

#UKPHC18

# Haven Cottage

Strawbale Passivhaus, Suffolk

Andrew Goodman

Good Architecture

15-40  
ARCHITECTURE COLLECTIVE

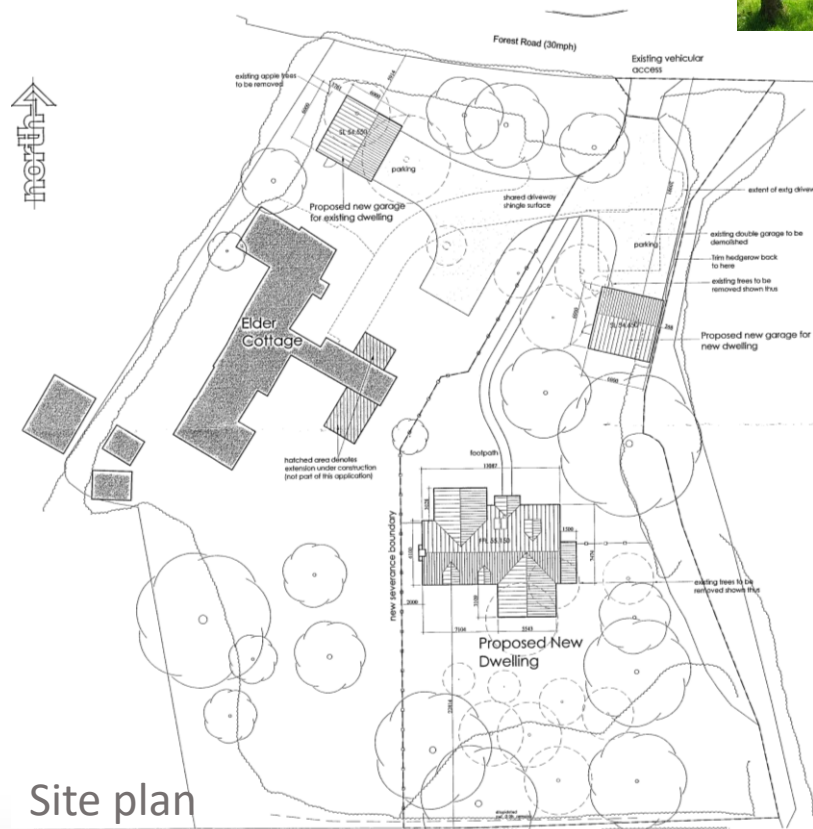


ukpassivhaus  
conference 2018

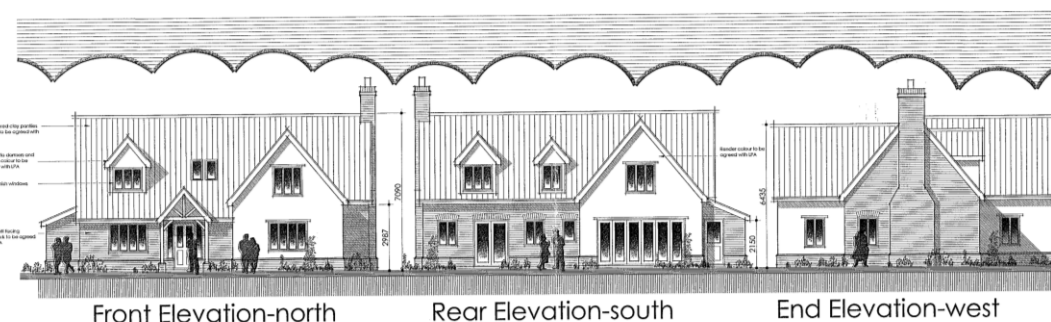


# The site

Existing planning drawings



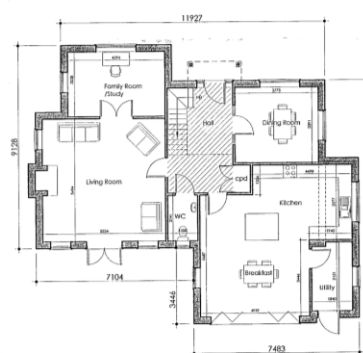
