



solving dampness



REPORT

For and on behalf of XXXX

Property surveyed XXXX

This report is for the sole use of Mrs Kim Beadle for whom the survey was undertaken and can only be relied upon for 90 days from the survey date. Unless expressly stated otherwise in this report, nothing in this report confers or is intended to confer any rights on any third party pursuant to the Contracts (Rights of Third Parties) Act 1999.

Dear XXXX,

Thank you for instructing us to carry out a damp survey of XXXX. We understand that you wanted to assure yourself that the leak from the shower room above the reception had been fixed and so you wish to have an opinion from an independent expert damp surveyor. Please inform us if we have misunderstanding your instructions.

OVERALL OPINION

Overall the house is a stunning property, with a few risks of damp. Every property suffers from dampness to some degree. You will mitigate the risk of damp if you follow all our recommendations. This report is intended to be read in full. Observations and opinions must not be taken in isolation.

Like any building, you need to be aware of the risks of damp arising in the future and plan a programme of prevention and maintenance accordingly.

We recommend you spend time understanding our advice in this report, which we would be happy to discuss in person. We would also be delighted to revisit at any time for a modest survey update fee and likewise before you eventually decide to sell the property.

INDEPENDENCE AND METHODOLOGY

Our only income is through damp survey fees. Our motivation is integrity and practical, durable solutions. There is no conflict of interest as we are independent of contractors and never profit from remedial work. We use chemical analysis to identify damp within walls.

SURVEYOR'S DECLARATION

I confirm that I inspected XXXX on 6 April 2018. I conclude that the main damp issue results from excessive humidity and condensation.

Simon Hichens

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Property Care Association qualified (PCAQT), Member of PropertyMark (ARLA)
Specialist Surveyor*

Report completed on 10 April 2018



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ABOUT DAMP SURVEYS LTD

Damp Surveys Ltd is an independent specialist damp surveying company incorporated following the development of analytical technology employed to rapidly and accurately differentiate types of damp. Our confidence in our analytical equipment allows us to categorically state whether or not there is a risk of rising damp. If we are satisfied that there is minimal risk of rising damp, we can offer a warranty subject to application and conditions.

Independence is key to understanding how we operate and why we provide a unique service quite different to any other company. Many contractors, looking for chemical damp work, offer low cost, or sometimes “free” surveys. We do not and never will benefit financially from any recommended remediation. We are motivated to recommend optimal treatment to protect the property now and into the future.

Your peace of mind is our goal, for you to be satisfied that the property will be properly protected against damp and for you to recommend us in person, or by social media.

THE PROPERTY

The property is a beautiful detached 1920's house surrounded by land. The front door to faces East. All references to location are taken as if standing facing the front door.

The walls are constructed of 9" (inch) brickwork. The ground floor is made of suspended timber over a sub-floor void with a solid floor conservatory. The elevation on the ground floor level is 189M above sea level, in a low flood risk area of London.

Changes to the property's original design

The property has been modernised with a conservatory extension and upstairs shower room amongst other improvements.

UNDERSTANDING DAMP

Excess damp found in properties is largely as a result of changes from the original design, location or use. Properties are built to absorb rain and evaporate moisture without excessive damp inside. Lifestyles have changed over the years, such as taking showers more often. The resultant raised humidity means most properties are at increased risks of condensation. Damp is not inherently dangerous. However, it can spoil decoration and encourage rot, mould and insect infestation. Rot is omnipresent and starts when wood cells rupture above 28% moisture content with a constant source of water. Brown rots, such as dry rot proliferates in unvented damp voids. Wood boring beetles are attracted to humid wood. Mould requires humidity on the surface of over 85% relative humidity (RH) to grow. Rising damp can spoil decorative surfaces. However, there is insufficient moisture to cause rot. Ground water contains nitrates, that inhibit mould growth. Rising damp needs a constant source of water, such as a high water-table within a meter of the ground. Stop the source of water and rising damp will dissipate. According to Thames Water, London's water-table is low, below the lowest tube-line. Rising damp results from the high relative force of attraction of silicone (found in sand, bricks, glass etc.), a phenomenon unhelpfully described as capillarity. The attractive force of silicone spreads water through connected pores in all directions. Plaster can be particularly absorbent. Water spreads downwards first through the additional force of gravity, until lower pores become saturated.

