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.

PROJECT DATA

- **Layout:** 4 bdrm, 3.5 bath, 2.5 fls, 3,156 ft²
- **Climate:** IECC 4A, mixed-humid
- **Completed:** May 2019
- **Category:** Attached Housing

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 38
- **Annual Energy Costs:** without PV $2,100
- **Annual Energy Cost Savings:** (vs typical new homes) without PV $2,850
- **Annual Energy Savings:** without PV 17,800 kWh
- **Savings in the First 30 Years:** without PV $119,100

KEY FEATURES

- **Walls:** SIPS, R-23 total: 5.5” EPS, 7⁄8” OSB taped at seams, house wrap, vinyl siding & brick siding.
- **Roof:** SIPS, R-47 total: 11.25” EPS, 7⁄8” OSB, taped at seams, synthetic underlayment, asphalt fiberglass shingles.
- **Attic:** No attic.
- **Foundation:** Insulated basement, R-21.3 total: Pre-cast concrete with adhered 2” EPS.
- **Windows:** Triple-pane, argon-filled, low-e3, vinyl double-hung and casement frames, U=0.23, SHGC=0.22.
- **Air Sealing:** 1.34 ACH 50, all SIP seams taped, foundation wall panel joints sealed.
- **Ventilation:** ERV, 3 zone with a programmable thermostat.
- **HVAC:** Ducted mini-split heat pump; 10.1 HSPF, 15.5 SEER, 3 indoor air handlers, 1 outdoor compressor, rigid metal ducts.
- **Hot Water:** Heat pump hot water heater, in utility room, 80-gal, 3.61 EF. Central manifold with PEX piping.
- **Lighting:** 100% LEDs.
- **Appliances:** ENERGY STAR clothes dryer, clothes washer, refrigerator.
- **Solar:** None.
- **Water Conservation:** EPA WaterSense labeled low-flow fixtures.
- **Energy Management System:** Programmable thermostat.
- **Other:** No/low-VOC paints; CRI Green Label Plus carpet, and bamboo flooring.

CONTACT

Joseph M Lombardi, AIA
610-727-0550
jmlombardi@architetra.com

“I love the house. I rave about it to everyone I come in contact with.”

Homeowner

Photos courtesy of Alter Eco