

# Poirier Homes LLC

State License #0009965



## Custom Homes & Designs

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Advantages of an Energy Star home. Energy and green features at 23 Stockbridge, and what distinguishes our home from a typical built custom home.

The Homes Poirier Homes build are Energy Star Homes, certified by a Home Energy Rater (HER), an Energy Star certified independent agent. The homes are given an energy rating (HERS index) by the agent, and designed to be energy efficient from the planning stages and tested to certify they meet the standard. ENERGY STAR qualified products and practices help you save money and reduce greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. EPA and U.S. DOE. The ENERGY STAR label also designates superior energy performance in homes and buildings. **This home at 23 Stockbridge exceeds Energy Star standards by 40%, and this house will use 49% less energy than a comparable house built to code with fiberglass insulation.**

- **Windows**- This home has aluminum clad Jeldwin windows. They are energy saver plus insulated dual low e annealed glass preserve film and argon filled. They have a u value of .27. All of our windows and doors are flashed with the Dow weathermate tape system. This insures that water stays out of the house, and drains away from the house like it is designed to do.
- **Insulation**- This home is insulated with the most advanced form of insulation available foam insulation. This home will be quieter, healthier, more comfortable, and less expensive to operate. Closed cell foam insulation is sprayed on basement walls and rim joists. Open cell foam insulation is sprayed on first and second floor exterior walls,

sloped roof sections to collar ties. R-40 fiberglass insulation on attic floor, R-19 fiberglass insulation on garage exterior walls, R-30 open cell installed on garage ceiling. Sound proofing for first floor interior walls with bathrooms, second floor interior walls for all bathrooms, and laundry room. All windows, doors and penetrations on exterior walls will be foamed with low expansion foam

- **HVAC-** This home has a 87% efficient hydro air natural gas modulating boiler. There also is a 90% efficient natural gas indirect water heater, and 14.5 sear air conditioning condensers. A energy recovery ventilation unit located in the attic brings fresh air into the house. Sheet metal trunk lines sealed with mastic wrapped with R-7 insulation.
- **The advantage of a hydro air system over a forced hot/cold air system is the following.** In a hydro air system, no combustion is taking place inside each air handler. Consequently, the air is not as hot or as dry as in a hot air system, and soot and combustion odors are not present inside the unit. This makes hydro air systems, on average, much cleaner and more comfortable than hot air systems. In addition, large sections of floor space are not taken up by ducts that need to be boxed in as they would on a conventional system - in order to reach various wings or stories of the home. Hydro air systems are also more comfortable and generally less dry than conventional hot air systems due to a lower temperature rise through the unit. Properly designed, the units will cycle on and off less, lowering the temperature swings within a room.
- **The advantage of having sheet metal trunk lines in your home is the following.** Sheet metal ducts last a lifetime. We seal all of the joints with mastic and wrap the outside with insulation so that there is minimal loss of heating or cooling in the house. With fiberglass duct board its structure gets less rigid (spongy) and interior lining is starts to disintegrate after just a few years of normal use. One of the biggest issues is with fiberglass duct boards is people complain of allergies and excessive dust in their house. With sheet metal ducts there is no excessive dust in the house if you change your air filters regularly.
- **Indoor air quality.** Our homes have improved indoor air quality because of the following things we put into the home. We have a **water management system that keeps water out of your house.** We use Delta MS membrane on the exterior of the foundation walls. This product is a dimpled membrane, impermeable to water and water vapor. The vacuum formed exclusive dimple pattern creates an air-gap between the membrane and the foundation wall. This unique design allows any incidental water getting past the dimpled membrane to flow freely to the perimeter footing drain. The air-gap guarantees a safe separation and full capillary break between the foundation wall and any ground-moisture. Unlike any spray-applied coating, Delta MS bridges large cracks and imperfections in foundation walls. We use the Dow weathermate system around all windows doors, and exterior penetrations. The Huber zip system sheathing is used on our homes. One of the many advantages of this product is it is a structural panel and protective barrier in a complete system that offers the strength and durability of an OSB panel with built in moisture protection. Zip system panels and tape provide a durable barrier blocking the entry of water into the wall and roof systems. Once the panels and tape have been installed, Zip system wall and roof sheathing prevents water from

becoming trapped between the panel and barrier. Zip system wall sheathing is specially designed to provide optimal permeance. Panels protect against moisture intrusion while also allowing walls to breathe and dry out. The Zip panels also reduce air leakage which helps protect the R value of the homes insulation, which makes the home more energy efficient. We also have a ERV unit which brings in fresh air into the house that is on a timer. We also use a low voc paint on the interior trim and walls like Sherwin Williams duration paint. Because we use products like these on our homes, our homes will be very healthy homes to live.

- Green features-The siding is fiber cement siding which come prefinished from Certain teed, the manufacturer. The raw materials are low in toxicity – wood pulp, cement, sand and water (recycled up to 4 times). The siding and paint finish are extremely durable: Longer lasting materials not only require fewer resources for replacement but also reduce maintenance and repair costs. Using prefinished materials reduced the need for painting onsite, and the Unique Colormax manufacturing process bakes on paint in the factory delivers a high quality, consistent finish, and reduces contaminants during exterior painting. A 15-year finish warranty ensures reduced need for repainting in the future.
- The floor joists are Boise Alljoists, a product in compliance with the Sustainable Forestry Initiative (SFI). Boise joists are 50% stronger than dimension lumber with half the wood fiber. Subfloor material is Huber Advantech (another SFI product) and Huber Zip System (SFI) wall sheathing with all taped joints on exterior walls for air and moisture resistance to promote a well sealed building envelope.
- This home has 2x6 exterior walls which gives increased overall structural strength to the house, and increases the space for insulation
- Poirier Homes will continue to monitor new developments in energy conservation and is committed to incorporating them in all of our future homes.