

Targa Homes

U.S. DOE

ZERO

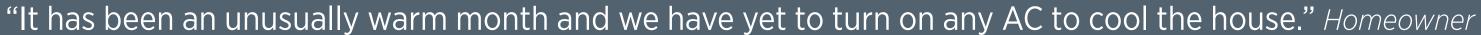
ENERGY READY HOME

2023 WINNER

Housing
Innovation
Awards

Low-Carbon Detached ADU | Seattle, WA | TargaHomes.com













PROJECT DATA

• **Layout:** 2 bdrm, 2 bath, 2 fls, 1,000 ft²

Climate: IECC 4C, marine
Completed: April 2023
Category: Custom for Buyer

MODELED PERFORMANCE DATA

- HERS Index: without PV 39; with PV 6
- Annual Energy Costs: without PV \$600; with PV \$150
- Annual Energy Cost Savings: (vs typical new homes) without PV \$750 with PV \$1,250
- Annual Energy Savings: without PV 6,400 kWh; with PV 10,250 kWh
- Savings in the First 30 Years: without PV \$32,050; with PV \$51,500

CONTACT

Sean Conta 206-251-8569 sean@targahomes.com

KEY FEATURES

- Walls: 2x6, 16'' o.c., R-25 total: $\frac{7}{16}''$ coated OSB sheathing with taped seams, 1'' R-4 cork, $\frac{3}{4}''$ ventilated rainscreen, siding.
- Roof: Gable rafter roof and flat TPO roof. $\frac{5}{8}$ " coated OSB taped to wall sheathing, then topped with 2x4 overhangs, 3.5" R-14 EPS, $\frac{1}{2}$ " plywood, and roofing.
- Attic: Unvented, vaulted attic, R-28 total: dense-pack cellulose.
- Foundation: Slab on grade, 4" R-16 EPS foam under full slab and at slab edge. Vapor barrier.
- Windows: Triple-pane windows, U=0.16, SHGC=0.37. Interior cellular blinds, low-e, argonfill. Wood and aluminum framed, European.
- Air Sealing: 0.35 ACH50: coated OSB with taped seams. Sill plate 2 beads of caulk. Bottom of wall taped to concrete stem wall. Window rough openings foamed and taped.
- **Ventilation:** ERV, ducted throughout home, continuous operation, MERV 13 filter. Range hood exhausts to outside, has passive makeup air damper.
- **HVAC:** Ductless minisplit air source heat pumps. Variable speed compressors. Two units, each with 1 indoor head and 1 outdoor compressor, 10.0 & 13.5 HSPF, 20.2 & 30.5 SEER. Operable skylights for night flush passive cooling.
- Hot Water: 43 gallon, 4.5 COP. Split-system CO2 heat pump water heater.
- Lighting and Appliances: LED lighting, ENERGY STAR appliances.
- Solar: 3.65 kWh, no battery. PV connected to monitoring app.
- Energy Management System: Electrical panel app tracks energy usage on each breaker.
- Other: Above-grade walls 2x6 studs are reclaimed lumber. Sheathing temperature/ humidity/wood moisture sensors buried in walls and roof for tracking. Cork insulation.





