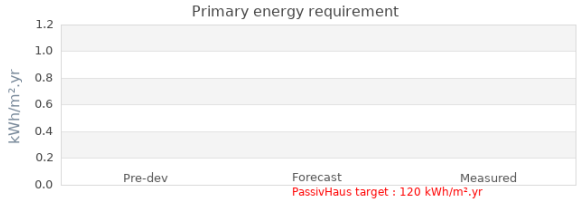
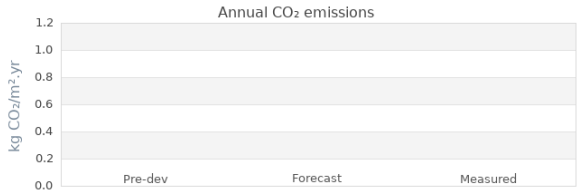
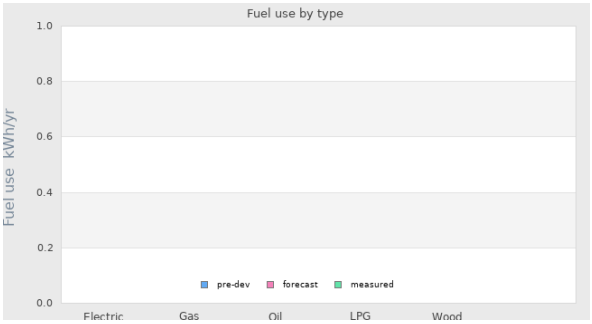
https://www.lowenergybuildings.org.uk/

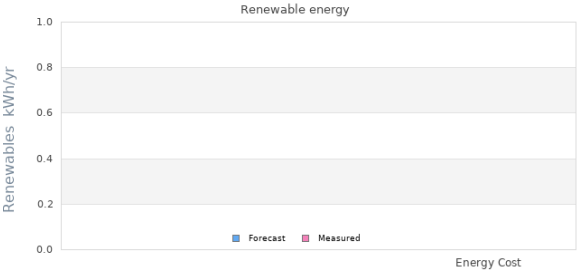
Project name Ashill Passivhaus, Norfolk

Project summary New 4 bed Passivhaus certified residential dwelling with open carport, traditional Norfolk vernacular, including associated utilities/services and access works.









Project Description

Projected build start date	
Projected date of occupation	
Project stage	Occupied
Project location	Ashill, Norfolk, England
Energy target	PassivHaus
Build type	New build
Building sector	Private Residential
Property type	Detached
Existing external wall construction	Masonry Cavity
Existing external wall additional information	
Existing party wall construction	
Floor area	187 m²

Floor area calculation method	
Building certification	Passivhaus certified

Project team

Organisation	
Project lead	
Client	
Architect	Parsons + Whittley Architects Ltd.
Mechanical & electrical consultant(s)	
Energy consultant(s)	
Structural engineer	
Quantity surveyor	
Other consultant	Alan Clarke
Contractor	Rowling Building Services Ltd.

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
Electric			
Gas			
Oil			
LPG			
Wood			

Fuel	previous	forecast	measured

Primary energy requirement & CO2 emissions

	previous	forecast	measured
Annual CO2 emissions (kg CO2/m².yr)	-	-	-
Primary energy requirement (kWh/m².yr)	-	-	-

Renewable energy (kWh/yr)

Renewables technology	forecast	measured
-		
-		
Energy consumed by generation		

Airtightness (m³/m².hr @ 50 Pascals)

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

Annual space heat demand (kWh/m².yr)

	Pre-development	forecast	measured
Space heat demand	-	-	-

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	

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

Project images