



Independent Inspection and Testing Helps Make Sure a Home is Energy Efficient

Builders can claim that their homes are energy efficient. But many of the energy efficiency features in a home are not visible, so how can home buyers really be sure? Look for homes that have earned the ENERGY STAR—these homes have had their energy efficiency independently verified by an inspector known as a Home Energy Rating System (HERS) rater. These professionals advise builders how to select the most appropriate energy-efficient features for a home, inspect and test the home during construction, and then verify that the home meets EPA’s strict guidelines for energy efficiency.

BENEFITS OF INDEPENDENT INSPECTION AND TESTING

- **Peace-of-Mind for Making a Smart Purchase.** Before buying a used car, consumers often take the car to a trusted mechanic not affiliated with the seller to have an expert verify its performance. This helps ensure they are making a smart purchase. Homebuyers can have similar peace-of-mind by looking for the ENERGY STAR label—typically located on a home’s circuit breaker box. This label assures homebuyers that the home has been verified by an independent HERS rater to be truly energy efficient. In addition to lowering monthly utility bills, the energy efficiency features typically found in ENERGY STAR qualified homes can also contribute to improved home durability and homeowner comfort.
- **Climate-Specific Recommendations.** An energy-efficient home built in Florida would not necessarily be energy efficient if it were built in Michigan. For a home to be energy efficient, it must be designed for regional weather characteristics. HERS raters are trained in climate-effective energy saving techniques, and their knowledge and field experience helps ENERGY STAR builder partners construct high-quality, energy-efficient homes.
- **Additional Inspections for Quality.** Homes that earn the ENERGY STAR typically undergo more inspections and testing than code-built homes. The HERS verification process helps identify and correct mistakes before they are hidden behind walls and holds builders constructing ENERGY STAR qualified homes to a higher standard. As a result, HERS verification can help improve the quality and energy efficiency of a home.



**Look for the ENERGY STAR
on the breaker box of your
next home.**

HOW INSPECTION AND TESTING WORKS

HERS raters are trained to evaluate construction techniques, take key measurements, and perform inspections and testing procedures to verify a home's energy-efficient performance. Here's how the process works:

Selection of Energy-Efficient Features. HERS raters help builders choose energy-efficient features for their ENERGY STAR qualified homes in two ways.

- With a **traditional HERS rating**, a HERS rater simulates a home's energy use with specialized computer software. The results of this analysis allow the HERS rater to identify the most effective upgrades to meet ENERGY STAR performance guidelines.
- With a **Builder Option Package**, a HERS rater does not calculate the home's energy use. Instead, the builder and HERS rater use a set of climate-specific construction specifications developed by EPA called a Builder Option Package (BOP). The BOP specifications have been pre-determined based on extensive analyses to consistently meet ENERGY STAR guidelines.



Home Energy Rater performs a blower door test.

Completion of Field Verification. Regardless of how the energy efficiency features are selected, HERS raters must also conduct on-site inspections and testing of a home. This field verification ensures energy measures are consistent with ENERGY STAR guidelines. The process usually includes a blower door test (to test the leakiness of the house), a duct blaster test (to test the leakiness of the duct system), and completion of a thermal bypass checklist (a visual inspection of common construction areas where air can flow through or around insulation).

The standards for HERS ratings, inspection protocols, and testing guidelines are maintained by the Residential Energy Services Network (RESNET). For more information, visit the RESNET Web site at www.natresnet.org.

A BETTER FUTURE

ENERGY STAR is a voluntary partnership between the government and more than 8,000 organizations, including more than 2,500 of the nation's home builders. Together with home buyers and their families, we are working to achieve a common goal—protecting the environment for future generations by changing to more energy-efficient practices and products today.

ENERGY STAR is the government-backed symbol for energy efficiency. It identifies new homes and more than 40 types of products that are energy efficient and offer the features, quality, and performance that today's consumers expect. Products that can earn the ENERGY STAR include windows, heating and cooling equipment, lighting, and appliances. To learn more about ENERGY STAR, visit www.energystar.gov.