

Mould & Fungi

Condensation

As the temperature of a given volume of air increases, the capacity to hold & carry water vapour with it increases.

Water vapour has a greater capacity to hold energy, than air. With more water vapour being held in air, the more energy a similar volume of air will hold.

There is a point at which water vapour can no longer remain as a vapour, this is called the **Dew Point**, & is the temperature at which when air is cooling reaches **100% Relative Humidity** & must change state into water (*Condenses*) by forming droplets. This may be on a colder surface, or within a cloud, as the droplet size (& weight) increases it forms rain, or runs down the cold surface.

If water vapour forms on a cold surface it is called Condensation, [*Dangerous because it can encourage bacterial growths*] if it forms within a building structure (*inside insulation*) it is called Interstitial Condensation. [*Dangerous because it can lead to rotting of the structure*]

Airtight Homes

Modern dwellings are designed with increasingly reduced air infiltration rates and higher levels of insulation making them almost completely sealed. Consequently the air inside can become moist, stale and generally stuffy & unpleasant to breathe.

Condensation

Dampness is a huge problem in the U.K. Damaging to both humans, and to the fabric of building. Condensation forms when the temperature of a surface (walls, mirror etc.) is below the dew point of the surrounding air. This leads to streaming windows and walls and ultimately to mould.

Signs of Condensation:

- Streaming windows
- Black mould on walls or fabrics and furnishings
- Musty smells

Condensation accounts for approximately 70% of reported damp problems in domestic dwellings.



Does your property have this problem?

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Unchecked levels of moisture (condensation) and relative humidity combined with a suitable organic breeding place such as wood, carpet, wall paper etc., will inevitably lead to mould growth & fungal growths. Mildew forms in wall cavities and crevices and microscopic mould spores can be inhaled by humans triggering asthma, allergies and skin disorders. Spores from certain types of mildew, mould & fungi can cause serious respiratory illnesses. The Housing Health and Safety Rating System (HHSRS) identifies damp and mould as one of the 24 hazards which could cause 'risk or harm to health and safety of an actual or potential occupier'.

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