



solving the causes of damp  
not just the symptoms



## LANDLORDS ASSESSMENT

For and on behalf of XXXX

Property assessed    XXXX

London, SE22 0PF

This assessment is for the sole use of XXXX 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,

Please find the landlord's assessment which we carried out on 15 January 2018 on your behalf.

## OVERALL OPINION

Overall the property is in good order with a few condensation dampness issues, made worse by some penetrating damp. The damp should be easy to manage. The condensation is most visible by the rear to door the garden, where there is reduced temperature and high humidity. This assessment is intended to be read in full. Observations and opinions must not be taken in isolation.

Like any building, especially a period property, you need to be aware of the risk 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 assessment, which we would be happy to discuss in person. We would also be delighted to upgrade to a full report or revisit at any time for a modest fee.

## 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 can use chemical analysis to identify damp within masonry walls.

## SURVEYOR'S DECLARATION

I confirm that I inspected 49 Hillcourt Road on 15 January 2018. There were a number of condensation issues that should be easy to manage. I therefore assess that the property is at "low damp risk" so long as the tenants follow our recommendations.

*Simon Hichens*

*Simon Hichens BSc (Chemistry), AISSE (Institute of Specialist Surveyors & Engineers)  
PCA (Property Care Association qualified), MARLA, MNAEA, PWC (consultant auditor)*

**Senior Surveyor**



*Report completed on 23-Jan-18*



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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 this technology allows us to categorically state whether or not there is a high risk of rising damp. If we are satisfied that there is minimal risk of rising damp, we can offer a warrantee 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 such as by following [www.twitter.com/DampSurveys](https://www.twitter.com/DampSurveys).

## REASONS FOR ASSESSMENT AND REQUESTS

We understand that a tenant is experiencing damp around the kitchen.

## CONCLUSIONS

We conclude that there was a leak, but that this has been repaired, there was some penetrating damp to the back wall caused by the upstairs neighbour's flue. There was no rising damp. The condensation problem, primarily caused by excess humidity not being sufficiently vented out of the property.

On a positive note, the flat is a beautiful Victorian property full of character with high ceilings.

Condensation causes walls to lose heat, thus will be economically inefficient to warm a cold wall back up to normal room temperature. It is in the tenant's financial interests to maintain a minimum temperature above the dew point throughout the winter.

## FINDINGS AND ILLUSTRATIONS

The humidity in the kitchen and bathroom areas were above 70%RH at 18.3°C, giving a dew point of 13°C. The temperature of the window and the wall around the washing machine measured at 13°C, so at the temperature that damp will start to condense - at night the temperature will become colder and water will condense in significant quantities.



The image to the left shows extensive mould by the washing machine. The image to the right shows penetrating wall from a drip forming on the lower section of the upstairs' flat's boiler flue.



## RECOMMENDATIONS

The key to managing condensation is extracting humid air at source, that is bathrooms, bedrooms, kitchen and washing, whilst maintaining the temperature above the dew point (point at which humid air condenses).

### **The tenants MUST**

- 1, Inform Landlord's as soon as damp arises. Thank you, to the tenants for bringing the matter to the Landlord's attention.
- 2, Keep bathroom or shower room doors closed and windows open after a bath or shower, until humidity has reduced.
- 3, Keep bedrooms ventilated by slightly opening windows (with safety locks "on" if available).
- 4, Keep any room where clothes are drying, ventilated in a similar manner.
- 5, Maintain a minimum temperature below the dew point, about 10°C. The thermostat should be used for this. Condensation reduces thermal insulation, so it is cheaper to maintain a minimum 10°C, than allow temperature to drop below the dew point (which should normally be below 10°C, once bedroom and bathrooms are being ventilated properly).

### **WHO (World Health Organisation) guidelines for indoor air quality – Europe 2009**

"Management of moisture requires proper control of temperature and ventilation to avoid excess humidity, condensation on surfaces and excess moisture in materials. Ventilation should be distributed effectively throughout spaces, and stagnant air zones should be avoided.

