



Hutch Homes (hutchhomesinc.com)

PPL Electric Utilities | High-Performance New Homes

General Information

Location	Lewisberry, PA
Layout	2 story, 4 bedrooms, 2.5 baths
HERS® Index Score	46
Estimated Monthly Bill	\$117
Estimated First-Year Savings (compared to Code Home)	\$1,294

Energy Contractors

Rater	PA Energy Auditors <i>paenergyauditors.com</i>
Mechanical	Kole Brothers <i>kolebros.com</i>
Air Sealing	Accurate Insulation <i>accurateinsulationpa.com</i>

Key features:

1. Superior Walls® foundation: A high-performance home starts with the foundation. Superior Walls are a high-density, waterproof concrete foundation system. The walls come insulated to an R-12.5 and are craned into place. The entire foundation was set in one day. The photo to the right shows the foundation set with the first-floor deck being installed.



2. AeroBarrier: A home's shell has multiple layers that help control the movement of air, heat and moisture. Typical air sealing can control air movement to a point, but AeroBarrier takes air sealing to a whole other level. The procedure is simple. The house is pressurized with a powerful fan and then injected with an aerosol caulk. The positive pressure forces the aerosol into all the cracks. A computer readout tells you exactly how well you've done the job. (Photo source: AeroSeal® AeroBarrier)



3. Grade 1 insulation: Wall cavities perform best when insulation fills the cavity front to back, side to side and top to bottom. This home has blown fiberglass insulation in the wall cavities with no gaps or voids that could allow heat loss in the winter or heat gain in the summer.



Learn more:

Visit ppllectric.com/HighPerformance for more information.

Estimated bill and savings based on expected appliance usage in energy-efficient model home. PPL Electric Utilities and its 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.



4. Better framing: Looking around the house now, all you see is walls, windows, doors and trim work. Behind the drywall, there is a world of details that you'll never see – a world of high-performance framing. Better framing creates more room for insulation. This lowers your energy use and increases comfort.

(A) Most cathedral ceilings are created with 10" or 12" rafters. This roof and ceiling sandwich is created with a tapering 12" to 24" custom truss. This allows room for extra deep insulation and an air space above it for ventilation.

(B) There is an attic behind this second-floor wall, so, like other outside walls, it gets extra air sealing before it's insulated.

(C) You can see the fireplace flue inside a framed box. This box will be air sealed from the second-floor outside wall and attic spaces before it's closed in with drywall.



5. High-efficiency heat pumps:

(A) Here is one of two high-efficiency Mitsubishi® cold-climate heat pumps. It's designed to provide heat no matter how cold it is outside.

(B) The A.O. Smith® heat pump water heater is almost 400% efficient. That means that you get 4 units of heat delivered from every unit of electricity coming in. Like other heat pump technology, this unit doesn't create heat. It just moves heat from one place to another.

6. Ventilation:

(C) The Fantech® ATMO™ Energy Recovery Ventilator (ERV) brings fresh air into the house and exhausts all the stale and polluted air you don't want. This is important for very tight homes. It's all about controlling the movement of air, heat and moisture. The ERV is connected to the HVAC ductwork, so the fresh air is distributed evenly throughout the house.



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