



Photos courtesy of Greenhill Contracting

“The DOE Zero Energy Ready threshold can be achieved without any significant costs over a code-built home.” Anthony Aebi, Greenhill Contracting



PROJECT DATA

- **Layout:** 4 bdrm, 3.5 bath, 3 fl, 3,912 ft²
- **Climate:** IECC 6A, cold
- **Completed:** May 2017
- **Category:** custom spec

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 33, with PV 2
- **Projected Annual Energy Costs:** without PV \$2,300, with PV \$400
- **Projected Annual Energy Cost Savings:** (vs typical new homes) without PV \$3,500, with PV \$5,500
- **Annual Energy Savings:** without PV 23,500 kWh, with PV 36,400 kWh

CONTACT

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KEY FEATURES

- **Walls:** R-22 ICF, vinyl siding, liquid-applied door and window flashing.
- **Roof:** Asphalt shingles, peel-and-stick membrane at edges and valleys.
- **Attic:** R-64 vaulted ceilings, insulated, unvented roof with 11" open-cell + 2" closed-cell spray foam.
- **Foundation:** ICF below-grade foundation walls for R-22 at slab edge, R-27 closed-cell spray foam under slab.
- **Windows:** Triple-pane, U=0.17, SHGC=0.23, argon-fill, vinyl-framed.
- **Air Sealing:** 0.12 ACH 50.
- **Ventilation:** ERV continuous 20 cfm in baths and 43 cfm in kitchen with boost speeds and timers; MERV 13 and electrostatic filters.
- **HVAC:** Air-source heat pump, 3.62 COP, 12.0 EER, all ducts inside.
- **Hot Water:** Air-source heat pump water heater, 50-gal., 3.4 EF.
- **Lighting:** 100% LED.
- **ENERGY STAR Appliances:** Refrigerator, clothes washer, dishwasher, heat pump clothes dryer.
- **Solar:** 10.26-kW PV.
- **Water Conservation:** Low-flow fixtures; drought-tolerant plants.
- **Energy Management System:** None.
- **Other:** Disaster-resistant ICF construction with spray foamed roof and hurricane clips; triple-pane windows; maintains indoor temperature thru multi-day power outages. No-VOC paints; 75% of construction debris recycled.

