

Martha Rose Construction

Abbott's Alley Net Zero | Sedro Wooley, WA | MarthaRoseConstruction.com



"Happy customers who have smoke-free air in their homes during fire season." Builder



PROJECT DATA

- Layout: 2-3 bdrm, 2 bath, 3 fls, 1,804 ft²
- **Climate:** IECC 4C, marine
- **Completed:** January 2019
- **Category:** Custom Spec

KEY FEATURES

- Walls: 2x6, 16" o.c., R-28 total: advanced framed, 1" EPS, $\frac{1}{2}$ " plywood sheathing, draining housewrap, fiber cement siding.
- **Roof:** Truss shed roof: flat 24" truss, composition shingles, monoplane angled for solar.
- Attic: Unvented attic: 22" R-60 blown-in fiberglass in attic, 24" raised heel energy trusses.
- Foundation: Slab on grade: R-20 EPS under slab, R-7.5 EPS on exterior of stem wall.

MODELED PERFORMANCE DATA

- HERS Index: without PV 47; with PV -13
- Annual Energy Costs: without PV \$750; with PV -\$100
- Annual Energy Cost Savings: (VS typical new homes) without PV \$950; with PV \$1,800
- Annual Energy Savings: without PV 7,600 kWh; with PV 18,000 kWh
- Savings in the First 30 Years: without PV \$39,100; with PV \$72,900

CONTACT

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- Windows: Triple-pane, argon-filled, low-e3, vinyl frame, U=0.18, SHGC=0.29.
- Air Sealing: 1.0 ACH50, detailed hand sealing of penetrations at ceiling, sill seal gasket at slab on grade.
- Ventilation: HRV, MERV 6 filters, 1.58 CFM/Watt, 77 SRE.
- **HVAC:** Ductless mini-split heat pump with variable speed compressor, 11 HSPF, 20 SEER. Infrared cove heaters upstairs.
- Hot Water: Electric tank, 50-gal, .95 EF.
- Lighting: 100% LED, photo sensors on exterior lights.
- Appliances: ENERGY STAR refrigerator, clothes washer, heat pump clothes dryer.
- **Solar:** 9.9 kW, rooftop panels.
- Water Conservation: Low-flow plumbing, PEX piping; stormwater infiltration under alley.
- Energy Management System: N/A
- Other: EV charging, accessible floorplan, bath, showers. 1st floor live-work space. No/low-VOC paints, adhesives, caulks, stains; salvaged lumber; recycled content insulation, drywall, and metal siding.



Energy Efficiency & Renewable Energy



For more information on the DOE Zero Energy Ready Home program, go to http://energy.gov/eere/buildings/zeroenergy-ready-home or scan the QR code.



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Housing

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