Condensation is caused by moist air condensing on cold surfaces, condensation starts when a wall's temperature falls below the "dew point". The dew point increases as humidity rises. There is often a line within a wall where the temperature is below the dew point, this is called the dew point line. Walls are designed to absorb and evaporate moisture daily. Damp is often cumulative. For example, condensation is more likely to form near a wall that is damp from penetrating rainwater. Likewise, rain will not evaporate as quickly if the wall surface is already humid through condensation. Furthermore, wet external walls are poor

thermal insulators. North, North-Eastern and North-Western walls receive minimal warmth from the winter sun. Some damp only occurs infrequently, once every few years, resulting from persistent rain and wind. Damp detection depends on conditions during the survey.

OBSERVATIONS

Conditions during the survey

Weather	Dry
The previous 24 hours	Some rain
Occupancy	Occupied, furnished
Internal relative humidity	36.5%RH
Internal temperature	17.7°C

External

- The roof appeared to be in good order, as far as could be seen. There were no obvious signs of ingress except where noted.
- Rainwater goods looked to be in good order, except where noted, however it was not raining.
- The brickwork appeared to be in reasonable order, with no obvious signs of ingress.
- There were no obvious signs of the damp proof course (DPC) being bridged.
- The vents to the sub-floor void appeared to be sufficient and in good order.

ILLUSTRATIONS

1 Damp damage in reception



The main purpose of the survey was to assure the owners that the repaired ensuite shower was no longer leaking. The damaged area was tested and found dry and ready to paint. The damp measurement was below the meters range of 7%WME (wood moisture equivalent).

Other matters - 2 Condensation



We noted considerable condensation on the windows to the shower room, as well as other windows in the house. We left a humidity meter so that you could become more aware of humidity.



Condensation forms behind objects such as curtains and furniture as lack of ventilation reduces the movement of warm dry air. We measured damp above the fireplace. This is from hygroscopic (water attracting) salts from when wood used to be burned.

3 Damp to the front window



The front window was damp in the corner. On the outside we could an area of green algae rising up to the window. It is likely that the flashing has failed in this corner. The algae is not a problem but an indication that there is regular rain water unable to run off or evaporate.

4 Bedroom fireplace



The fireplace in one of the bedroom is damp from the ceiling coving down. We investigated the roof and found the chimney above and adjoining woodwork to be damp, well above the "at risk" threshold. There were no signs of rot, probably because there is sufficient ventilation in the loft. However, rot could easily form at any time.

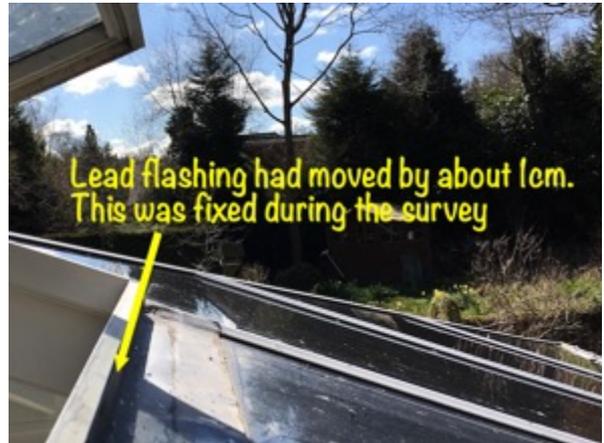


Looking at the position of the damp inside, size of chimney and the outside, we conclude that the most likely cause of the damp is damage to the valley in the corner behind the chimney (as seen from above). Without seeing it, we cannot be sure of the cause and so recommend someone view the damp side of the chimney.

5 Conservatory



The conservatory appeared to be made to very high specifications and has lasted very well. We noted damp from above and below the roof window.



Above are photos taken from within the roof window. Algae and moss has grown up above the window, this cause be causing ingress above it. There was also a section of lead that had come away from the lower section of wood, this was fixed back and so should help keep the conservatory watertight, but won't stop water from coming from above the window.



