BERI factsheet P1

Insulation - How to make sure your home is well insulated

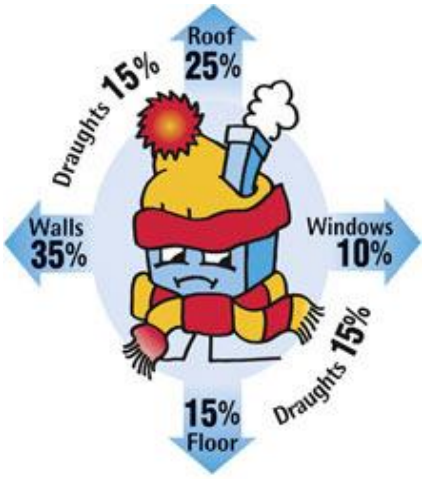
Insulation is important to help you stay warm in the winter. It also helps prevent over-heating in the summer. The picture shows where the heat is lost from a house if there is no insulation. Start by checking your insulation as explained below.

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.

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 BERI factsheet on 4 Roof Insulation and/or factsheet 3 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. 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 BERI factsheets 5 and 6 on Insulation for stone walls DIY (including timber frame walls) or by insulation companies.

If you need an installer for standard top-up loft insulation or cavity wall insulation contact the Energy Saving Trust advice centre (SCARF) 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 BERI factsheet 2 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 draughtproofing 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. Ask us for more information if you are interested in more specialist products.

Windows and Doors

Thick curtains, drawn as soon as it gets dark, are very effective as they have both an insulating and a draughtproofing 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. It costs just £7.99 from B & Q (joinery section) 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. B & Q also sells sheets of perspex.

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. Cost is from £22 each. These are available from the Chimney Balloon Company at www.chimneyballoon.com tel 01252 319325.

Permanently blocking up chimney

The best option for an unused fireplace is to board up the chimney area completely. The way to do this is having a board fixed with sealant to avoid draughts. A small ventilator would be required at the bottom of the board to prevent condensation.

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.

Cost approx £13 for 80 mm tank jacket. This 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 water tank and boiler costs from 77p per metre . All accessible hot pipes in cupboards etc should be lagged.

INSULATING YOUR BATH

If you like to soak in the bath this might suit you. You could take off the side of the bath and stuff the cavity with old pillows, old coats etc and then replace the side. This keeps your bath water hotter for much longer.

Banchory Energy Reduction Initiative (BERI) is a local community group funded by the Climate Challenge Fund project until March 2012 and run by volunteers and part time staff. Advice drop - in sessions at Banchory Town Hall Mondays and Fridays 10.30 – 12.30 e mail beri.banchory@hotmail.co.uk or telephone 07769712520. Information online at **www.banchory.org** link to community groups

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