

Keeping you  
snug wherever  
you call home...

Application Guidance  
**COLD ROOF**



**therma  
fleece**<sup>®</sup>  
British wool insulation

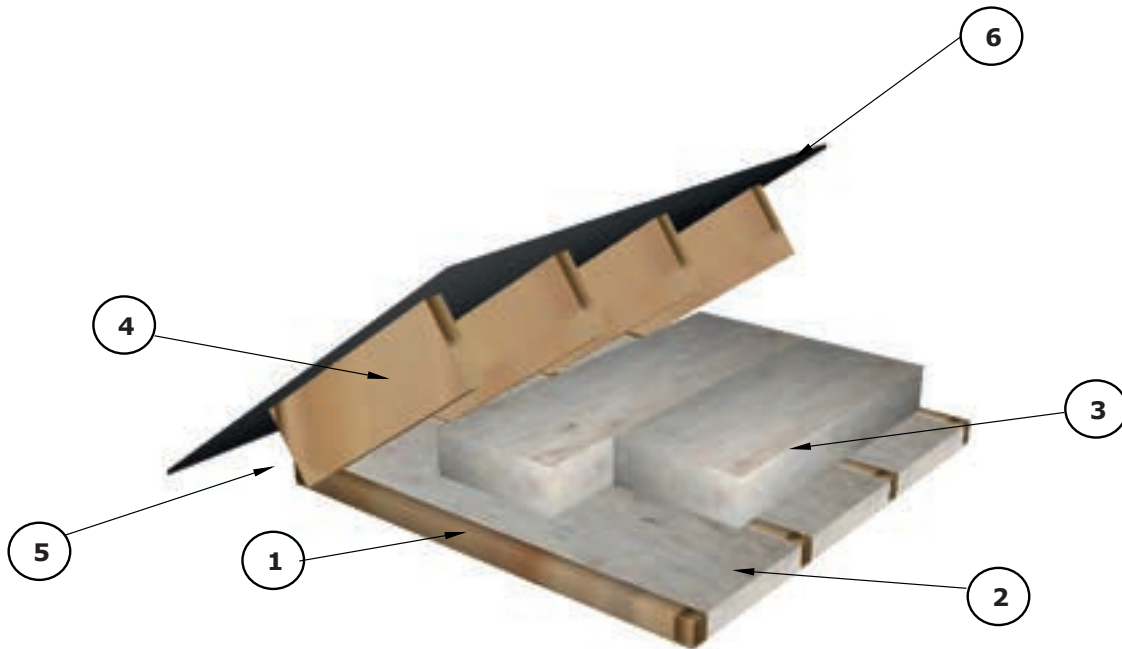
## INSTALLING THERMAFLEECE

Thermafleece insulation is easy and safe to install in any loft situation. For existing buildings, we recommend a minimum depth of 240mm of CosyWool Roll in the loft space. For new builds, we recommend a minimum depth of 300mm of Thermafleece CosyWool Roll.

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 channels running the full height of the insulation.

Where a low vapour resistance breather membrane is used, take insulation over the wall plate to meet the wall insulation and push close to the breather membrane allow 20mm to accommodate the membrane drape. Refer to the membrane suppliers guidance for details.

Where a high vapour resistance membrane is used, ventilation at the eaves must be maintained. Ensure a gap of at least 50mm between the insulation and the eaves vents to ensure adequate air flow into the loft space.



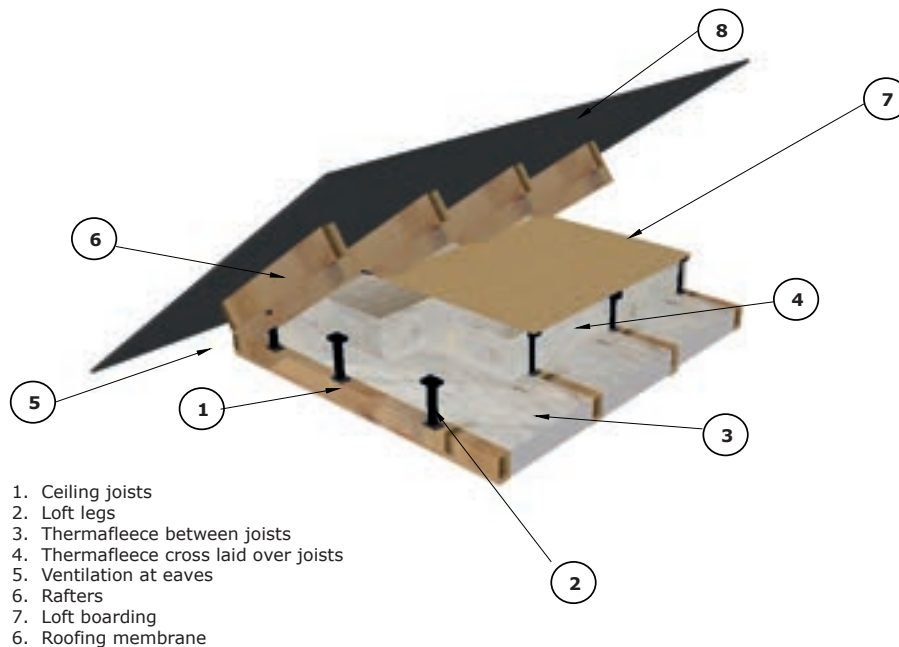
1. Ceiling joists
2. Thermafleece between joists
3. Thermafleece cross load over joists
4. Rafters
5. Ventilation at eaves
6. Roofing membranes

Thermafleece can also be used with loft legs to provide a boarded area for storage whilst also maintaining an appropriate depth of insulation. Refer to the loft leg manufacturer's instructions for installation. Thermafleece is installed as below. Care should be taken to avoid gaps in the insulation around the loft leg.

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 all insulation products, electrical cables in close proximity to insulation must be appropriately rated. It may be necessary to de-rate electrical cables. 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 necessary.



Typical U-Value - W/m <sup>2</sup> K			
Thermafleece over joists	Thermafleece CosyWool between joists		
	100mm	150mm	170mm
100mm	0.19	0.16	0.15
140mm	0.16	0.14	0.13
150mm	0.16	0.13	0.13
200mm	0.13	0.11	0.11

## Performance

Thermafleece will last the life of the building under normal conditions so once installed it does not require replacement. In the event of a significant roof leak or flood such that the insulation becomes wet, remove the insulation and replace with new insulation once the area has dried out and repairs made.

## State of repair

Your loft should be in a good state of repair prior to installing insulation.

## 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 timbers

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

## **Protected Species**

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

## **Clearance from flues or chimneys**

Thermafleece 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).

## YOUR NOTES

This information is given in good faith as a general guide to users and specifiers of Thermafleece. This information is not a substitute for any design that may be necessary to determine suitability of the products for your end-use. Since we have no influence over project or site specific issues, Eden Renewable Innovations Ltd makes no warranties or accepts no liability in relation to the use of this information.

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