THERMAFLEECE®

SHEEP'S WOOL THERMAL AND ACOUSTIC INSULATION

THERMAL EFFICIENCY

Thermafleece is widely recognised as one of the country's leading brands of natural thermal insulation. In addition to providing first class thermal performance, Thermafleece provides excellent acoustic performance and contributes towards a healthier indoor environment.

Why Insulate

Insulating a property will significantly reduce the amount of energy that is lost from the building envelope. By reducing this wastage, less energy is consumed and less carbon dioxide released to the atmosphere. However, the choice of insulation material can also contribute towards a reduction in carbon dioxide emissions. Since natural insulation such as Thermafleece requires much less energy in its production, individuals can make an additional contribution to the well being of our environment by choosing this type of sustainable insulation.

Thermal Performance

Thermafleece is manufactured using state of the art processes to derive a low density and low thermal conductivity in the finished insulation. As a result, Thermafleece has a thermal conductivity of 0.039 W/mK which places its thermal performance in line with conventional alternatives.

The natural 'springiness' of Thermafleece batts ensures that the insulation fits tightly between rafters ensuring that any potential airflow around the insulation is lowered to an absolute minimum.

The various sizes of Thermafleece can be used in conjunction to achieve specific levels of thermal insulation depending on the circumstance. Thermafleece is supplied in two widths and three different thicknesses to ensure full coverage. It is also easy to cut enabling irregular areas to be fully insulated.

Structural Integrity

In order to ensure consistent thermal performance over the lifetime of the insulation, it is important that insulation retains its shape throughout its service life. Thermafleece contains a lofting agent to maintain fibre stability and ensure the insulation batts maintain structural integrity throughout the service life of the material. The manufacturing process ensures that each insulation batt is composed of a continuous lattice of wool fibres that will not split or delaminate in service.

THICKNESS +/– 5mm	THERMAL RESISTANCE
50 mm	1.25 Km^2/W
75 mm	1.90 Km^2/W
100 mm	2.55 Km^2/W
150 mm 150 = 2 x 75mm or 1 x 100mm + 1 x 50mm	3.80 Km^2/W
200 mm 200 = 2 x 100 mm	5.10 Km^2/W
250 mm 250 = 2 x 100mm + 1 x 50mm	6.35 Km^2/W

Thermafleece – Controlling Heat

In addition to providing first-class thermal performance, the wool in Thermafleece is capable of releasing and creating heat. This process can have a stabilising influence over air temperature.

If the outside temperature increases and begins to heat the wool fibre, it releases moisture which has a cooling effect on the fibre. This in turn can reduce the flow of heat to the inside of the building. Through this mechanism, peak temperatures can be reduced by as much as 7°C when compared to buildings containing synthetic insulation. Conversely, in the winter the absorption of moisture by wool insulation can increase peak temperatures by up to 4°C compared to buildings containing synthetic insulation.

In line with good practice, Thermafleece should be considered in conjunction with the range of measures available in order to maximise thermal efficiency.

THERMAFLEECE

Healthy to use. Healthy to live with

For further information contact:

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BUILDING ON WHAT COMES NATURALLY

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