

Adapted from:  
Community Planning and Development Outcome and Performance Measurement Framework  
Online at: [Training Manual and Guidebook](#)

Appendix 1:  
Energy Star Sets Energy Performance Standards for Buildings

WHAT IS THE ENERGY STAR BUILDING PERFORMANCE STANDARD?

- For residential single and multifamily new construction up to 3 stories, it is a system for achieving **and** verifying a certain level of performance with respect to energy efficiency.
- Performance is certified by independent third-party contractors.
- The Energy Star standard is uniform throughout the United States, and a national infrastructure exists for implementation.
- ENERGY STAR is not a new building code, or specification. It does not replace existing energy codes or building codes. “Efficiency” means total purchased house energy consumption, not only heating, cooling and hot water. [New in '06]
- An Energy Star home is **at least** 30% more energy efficient than a comparable home built to meet the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. See [www.energystar.gov](http://www.energystar.gov) for more information, including the new performance guidelines to be applied for most homes beginning July 1, 2006.
- An Energy Star Home/Building is defined as one which has been **certified** through inspection and **testing** as meeting the Energy Star Qualified New Homes Standard. To achieve this rating the building must score less than or equal to 80 in the North ( $\leq 85$ South) on the Mortgage Industry Home Energy Rating Scale (HERS).
- HERS Scores give a numeric value between 0 and 100 indicating the relative energy efficiency of a given home as compared with the HERS Energy-Efficient Reference Home (EERH) as specified by the HERS Council Guidelines. The lower the score, the more efficient the home. A home with zero energy use (total energy consumption) scores 0.

## WHAT DO HERS CONTRACTORS DO?

- Review builder's plans for Energy Star performance.
- Evaluate and rate energy efficiency of buildings.
- Provide independent 3rd Party inspections AND testing.
  - Inspection—The home energy rater inspects the home and, with software, measures its energy characteristics, such as insulation levels, window efficiency, wall-to-window ratios, the heating and cooling system efficiency, the solar orientation of the home, and the water heating system.
  - Testing—Diagnostic testing, such as blower door for building air leakage and duct blaster testing for forced air systems leakage is part of the rating.

## NOW HOW DO WE GET ALL THIS INTO [HUD] COMMUNITY PLANNING AND DEVELOPMENT'S HOUSING PROGRAMS?

Incorporate the following language into your RFPs or procurement process for housing:

“All new and gut rehabilitation residential buildings up to three stories shall be designed to meet the standard for Energy Star Qualified New Homes (≤80 [85 for South] and >70 on the HERS Rating Scale). All procedures used for this rating shall comply with National Home Energy Rating System guidelines.”

Believe it or not this is the only thing *you* have to do! The developer takes care of the rest.

## ENERGY STAR REFERENCES, LINKS UPDATED 12/20/2010 [All are “http://” sites.]

**Energy Star:** [www.energystar.gov](http://www.energystar.gov)

**HUD's Energy webpage including "Energy Star for Grantees" PPT presentation:** [www.hud.gov/offices/cpd/library/energy/](http://www.hud.gov/offices/cpd/library/energy/)

**HUD PD&R Energy Efficient Rehab Advisor:** [rehabadvisor.pathnet.org/index.asp](http://rehabadvisor.pathnet.org/index.asp)

**Residential Energy Services Network:** [www.natresnet.org/programs/default.htm](http://www.natresnet.org/programs/default.htm)

**Very comprehensive technical stuff in English:** [www.buildingscience.com](http://www.buildingscience.com)

**DOE Webpage for State Energy Codes:** [www.energycodes.gov](http://www.energycodes.gov)

**EIA Webpage for Energy uses by State:** <http://tonto.eia.doe.gov/state/>

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