

# Clifton View Homes

U.S. DOE

ZERO

ENERGY READY HOME

2024 WINNER

Housing
Innovation
Awards

Second Street Cabins | Langley, WA | CliftonViewHomes.blogspot.com



"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 ft<sup>2</sup>

Climate: IECC 4C, marineCompleted: 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.





