Charles Thomas
Lakeside Luxury | Valley, NE | CharlesThomasHomes.com

"The biggest reward for me is the personal satisfaction of knowing I am in the top 1% of all builders in the country." Tim Lowndes, Charles Thomas Homes

PROJECT DATA

- **Layout:** 5 bdrm, 5 bath, 2 fl, 4,556 ft²
- **Climate:** IECC 5A, cold
- **Completed:** February 2017
- **Category:** custom for buyer

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 48, with PV NA
- **Projected Annual Energy Costs:** without PV $2,300, with PV $NA
- **Projected Annual Energy Cost Savings:** (vs typical new homes) without PV $1,700, with PV $NA
- **Annual Energy Savings:** without PV 12,300 kWh; 860 therms

KEY FEATURES

- **Walls:** 2x6 24” o.c., advanced framing. R-23 blown fiberglass. Open-cell spray foam (R-21) at rim joists and top plates. Closed-cell spray foam behind tubs, showers, fireplaces. Coated, taped sheathing for air and water barrier. Fiber cement siding and trim.
- **Roof:** OSB decking, ice-and-water shield at eaves, 15-lb felt, 30-year asphalt.
- **Attic:** R-50 blown fiberglass; raised heel trusses; all top plates, knee walls, and soffits spray foamed.
- **Foundation:** Slab-on-grade with R-13 rigid foam on shallow frost-protected footings.
- **Windows:** Double-pane, low-e3, argon-filled.
- **Air Sealing:** 0.80 ACH 50.
- **Ventilation:** Fresh air intake with electronically controlled damper. Master bath exhaust fan set to continuous with high-speed switch; other bath fans timed.
- **Hot Water:** Combi heat and hot water tankless boilers.
- **HVAC:** Two tankless 95% efficient gas boilers for hot water coil with high-velocity small duct system in building; two 16-SEER two-stage AC units.
- **Lighting:** 100% LED.
- **Appliances:** ENERGY STAR dishwasher, refrigerator, clothes dryer, ceiling fans.
- **Solar:** Solar-ready.
- **Water Conservation:** Push-button recirc pump; WaterSense fixtures.
- **Energy Management:** Programmable thermostats.
- **Other:** No-VOC paint; active radon mitigation.

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.