

DIY fact sheet

Seal your doors and windows to reduce draughts



Air leakage through gaps around doors and windows is a major cause of energy wastage. In winter, draughts can increase household heating costs by up to 25%. Doors require draught proofing at their base and between the door and frame. Windows should be draught proofed where an openable part meets the frame. Although gaps and draughts waste energy, it is important to keep your home ventilated to some degree to maintain a healthy environment. A completely airtight home is not desirable as 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

There are many cost-effective, easy to install items that you can use to draughtproof your doors. These are available from your local hardware store or on-line:

- Door snakes (FIG 1). These are available as single or double sided snakes and can be fitted manually.
- Door sweeps or draught excluders (FIG 2). These need to be permanently attached to doors or door frames. They may need to be cut to size and in some cases require the use of power tools.
- Air leakage through gaps around doors and windows is a major cause of energy wastage. In winter, draughts can increase household heating costs by up to 25%.
- Weather stripping (FIG 3). Rubber, foam or brush strips are available with a self-adhesive backing. Ensure you get a thickness and colour that is suitable for your doors and windows.
- Caulking compounds or sealants and a sealant gun (FIG 4).

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Figure 1.



Figure 2.

How to install

Door and window frames weather stripping:

1. Choose an appropriate type of weather stripping. For door and window joins which close directly onto the frame, you should use foam or rubber seals.
2. When closed, these will compress and create a seal. For sliding doors and sash windows which close by running past the frame, you should use brush seals. Foam and rubber seals are generally not suitable in this case. Before sealing your door and window frames, ensure that all surfaces are clean.
3. Measure and cut the foam, rubber or brush strips to the lengths required.
4. Align the strip correctly then carefully stick them onto the frame.
5. If the door or window does not close properly, or if the strips interfere with the hinges, trim the strips until you have a snug fit.

Door bottom seals:

To block draughts that pass through the bottom of your doors, simply lay a door snake down or attach a rubber door seal to the base of the door. For some doors, these seals which 'sweep' behind the door will not work and a 'threshold' seal is required. Threshold seals are installed at the base of the door frame, with the door closing onto the device to create the seal.

Gaps in construction:

You can seal uneven cracks and gaps around windows (both inside or outside your home) by using permanent fillers such as caulking compounds or sealants. When working with sealants be sure to wear gloves and a face mask. Insert the sealant tube into the sealant gun then carefully cover the entire gap or crack and neaten as required.

Resources

General

Sustainability Victoria: Energy Smart Housing Manual: <http://www.sustainability.vic.gov.au/www/html/1823-publications--c-f.asp>

Specific

Example of double sided draught excluder: <http://www.topbuy.com.au/tbcart/pc/Double-Sided-Draught-Excluder-Draft-Stopper-Easy-to-Fit-Saving-Your-Heating-Cost-p91594.htm> Draught proofing a door: <http://www.readersdigest.com.au/draught-proofing-a-door> How to install weather stripping: http://www.bunnings.com.au/learn-how-to-diy_diy-projectcentre_detail.aspx?id=87&categoryid=24



Figure 3.



Figure 4.

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