



# Product Certification

Q-Bot is a digital construction company, creating robotic solutions in the energy efficiency sector across both social and private housing.

## The Challenge

More than 10 million homes in the UK have suspended timber flooring and very few have been insulated due to the disruption and cost of doing so. Older homes with timber flooring can lose a significant amount of heat. Installing suspended timber floor insulation without uplifting flooring is a challenge that Q-Bot's underfloor insulation is designed to mitigate.

Their solution uses a remotely operated robotic device to apply spray-foam to the underside of the floor which causes minimal disruption and significantly reduces heat loss through the floor, providing a barrier to cold air drafts. To increase confidence and trust in their brand, Q-Bot sought to get their Insulation Solution independently verified by Energy Saving Trust's Product Certification service.



## Taking Action

To verify the energy savings, Energy Saving Trust modelled "before" and "after" scenarios using the energy modelling system BREDEM SAP and the Dynamic Engine – our market-leading calculation engine which is used widely throughout our work, including government reporting and consumer advice - to generate energy saving characteristics and scenarios for a range of property archetypes. This process produces robust and realistic energy saving claims for the purposes of consumer guidance when marketing the Q-Bot's Insulation Solution.

**“ The results of the verification process strongly enhance our energy savings claims. ”**

Q-Bot submitted on site evidence before and after installing underfloor insulation, along with the British Board of Agrément Certificate, the UK's leading construction certification body. The report demonstrated that that Q-Bot could be successfully deployed for insulating suspended timber ground floors without the requirement of lifting the entire flooring structure, either through a hatch or a vent to the under-floor cavity.



## Result

The results of the Dynamic Engine modelling demonstrated an increase in SAP score after insulation application, which was evident in all modelled property archetypes.

This result supports the well-established position that floor insulation improves the energy efficiency of buildings, with Q-Bot's underfloor insulation typically saving around £255 a year in an electrically heated home for domestic energy consumers.



“Q-Bot is really proud to be certified by Energy Saving Trust, reflecting such a great endorsement from a trusted and independent national body. The results of the verification process strongly enhance our energy savings claims and more broadly all the benefits of installing our robotic underfloor insulation. The team at EST has very been helpful and open to conversation.”

**- Audrey, Marketing Executive, Q-Bot**

Q-Bot's underfloor insulation successfully gained Energy Saving Trust's 'Verified' Product Certification stamp of approval provides independent assurance about the performance and claims associated with energy saving products.



## Why work with Energy Saving Trust?

We offer a range of services relating to the evaluation and verification of the performance of energy efficiency and renewable technology. EST Product Verification is a bespoke service, designed to assist businesses in communicating the energy and performance benefits of their products. The process involves the independent verification of a product's performance characteristics followed by the development of factual, informative, consumer-facing claims for use in promotional marketing materials.

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Learn more about [Q-bot's underfloor insulation](#)