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.

CONTACT
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PROJECT DATA
• Layout: 5 bdrm, 5 bath, 2 fl + bsmt, 7,629 ft²
• Climate: IECC 4A, mixed-humid
• Completed: December 2021
• Category: Custom for Buyer

MODELED PERFORMANCE DATA
• HERS Index: without PV 36; with PV 1
• Annual Energy Costs: without PV $1,600; with PV $450
• Annual Energy Cost Savings: (vs typical new homes) without PV $2,900; with PV $4,250
• Annual Energy Savings: without PV 36,100 kWh, 130 therms; with PV 52,800 kWh, 130 therms
• Savings in the First 30 Years: without PV $141,200; with PV $206,400

KEY FEATURES
• Walls: 2x6, 16” o.c., R-24 total: advanced framed, R-23 blown fiberglass, R-3 insulated coated OSB sheathing with seams taped, vinyl and stone veneer siding.
• Roof: Shed truss roof: coated OSB, synthetic felt, architectural shingles or standing-seam metal roofing; continuous ridge vents.
• Attic: Vented attic, R-65 total: 2” open-cell spray-foam on attic floor, 22” blown fiberglass.
• Foundation: Insulated basement: 1.5” cc foam sprayed on interior behind 2x4 framed walls with R-13 batt. On exterior, spray-applied rubber waterproofing, dimpled plastic drainboard.
• Windows: Double-pane, argon-filled, vinyl-framed, low-e2; fixed and casement; fixed awnings and motorized blinds, U=0.25, SHGC=0.27.
• Air Sealing: 2.04 ACH50; sheathing taped at all seams. Sill and drywall gaskets.
• Ventilation: ERV with separate ducting to every room, MERV 13 filters. Dehumidifier. Dampered dedicated makeup air for range hood and dryer.
• HVAC: Two ground-source heat pumps, 22.2-24.8 EER, 3.9-4.4 COP.
• Hot Water: Ground source heat pump preheats water for two gas tankless water heaters.
• Lighting: 100% LED; daylight sensors, timers, controls, 3 solar tubes.
• Appliances: ENERGY STAR dishwasher, refrigerator.
• Solar: 18-kW rooftop panels, three 14-kW batteries for 42 kW total storage.
• Water Conservation: WaterSense fixtures; PEX piping; adaptive recirculation pump.
• Energy Management System: Wi-Fi energy monitoring system tracks PV production and usage of every appliance. Carbon emissions monitor. Smart thermostats.
• Other: Recycled-content concrete and roofing shingles. Electric vehicle charger installed.

“This summer is looking promising with little to no electrical bill and a very little gas bill.” Homeowners

Photos courtesy of Stockell Custom Homes

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