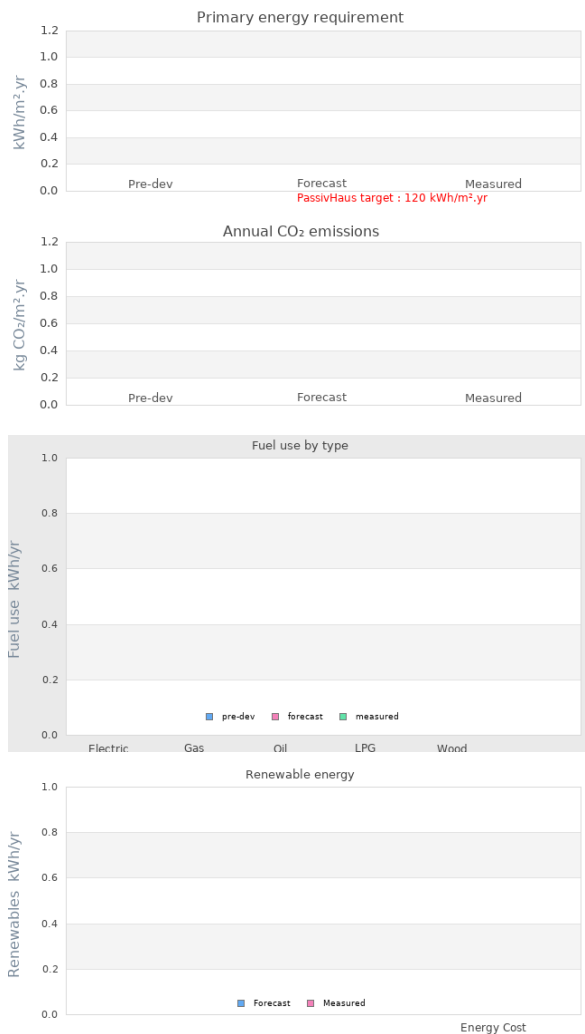


## Project name Bristol Passivhaus

**Project summary** This residential building stands on the grounds of a listed church with a parish from the 18th century. Due to the heritage of the site, the new build was required to be built in the style of the existing church and parish.



## Project Description

Projected build start date

Projected date of occupation

Project stage

Occupied

Project location

Bristol, Bristol, England

Energy target

PassivHaus

Build type

New build

Building sector

Private Residential

Property type

Detached

Existing external wall construction

Existing external wall additional information

Existing party wall construction

Floor area	411 m <sup>2</sup>
Floor area calculation method	PHPP
Building certification	Passivhaus certified

## Project team

Organisation

Project lead

Client Private Client

Architect Andrew Stone Architect Ltd

Mechanical & electrical consultant(s)

Energy consultant(s) Roderick Williams

Structural engineer

Quantity surveyor

Other consultant

Contractor Steve Beck Building Services & Herz & Lang GmbH

## Design strategies

Planned occupancy

Space heating strategy

Water heating strategy

Fuel strategy

Renewable energy generation strategy

Passive solar strategy

Space cooling strategy

Daylighting strategy

Ventilation strategy

Airtightness strategy

Strategy for minimising thermal bridges

Modelling strategy

Insulation strategy

Other relevant retrofit strategies

Other information (constraints or opportunities influencing project design or outcomes)

## Energy use

Fuel use by type (kWh/yr)

Fuel	previous	forecast	measured
<b>Electric</b>			
<b>Gas</b>			
<b>Oil</b>			
<b>LPG</b>			

Fuel	previous	forecast	measured
<b>Wood</b>			

### Primary energy requirement & CO2 emissions

	previous	forecast	measured
<b>Annual CO2 emissions</b> (kg CO2/m <sup>2</sup> .yr)	-	-	-
<b>Primary energy requirement</b> (kWh/m <sup>2</sup> .yr)	-	-	-

### Renewable energy (kWh/yr)

Renewables technology	forecast	measured
-		
-		
<b>Energy consumed by generation</b>		

### Airtightness ( m<sup>3</sup>/m<sup>2</sup>.hr @ 50 Pascals )

	Date of test	Test result
Pre-development airtightness	-	-
Final airtightness	-	-

### Annual space heat demand ( kWh/m<sup>2</sup>.yr )

	Pre-development	forecast	measured
<b>Space heat demand</b>	-	-	-

Whole house energy calculation method

Other energy calculation method

Predicted annual heating load

-

Other energy target(s)

## Building services

Occupancy

Space heating

Hot water

Ventilation

Controls

Cooking

Lighting

Appliances

Renewables

Strategy for minimising thermal bridges

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## Building construction

Storeys

Volume

Thermal fabric area

Roof description

Roof U-value

Walls description

Walls U-value

Party walls description

Party walls U-value

Floor description

Floor U-value

Glazed doors description

Glazed doors U-value

Opaque doors description

Opaque doors U-value

Windows description

Windows U-value

Windows energy transmittance  
(G-value)

Windows light transmittance

Rooflights description

Rooflights light transmittance

Rooflights U-value

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## Project images

