1 MILLION+ HOMES
DAMP & CONDENSATION

Damp and condensation issues can be complex and not really understood: the PRS survey of 2014 found that in excess of 4% of dwellings had damp problems. That's over 1 million homes!

Mark Doyle

Mark is a Chartered Engineer who moved into property full time following a serious rugby injury in 1996. Landlords and investors since 1991, he and his wife Claire have well over 20 years of experience in buy-to-lets (BTLs), Houses in Multiple Occupation (HMOs), developments, and conversions into flats and houses. They typically work on properties in very poor condition.

Too much moisture and a temperature imbalance in a property leads to damp and condensation, and rightly or wrongly, everyone has an opinion on it. This can be great news for educated investors, as it's likely to scare 'ill-informed' buyers away. Anyone looking for a property to improve or to add value to is likely to find damp, and may well find condensation and mould (especially if it's already empty). But it's really not that difficult or too expensive to simply rip out and replace materials and to improve a property, so why is it all such a big deal?

A Double Whammy!

Damp is usually associated with older property; however it can be found somewhere in almost any building, and it can present both physical and legal challenges.

1 When you buy a property that needs improvement (which has probably stood with no heating on), it can deteriorate quickly as moisture passes through the structure. Damp will leave a stain, sulphates, and residue on surfaces (see photos 1 & 11), but at its worst the fabric of plaster and masonry can crumble away (see photos 4 & 8), timber will rot (see photos 3, 7 & 12) and a property can fail a valuation survey and become un-mortgagable (see photos 7 & 8).

The Defective Premises Act 1972: states that you as an owner can still be held liable for all of the defects found in a property – even if you didn't know any problems existed.

Also, the newer **Construction Design and Management Regulations 2015 (CDM Regs)** place considerable onus on the owner or client for health, safety, and thorough quality workmanship.

The Landlord and Tenants Act 1985, section 11: states that the landlord is responsible for the structure, exterior, utilities, heating, services, and any common parts of the property. A notice does have to be issued by the authority to an owner prior to any prosecution,but a tenant can also sue for damages over the previous 6 years.

It's also, important to be aware that depending on which country the property is in and the type of tenancy agreement you have, under the **Deregulation Act 2015** a section 21 notice to quit cannot be served if a tenant has already made a complaint in writing or email (and likely to include text messaging in future) about a problem at the property to the landlord, agent, or council (the so-called revenge or retaliatory eviction), while repair works are outstanding.

Councils can also enforce with **The Environmental Protection Act 1990 and the Housing Act 2004, Part 1 HHSRS Rating System**, so it's very important to be proactive and work with councils.

2 When you own a property that already has tenants, and a damp problem develops, it will need quick work and careful remedial works to minimise any disruption. This may even mean temporary works until a tenant goes away on holiday or leaves. Bear in mind the worst tenant to deal with is the one that feels aggrieved at paying rent for a property they believe has a problem, and it's all so easy to complain.

What can I do about Damp Problems?

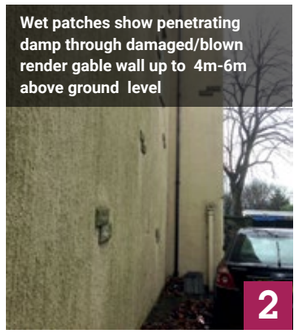
Firstly, work out what kind of damp problem you have, starting with exactly where it is. Damp can be complex to sort out: you may need to bring in someone with more experience, but beware of 'experts with damp meters' and specialist companies that will charge you thousands for a single day's work, plus you need to use common sense when you get a quotation for say £5,000 (if the damp works need a team of x3 at say £200/day for the boss, plus £120/day for each of his men, and they are on your job for 5 days … that's £2,200 for labour, then add the cost of the equipment, materials, plus the profit for their experience – and what about VAT?), and ask yourself if you are happy with the cost of these works?

Secondly, you will need to rip-out and replace the damaged materials (with for example, aqua board, waterproof mesh and render) and probably add some things to prevent the problem recurring (eg a DPC, mechanical ventilation and passyfiers). So, be methodical, work out exactly what you need to do to sort out each problem you have, and in what order, and write up a brief schedule of works. There are a huge variety of methods and materials available to use, and we all need good advice at times, so don't be afraid to ask daft questions.

Types of Damp	Features
Rising Damp	• Affects basements, solid floor slabs, and the ground floor to a maximum wall height of about 700mm (has been seen to 2m above ground level). • Water rises into the home either through or around the damp course (DPC). • Usually leaves a 'tide mark' of salts or sulphides from the mortar mix. • Iron staining visible on corners from buried angle bead. • Present all year but more noticeable in wet conditions.
Penetrating Damp	• Found on external walls due to building defect (eg render). • Can be found all the way up to gutter or gable apex level. • Seen as wet patches on inside walls, usually without mould growth. • Seen on chimney faces with staining due to soot/sulphide penetration. • More evident in wet weather.
Condensation	• Can cause damp! • Common on cold surfaces such as windows and ceramic wall tiles. • Common adjacent to gas heat sources. • Nearly always leads to mould growth. • Prolonged exposure produces damp conditions and deterioration.
Leaks	• Often around the top of the upstairs walls and ceilings. • Staining in the middle of the ceiling is likely to be a roof or pipe work problem. • Damp at top of external walls, most likely due to gutter/ downpipe problems. • If around the chimney/wall junction, most likely due to flashing, re-pointing or chimney pot problem. • Damp can occur from any water supply or drainage leak.

