

Greenhill Contracting

ZERO
ENERGY READY HOME

2019 WINNER

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PROJECT DATA

- **Layout:** 3 bdrm, 3 bath, 1 fl + bsmt, 2,512 ft²
- Climate: IECC 5A, cold
- Completed: July
- Category: custom buyer

MODELED PERFORMANCE DATA

- **HERS Index:** without 39; with PV -5
- Annual Energy Costs: without PV \$1800; with PV \$100
- Annual Energy Cost Savings: (vs typical new homes) without PV \$2,200; with PV \$3,950
- Annual Energy Savings: without PV 14,700 kWh; with PV 26,200 kWh
- Savings in the First 30 Years: \$167,200

CONTACT

Anthony Aebi 845-594-5076 greenhillcontracting@yahoo.com

KEY FEATURES

- Walls: ICF, R-22 total: ½" drywall; 11.25" ICF blocks, vinyl siding.
- **Roof:** Gable roof; ³/₄" T&G OSB, self-adhered membrane at valleys and roof edges; underlayment; 130 mph rated asphalt shingles, lifetime warranty.
- Attic: Unvented attic; 10.5" R-46 open-cell spray foam plus 2.5" R-19 closed-cell spray foam on underside of roof deck, 2" XPS +60 spray foam at roof-wall, 16" raised heel truss.
- **Foundation:** R-22 ICF basement walls clad with cementitious boards waterproofed with tar; 4.5" R-29 closed-cell spray foam under slab.
- **Windows:** Triple-pane, argon-filled, low-e, vinyl casement frames, U=0.18, SHGC=0.23; triple-pane sliding doors, U=0.20, SHGC=0.28.
- Air Sealing: 0.18 ACH 50.
- **Ventilation:** ERV with continuous 20 cfm draw from baths and 40 cfm from kitchen plus boost settings; CO₂ sensor also controls boost setting; MERV 7 & 8 filters.
- HVAC: Ducted mini-split heat pump, 9.8 HSPF, 16 SEER, 2 air handlers, ducts inside.
- Hot Water: Heat pump water heater, EF 3.53, 50-gal.; central manifold plumbing with PEX.
- Lighting: 100% LED, motion sensors.
- Appliances: ENERGY STAR refrigerator, clothes washer, dishwasher, heat pump clothes dryer.
- **Solar:** 10.2-kW PV.
- Water Conservation: WaterSense-labeled fixtures, drought-resistant landscaping.
- Energy Management System: Programmable thermostat.
- Other: Wide doors and hallways, zero-VOC paint, low-VOC KCMA cabinets; hurricane clips, disaster-resistant features.





