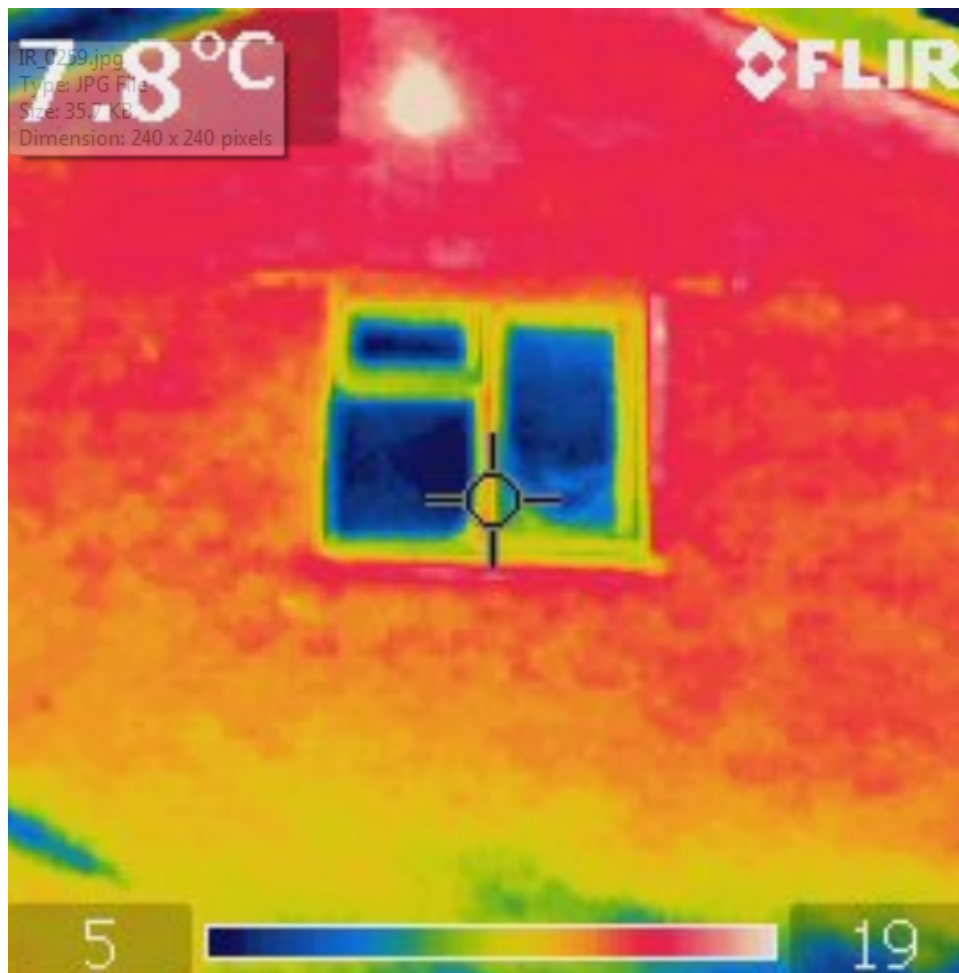


Beattie Passive has 3D modelled the existing house and the new extension and designed a continuous void from the existing foundations up the facade over the roof and linking to the ground floor walls and roof on the new build, eliminating thermal bridges and greatly improving the existing house u-values.

Existing wall

75mm Platinum Eco beam in existing Cavity
150mm Platinum Eco beam to new BP void
50mm King span K5 wall over clad phonic insulation
U-value 0.13K/m2k



Existing roof

219mm Platinum Eco bead to new BP void
50mm King span phonic K5 insulation over clad
100mm Platinum EPS 70 between ceiling joist.
U-value 0.09 W/m2k

Ground floor

150mm Eco slab ventilated shutter laid over existing ground floor slab.

300mm platinum Ecobead to underside of floor board.

U-value 0.1W/m²k

An interlocking 1200g vapour barrier linking the new extensions and the existing external walls and roof with 0.6 Air changes Air.

New Extension built with Beattie Passive Build System

U-values

Ground floor 0.11W/m²k

Walls 0.11W/m²k

Roofs 0.11w/m²k

Garage extension floor 0.11W/km²

Window and doors

Monster Joinery passive UPVC 0.78 W/km²

MVHR to existing and new extensions

Genvex GES system with 1250 watt inline electric heater

Space heating 1.5kw heater to lounge

Tower rail heaters to Bathrooms

Electric under floor heat mat to kitchen/dining room

Hot water

Super S electric hot water cylinder 210lts

And power shower fitted to showers

Photovoltaic

2 kW photovoltaic fitted to south facing roof.

This project is to be submitted by Steff Bell of Futurekomfort for Enerphit passive certification

