



# Habitat for Humanity of Catawba Valley

Northstone Bungalow | Hickory, NC | [HabitatCatawbaValley.org](http://HabitatCatawbaValley.org)



Photos courtesy of Habitat for Humanity of Catawba Valley

“Now we live in a Zero Energy Ready Home that is comfortable, with healthy air to breathe, and our energy bills have decreased.” *Home owner*



## PROJECT DATA

- **Layout:** 3 bdrm, 2 bath, 1 fl, 1,232 ft<sup>2</sup>
- **Climate:** IECC 4A, mixed-humid
- **Completed:** March 2016
- **Category:** affordable

### MODELED PERFORMANCE DATA

- **HERS Index:** without PV 46, with PV NA
- **Projected Annual Energy Costs:** without PV \$800, with PV \$NA
- **Projected Annual Energy Cost Savings:** (vs typical new homes) without PV \$700, with PV \$NA
- **Annual Energy Savings:** without PV 7,600 kWh; with PV NA

## KEY FEATURES

- **Walls:** 2x4 16" o.c., advanced framing; OSB sheathing; R-15 blown fiberglass; R-10 EPS exterior rigid foam with taped seams; 2x4 furring strips; engineered wood lap siding.
- **Roof:** Coated OSB sheathing with taped seams, 30-year architectural shingles.
- **Attic:** Vented attic, R-50 blown fiberglass.
- **Foundation:** Unvented crawlspace of concrete block with R-10 EPS on inside of walls and 12-mil reinforced liner.
- **Windows:** Double-pane, low-e vinyl-framed windows, U=0.30, SHGC=0.22.
- **Air Sealing:** 3 ACH 50.
- **Ventilation:** Continuous ERV at 42 cfm.
- **HVAC:** Ducted mini-split heat pump in closed crawlspace, 18 SEER, 10 HSPF, R-8 flex duct.
- **Hot Water:** Heat pump water heater 3.39 EF.
- **Lighting:** 100% LED lighting, ENERGY STAR ceiling fans.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, washer & dryer.
- **Solar:** None.
- **Water Conservation Features:** WaterSense plumbing fixtures.
- **Energy Management System:** None.
- **Other:** Low-VOC paint, passive radon ventilation system, indoor return air vents; universal design wider doorways and hallway.

## CONTACT

Derek Ross  
828-612-1436  
[derek@habitatcatawbavalley.org](mailto:derek@habitatcatawbavalley.org)

