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.

2022 WINNER

PROJECT DATA

• Layout: 4 bdrm, 1.5 bath, 2 fl, 1,612 ft²
• Climate: IECC 5A, cold
• Completed: March 2022
• Category: Affordable

MODELED PERFORMANCE DATA

• HERS Index: without PV 34
• Annual Energy Costs: without PV $1,450
• Annual Energy Cost Savings: (vs typical new homes) without PV $600
• Annual Energy Savings: without PV 11,300 kWh
• Savings in the First 30 Years: without PV $24,050

KEY FEATURES

• Walls: 2x6, 24" o.c., R-29.5 total: R-23 mineral wool, R-6 coated sheathing, taped; vinyl siding.
• Roof: Truss gabled roof: ½" coated OSB, all seams taped; 2 rows membrane at eaves; drip edge; soffit and ridge vents. IBHS Fortified Roof certified.
• Attic: Vented attic: 17" R-60 blown cellulose at attic floor. 16" raised heel energy trusses.
• Foundation: Slab on grade: poured concrete stem walls. Vapor barrier and 2" XPS foam under slab. Sill seal.
• Windows: Triple-pane, argon-filled, low-e, vinyl frame, U=0.22, SHGC=0.23. Double-hung.
• Air Sealing: 1.5 ACH 50. Spray foam at all gaps, acoustic caulk on wood seams, 1" rigid foam on all exterior walls, all sheathing seams taped.
• Ventilation: ERV; separately ducted, SRE 75%. MERV 8 filter on air intake.
• HVAC: Ductless mini-split heat pump with 14 Btu/hr, 33 SEER; 2 indoor air handlers, and 1 outdoor compressor. Air transfer fans over bedroom doors.
• Hot Water: 50-gallon heat pump water heater, 3.45 EF, located in mechanical room.
• Lighting: 100% LED with motion sensors and daylight sensors.
• Appliances: ENERGY STAR dishwasher, refrigerator, clothes washer, clothes dryer.
• Solar: Solar ready; conduit in place from roof to inverter location.
• Water Conservation: Whole house is EPA WaterSense certified. Compact plumbing design. Rain gardens.
• Energy Management System: Smart ventilation; motion and daylight sensors.
• Other: No-VOC paint, flooring. Metal conduit in for future electric vehicle charging station.

CONTACT

Kris McKelvie
860-541-2208 ext.2212
construction@hfhncc.org

"It has always been my dream to be a homeowner." Homeowner