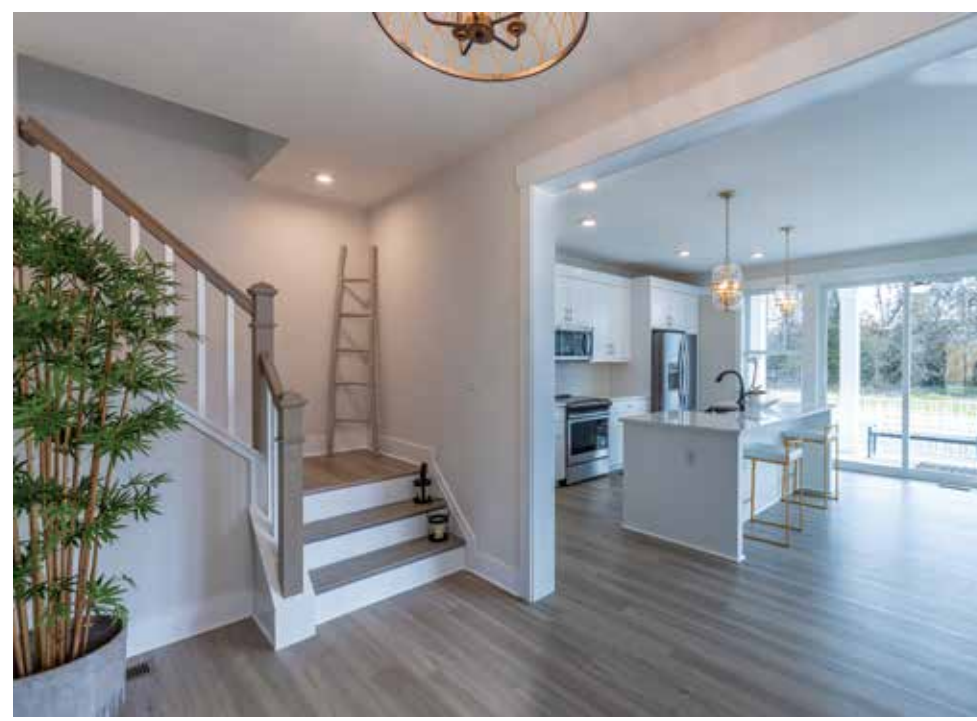




Photos courtesy of Healthy Communities

“...solar-powered, energy-efficient, easy to maintain, and visually stunning.” Homeowner



PROJECT DATA

- **Layout:** 3 bdrm, 2.5 bath, 2 fls*, 2,227 ft² *[Floors either 1 or 2 depending on unit]
- **Climate:** IECC 4A, mixed-humid
- **Completed:** June 2020
- **Category:** Production

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 46; with PV 9
- **Annual Energy Costs:** without PV \$1,350; with PV \$400
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$1,150; with PV \$2,100
- **Annual Energy Savings:** without PV 9,700 kWh; with PV 17,400 kWh
- **Savings in the First 30 Years:** without PV \$48,500; with PV \$87,500

CONTACT

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KEY FEATURES

- **Walls:** 2x6, 24" o.c., R-25.2 total: wall cavity: flash & batt 1" open-cell spray foam + R-19 fiberglass batt or spray-in cellulose, R-3.5 coated OSB exterior sheathing, fiber cement siding; open-cell spray foam in rim joists. Designed with 3D Building Information Modeling (BIM).
- **Roof:** Gable truss roof: R-49 insulation, plywood sheathing, fire and ice underlayment, ridge vent, architectural shingles. 14" raised heel trusses, 8/12 pitch optimal for solar panels.
- **Attic:** Vented attic: 14" R-49 blown-in cellulose, 14" R-50 open-cell spray foam in attic floor above garage and porch.
- **Foundation:** Unvented crawlspace; CMU walls insulated on interior with R-11 batt. 8-mil vapor barrier over dirt floor; R-19 open-cell spray foam in rim joists.
- **Windows:** Double-pane, argon-filled, low-e, vinyl single-hung frames, U=0.28, SHGC=0.22.
- **Air Sealing:** 1.37 ACH 50; foam gasket and caulk at sill plates, OC spray foam rim joists.
- **Ventilation:** ERV, MERV 8 or 13 filter. Supplies to HVAC return, pulls from two house locations.
- **HVAC:** Central heat pump, 10 HSPF, 10.8 SEER. Rigid metal ducts.
- **Hot Water:** Heat pump water heater, 3.42 UEF, ENERGY STAR certified, 50-gal. recirc pump.
- **Lighting:** 100% LED, motion sensors, daylighting.
- **Appliances:** ENERGY STAR dishwasher, clothes washer, clothes dryer, and refrigerator.
- **Solar:** 5.94 kW; 18 rooftop panels, central inverter.
- **Water Conservation:** EPA WaterSense fixtures. Drought-resistant landscaping.
- **Energy Management System:** Smart climate controls, smart thermostat, solar tracking.
- **Other:** Electric vehicle charging station, low-VOC paints, Green Guard & Green Label Plus flooring, natural stone building material in bathrooms/entry.

