BPC Green Builders
Trumbull Residence | Wilton, CT | BPCGreenBuilders.com

“[We generated more power than the house used.]” Homeowner

PROJECT DATA

• **Layout:** 3 bdrm, 2.5 bath, 2 fls + bsmt, 4,345 ft²
• **Climate:** IECC 5A, cold
• **Completed:** January 2020
• **Category:** Custom for Buyer >3,000 ft²

MODELED PERFORMANCE DATA

• **HERS Index:** without PV 36; with PV -13
• **Annual Energy Costs:** without PV $3,150; with PV -$1,000
• **Annual Energy Cost Savings:** vs typical new homes) without PV $5,650; with PV $9,900
• **Annual Energy Savings:** without PV 23,000 kWh; with PV 40,600 kWh
• **Savings in the First 30 Years:** without PV $235,500; with PV $414,600

KEY FEATURES

• **Walls:** 2x8 16” o.c., R-37 total: dense pack-cellulose, ¾” sheathing w/taped joints, 3” exterior mineral wool rigid insulation, 1x furring strips, fiber cement siding.
• **Roof:** Shed roof, R-84.6 total: 16” TJI rafters, R-57.6 dense-pack cellulose, ¾” coated OSB, no overhang, taped joints, topped by 4.5” R-27 SIP with overhangs, ice and water shield, asphalt shingles, ENERGY STAR Cool Roof certified.
• **Attic:** No attic, vaulted ceilings.
• **Foundation:** Insulated basement, R-23.7 total: 10” poured concrete wall; on interior 2” closed-cell spray foam behind 2x4 16” o.c. stud wall with dense-pack cellulose. Under slab: vapor barrier, 6” R-28.8 closed-cell EPS rigid foam; 4” EPS at slab edge to foundation walls.
• **Windows:** Triple-pane, low-e, aluminum-clad vinyl tilt turn frames, U=0.13, SHGC=0.36.
• **Air Sealing:** 0.58 ACH 50. All wall and roof joints taped, wall to first roof corner taped.
• **Ventilation:** ERV, MERV 7 filter, bathroom and laundry boost controls.
• **HVAC:** Ducted Mini-Split Heat Pump, 10.1 HSPF, 15.8 SEER, 2 air handlers, 1 outdoor unit.
• **Hot Water:** Split heat pump water heater, 83-gal, 4.5 COP. Recirc pump.
• **Lighting:** 100% LED, daylighting.
• **Appliances:** ENERGY STAR refrigerator, dishwasher, clothes washer, and clothes dryer.
• **Solar:** 14.7 kW; prewired for future battery.
• **Water Conservation:** EPA WaterSense fixtures. Drought-resistant landscaping. Rain garden.
• **Energy Management System:** N/A.
• **Other:** Electric vehicle charging station, zero VOC paints. Main floor master.

CONTACT

Chris Troll
203-258-5821
chris@bpcgb.com

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.