



PBS High Performance Modular Products

Striving to become an industry leader in energy efficient building practices, Professional Building Systems, Inc. is now offering performance build options for their builders and customers wanting a *Certified* high performance built home. A 3rd party monitored energy efficient quality assurance program has been established within both plants.

100% of all PBS modular homes will be built following a prescribed energy efficiency protocol at the plant level and labeled as Quality Confirmed Builds.

A **Quality Confirmed Build** follows a specific set of energy efficiency plant guidelines including proper air sealing practices & grade I insulation install.



Quality Performance Modular Build™

Job #

Quality Performance Product

This home was designed & built in compliance with 3rd party monitored plant quality control procedures. The plant portion of the build follows efficient building practices recommended by the U.S. Environmental Protection Agency and approved by Certified Energy Raters, LLC, our plant certifier.

Type of Performance Build (as checked):

- PBS Homes Quality Performance Build (No Certification)**
- PBS Homes Certified High Performance Build (HERS Certification)**
- PBS Homes Premium Build (Energy Star 3.0/3.1 Certification)**

Quality Confirmed

To qualify as a PBS Homes High Performance Home, this home once completed must be performance tested on-site by a certified HERS Rater and achieve HERS Certification or earn Energy Star Certification and final labeling.

A final performance label is required as verified "proof" of the completed home's performance.

Certification

I certify that the energy efficiency and performance measures included in the plant building process for this modular home conform to our documented quality control performance building procedures.

Plant QA Representative

Plant Certifier: Certified Energy Raters, LLC

800-671-1895

A Quality Confirmed Build label will be affixed to each home shipped as proof of the plant's adherence to the Quality Assurance Program.

The build cannot be considered a "high performance home" unless its efficiency is site tested and certified.

For PBS builders and customers wanting the home certified as "high performance" they may choose one of two types of certifications:

- High Performance Build (HERS Certification)
- Premium Performance Build (Energy Star version 3.0/3.1 certification & Label)

A **High Performance Build** follows the same specific set of energy efficiency plant guidelines as the Quality Confirmed Build but includes any additional efficiency items recommended after energy modeling, the build plan & issuance of a projected HERS score. *This is a pre-label for a final HERS certified build.

A **Premium Performance Build** uses Energy Star 3.0/3.1 guidelines and requires Energy Star checklists for the build which includes advanced framing techniques and other specific requirements. Each build is REM modeled and an Energy Star Prescription issued to the plant and the builder with instructions to be able to complete a successful Energy Star Certified Home in the field.

PBS offers two option packages for both certification types:

- **Planning Package** (Non-turnkey) – is a plant offered pre-certification option which includes:
 - Rater Plan Review
 - REM Modeling
 - HERS or Energy Star build prescription
 - Projected HERS/Energy Star Score
 - IECC Code compliance review & documentation
 - Plant QA (HERS & Energy Star)
 - **The Planning Package does not include final testing or certification**

Benefits of the Planning Package

- Builder can choose own field rater
- Plan is modeled with a projected outcome
- Builder's rater does not need to visit plant
- Builder receives IECC compliance docs for use

- **Turnkey Package** – is a plant offered pre-certification option which includes:
 - Rater Plan Review
 - REM Modeling
 - HERS or Energy Star build prescription
 - Projected HERS/Energy Star Score
 - IECC Code compliance review & documentation
 - Plant QA (HERS & Energy Star)

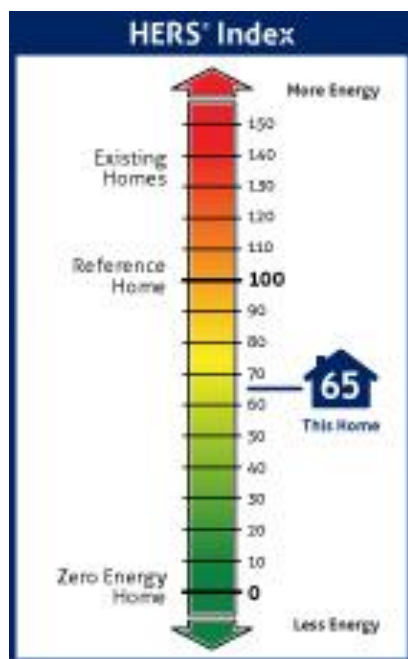
Plus:

- Field verification & Energy Star Checklist completion
- Site Performance Testing (HERS & Energy Star)
- HERS/Energy Star Report, Label & Certificate
- IECC code compliance final documentation
- Federal/State/Local Energy Efficiency Incentive registration (if available)

Benefits of the Turnkey Package

- Simple for Builder – all is included
- Simple for Builder – just follow the ES/HERS Prescription
- Simple for Builder – One rater contact

The goal is to make the process of a high performance certified build easy!



The figure shows a blue ENERGY STAR label form. At the top left is the ENERGY STAR logo. To the right, it says 'AN ENERGY STAR QUALIFIED HOME'. Below this are several input fields: 'Address:', 'Built by:', 'Verified by:', 'Date:', and 'Optional information:'. At the bottom, there is a small text block: 'ENERGY STAR qualified homes are independently verified to meet strict energy efficiency guidelines set by the U.S. Environmental Protection Agency. Each home that earns the ENERGY STAR can keep 4,500 lbs of greenhouse gases out of our air each year. www.energystar.gov'.

ADVANTAGES OF EACH PROGRAM

High Performance Build

- No required checklists
- No requirement for certified HVAC installer
- HERS modeling, testing & scoring the exact same as Energy Star
- Builder/Customer cannot “fail”
- Many communities are accepting the HERS Certification in lieu of an Energy Star requirement
- 2009, 2012 & 2015 IECC requires performance testing (2015 IECC based on HERS)
- Building cost is less than meeting all of Energy Stars requirements and permits more builders to offer a labeled energy efficient product who are dealing in price sensitive markets.
- Can sign up as a RESNET Energy Wise Builder at no cost.

Premium Performance Build (Energy Star vs 3.0/3.1 Label)

- Energy Star is a Premium Build – “Better is Better”
- Builder can sign up as an Energy Star Partner at no cost
- Builder listed as Partner on www.energystar.gov
- Builder can receive national/local recognition
- Many communities require Energy Star Certification
- NGBS/LEEDS award points for Energy Star Certified Homes
- A better choice for builders dealing in “higher end” markets
- Free Energy Star marketing materials & Partner resources
- Brand preference above competitors
- 2009, 2012 & 2015 IECC requires performance testing (2015 IECC based on HERS)
- Homeowner receives a more valuable home

