

Habitat for Humanity North Central CT

Forbes Street | East Hartford, CT

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



"It has always been my dream to be a homeowner." Homeowner



PROJECT DATA

- Layout: 4 bdrm, 1.5 bath, 2 fl, 1,612 ft²
- Climate: IECC 5A, cold
- **Completed:** March 2022
- Category: Affordable

KEY FEATURES

- Walls: 2x6, 24" o.c., R-29.5 total: R-23 mineral wool, R-6 coated sheathing, taped; vinyl siding.
- **Roof:** Truss gabled roof: $\frac{1}{2}$ " coated OSB, all seams taped; 2 rows membrane at eaves; drip edge; soffit and ridge vents. IBHS Fortified Roof certified.
- Attic: Vented attic: 17" R-60 blown cellulose at attic floor. 16" raised heel energy trusses.

MODELED PERFORMANCE DATA

- HERS Index: without PV 34
- Annual Energy Costs: without PV \$1,450
- Annual Energy Cost Savings: (VS typical new homes) without PV \$600
- Annual Energy Savings: without PV 11,300 kWh
- Savings in the First 30 Years: without PV \$24,050

CONTACT

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Energy Efficiency & Renewable Energy

- Foundation: Slab on grade: poured concrete stem walls. Vapor barrier and 2" XPS foam under slab. Sill seal.
- Windows: Triple-pane, argon-filled, low-e, vinyl frame, U=0.22, SHGC=0.23. Double-hung.
- Air Sealing: 1.5 ACH 50. Spray foam at all gaps, acoustic caulk on wood seams, 1" rigid foam on all exterior walls, all sheathing seams taped.
- Ventilation: ERV; separately ducted, SRE 75%. MERV 8 filter on air intake.
- HVAC: Ductless mini-split heat pump with 14 Btu/hr, 33 SEER; 2 indoor air handlers, and 1 outdoor compresser. Air transfer fans over bedroom doors.
- Hot Water: 50-gallon heat pump water heater, 3.45 EF, located in mechanical room.
- Lighting: 100% LED with motion sensors and daylight sensors.
- **Appliances:** ENERGY STAR dishwasher, refrigerator, clothes washer, clothes dryer.
- **Solar:** Solar ready; conduit in place from roof to inverter location.
- Water Conservation: Whole house is EPA WaterSense certified. Compact plumbing design. Rain gardens.
- Energy Management System: Smart ventilation; motion and daylight sensors.
- **Other:** No-VOC paint, flooring. Metal conduit in for future electric vehicle charging station.



For more information on the DOE Zero Energy Ready Home program, go to http://energy.gov/eere/buildings/zeroenergy-ready-home or scan the QR code.



2022 WINNER

Housing