

Insight Homes

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ZERO

ENERGY READY HOME

2024 WINNER

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PROJECT DATA

- **Layout:** 3 bdrm, 3 bath, 2 fl, 2,365 ft²
- Climate: IECC 4A, mixed-humid
- Completed: March 2024
- Category: Production

MODELED PERFORMANCE DATA

- **ERI:** without PV 53
- Annual Energy Costs: without PV \$4,150
- Annual Energy Cost Savings: (versus typical new homes) without PV \$750
- Annual Energy Savings: without PV 20 kWh
- Savings in the First 30 Years: without PV \$31,400

CONTACT

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KEY FEATURES

- **Walls:** Panelized, 2x6 24" o.c., advanced framed, R-23 total: coated OSB sheathing with taped seams, blown fiberglass, vinyl siding.
- **Roof:** Gable truss roof, $\frac{7}{16}$ " OSB sheathing, roofing paper, ice and water shield, double layer of starter shingles along roof rake, architectural shingles. 15" overhangs.
- Attic: Vented, 16.25" R-49 blown fiberglass; 12" R-38 batt fiberglass in vaulted ceilings. Sloped ceiling plane. 18" raised-heel trusses. No HVAC in attic.
- **Foundation:** Unvented, conditioned crawlspace: poured concrete walls; 10-mil poly vapor barrier sealed from ground to 18" up foundation wall, 2" R-10 XPS foam board attached to interior walls. R-19 open-cell spray foam in band joists.
- Windows: Double-pane windows, U=0.28, SHGC=0.19, low-e, argon fill.
- **Air Sealing:** 3.45 ACH50; two-stage air sealing approach: pre-drywall all penetrations are through subfloor, top plates, and exterior walls and around windows and doors are sealed with low-expansion foam. Post-drywall ceiling holes and top-plates sealed from attic.
- **Ventilation:** Exhaust-only ventilation integrated with HVAC with MERV 13 filters.
- HVAC: Central air-source heat pump, 9.95 HSPF, 20 SEER.
- Hot Water: Tankless propane water heater, 0.96 UEF. Central manifold system with PEX.
- Lighting and Appliances: ENERGY STAR appliances.
- **Solar:** 5 kW, no battery.
- Energy Management System: Online monitoring of power production.
- Other: PV monitoring at the individual module level.





