



Damp Problems.....
RISING DAMP & REPLASTERING
WATERPROOFING
<b>CONDENSATION</b>
Timber Problems
FUNGAL DECAY & WOODWORM
EPOXY RESIN REPAIRS
Masonry Problems
WALL TIE FAILURE

## PROBLEM

# CONDENSATION

Condensation is probably the most common form of dampness in buildings although it is frequently not immediately visible to the surveyor.

In the home condensation is largely the consequence of today's improved standards of insulation and draught proofing, particularly when older properties have been upgraded. Lack of adequate ventilation allied to modern occupancy lifestyles in terms of cooking, washing and bathing can lead to a build-up of excessive humidity and moisture.

This leads to condensation forming on cooler surfaces, particularly in areas with little air circulation. The result can be peeling decorations, unhealthy living conditions, unsightly mould growth and damage to fabrics and clothing.



Black spot mould



## CAUSES

The ability of air to hold water vapour increases with temperature. Condensation arises when the air is fully saturated and 100% relative humidity ('Dew Point') is reached. Then any air in contact with colder surfaces will cool and release moisture in the form of water droplets.

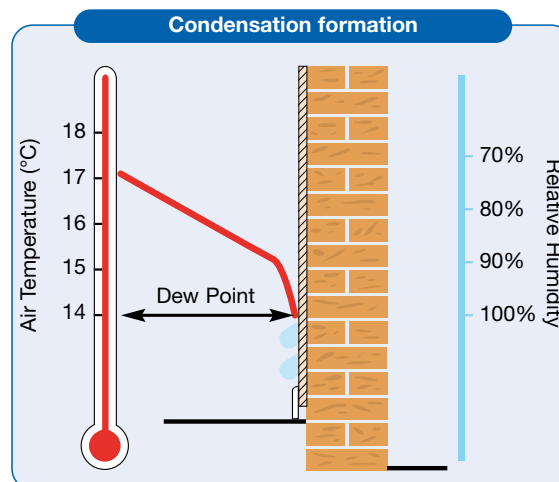
Air with a high moisture content will have a high vapour pressure. Water vapour does not always condense in the room of its source and as a gas will move through the property seeking pressure equalisation with the colder air outside.

Building materials vary in their heat conduction capabilities and so their capacity to stop surface condensation forming.

## MITIGATION

Various general measures can be adopted to combat the formation of surface condensation including

- **Improve ventilation** - to evacuate excessive moisture
- **Increase heating levels** - and keep constant
- **Improve level of insulation** - and so surface temperatures
- **Reduce sources of excess moisture** - eg. drying clothes indoors or paraffin/calor gas heaters
- **Improve insulation of external walls** - including exclusion of dampness

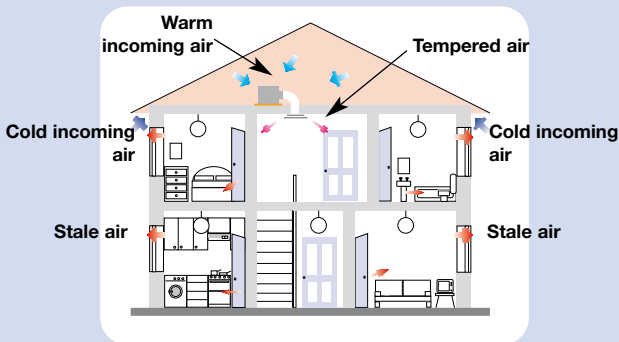


## CONTROL

## CONTROL

### POSITIVE PRESSURE VENTILATION

This system draws in fresh tempered outside air through the loft and by creating a positive pressure circulates it gently around the whole property. As the moisture content of outside air is generally lower than that indoors, this reduces the level of humidity.



The loft mounted fan unit is fully automatic and quiet in operation. For single floor flats a compact duct mounted version is available for fitting in a kitchen or other location.

Features of this system include

- 'Intelligent' humidistat control
- Ultra low speed for night-time use
- Low running costs - less than 1p per day
- Complementary passive ventilators where needed
- Discreet ceiling diffuser to avoid down draughts

### EXTRACTOR FANS

For specific high humidity situations such as the kitchen, utility room and bathroom, the installation of an extractor fan will evacuate stale, heavily moisture laden air directly to the outside quickly and efficiently.

The Peter Cox range of vents are fitted with humidistat sensor controls so that the fans operate automatically and only when required. With low sound levels in operation and ultra low energy usage the vents feature a unique shutter which opens silently and then closes tightly again to eliminate back draughts when the fan stops.



Loft mounted positive pressure ventilation unit



Ceiling diffuser

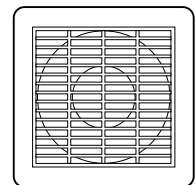
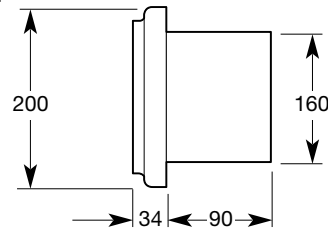


A compact unit, for properties without a loft

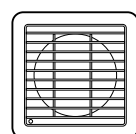
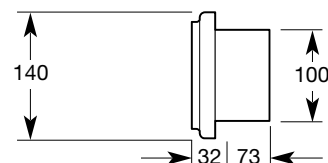


Extractor fan

#### Typical dimensions



Kitchen & Utility Room fan unit



WC and Bathroom fan unit

For Further Information ☎ 0800 789 500

Peter Cox Ltd. Aniseed Park, Broadway Business Park, Chadderton, Manchester OL9 9XA  
Tel: 0845 222 0404

E-mail: [marketing@petercox.com](mailto:marketing@petercox.com) Web: [www.petercox.com](http://www.petercox.com)



Certificate No FS 14867



British Structural Waterproofing Association

