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.

"It's hard to beat having a positive impact in improving someone's health." Builder

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PROJECT DATA

- **Layout**: 3 bdrm, 3.5 bath, 2 fls+bsmt, 5,396 ft²
- **Climate**: IECC 4A, mixed-humid
- **Completed**: May 2020
- **Category**: Custom for Buyer >3000 ft²

MODELED PERFORMANCE DATA

- **HERS Index**: without PV 43; with PV 24
- **Annual Energy Costs**: without PV $2,200; with PV $1,450
- **Annual Energy Cost Savings**: (vs typical new homes) without PV $2,500; with PV $3,300
- **Annual Energy Savings**: without PV 19,400 kWh; with PV 26,000 kWh
- **Savings in the First 30 Years**: without PV $101,800; with PV $134,000

**KEY FEATURES**

- **Walls**: 2x6, 16" o.c. R-25.6: advanced framed, R-19 fiberglass batts, coated OSB R-6.6 sheathing taped, fiber cement siding.
- **Roof**: Truss gable roof & rafter shed roof: ½" coated OSB sheathing taped, self-adhered membrane at valleys, eaves, and low slopes; asphalt shingles and metal cladding.
- **Attic**: Vented 2nd floor attic: 19" R-50 blown-in fiberglass; 1st floor attic: 9" R-38 open-cell spray foam on underside of roof sheathing, 24" raised heel energy trusses.
- **Foundation**: Insulated basement: pre-cast concrete walls with integrated foam-insulated concrete studs with metal nailer facings; + R-10 rigid on sill plate. Spray foam at rim band.
- **Windows**: Triple-pane, argon-filled, low-e2, fiberglass frame, fixed & casement styles, interior shades, U=0.17 (fixed), 0.20 (casement), SHGC=0.25.
- **Air Sealing**: 1.09 ACH50. Foundation wall joints caulked, wall seams and holes taped.
- **Ventilation**: ERV with MERV 8 and 13 filters, supplies to return side of HVAC.
- **HVAC**: Central air-source heat pump, 9.5 HSPF, 18.5 SEER. Three floors/zones with 3 smart thermostats with humidity sensors to control an additional dehumidifier.
- **Hot Water**: Heat pump water heater, 50-gal, 3.5 EF. 2nd electric tankless water heater.
- **Lighting**: 100% LED, motion sensors on exterior lights, large windows.
- **Appliances**: ENERGY STAR refrigerator, dishwasher, exhaust fans.
- **Solar**: 5.27 kW.
- **Water Conservation**: Low-flow fixtures, compact PEX plumbing.
- **Energy Management System**: Wi-Fi thermostats, water heater, PV, and monitor.
- **Other**: Accessible floorplan, hallways, doors, showers. Low/no-VOC paint, caulk, glue, stain.