Site plan



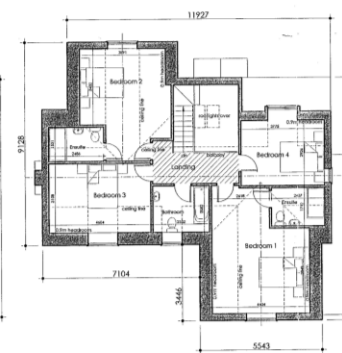
Front Elevation-north

Rear Elevation-south

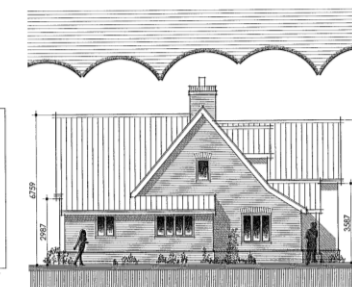
End Elevation-west



Ground Floor Plan



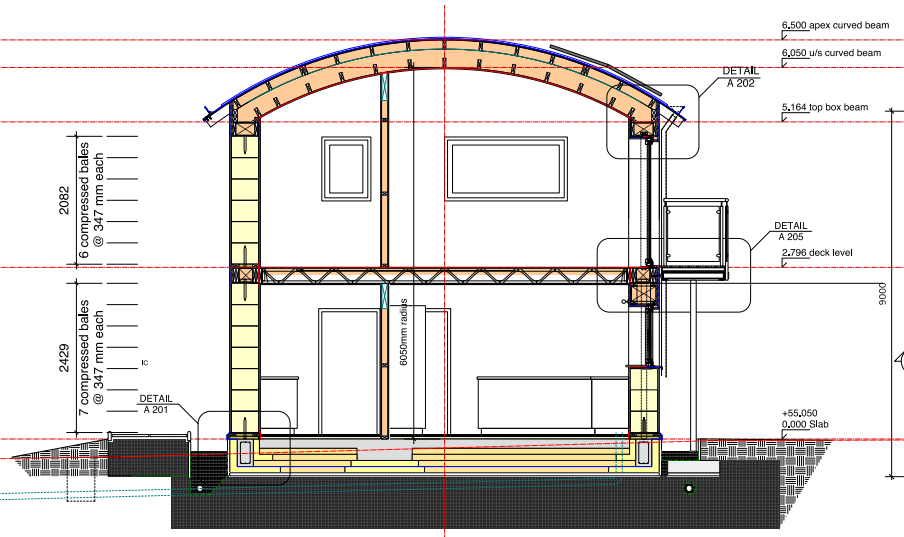
First Floor Plan



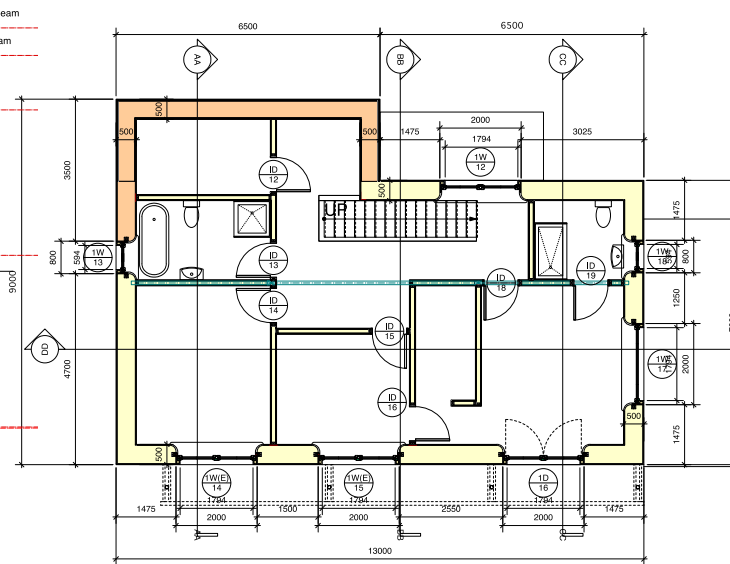
