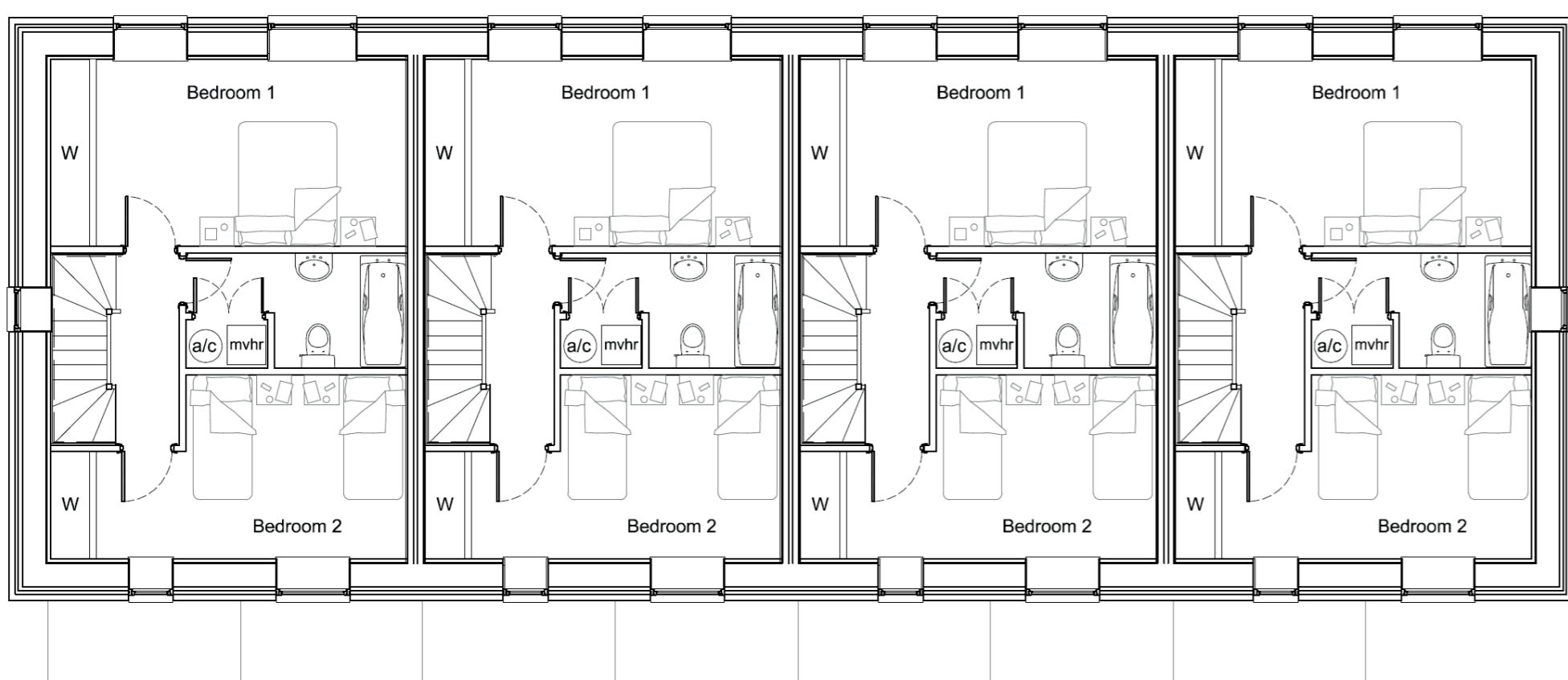




GROUND FLOOR PLAN



FIRST FLOOR PLAN

Hook Hollow

Seend, Melksham

The first affordable community land trust project in Wiltshire

Design: PKA Architects
 Contractor: Winsley White
 Construction System: PH15

Houses 1-4 Case Study:

Gross Internal Area: 81 m²
 Form Factor: 2.4
 Annual Heating Demand: 15 kWh/m²
 Heating Load: 9W/m²
 Predicted Overheating: < 1%
 Annual PER Demand: 69 kWh/m²
 12 Panel PV Array: 4.5 kW
 Predicted Airtightness: 0.4 ach @ 50Pa
 Passive House Class: Classic

DIRECT ELECTRIC HEATING:

Annual Heating Demand: 15 kWh/m² × 81 m² (GIA) = 1215 kWh
 Annual Cost at Current Prices: £420 (at 34 p/kWh)
 Power required to heat on coldest day: 9W/m² × 81m² (GIA) = 730 W single electric radiator

PHOTOVOLTAIC GENERATION:

Annual Electricity Generation: 4500 kWh
 Annual Income from PV: £360 (at 8p/kWh)

PH15 using STEICO

- STEICOjoist** lightweight I-joist system for wall studs and roof rafters.
- STEICO LVL** laminated veneer lumber for beams, lintels and base plates.
- STEICOzell** wood fibre insulation for air injection into wall and roof cavities.
- STEICOflex** flexible wood fibre insulation for filling small cavities and spaces.
- STEICOprotect** wood fibre sheathing board for external insulation.

Client Team

