

Making Energy Star, Green Built Homes Count

How to get the Appraisal you need

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HomeOwnership Center



Building homes. Fulfilling dreams. Every day.

What is Energy Efficiency?

The process of doing more with less!



=

MORE
Doing
LESS
with

What is Energy Star?

Energy Star is a United States government program created in 1992 by the US Environmental Protection Agency in an attempt to reduce energy consumption and greenhouse gas emission by power plants. What began originally as a voluntary labeling program has grown in to one of the largest efforts worldwide to promote energy efficient consumer products



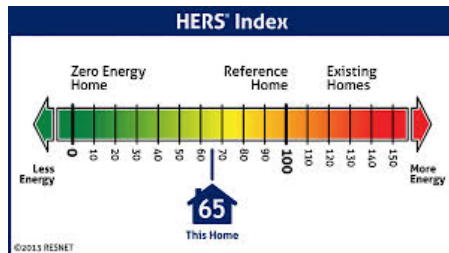
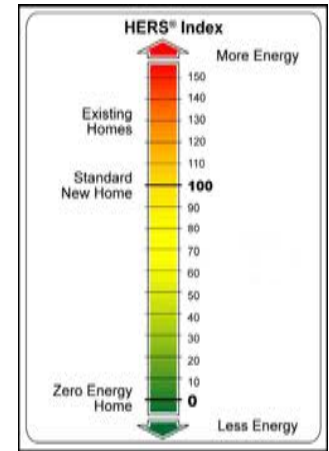
Energy Efficient Terminology

HERS Index - Industry standard for measuring a home's energy efficiency

Source: (www.resnet.us)

HERS Rating - Is a comparative analysis of how energy efficient your home is as compared to other similar homes

Source: (www.resnet.us)



Energy Star Certification Paths (2) Paths to certify a home to earn Energy Star

Prescriptive Path - is based on a predefined package of improvements

Performance Path - is based on a customized package of upgrades.

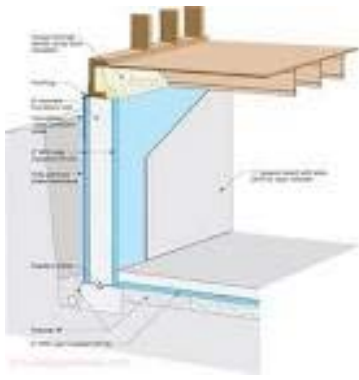
The National Program Requirements define the core energy efficiency specifications for both the Prescriptive and Performance Paths

Source: (www.energystar.gov)

Best Practices & What Must be Considered for Energy Efficiency

What has to be Considered:

- ✓ Climate Zone
- ✓ Foundation
- ✓ Envelope Construction (Building Practices, Air Sealing, Windows, Doors & Insulation)
- ✓ Conditioned Space (Foundation, Walls & Roof)
- ✓ Air Sealing
- ✓ Heating / Cooling Equipment
- ✓ Thermostat & Duct Work
- ✓ Water Heater
- ✓ Lighting & Appliances
- ✓ Inspection & Verification



Why should a builder become an Energy Star Partner?

- ✓ Use energy efficiency to enhance your credibility
- ✓ Increase visibility
- ✓ Gain access to new customers
- ✓ Utilize a proven strategy
- ✓ Earn recognition for your success in improving the customer's energy efficiency
- ✓ Environmental Impact
- ✓ Good Building Practice
- ✓ Understand Building Science

How Much does Energy Efficient Construction Cost?

Energy efficient construction cost vary depending on location, availability of material, skilled labor and professional raters.

Typical Code Built House 2012 **HERS Index 100**

3BR, 2 Bath, 1380 Gross Sq. Feet, Morehead, KY

Process

Foundation	
Framing	
Insulation	
Air Sealing	
Electrical	
HVAC	
Plumbing	
Drywall	
Interior Finish	
(I.E: Paint, Cabinets, Floor Coverings)	
Exterior Finish	
(I.E.: Roofing, Siding, Conc. Etc.)	
Misc.	
Total Construction Cost	\$103,500.00

Energy Star V 3.0 Energy Star House Built in 2012 **HERS Index 44**

3BR, 2 Bath, 1380 Gross Sq. Feet, Morehead, KY

Process

	Additional Cost
Foundation.....	\$1,875.00
Framing.....	\$495.00
Insulation.....	\$2,170.00
Air Sealing.....	\$651.00
Electrical.....	\$0.00
HVAC	\$1,870.00
Plumbing.....	\$450.00
Drywall	\$350.00
Interior Finish.....	\$0.00
(I.E: Paint, Cabinets, Floor Coverings)	
Exterior Finish.....	\$0.00
(I.E.: Roofing, Siding, Conc. Etc.)	
Misc.	\$0.00
Total Construction Cost	\$103,500.00
Additional Energy Star Cost	\$7,861.00
Total Cost	\$111,361.00

