

Condensation and Dampness

Warm air holds more moisture than cold air. Condensation occurs when warm, moist air comes into contact with a cold surface, such as a single glazed window or an uninsulated external wall. When the moist air comes into contact with the cold surface it turns back into water droplets – condensation.

Everyday activities contribute to the amount of moisture in the air around our homes:

- **bathing** can result in 0.5 to 1 litre of additional moisture
- **cooking by gas** over 24 hours can result in 2 to 4 litres of additional moisture
- **using a bottled gas heater** can result in 4 litres of additional moisture
- **drying clothes** can result in 3 to 7.5 litres of additional moisture
- **2 people sleeping for 8 hours** can result in 0.5 litre of additional moisture

Condensation in the home is caused by:

- **inadequate heating**
- **inadequate insulation**
- **inadequate ventilation**
- **producing excessive moisture**

Human beings produce water vapour - this cannot be avoided. However, condensation dampness is different to other forms of dampness because the inhabitants may be able to exercise some control over the amount of condensation in the home. Condensation dampness can occur in houses that are insufficiently heated, poorly insulated, or not properly ventilated. Installing loft insulation, cavity wall insulation and draughtproofing measures will reduce and minimise condensation in the home, as will effective use of heating. However, it is equally important to ensure that houses are properly ventilated.

Helpful tips on avoiding/minimising condensation dampness include:

- keep lids on pans when cooking
- dry clothes outside when possible. When drying clothes indoors, ventilate the room and keep the door closed
- avoid using flue-less bottled gas heaters
- ventilate all the time. Increase ventilation in the kitchen and bathroom when in use
- maintain a background heat all day in colder weather

If condensation builds up regularly, surfaces are likely to remain damp. When this happens, mould can develop on walls and ceilings, also on carpets and soft furnishings.

Dealing with Mould:

Excess mould should be removed with a damp cloth or a vacuum cleaner. The cloth should be thrown away and the vacuum cleaner emptied, to prevent mould spores spreading. Wipe down or spray affected areas using a fungicidal wash or diluted bleach. When redecorating after treatment, a fungicidal, mould-resistant paint should be used (this should not then be painted over with an ordinary paint). If wallpapering, a paste that contains a fungicide should be used.

See also **Chapter 3** for details on the different physical measures which can be installed to prevent and reduce condensation and dampness.

