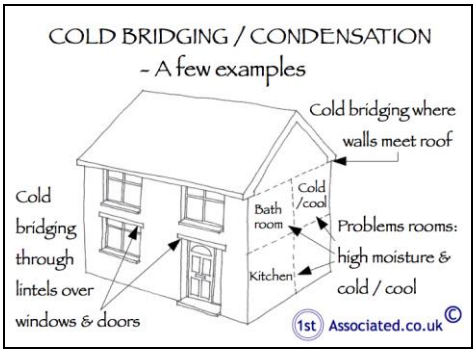
Cold Bridging

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

Certain types of buildings are more susceptible to Condensation and Cold Bridging

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 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. If you buy a 1960's property for example, with concrete lintels that cause cold bridging, this is a characteristic of the property and it is very difficult to change. However not only could it be a characteristic of the building it could also be caused by alterations that you make to the building.

1960's properties built with concrete lintels that can cause Cold Bridging

To give you some examples of Cold Bridging

As mentioned above typically Cold Bridging can be caused by lintels and also by beams (which effectively are big lintels). These were very commonly used in 1960's and 1970's buildings and can lead to condensation over doors and windows. We mentioned a 1960's building but here are some examples of concrete lintels that were commonly used in the 1970's and which today have caused cold bridging over the door and which in turn has led to condensation and deterioration of the paintwork.

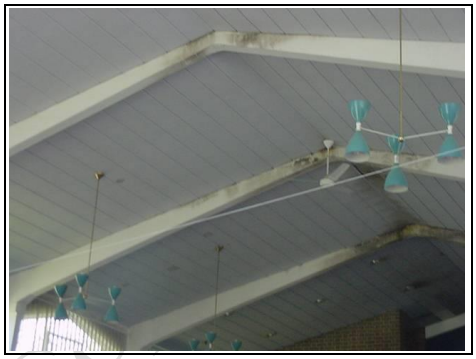
A rear door to a 1970's building. Can you tell where the cold bridging would be in this photo?

A close up view showing there is a concrete lintel over the door and window. This is where the cold bridging occurs causing condensation inside

Cold Bridging can also occur on metal lintels. We note that some modern metal lintels now have insulation in them which we assume is to reduce cold bridging.

Commercial properties suffer from Cold Bridging too

Commercial buildings are often built using structural frames. These frames are usually constructed of concrete or metal or sometimes both. The structural frame forms the skeleton of the building as you can see in the adjoining photo. Sometimes the structural frames, particularly, the concrete ones can suffer from Cold Bridging which causes blackening of the concrete frame. This can look like the roof has leaked and can lead to wrongly diagnosing a problem as being a roof leak This can result in great time and expense being wasted repairing a roof that was not leaking and indeed in some cases has led to a new roof being fitted which has costs tens of thousands of pounds. This happened because it wasn't understood what the problem was.



Cold Bridging in a commercial property with a concrete frame.

When is Cold Bridging Likely?

In our experience we have seen cold bridging occurring in

1. Georgian and Regency properties
2. Victorian and Edwardian properties
3. Pre-war properties
4. War years construction properties
5. Post war construction properties up to the 1980's.

Georgian style properties can suffer from cold bridging and condensation. However in our experience it is more likely to be the new extensions or alterations that are added to them

1960's properties with plastic double glazing and no trickle vents can suffer from condensation.

6. Commercial properties that use structural frames particularly concrete frames.

We find that cold bridging and condensation occur most commonly where a property has a relatively high heating level, a good level of insulation and where it has many occupants.

Problems with 1970/1980 era properties relating to Cold Bridging

1970's property with cold bridging to the roof beams and the lintels

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

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

For example with:

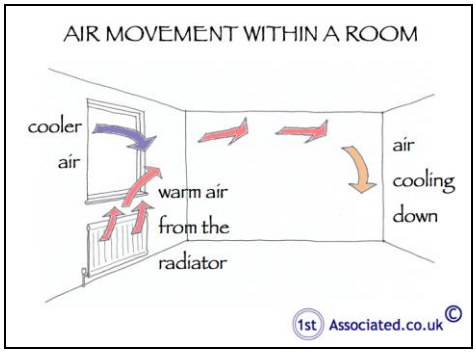
1. cavity wall insulation or
2. double glazed windows.

1980's property, cold bridging was found in the lintels

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

How to solve Cold Bridging

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



Air movement within a room

Where do we most commonly find Cold Bridging?

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

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

Is your life style 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. 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.

