ZeroNetNow
Cooper Street Residence | New Paltz, NY | ZeroNetNow.com

“Since the summer of 2022, we have consumed less energy than we have produced.” Homeowners

PROJECT DATA

• **Layout:** 4 bdrm, 3.5 bath, 3 fl + bsmt, 3,718 ft²
• **Climate:** IECC 6A, cold
• **Completed:** February 2022
• **Category:** Custom for Buyer

MODELED PERFORMANCE DATA

• **HERS Index:** without PV 26; with PV -13
• **Annual Energy Costs:** without PV $2,000; with PV $250
• **Annual Energy Cost Savings:** (vs typical new homes) without PV $4,500; with PV $6,250
• **Annual Energy Savings:** without PV 25,250 kWh; with PV 40,100 kWh
• **Savings in the First 30 Years:** without PV $182,950; with PV $254,100

CONTACT

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KEY FEATURES

• **Walls:** ICF walls, R-22 total: 11.25″ ICF blocks, engineered wood siding.
• **Roof:** Gable truss roof, coated OSB sheathing, 1"x3" furring strips, self-adhered membrane, solar PV shingles.
• **Attic:** Unvented attic, vaulted ceilings: 10″ R-44 medium-density spray foam topped by 2.5″ R-18 high-density spray foam.
• **Foundation:** Insulated basement: ICF blocks R-22, 11.25° wide.
• **Windows:** Triple-pane, argon and kypton filled, low-e, vinyl; U=0.17-0.20, SHGC=0.21-0.25.
• **Air Sealing:** ACH50 = 1.48 CFM50. Spray foam under slab and on attic walls and ceiling; ICF walls with liquid-applied flashings at all rough openings and penetrations.
• **Ventilation:** ERV with MERV 11 and 6 filters, demand-controlled ventilation, CO₂ sensors.
• **HVAC:** Heat pump, ground-loop config, 5.1 COP, variable-speed compressor, 34 EER.
• **Hot Water:** Ground-source heat pump water heater, 80-gal, 2.66 EF.
• **Lighting:** 100% LED, motion sensors, large windows.
• **Appliances:** ENERGY STAR refrigerator, dishwasher, clothes washer and dryer.
• **Solar:** 13,74-kW roof shingles.
• **Water Conservation:** EPA WaterSense fixtures; central manifold, PEX piping.
• **Energy Management System:** CO₂ sensors in master bedroom, return duct, and at kitchen trigger boost setting on the ERV. Wi-Fi monitoring of energy production and end uses.
• **Other:** Low-VOC products. ICF thermal mass holds temp through power outages. EV ready.