

Floor Insulation

Depending on your floor type, insulation can be an effective way to reduce your energy costs and carbon footprint.

How to work out the best way to insulate your floor:

1. What type of floor do you have?

There are two main floor types found in UK properties; solid floors and suspended floors. Suspended floors are generally timber floorboards laid over timber joists. Solid floors in modern houses tend to be poured concrete, whereas in older properties these can be solid stone or tiled floors laid directly onto earth. If you have a floor covering, you may have to lift a corner to identify the floor type underneath. Alternatively look for ventilation bricks at the base of your external walls - these indicate a suspended floor.



Uninsulated
solid floor



Uninsulated
suspended
floor

2. Do you have a Cellar?

If you have access to an unheated basement or cellar, it is likely that you will be able to insulate your floor from below. This is a relatively cheap and simple way to reduce heat loss and prevent draughts.

3. Does your floor need replacing?

As a smaller amount of heat tends to be lost through floors than other parts of the building fabric, it may make sense to wait until your floor needs replacing before undertaking this measure. If you are replacing a solid floor, building regulations require you to upgrade floor insulation to meet current standards. And don't forget - replacing a concrete floor is a great opportunity to install energy efficient underfloor heating.



*Typical Costs and Savings...



185kgCO₂e

Annual Carbon Savings



£75

Annual Bill Savings



£3,600 - £4,700

Typical cost

Costs may vary significantly depending on level of work required.

Keep it Natural

Although insulation can reduce the energy needed to heat your home, the materials used can have a significant environmental impact.

There are many natural alternatives to synthetic insulation materials, such as sheep's wool, hemp or wood fibre, which are better for your home, your health and the planet!



* Figures are taken from Energy Saving Trust and are based on fuel prices as of October 2023. Estimates are based on an insulated, three bed, semi-detached, gas-heated home. The average professional installation cost is unsubsidised, prices will vary.



Floor Insulation



The Benefits of Floor Insulation

- Your home will use less energy, lowering your carbon footprint
- Financial savings on heating bills
- Improved thermal efficiency and a more comfortable home
- Insulating a suspended floor can help to prevent draughts
- Most floor insulation can be completed by those with a good level of DIY skills
- Insulation may increase the value of your property

How is Floor Insulation Installed?

Solid Floor Insulation

Solid insulation can be laid on top of an existing solid concrete floor slab. As this will raise the floor height, please note that the height of fixtures and fittings may require adjustment.

If you are replacing a solid floor, insulation can be added beneath the floor slab.

Suspended Floor Insulation

Insulation rolls or batts can be fitted between floor joists. If there is no access to the floor from below, this will require floorboards to be removed and netting attached to the joists to support the insulation.

If there is access to the floor from below, insulation can be fitted between the floor joists and plasterboard or other fire resistant boarding attached to the underside of the joists

Draught Proofing

Draughts can often be the cause of heat loss through suspended floors. There are several simple draught proofing measures that can be easily undertaken to improve your comfort before committing to more costly and disruptive methods.

- Installing fitted carpets
- Sealing gaps between floorboards
- Filling / sealing gaps at floor perimeters (around skirting etc.)

It is important **not** to block air vents or ventilation bricks below the floor level, as these are crucial to ventilate the space below a suspended floor.

Next steps...

If you are interested in Floor Insulation, NEP are here to help. For advice on grants or to arrange a technical survey, please complete our online form at:

www.nottenergy.com/self-referral-form

or call us on **0115 947 2207**