

Factsheet



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/m³ 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 Information

-  Width (mm) – 390, 590
-  Vapour open
-  Thickness (mm) – 50, 70, 90
-  Thermal conductivity – 0.035 W/mK
-  Sound absorption – NRC 1.10 @ 90mm
-  Recyclable
-  Manufactured to ISO 9001 & 14001
-  Made in the UK
-  Made from British wool
-  Contains recycled materials – 25%
-  Highly breathable

Best For

- Floors – Suspended ground floor & between floors
- Lofts – Cold roofs
- Warm Roofs – Pitched roof or attic conversions
- Walls – Timber frame & solid (internal)

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 CO₂ 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
- 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

Specifications

Performance

- Dimensional Stability to EN 1604 – Pass
- EPD registration no. S-P-04468
- EPD valid to 31/10/26
- Fire Classification – EuroClass E
- Flammability & Smoulder Resistance (BS 5803-4) - Pass
- Manufactured to ISO 9001 & 14001
- Moth/Beetle Proofing: ISO 3998 - Pass
- Mould Resistance: CUAP 2002-01-25 - Pass
- Recoverability and Thickness (EN 823) - Pass
- Recyclable
- Recycled Content – 20%
- Sound Reduction - $R_w = 41\text{dB}$
- Specific Heat Capacity - $1800\text{ Jkg}^{-1}\text{K}^{-1}$
- Thermal Conductivity - $0.035\text{ Wm}^{-1}\text{K}^{-1}$
- Vapour Resistivity - $9\text{ MN}\cdot\text{s}\cdot\text{g}^{-1}\text{m}^{-1}$
- Water Absorption (@100% RH) – 24% w/w

Climate Impact

	Cradle to Gate	Product Lifecycle	Product Carbon Footprint
Standard	EN15804	EN15804	*PAS 2050
Stage	A1-A3	A1-C4	60 year service life
Units	0.05 kg CO _{2e}	1.44 kg CO _{2e}	0.64 kg CO _{2e}

*Greenhouse gas emission calculated by Eden Renewable Innovations Ltd in accordance with PAS 2050, self declared

**Functional unit: 1 m² R 1m²K/W

Acoustic Absorption

Thickness	Weighted Sound Absorption Rating a_w	NRC	Class
(mm)	EN ISO 11654:1997	EN ISO 11654:1997	ASTM C 423-01
50	0.85	0.85	B
90	1	1.1	A

Sizes

- Thicknesses (mm) tolerance +/- 5mm – 50, 70, 90
- Widths (mm) – 390 & 590
- Slab Length (mm) – 1200

R-Values

Thickness (mm)	Thermal Resistance (Km ² W)
50	1.43
70	2
100	2.86
140	4
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.

For cutting information visit the Thermafleece UltraWool product page on the website or take a look at the video on [YouTube](#).

Where to Buy

Our products are available through a wide network of merchants and distributors. To find out more visit www.thermafleece.com or call us on 01768 486285.

