High Performance Homes
Rose Acres  |  Westminster, MD  |  hphpa.com

"The home effortlessly maintains even temperatures throughout, while delivering super clean air."  Home owner

PROJECT DATA

• Layout: 6 bdrm, 3 bath, 1.5 fl + bsmt, 4,270 ft²
• Climate: IECC 4A, mixed-humid
• Completed: April 2017
• Category: custom for buyer

MODELED PERFORMANCE DATA

• HERS Index: without PV 35; with PV 14
• Annual Energy Costs: without PV $1,300; with PV $600
• Annual Energy Cost Savings: (vs typical new homes) without PV $1,650, with PV $2,350
• Annual Energy Savings: without PV 18,500 kWh; with PV 26,300 kWh
• Savings in the First 30 Years: $104,000

KEY FEATURES

• Walls: R-23 6.5" SIPs; house wrap; stone and vinyl siding; 4.5" SIPs; 1" closed-cell spray foam + R-19 batt at rim joists. All joints caulked.
• Roof: Asphalt shingles, 15# felt; all eaves, gables, and valleys have ice-and-water shield; kick-out flashing; 5" sidewall flashing.
• Attic: Vented attic, 1" closed-cell foam sprayed on ceiling deck + R-49 blown fiberglass = R-56 total.
• Foundation: Basement of R-21.3 insulated concrete panel walls; R-10 under slab.
• Windows: Double-pane, single-hung, low-e, argon-filled; U=0.24, SHGC=0.17.
• Air Sealing: 1.1 ACH 50.
• Ventilation: Controlled smart switch venting system that calculates makeup air; fresh air intake; timered exhaust.
• HVAC: Ground-source heat pump, 5.3 COP, 24.4 EER, 27.4 SEER; mastic-sealed ducts.
• Hot Water: 55-gallon desuperheater + 0.91 EF 55-gallon electric tank water heater. Push button recirculation pump.
• Lighting: 100% LED or CFL, all ENERGY STAR fixtures.
• Appliances: All ENERGY STAR.
• Solar: 5.94-kW PV system.
• Water Conservation: Low-flow fixtures; recirculation pump. Native landscaping.
• Energy Management System: Energy management system.
• Other: Low- or no-VOC products; motion-sensor garage exhaust fan; ADA accessible.

CONTACT

Amy Whaley
717-359-4663
awhaley@hphpa.com

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.

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