

# **Amaris Custom Homes**

Eden Prairie | Eden Prairie, MN | MinnesotaGreenHomeBuilder.com



"We are delighted by our beautiful, net-zero energy, green home of our dreams." Home owner



#### **PROJECT DATA**

- Layout: 5 bdrm, 3 bath, 1 fl + bsmt, **3**,184 ft<sup>2</sup>
- Climate: IECC 6A, cold
- Completed: June 2019

### **KEY FEATURES**

- Walls: 2x4 LSL studs 24" o.c., advanced framing, R-25 total: 2" closed-cell spray foam in cavities; 2" R-10 rigid foam, <sup>7</sup>/<sub>16</sub>" OSB sheathing, house wrap, engineered wood siding.
- **Roof:** Gable roof, engineered roof trusses at 24" o.c., ½" OSB sheathing, ice-and-water shield, continuous ridge vent, #15 felt, architectural asphalt shingles; 2-ft overhangs.
- Attic: Vented attic; R-60 total: 2" R-14 closed-cell spray foam on attic floor, R-46 blown
- **Category:** custom for buyer

#### **MODELED PERFORMANCE DATA**

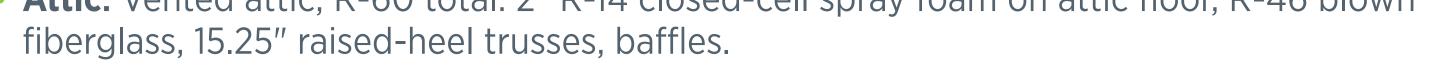
- **HERS Index:** without PV 40; with PV -2
- Annual Energy Costs: without PV \$1,600; with PV \$100
- Annual Energy Cost Savings: (VS typical new homes) without PV \$2,650; with PV \$4,100
- Annual Energy Savings: without 11,714 kWh, 733 Therms; with PV 27,900 kWh, 700 Therms
- Savings in the First 30 Years: 199,400

## CONTACT

Raymond Pruban 651-426-0584 rpruban@amariscustomhomes.com



**Energy Efficiency &** Renewable Energy



- Foundation: Insulated basement, R-23 total: <sup>1</sup>/<sub>2</sub>" drywall, 2x4 studs at 24" o.c., R-13 closedcell spray foam, 8" poured concrete walls, polymer asphalt waterproof, 2" R-10 rigid foam.
- Windows: Triple-pane, argon-filled, low-e2, fiberglass casement frames, U=0.22, SHGC=0.23.
- Air Sealing: 0.59 ACH 50; acoustical sealant of sill plates, glue and sealant at wood-to-wood.
- Ventilation: ERV, timered bath fans, MERV 16 filters; motion-sensored garage exhaust fan.
- **HVAC:** 96% AFUE gas furnace; 19.2 SEER central air-source heat pump; sealed metal ducts.
- Hot Water: Electric tank, 0.95 EF, 100-gal.; compact distribution with PEX piping, smart recirculation pump, R-3 insulation on all hot water lines.
- Lighting: 100% LED.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, and washing machine.
- **Solar:** 12.28-kW PV system.
- Water Conservation: EPA WaterSense fixtures and toilets; 250 ft<sup>2</sup> rain garden.
- Energy Management System: Wi-Fi-enabled smart thermostat and PV tracking.
- **Other:** ADA-compliant doors, hallways, bathrooms, kitchen bar; electric vehicle charging station.



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



2019) WINNE

Housing