



Off The Grid Design

Sol Lux Alpha | San Francisco, CA | Houzz.com/pro/sarterfish/off-the-grid-design-llc



Photos courtesy of Off the Grid Design

“The owners are extremely satisfied to be living in a very healthy, quiet, and technologically advanced “nanogrid” home.” *John Sarter, Off The Grid Design*



PROJECT DATA

- **Layout:** 3 bdrm, 2 bath, 1 fl, 1,800 ft²
- **Climate:** IECC 3C, marine
- **Completed:** May 2018
- **Category:** multifamily

MODELED PERFORMANCE DATA

- **HERS Index:** 30% above CA Title 24; ZNE+
- **Annual Energy Costs:** without PV \$2,750; with PV \$-650
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$3,500; with PV \$7,350
- **Annual Energy Savings:** without PV 7,300 kWh; with PV 14,600 kWh.
- **Savings in the First 30 Years:** \$321,900

CONTACT

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KEY FEATURES

- **Walls:** Wood post and beam; advanced framed; 5.5" blown fiberglass + 4 layers of 5/8" fiberglass mat gypsum sheathing = R-27 total wall. Liquid-applied weather barrier. Concrete fiberboard and aluminum panel siding.
- **Roof:** TPO roof; Cool Roof certified.
- **Attic:** Unvented, 5" open-cell spray foam + 11" dense-packed fiberglass + 5" open-cell spray foam in cricket. Total = R-82.
- **Foundation:** Raised slab, 2" R-12 polyiso under first floor.
- **Windows:** Double-pane, low-e, argon-filled, aluminum-clad vinyl frames.
- **Air Sealing:** 5.7 ACH 50.
- **Ventilation:** ERV, triple MERV-13 filtered.
- **HVAC:** Ducted mini-split heat pump.
- **Hot Water:** Heat pump water heater, COP 4.5.
- **Lighting:** 100% LED.
- **Appliances:** ENERGY STAR dishwasher, clothes washer, clothes dryer, and refrigerator.
- **Solar:** 46-kW PV system shared by four units; 10 kW per unit plus 6 kW for common areas.
- **Water Conservation:** WaterSense certified.
- **Energy Management System:** Battery storage system.
- **Other:** First building approved for alternate path of compliance for San Francisco's green building code.

