



S.D. Jessup Construction

Modern Farmhouse | Pilot Mountain, NC | SDJessup.com



Photos courtesy of S.D. Jessup Construction

“After moving into this home, my sinus problems have gone away.” Homeowners



PROJECT DATA

- **Layout:** 4 bdrm, 4 bath, 2 fl, 3,630 ft²
- **Climate:** IECC 4A, mixed-humid
- **Completed:** February 2021
- **Category:** Custom for Buyer

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 47
- **Annual Energy Costs:** without PV \$1,300
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$1,100
- **Annual Energy Savings:** without PV 13,350 kWh
- **Savings in the First 30 Years:** without PV \$44,800

CONTACT

Shawn D. Jessup
336-368-1155
shawn@sdjessup.com

KEY FEATURES

- **Walls:** 2x4 studs, 16" o.c., R-21.6 total: 2x4 studs, advanced framed, R-15 fiberglass batt, spray foam or XPS in some cavities; coated insulated OSB R-6.6; fiber cement siding.
- **Roof:** Rafter gable & shed roof: 2x6 or 2x8 rafters, 7/16" OSB; synthetic underlayment, self-adhered membrane in valleys and transitions. 30-yr asphalt shingles or metal roofing.
- **Attic:** Unvented attic: vaulted ceilings, 7.5" R-30 open-cell spray foam on roof deck.
- **Foundation:** Sealed, conditioned crawlspace, thermostat-controlled damper on supply ducts. CMU stem walls w/R-10.2 foam cores; 15-mil poly vapor barrier on floors and walls.
- **Windows:** Double-pane, argon-filled, low-e2, aluminum-clad wood, U=0.28, SHGC=0.19.
- **Air Sealing:** 0.993 ACH50; crawlspace sealed with 15-mil polyethylene and tape; foundation, sill plates, penetrations, and joints caulked; wall seams and holes taped.
- **Ventilation:** ERVs in crawl and attic, temp/humidity sensor, MERV 13 and 8 filters.
- **HVAC:** 2 ducted mini-split heat pumps, 10.8 HSPF, 18.9 SEER (main level) & 17.8 SEER (upstairs); liquid propane 41,000 Btu/h fireplace with battery backup for power outages.
- **Hot Water:** Heat pump water heater, 50-gal, 3.5 EF, leak detection, pipes insulated to R-3.
- **Lighting:** 90% LED, motion sensors, large windows and glass doors for daylighting.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, 4 exhaust fans, freezer.
- **Solar:** PV ready, conduit in place.
- **Water Conservation:** Low-flow fixtures; compact PEX plumbing.
- **Energy Management System:** Smart monitors for energy usage and for indoor air quality.
- **Other:** During construction: no smoking or fuel burning in house, HVAC registers double sealed, active radon, portable dehumidifier, air filters on electric space heaters.