End Elevation-east



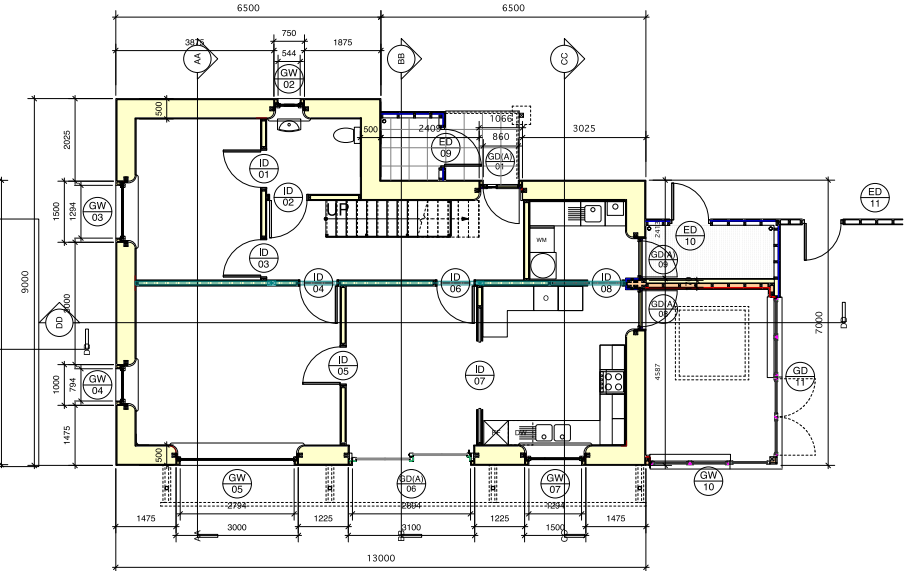
# New design



Section



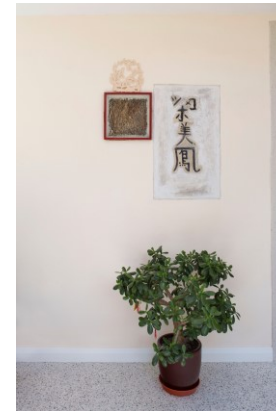
First floor plan



Ground floor plan



# Procurement



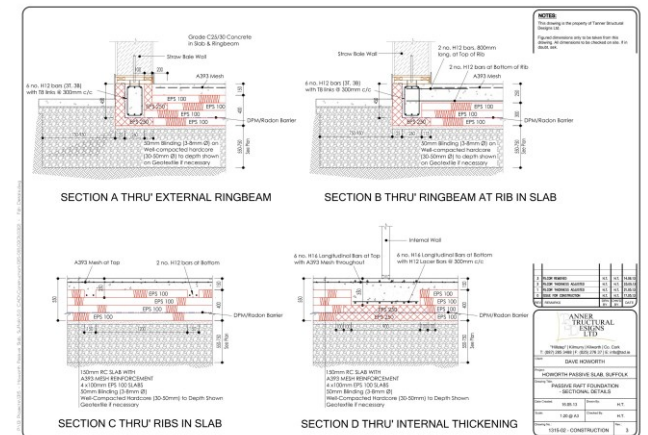
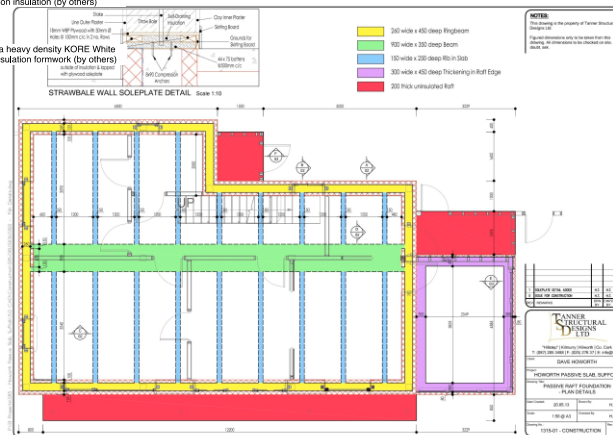
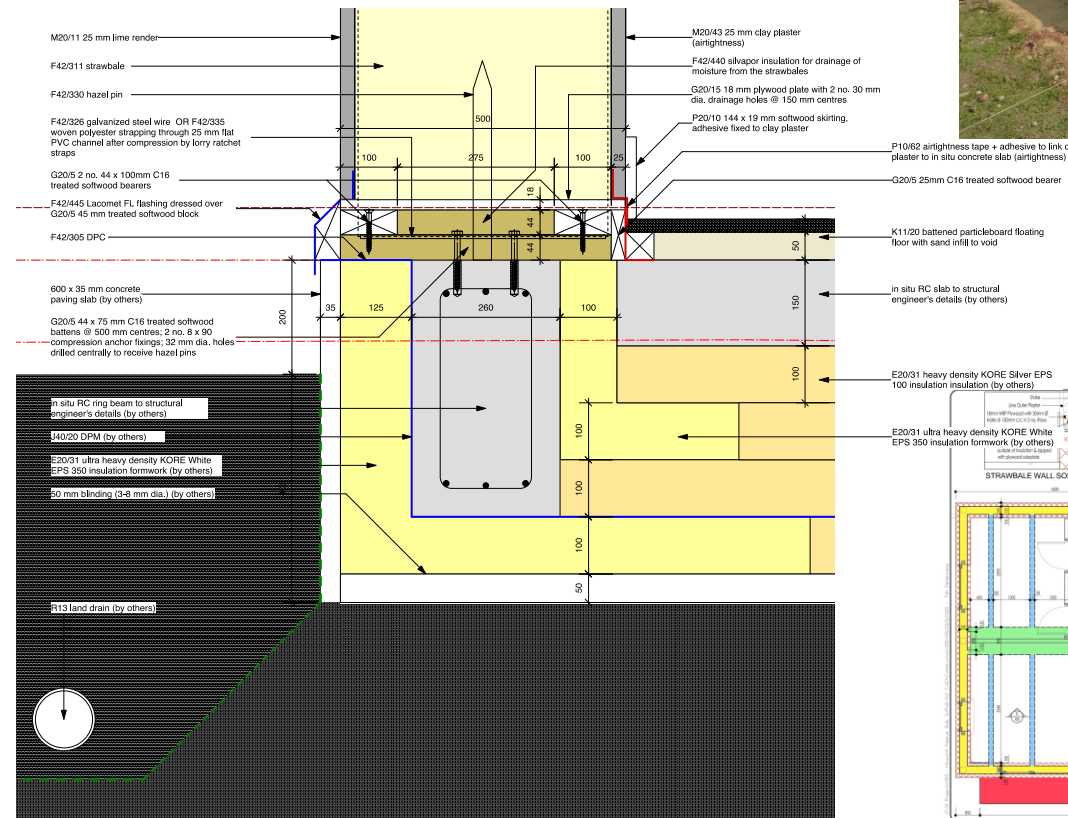


