



# Red Tree Builders

Robinhood | Asheville, NC | RedTreeBuilders.com



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“Our biggest reward is to make a real difference in our clients’ lifestyle and their health.” *Builder*



## PROJECT DATA

- **Layout:** 5 bdrm, 4 bath, 1 fl + bsmt, 4,501 ft<sup>2</sup>
- **Climate:** IECC 4A, mixed-humid
- **Completed:** March 2021
- **Category:** Custom Spec

### MODELED PERFORMANCE DATA

- **HERS Index:** without PV 55
- **Annual Energy Costs:** without PV \$2,200
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$2,550
- **Annual Energy Savings:** without PV 14,500 kWh, 100 Therms
- **Savings in the First 30 Years:** without PV \$123,700

## KEY FEATURES

- **Walls:** 2x6, 24" o.c., R-19 total: advanced framed, R-19 batt, 7/16" coated OSB, drain wrap; brick veneer and fiber cement siding, liquid flash door and window pans.
- **Roof:** Truss and rafter gabled roof: plywood deck, architectural shingles and metal roof.
- **Attic:** Unvented attic: vaulted ceilings, 7" R-28 open-cell spray foam under decking.
- **Foundation:** Pre-cast concrete walls with integrated foam-insulated concrete studs with metal nailer facings; 7" open+closed-cell spray foam in wall cavity, 40-mil waterproofing and drain mat on exterior, 2" rigid foam under slab.
- **Windows:** Double-pane, argon-filled, low-e3, aluminum-clad wood frame, U=0.27, SHGC=0.23.
- **Air Sealing:** 2.00 ACH50, aerosol whole-house sealant.
- **Ventilation:** ERV, MERV 11 filter at furnace, garage exhaust fan on motion sensor with timer.
- **HVAC:** Central air-source heat pump, 9.6 HSPF, 18 SEER, backup gas furnace 96 AFUE.
- **Hot Water:** Hybrid heat pump water heater, 80-gal, 3.45 UEF.
- **Lighting:** 100% LED, 2 solar tubes in master closet.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, 3 exhaust fans, microwave.
- **Solar:** Solar ready with blocking for future PV components, breaker space in electrical panel, 1" labeled metal conduit installed from roof to panel and inverter location.
- **Water Conservation:** Low-flow fixtures, central manifold with PEX piping. French drains.
- **Energy Management System:** Smart thermostat has a humidity sensor.
- **Other:** EV charging, accessible doorways, lever handles, kitchen drawers, task lighting, showers. Low/no-VOC paints, stains, cabinets, flooring, trim, doors, recycled-plastic deck.

## CONTACT

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