

Product Scotland
Case Study – Winner
Sisaltech Ltd



Sisaltech Ltd

Sisaltech, based in Roslin, has developed an insulation product, Sisalwool, offering multiple environmental and user benefits, including repurposing waste materials, warmth and breathability.

The product stands out in the market due to its unique blend of natural fibres and its commitment to sustainability. Unlike conventional insulation products that rely on synthetic materials, Sisalwool combines sheep's wool sourced from the Harris Tweed industry and sisal fibres from reused coffee sacks. This innovative approach not only repurposes waste materials but also provides superior thermal and acoustic insulation properties.

Sisaltech's passion to provide a product with circular economy credentials and a low carbon footprint is evident across the small team of five employees. There is clear leadership from the founder and CEO, with all staff encouraged to generate ideas for improvements and business development, which are shared informally.

Highlights

Sisalwool is a unique natural fibre, breathable insulation product, providing multiple environmental and user health benefits

Sisaltech uses Scottish wool, some of it recycled and some of it waste from the processing of new wool. As part of their commitment to the circular economy, they also repurpose recycled coffee sacks from local coffee roasters, giving waste materials a second life. By integrating these natural fibres into Sisalwool, they not only reduce landfill waste but also create a highperformance, breathable insulation that benefits both buildings and the environment.

Commercially available through several outlets, including B&Q and Amazon



The Product Scotland Award recognises businesses that have developed a product that delivers significant environmental and business benefits. At the time of application, the product must have been developed and already in the marketplace.

The business actively engages with local sustainability groups and industry associations to promote best practice and drive collective action. This includes participation in the Alliance for Sustainable Building Products (ASBP) to share knowledge and develop best practices in insulation installation. They have also engaged with architects, including through architectural magazines and journals and they feature in the Scottish Edge Circular Economy Guide.

By collaborating with Harris Tweed producers and coffee roasters, Sisaltech is repurposing waste materials that would otherwise go to landfill, significantly reducing waste and promoting the circular economy. Sisalwool offer a 30 year warranty, which compares well with alternatives. However, unlike synthetic insulation, Sisalwool can be easily returned for full recycling at the end of its life.

Sisalwool is suitable for use retrofitting old solid stone buildings due to its breathability, unlike synthetic alternatives. This allows these buildings to be insulated, with the excellent thermal insulation properties reducing heat loss in winter and heat gain in summer, lowering energy consumption for heating and cooling. On average, households using Sisalwool can save up to 20% on their energy bills annually. For a typical household, this translates to savings of approximately £200 per year. From a health and safety perspective, the product is not harmful to touch or breathe when installing, unlike traditional synthetic insulation products.



Sisaltech anticipate that the market for the product will greatly increase once Building Regulations require embodied carbon to be considered. They are currently in discussion with the Energy Company Obligation ECO4 scheme and hope to become an approved product supplier for the UK Government backed scheme which targets low income and vulnerable, fuel poor households and the least energy efficient homes. If successful, Sisalwool would be used for retrofitting of solid stone properties.

Quote from the company:

"We are absolutely thrilled to be recognised as the winner of the VIBES 2024 Product Scotland Award. This accolade highlights our commitment to sustainability and innovation in the building materials sector. At Sisalwool, we believe that natural fibre insulation is key to creating healthier, more energy-efficient homes while reducing environmental impact. This award is a testament to the hard work of our entire team, and we are excited to continue pushing boundaries with eco-friendly solutions that benefit both people and the planet."