



R. W. Buff Construction (rwbuff.com)

ZERH Model Home

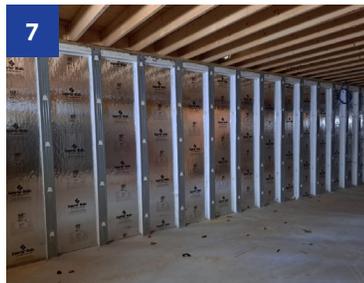
Location	Buck Hill Falls, PA
Layout	2 story, 4 bedrooms, 3 baths
HERS® Index Score	44
Estimated Monthly Electric Bill	\$177
Estimated First-Year Savings (compared to Code Home)	\$916

Energy Contractors

Rater	Fekete Thermal Inspections
Mechanical	Nauman Mechanical
Air Sealing	Northeast AeroBarrier

Key features:

- 1. High-performance walls:** ZipR® sheathing (green) provides superior weather protection, and its proprietary tape (black) protects you from drafts and heat loss.
- 2. Continuous insulation:** ZipR® isn't just sheathing. It adds continuous foam insulation around the entire house. This means that you don't lose heat or gain heat through the wood framing.
- 3. Attic insulation:** High-density foam insulation insulates extremely well and can stop the movement of moisture as well. Insulating the underside of the roof allows all the mechanical equipment to be installed in the attic without an energy penalty.
- 4. Fresh air:** Tight houses need good ventilation. Here are two Zehnder® Energy Recovery Ventilator (ERV) distribution boxes and the 3" fresh air supply ducts that go to every room in the house. The large black pipes are fresh air supply from and exhaust to the outdoors.
- 5. Better windows:** This Anderson series window has an insulating value of R-4.2. That's 27% better than a typical contractor window.
- 6. The tools tell the story:** The white blower door fan mounted in a red sheet is connected to a computer that measures .27 Air Changes Per Hour (ACH50) for the entire house. This is almost 10 times tighter than the average house.
- 7. Foundation:** Superior Walls® precast wall panels are one of the strongest and most waterproof basement systems. These high-efficiency panels are insulated to a R-21 rating.
- 8. Solar ready:** There are two key instructions: (1) Leave enough clear roof area facing roughly south (no plumbing pipes or venting). (2) Install plywood near the electric panel for mounting solar equipment and a conduit running to the attic near the future location of the PV panels.



Learn more:

Visit ppllectric.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 in actual usage, costs or savings from this estimate.





Not all homes are created equal



Zero Energy Ready Homes — Compared with 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 (ZERH), one of the most rigorous home certifications in the USA.

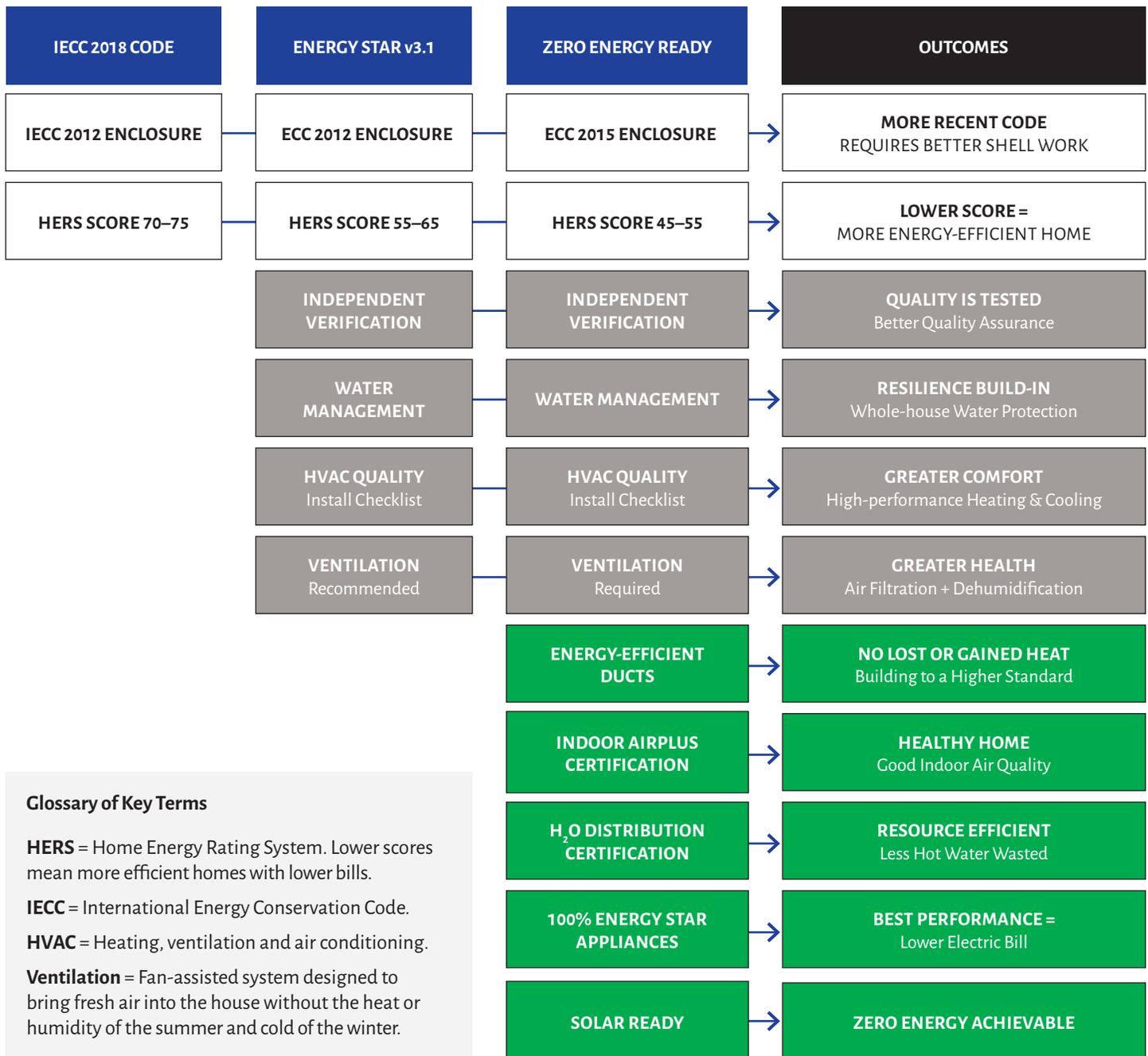
Code Homes set the minimum standard for health, safety, durability and energy efficiency.

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

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 **gray boxes** show the benefits of an ENERGY STAR certified home and a ZERH. The **green boxes** show the extra benefits of a ZERH.



Glossary of Key Terms

HERS = Home Energy Rating System. Lower scores mean more efficient homes with lower bills.

IECC = International Energy Conservation Code.

HVAC = Heating, ventilation and air conditioning.

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.