

PPL Electric Utilities | High-Performance New Homes Pilot

Alden Homes (aldenhomes.com)

ZERH Model Home

Location Mount Joy, PA

Layout 2 story, 4 bedrooms, 3.5 baths

HERS* Index Score 49
Estimated Monthly Electric Bill \$140

Estimated First-Year Savings

(compared to Code Home) \$552

Energy Contractors

Rater paenergyauditors.com

Mechanical ameri-tec.net

Air Sealinghealthyenergypros.comInsulationaccurateinsulationpa.com

Key features:

- 1. Walls: Zip System* sheathing (green) provides superior weather protection, and its proprietary tape (black) protects you from drafts and heat loss.
- 2. Flooring system: Floor trusses create space for ducts so they don't have to run through the attic where they can gain or lose up to 30% of their heating or cooling.
- **3. Roof framing:** The roof/attic framing has a raised heel truss system that allows more space over the outside wall for proper air sealing and insulation.
- 4. Grade 1 insulation: You can pile on the insulation, but unless you air seal first and fill all the voids, the insulation just can't do its job well.
- 5. Foundation: Superior Walls* precast wall panels are one of the strongest and waterproof basement systems. The standard panel is insulated to an R-12.5.
- 6. Heat/cool: The Lennox* 96% efficient gas furnace with variable-speed blower and an 18 SEER variable capacity air conditioner boasts a high efficiency (MERV 16) filter and UV sterilizing lights for the cleanest air.
- **7. Ventilation:** The Lennox energy recovery ventilator (ERV) is mounted to the right of the heater/AC. This unit provides filtered fresh air year round, as well as dehumidified air in the summer.
- 8. Airtight: The final air sealing happens after all the sheetrock has been installed. That's when an aerosol sealant is blown into all rooms of the house under positive pressure from a large fan.
- **9. Solar Ready (not shown):** Plywood is added next to the electrical panel for a future solar inverter and battery. A conduit runs from this area to the attic so it will be easy to connect to a future solar electric system.















Learn more

Visit **ppelectric.com/performancepilot** for more information.

Estimated bill and savings based on expected appliance usage in energy-efficient model home. PPL Electric Utilities and their partnering suppliers make no guarantee of usage, costs or savings and are not responsible for any variation of actual usage, costs or savings from this estimate.



NOT ALL HOMES ARE CREATED EQUAL

Zero Energy Ready Homes — Compared to other standards

We all know the phrase "Home is where the heart is," but homes should also be safe, healthy and affordable. PPL Electric Utilities is proud to sponsor four different energy model homes this year. All are Zero Energy Ready Homes, one of the most rigorous home certifications in the USA.

Code Homes – set the minimum standard for health, safety, durability and energy efficiency.

ENERGY STAR® homes – are 10–20% more energy efficient than code homes.

Ventilation = Fan-assisted system designed to bring fresh air into the house without the heat or humidity of the summer

and cold of the winter.

DOE – Zero Energy Ready homes – raise the bar even further and prepare the home for a solar electric system.

The graphic below shows these three home certifications. Each step right adds value to your home and your living experience. The grey boxes show the benefits of an ENERGY STAR certified home and a ZERH. The green boxes show the extra benefits of a ZERH.



