

## Electricity and You

# WARMTH WITHOUT WASTE



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**If your home has little or no thermal insulation, you could be wasting a high proportion of the heat you pay for in warming the outside air. Heat tries to get out everywhere. It escapes through the roof, through the walls and windows, up the chimney, through gaps around door and window frames, and even through the floor.**

Good insulation will cut this loss dramatically. Not only will you save on heating costs; you'll also be more comfortable with no more chilly corners, cold walls and icy draughts to avoid. And if you decide to move you'll probably find your home worth more and easier to sell because of the added insulation. What's more, if you are having a new heating system installed, you'll find that good insulation will reduce the size of system needed, so you'll save on capital costs too!

**So be wise, insulate your home properly.**

This leaflet shows you what to do.

## LINE YOUR LOFT

The roof space is a good place to start insulating because it's there that you can save a considerable amount of heat for only a modest outlay.



Loft insulation can cut heating bills considerably.

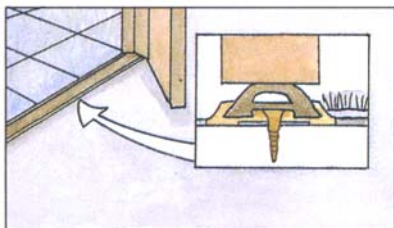
For big savings on your heating we recommend at least a 100 mm (4 in), but preferably 150 mm (6 in), layer of glass fibre or similar material laid between or over the joists. In a typical three-bedroom 'semi' you could save as much as 15% of your heating bill every year ... in a bungalow it could be even more. The cost would be about £150 if you laid the insulation yourself and you would probably recover this in about two or three years. You may in fact be entitled to a government grant towards the cost. For more information please contact the Energy Action Grants Agency, Newcastle (0800 181667).

## STOP THOSE DRAUGHTS

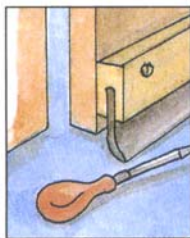
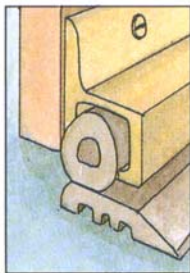
Draughts through door and window frames are usually easy and cheap to stop. You'll feel the benefit immediately and see the benefit next time your heating bill comes in. All sorts of draught excluders are available, ranging from a simple adhesive strip to a sophisticated 'threshold' sealer, and most only cost a few pounds. Some of the many types are shown here.



Cut out window draughts with adhesive strip.



Fit a neat on-door or threshold sealer and stop icy draughts.



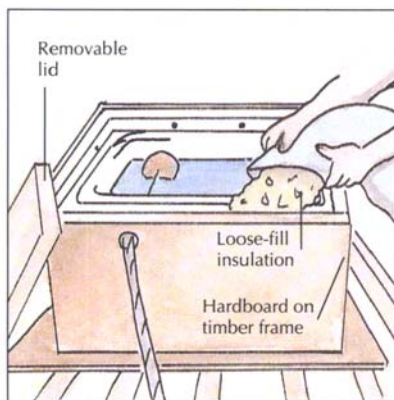
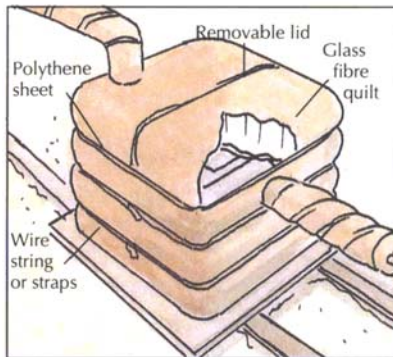
## DON'T FORGET FLOORS, WINDOWS AND CHIMNEYS

With solid concrete floors you can save heat by laying a thick carpet with ample underlay, or including insulation in new homes. Suspended timber floors can be given extra insulation by fixing a layer of glass fibre below the floorboards using plastic netting to support it.

Large windows lose a lot of heat. Double glazing may be expensive but it's particularly worthwhile if you want to cut down noise and condensation as well as heat loss. There are various types of double glazing available. For existing homes, 'second windows' with aluminium or plastic frames can be clipped or hinged on to the existing frames, or fitted with sliding runners for easy opening. If you are having a new home built, or completely replacing the window frames in an existing house, neat factory-sealed units might be the answer. One do-it-yourself double glazing method relies on stretched plastic film to form the inner pane. Cheap to buy (costing only a few pounds for a one square metre window) it is comparatively simple to fit. ►

Your loft is already insulated? Check to see how thick the layer is – many houses have only 25 mm (1 in) and, as we've said, you need 100 mm (4 in) to 150 mm (6 in) for big savings.

