

C&B Custom Homes

U.S. DOE

ZERO

ENERGY READY HOME

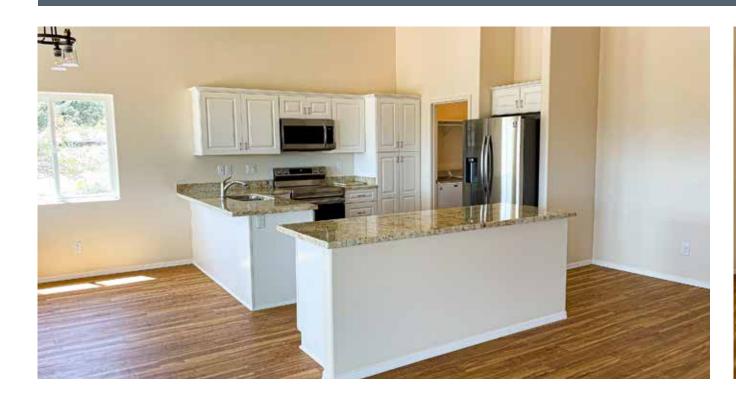
2022 WINNER

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PROJECT DATA

• **Layout:** 3 bdrm, 2 bath, 1 fl, 1,328 ft²

• Climate: IECC 4B, mixed-dry

Completed: June 2022

• Category: Custom Spec

MODELED PERFORMANCE DATA

- HERS Index: without PV 45; with PV 30
- Annual Energy Costs:
 without PV \$1,100; with PV \$850
- Annual Energy Cost Savings:
 (vs typical new homes) without PV
 \$550; with PV \$1,000
- Annual Energy Savings: without PV 7,550 kWh, 380 therms; with PV 10,100 kWh, 380 therms
- Savings in the First 30 Years: without PV \$26,900; with PV \$49,150

CONTACT

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KEY FEATURES

- Walls: 2x6, 16" o.c., R-27 total: R-22 spray foam in cavity, house wrap, 1" R-5 foam sheathing. Type F acrylic stucco.
- Roof: Truss gabled roof: ½" deck sheathing, fully self-adhered underlayment. Cement tiles.
- Attic: Unvented attic with 7" R-25 open-cell spray foam on underside of roof deck.
- Foundation: Slab on grade: CMU stem walls. Rigid foam is 2" thick (R-10) and 48" wide under slab perimeter and 1" R-5 on slab edge.
- Windows: Double-pane, argon-filled, low-e, vinyl frame, U=0.27, SHGC=0.19.
- Air Sealing: 1.80 ACH50, spray-foamed attic, sill seal, foam seal all exterior penetrations.
- Ventilation: ERV tied to central air handler, MERV 9 filter.
- HVAC: Gas furnace, 96% AFUE. 14 SEER AC unit. Flex ducts in attic.
- Hot Water: Gas tankless, 97% efficient, central manifold plumbing with PEX piping.
- Lighting: 100% LED.
- Appliances: ENERGY STAR dishwasher, refrigerator, ceiling fan, exhaust fans.
- Solar: 3.45-kW, 10 rooftop panels with integrated micro-inverters.
- Water Conservation: EPA WaterSense-rated low-flow showerheads, faucets, and toilets. Central manifold with PEX piping. Button-activated recirculation pump. Drip irrigation.
- Energy Management System: Smart thermostats; app that tracks electricity usage and production.
- Other: Low/no-VOC finishes, paints, adhesives; GreenGuard Gold flooring. Outlets for EV charging.





