



McStain Neighborhoods

Arras Park | Thornton, CO | McStain.com



“We are currently pursuing our first all-electric homes.” *Danielle Davis, McStain Neighborhoods*



PROJECT DATA

- **Layout:** 3 bdrm, 2.5 bath, 2 fl, 1,689 ft²
- **Climate:** IECC 5B, cold
- **Completed:** March 2022
- **Category:** Custom Spec

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 47; with PV 26
- **Annual Energy Costs:** without PV \$1,200; with PV \$550
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$850; with PV \$1,450
- **Annual Energy Savings:** without PV 2,750 kWh, 410 therms; 7,450 kWh, 410 therms
- **Savings in the First 30 Years:** without PV \$40,800; with PV \$71,650

CONTACT

Danielle Davis
303-494-5900
dvd@mcstain.com

KEY FEATURES

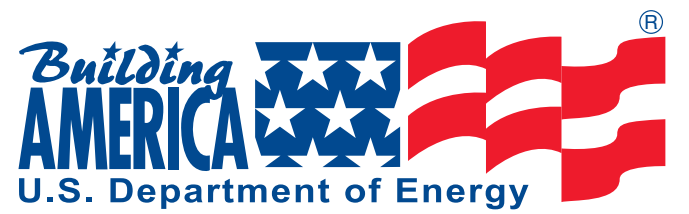
- **Walls:** 2x6 24" o.c., R-23 total: advanced framed; R-23 netted blown fiberglass in cavity; ¾" coated OSB with seams taped, fiber cement and brick siding.
- **Roof:** Truss gabled roof: self-adhered underlayment, architectural asphalt shingles.
- **Attic:** Vented: 15" R-50 blown fiberglass, 12" raised-heel energy trusses.
- **Foundation:** Unvented conditioned crawlspace, poured concrete walls, 8-12" cast-in-place, R-19 drape insulation sealed to 10-mil poly vapor barrier ground cover.
- **Windows:** Double-pane, argon-filled, low-e, vinyl-framed, single-hung, U=0.30, SHGC=0.36.
- **Air Sealing:** 2.26 ACH50, whole house sealed with aerosolized acrylic sealant beads.
- **Ventilation:** Exhaust only, 80 CFM fans; MERV-13 filter at furnace air return.
- **HVAC:** Gas furnace, 96 AFUE, modulating furnace, A/C 16 SEER, rigid metal ducts in conditioned space.
- **Hot Water:** Gas-fired tankless, .95 UEF. "Smart" recirculation pump.
- **Lighting:** 100% LED.
- **Appliances:** ENERGY STAR dishwasher, refrigerator, clothes washer, clothes dryer.
- **Solar:** 4.125-kW rooftop panels.
- **Water Conservation:** Whole house EPA WaterSense certified; drought-resistant landscaping.
- **Energy Management System:** Smart doorbell; smart thermostat.
- **Other:** All products meet Indoor AirPlus certifications. Wired for EV charging.



Energy Efficiency &
Renewable Energy



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.



PNNL-SA-177468 September 2022