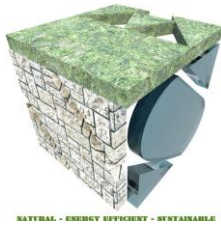


NATURAL - ENERGY EFFICIENT - SUSTAINABLE

Natural, Energy Efficient and Sustainable, Products and Services

Case Study - Company D



Product

Company D makes an eco-friendly home insulation product made from recycled newspapers (cellulose). This product is suitable for insulating Timber Framed Homes, Attics and Lofts.

Advantages of using this product when compared to others

- When used as wall insulation, cellulose has an extremely low thermal conductivity which is only better by products that cost a minimum of 3 times more on average.
- The product is natural and biodegradable.
- It's easy to fit into tight corners or unusually shaped gaps.
- The product can also insulate against sound.
- It requires less than 10% of the energy required by fibreglass to produce it.

Disadvantages of using this product when compared to others

- Can have a shorter lifespan than alternatives (approximately 60 years)
- Cellulose weighs roughly 3 times the weight of loose fibreglass, and therefore consideration must be given to support the weight.

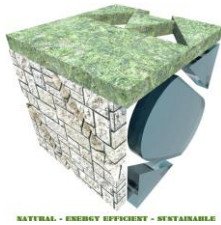
Application is suitable not just for new homes, but also for retrofitting old homes, apartments and commercial buildings.

The Industry

The domestic market for cellulose insulation products is currently established however it currently occupies a niche worth less than 1% of the total natural insulation market. The total market for natural insulation equates to less than 10% of all revenue, and includes products like wool, cork, hemp etc.

At the time of writing, there is limited information available on the market for recyclable paper. Company D has had some difficulty identifying a local sustainable source for due to most local producers having long established recycling policies and waste elimination measures.

The main application for this type of product, is in the roof, attic and walls of timber frame buildings. It is also commonly used in the roof of non-timber based buildings. It is estimated, that at the peak of the recent housing boom, just under 30% of all houses built in the domestic market were timber frame buildings.



Pricing

Due to the bespoke nature of most installations, it is impossible to give a set price for cellulose installation. Generally, cellulose is cheaper than most other forms of insulation, with the exception of Fibreglass: which has a lower lifespan and similar thermal conductivity when used in cavity walls and attics).

SWOT ANALYSIS

Strengths	<ul style="list-style-type: none"> • Few domestic competitors • Good product
Weaknesses	<ul style="list-style-type: none"> • Sourcing paper locally is difficult due to most suppliers having long term recycling policies and contracts
Opportunities	<ul style="list-style-type: none"> • Rising awareness of the impact of carbon footprints, potentially increasing demand for local produced products
Threat	<ul style="list-style-type: none"> • Legislation changes may restrict the usage of some fire retardant chemicals used to treat the product

Funding

Cellulose insulation is considered an energy saving product, which means it is often applicable for energy saving grants. In the domestic market, grants are available on a regular basis for this type of home improvement investment.

Legislation

The product meets all fire protection standards and is tested to BS5803.