# Strawbale for self-builders





# Substructure



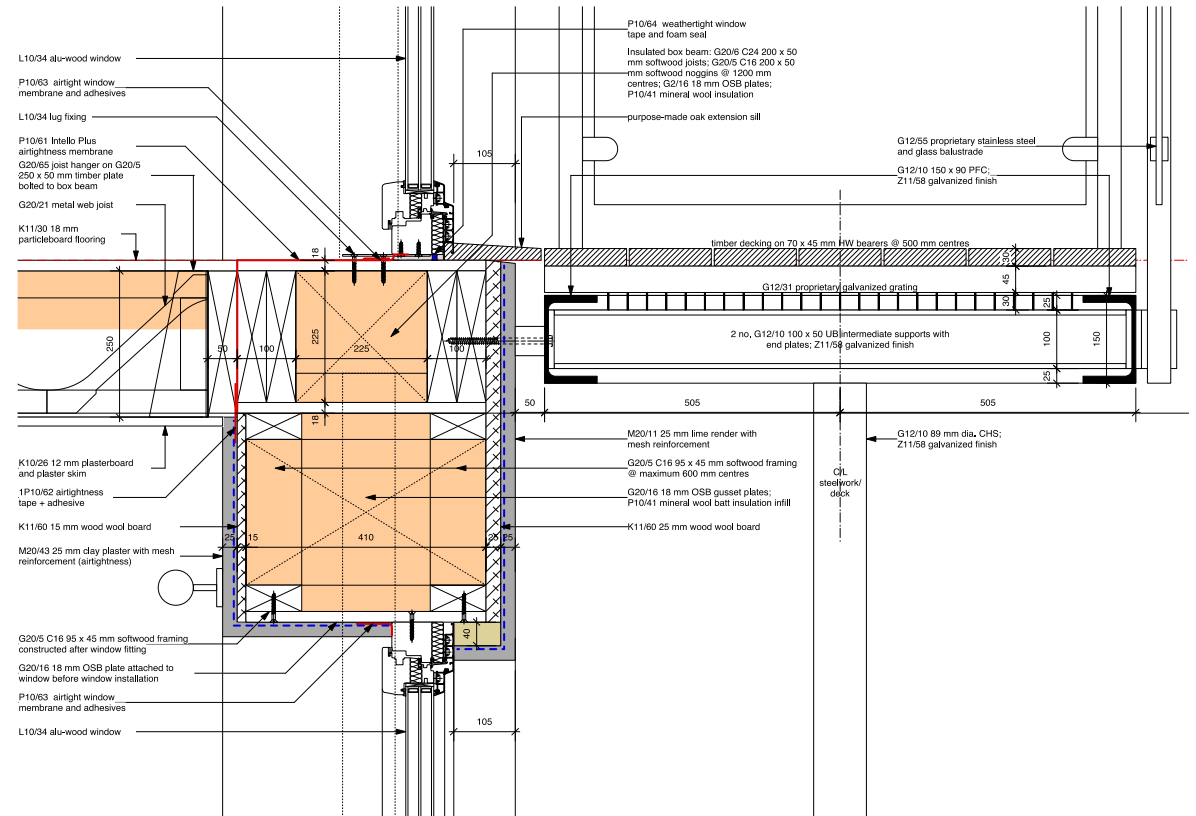


# External walls



