

# Insulating your loft...



## How much SupaSoft Insulation to use

This will depend if you have and are planning to keep existing insulation in place. Please refer to the tables below for our recommended thicknesses.

### Fully insulating with SupaSoft Insulation

INSULATION DEPTH (mm)			SupaSoft Insulation $\lambda$ 0.040 W/mK
Between Joist	Over Joist	Total Depth	U-value W/m <sup>2</sup> K
100	150	250	0.16
100	200	300	0.13

### Topping up with SupaSoft Insulation

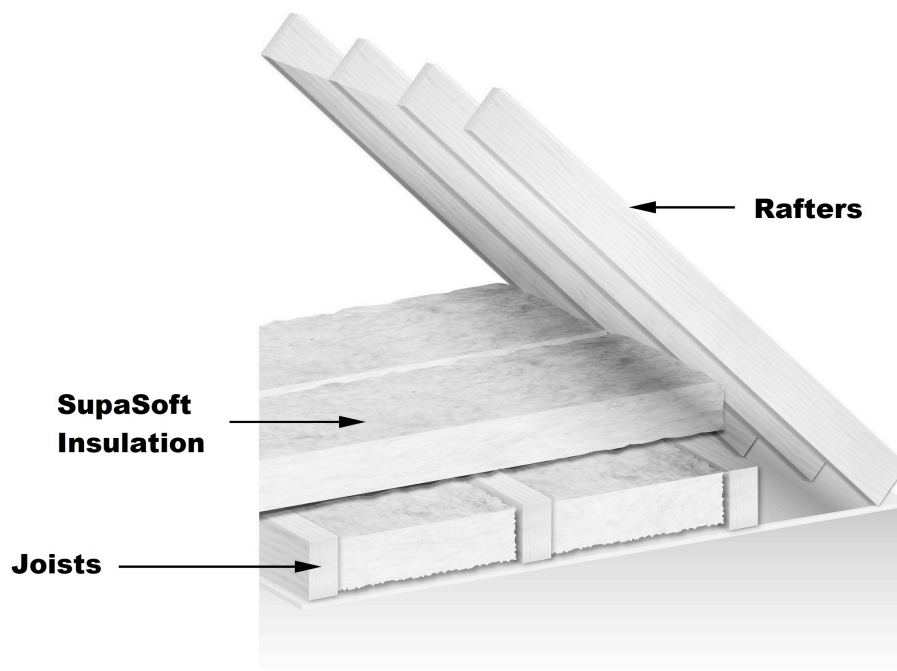
INSULATION DEPTH (mm)			SupaSoft Insulation $\lambda$ 0.034 W/mK
Existing Fibreglass	Additional SupaSoft Insulation	Total Depth	U-value W/m <sup>2</sup> K
75	200	275	0.15
75	150	225	0.18
100	200	300	0.14
100	150	250	0.17
125	200	325	0.13
125	150	275	0.15
125	100	225	0.19
150	200	350	0.12
150	150	300	0.14
150	100	250	0.17

## Insulating your loft with SupaSoft Insulation

Insulating at ceiling level within the roof space is the easiest way to reduce heat loss through the roof. Insulation can be installed in loft spaces to a large depth that allows high energy efficiency to be achieved.

SupaSoft Insulation is easy and safe to install in any loft situation. For existing buildings, we recommend a minimum depth of 250mm of our insulation in the loft space. Larger depths may be required to comply with current Building Regulations.

- Fit first layer of insulation between the joists ensuring all joints are close-butted to avoid air gaps. Cross-lay additional layers of insulation to reduce thermal bridging.
- Where a low vapour resistance membrane is used, take insulation over the wall plate to meet the wall insulation and push tight against the breather membrane. Refer to the membrane manufacturer for guidance on eaves ventilation.
- Where a high vapour resistance membrane is used, eaves ventilators are required. Care must be taken to avoid blocking the ventilation air path.
- SupaSoft Insulation can be used to insulate the floor of a boarded loft space. Fit the first layer between joists ensuring all joints are close-butted to avoid air gaps.



