Zero Net Now
Zero Energy at Albany Post | New Paltz, NY | ZeroNetNow.com

CONTACT
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.

PROJECT DATA

• Layout: 2 bdrm, 2 bath, 3 fls, 3,481 ft²
• Climate: IECC 6A, cold
• Completed: June 2021
• Category: Custom for Buyer >3000 ft²

MODELED PERFORMANCE DATA

• HERS Index: without PV 27; with PV -16
• Annual Energy Costs: without PV $1,550; with PV $300
• Annual Energy Cost Savings: (vs typical new homes) without PV $3,350; with PV $5,500
• Annual Energy Savings: without PV 22,200 kWh; with PV 36,400 kWh
• Savings in the First 30 Years: without PV $135,300; with PV $221,500

KEY FEATURES

• Walls: ICF, R-22 total: 11.25" ICF walls; composite wood siding.
• Attic: Unvented attic: 10" R-45 medium-density + 2" R-14 high-density spray foam.
• Foundation: Insulated daylight basement: R-22 11.25" ICF, above-grade vinyl trim and siding, below-grade cementitious boards. 3.5" R-26 closed-cell spray foam under slab.
• Windows: Triple-pane, argon filled, low-e2, vinyl frame, casement style, U=0.17, SHGC=0.19.
• Air Sealing: 0.20 ACH50, spray foam under slab, liquid-applied flashings at all rough-openings and penetrations, spray foam under roof and at eaves.
• Ventilation: ERV, CO₂ sensors trigger higher speed. Boost settings in baths and kitchen. MERV 6 filter on fresh air intake, MERV 11 filter on supply to air handler, 76 SRE.
• HVAC: Ground-source heat pump with one, 3-ton central air handler, ground-loop configuration with a 5.0 COP, AC variable speed compressor, 34 EER, rigid metal ducting.
• Hot Water: Ground-source heat pump, 80-gal, 2.66 EF.
• Lighting: 100% LED, motion sensors.
• Appliances: ENERGY STAR refrigerator, clothes washer, ventless heat pump clothes dryer.
• Solar: 11.752 kW, 13.5 kWh battery storage, rooftop shingles.
• Water Conservation: EPA WaterSense toilets, central manifold with PEX piping.
• Energy Management System: Sensors for CO₂, temp, humidity. Tracking of PV, energy use, HVAC, ERV.
• Other: Accessible floorplan, doorways. Low/no-emission paints, adhesives, sealants.

“It is very satisfying to be able to monitor the house’s energy usage and see that far more energy is being generated than used.” Homeowner

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Photos courtesy of Zero Net Now

PNNL-SA-166200  September 2021