

Lynridge, 28 Riverside Road, Shoreham Beach BN43 5RB

Overview

Owners: Simon and Safiya Allum-Augier

Type: Detached Bungalow

Age: 1943

Beds: 3/4

Area: 110m²

Residents: 2

Key Features

Air source heat pump

Mechanical ventilation with heat recovery

Large solar array

Rainwater recycling for flushing toilets

Introduction and approach

Simon and Safiya fell in love with the 'beach pad' when they first viewed it in September 2022 and moved in June 2023. The previous owner had lived there since the property was built in 1943. Having had no modifications, on one hand the property was completely unspoiled, but once they moved in they knew they had a huge task on their hands!

Being one of the original detached bungalows on Shoreham Beach, they were fortunate to have a large front and even larger rear garden which Simon, with the help of their architect Ben, immediately saw the potential to achieve 'Passive House standard to the rear new build extension, and to achieve EnerPHit standard to the existing front part of the property.

After two years of having lived through icy cold winters, where mould grew in the inside of their windows and also in the wardrobes (!), Simon and Safiya are now excited to open the 'beach pad' and share their dream and knowledge to help and advise others.

The transformation is unrecognisable. The 'beach pad' uses a 12kW Vitron inverter coupled to 46kW of battery storage, an Aira



air source heat pump and, having made the property airtight, they use a Zehnder MVHR for ventilation. Even the tumble dryer is a low energy heat pump model. The Pad is now powered totally by electricity, and the gas has been disconnected.

This enables them to live off grid for 9 months of the year, and they are now reaping the benefits of all their hard work.

Energy Efficiency Measures

Heating and hot water

ASHP - Aira 6kW

Ventilation

Whole house ventilation with heat recovery (MVHR)
- Zehnder ComfoAirFlex 350

Insulation

Walls - New build: Thermalite blocks laid flat, 150 ml EWI. Mesh, breathable render coat, batten, counter batten, UV membrane & Vertical Cedar Cladding.

Existing walls: cavity wall with external wall insulation as above.

Windows - Rational triple glazed windows

Sliding doors: Solarlux

Roof - Flat warm roof on new build 150mm thick, pitched roof has loft insulation 400mm thick



Structural engineer -

Nigel DeSilva

MVHR -

Installed by Simon

AHSP -

Installed by Aira

Rational windows -

Installed by Simon

Patio doors -

Passivelux

Self-builder -

Simon Allum-Augier, 360 Finish Ltd

Renewables and low carbon technology

Solar panels - 455 Aiko Neostar x 24 panels
12kW Vitron inverter coupled to 46kW of battery storage

Energy use

Only connected to grid in July, accumulated 2858 kW July - October (4 months)

Water Conservation

Rainwater recycling stored for use of flushing toilets

Other sustainable measures/ lifestyle decisions

Simon and Safiya have a vegan lifestyle - composting, growing their own organic veg and salad.

Plan to return to using electric vehicle.

Lessons learned/further improvements

They chose to live in the property during construction with a blind Labrador dog, not for the faint hearted. Hard work but you can develop organically as you progress.

Still in progress - landscaping front of property.

Professionals/ Materials

Architect -

Ben Murdoch

