



# Hartford Habitat for Humanity

Roosevelt Zero Energy Home | Hartford, CT | HartfordHabitat.org



Photos courtesy of Hartford Habitat for Humanity

"It was actually perfect to start a family here." Homeowner



## PROJECT DATA

- **Layout:** 3 bdrm, 1.5 bath, 2 fls, 1,280 ft<sup>2</sup>
- **Climate:** IECC 5A, cold
- **Completed:** May 2019
- **Category:** Affordable

### MODELED PERFORMANCE DATA

- **HERS Index:** without PV 34; with PV -7
- **Annual Energy Costs:** without PV \$1,500; with PV \$150
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$2,300; with PV \$4,000
- **Annual Energy Savings:** without PV 10,600 kWh; with PV 18,600 kWh
- **Savings in the First 30 Years:** without PV \$97,300; with PV \$167,000

## CONTACT

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## KEY FEATURES

- **Walls:** 2x6, 24" o.c., R-31 total: 5.5" open-cell spray foam in cavity, 1.5" R-6.5 insulated coated OSB sheathing, vinyl siding.
- **Roof:** Gable truss roof: 0.5" coated OSB deck; ice & water shield; architectural shingles.
- **Attic:** Vented attic: 20" R-60 blown-in cellulose above ceiling, 0.5" drywall, 4-mil poly vapor barrier, air sealed w/foam around light boxes and penetrations. 12" raised heel trusses.
- **Foundation:** Insulated basement, R-31 total: precast concrete panels with adhered R-10 rigid foam, R-21 fiberglass batt.
- **Windows:** Triple-pane, argon-filled, vinyl double-hung frames, U=0.19, SHGC=0.27.
- **Air Sealing:** 1.12 ACH 50, all plates and sills sealed, dry wall sealed to top plates, all ceiling fixtures foamed.
- **Ventilation:** HRV, pulls from kitchen and baths, to bedrooms, living room; MERV 9 filter.
- **HVAC:** 2 single-head ductless heat pumps, 14.2 HSPF, 33.0 SEER. In-wall transfer fans.
- **Hot Water:** Heat pump water heater, 3.42 UEF, 50-gal., compact plumbing, PEX tubing.
- **Lighting:** 100% LED, daylight sensors.
- **Appliances:** ENERGY STAR refrigerator, range, dishwasher, clothes washer, clothes dryer.
- **Solar:** 7.75-kW rooftop panels; 25 310-watt panels.
- **Water Conservation:** EPA WaterSense fixtures, drought-resistant landscaping.
- **Energy Management System:** PV tracking, programmable thermostat.
- **Other:** No-VOC paints and flooring, formaldehyde-free cabinets.

