

McStain Neighborhoods

McStain Neighborhoods | Aurora, CO | McStain.com



"We did analyze incremental costs and other factors such as product availability and determined that those costs were negligible compared to the branding power of building efficient healthy homes." *Builder*



PROJECT DATA

- Layout: 3 bdrm, 2.5 bath, 2 fls, 2,916 ft²
- Climate: IECC 5B, cold
- Completed: February 2021
- Category: Production

MODELED PERFORMANCE DATA

KEY FEATURES

- Walls: Panelized, 2x6 24 in o.c., R-19 total: advanced framed, R-23 blown fiberglass in cavity. Factory-installed coated OSB sheathing taped. Fiber cement lap siding.
- Roof: Truss gabled roof: self-adhered underlayment, 30-year architectural asphalt shingles.
- Attic: Vented attic: 20" R-50 blown-in fiberglass in attic.
- Foundation: Insulated basement: 10" poured concrete walls, spray-on damp proofing; R-19 closed-cell foam in rim joists; R-19 fiberglass drape on interior basement and crawl space walls. Active radon vent in aggregate below sealed 6-mil crawl vapor barrier. Exterior perimeter drain pipe to sump.
- HERS Index: without PV 51; with PV 34
- **Annual Energy Costs:** without PV \$1,400; with PV \$800
- Annual Energy Cost Savings: (vs typical new homes) without PV \$1,700; with PV \$2,250
- **Annual Energy Savings:** without PV 3,600 kWh, 650 Therms; with PV 8,300 kWh, 650 Therms
- Savings in the First 30 Years: without PV \$82,500; with PV \$110,500

CONTACT

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

- Windows: Double-pane, argon-filled, low-e, vinyl frame, U=0.29, SHGC=0.31.
- Air Sealing: 1.7 ACH50, closed-cell spray foam at rim joists and exterior penetrations.
- Ventilation: Exhaust-only, MERV 14 filter, 59 CFM/Watt.
- HVAC: Gas furnace, 95 AFUE, modulating furnace, variable speed fan motor, AC unit, 13 SEER, rigid metal duct system, ducts in conditioned space.
- Hot Water: Gas tankless, .96 EF, smart recirc pump.
- Lighting: 100% LED.
- Appliances: ENERGY STAR dishwasher, refrigerator, hood vent.
- Solar: 4 kW, rooftop panels.
- Water Conservation: Low-flow fixtures; central manifold with PEX piping; hot water recirc.
- Energy Management System: Smart thermostat.
- Other: Low/no-VOC finishes, flooring, cabinets; active sub-slab radon venting.



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-166190 September 2021

Housing