



Habitat for Humanity North Central Connecticut

Cleveland Avenue Home | Hartford, CT |

Habitat.org/ct/hartford/north-central-connecticut-habitat-humanity



Photos courtesy of Habitat for Humanity North Central Connecticut

“To have a home ... that gives my son and I a safe and healthy place to live... and to know I can afford to pay my bills is a true blessing.” Homeowner



PROJECT DATA

- **Layout:** 3 bdrm, 1.5 baths, 2 fls + bsmt, 1,396 ft²
- **Climate:** IECC 5A, cold
- **Completed:** August 2022
- **Category:** Affordable

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 34
- **Annual Energy Costs:** without PV \$1,700
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$2,150
- **Annual Energy Savings:** without PV 10,300 kWh
- **Savings in the First 30 Years:** without PV \$90,250

CONTACT

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KEY FEATURES

- **Walls:** ICF. R-25 total: 11.25", vinyl siding with integrated 0.5" R-0.61 EPS.
- **Roof:** Gable truss roof, IBHS Fortified, ½" coated OSB sheathing with seams taped, two rows adhered membrane at eaves, drip edge, architectural asphalt shingles. Roof trusses engineered for heavy snow load and solar panels.
- **Attic:** Vented, R-60 total: 17" blown cellulose, 14" raised-heel trusses.
- **Foundation:** Insulated basement, R-27.14 total: 11.25" R-24 ICF walls, spray-applied waterproofing membrane; ¾" R-3.1 insulated drain board, ¼" parging. Passive radon mitigation system installed with wiring in place for future fan if needed.
- **Windows:** Triple-pane, U=0.22, SHGC=0.23, low-e, argon fill, vinyl-framed, double-hung.
- **Air Sealing:** 1.48 ACH 50, ICF walls, all penetrations taped or foam sealed.
- **Ventilation:** ERV, 50 cfm continuous, MERV 8 or 13 filters. SRE 75%; ASRE 75%; ATRE 40%.
- **HVAC:** Ductless minisplit air-source heat pump; 14 HSPF, 33 SEER, 2 indoor air handlers, 1 outdoor compressor. Variable speed compressor. 14.0 Btu. Transfer fans over bedroom doors pull conditioned air into room when door is closed.
- **Hot Water:** Heat pump water heater, 50-gallons, COP 3.45. Compact plumbing distribution.
- **Lighting and Appliances:** LED lighting; ENERGY STAR appliances, all electric.
- **Solar:** No PV installed. Solar ready: conduit to roof, ample electric panel space, and roof orientation to maximize future solar.
- **Energy Management System:** None.
- **Other:** All electric, EV charging pedestal.



Energy Efficiency & Renewable Energy



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.



Oct 2023, PNNL-SA