

With energy costs continually on the increase, and the introduction of new carbon taxes there has never been a better time to consider increasing the level of insulation in your home.

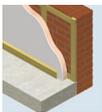
ATK Building Contractors can survey your home and calculate your insulation requirements. Our assessment will determine the most appropriate type and level of insulation to ensure your house runs as energy efficient as possible.

When insulating your home, the objective is to increase the 'U value' of your house. With an increased 'U value', you will achieve a better rating in a BER (Building Energy Rating) assessment. The higher your BER rating, the more energy efficient and comfortable your home will be. New regulations stipulate that if you are selling your home or property, a BER certificate must be provided for the property. A well insulated property will result in a better BER rating.

There are a number of [government grants](#) available for upgrading and insulating existing dwellings. ATK Building Contractors specialise in the 3 main areas of insulation:

- Internal insulation (dry lining)
- Attic Insulation
- External insulation

Internal Insulation



If your home is built using solid wall or hollow block construction methods, cavity fill insulation is not an option. Internal insulation (sometimes referred to as 'dry-lining') involves fixing insulation to the inner surfaces of your external walls. This usually involves fixing an insulation board to the walls and covering it with a vapour barrier layer and plasterboard. One of the main disadvantages of internal insulation is the loss of room space; this may be minimised by using high performance insulation products that are thinner. While this is often a more affordable option than installing external wall insulation, the loss of space and potential necessity to take out and re-fit fitted kitchens and appliances can result in people choosing the external insulation option. (© sei.ie)

External Insulation



A typical property loses about 40% of its heat through external walls. If your property is not suitable for internal insulations, there is an option to externally insulate your property. External wall insulation systems generally comprise of an insulation layer to achieve the requisite

standards of thermal performance protected with a weatherproof finish, usually a render, but can comprise brick slips, tiles and decorative boards. Insulating render can also be an advantage in certain locations.

Loft/Attic Insulation



Loft/attic insulation is usually achieved through glass wool insulation. Glass wool is an insulating material, made from fiber glass, arranged into a texture similar to wool. Glass wool is produced in rolls or in slabs, with different thermal and mechanical properties. Thanks to a dense entanglement of materials with a low conduction and trapping a great amount of air, glasswool is an excellent thermal insulant. The thicker it is, the best thermal resistance it has, thus reducing heat losses in winter and protecting against heat in summer

Below are a number of insulation tips from Sustainable Energy Ireland.

- Insulate your attic well and save up to 20% on your home heating bill. If your attic insulation is currently less than 200 mm, then you should add further layers. There are a variety of suitable materials including mineral wool, rock wool, sheeps wool, polystyrene, cellulose fibre

and multi-layered foil.

- Wall insulation can be increased in a number of ways. The pay-back period is dependent on a number of factors including type, thickness and quality of existing insulation. The most popular types of insulation systems are, (i) insulated dry lining, (ii) blown mineral or cellulose fibre or polystyrene beads into the cavity, or (iii) rigid external insulation with render or brick finish. Specialist advice should be sought in all cases.

- Choose double glazed units when replacing windows. Much of the heat loss from a house occurs through the windows particularly if they are single glazed. Significant energy savings can be achieved if double glazing has Argon fill and low-emissivity glass.

- If replacing the hot water cylinder, a cylinder with factory applied insulation should be considered. Such insulation is more effective at retaining heat than a lagging jacket, is less easily damaged and cannot be pulled out of place.

- A lagging jacket on your hot water cylinder will keep water hotter for longer and pay for itself in 2-3 months

- Keep curtains closed at night and ensure that the curtains don't hang over the radiators.

- A reflective foil, backed by insulation if space permits should be fixed behind radiators mounted on external walls

(http://www.sei.ie/Power_of_One/Energy_Saving/Insulation_Tips/).