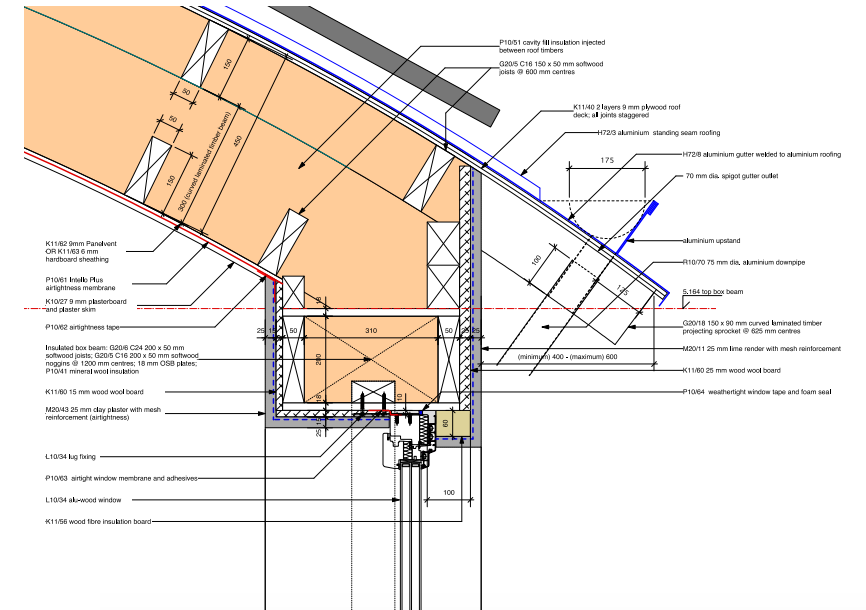
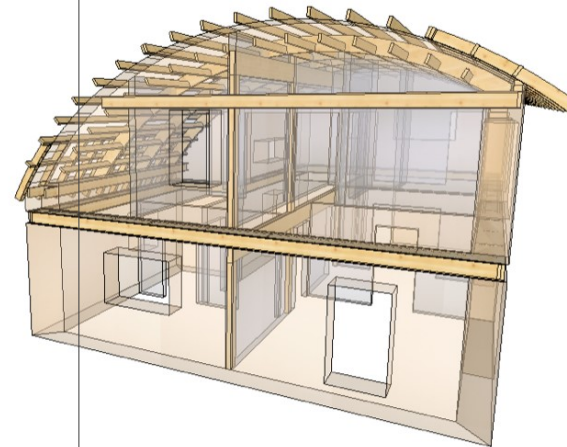
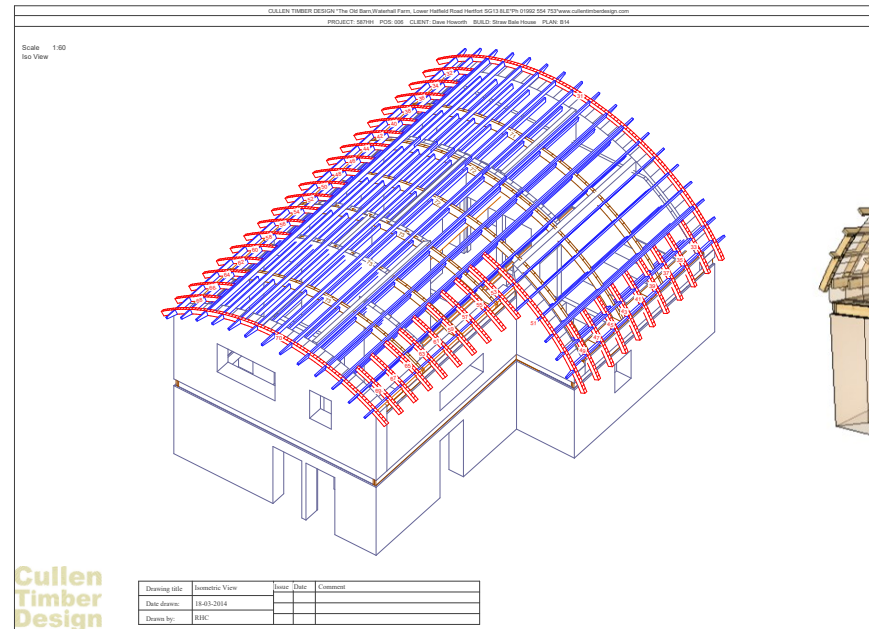


