# FS02: Loft Insulation

**About**

**Typical costs:**

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**Typical annual savings:**

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* Loft insulation can be laid between the roof joists or the rafters to reduce the amount of heat lost through the roof. There are also options for loft insulation in cases where the loft is used for storage, as a living space or is inaccessible.

**Benefits**

* The insulation maintains your home at a more consistent temperature; making your home feel warmer in the winter and cooler in the summer
* Pay less on your heating bills
* In some cases, loft insulation can be installed by the resident, without the need for an external contractor.

**Key considerations**

* Materials: Loft insulation can come in various forms and the most appropriate one will depend on the arrangement of the roof rafters, whether the roof space is used for storage or living space, obstructions in the loft space or lack of space. Common options available include blanket insulation (or matting) which can be rolled out in most loft spaces, rigid insulation boards used when space is limited, or loose fill insulation used for irregular spaces.
* Existing insulation: If you already have loft insulation it is worth checking that it is at least 270mm deep and has been correctly installed. You can top-up existing loft insulation to meet current standards.
* Ventilation: Incorrect installation of loft insulation resulting in restricted airflow could result in a build-up of condensation which causes damp. Check that there is sufficient ventilation in the roof before you begin.
* Permissions: Planning permission is not required for loft insulation however the insulation installed may be required to meet building regulations. Your installer should know about this but if in doubt, check this with your local authority.
* Installation process: Installation of loft insulation is usually straightforward. In cases where there is no existing damp or major obstructions in the loft space, it can be installed yourself. If there is a living space in the roof, the installation is more complex and should be conducted by a professional.

**Further information**

* Case studies:
	+ [Aachen](http://www.lowenergyapartments.eu/wp-content/uploads/2016/03/LEAF_Case_study_showcase_Germany_D8.4_Feb16.pdf) (Germany)
	+ [Edinburgh](http://www.lowenergyapartments.eu/wp-content/uploads/2016/03/LEAF_Case_study_showcase_Scotland_D8.4_Feb16%E2%80%99.pdf) (UK)
* Useful information:
	+ [National Insulation Association](https://www.nia-uk.org/) (NIA): Trade Association with list of approved installers
	+ [The Energy Saving Trust](http://www.energysavingtrust.org.uk/home-insulation/roof-and-loft): more detailed information about loft and roof insulation.