

Keyholes can be easily dealt with by fitting a cover plate, known as a covered escutcheon plate, over the keyhole.

FURTHER INFORMATION

Draughtproofing Advisory Association Ltd, PO Box 12, Haslemere, Surrey GU27 3AN. Tel: (0428) 54011

Buildings Research Establishment, Bucknalls Lane, Garston, Watford WD2 7JR. Tel: (0923) 674040

Energy Efficiency Office, Thames House South, Millbank, London SW1P 4QJ.

A good source of more detailed information on how to choose and fit draught-proofing is "The Draught-proofing Handbook" (price £5) available from the London Energy and Employment Network, 99 Midland Road, London NW1 2AH. Telephone (01) 387 4393.

Help for Low-Income Groups

If you are a pensioner, disabled, on a low income, or in receipt of state benefits, you may be entitled to a special low-cost or free service for draught-proofing your home or insulating your loft. To find out if there is a Neighbourhood Energy Action project in your area, write to Monergy Saver, Freepost, Newcastle upon Tyne NE1 1BR, or telephone (0632) 615677.

Other Leaflets in This Series

Monergy Fact Files on:

Insulation: Loft, Pipes and Tanks

Insulation: Cavity Walls

Insulation: Solid Walls

DIY Double Glazing

Professional Double Glazing

Heating Controls

Heating Systems

Available Free From:

Monergy Information, PO Box 3, Diss, Norfolk IP22 3HH.

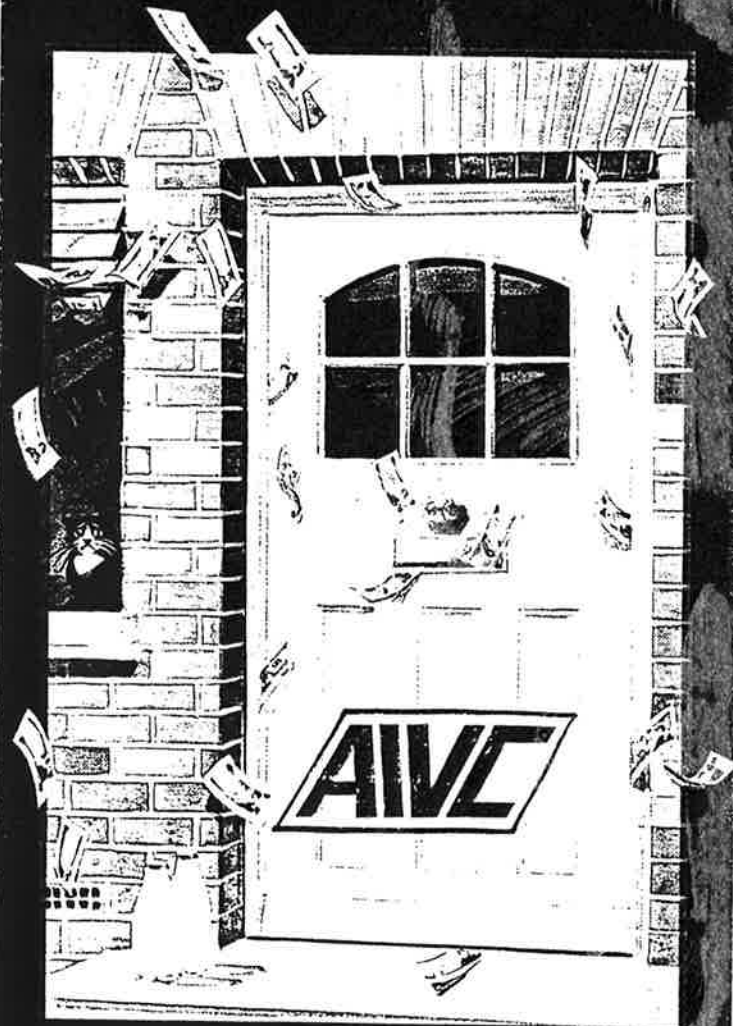
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INSULATION DRAUGHT-PROOFING