# First floor

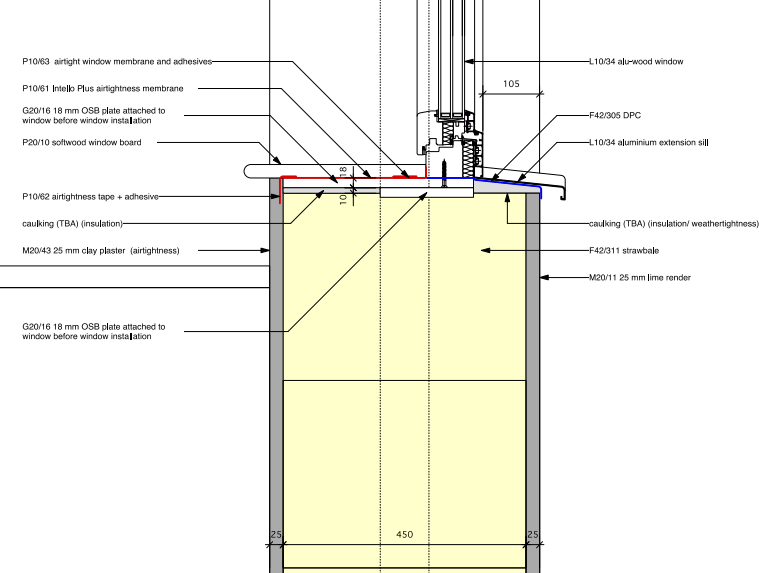
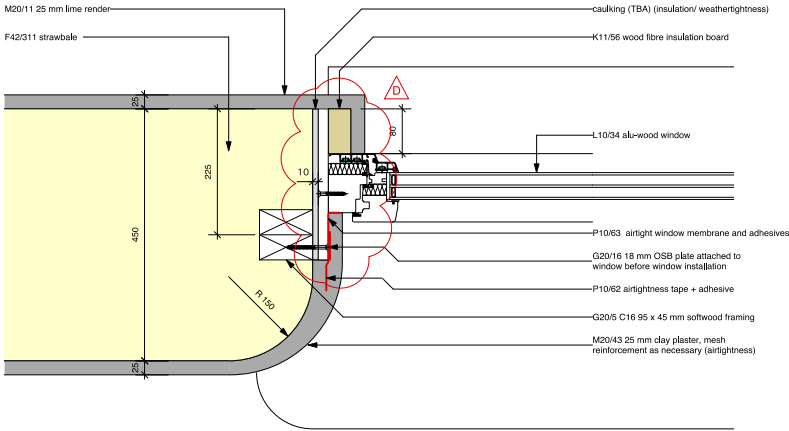




