

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 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 (≤ 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.

Appendix 1:
Energy Star Sets Energy Performance Standards for Buildings

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 [All are "http://" sites.]

www.energystar.gov

HUD's "Energy Star for Grantees" presentation for workshops:
www.hud.gov/offices/cpd/library/energy/energystargrantees.ppt

www.rehabadvisor.pathnet.org/index.asp

www.natresnet.org/programs/default.htm

Very comprehensive technical stuff in English:
www.buildingscience.com

DOE Webpage for State Energy Codes:
www.energycodes.gov

EIA Webpage for Energy uses by State /Source/Sector:
www.eia.doe.gov/emeu/states/states.html

###