Sareth Builders
The Oberlin ZERH | Lorain, OH | SarethBuilders.com

“We receive consistent feedback from our ZERH clients indicating how comfortable and quiet our homes are.” Sareth Builders

PROJECT DATA

- **Layout:** 3 bdrm, 2 bath, 1 fl, 1,814 ft²
- **Climate:** IECC 5A, cold
- **Completed:** Completed
- **Category:** custom spec

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 36
- **Annual Energy Costs:** without PV $1,250
- **Annual Energy Cost Savings:** (vs typical new homes) without PV $1,000
- **Annual Energy Savings:** without PV 9,000 kWh, 100 CCF
- **Savings in the First 30 Years:** $48,700

KEY FEATURES

- **Walls:** 2x6 24" o.c. advanced framing, R-33 total: ½" drywall, 6" stud at 24" o.c., ½" taped OSB, 2" XPS, stucco wrap, vinyl siding and stone cladding.
- **Roof:** Hip roof; OSB sheathing, synthetic underlayment, ice-and-water shield, fiberglass asphalt 50-year shingles, soffit and ridge vents.
- **Attic:** Vented attic, 16" R-60 blown cellulose, 2" closed-cell spray foam over ceiling drywall seams, 14" to 24" raised energy heels.
- **Foundation:** Prefab concrete panels with R-20 EPS foam; added R-20 XPS on slab shelf; 2" Poly-iso at slab edge and under full slab, topped with #57 stone and vapor barrier.
- **Windows:** Double-pane, argon-filled, low-e, vinyl casement frames, U=0.26, SHGC=0.28.
- **Air Sealing:** 0.47 ACH 50. All seams and penetrations caulked, taped, and/or foamed.
- **Ventilation:** ERV, continuous ventilation; continuous 50-cfm bath fans with humidity and occupancy sensors for 80-cfm boost setting; whole-house dehumidifier; MERV 15 filter.
- **HVAC:** 1 ducted and 3 ductless mini-split heat pumps to 1 outside compressor; insulated buried ducts, dehumidifier, passive solar design.
- **Hot Water:** Gas tankless, 97% efficient; compact design, PEX piping.
- **Lighting:** 100% LED, daylighting, ENERGY STAR ceiling and fans.
- **Appliances:** ENERGY STAR clothes washer, gas clothes dryer, dishwasher, refrigerator.
- **Solar:** Solar ready.
- **Water Conservation:** EPA WaterSense fixtures and toilets.
- **Energy Management System:** Programmable thermostats.
- **Other:** Aging-in-place design, wide doors, halls, baths, and entries.

CONTACT

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