Habitat for Humanity of Catawba Valley
The Rudy Project | Hickory, NC | HabitatCatawbaValley.org

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PROJECT DATA

- Layout: 3 bdrm, 2 bath, 1 fl, 1,160 ft²
- Climate: IECC 4A, mixed-humid
- Completed: January 2019
- Category: affordable

MODELED PERFORMANCE DATA

- HERS Index: without PV 40
- Annual Energy Costs: without PV $750
- Annual Energy Cost Savings: (vs typical new homes) without PV $300
- Annual Energy Savings: without PV 3,400 kWh
- Savings in the First 30 Years: $12,200

KEY FEATURES

- Walls: 2x6 24” o.c. advanced framing; ladder blocking, open and insulated headers, R-26 total: ½” drywall, R-19 unfaced batts, ½” OSB sheathing, 1” taped rigid foam, 1x4 furring strips, ¼” engineered wood lap siding.
- Roof: Gable roof; coated OSB sheathing, architectural asphalt shingles.
- Attic: Vented attic; 20” R-50 blown fiberglass; 24” raised heel trusses.
- Foundation: Unvented crawlspace, R-11 total: 2” rigid EPS on inside face of 8” CMU, rubberized waterproof coating, 12-mil reinforced polyethylene liner over dirt.
- Windows: Double-pane, argon-filled, low-e, vinyl single-hung frames, U=0.30, SHGC=0.22
- Air Sealing: 2.5 ACH 50, drywall glued at top plate, sill seal.
- Ventilation: ERV, MERV 13 filters.
- HVAC: Ductless mini-split heat pump, 12.5 HSPF, 26.1 SEER, 1 indoor air handler, 1 outdoor compressor; dehumidifier in crawl.
- Lighting: 100% LED, motion sensors on exterior lights.
- Appliances: ENERGY STAR refrigerator, dishwasher, clothes washer, and dehumidifier.
- Water Conservation: WaterSense-labeled fixtures and toilets.
- Other: 3-ft doors and hallways, low-VOC paint, Green Guard cabinets and flooring, passive radon vent, IBHS Fortified Home Bronze-level features.

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.