



Thrive Home Builders

Lowry Plan | Denver, CO | ThriveHomeBuilders.com



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“We’re generating more energy than we’re using.” Home owner



PROJECT DATA

- **Layout:** 4 bdrm, 4.5 bath, 2 fl + bsmt, 4,119 ft²
- **Climate:** IECC 5B, cold
- **Completed:** October 2016
- **Category:** production

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 38, with PV 4
- **Projected Annual Energy Costs:** without PV \$1,550, with PV \$-10
- **Projected Annual Energy Cost Savings:** (vs typical new homes) without PV \$2,550, with PV \$4,100
- **Annual Energy Savings:** without PV 9,200 kWh, 610 therms; with PV 22,200 kWh, 610 therms

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KEY FEATURES

- **Walls:** Double walls; 2x4 24" o.c. advance framed; staggered studs; 9.5" R-41 blown fiberglass; sprayer applied sealant; 1/2" OSB; corrugated house wrap; fiber cement & stone siding.
- **Roof:** Ice-and-water shield at roof edge; waterproof underlayment; metal drip edge; 30-yr asphalt shingles.
- **Attic:** Vented attic; R-50 blown fiberglass, 14" raised heel trusses; sealed top plates.
- **Foundation:** Basements with perforated vinyl-faced R-19 blanket insulation on interior of unfinished walls. 4" gravel and vapor barrier under slab.
- **Windows:** ENERGY STAR double-pane; argon-filled; vinyl-framed; U=0.25, SHGC=0.30.
- **Air Sealing:** 1.77 ACH 50.
- **Ventilation:** Continuous exhaust fans.
- **HVAC:** Central air-source heat pump; HSPF 12.2, SEER 18.9; plus 97.4 AFUE backup gas furnace. Ducts in conditioned space.
- **Hot Water:** .97 EF tankless gas water heater.
- **Lighting:** 100% LED; daylighting.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, exhaust fans, ceiling fans.
- **Solar:** 8.68-kW solar PV.
- **Water Conservation:** WaterSense fixtures; "smart" hot water recirc; drip irrigation.
- **Energy Management System:** Internet monitoring of PV production and energy use.
- **Other:** EPA Indoor airPLUS, low-VOC paints, low-formaldehyde wood products. Active radon ventilation system; radon testing prior to closing. Ducts cleaned. Shear walls; reinforced framing and roof. Excavation to 30-ft depth to replace high-expansion soils.

