Health-E Community Enterprises of Virginia

Jefferson Green | Richmond, VA | wfsolarhomes.com

“...have been breathing better recently than I can remember in years!” Home owner

PROJECT DATA

• Layout: 4 bdrm, 3.5 bath, 3 fl, 2,666 ft²
• Climate: IECC 4A, mixed-humid
• Completed: June 2018
• Category: multifamily

MODELED PERFORMANCE DATA

• HERs Index: without PV 41; with PV NA
• Annual Energy Costs: without PV $1,300; with PV $NA
• Annual Energy Cost Savings: (vs typical new homes) without PV $2,050; with PV $NA
• Annual Energy Savings: without PV 13,400 kWh; with PV NA
• Savings in the First 30 Years: $90,700

KEY FEATURES

• Walls: 2x6 24” o.c. advanced framed walls; 2” R-13 closed-cell spray foam + 3.5” R-12.6 cellulose = R-25.6 total. OSB, house wrap; brick veneer with ventilation gap. Open-cell foam in rim bands; sill gaskets and caulk at bottom plate.
• Roof: Recycled rubber slate tiles; tapered R-5 insulation; low-albedo membrane.
• Attic: Vaulted ceilings, 14” and 16” roof joists, R-50 to R-57 open-cell spray foam.
• Foundation: Unvented, conditioned crawlspace with R-22 ICF foundation walls.
• Windows: Double-pane, low-e, argon-filled, U=0.25, SHGC=0.20, on historic front only. All others windows and sliders are 1” triple pane, low-e, argon filled. U=0.20, SHGC=0.18.
• Air Sealing: 1.3 ACH 50.
• Ventilation: ERV, MERV 8 filters.
• HVAC: Ground-source heat pump, 4-zone ducted system, 4.1 COP. SEER 20.6; metal ducts insulated to R-8 and mastic-sealed; ducts in conditioned space between floors or in crawl space. Any ducts in vented attic are covered with open-cell spray foam.
• Hot Water: Electric 50-gallon hot water heater, 0.91 EF.
• Lighting: 100% LED, ENERGY STAR ceiling fans.
• Appliances: EPA ENERGY STAR dishwasher and refrigerator.
• Solar: PV ready.
• Water Conservation: WaterSense fixtures; push-button recirculation pump.
• Energy Management System: PV monitoring system.
• Other: Low-/no-VOC paints, passive radon, wired for EV. LEED certified.

CONTACT

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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.