

Deltec Homes

ZERO
ENERGY READY HOME

2019 WINNER
Housing
Innovation
Awards

Bluegate Horizon | Mills River, NC | DeltecHomes.com



"We have absolutely loved this home...just walking through the house every day is a joy." A Deltec home owner









PROJECT DATA

- **Layout:** 3 bdrm, 2 bath, 1 fl, 1,759 ft²
- Climate: IECC 4A, mixed-humid
- Completed: February 2019
- Category: custom for buyer

MODELED PERFORMANCE DATA

- HERS Index: without PV 45; with PV 0
- Annual Energy Costs: without
 PV \$1,000; with PV \$190
- Annual Energy Cost Savings: (vs typical new homes) without PV \$900; with PV \$1,750
- Annual Energy Savings: without PV 9,200 kWh; with PV 17,450 kWh
- Savings in the First 30 Years: \$74,500

CONTACT

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KEY FEATURES

- Walls: 2x6 24" o.c. advanced framing, R-24 total: %" drywall, 5.5" unfaced fiberglass batt, %" plywood sheathing, 1" R-5 XPS, rigid foam, draining house wrap, fiber cement lap siding; wall panels built in factory powered by renewable energy.
- **Roof:** Vaulted asymmetrical roof with clerestory windows, 5%" drywall, open web trusses at 24" o.c., 5%" plywood sheathing, polyolefin underlayment, ENERGY STAR Cool Roof.
- Attic: Unvented, vaulted ceilings; 8" R-30 open-cell spray foam under roof decking.
- Foundation: Slab on grade; 2" R-10 XPS at slab edge; termite inspection gap.
- Windows: Double-pane, argon-filled, low-e3, fiberglass double-hung, U=0.27, SHGC=0.21.
- Air Sealing: 1.44 ACH 50.
- Ventilation: Independently ducted HRV, also exhausts guest bath.
- **HVAC:** Combination ducted ductless mini-split heat pump, 10.7 HSPF, 17.45 SEER, 2 indoor air handlers; electric baseboard back-up. MERV 8 filters at return grills in bedrooms.
- Hot Water: Heat pump water heater, 3.69 EF, 50-gal.; push button recirculation pump.
- Lighting: 100% LED, daylighting.
- Appliances: ENERGY STAR refrigerator, dishwasher, clothes washer, and ceiling fans.
- Solar: 6.5-kW PV system.
- Water Conservation: EPA WaterSense fixtures and toilets; two 50-gal. rain barrels.
- **Energy Management System:** Wi-Fi-enabled thermostat remotely controls mini-splits, heat pump water heater, dishwasher, and range; PV monitoring system.
- Other: No-step entries, 3-ft doors. Zero-VOC interior paints and primers, Green Seal-labeled carpet, KCMA-certified cabinetry, Green Guard-labeled flooring.





