Dwell Development
Emerald Star | Seattle, WA | DwellDevelopment.com

“They sell themselves because once people understand, then there is only one choice to make.” - Anthony Maschmedt, builder, Dwell Development

**PROJECT DATA**
- **Layout:** 3 bdrm, 2.5 bath, 3 fl, 2,117 ft²
- **Climate:** IECC 4C, marine
- **Completed:** October 2015
- **Category:** custom spec

**MODELED PERFORMANCE DATA**
- **HERS Index:** without PV 45, with PV 0
- **Projected Annual Energy Costs:** without PV $472, with PV $0
- **Projected Annual Energy Cost Savings:** (vs home built to 2012 IECC) without PV $888, with PV $1,628
- **Annual Energy Savings:** without PV 9,896 kWh, with PV 18,090 kWh

**KEY FEATURES**
- **Walls:** Double 2x4 stud wall, 12" cavity dense-packed w R-46 cellulose, ½" OSB sheathing, fluid-applied weather-resistive barrier, reclaimed barn wood and standing seam metal siding.
- **Roof:** R-84: unvented 16-inch cathedral roof with R-64 blown fiberglass, ½" OSB sheathing, 3" R-20 polyiso, ¼" protection board, standing seam metal roof.
- **Attic:** No attic.
- **Foundation:** Poured concrete foundation stem walls; slab-on-grade with 4" R-16 EPS under slab, and full perimeter thermal break, R-8 slab edge.
- **Windows:** triple-pane, low-e, argon-filled, wood-framed, U=0.09, SHGC=0.50.
- **Air Sealing:** 1.17 ACH 50.
- **Ventilation:** HRV, MERV 7 filters.
- **HVAC:** 83-gal CO₂ heat pump water heater, 450% efficient, for radiant floor heat and hot water.
- **Lighting:** 100% LED.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, clothes washer, dryer, induction range.
- **Solar:** 8.1-kW PV.
- **Water Conservation:** All WaterSense low-flow fixtures, 420-gal rainwater cistern.
- **Energy Management System:** Adaptive use home management system.
- **Other:** Electric car charging station, no-/low-VOC finishes, 100% reclaimed siding, 90% FSC or reclaimed wood, recycled content tile, countertops; Passivhaus inspired.

**CONTACT**
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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.