Building owners are responsible for providing a healthy workplace or living environment that is free of excess moisture and mould, by ensuring proper building construction and maintenance.

The occupants are responsible for managing the use of water, heating, ventilation and appliances in a manner that does not lead to dampness and mould growth."

The tenant has a duty to use the facilities as directed by the landlord and informing the landlord as soon as a facility is in disrepair. Tenants have the responsibility to wipe down condensation and mould before it becomes a health hazard.

A typical house contains 30 - 40 litres of atmospheric water. Each day, each occupant adds;

- 1, 0.8 litre in respiration, (about 0.2 litres at night),
- 2, 0.5 litre per shower,
- 3, 0.5 litre for washing,
- 4, 0.25 litre cooking,



## 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, increased occupancy etc. 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. Rot requires a constant source of water. Whereas mould doesn't need water, but requires over 85% relative humidity (RH) to grow. Beetles are attracted to humid wood.

Rising damp can spoil decorative surfaces. It cannot by itself cause rot and will inhibit mould growth. It needs a constant source of water, such as a high water-table within about a meter of the ground. Stop the constant 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.

Damp is often cumulative. For example, condensation is more likely to form on a wall that is humid from rainwater. Likewise, rain will not evaporate as quickly if the wall surface is already humid through condensation. Furthermore, wet walls are poor thermal insulators. North, North-Eastern and North-Western walls receive minimal warmth from the winter sun. Some damp occurs infrequently, once every few years, resulting from persistent rain and wind.

### Condensation

Vapour condensing into water on cold surfaces is the most common form of dampness in the home. It is most prevalent on the lower surfaces of external ground floor walls. Warm moist air from a kitchen, bathroom, washing machine or drying clothes will condense rapidly when meeting a cold external wall, window or pipe. Add to this humid breath from human and pets.

A wall will be relatively cold at the point where both skins of a cavity wall meet. This is most pronounced at the base of a ground floor wall, which is often more than 5°C cooler than the ambient temperature. The temperature differential can be much greater at night.



The dew point is the temperature that water starts to condense. Humid air from a warm moist kitchen readily condenses on the cooler surfaces of external walls. Typically, a surface only has to be 5°C lower than the ambient temperature for condensation to start to form.

Glass and metal are good conductors of heat and therefore lose thermal energy much more rapidly than timber, brick or plaster. Condensation runs down cold windows and frames onto walls beneath them. Metal objects embedded in walls such as behind an electrical socket, cable or pipe can initiate condensation. Cold metal can cause condensation, even in summer.

Although condensation is inevitable, it can be managed with ventilation out at source, combined with sufficient heat, air circulation and regular wiping of wet surfaces.

Ideally clothes should be dried outside, or with an externally vented clothes drier. Double glazed windows should have trickle vents kept open.

An alternative is to designate wet areas, then manage humidity in those wet areas, by wiping off surface moisture and opening windows often. Victorians used to tile their entrance halls, at the point where cold air meets warm humid air. Bathroom paints and tiles evaporate moisture readily and are easy to wipe down. Top tip; use an electrically heated bathroom mirror.

A common mistake is to increase ventilation into a building. This can be counterproductive as the outside air is likely to be cooler than the warm moist internal air, and will cause, rather than alleviate condensation. Positive flow ventilation systems do not necessarily reduce condensation.

In the worst cases, condensation can form within a wall. This is known as interstitial condensation. We will not be able to identify interstitial condensation unless it visibly affects internal decoration.

Bathrooms were not originally designed with extractor fans. If your bathroom does not have one, then close the door and open the window until humidity has normalised (about 50%RH). Kitchen extractor fans are a recent innovation. Again, do close the door and open the window. Also you should keep lids on pots and pans to reduce humidity.



## LIMITATIONS OF ASSESSMENT

Landlord assessments 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 warrant any findings in this report unless we enter into a separate warranty 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 becoming more visible. 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.