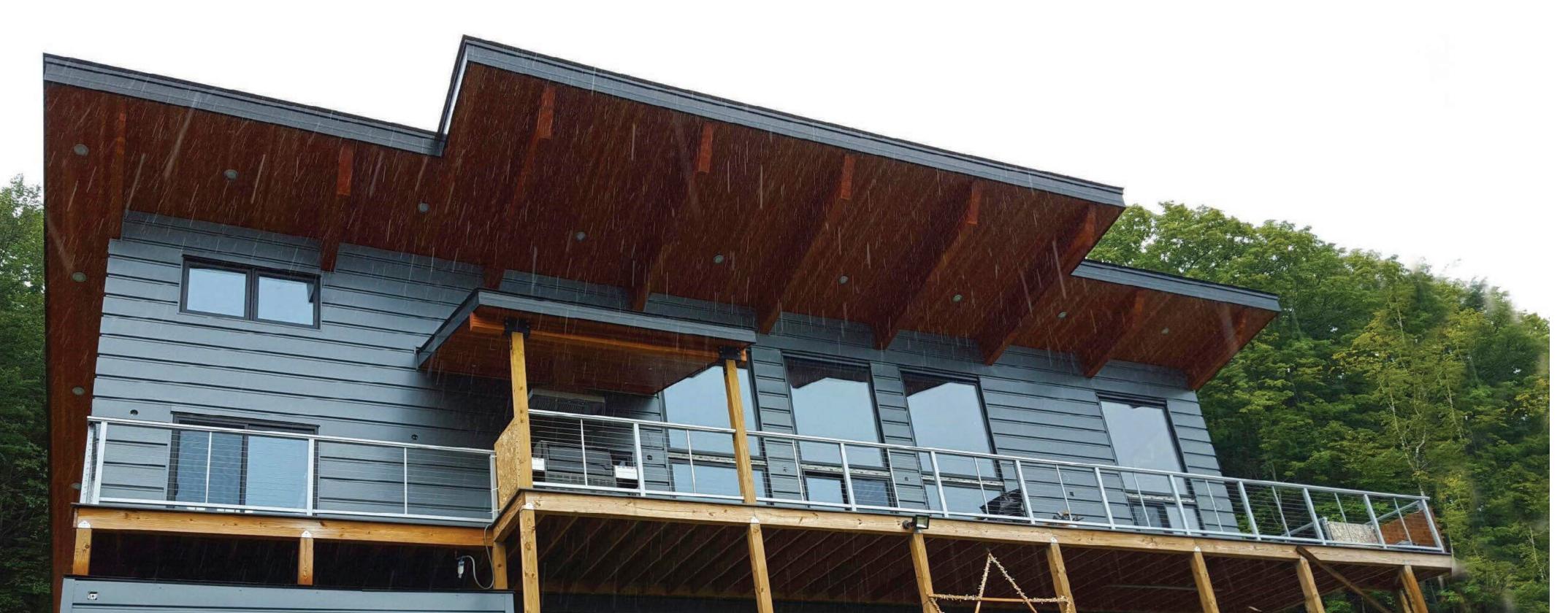


PepperTree Homes

Mad River Glen House | Waitsfield, VT | PepperTreeHomes.com





"This is among one of the most fun and best experiences of my life." Home owner



PROJECT DATA

• **Layout:** 4 bdrm, 5 bath, 1 fl + bsmt, 3,750 ft²

- Climate: IECC 6A, cold
- **Completed:** November 2015
- Category: custom for buyer

KEY FEATURES

- Walls: R-35, 8" graphite-enhanced SIP, draining house wrap, corrugated steel siding.
- **Roof:** R-56, 12" graphite-enhanced SIP, synthetic underlayment, steel standing-seam roof.
- Attic: Mostly vaulted ceilings, two small attic areas in conditioned space for HRV and air-handler.
- Foundation: 13" R-23 ICF foundation with spray-on coating and ribbed drainable membrane, backfill of washed drain rock; under slab 6" R-30, type II EPS.

MODELED PERFORMANCE DATA

- HERS Index: without PV 41, with PV 18
- **Projected Annual Energy Costs:** without PV \$1,569, with PV \$727
- Projected Annual Energy Cost Savings: (vs home built to 2009 IECC) with PV \$4,039
- Annual Energy Savings: with PV 30,856 kWh, 261 gal. propane

CONTACT

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- Windows: Vinyl-framed triple-pane, triple-low-e windows, U=0.13-0.17, SHGC=0.51.
- Air Sealing: 2.01 ACH 50.
- Ventilation: 2 HRVs, 95% efficient.
- HVAC: Radiant floor heat from solar hot water system, passive solar design.
- Hot Water: Solar hot water, propane-fired tankless back-up.
- Lighting: 100% LED.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, clothes washer.
- Solar: Hot water system with 120° phase change materials in 320-gal storage tank.
- Water Conservation: All low-flow faucets & fixtures.
- Energy Management System: Cell-phone interface w/heating system for remote monitoring of floor temperature, etc.
- **Other:** 83% of heating from passive solar gains, remainder from solar hot water radiant floor for annual energy cost of -\$51, electric car charging station.



Energy Efficiency & Renewable Energy



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.



Housing

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