# Roof



# Windows

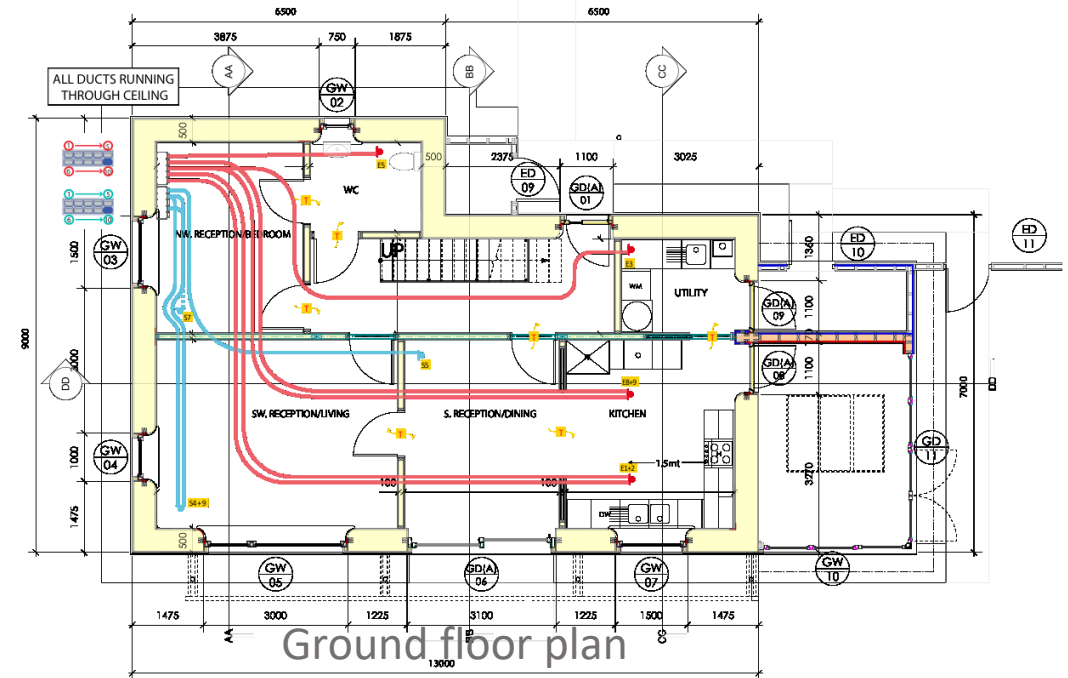
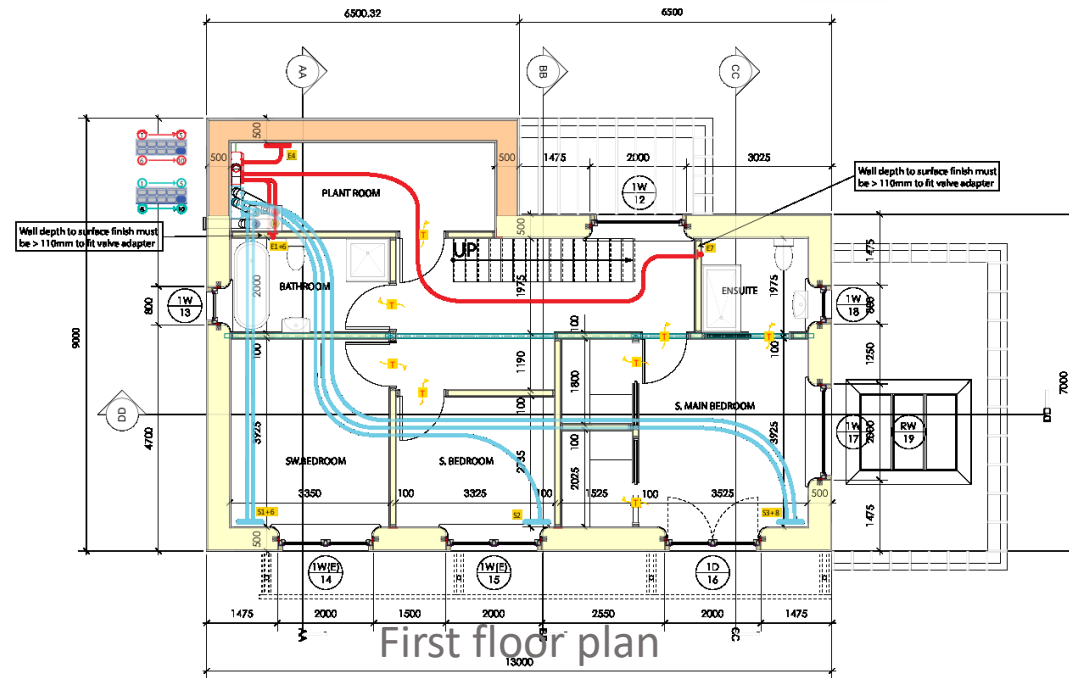




