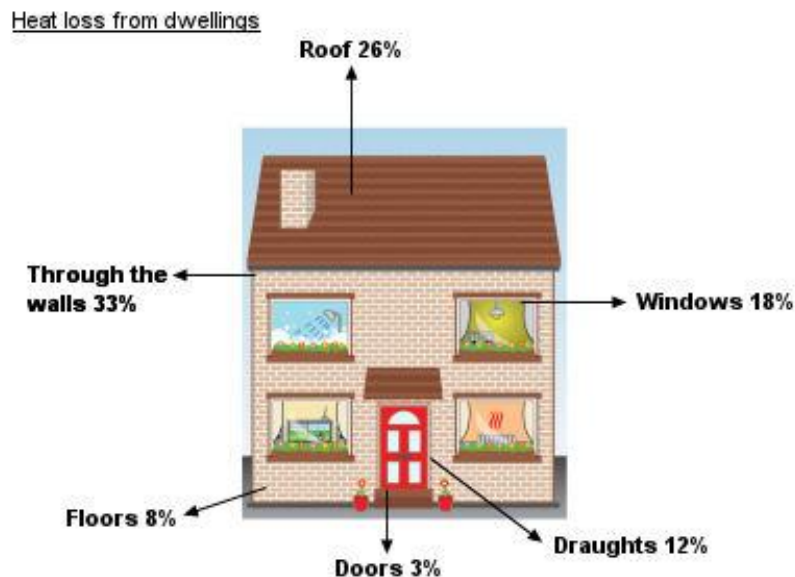


## Insulation - How to make sure your home is well insulated



Insulation is important to help you stay warm in the winter. It also helps prevent overheating in the summer. The picture shows where the heat is lost from a house if there is no insulation. To help reduce this heat loss, give your home an insulation MOT.

### HOUSE SUSPICIOUSLY COLD ?

If it seems that your home is colder than it should be, especially if it is not old, it might be that there is some insulation missing. Unfortunately this is a national problem. One approach would be to arrange for a thermal image to be done. This uses a specialist camera to survey the outside and inside of properties to spot where there are differences in wall, roof, door and window temperatures. This can identify where there are hot and cold spots which mean heat is escaping from your home and cold is seeping in.

### LOFT

It is usually possible to check how much loft insulation there is. Ideally there should be 270 mm of insulation and the joists should be covered too. If there are sloping ceilings, eaves or dormers these should also be insulated. For more information see HOW TO factsheet on Roof Insulation and/or Insulation for Floored Lofts

## **WALLS**

Houses built since 1983 should have 50 mm of insulation in the walls already. Cavity walls can benefit from having standard cavity wall insulation even if there is some insulation already in place. This is because when the house is built, the insulation is not put in the cavity itself. The insulation installers check the walls for suitability before the work is done and the insulation comes with a 25 year guarantee.

If you have timber frame walls or stone walls there are ways to insulate these too. See HOW TO factsheets on Insulation for stone walls.

If you need an installer for standard top-up loft insulation or cavity wall insulation contact the Energy Saving Trust advice centre on the freephone number at 0800 512 012 and they help you get the best deal.

## **FLOOR**

Floor insulation was not included in new houses until 1991, so if your home is older than this, it is unlikely to have floor insulation. See HOW TO factsheet on Floor Insulation.

## **DRAUGHTS**

Draughts can occur from unsealed external doors and windows, gaps around floors and between floorboards, open chimneys etc. Don't forget the draughts at the top of the house, such as around the loft hatch and where pipes go into the loft. It is also worth draught proofing doors that lead onto a cold space such as a cellar, front hall, conservatory or a cupboard under the stairs. Foam strip for windows is not very effective. You can use builders mate or silicon sealants for some draughts such as between floorboards. DIY products are available from DIY shops.

## **WINDOWS AND DOORS**

Thick curtains, drawn as soon as it gets dark, are very effective as they have both an insulating and a draught proofing effect. Make sure these do not cover any heaters/radiators. Thermal curtain linings are recommended. Energy efficient blinds, which reflect heat back into the room, are also available.

A low cost short-term alternative to double glazing is to tape polythene across the window frames. There is a product called Stormguard secondary window film which is enough for 4 windows and is available from DIY stores. Standard secondary glazing is very effective also. This involves an additional layer of glass or perspex being added to the existing frames. This is much cheaper than having new window units installed and again all materials can be found in a good DIY store.

## **DRAUGHTS FROM CHIMNEYS**

Considerable amounts of heat from a room is lost if there is an open chimney. Chimney balloons are ideal for where a chimney or flue is used for a fire occasionally. They make the room noticeably warmer. They inflate to the size of the chimney and are re-usable. Costs start at around £20 each. These are available from the Chimney Balloon Company at [www.chimneyballoon.com](http://www.chimneyballoon.com) tel 01252 319325.

## **HOT WATER TANK INSULATION**

The payback period for insulating a hot water cylinder is 6 months – 1 year if there is poor or no insulation at present. This is often the single most cost-effective measure possible when making your home more energy efficient.

Tank jackets can be fitted on top of any existing insulation and on some pre-insulated tanks if the existing insulation is poor. There would still be enough warmth to use this area as an airing cupboard if there was additional insulation on the tank and/or hot pipes.

## **INSULATING ALL HOT PIPES with tubing**

Lagging tubing for hot pipes at the water tank and boiler costs start at less than 77p per metre. All accessible hot pipes in cupboards etc should be lagged. I have come across different views on lagging internal hot water pipes. One view is that if in cupboards, etc, they are in the insulated part of the home and will contribute to the heating effect you want to warm your home. The other view is that unlagged hot water pipes in cupboards etc are an ineffective way to deliver heat. Better to use the heating system for this and protect as much of the heated water as possible by lagging all pipes.