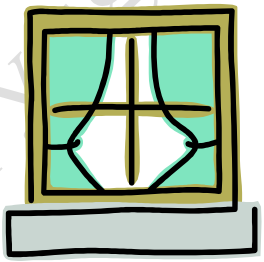
Expert witness case, what is an expert witness?

This is where you employ someone who is a specialist within a field, such as us as Chartered Building Surveyors, who comment on problems of condensation within the property. We have been involved in several court cases as expert

Older style London converted flats with property problems such as condensation and cold bridging

witnesses where landlords are being taken to court over the condensation that is occurring in their property. The expert witness case looks at how this condensation is occurring and if it relates, for example, to the occupiers' lifestyle or whether it relates to the way the building was constructed and where there are, for example, cold bridging elements. When discussions of this nature take place in court they can be very expensive.

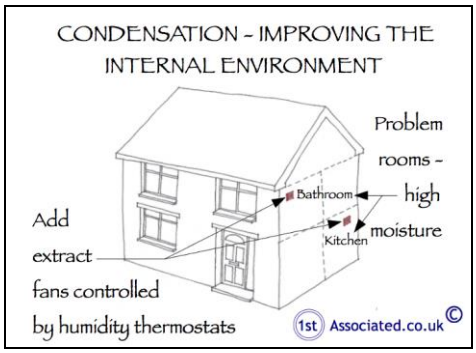
Is Cold Bridging and Condensation a design problem or a lifestyle problem?



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.

Design of the Building

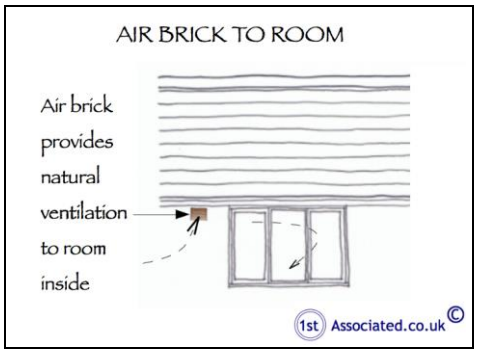
Sometimes it really is down to the design of the property. Where there are cold elements in it, such as a concrete structural frame or concrete lintels, when these are in contact with moist air condensation occurs. Sometimes this is impossible to stop but often it is possible to reduce it by having a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



Air brick may not ventilate room enough

about one inch square of air regularly passes through the grills.

What's happening in brand new housing?

It could be argued that we still do not know what is happening in brand new houses that are highly insulated. We have been involved in one legal case where a modern heat exchange system was being used where it was simply not possible to have a shower in the property without causing condensation, even with the windows open and taking other measures. Our concern is what is happening to this condensation? It was not visible on the surface so is it visible as interstitial condensation? We still think there will be problems to be found in modern properties. As Chartered Surveyors we like to see things that have been is use for some time work before we would recommend them.

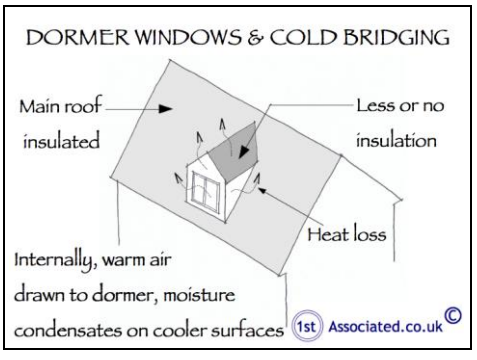
In the winter we have condensation problems but in the summer we don't

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

Sliding sash windows can swell in the winter months

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

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



Cold bridging and dormer windows

Extensions and Cold Bridging

Increasingly we are coming across problems where properties have been extended and it has

not been planned or thought through properly. We have come across dormer roofs that simply have no insulation so any heat in the property is going straight out of the dormer roof. We have also come across property problems where an extension has resulted in colder areas within the property and which although not problem areas, as such, our clients have found them unpleasant areas to be in. It is not a great outcome if you have just spent tens of thousands of pounds on a new extension that you are not happy with.

French Drain

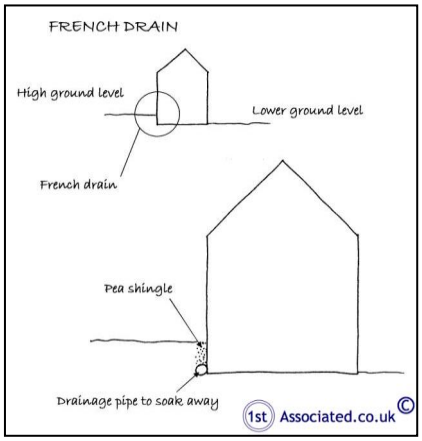
Using a French drain to resolve a dampness problem

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

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

What use is a French drain?

