

Blocking the draughts around your home will help you maintain a comfortable indoor environment. Although it may seem insignificant, reducing air leakage in your home can save up to 20% on heating and cooling costs.

Although gaps and draughts waste energy, it is important to keep note that a completely air-tight home is not desirable. Some ventilation is necessary to replace used internal air that contains odours, carbon dioxide and contaminants.

Note: Homes heated by unflued gas heaters require a level of fixed ventilation. When draught proofing, it is important to ensure you allow for this requirement.

What you need

Some materials used to block the leaks include:

- Caulking compound, plaster or sealants
- Clear contact adhesive or skylight diffuser
- Insulation batts or chimney diffuser
- Self-closing extractor fan 'cap'.

How to install

Firstly, you need to identify the sources of air leakage in your home. Obvious gaps can be found by completing a visual inspection of each room. You can also feel around for air movement or hold a lit candle around suspected air leaks and watch for a flicker. Some common sources of air leakage and how to seal them are discussed below.

Fixed wall vents (FIG 1)

Fixed wall vents are found in older homes and are no longer required under building regulations. You can permanently seal the internal vent by filling it with caulking compound, plaster or sealants. A simple temporary solution is to cover the vent using a sheet of clear contact adhesive.

Vented skylights (FIG 2)

You can reduce air leaked from a vented skylight by installing a clear plastic seal or light diffuser at the base of the skylight shaft. Diffusers are also available with tinting, which can help to further reduce summer heat gain.

Exhaust fans

Most exhaust fans are not sealed to the outside air. You can fit a self-closing lid over the outlet which blows open when the fan is on and falls shut when the fan stops.

Construction joints (FIG 3)

Cracks and gaps between bricks, around plumbing intrusions and along the roof line are just some examples of air-leaks that can be found in your home as a result of it moving over time. Caulking compounds that are silicone or latex based can be used to seal cracks and gaps. Silicone sealants are weather resistant and can be used for exposed areas. When working with sealants be sure to wear gloves and a face mask. Insert the sealant tube into the gun then ensure the surface of the crack is clean. Carefully cover the entire gap or crack with sealant.

Windows and doors

See the 'Seal your doors and windows to reduce draughts' fact sheet for detailed resources.

Resources

Green it yourself: <http://greenityourself.com.au/projects/watch-now-how-draught-proof-wall-vents>, NABERS resources (sealing out draughts): <http://nabers.com.au/page.aspx?cid=567&site=3>, http://ateamnsw.com.au/pdf/sealing_out_draughts.pdf, <http://www.refitnsave.org.au/products/draught-proof/120-sw-draft-proofing>

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Figure 1

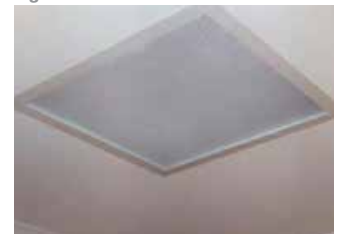


Figure 2



Figure 3

Figures 1-3 Area to block draughts.