A MONERGY FACT FILE



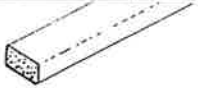
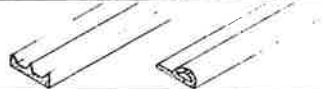


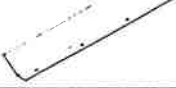




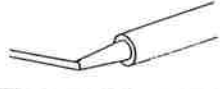
ENERGY EFFICIENCY OFFICE

Selecting a Draughtstrip

The chart below compares the range of draughtstrips that you are likely to find in the shops. All the products are suitable for reducing draughts, but some are more durable, or more effective, or give fewer problems

than others. Study this information and take this leaflet with you to help identify the draughtstrip you want. If you cannot find what you want the shop may be prepared to order it for you.

Comparison of Draught-stripping Materials

Comparison of draughtstripping materials			KEY			
Material	Typical Appearance	Resistance to wear	Easily compressed	Wide range of gaps	Method of fixing	
Foams	PVC foam with protective skin		***	**	*	Self-adhesive
	Cellular EPDM rubber		***	*	*	Self-adhesive
Brushes	Self adhesive pile		*	**	*	Self-adhesive
	Pile in plastic or aluminium holder		**	**	***	Nail/screw
Thin sections	Copper		**	***	***	Nail
	Hard plastic (Polypropylene or PVC)		*	***	**	Nail/Self-adhesive
	Flexible plastic (Polyester)		**	***	***	Self-adhesive
Shaped sections	Silicone rubber		***	**	**	Self-adhesive or glued
	Plastic in rigid holder		**	* tube ** fin	***	Nailed
Seal-ants	Silicone rubber		***		***	Squeeze from tube

How Long Will it Last?

Most materials are hardwearing, but the most durable come with a guarantee for five years or more.

Will it Make the Window Difficult to Close?

Select a material that is the right thickness and easily compressed – most draughtstrips feel soft but some need excessive force to compress them over a long length. A material that slides easily is essential for sliding windows.

The compressibility of a material is a good guide to its ability to cope with different gap sizes, although silicone sealant can be shaped to fill any size of gap before it sets. Draughtstrips with holders can be fixed to cope with differing sized gaps.

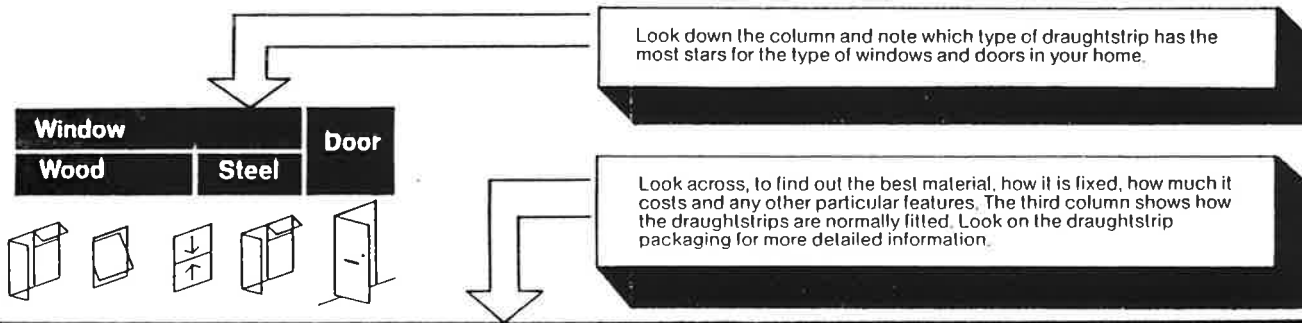
What About Painting?

You should avoid painting draughtstrip where possible. It is best to fix new draughtstrip about a week after painting. Accidental painting will not affect most draughtstrips, except for brush piles – these lose their effectiveness if painted. Gloss paint is very slow to dry on EPDM and neoprene rubber and paint spills should always be removed before closing the window.

Is it Easy to Fix?

