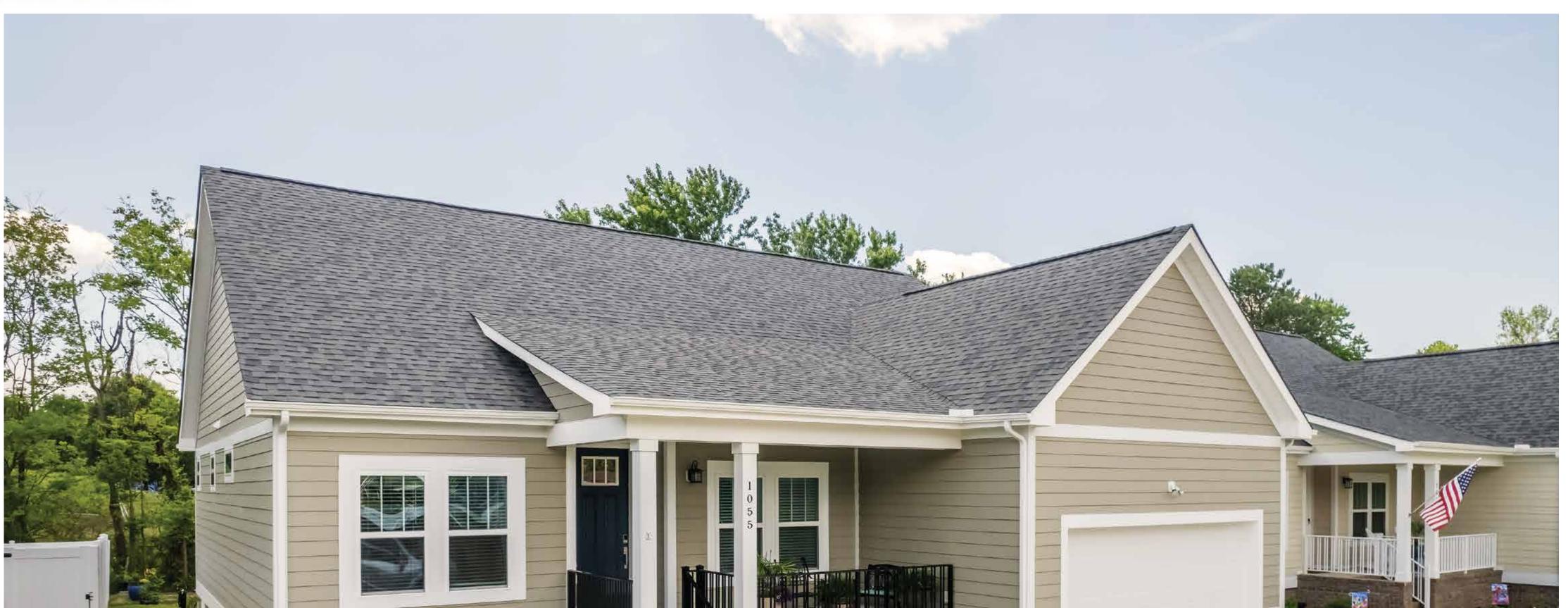


Healthy Communities

Today's New Living Experience | Williamsburg, VA | Healthycommunitiesva.com





"The interior of our home is incredibly quiet, allowing us to fully relax and unwind." Homeowners



PROJECT DATA

- Layout: 3 bdrm, 2 bath, 1 fl, 1,847 ft²
- Climate: IECC 4A, mixed-humid
- **Completed:** September 2022
- Category: Production, Affordable

MODELED PERFORMANCE DATA

KEY FEATURES

- Walls: Panelized, 2x6, 24" o.c., R-24 total: advanced framed, in wall cavity 1" closed-cell spray foam then 4.5" R-19 fiberglass batt compacted to R-16. Plywood sheathing. 1" R-5 graphite GPS, fiber-cement siding. 5.5" open-cell foam in rim joists.
- **Roof:** Gable truss roof, ½" plywood decking, synthetic underlayment, continuous ridge vent, 30-yr architectural shingles. Storage cradle built into trusses 14" raised-heels.
- HERS Index: without PV 44; with PV 8
- **Annual Energy Costs:** without PV \$1,200; with PV \$300
- Annual Energy Cost Savings: (vs typical new homes) without PV \$1,750; with PV \$2,650
- **Annual Energy Savings:** without PV 9,450 kWh; with PV 17,050 kWh
- Savings in the First 30 Years: without PV \$74,200; with PV \$110,750

CONTACT

Jay Epstein 757-592-4855 Jay@hec-va.com

- Attic: Vented attic, 14" R-49 blown cellulose. Attic hatch gasketed and insulated.
- Foundation: Unvented crawlspace, R-10 interior rigid foam, R-19.5 open-cell spray foam in rim joist. Raised dirt floor with 8-mil poly vapor barrier.
- Windows: Double-pane, U=0.28, SHGC=0.22. Low-e, argon fill, vinyl framed.
- Air Sealing: 1.94 ACH50; 3.5" sill gasket plus expansive caulk at rim. All wall joints caulked then sealed with 1" closed-cell spray foam to back of cavity wall. Top plates spray foamed.
- Ventilation: ERV integrated with central HVAC airhandler. Uses HVAC supply and returns.
- HVAC: Air source heat pump, multi-stage compressor. 9.6 HSPF 18 SEER, variable speed.
- Hot Water: Heat pump water heater, 50-gal, 3.35 COP. Recirc pump, compact plumbing.
- Lighting and Appliances: LED lighting, ENERGY STAR appliances.
- Solar: 6.32 kW PV panels. Electrc hub installed for future of EV charger, subpanel, and battery backup.
- Energy Management System: Web-enabled HVAC, diagnostics, plus locks, video surveillance, lights, shades, garage doors, energy usage.
- Other: Building Integrated Modeling.



Energy Efficiency & Renewable Energy



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.



23 WINNER

Housing