

Environmentally Friendly

RAMS Insulation

What is embodied energy?

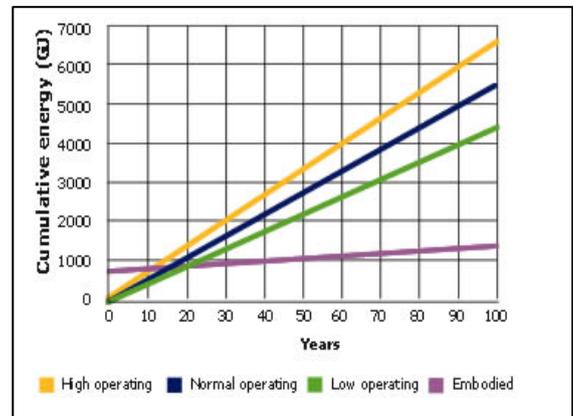
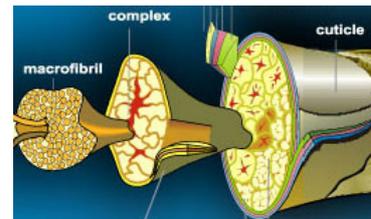
Embodied energy is the energy required to produce the material and manufacture it to a building-grade insulation standard. It is typically measured in kilo Watt Hours per cubic metre (kWh/m³). Wool insulation contains the least embodied energy of any insulation available, meaning that in a very short time, it will save more energy than will have gone into its production. Most common insulation materials will take many years to achieve this break-even point and some will never reach it at all. The embodied energy of Sheep Wool Insulation is 15kWh m⁻³ (54MJ m⁻³) which is less than half of that of cellulose insulation and one sixth of that of mineral wool.

Wool - Biodegradable & Renewable:

Wool is a natural fibre that is totally renewable. Wool fibre is made from keratin, an insoluble protein with quite a distinctive structure. Each piece is made up of three essential components: the cuticle, the cortex, and the medulla.

Research by CSIRO has found that the average household contains about 1,000 GJ of energy embodied in the materials used in its construction. This is equivalent to about 15 years of normal operational energy use. For a house that lasts 100 years this is over 10 percent of the energy used in its life.

Embodied energy content varies greatly with different construction types. In many cases a higher embodied energy level can be justified if it contributes to lower operating energy. For example, large amounts of thermal mass, high in embodied energy, can significantly reduce heating and cooling needs in well designed and insulated passive solar houses.



Low Carbon Impact:

Wool captures 6 kg of Carbon dioxide per M²

No waste:

In production & Installation there is no waste accumulated

100% Biodegradable:

Wool when placed into the earth is biodegradable

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RAMS Insulation is a business division of International Trading Network Pty Ltd / Exporting Wool Insulation Since 1994