Factsheet

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

Thermafleece NatraHemp is a medium density insulation containing 60% 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 28 kg/m^3, 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 Information

- Width (mm) – 370, 570
- Vapour open
- Thickness (mm) – 50, 70, 100
- Thermal conductivity – 0.042 W/mK
- Sound absorption – NRC 0.90 @ 100mm
- Recyclable
- Manufactured to ISO 9001 & 14001
- Made in the UK
- Contains recycled materials – 37.5%
- Highly breathable

Best For

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

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 0.042 W/mK, Thermafleece NatraHemp provides an effective level of insulation performance.

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.

Technical Support

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

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

Eden Renewable Innovations Ltd

Sales & General Enquiries: **017684 86285** • enquiries@thermafleece.com • www.thermafleece.com (V3)

Specifications

Performance

- Dimensional Stability to EN 1604 – Pass
- Flammability & Smoulder Resistance (BS 5803-4) - Pass
- Manufactured to ISO 9001 & 14001
- Recoverability and Thickness (EN 823) - Pass
- Recyclable
- Recycled Content – 37.5%
- Sound Reduction - Rw = 40dB
- Specific Heat Capacity - 1800 $Jkg^{-1}K^{-1}$
- Thermal Conductivity - 0.042 $Wm^{-1}K^{-1}$
- Vapour Resistivity - 9 $MN{\cdot}s{\cdot}g^{-1}m^{-1}$
- Water Absorption (@100% RH) – 17% w/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
70	0.85	0.85	B
100	1	0.9	A

Sizes

- Thicknesses (mm) tolerance +/- 5mm – 50, 70, 100
- Widths (mm) – 370 & 570
- Length (mm) – 1200

R Values

Thickness (mm)	Thermal Resistance (Km^2W)
50	1.19
70	1.67
100	2.38
140	3.33
170	4.05
200	4.76
270	6.43
300	7.14

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.

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 NatraHemp should be considered as concealed voids for the purposes of fire and cavity barriers installed as appropriate. Thermafleece NatraHemp is not suitable for use as a cavity barrier.

For 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.

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 or call us on 01768 486285.

For technical advice call us on **01768 486285** or email enquiries@thermafleece.com.