

Health-E Community Enterprises of Virginia

U.S. DOE

ZERO

ENERGY READY HOME

2013 WINNER

Housing
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Awards

Jefferson Green | Richmond, VA | wfsolarhomes.com











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

CONTACT

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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.