Self-adhesive seals are easiest to fix although the surface must be properly prepared first. Other fixing methods take longer and need more care – check the fixing details on the packaging before making a final choice. Self-adhesive seals can be very difficult to remove satisfactorily, whereas screw-fixed seals can more easily be removed and refitted.

Which One is Best for My Windows and Doors?



	Window Wood	Steel	Door		
Foams	***	**	X	***	**
	<p>Best material PVC foam with protective film. Advantages The quality of self adhesive strip has improved greatly. It is quick and easy to apply. Not visible when window is closed. Low cost. Disadvantages If used in small gaps, (under 2mm), needs a lot of force to compress. Cost 10 - 16p a metre for PVC foam, 30 - 65p a metre for EPDM rubber.</p>				
Brushes	***	Y	***	X	**
	<p>Best material Soft nylon or polypropylene pile with central fin in a PVC or aluminium holder. Advantages Can be fixed to cope with a wide range of gap sizes. Disadvantages Brush piles should be removed when repainting. Visible when window or door is closed, but small PVC sections are unobtrusive. Fixing can be time-consuming. Cost 80p - £1.20 a metre. Self adhesive piles 30p - 50p a metre.</p>				
Thin sections	**	**	**	***	***
	<p>Best material Flexible plastic Advantages Relatively cheap and easy to fix. Can cope with a wide range of gap sizes. Disadvantages The thin film may be prone to accidental damage, but can easily be replaced. When used as a wiper seal, it makes a 'crackly' noise when opening and closing, and may hum in high winds. Cost about 30 - 60p a metre for plastic V-strip.</p>				
Shaped sections	***	***	X	***	**
	<p>Best material PVC or neoprene Advantages Very durable. Some are self-adhesive. Disadvantage Gluing sections in place with silicone sealant needs careful preparation, clean surfaces and some skill. Need to choose correct size of tubing relative to gap size. Cost about £1 - £2.50 a metre.</p>				
Sealants	***	**	X	***	X
	<p>Best material Silicone rubber Advantages Very durable. Copes well with narrow and uneven gaps. Disadvantages Cannot cope with seasonal changes in gap size. Needs clean, well prepared surfaces and some skill to apply. Sealant needs to be left to cure before removing release tape and final trimming. Cost 60 - 80p per metre depending on gap size.</p>				

KEY X = unsuitable Y = may be suitable - depends on the design of the windows

*** The more stars the better the performance
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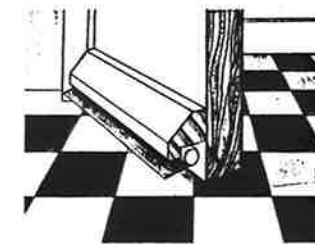
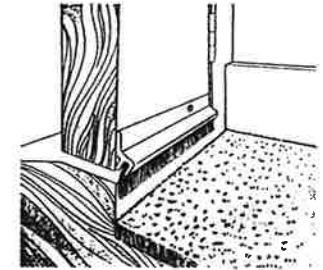
Door Thresholds

Draughtstrips used at the thresholds of external doors are subject to rougher treatment than in other locations. The best choice will depend on two factors:

- whether the door opens inwards or outwards (we show solutions for both).
- the clearance between the bottom of the door and the floor finish.

Door Opens Inwards

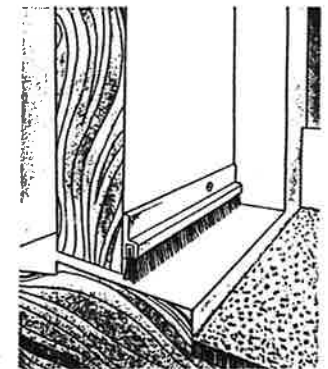
With step up to threshold. Fix a brushseal or PVC lin to the back of the door. They are good at dealing with a wide range of gaps and are easy to fix. Cost £3 - £4.



For flush thresholds there is no ideal solution, but a draught excluder which has a flexible flap that lifts up automatically when the door opens should work well. Some care is needed to fix it accurately. Cost about £6.50.

