



"In the last few months...we have consumed less energy than we have produced." Homeowners



## PROJECT DATA

- **Layout:** 4 bdrm, 3.5 bath, 3 fl + bsmt, 3,718 ft<sup>2</sup>
- **Climate:** IECC 6A, cold
- **Completed:** February 2022
- **Category:** Custom for Buyer

### MODELED PERFORMANCE DATA

- **HERS Index:** without PV 26; with PV -13
- **Annual Energy Costs:** without PV \$2,000; with PV \$250
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$4,500; with PV \$6,250
- **Annual Energy Savings:** without PV 25,250 kWh; with PV 40,100 kWh
- **Savings in the First 30 Years:** without PV \$182,950; with PV \$254,100

## CONTACT

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## KEY FEATURES

- **Walls:** ICF walls, R-22 total: 11.25" ICF blocks, engineered wood siding.
- **Roof:** Gable truss roof, coated OSB sheathing, 1"x3" furring strips, self-adhered membrane, solar PV shingles.
- **Attic:** Unvented attic, vaulted ceilings: 10" R-44 medium-density spray foam topped by 2.5" R-18 high-density spray foam.
- **Foundation:** Insulated basement: ICF blocks R-22, 11.25" wide.
- **Windows:** Triple-pane, argon and krypton filled, low-e, vinyl; U=0.17-0.20, SHGC=0.21-0.25.
- **Air Sealing:** ACH50 = 1.48 CFM50. Spray foam under slab and on attic walls and ceiling; ICF walls with liquid-applied flashings at all rough openings and penetrations.
- **Ventilation:** ERV with MERV 11 and 6 filters, demand-controlled ventilation, CO<sub>2</sub> sensors.
- **HVAC:** Heat pump, ground-loop config, 5.1 COP, variable-speed compressor, 34 EER.
- **Hot Water:** Ground-source heat pump water heater, 80-gal, 2.66 EF.
- **Lighting:** 100% LED, motion sensors, large windows.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, clothes washer and dryer.
- **Solar:** 13,74-kW roof shingles.
- **Water Conservation:** EPA WaterSense fixtures; central manifold, PEX piping.
- **Energy Management System:** CO<sub>2</sub> sensors in master bedroom, return duct, and at kitchen trigger boost setting on the ERV. Wi-Fi monitoring of energy production and end uses.
- **Other:** Low-VOC products. ICF thermal mass holds temp through power outages. EV ready.