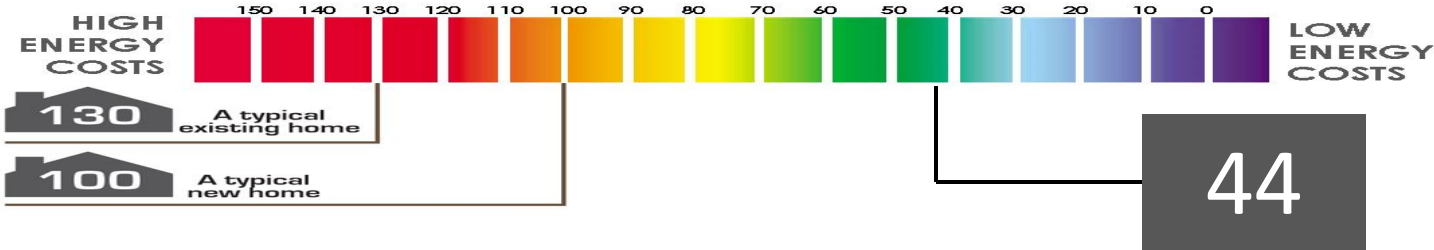


The itemized cost are associated with Frontier Housing, Inc, based on our labor and material rates. All rates for labor and material are at variance.

The HERS Rating...

HERS Rating - Is a comparative analysis of how energy efficient your home is as compared to other similar homes

Source: (www.resnet.us)



3BR, 2 Bath, 1380 Square Feet



This home is **56%** more energy efficient than a typical new home &

86% more energy efficient than a typical existing home.

The Value of Energy Efficient Construction

New Home Energy Efficient Mortgage Report

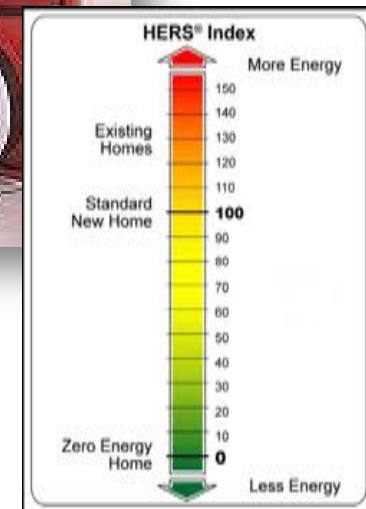
Use this Energy Report to show the Energy Savings (for underwriting purposes in accordance with the requirements of the Energy Efficient Mortgage product) to determine the Energy Savings related to the property. This report is to be completed by the Energy Rater and submitted to the Lender. This report must be retained by the Lender in the Loan File

Who generates this report?

The HERS Rater

What is this report based on?

The performance of the Energy Efficient property
HERS Score



New Home Energy Efficient Mortgage Report

New Home Energy Efficient Mortgage Report

Use this Energy Report to show the Energy Savings (for underwriting purposes in accordance with the requirements of the Energy Efficient Mortgage product) to determine the Energy Savings related to the property. This Report is to be completed by the Energy Rater and submitted to the Lender. This Report must be retained by the Lender in the Loan File.

Borrower Name(s): _____

Property Address: _____

New Home Energy Savings

Monthly Energy Savings

The Monthly Energy Savings Value is the average monthly energy savings of the design home over the 2006 International Energy Conservation Code reference home. REM/Rate calculates the annual savings of the design home for heating, cooling, water heating and base loads.

New Homes Energy Value

Energy Savings Value

The Energy Savings Value is the Net Present Value of the annual energy savings of the design home over the 2006 International Energy Conservation Code reference home calculated over a lifetime of 23 years and a discount rate of 4.77%.

International Energy Conservation Code Year Used

Rater's/Provider's Signature	_____
Date	_____

REM/Rate - Residential Energy Analysis and Rating Software v14.3

This information does not constitute any warranty of energy cost or savings.
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Monthly Energy Savings

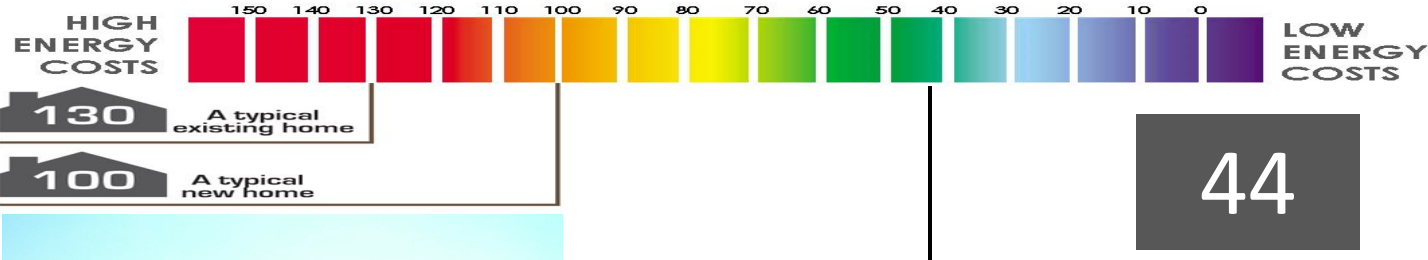
Energy Savings over a lifetime of 23 years

Discount Rate

The HERS Rating...

HERS Rating - Is a comparative analysis of how energy efficient your home is as compared to other similar homes

Source: (www.resnet.us)



A Typical New Home

Elec. Per Month (Avg.)
\$ 148.53
Not Energy Star
No HERS



HERS Rated Energy Star Certified Home
HERS 44

Elec. Per Month (Avg.)
\$ 66.94
Energy Star Qualified
HERS Score: 44
Savings: \$81.59/month

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Questions?



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