UK Passivhaus Awards 2023

#PHTawards2023

SHEPHERDS BARN ENERPHIT PLUS

“We feel very comfortable in the house. It's very resilient. What's so good is the lack of draughts!!”

Sonny Shepherd



KEY STATS:

144 m² TFA	3.4 Occupancy	2020 Certified
174 m² GIA	-584 £/a Net running costs	524 £/a Demand running costs

PERFORMANCE:

24 kWh/m²a TFA Heat demand	12 W/m² TFA Peak heat load	0.18 ACH@50pa Airtightness
30 kWh/m²a TFA Primary Energy Demand	76 kWh/m²a TFA Primary Energy Generation	25 kWh/m²a GIA EUI
< 2 25°C Exceedance % PHPP/measured	208 $kgCO_2e/m^2$ GIA Upfront Carbon LETI	380 $kgCO_2e/m^2$ GIA Whole-life Carbon LETI

5-years to design and construct. Challenging planning constraints. Low impact design. AECB Daylight Standards. LETI Whole-life carbon A-rating. 30% improvement on RIBA 2030 Challenge for EUI and Whole-life carbon. ‘Zero’ waste. Self build.

LOCATION: Lanchester, County Durham

BUILDING TYPE: Residential retrofit

STANDARD: Passivhaus EnerPHit Plus

CONSTRUCTION: Masonry / timber Frame

TEAM CREDITS: Paul & Sonny Shepherd, Mark Siddall (LEAP), Alison Church (Jackson Church), John Butler (Sustainable Building Consultancy), Kym Mead (MEAD Ltd.)

THANKS TO SPONSORS

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