# Airtightness

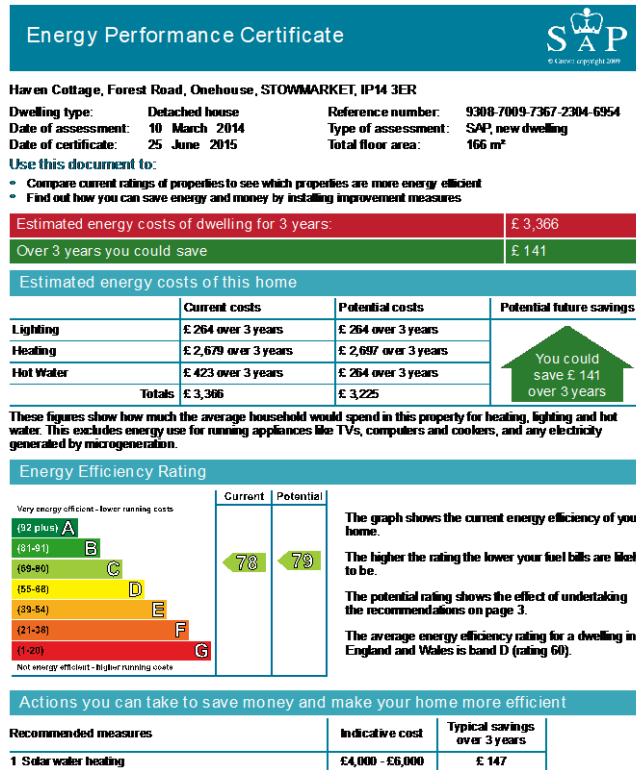


# Services

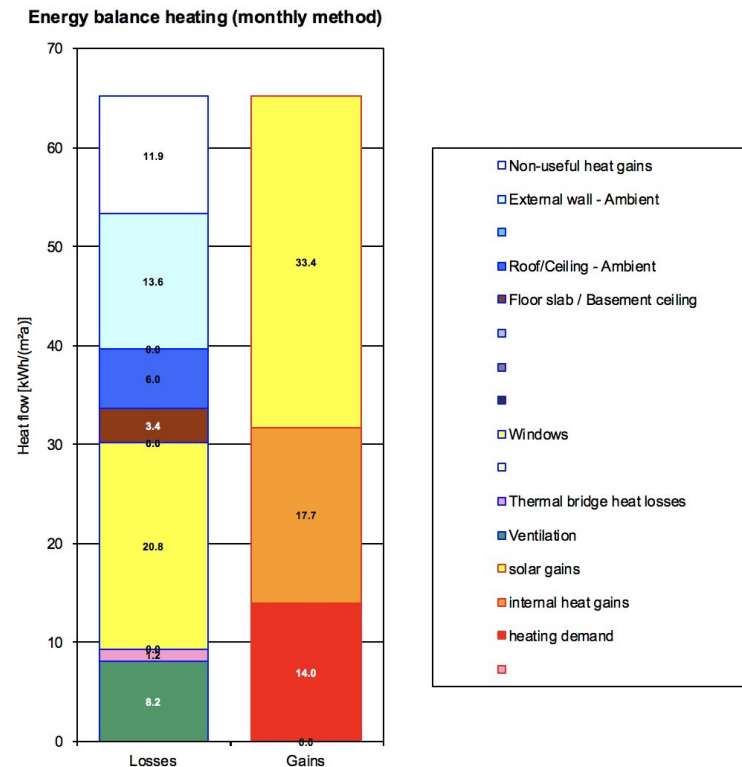




# Performance



Energy performance certificate (EPC)



PHPP Energy balance

- Treatable floor area: 148.3 m<sup>2</sup>**  
(with Conservatory outside thermal envelope)
- PH certification: Classic (PHPP9 PER assessment)**
- Space heating demand (PHPP): 14 kWh/m<sup>2</sup>yr**
- Heating load (PHPP): 10 W/m<sup>2</sup>**
- Airtightness (@ 50 PA): 0.42 ACH**
- Energy Performance Certificate (EPC): C78**
- Overheating (PHPP): 6%**
- Electricity bills (based on meter readings): £512**
- Receipt from Feed in Tariff: £627**
- Net profit: £115**



# Feedback

**Dave** “.....it just behaves as it is supposed to.....the Passivhaus windows keep the draughts and noise out. Passivhaus walls and windows, and roof and floor, keep the temperature stable so we just sit and look at it snowing outside. In the summer, we sit back and look at the sun and the fields.”

**Mabel** “I haven’t been able to wear my woolly socks and jumpers since we moved in.”

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