

# Sustainable Ideford: I is for Insulation

It is often said that the best way to reduce emissions from heating our homes, while saving money at the same time, is to insulate them better. But where and how you put the insulation is not a straightforward matter.

Ovo Energy estimates that heat is lost through different routes from a house as follows:

Walls	30-40%
Roof	About 25%
Windows and doors	15-20%
Floor	About 10%

All of these heat losses can be addressed, as described below. We have not attempted to estimate costs, as these vary so much with the type and construction of the house, or to quantify the benefits, as these depend on how well or badly insulated the house is to start with. One thing that is certain is that the savings will be greater the higher the unit price of energy.

## Wall insulation

If your house has cavity walls, they can usually be insulated by injecting insulation material into the cavity from the outside. A specialist company will drill holes in the outside walls, inject insulation through the holes and then seal them with cement.

But solid walls can be insulated too – either from the inside or the outside. This will cost more than insulating a standard cavity wall but the savings on your heating bills will be bigger too.

## Floor insulation

Timber floors can be insulated by lifting the floorboards and laying mineral wool insulation supported by netting between the joists.

## Loft insulation

If access is easy and your loft joists are regular, you can use rolls of mineral wool insulation. The first layer is laid between the joists – the horizontal beams that make up the floor of the loft – then another layer is laid at right angles to cover the joists and make the insulation up to the required depth.

## Energy efficient glazing

There are many different forms of double (or triple) glazing. Existing windows can be replaced with double-glazed uPVC frames, or with hardwood frames, which are more expensive. Or you can leave the existing windows and fix a secondary window a few inches further back (this is better for shutting out noise as well).

Before embarking on any of these options, it is best to seek advice on costs and benefits from a reputable installer (or preferably two or three). There is general advice on the Energy Saving Trust website. Also, Exeter Community Energy (ECO) will visit your home, assess your needs, and advise you what to do under their Retrofit in Devon scheme.

But if you are not planning to spend substantial sums on insulating your home, here are two much cheaper options:

## **Insulating curtains**

Special insulating curtain linings are great for cold winter evenings.

## **Personal insulation**

If you wear layers of suitable clothes that trap air inside and between each layer of material, it will save a lot of money for a relatively low outlay. There is some highly effective clothing available, such as merino wool vests, neck warmers, lined trousers etc. The initial cost is a fraction of the savings you can make by keeping your body warm and turning down the heating.

Find out much more at [\*\*https://energysavingtrust.org.uk/energy-at-home\*\*](https://energysavingtrust.org.uk/energy-at-home)

**ECO.org.uk**