



United Way of Long Island

Options for Community Living | Deer Park, NY | unitedwayli.org



Photos courtesy of United Way of Long Island

“ZER homes have the ability to reduce energy costs while providing a healthy, more comfortable solution for our special needs residents.”
Rick Wertheim, senior vice president, Housing and Green initiative, United Way of Long Island Housing Development Corporation



PROJECT DATA

- **Layout:** 3 bdrm, 1 bath, 1 fl, 1,436 ft²
- **Climate:** IECC 4A, mixed-humid
- **Completed:** July 2014
- **Category:** Affordable, retrofit

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 40, with PV -3
- **Projected Annual Utility Costs:** without PV \$1,669, with PV \$-446
- **Projected Annual Energy Cost Savings:** (vs home built to 2009 IECC) without PV \$351, with PV \$2,496
- **Annual Energy Savings:** without PV/solar thermal 456 kWh, 1,777 therms; with PV/solar thermal 5,314 kWh, 1,197 therms
- **Added Construction Cost, vs 2009 IECC:** without PV \$16,000, with PV \$24,325, with solar thermal \$10,219

CONTACT

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KEY FEATURES

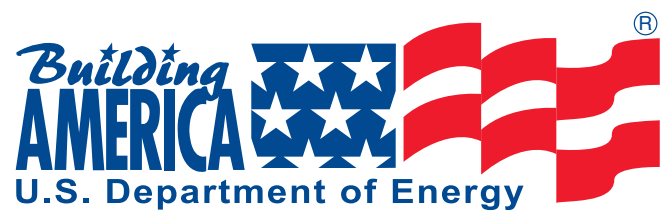
- **Walls:** 2x4 16" o.c., 3.5" dense-pack cellulose (R-13.5), plywood sheathing, house wrap, 1.5" polyiso rigid foam, 1x3 furring strip drainage plane, fiber cement siding.
- **Roof:** 2x8 rafters, 1/2" sheathing, two 2" layers polyiso rigid foam, 5/8" plywood, 15-lb felt, ice and water shield 3 ft in and at all valleys, fiberglass shingles.
- **Attic:** Unvented, 6" open-cell spray on underside of roof deck. Total attic (with above-roof rigid foam) R-48.
- **Foundation:** 8" poured concrete basement walls, 2.5" polyiso on interior; elastomeric waterproofing membrane over fiber protection board on exterior sill to footing.
- **Windows:** Double-pane, vinyl-framed, low-e, argon-fill, U=0.2, SHGC=0.24.
- **Air Sealing:** 1.92 ACH 50.
- **Ventilation:** ERV tied to HVAC ducts, separate returns in laundry, kitchen; bath fans.
- **Hot Water:** Solar thermal water heater with 120-gal tank and electric backup, wall-hung boiler with 40-gal tank.
- **HVAC:** 95 AFUE wall-hung boiler for hydro-coil; 16 SEER AC, rigid metal ducts.
- **Lighting:** 100% CFL.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, clothes washer.
- **Solar:** 7.8-kW PV, solar thermal evacuated tube system.
- **Water Conservation:** EPA WaterSense certified home, native plants.
- **Energy Management System:** Yes, wi-fi enabled.
- **Other:** No/low-VOC, no-formaldehyde wood; aging in place features.



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.



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