

# All the facts...

Thermafleece UltraWool is a high density ultra-efficient insulation rich in British sheep's wool and is the ideal choice if you are looking for maximum thermal performance when space is at a premium.

With a density of 31 kg/m<sup>3</sup> Thermafleece UltraWool also helps provide exceptional acoustic insulation performance in wall, floor and roof systems.

Research shows that using 75% wool in combination with recycled fibres outperforms alternative products with a higher percentage of wool. Our wool rich blend ensures you get the full benefit of sheep's wool with enhanced performance, durability and sustainability.

Like all Thermafleece products, it is long-lasting, safe to handle and contributes to a healthier indoor environment by regulating moisture and absorbing harmful airborne substances in the home.

## Key Facts

- ➊ Width (mm) – 390, 590
- ➋ Thickness (mm) – 50, 70, 90
- ➌ Thermal conductivity – 0.035 W/mK
- ➍ Sound absorption – NRC 1.10 @ 90mm
- ➎ Sound reduction – Rw 41dB – 54dB @ 70mm
- ➏ Highly breathable
- ➐ Made in the UK
- ➑ Contains British wool
- ➒ Manufactured to ISO 9001
- ➓ Can be recycled

## Applications

- **Roofs** – Lofts & warm roof
- **Walls** – Timber frame & solid wall
- **Floors** – Suspended ground floor & between floor

## Why Insulate with Thermafleece UltraWool?

Insulating a property will significantly reduce the amount of energy lost from the building envelope, reducing energy consumption and carbon dioxide released to the atmosphere.

### High Performance

With a Thermal Conductivity of 0.035 W/mK, Thermafleece UltraWool is the best performing natural fibre-based insulation on the market.

### Cost Effective

Energy savings from using Thermafleece UltraWool mean it can pay for itself in a few years.

### Long Lasting

Thermafleece UltraWool contains a lofting agent to maintain durability, fibre stability and structural integrity.

### Sustainable

Thermafleece UltraWool can reduce CO<sub>2</sub> emissions by many tonnes over the lifetime of use. Wool also fixes carbon dioxide helping reduce greenhouse gas levels.

### Safe

Thermafleece UltraWool is safe to handle and can be recycled or safely disposed of at the end of its life.

## Technical Support

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

- For technical advice call us on **01768 486285** or email [enquiries@thermafleece.com](mailto:enquiries@thermafleece.com)
- 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

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## Specifications

### Performance

- Thermal Conductivity:  $0.035 \text{ Wm}^{-1}\text{K}^{-1}$
- Water Absorption (@100% RH): 30% w/w
- Specific Heat Capacity:  $1800 \text{ Jkg}^{-1}\text{K}^{-1}$
- Mould Resistance: CUAP 2002-01-25: Pass
- Moth/Beetle Proofing: ISO 3998: Pass
- Vapour Resistivity:  $9 \text{ MN}\cdot\text{s}\cdot\text{g}^{-1}\text{m}^{-1}$
- BS 5803-4, Flammability & Smoulder Resistance: Pass
- EN11925-2, Reaction to Fire: Pass
- Fire Classification: EuroClass E
- Recoverability and thickness, EN 823: Pass
- Dimensional stability to EN 1604: Pass

### Standards

- Manufactured to ISO 9001

### Environmental

- GWP (A1-A3):  $1.63 \text{ kgCO}_2\text{e}$
- GWP (A1-A3) inc. biogenic carbon:  $0.59 \text{ kgCO}_2\text{e}$
- Recycled Content: 20%
- Recyclable: Yes

### Sizes

- **Thicknesses** – 50, 70 & 90 mm
- **Widths** – 390 & 590 mm
- **Slab Length** – 1200 mm

### R Values

Thickness mm (tolerance +/- 5mm)	Thermal Resistance $\text{Km}^2\text{W}$
50	1.43
70	2.00
100	2.86
140	4.00
190	5.43
240	6.86

## Installation and Handling

Thermafleece UltraWool is non-hazardous and can be handled without protective clothing, although we recommend you wear PPE in spaces such as lofts.

Protect the insulation from prolonged exposure to sunlight when unpacked and avoid wetting, store under cover and clear of the ground.

If the insulation gets wet during storage or as a result of flooding in service, remove the affected insulation and replace with new.

When installed in walls and floors, spaces filled with UltraWool should be considered as concealed voids for the purposes of fire risk and cavity barriers installed as appropriate. Thermafleece UltraWool is not suitable for use as a cavity barrier.

Thermafleece can be safely and easily torn apart, but if you need a more accurate edge then we recommend the 'Roll and Cut' Method. Tools Required: Sharp Scalloped Edge Knife or Insulation Saw

1. For an accurate length. Roll the insulation as tightly as possible along the width. Measure where you need to cut then taking the insulation saw / knife easily cut through. This provides a nice, neat edge and is an alternative to tearing by hand.

2. To cut the width of the roll: Keep the insulation rolled and do not unwind. Measure the required width that you need then using the knife or insulation saw begin to cut through the whole roll.

You can also cut Thermafleece by tightly compressing or clamping the insulation between two pieces of solid 15mm board. Overhang the fleece where you want to cut keeping the two board edges aligned. Saw cut the edge using a sharp, scalloped edged knife and keep the blade firm and square against both board edges throughout. Trim any fine remaining fibres with large scissors or shears.

### Where to Buy

Our products are available through a wide network of merchants and distributors. To find out more visit our web site [www.Thermafleece.com](http://www.Thermafleece.com) or call us on 01768 486285.