We also noted window rot on the sill to the conservatory door.

CONCLUSIONS

There is no evidence of damp from the shower room, however the shower is made out of more than one material, the joins will come apart and water is likely to leak again.

There were other sources of damp including condensation and ingress through various roofs.

RECOMMENDATIONS

Our recommendations address items identified in our survey as areas of sufficient concern that they must be undertaken to mitigate the risk of damp. In line with every property, we recommend ongoing observation, repair and a periodic programme of maintenance, including annual clearing of gutters, repainting, repointing and noting of perimeter ground level and water-table fluctuations. We are happy to return and update the survey.

Action plan

- 1) The damp in the reception is ready to sand down with coarse grain sand paper, ready for painting.
- 2) Condensation;
 - a) The humidity in the ensuite shower room should be reduced either by keeping the window open during and after a shower, or by use of an extractor fan with delayed timer, or humidistat.
 - b) The condensation to the windows with secondary glazing should either have more air movement between the two layers of glass or reduced humidity in the room affected.
 - c) Where ever possibly, humidity should be extracted at source, including kitchens, bathroom and rooms occupied., such as bedroom at night by use of a window kept ajar.
 - d) Reduce the production of humidity by keeping tops on pots and pans in the kitchen.
 - e) Use a humidity meter (gifted to you) and mouldpoint.co.uk to become more humidity aware.
 - f) Keep a minimal night-time temperature of about 10°C. This is best achieved with a modern thermostat, such as a Hive, Nest, Tado etc. as they allow for multiple time and temperature settings.
 - g) If humidity persists in the reception, then the curtains should be regularly moved away from the wall to allow for air flow.
- 2b) The alcove above the fireplace. The probable cause of damp is hygroscopic salts, drawing humidity from the surroundings. The chimneys have protection from rainwater, there is no evidence of damp from above the is section, therefore it is highly unlikely that there is a source of damp other than ambient moisture.

The easiest way to deal with these hygroscopic salts before repainting with emulsion, is to sand the area thoroughly and wipe them away. Salts normally only form on the final 1 – 2mm. However, if salts persist then place a barrier in front of them.

- i. This could be section of plasterboard, cut to shape, and either finished with plaster, or paint directly onto the plaster board.
- ii. A “cheat” way of treating the salts, without losing depth, is to paint gloss onto the section of alcove, then allow the gloss to dry thoroughly (say a week depending on temperature and paint), before being sanded with coarse grain sandpaper and painted with emulsion.

3 Damp to the front window probably requires the flashing to be refixed.

4 Damp to the bedroom fireplace probably needs the flashing to be refixed.

We recommend a roofing survey with cherry picker or other means to get into the hard to reach roof areas without damaging the roof in the process.

5 The company which made the conservatory is best placed to repair the leak to the roof window and rot to the wooden door sill. Experts who work or worked for the company are best placed to know what goes wrong with the conservatories and how best to fix them.

It is a well made conservatory and therefore is still probably being installed, even if not by the same company.

LIMITATIONS

Damp Surveys Ltd reports are designed to provide you with an informed independent expert opinion as to the condition of the property together with any recommendations for further investigation or remedial work. We do not warrantee any findings in this report unless we enter into a separate warrantee agreement with you.

The survey was conducted during daylight hours. Damp will be more noticeable at night and when the weather is colder and more humid. Gutters are more likely to fail when full of leaves and during periods of prolonged rain and adverse wind. We make best endeavours but cannot guarantee being able to identify all forms of damp, rot and insect infestation affecting the property. The survey represents a snapshot in time. Damp is often progressive only becoming visible after the survey. We are happy to return and update our observations and advice at any time.

We carried out a careful and thorough inspection of as much of the property as was accessible. However, when it is not possible to make a full inspection, we make a professional judgement about the likelihood of a defect being present. In certain circumstances, this may lead to a recommendation for further action to open up an area for further investigation. We are unable to see the whole roof, all the guttering and some of the drains. We were unable to inspect woodwork or other parts of the structure which are

covered, unexposed or inaccessible, and are therefore unable to report that such parts of the property are free from defect. There were no obvious signs of damp resulting from these limitations.

