COTSWOLD
District Council

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Roofs

Making sure that your roof is insulated is one of the most effective measures for improving your buildings energy efficiency. This is unlikely to require Planning Permission if your building is not listed. If you live in a listed building, some types of roof insulation will require Listed Building Consent.

When looking to insulate your roof you should consider the following:

- Whether your building is listed.
- Whether your building is in a conservation area.
- What type of roof(s) do I have? *E.g pitched, flat or mono.*
- What type of roof covering do I have? *E.g stone or clay tiles, slates, thatch, artificial tiles, cement tiles.*
- Does my roof have any features which may need more specialist attention? *E.g dormer windows.*

Once this has been established, you will need to consider the most appropriate type of roof insulation for your property – some buildings have mor than one type of roof or roofing covering. This may require a different approach for each roof. You can insulate in the following ways either at rafter level (also known as a warm roof) or at ceiling level (also known as a cold roof).

If you live in a listed building, you will need to consider if these measures are appropriate – will it affect any traditional constructional features, such as lath and plaster ceilings, **torching** to the underside of roof tiles, and whether you have access to the roof. Once you have decided on the way you want to insulate your roof – you may need to seek profession advice on this (please go to the Getting Help page for more information) – you will need to consider the types of materials you will use to insulate the roof and whether additional ventilate need to be installed to prevent moisture build-up once the insulation has been installed.

The most effective materials to use for insulating a **traditional building** are ones that are breathable (in other words, **vapour permeable** and **hygroscopic**). Examples of these are:

- Wood fibre board
- Lambswool
- Aerogel
- Cellulose for difficult to reach areas

When insulating a roof, it is very important to make sure that there aren't any gaps in the insulation, particular attention needs to be paid to the eaves area, junctions and your water tank and water pipes, if you have any in the attic.

If you need to increase the ventilation in your roof, then typically this is installed at eaves level and/or ventilation tiles are installed. A suitably qualified surveyor should be able to advise on this (details on finding specialist help can be found at Getting Help).

Protected Species

Protected species (this this context this is likely to be bats and nesting birds) are protected by law and to knowingly disturb or block their roost or nesting site is a criminal offence. You should seek advice from an ecologist about whether the works might impact these species before you start insulating the roof.

If they are disturbed whilst installing insulation in the roof, then the works must stop immediately, and a suitably qualified ecologist employed to advise you going forward. An ecologist can be found at CIEEM.

Further information

Historic England have produced various documents on insulating roofs which provide detailed guidance on this topic:

Insulating Pitched Roofs at Ceiling Level

Insulating Pitched Roofs at Rafter Level

Insulating Flat Roofs

Insulating Dormer Windows

Insulating Thatched Roofs

The STBA (sustainable Traditional Building Alliance) have produced a Guidance Wheel and Knowledge Centre, both of which are very helpful for guidance on suitable measures, other considerations and potential implications of the work. These tools are aimed at professional or technically minded homeowners.

Bath & North East Somerset Council have produced useful guidance on Roof insulation at ceiling level and Roof insulation at rafter level. This includes diagrams.

The Essex Design Guide has a very helpful section (including further reading) on insulating Roofs. This includes diagrams and has a section on materials.