



"Very impressed by the time spent assessing the house and the comprehensive report that followed"

Mr & Mrs Spencer, Beeston, Nottingham

Measures Installed
Solar Panels and Internal Wall Insulation

Case Study

Mr & Mrs Spencer have lived in their 1946-built bungalow in Chilwell, Beeston, for over 40 years. Since purchasing their **solid brick home**, they have made a series of improvements, including the addition of a modern **cavity-wall extension** at the front. Their retrofit journey has developed in phases, with each stage improving comfort, enhancing the appearance of the home, and reducing both energy demand and carbon emissions.

Before engaging with the HEAT Hub team at NEP, they had already completed several energy efficiency measures including **installing loft insulation, replacing older windows and fitting solar panels**. Their modern cavity wall extensions were also built with high levels of insulation in the walls, roof and floor, alongside modern double glazing. **The noticeable improvement in comfort and heat retention within the new extension demonstrated the benefits of a well-insulated building fabric.**

In March 2024, they attended the **HEAT Hub event in Broxtowe** to learn more about the support available for homeowners. Following the event, they **registered for a retrofit assessment and a future fit home energy plan**. At that stage, their priorities for home improvement included **improving the thermal performance of the solid brick main house, replacing older double-glazed windows** that had started to deteriorate and minimising the risk of heat loss throughout. Having experienced the difference the modern extension had made; they recognised that upgrading the older part of the property was the next logical step and welcomed the opportunity to receive tailored retrofit advice.

Outcome

Their future fit home energy plan recommended a phased programme of improvements including solid wall insulation, solid floor insulation, replacement double glazing and ultimately, an air source heat pump. Inspired by the recommendations, they began implementing the measures straight away. Reflecting on the service, they said they were **"very impressed by the time spent assessing the house and the comprehensive report that followed."** Using the guidance provided in the plan, they have since **replaced their old sealed-unit glazing**. They are currently **installing underfloor insulation themselves, while professional contractors are completing additional work including upgrading heating controls, internal wall and ceiling insulation.**

Although the improvements have been carried out gradually, they have already made a significant difference. Mr & Mrs Spencer report that **"as each room is completed, the change in the ambient temperature is obvious"**. They have also seen noticeable reductions in their energy bills. Combined with the electricity generated by their solar panels, the retrofit has helped protect them from rising energy prices. They estimated that their current bills are **"less than 50% of what it would have been had we not undertaken the work"**.

Next steps

The next stage of their retrofit journey is to complete the remaining improvements to the original solid brick part of the house. They are also planning a small extension and a kitchen renovation, where they intend to incorporate the same energy-saving principles and recommendations set out in their future fit home energy plan.

Their home is also featured on Greening Beeston's EcoTrail-NG9, a trail of local energy efficient homes that showcases resident improvements, sharing benefits and lessons learned with the community. Visitors can explore the trail using an online map, and, at each property, scan a QR code to access more information. Those unable to visit in person can also browse the featured homes online.

This case study demonstrates that successful retrofit is often a gradual process rather than a single project. By combining trusted advice, phased investment and shared community experiences, Mr & Mrs Spencer have been able to make informed decisions that continue to improve the comfort and resilience of their home. They are also helping inspire other homeowners to begin their own retrofit journey with their work under Eco-Trail and more recently, as key speakers at the HEAT Hub Whole House Retrofit Party held at the Temple Community Centre on the 20th of June.

For more information about the HEAT Hub including registering for advice on home energy retrofit, call 0115 985 3000 or visit: <https://www.homeenergyadviceteamhub.uk/>



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