ONGOING MAINTENANCE

- 💧 Keep gutters clear, especially when leaves collect in them.
- 💧 Check flow of water from the roof and down the gutter during heavy rain.
- 💧 Reduce risk of condensation by extracting damp air from humid rooms such as a kitchen or bathroom.
- 💧 Mould and damp should be washed away daily.
- 💧 There is no magic bullet for condensation in a bathroom. It's very common. Improving the ventilation out, heat and use of tiles and bathroom paints help.
- 💧 If the bathroom is updated in the future be aware when a bath or shower is taken out, there is likely to be evidence of damp left behind it. This is normal and should dry easily.
- 💧 We advise clients that they need to be vigilant in ensuring that drains and guttering on the building are cleared and functioning at all times.
- 💧 Skirting boards were carefully examined. There was no evidence of dampness found except where noted. This is significant as fixing skirting boards to rendered masonry walls requires pre-drilled pilot holes to fit the plastic plugs and screws or nails. These holes can often be up to 100mm deep. If damp is present in the walls, it will rust iron nails or screws, and visibly "bleed" out into the skirting board.
- 💧 We examined the plaster and decorating. There were no signs of penetrating dampness nor rising dampness. Here was evidence of mild condensation.
- 💧 We also carefully examined the walls inside the kitchen cabinets, and closets, and took damp readings there – no dampness was detected.
- 💧 Electrical points: There was no evidence of dampness or moisture around any electrical points except where noted. Again, bearing in mind that all electrical points are set with screws drilled into the masonry wall, if plaster or render was damp there would be evidence of this where the screws were drilled into the wall.

HEALTH AND SAFETY CONSIDERATIONS

There are currently no health and safety issues resulting from defects. Read the manufacturers label on the fungicidal paint.

APPENDIX - STANDARD TERMS OF ENGAGEMENT

Terms of Engagement

- 1) You may cancel this contract with Damp Surveys Ltd at any time 24 hours before the time and day of the pre-arranged inspection.

- 2) We may cancel this contract at any time including the day of the inspection if we determine after arriving on site, that it is unsafe or that we do not have sufficient skills to complete the exercise for you. In such a case, we will refund full payment less our travel expenses.

- 3) You are engaging Damp Surveys Ltd, to undertake an inspection of the property in question at a pre-arranged time and the production of a report in a timely fashion thereafter. We will carefully and thoroughly inspect both the inside and outside of the property but NOT any outbuildings unless specifically requested to do so in writing.

- 4) Before the inspection, but after the appointment has been made, we will undertake a desk top analysis of the property by checking various different websites and other information sources for details about the property and its location.

- 5) Terms of Payment – we only accept instructions after advance payment.

- 6) Liability – our report is provided for your use only and may only be relied upon for 90 days from the survey date. Unless expressly stated otherwise in this report, nothing in this report confers or is intended to confer any rights on any third party pursuant to the Contracts (Rights of Third Parties) Act 1999.

- 7) We are unable to inspect parts of the structure which are covered, unexposed or inaccessible, including lofts, without written permission to do so, and are therefore unable to report that such parts are free from defect. We may express a professional opinion as to the likelihood of damp.

- 8) No disruptions will be made to the building's fabric save for a few pin sized holes, left by a measuring device. Access hatches and inspection chamber lids will only be lifted where it is easily possible to do so. Floor coverings and furniture cannot be moved, unless we have the prior written consent of the property owner. Floor voids will only be inspected if access panels permit. If there is a covered area you particularly wish us to investigate, please ensure that the owner of the property gives us prior written permission to uncover it.



9) We sometimes publish damp related images on websites to inform the public of damp, rot and the causes of damp and rot. We make every effort to ensure individual and corporate privacy is protected.

Insurance

For peace of mind, Damp Surveys Ltd have Public Liability insurance of £1,000,000 and Professional Indemnity insurance of £250,000 (annual aggregate) both through Hiscox.

Quotations

We recommend obtaining three quotes for any significant remedial work. We are happy to review your quotes, but always remain independent of contractors.