



Photos courtesy of Energize Delaware's ZeMod Program and Beracah Homes

"I love my home, and the \$16/month electric bill is really nice." Homeowner



PROJECT DATA

- **Layout:** 2 bdrm, 2 bath, 1 fl, 1,209 ft²
- **Climate:** IECC 4A, mixed-humid
- **Completed:** July 2021
- **Category:** Affordable

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 40; with PV 1
- **Annual Energy Costs:** without PV \$700; with PV \$200
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$1,050; with PV \$1,550
- **Annual Energy Savings:** without PV 7,450 kWh; with PV 14,350 kWh
- **Savings in the First 30 Years:** without PV \$42,050; with PV \$63,850

CONTACT

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KEY FEATURES

- **Walls:** Double wall, R-33.5 total: two 2x4 walls, 1" apart, dense-packed fiberglass; coated OSB; vinyl siding. Wall panels and house sections constructed in factory.
- **Roof:** Gabled rafter roof, 2x8 ceiling joists, coated OSB w/taped seams, asphalt shingles.
- **Attic:** Vented attic: R-50 of 7.25" of dense-pack fiberglass and 7.75" loose-fill fiberglass, 10" raised heel energy trusses.
- **Foundation:** Vented crawlspace: CMU walls. R-30 fiberglass batts in 2x10 floor joists.
- **Windows:** Double-pane, argon-filled, low-e, vinyl-framed, U=0.250, SHGC=0.18.
- **Air Sealing:** 1.5 ACH50, modular components are sealed together on site.
- **Ventilation:** Ducted conditioning EV with MERV 13 filters; 2.6 CFM/watt. Controls based on temperature, RH, CO₂, and VOC sensors. Continuous or timed settings.
- **HVAC:** Ductless heat pump, 11 HSPF, 26 SEER, variable-speed compressor.
- **Hot Water:** Heat pump water heater, 50-gal, 2.78 EF.
- **Lighting:** 100% LED lighting, large windows.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, clothes washer, clothes dryer.
- **Solar:** 5.12-kW rooftop panels.
- **Water Conservation:** EPA WaterSense-labeled fixtures.
- **Energy Management System:** Rooftop PV solar panels. Energy production and usage at specific end uses are monitored.
- **Other:** Low-emission cabinets, flooring, paint, counter tops, doors; hard floors minimize particulates. Modular construction.

