



Second Street Cabins

Langley, WA | Jim Soules & Clifton View Homes
Soulescompany.com, zero-energyplans.com



Photos courtesy of Clifton View Homes

“Having the final blower door test done was like taking a final exam on a college course!” *Owner and Developer*



PROJECT DATA

- **Layout:** 1 bdrm, 1 bath, 1 fl, 550 ft²
- **Climate:** IECC 4C, marine
- **Completed:** May 2024
- **Category:** Custom

MODELED PERFORMANCE DATA

- **ERI:** without PV 37; with PV -36
- **Annual Energy Costs:** without PV \$350; with PV \$0
- **Annual Energy Cost Savings:** (versus typical new homes) without PV \$700; with PV \$1,050
- **Annual Energy Savings:** without PV 5,920 kWh; with PV 8,740 kWh
- **Savings in the First 30 Years:** without PV \$29,700; with PV \$43,900

CONTACT

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KEY FEATURES

- **Walls:** SIPs, R-28 total: graphite EPS 6.5" SIPs, corrugated draining housewrap, 3/8-inch plastic furring rainscreen; cedar siding or zinc-aluminum-coated standing-seam steel roofing as siding on north sides.
- **Roof:** SIP roof; 10.25" graphite EPS SIPs, synthetic underlayment, zinc-aluminum standing-seam steel roofing.
- **Attic:** Unvented, vaulted ceilings, 9.35" R-46 graphite EPS in roof SIPs.
- **Foundation:** Slab on grade, poured concrete, R-10 perimeter insulation and R-20 under full slab.
- **Windows:** Triple-pane windows, U=0.16, SHGC=0.36, low-e, argon-fill. Roof overhangs.
- **Air Sealing:** 1.44 ACH50; all SIP panels sealed with spray foam and tape.
- **Ventilation:** Range fan balanced to air intake with fan and 8-inch HEPA filter.
- **HVAC:** Ductless mini-split heat pump, 10.9 HSPF, 29.8 SEER; 1 outdoor head, 1 indoor head. Stained, sealed, insulated concrete slab and south-facing windows for thermal mass and passive solar heating.
- **Hot Water:** Heat pump water heater, 50-gal, 3.88 EEF. Core plumbing design.
- **Lighting and Appliances:** ENERGY STAR appliances.
- **Solar:** 7.2 kW, no battery.
- **Energy Management System:** Web-based monitoring of PV system.
- **Other:** Electric vehicle chargers. Three identical zero energy cottages on one tax lot.