- Fit additional layers of SupaSoft Insulation between cross laid joists following the same procedure as before.
- Insulation should not be fitted between joists under the water tanks. Additional layers of insulation should be installed along the sides of the tank to meet the lagging around the tank.
- As with other insulation products, it may be necessary to de-rate electrical cables buried in insulation. BS 7671: 2008 suggests that where wiring is completely surrounded by insulation, it may need to be de-rated to as low as half its free air current carrying capacity. Guidance should be sought from a qualified electrician.
- Down-light covers that meet Part F and Part B of the Building Regulations should be used where appropriate.

- Should air-tightness performance be required, use a separate and sealed air leakage barrier attached to the ceiling joists.

## Things to consider prior to insulating with SupasSoft insulation

### State of repair

Your loft should be in a good state of repair prior to installing insulation. You should give consideration to the following:

### Ventilation

Ventilation prevents the risk of condensation forming in your loft. Condensation promotes mould growth, which can endanger the health and well-being of building occupants and ultimately the integrity of the building fabric through rotting and degradation. As you increase the depth of insulation in your loft, the loft space may become colder in winter making the need for ventilation important.

You should ensure that existing ventilation pathways are kept clear prior to installing insulation.

### Rainwater penetration

You should ensure there is no visible ongoing rainwater penetration or evidence of such penetration. If there is evidence of rainwater penetration you should ensure repairs are made prior to installing insulation.

### Ceiling condition

Your ceiling shall be in a good visible state of repair.

### Electrical connections

There should be no visible defects in the electrical wiring of the roof space.

### Roof members

There should be no visible corrosion of the structural metal connections or degradation of timbers in the roof space.

### Leakage and damp

There should be no evidence of ongoing leakage or damp from existing water supply pipework, tanks or heating systems. If you see evidence of a leak, ensure repairs are made prior to installing insulation.

### Ventilation impediment

Where existing insulation has been pushed into the eaves and is impeding ventilation pathways, this should be moved prior to installing new insulation. If necessary, insulation interrupters/rafter trays should be fitted to ensure the air path remains open.

### Pre-existing insulation

Existing loft insulation which is still fit for purpose can be left in situ and topped up to comply with current building regulations/standards. Examples of insulation being unfit for purpose include health and safety concerns (e.g. due to vermin infestation or bird litter or where signs of damp are visible).

Care should be taken not to damage existing insulation around water tanks and pipework if it is in good condition.

## **Asbestos**

Care should be taken around Asbestos and Asbestos-Containing Materials (ACMs) that are sometimes found in the loft spaces where it is used to insulate water tanks and pipes etc. and in heating systems for flues etc. Please seek expert advice when asbestos is encountered.

## **Protected Species**

Please seek advice from the relevant body if you encounter protected species.

## **Clearance from flues or chimneys**

SupaSoft insulation should not be installed within 150mm of a working flue or chimney.

## **Electrical apparatus**

A recessed light fitting that is not type “F-capped”, should either be replaced with a fitting that is certified both “F-capped” and “IP6X dust tight” rated at 50 watt or have equivalent covers placed over them to comply with relevant industry standards BS EN 60598-1/BS EN 60598-2.

For other electrical apparatus penetrating the ceiling the insulation material shall be retained at a minimum of 75mm (maximum 150mm) away from the apparatus.

Any transformers or ballast units (e.g. for halogen or LED lighting) should be placed on a suitably sized plate (typically 150x150mm) made from non-combustible material, which sits on top of the insulation where possible. If not possible the insulation material shall be retained at a minimum of 75mm (maximum 150mm). Transformers or ballast units should not be buried under insulation material unless they are specifically approved for this purpose.

## **High-ampere electric cables**

Electric cables supplying storage heaters, immersion heaters, electric showers, electric cookers or solar PV shall not be covered by thermal insulation. Cables to these appliances shall be lifted above the insulation. If this is not possible, the insulation must be retained at a minimum distance of 75mm (maximum 150mm).

## **Technical Support**

We offer a comprehensive support to meet all your technical requirements including:

- For technical advice call **01768 486285**
- On-site and off-site support throughout the design and build process
- Advice on meeting current regulations including Building Regulations
- U-value and condensation risk analysis
- Advice on environmental impact
- Application guidance notes, comprehensive product data and reports.

## **Further Information**

For further information please contact us at the address below.