Draught-proofing measures

Derwent-Head
Home Energy Advice

Before carrying out any draught proofing it is important to consider whether any significant problems with condensation exist as draught proofing will reduce ventilation and can make any condensation problems worse. One main way to help reduce condensation problems is to reduce the amount of moisture being generated in the house by:

i) Keep lids on pans of boiling water while cooking and, if possible, install a kitchen extractor or hood type fan in the kitchen for use while cooking.

ii) Fit an extractor fan in the bathroom to use while having a shower or bath.

iii) Although not very common these days, also avoid using portable heaters such as those using propane gas.

On the other hand, it is also important to maintain enough ventilation for air freshness in the house and to provide the air requirements of any fuel burning heating appliances that don't take their air supply directly through a balanced flue (i.e. that aren't room sealed). In addition to this the kitchen needs adequate ventilation when a gas cooker is in use.

1) Draught proofing of doors and windows

Double glazed door and window units come with integral draught seals so normally no further action need be taken. Sometimes though, even with double glazing, the fitting of well positioned additional seal strips can be beneficial.

Particularly with single glazed doors and windows, draught sealing is a relatively cheap and quick means of making your home more comfortable.

There are two main types of draught seals, compression and wiper.

- Compression seals come as either a thin strip of sticky backed foam rubber or as a formed rubber profile with a sticky back. The compression seals are designed to be fitted in the gap between window and frame or door and frame so that when compressed they prevent a draught. These seals come suitable for different sizes of gap so the approximate size of the gaps around the windows and doors needs to be checked against what it says on the box before buying. The sticky back of the seal is covered by a thin strip of paper and to fit the seal the paper strip is progressively peeled back as the seal is stuck to the frame of the window or door. It is always important to check afterwards that the seal isn't preventing closure of the door or window.

- Wiper seals are either a brush seal with a long, narrow brush-like strip or a continuous strip of rubber mounted in a metal or plastic carrier. The brush strip type is good for places like sliding patio doors and sash windows. The continuous rubber strip type is designed to fit on the outside of external doors with the edge of the rubber seal touching the outside face of the door. This type of seal also helps seal against driving rain as well as draught proofing. Remember to fit a letter box seal on the back of the door at the same time.

- A fuel burning appliance that is not room sealed will need its own adequately sized vent or trickle vents on windows to ensure the necessary air supply. It is very important that these vents are left open even if they are a source of draughts. It is also recommended to leave a total of about 2 metres of window edge without draught proofing to provide adequate normal ventilation.

- Any gaps around the outside of door or window frames should be sealed with a flexible silicone sealant that is suitable for this external use.

2) Draught proofing downstairs suspended wooden floors in older houses

Suspended wooden floors on the ground floor of older houses are ventilated underneath by air bricks to provide an air circulation and prevent dampness and wood rot. The air bricks are visible on the outside walls of these houses at about ground level and it is important they are kept open and not covered up. With these older houses the wooden flooring is formed by interlocking floorboards and these may well have gaps between them which can be a source of draughts into your downstairs rooms. When a new carpet is being fitted in a downstairs room it is an opportunity to consider sealing the gaps between the floorboards with sealant or a possible alternative is to fit a layer of thin hardboard over the floorboards before the new carpet is fitted. Seal the joints between the hardboard with tape. It will be important to check though that the gap under all doors is sufficient for the extra thickness of hardboard as well as the final thickness of the carpet. Note! Air bricks in new houses normally indicate a suspended concrete floor for which draughts are not an issue.

3) Draught seal the loft hatch

Fit a draught seal on the loft hatch to prevent losing the warm air from the house into the loft. Also fit catches to the hatch to make sure it is held down firmly to prevent it being lifted by the affect of the wind in the loft on very windy days.