

## Insulating the Floor

A house can lose around 10% of its heat through the floor. This is usually due to draughts coming up between the floorboards and around the skirting boards or because of a lack of insulation under the floorboards themselves (or both!).

Flooring is frequently overlooked when homeowners are upgrading or improving the energy efficiency of their house, yet insulating the floor can be an affordable way of reducing heat loss in the home. If you have draught proofed the windows and doors, topped your loft insulation up to 270-300mm, have double glazing and cavity wall insulation; insulating and draught proofing the floor can help reduce energy consumption even further. Insulating the floors also ensures that an even and continuous layer of insulation is surrounding the house - heat will always pass through the surface with least resistance. Insulating the floors can be a relatively affordable insulation measure and DIY installation.

	Annual saving per year (£)	DIY cost	DIY payback	CO <sub>2</sub> saving per year
Floor insulation	Around £50	Around £100	From 2 years	Around 250kg
Filling gaps between floor and skirting board	Around £25	Around £20	Around 1 year	Around 130kg

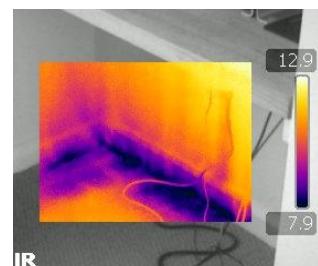
## How do you insulate a floor?

### Suspended timber floors

Timber floors can be insulated relatively easily by lifting the floorboards up and laying an insulation material between the floor joists suspended off the concrete below with debris netting. This needs to be strung tightly so the weight of the insulation does not make it sag over time. Debris netting or similar is recommended as some wire (chicken wire) can be susceptible to rot. The insulation should also be packed in tightly so to minimize possible movement.



After the insulation has been laid the floor boards can be replaced and any gaps should be blocked with regular tube sealant such as silicon to prevent any draughts coming up through floor. The edge of the carpet or flooring should also be sealed around the skirting board.



**Please note:** When insulating under a timber floor, it is important that the airbricks beneath the floor joists are not blocked with insulation. If there is an inadequate flow of air beneath the floor joists they can be susceptible to rot.

### Concrete floors

There is very little that can be done to insulate solid concrete floors unless you are able to lift the level of the door frames to enable extra insulation to be laid on top. Insulating concrete floors before they are laid however is a simple solution that should be adopted. Rigid insulation board or polystyrene slabs can be used. These are available from any good DIY store.