Laying glass fibre is easy. It's supplied in rolls to fit between or over the joists. You'll need a safe and adequate light, a board to kneel on, a sharp knife and something to push the material snugly into corners. Wear gloves and a face mask to avoid irritation.



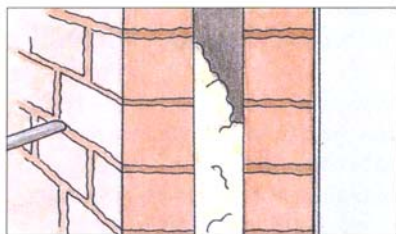
Two ways of insulating your cold water tank to protect from freezing. Another method is to encase the tank with special insulation board.

While you're in the loft, don't forget to lag the cold tank and any pipework to prevent a freeze-up. But don't place any insulation beneath the tank if it rests on, or is close to, the joists ... a little warmth reaching it will guard against possible freezing.

If your loft has a lot of awkward corners or obstructions, you might find it easier to use a 'loose-fill' insulation. This is simply packed or poured, depending on its type, between the joists.

## INSULATE YOUR WALLS

You can cut heat loss through cavity walls by up to two-thirds if you have the cavities filled with a suitable insulation material. For a typical 'semi' this could save up to 20% of your heating bill.

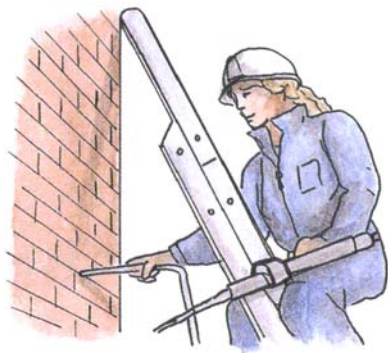


Save £s with cavity wall insulation

Cavity insulation is suitable for most houses but always seek expert advice, particularly if you live in a very wet or windy area. If you have had trouble with damp patches, get these looked at first. And take great care when selecting a firm to carry out the work. If insulating foam is to be used, choose an installer who certifies that the product conforms to British Standard 5617 and that the installation method is covered by British Standard 5618. With mineral fibre, the installer should have an Agrément Board certificate covering both the material and method of installation.

Cavity filling usually takes about a day and there's very little mess or disruption. It's all done from the outside by neatly drilling small holes through the outer wall. The cost for an average three-bedroom 'semi' starts from about £400. Very reasonable when you consider the savings and increased comfort you'll be enjoying, and the higher value of your home.

If your home has solid walls, you may be able to cut the heat loss by dry lining, but you should obtain specialist advice first.



Unused chimneys and flues can be sealed to cut off escaping heat. Block up fireplace openings and fit a ventilated cap on top of the stack. A ventilation grille in the chimney breast or flue is necessary to prevent the build up of condensation.

**Safety first!** It is very important that you always ensure rooms have enough ventilation for coal, gas and oil heaters to operate safely.

Finally, remember that to make the most of all the insulation improvements you have carried out, you must have proper temperature controls on your heating system. Ask your Electricity Company for details.

## HOW TO MAKE BIG SAVINGS IN YOUR WATER HEATING

Just as insulation reduces heating costs, so it can cut the cost of your hot water ... and the savings can be considerable.

### Tuck up your tank

Many modern hot water tanks are supplied already insulated. If not, an 80 mm (3 in) thick lagging jacket conforming to British Standard 5615, or a box filled with loose-fill

insulation, should be placed around it. A lagging jacket can be bought for a few pounds. You can fit it easily in about 15 minutes and it could pay for itself in a month or two. And don't worry about airing clothes ... even a well lagged tank will keep the airing cupboard warm enough, but remember to ensure that the cupboard is adequately ventilated.



### ... and those pipes

Don't leave the job unfinished. Wrap insulation material around any exposed hot water pipes to keep the heat in ... and lag cold pipes as well to avoid a freeze-up.

### Want any more advice?

The staff in your Electricity Company shop will be pleased to help you.