



# Thrive Home Builders

Courtyard Rows | Lone Tree, CO | ThriveHomeBuilders.com



Photos courtesy of Thrive Home Builders

“The real test came when I moved in, got my utility bill, and all I can say is wow! The solar panels produce more energy than I am using, three months in a row so far!” *Home owner*



## PROJECT DATA

- **Layout:** 2 bdrm, 2 bath, 2 fl + bsmt, 2,780 ft<sup>2</sup>
- **Climate:** IECC 5B, cold
- **Completed:** August 2016
- **Category:** multifamily

### MODELED PERFORMANCE DATA

- **HERS Index:** without PV 41, with PV 8
- **Projected Annual Energy Costs:** without PV \$1,200, with PV \$150
- **Projected Annual Energy Cost Savings:** (vs typical new homes) without PV \$1,750, with PV \$2,850
- **Annual Energy Savings:** without PV 6,300 kWh, 360 therms; with PV 15,300 kWh, 360 therms

## CONTACT

Bill Rectanus  
614-204-9043  
brectanus@thrivehomebuilders.com

## KEY FEATURES

- **Walls:** Double walls, 2x4 24" o.c. advance framed, staggered studs, 9.5" R-41 blown fiberglass. Sprayer applied sealant; ½" OSB; corrugated house wrap; fiber cement & stone siding.
- **Roof:** Ice-and-water shield; 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 R-19 blanket insulation on interior of unfinished walls; R-15 in cavity of finished walls; 4" gravel and vapor barrier under slab.
- **Windows:** ENERGY STAR double-pane, argon-filled, vinyl-framed; U=0.21, SHGC=0.28.
- **Air Sealing:** 4.35 ACH 50.
- **Ventilation:** Continuous exhaust fans.
- **HVAC:** Central air-source heat pump HSPF 9.0, SEER 15.5, plus 97.4 AFUE backup gas furnace. Ducts in conditioned space.
- **Hot Water:** .97 EF tankless gas water heater.
- **Lighting:** 100% CFL.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, exhaust fans.
- **Solar:** 6.2-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. Shear walls; reinforced framing and roof. Excavation to 30-ft depth to replace high-expansion soils. Active radon ventilation system. Ducts cleaned.