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



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

French drains must be on a slope

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

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

The French drain system that we would recommend

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

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

The French pond!

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

LIMITATIONS

Specific Defects Report

1. Conditions of Engagement

Please note: references to the masculine include, where appropriate, the feminine.

Subject to express agreement to the contrary (which in this particular case has been none) and any agreed amendments/additions (of which in this particular case there have been none), the terms on which the Surveyor will undertake the Specific Defects Report are set out below.

Based upon a visual inspection as defined below the Surveyor will advise the Client by means of a written report as to his opinion of the visible condition and state of repair of the specific problem or problems only. In this instance the Dampness.

2. The Inspection

2.1 Accessibility and Voids

The Surveyor will base this report on a visual inspection and accordingly its scope is limited. It does not include an inspection of those areas, which are covered, unexposed or inaccessible. Our visual inspection will relate to the specific defects shown to us only.

1.2 Floors

We have not opened up the floor structure, but you did show us a section of the floor that had been opened. We have only carried out a visual inspection and any conclusions will be based upon our best assumptions. We can open up the floor if so required at an extra fee.

2.3 Roofs

The Surveyor has inspected the roof.

2.4 Boundaries, Grounds and Outbuildings

The Surveyor has inspected boundaries including the grounds and outbuildings unless specifically stated (none stated).

2.5 Services

No services inspected.

2.6 Areas not inspected

The Surveyor will have only inspected those areas identified within the report. His report will be based upon possible or probable defects based upon what he has seen together with his knowledge of that type of structure. If you feel that any further areas need inspection then please advise us immediately.

2.7 Note: We have not moved furniture or fixtures and fittings unless stated.

2.8 Specific Defects Report

As this is a report upon a Specific Defect we do not offer any comment or guidance upon reactive maintenance and/or planned or routine maintenance items.

2.9 Whilst we have used reasonable skill and care in preparing this report, it should be appreciated that the Chartered Surveyors cannot offer any guarantee that the property will be free from future defects or that existing defects will not suffer from further deterioration;

3. Deleterious and Hazardous materials

Unless otherwise expressly stated in the Report, the Surveyor will assume that no deleterious or hazardous materials or techniques have

been used in the construction of the property. However the Surveyor will advise in the report if in his view there is a likelihood that high alumina cement (HAC) concrete has been used in the construction and that in such cases specific enquiries should be made or tests carried out by a specialist.

4. Contamination

The Surveyor will not comment upon the existence of contamination as this can only be established by appropriate specialists. Where, from his local knowledge or the inspection he considers that contamination might be a problem he should advise as to the importance of obtaining a report from an appropriate specialist.

5. Consents, Approvals and Searches

5.1 The Surveyor will assume that the property is not subject to any unusual or especially onerous restrictions or covenants which apply to the structure or affect the reasonable enjoyment of the property.

5.2 The Surveyor will assume that all bye-laws, Building Regulations and other consents required have been obtained. In the case of new buildings and alterations and extensions, which require statutory consents or approval the Surveyor will not verify whether, such consents have been obtained. Any enquiries should be made by the Client or his legal advisers.

5.3 Drawings and specifications will not be inspected by the Surveyor. It is the Clients responsibility to forward any drawings and specifications that he has or knows the whereabouts of to us to include information in our report. If these are not forthcoming we will make our best assumptions based upon the information available.

5.3The Surveyor will assume that the property is unaffected by any matters which would be revealed by a Local Search and replies to the usual enquiries or by a Statutory Notice and that neither the property nor its condition its use or intended use is or will be unlawful.

6. Fees and Expenses

The Client will pay the Surveyor the agreed fee for the Report and any expressly agreed disbursements in addition.

7. Restrictions on Disclosures

7.1 This report is for the sole use of the Client in connection with the property and is limited to the current brief. No responsibility is accepted by the Chartered Surveyors if used outside these terms.

7.2 Should any disputes arise they will be dealt with and settled under English law;

7.3 This report does not fall under the Third Parties Rights Act.

8. Safe Working Practices

The Surveyor will follow the guidance given in Surveying Safely issued by the Royal Institution of Chartered Surveyors (RICS).