

Sheet: 14



# Roof Insulation

Fitting an extra layer of insulation in your loft is a quick and easy way to cut your heating bills and make your home warmer  
25% of heat is lost through uninsulated roofs.

Benefits include:  
Easy to fit in many houses  
Lasts for years  
Can be DIY or professionally fitted

If you have an unheated loft with less than 200mm (8 inches) of insulation at the floor level, then it is probably worth adding an additional layer to help keep the heat in.

If you have a standard loft with a pitched roof, and no heated rooms in the loft space, then it is best to insulate it by laying rolls of flexible insulation material at the floor level.

If you already have some insulation, check the depth. If it is 150 mm (6 inches) or less then you may want to add another layer to bring it up to the recommended depth (270mm or more). If you only have 100mm or less, then it is definitely worth adding some more.

If you have a flat roof, or a room built into your loft, then adding more insulation may be a bit more difficult.

If you have a standard loft but it is difficult to get into or has very limited headroom, then you may need to use a different approach. A specialist company may be able to blow loose insulation material into your loft.

## How to insulate your loft

Insulating a standard loft can be a fairly simple job if you are confident with DIY, but there are plenty of professional companies who can do the work for you.

You can insulate a standard loft by laying mineral wool between the joists. These are the horizontal beams that make up the floor of the loft. A second layer of insulation should then be added at right angles to cover the joists, bringing the insulation up to the recommended depth of 270mm. Other flexible materials, such as sheep's wool insulation, can be used instead of mineral wool.

If you want to store anything in your insulated loft, you will need to fit a raised floor to put your boxes on – you shouldn't rest anything on the insulation itself. You can raise the floor level by fitting timber battens or plastic legs on the joists to support the new floor. You can then insulate between the joists with mineral wool, and fit the new floor boards on top.



If you are confident with DIY, then insulating your loft is often a fairly easy job to take on, but there are plenty of experienced professionals who can do the job for you. Some households may get some financial help towards the cost of a professional installation through ECO Help to Heat or through a local support scheme. If this is the case then the scheme operator will arrange for a company to fit the insulation.

### **Natural Materials**

Materials made from natural fibres also offer the important additional benefit of 'carbon sequestration'. This is because the growing plants absorbed carbon from the atmosphere, and this carbon then stays locked up for decades.

Another benefit of natural materials is their breathability, which affects how they deal with moisture. It's particularly important in older buildings, because they were designed to be open to absorbing and releasing moisture. Sealing an old house up with cement render and non-breathable insulation tends to cause damp problems. Using natural materials therefore helps to protect buildings from damage as well as leading to a low environmental impact.

### **Where to get it**

Where you get your insulation from will depend on who is going to fit it

If you are fitting the insulation yourself then you can buy rolls of mineral wool in any DIY store, or you can order a wide range of materials online.

If you are looking for financial help towards the cost, then you should apply for the support first. If you are successful, then the scheme operator will arrange for an installer to supply and fit the material.

If you are going to pay for a professional company to insulate your loft, then they will supply the material.

### **Things to look out for**

Insulating a standard loft should be easy and risk free provided some simple guidelines are followed.

If a professional is insulating your loft, then they should make sure that there is no risk of frozen pipes or condensation problems. If you are doing the work yourself, you will need to take care of this:

Ensure that any pipework or water tanks in the loft are well insulated, and do not fit loft insulation underneath water tanks. The loft will get colder after it is insulated, so uninsulated pipes could freeze.

Ensure that the loft is well ventilated and that existing ventilation is not blocked by the new insulation.

Make sure that the roof is weatherproof before you insulate. Any rain getting into the insulation will damage it permanently, and the insulation may prevent the water from drying out.