

Mandalay Homes

Discovery Home | Prescott, AZ | MandalayHomes.com





"We were renting a 990-square-foot apartment and the fact that our ... summer bill is the same with double the square footage is amazing." Homeowners



PROJECT DATA

- Layout: 2 bdrm, 2.5 bath, 1 fl, 2,109 ft²
- **Climate:** IECC 4B, mixed-dry
- Completed: May 2022
- **Category:** Production

MODELED PERFORMANCE DATA

KEY FEATURES

- Walls: 2x6, 16" o.c., R-25 total: R-25 spray foam, OSB house wrap, stucco.
- **Roof:** Truss shed roof: OSB, underlayment, asphalt shingles. 4-⁵/₈" raised heel energy trusses.
- Attic: Unvented attic, vaulted ceilings, 10" R-33 open-cell spray-foam on under side of roof deck.
- Foundation: Slab on grade, insulated slab.
- HERS Index: without PV 44; with PV 14
- Annual Energy Costs: without PV \$1,350; with PV \$550
- Annual Energy Cost Savings: (VS typical new homes) without PV \$1,250; with PV \$2,050
- Annual Energy Savings: without PV 3,250 kWhs; with PV 9,590 kWh
- Savings in the First 30 Years: without PV \$50,550; with PV \$82,500

CONTACT

David Everson 855-955-6466 dave@mandalayhomes.com



- Windows: Double-pane, argon-filled, low-e, vinyl-framed, single-hung, U=0.29, SHGC=0.23.
- Air Sealing: 0.66 ACH50. Open-cell spray foam in walls and attic. Whole-house sealed with aerosolized acrylic air sealant.
- Ventilation: ERV to central air handler, IAQ monitors in light switches in great room, kitchen, den, bedroom, and owner's suite. Humidity sensors in light switches for exhaust fans in baths and laundry.
- HVAC: Central air-source heat pump, 12 HSPF, 18 SEER, 4" high-flow flex ducts.
- Hot Water: Electric tankless water heater, smart recirculating pump.
- Lighting: 100% LED, motion sensors, timers, lighting controls.
- Appliances: ENERGY STAR refrigerator, dishwasher, ceiling fan, exhaust fans (5).
- **Solar:** 3.74-kW rooftop panels, 10-kWh battery storage. Solar production tracking.
- Water Conservation: Low-flow fixtures, PEX piping, drip irrigation.
- Energy Management System: Smart water usage, leak detection, IAQ and RH monitors.
- Other: Low/No-VOC products; air purification system; energy usage monitoring. EV charging station.



Energy Efficiency & Renewable Energy



For more information on the DOE Zero Energy Ready Home program, go to http://energy.gov/eere/buildings/zeroenergy-ready-home or scan the QR code.



PNNL-SA-177467 September 2022