

Energy Vision Homes

Hollis House | Hollis, NH | EnergyVisionHomes.com





"A lowered second-floor wall height decreased the volume of the house... and reduced heating and cooling loads in the building."

John Slater, builder, Energy Vision Homes









PROJECT DATA

• Layout: 4 bdrm, 2.5 bath, 2 fl, 3,197 ft²

Climate: IECC 5A, cold
Completed: February 2022
Category: Custom for Buyer

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 26; with PV -7
- Annual Energy Costs: without PV \$1,650; with PV \$200
- Annual Energy Cost Savings: (vs typical new homes) without PV \$4,850; with PV \$6,500
- Annual Energy Savings: without PV 8,800 kWh; with PV 27,750 kWh
- Savings in the First 30 Years: without PV \$197,750; with PV \$264,250

CONTACT

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KEY FEATURES

- Walls: 2x6, 24 in. o.c., total R-41: $\frac{5}{8}$ " drywall; $1-\frac{1}{2}$ " service cavity, vapor-open membrane, $5-\frac{1}{2}$ " dense-pack fiberglass in wall cavity, $\frac{1}{2}$ " CDX plywood, vapor-open WRB, 5" mineral wool board, $\frac{3}{4}$ " furring strips/drainage plane, cedar siding.
- Roof: Truss gable roof, $\frac{5}{8}$ " CDX sheathing, self-adhered bituminous membrane over whole roof, fiberglass shingles; 22" raised heel trusses.
- Attic: Vented attic with 18" R-38 blown fiberglass.
- Foundation: Basement, 5%" drywall, 2x4 24" o.c., vapor-open membrane, 1" Type IX closed-cell EPS, 10" concrete, self-adhered membrane, 5" mineral wool, dimple mat.
- Windows: Triple-pane, low-e2, argon-filled, vinyl-framed, tilt-turn; U=0.15, SHGC=0.51.
- Air Sealing: 0.60 ACH 50. Sub-slab poly and vapor-open wall and ceiling air barriers were taped together at seams. All penetrations sealed with tape and fluid-applied flashing.
- Ventilation: ERV, 116 CFM, 44 Watt, SRE 83; separately ducted, MERV 13 filter, CO2 sensor.
- HVAC: Ducted mini-split heat pump; 11 HSPF, 18 SEER, 3 indoor air handlers, 3 outdoor compressors. Rigid metal ducts, sealed and insulated, compact design, in conditioned space.
- Hot Water: Heat pump water heater, 65 gallon, EF 3.85; in basement.
- Lighting: 100% LED, large windows used throughout the home.
- Appliances: ENERGY STAR refrigerator, dishwasher, clothes washer, primary water heater.
- Solar: 9,75-kW of solar panels; installed on barn roof.
- Water Conservation: EPA WaterSense certified whole house.
- Energy Management System: PV software tracks production. Wi-Fi HVAC controls.
- Other: All materials Green Guard Gold Certified. No Redlist products were used.





