

# All the facts...

Hemp is a fast-growing, low-impact plant crop that produces fine fibres suitable for insulation.

Thermafleece NatraHemp is a medium density insulation rich in home-grown hemp fibres and is a safe, efficient and durable alternative when plant fibre is the preferred choice.

Thermafleece NatraHemp fits securely between rafters, joists and studs providing excellent thermal insulation performance. What's more, with a density of 25 kg/m<sup>3</sup>, Thermafleece NatraHemp can provide good acoustic insulation in a variety of systems.

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

## Key Facts

- ➔ Width (mm) – 370, 570
- 📏 Thickness (mm) – 50, 70, 100
- 🌡️ Thermal conductivity – 0.040 W/mK
- 🔊 Sound absorption – NRC 0.90 @ 100mm
- 🌬️ Highly breathable
- 🇬🇧 Made in the UK
- 🇬🇧 Contains British hemp
- 🏭 Manufactured to ISO 9001 & 14001
- ♻️ Can be recycled

## Applications

- **Roofs** – Lofts & warm roofs
- **Walls** – Timber frame & solid walls
- **Floors** – Suspended ground floors & between floors

## Why Insulate With Thermafleece NatraHemp?

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

### Performance

With a Thermal Conductivity of 0.040 W/mK, Thermafleece NatraHemp provides a better level of performance compared to low density insulation.

### Cost Effective

Energy savings from using Thermafleece NatraHemp meaning it can pay for itself in a few years.

### Long Lasting

Thermafleece NatraHemp contains a lofting agent to maintain fibre stability and structural integrity throughout.

### Sustainable

Using Thermafleece NatraHemp can reduce your carbon emissions by many tonnes over the lifetime of use. The hemp fibres fix carbon dioxide further helping reduce greenhouse gas levels.

### Safe

Thermafleece NatraHemp is safe to handle without the need for personal protective equipment. It can be recycled or safely disposed of at the end of its life.

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## Specifications

### Performance

- Thermal Conductivity:  $0.040 \text{ Wm}^{-1}\text{K}^{-1}$
- Density:  $25 \text{ kgm}^{-3}$
- Vapour Resistivity:  $9 \text{ MN}\cdot\text{s}\cdot\text{g}^{-1}\text{m}^{-1}$
- Water Absorption (@100% RH): 17% w/w
- Specific Heat Capacity  $1800 \text{ Jkg}^{-1}\text{K}^{-1}$
- Flammability & smoulder resistance to BS 5803-4: pass

### Acoustic

- EN 11654:1997: Class A @ 100mm
- EN 11654:1997: Class A @ 70mm

### Accreditations

- Manufactured to ISO 9001 & 14001

### Environmental

- Embodied Energy (Net of Non-Fossil Feedstock Energy):  $10 \text{ MJkg}^{-1}$
- Recycled Content: 37.5%
- Recyclable: Yes

### Sizes

- **Thicknesses** – 50, 70 & 100 mm
- **Widths** – 370 & 570 mm
- **Length** – 1200 mm

### R Values

Thickness mm (tolerance +/- 5mm)	Thermal Resistance $\text{Km}^2\text{W}$
70	1.75
100	2.50
140	3.50
170	4.25
200	5.00
270	6.75
300	7.50

## Installation and Handling

Thermafleece NatraHemp is harmless and can be installed without gloves or protective clothing, although we recommend you wear a dust mask in enclosed spaces such as lofts.

Thermafleece NatraHemp can be used in conjunction with a vapour permeable membrane to retain the benefits of water vapour absorption and release.

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

For more accurate cutting, tightly compress or clamp the insulation between two pieces of solid 15mm board. Overhang the slab where you want to cut keeping the two board edges aligned. Cut the edge with a scalloped edged knife and keep the blade firm and square against both board edges throughout.