Keeping the cold air out

Simple DIY draught-proofing

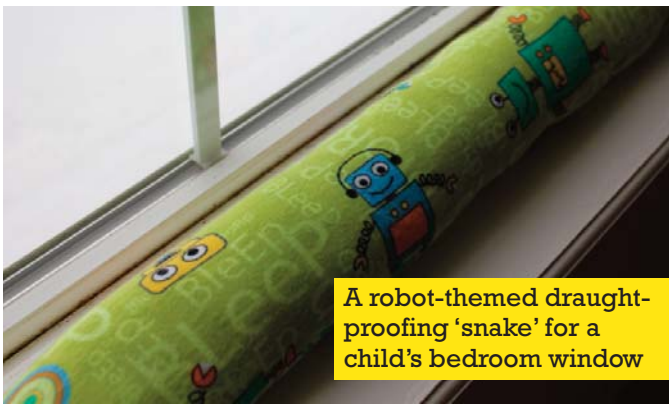
No-one likes to live in a draughty house. And, apart from the discomfort, it's a waste of money if the air that you have paid to warm up keeps escaping through gaps in the house and being replaced by cold air from outside.

The good news is that draught proofing is easy. A bit of DIY can go a long way to plugging those gaps and keeping cosy at home. You'll stop wasting money on your heating bills, and cut down on your carbon dioxide (CO_2) emissions too.

So, where do the draughts come from? Most houses, particularly old ones, have cracks and gaps through which warm air goes out and cold air blows in. Not all of these can be dealt with by a DIY-er, but many can, such as the gaps between or around floorboards; around windows and doors; through the letterbox; where pipework comes through external walls; around the loft hatch; and around electrical fittings.

For more information about draught-proofing windows, see our **secondary glazing** advice sheet. Use the checklist (right) to find out where you can draught proof different areas of your home.

Never block boiler flues, air bricks, or window trickle vents and avoid over draught-proofing windows in kitchens and bathrooms where the moist air needs to escape.



A robot-themed draught-proofing 'snake' for a child's bedroom window

Mind the gap

The most common draught-zones ... and DIY solutions to dealing with them

Windows: Use foam, metal or plastic draught strips (see over), or brush seals for sash windows (photo, right). Temporary secondary glazing is another option

Exterior doors: Fit brush or hinged-flap draught excluders, fitted along the bottom of the doors (see over).

Interior doors: Cut draughts with 'snake' draught excluders (like the one in the photo, right), brushes or similar strips of material, (see over).

Unused chimneys: Chimney balloons are available from most DIY stores. Plastic bags stuffed with other plastic bags also work – remember to remove and let the air circulate in summer.

Around pipework: Apply silicone mastic, wall-filler or expanding foam as appropriate.

Floorboards and skirting boards: Fill the gaps with flexible fillers, clear or brown silicone mastic, decorators' caulk or similar products.

Cracks in walls: Use cement or a hard-setting decorators' wall-filler.

Redundant extractor fan outlets: These should be blocked up.

Loft hatches: Use strips of draught excluding material fitted around the edges of the frame, and don't forget to insulate the hatch itself.

Lighting and electrical fittings: Plug the gaps around the fittings with wall-filler.

Letterboxes: Fit flaps or brushes to keep the cold air out and the warm air in. See over for instructions.

See over for instructions on how to fit a door brush, how to fit a letterbox draught-excluder and how to fit draught exluding strip to a window or door

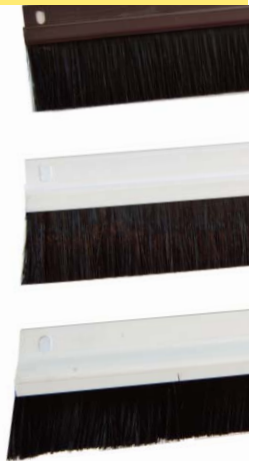
How to fit a door brush

Door brushes can be easily fitted along the bottom of most doors. First, use a **tape measure** to measure the width of the door and cut the brush to the right length (a **hacksaw** is good for doing this).

Then position the brush against the door so that the brush is just touching the floor. Using a **pencil**, make guide marks on the door through the pre-drilled holes in the excluder to show where the screws will go.

Next **drill** pilot holes in the points you marked and loosely **screw** the excluder in place.

Open and close the door to ensure it creates a good seal before tightening the screws or adjusting the height if necessary. The excluder should not be placed so low that it makes it difficult to open or close the door!



How to fit a letterbox draught-excluder

A letterbox draught-excluder is a simple way to stop warmth escaping.

First, place the draught-excluder over your letterbox and use a **pencil** to mark the fixing points through the pre-drilled holes. Maybe a friend could hold the draught-excluder in place while you check that letters can pass through it.

Drill pilot holes at the points you marked and loosely **screw** the draught-excluder onto the door.

Check that letters can pass through the brushes before **tightening the screws**, adjusting its position if necessary.

Fixing a perimeter seal around a window or door using foam draught-excluder

Start by cutting off a 50-60mm piece of the foam draught excluder to use as a **test strip**. Stick this to the door or window frame (not the door or window itself), as close as possible to the edge nearest you.

Close the door or window and slip a credit card between the test strip and the door. It should be a comfortable fit. If you have to force it, then the excluder is probably too thick; if the credit card is loose and falls out, then the excluder is probably too thin. Once you've done the test, remove the test strip.

When you're satisfied that you have the **right thickness of foam excluder**, measure the frame of your door or window and cut the excluder to the required lengths using a pair of **scissors**.

Clean and dry the door or window frame to ensure the adhesive sticks properly, then apply the foam strip to the door or window frame, as near to the edge as possible, checking that it isn't difficult to open or close the door or window!

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