



Noyes Development

Historic Oak Hills Remodel | Beaverton, OR | NoyesDevelopment.com



Photos courtesy of Noyes Development

“The home is extremely comfortable and our utility bills, compared to the neighbors, are drastically reduced.” *Homeowner*



PROJECT DATA

- **Layout:** 5 bdrm, 3 bath, 2 fl, 3,357 ft²
- **Climate:** IECC 4C, marine
- **Completed:** May 2023
- **Category:** Custom

MODELED PERFORMANCE DATA

- **ERI:** without PV 42
- **Annual Energy Costs:** without PV \$1,450
- **Annual Energy Cost Savings:** (versus typical new homes) without PV \$450
- **Annual Energy Savings:** without PV 8,160 kWh
- **Savings in the First 30 Years:** without PV \$19,600

KEY FEATURES

- **Walls:** 2x4 16" o.c., post and beam, R-23.7 total: dense-pack fiberglass, 2" rigid insulation, sheathing, housewrap, rain screen, fiber cement siding.
- **Roof:** Hip truss roof, plywood, roofing paper, shingles. Vapor diffusion ports.
- **Attic:** Unvented conditioned attic: 6" R-49 closed-cell spray foam under roof.
- **Foundation:** Vented crawlspace: 8" poured concrete. Insulated on underside of first floor with 1" R-8 closed-cell spray foam and high-density R-30 fiberglass batts.
- **Windows:** Double-pane windows, U=0.24, SHGC=0.25. Fixed awnings, large overhangs.
- **Air Sealing:** 1.45 ACH50; Spray foam-sealed attic and subfloor, extensive caulking of penetrations, taped sheathing seams.
- **Ventilation:** ERV, separately ducted. IAQ sensors throughout the house; additional exhaust in bathrooms. 2-inch filter on ERV.
- **HVAC:** Central air-source heat pump, 11.7 HSPF, 16.0 SEER. Variable-speed heat pump, ducts in conditioned space.
- **Hot Water:** Tankless gas water heater, 0.95 EF. Manifold system, centrally located, battery backup for water heater.
- **Lighting and Appliances:** All lighting changed to LED; all appliances upgraded to ENERGY STAR.
- **Solar:** None due to neighbors' existing oak trees.
- **Energy Management System:** IAQ monitoring.
- **Other:** Gut rehab to studs of existing 1970s home, extensive reuse of structure and materials from existing property.

CONTACT

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