[bundle] design studio
Felicity | Bellingham, WA | BundleDesignStudio.com

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

"I have a lot of allergies... and this year I haven’t had to take a single pill." Homeowner

PROJECT DATA
• Layout: 3 bdrm, 2.5 bath, 2 fls, 1,741 ft²
• Climate: IECC 4C, marine
• Completed: January 2021
• Category: Attached Housing

MODELED PERFORMANCE DATA
• HERs Index: without PV 35; with PV 0
• Annual Energy Costs: without PV $500; with PV $100
• Annual Energy Cost Savings: (vs typical new homes) without PV $600; with PV $1,000
• Annual Energy Savings: without PV 7,300 kWh; with PV 12,800 kWh
• Savings in the First 30 Years: without PV $23,700; with PV $41,500

CONTACT
Dan Welch
360-296-2657
dan@bundledesignstudio.com

KEY FEATURES
• Walls: 2x6, 24” o.c., R-26 total: advanced framed; dense-packed cellulose in cavity, ½” CDX plywood with all nails, joints, and holes taped, 2” cork, weather resistant barrier, 1x vertical + 1x horizontal battens, 1.25” Juniper open-joint cladding.
• Roof: Gable roof: 16” parallel cord trusses dense-packed with cellulose, topped with taped membrane, 2x battens for air gap, ½” plywood sheathing, self-adered membrane, standing seam metal roof. Flat roof: 2x10 rafters dense-packed with cellulose, ½” plywood sheathing taped, R-12 tapered polyisocyanurate foam board, TPO membrane.
• Attic: No attic, cathedral ceilings, hot roof.
• Foundation: Vented crawl space. Floor joists have 16” R-43 dense-packed cellulose.
• Windows: Triple-pane, argon-filled, low-e2, fiberglass frame; U=0.15, SHGC=0.43.
• Air Sealing: 0.88 ACH50, roof membrane taped to wall sheathing; all seams taped.
• Ventilation: HRV, ERV in ADU, MERV 13 filters, boost switches in bathrooms.
• HVAC: Central heat pump, 12.2 HSPF, 17.7 SEER, AC variable-speed compressor.
• Hot Water: Heat pump, 2.90 EF, 80-gal, compact plumbing design, recirculation pump.
• Lighting: 100% LED.
• Appliances: ENERGY STAR refrigerators, dishwashers, clothes washers, ventless HP dryers.
• Solar: 6.38-kW rooftop panels.
• Water Conservation: Low-flow fixtures, PEX piping, compact plumbing.
• Energy Management System: N/A
• Other: Accessible ramp, kitchen, shower. Low-VOC flooring, cabinetry, paint.

Photos courtesy of [bundle] design studio

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