United Way of Long Island
United Veterans Beacon House | Huntington Station, NY | UnitedWayLI.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

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

KEY FEATURES

• Walls: Advanced framed 2x6 24” o.c. stud wall w/5.5” R-19.8 dense-packed cellulose plus two ¾ sheets R-10 foam insulation for total R-30. Coated taped OSB, PVC siding.
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• Roof: ½ 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.
• 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.

CONTACT

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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.