Condensation & Damp are the most common cause of complaint from tenants to councils!


1 Rising damp sulphide 'tide mark'


2 Wet patches show penetrating damp through damaged/blown render gable wall up to 4m-6m above ground level


3 Wet rot (requires 30% moisture content) from rising damp bridging from floor slab with no DPC sheet or insulation.


4 Prolonged plaster/masonry damage from rising damp in empty auction property.

DAMP METERS

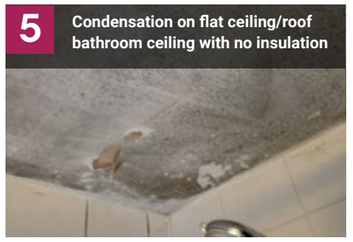
The problem with Damp Meters commonly used by surveyors is that they were really developed for use with timber and don't measure moisture. Damp meters measure the ability of the surface between x2 prongs to conduct an electric signal (in theory the 'wetter' a surface is, then the stronger the signal). So could you get a higher so-called 'damp' reading in wallpaper or in old paint or in artex or a plaster (let alone bonding or browning) or a mortar mix with higher salt content (after all salt is a good conductor of electric), compared to the wall underneath – yes!

So if a valuation survey or the Homebuyers survey shows excessive damp, and downvalues a property, is it true? Not necessarily. Fortunately the BS5250; 2011 states that "Accurate measurements of the moisture content of brick or mortar cannot be obtained by the use of electrical moisture meters". This is one really good reason you should be present at every valuation survey.

Condensation

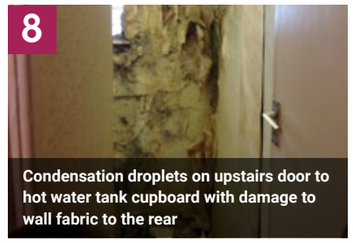
Most properties experience some water vapour or condensation problems at some point, but if we assume that the property owner has provided adequate heating, ventilation, and insulation in a property, why will condensation still take place? Condensation is really driven by the occupant's lifestyle, eg bathing, breathing, cooking, washing, drying clothes, and a family of x4 will generate approx 20 litres of moisture/water vapour a day. If you do have a problem, be prepared for the tenant and even council officials to blame you/the owner firstly, and you must respond quickly to avoid any deterioration and possible prosecution.

Droplets of water vapour condensing onto a cold surface are the first sign of a condensing damp problem, and then the growth of black mould in these wet patches from spores is the logical progression.


5 Condensation on flat ceiling/roof bathroom ceiling with no insulation


6 Condensation build up in bay window behind sofa


7 Water droplets glistening on roof felt (from heavy loft insulation with no roof vents), causing rotted joists/purlins and interstitial damp below


8 Condensation droplets on upstairs door to hot water tank cupboard with damage to wall fabric to the rear


9 Black Mould (Stachybotrys Chartarum) from condensation


10 Black Mould in the surface paintwork only (from condensation)


11 Brown Mould (Aspergillus) due to damp from a soil pipe leak


12 Dry Rot (requires 50%+ moisture content) from damp bridging

Where there's blame, there's a …!

To generalise, damp is typically regarded as a result of a building defect, and in the event of legal action, the courts are likely to blame the owner/landlord. Condensation on the other hand can be caused by many factors, and the courts **'may'** support the owner/landlord – but only if they can prove they have done **'everything possible'** to keep in balance the 'Heating, Ventilation and Insulation' at the property.

Contact Details

Mark is happy to chat or coach anyone who may need some assistance and can be contacted at: **mark@cheshlancs.co.uk** or **www.cheshlancs.co.uk**

Condensation is the balance between **'Heating & Ventilation & Insulation'**

The amount of condensation you will get in a property will depend on:

- **How much moisture/water vapour is produced by those residents**
- **Insufficient temperature control**
- **Lack of insulation and presence of cold surfaces**
- **How much ventilation and air circulation takes place**

Tip: Aim to improve all of the above, and always keep records of works (photos/ videos).

Note: Using gas fires, cookers, and central heating produces moisture (perhaps reduce gas appliances?).

Black Mould

The spores are naturally ever-present in the air, and only become obvious when they can grow in the right conditions; for this they need:

- **Moisture (from condensation, humidity)**
- **Food (paint, glue, wallpaper, stickers)**
- **Temperature (central heating)**

Tip: Black mould is commonly associated with condensation but rarely found with damp. Damp surfaces are usually too wet and contain salts/sulphides from the mortar mix, which prevents most mould growth!

Tip: Don't scrape black mould or you will release the spores into the air. Make sure that whoever cleans wears a mask and goggles (that way you reduce any potential future litigation).

Tip: The easiest way to clean black mould is with a spray bottle filled with bleach or white vinegar or a baking soda/water mix.

Five 'QUICK FIX' tips to minimise condensation and reduce black mould in your property

1. Fit a washing line and/or rotary dryer
2. Fit 'Passyfier' type sleeved vents in cold spots and clear all air bricks
3. Clear gutters, drains, and fit rainwater deflectors
4. Fit trickle vents to all upvc windows
5. Buy your own 10 litre Dehumidifier