



Pioneer Valley Habitat for Humanity

Glendale Road Modular Homes | Florence, MA | PVHabitat.org



Photos courtesy of Pioneer Valley Habitat for Humanity

“Our new home is a blessing in many ways.” Homeowner



PROJECT DATA

- **Layout:** 3 bdrm, 2 bath, 2 fls, 1,222 ft²
- **Climate:** IECC 5A, cold
- **Completed:** September 2019
- **Category:** Affordable

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 35; with PV -20
- **Annual Energy Costs:** without PV \$1,500; with PV \$100
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$3,250; with PV \$4,650
- **Annual Energy Savings:** without PV 6,400 kWh; with PV 15,800 kWh
- **Savings in the First 30 Years:** without PV \$136,300; with PV \$195,400

CONTACT

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KEY FEATURES

- **Walls:** Modular, double wall, R-43 total: double stud walls 2x4 24" o.c., dense-packed cellulose.
- **Roof:** SIP shed roof: vapor barrier primer on interior, 12" SIP, EPDM rubber roofing membrane.
- **Attic:** No attic.
- **Foundation:** Unvented crawlspace, 12-mil poly.
- **Windows:** Triple-pane, low-e3, vinyl double-hung frame, U=0.20, SHGC=0.19.
- **Air Sealing:** 0.56 ACH 50.
- **Ventilation:** ERV, ducted, monitors CO₂, VOCs, indoor/outdoor temps, and humidity. MERV 13 filters.
- **HVAC:** Ductless air source heat pump, 11.5 HSPF, 26.1 SEER, 1 indoor air handler, 1 outdoor compressor. CERV ventilation system also provides some heat pump heating and cooling.
- **Hot Water:** Heat pump water heater in upstairs utility closet, 3.55 EF, 40-gal.
- **Lighting:** 100% LED.
- **Appliances:** ENERGY STAR refrigerator, microwave, range hood, clothes washer, and dishwasher.
- **Solar:** 9 kW rooftop panels.
- **Water Conservation:** Low-flow plumbing fixtures.
- **Energy Management System:** PV tracking, indoor air quality monitoring.
- **Other:** Low-VOC finishes on floors, doors, cabinets, paints, demand-controlled ventilation.

