

IDENTIFYING THE TYPE OF DAMPNESS OCCURING IN TYOUR HOME:

What is Condensation?



Condensation...is formed when warm moist air, produced by activities such as cooking and bathing, comes in contact with a cold surface. IT helps to think of it as an invisible bubble of water that is produces in our kitchen or bathroom. The bubble then moves around your home until it either goes outside through an air vent or window, or hits a cold surface where it bursts and causes condensation.

It can happen in many areas of your home, e.g.:

- On windows where moisture droplets will form
- Around window frames where black mould will grow
- On outside walls where mould will also grow
- On all cold surfaces – even furniture and clothes

What can be done about condensation?

- You need to balance four factors:

1. Heating

- Cold areas in your home should be avoided. These are where condensation can occur, so whole heating is best
- Heating systems and controls should be used efficiently. This will save you money and make you comfortable.

Make sure you are getting all the benefits you are entitled to, so you can afford to heat your homes to a comfortable temperature.

2. Insulation

- Walls can be insulated by filling the cavity with insulation. This has to be done by an installer.
- Solid walls can be insulated by dry lining, but this can be costly and best done when you need o do other work.
- Lofts should be insulated. This will cut heating bills and keep your home warmer for longer.
- Windows, external, kitchen and bathroom doors should be draught proofed. This stops draughts, which makes your home cold and will prevent moisture escaping to elsewhere in the home.

<p>Are there any building defects, i.e. guttering, poor pointing or brickwork?</p> <p>Does the dampness increase in cold weather?</p> <p>Are there any signs of dampness on external brickwork, i.e. mould, white salts?</p>	<p>SUGGESTS RAIN PENETRATION</p>
<p>Is the dampness at ground floor level only?</p> <p>Is the area wetter at the skirting boards and is there a salty 'tide mark'?</p>	<p>SUGGESTS RISING DAMP</p>
<p>Is there a water stain on the surface?</p> <p>Does the dampness spiral outwards like a whirlpool?</p> <p>Has there been a leak in the kitchen or bathroom that you know of?</p> <p>Are their pipes inside the all, which may have burst?</p>	<p>SUGGESTS PLUMBING DEFECTS</p>
<p>Does the dampness increase in cold weather?</p> <p>Is the area a particularly cold spot?</p>	<p>SUGGESTS CONDENSATION</p>

For more information on reducing condensation in your home please call the

Yorkshire Energy Partnership on 01904 b545020

If you are claiming certain benefits you may be eligible for a grant through the *Warm Front Scheme* for insulation, draught proofing and possibly some heating

3. Ventilation

- Extractor fans fitted in the kitchen and bathroom will automatically get rid of moisture where it is produced.
- Windows opened during cooking, washing or after a bath will let out moisture, but remember to close them again
- Draught-free, permanent vents in all rooms should be provided to let out moisture.
- Remember: blocked up airbricks, flues or vents can be dangerous with certain types of heaters.

4. Moisture Reduction

- Drying clothes indoors produces a lot of moisture, so always dry outside, if possible.
- If you have to dry clothes indoors, use the bathroom with its window open and door shut.
- Cover pans and do not leave kettles boiling
- Close doors to bathroom and kitchen when producing water vapour
- Vent tumble dryers unless it is the condensing type
- Portable gas heaters produce a lot of moisture: 1 pint of gas produces 1 pint of water when it burns. If you use these heaters you will need a lot more ventilation.

Condensation can be reduced, and often cured. If the points above are followed, there should not be persistent problem in your home. However, you must remember that a balance is needed between the four factors.

HOW MUCH MOISTURE IS PRODUCED BY TYPICAL HOUSEHOLD ACTIVITIES?

Clothes washing	1 pint
Bathing	2 pints
4 people sleeping for 8 hours	3 pints
Cooking by gas for 22 hours	3 pints
Clothes drying (6lbs of spun washing in an invented tumble dryer)	10 pints

Dampness in the home can also be caused by:

Rising Damp, Rain Penetration, Plumbing Defects



Rising Damp

This is caused by a defective or missing damp proof course. A damp proof course aims to stop moisture soaking up through the walls of a building from the soil beneath, or adjacent to it. In some buildings the damp proof course may be missing, alternatively, soil or other debris may be piled against the outside wall thereby enabling moisture to by-pass the damp proof course. Inside the dwelling there will be a wet patch starting at ground level and ending in a "tide mark" about one meter above ground level. Its distinguishing feature is the sharpness of its leading edge of salts and its location.

Rain Penetration

This is caused by rainwater seeping in through the fabric into the dwelling. Common causes are faulty guttering, bridging of wall cavities by debris, missing slates or tiles of pitched roofs and holes developing in the weatherproof membrane of flat roofs. Some of the causes such as faulty guttering or missing slates can be spotted by a simple visual inspection of the outside of the dwelling.

A complication factor is that rain enters the dwelling in quite a different place to the place where it enters the outer skin of the fabric, i.e. water travelling along a cavity before finding a suitable path in to the dwelling. A useful sign of a wall suffering from water penetration is traces of white salts leaching out of the brickwork. In severe cases, mould will also appear on the external brickwork.

Plumbing Defects

An example of plumbing defects is an overflow pipe which discharges water down the outer face of an external wall leading to water penetration in all flats passed on the way to ground level. A regular sight in public sector housing is staining of external walls and even moss associated with such features. Another cause is burst pipes in loft spaces or leaking central heating pipes.



Dampness caused by plumbing defects generally radiates out from a central point, with fairly distinct edges. Long-term water penetration again may have traces of white salts associated with it.