

66 Islingword Road, Brighton BN2 9SL

Overview

Age: 1860's

Type: Mid-terrace

No of bedrooms: 3

No of floors: 3

Floor area: 175 m2

Walls: Solid brick and bungaroosh

Key Features

+ Condensing boiler

+ External wall insulation

+ Solar PV panels



Introduction and approach

Eddie and his family have been living at their home for at Islingword Road since the 1990s.

When they moved in the ground floor of the house was two large workshops where Mears the greengrocers had previously parked their fruit delivery vehicles. There was small flat above. The workshop space was one of the main reasons they bought the house.

The first phase of work to convert the building into a family home was done in 2000. One of the ground floor workshops converted into a kitchen and living area, the 'butterfly' roof was removed and a two storey extension was built. The renovation took around six months and it cost around £60,000. The finishes were done by Eddie.

A second phase of work to expand the home was undertaken in 2010 with a second storey extension. At the same time the south facing front wall of the house was re-rendered as the render needed replacing after being damaged over time by driving rain. When this was done, 60mm of polystyrene external wall insulation was added.

Finally, an array of solar panels were installed on the south facing second storey roof.

Energy efficiency measures:

"After the original build and about 10 years later the outside render was really bad. It's south facing and gets a lot of wind and rain and salt, so I needed to re-render it. There was damp inside. We looked into systems of doing it and I thought external cladding was one of the best ones."

Around 2010 the render on the south street facing wall began to fall off, leading to damp in the house. The wall was repaired and re-rendered and at the same time 60mm of polystyrene external wall insulation was added. The insulated is fixed to the walls, then there is a base coat of render with a plastic mesh set into it and a final finishing polymer acrylic top coat. Initially, the wall was pure white, but now needs painting. This external wall insulation has significantly improved the thermal performance of the wall, has made the house warmer and the damp problems have gone.

Heating and hot water:

Heating and hot water are provided by a high efficiency Worcester Bosch Greenstar Combi mains gas boiler.

Renewables and Low carbon technology:

A 2.2 kWp array comprised of 9 no. mono crystalline solar panels was installed on the south facing second storey roof to take advantage of the Feed in Tariff in 2011. The Feed in Tariff was government scheme available at the time to encourage people to install solar panels. The scheme pays people for the renewable electricity they produce and export to the grid. The array of panels cost around £10,000, which has now be 'paid back' through the Feed in Tariff for the capital cost of the system. The system generates around 2,300 kWh of renewable electricity a year, which helps offset electricity use.



Eco Open Houses Online is a collaborative project between Low Carbon Trust, Brighton Permaculture Trust and Hanover Action. The event is funded by Brighton & Hove City Council Communities Fund's Carbon Reduction Fund.