Door Opens Outwards

For flush thresholds fix a brushseal to the back of the door as shown. If the threshold is reasonably smooth, choose one of the smaller brushseals with a fine brush pile. Otherwise choose a brushseal with long stiff bristles - these are better at coping with worn and uneven thresholds. Cost £3 - £4.



Don't Forget the Letterbox and Keyhole

Letterboxes can let in a lot of cold air, especially if newspapers and letters are left in all day. Covers consisting of two nylon brushseals are probably the best solution; some also have flaps. Cost £3.

INSULATION: DRAUGHT-PROOFING

A Money Fact File

Why Draught-proof?

As much as a quarter of the heat from a typical British home is lost through draughts. Although draughts find their way through many gaps and cracks between floorboards, under the skirting and around electrical fittings and loft hatches, up to half the draughts come through undraught-proofed windows and doors. This is a terrible waste of energy – and you are paying for it in unnecessarily high heating bills.

Can You Feel the Draught?

As well as being a waste of expensive energy we all know that draughts can make you feel very uncomfortable even when the rest of the room is warm. Cold draughts are most noticeable when sitting down for any length of time as cold air tends to sink to the floor, chilling feet and ankles. Draught-proofing will make your home noticeably more comfortable.

You don't need a meter to tell you where the draughts are. Just hold the palm of your hand up to the edges of the windows or doors in your home. Wherever you can feel cold air coming in, warm air is also rushing out.

Other Advantages

Draught-proofing can also keep your home cleaner and quieter by keeping out dirt and outside noise as well as stopping windows rattling when it's windy.

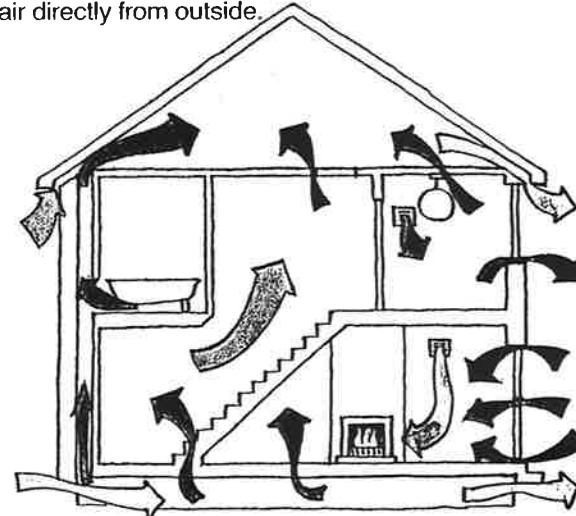
How Much Will I Save?

Draught-proofing is an inexpensive cost-effective way of reducing your heating bills. Typically it can save you up to 10 per cent of your heating bill, depending on how draughty (from all sources) your home is.

A Word of Caution

Cutting out unwanted draughts will make your home more comfortable, but a supply of fresh air is still essential. Most homes are sufficiently leaky to allow enough fresh air to circulate and prevent it becoming stale and stuffy. But there are two situations where extra ventilation may be needed.

Open fires, gas fires, flued boilers and flueless appliances including gas cookers will need a supply of fresh air to burn their fuels safely and efficiently. Ensure there is a permanent supply of air into the room – from an air brick for example. This advice does not apply to gas appliances with a *balanced flue* – they draw their air directly from outside.



BLUE – TYPICAL DRAUGHTS.
ORANGE – ESSENTIAL VENTILATION.

Moisture is being produced all the time in homes, by breathing and perspiration, but mainly by cooking, washing, and bathing. Too much moisture in the building causes condensation on windows. This may collect on the window sills and can be dealt with fairly easily. But condensation also forms on cold exterior walls or ceilings. This can cause mould or other damage. Keeping your home warm will reduce the problem but condensation can be reduced by:

- opening kitchen or bathroom windows while cooking, running hot water, or drying clothes:
- fitting extractor fans to these rooms:
- not draught-proofing the windows of these rooms, but instead draught-proofing their *interior* doors (and keeping them closed) to prevent moisture spreading through the home.