

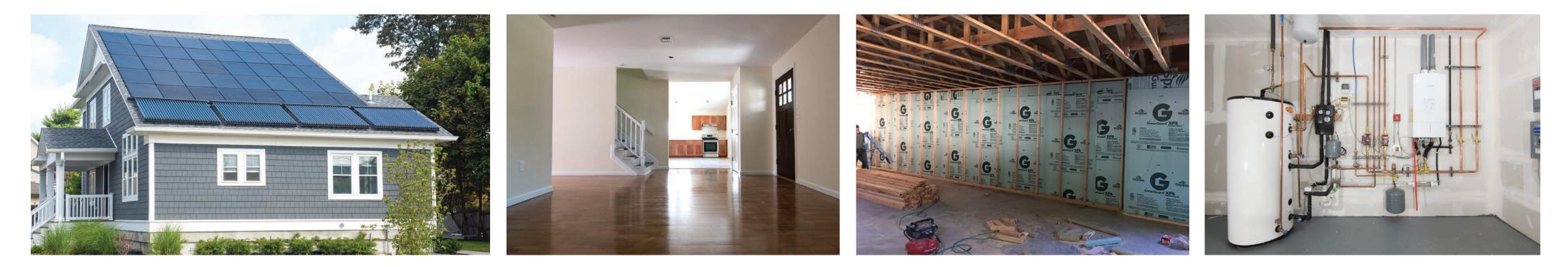
United Way of Long Island



United Veterans Beacon House | Huntington Station, NY | UnitedWayLl.org



"This DOE ZERH home will provide these Vets with a more comfortable, healthy living experience while saving taxpayers with its very low operational expenses." *Rick Wertheim, builder, United Way of Long Island*



PROJECT DATA

- **Layout:** 5 bdrm, 2.5 baths, 2 fl + bsmt, 3,719 ft²
- **Climate:** IECC 4A, mixed-humid
- Completed: June 2017
- Category: affordable

KEY FEATURES

- Walls: Advanced framed 2x6 24" o.c. stud wall w/5.5" R-19.8 dense-packed cellulose plus two ³/₄" sheets R-10 foam insulation for total R-30. Coated taped OSB, PVC siding.
- Roof: 5/8" plywood decking; ice-and-water shield at valleys, drip line, and roof edges, 30# felt, architectural fiberglass shingles.
- Attic: Vented attic, raised-heel trusses, 14" R-50 blown cellulose in flat ceiling; open-cell spray foam in vaulted ceiling.

MODELED PERFORMANCE DATA

- HERS Index: without PV 31, with PV -5
- **Projected Annual Energy Costs:** without PV \$1,750, with PV \$-200
- Projected Annual Energy Cost Savings: (vs typical new homes) without PV \$3,900, with PV \$5,850
- **Annual Energy Savings:** without PV 4,900 kWh, 1,300 therms; with PV 17,100 kWh, 1,600 therms

CONTACT

Rick Wertheim 631-940-3722 rwertheim@unitedwayli.org



Energy Efficiency & Renewable Energy

- **Foundation:** Basement, poured concrete with 2.5" R-12.5 polyiso on interior. Exterior covered with elastomeric waterproofing membrane plus fiber protection board to footing.
- Windows: Vinyl-framed, double-pane, low-e, argon-filled windows, U=0.17, SHGC=0.20.
- Air Sealing: 2.06 ACH 50.
- Ventilation: ERV, MERV 13 filter.
- HVAC: Hydrocoil split-air system attached to 95 AFUE wall-hung gas-fired boiler, 13 SEER AC.
- Hot Water: Solar thermal water heating; wall-hung boiler for backup.
- Lighting: 100% LED, occupancy and vacancy sensors.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, and clothes washer.
- **Solar:** 8.5-kW PV.
- Water Conservation: WaterSense fixtures; central manifold distribution. Drip irrigation.
- Energy Management System: Internet controlled HVAC; tracks energy use, temp, humidity, maintenance.
- **Other:** Low-VOC finishes, formaldehyde-free furnishings. extra fasteners, 120-mph windows, impact-resistant siding.



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.

