S. D. Jessup Construction
Pipers Creek | Ararat, NC | www.SDJessup.com

“I’m building... homes that actually work right and owners enjoy living in.” Shawn Jessup, S. D.

PROJECT DATA

• Layout: 3 bdrm, 2.5 bath, 2 fls, 3,310 ft²
• Climate: IECC 4A, mixed-humid
• Completed: November 2018
• Category: custom buyer

MODELED PERFORMANCE DATA

• HERS Index: without PV 42
• Annual Energy Costs: without PV $1,650
• Annual Energy Cost Savings: (vs typical new homes) without PV $1,550
• Annual Energy Savings: without PV 12,800 kWh
• Savings in the First 30 Years: $65,200

KEY FEATURES

• Walls: 2x4 16" o.c. advanced framing; R-21 total: ½" drywall; 1st floor 2x4 16" o.c. with R-15 fiberglass batts, 2nd floor 2x6 16" o.c. with R-19 fiberglass batts; R-6.6 poly isocyanurate rigid foam taped at seams and continuous roof to foundation; self-draining vinyl siding.
• Roof: Gable roof; ¾" taped coated OSB sheathing, asphalt shingles, 2-ft overhangs.
• Attic: Unvented, R-50 open-cell spray foam, 15" raised energy heel trusses.
• Foundation: Insulated basement, R-31.5 total; pre-cast concrete walls panels with insulated concrete studs, 2.5" R-12.5 XPS foam plus R-19 fiberglass, asphalt water proofing.
• Windows: Double-pane, argon-filled, low-e, vinyl double-hung frames, U=0.30, SHGC=0.25.
• Air Sealing: 0.37 ACH 50.
• Ventilation: ERV with MERV 8 filter, indoor air quality sensors, MERV 13 filter on HVAC.
• HVAC: Central air-source heat pump, 9.5 HSPF, 18.5 SEER; rigid metal ducts in conditioned space. Sealed direct-vent propane fireplace.
• Hot Water: Heat pump water heater, 3.55 EF, 50-gal.; electric tank backup; compact plumbing with PEX piping.
• Lighting: 100% LED, motion sensors, daylighting.
• Appliances: ENERGY STAR refrigerator, dishwasher, ceiling fans, and exhaust fans.
• Solar: Solar ready.
• Water Conservation: EPA WaterSense fixtures and toilets.
• Energy Management System: Smart, internet-enabled thermostats, indoor air monitor.
• Other: Wide doors and hallways, low-to-no-VOC products, CARB ATCM/TSCA cabinets.

CONTACT

Shawn Jessup
336-368-1155
Shawn@SDJessup.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.