



Setting the Standards for Quality 1996 - 2016

# The Market Option to Energy Code Compliance

The HERS Index

SprayFoam 2016

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### What is RESNET



- An industry-based, not for profit organization
- A national standards making body for building energy efficiency rating and certification systems in the USA (ANSI Accredited Standards Development Organization)
  - Consensus based standard development and amendment process
  - Transparent review and adoption process Formal public review and comment process

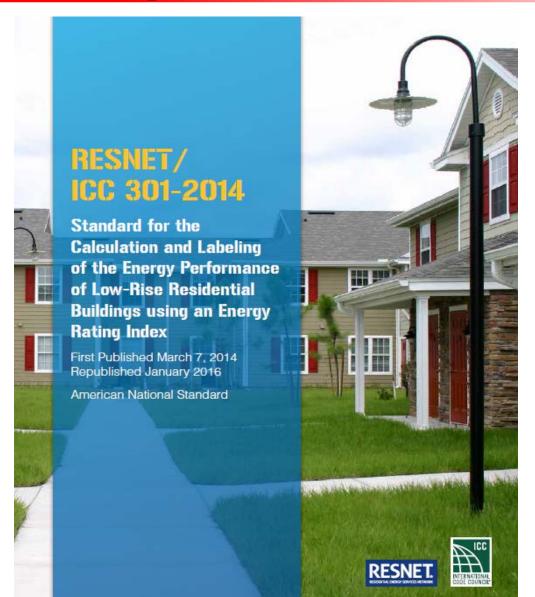
### What Are Home Energy Ratings

A home energy rating is a whole house analysis of a home's energy efficiency by a trained and certified RESNET Home Energy Rater. The house data is entered into a RESNET accredited rating software tool which produces the rating

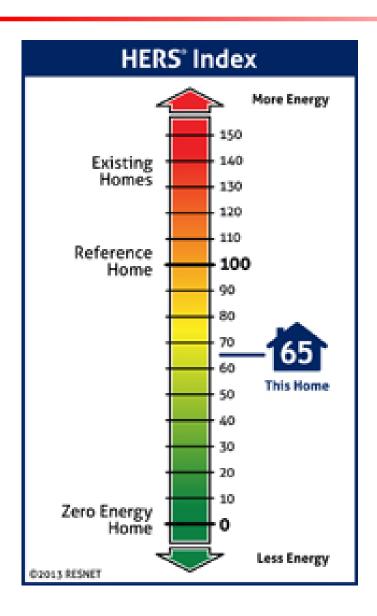
The rating produces a HERS Index Score. The HERS Index is the nationally recognized scoring system for measuring a home's energy performance.

The HERS Index can be described as a milesper-gallon (MPG) sticker for houses.

# The ANSI RESNET/ICC Energy Rating Index Standard



### The RESNET HERS Index



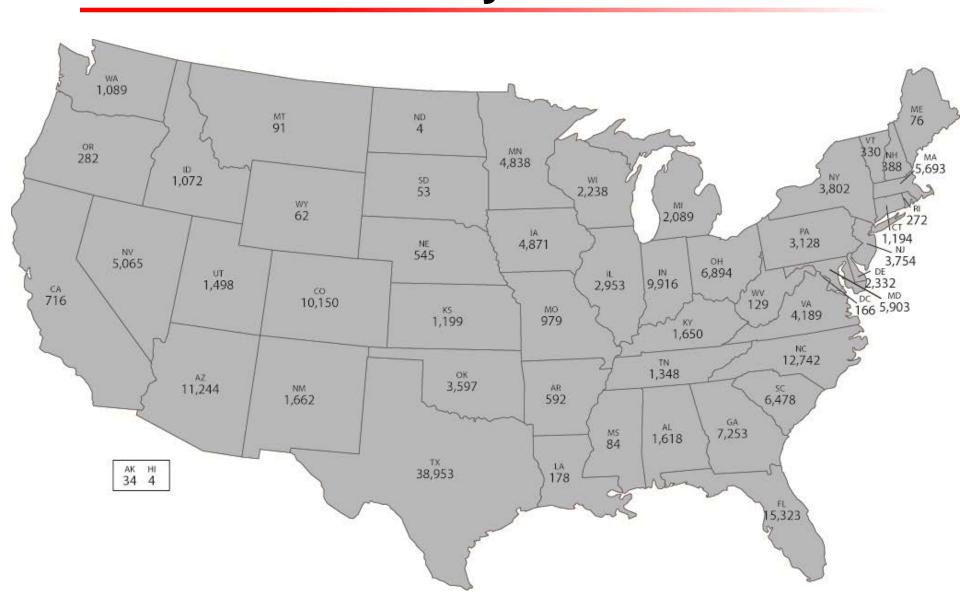
### **Market Penetration of HERS Index**

- To Date Over 1.7 Million Homes Rated and Issued HERS Index Score in U.S.
- Over 190,000 New Homes Rated in 2015 and Issued a HERS Index Score
  - -30% increase over 2014
  - -38% of all new homes sold
- Average HERS Index Score was 62

## Average HERS Index Scores by State



## Number of Homes HERS Rated in 2015 by State



### 2015 IECC Incorporates Rating Score (R-406)

The rating scores that were adopted by the IECC are:

Regions 1 and 2	52
Region 3	51
Region 4	54
Region 5	55
Region 6	54
Region 7 and 8	53

The HERS path also requires that a builder must meet the mandatory measures of the 2009 IECC

## 2015 IECC Energy Rating Index Option

States That Have Adopted Energy Rating Index

- Illinois
- Maryland
- Michigan
- New Jersey
- Texas (modified scores)
- Vermont (modified scores)

## Tools for Builders in Educating Code Officials on Energy Rating Index

- Fact sheets
- PowerPoint Presentation
- International Code Council RESNET video
- RESNET Standard Energy Rating Index Compliance Report

## Factsheets on Adoption of Energy Rating Index Score

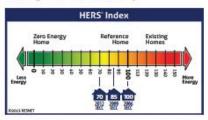


#### **Energy Rating Index Performance Path**

#### Benefits of the Energy Rating Index Score Option

The Energy Rating Index (ERI) performance path gives builders yet another option for complying with the International Energy Conservation Code (IECC). In addition to the prescriptive and performance paths of previous versions of the IECC, builders now have the option of meeting a target ERI score through a wide range of performance options to demonstrate compliance. The ERI performance path also requires builders to achieve the mandatory code requirements of the IECC, including water-heating piping provisions, and comply with the minimum insulation and window envelope performance requirements of the 2009 IECC.

The ERI score is defined as a numerical score where 100 is equivalent to the 2004 (ECC and 0 is equivalent to a net-zero home. Each integer value on the scale represents a one percent change in the total energy use of the rated design relative to the total energy use of the ERI reference design.



Using the ERI performance path for compliance with the IECC has several benefits, including more Resubility in complying with code, decreased emissions, lower building costs, reduced jurisdictional manipawer, utility bill savings, increased resale value and market competition.

#### FROM A BUILDER'S PERSPECTIVE

Lower First Coss. The ERI performance path allows builders flexibility in achieving the ERI performance goal of the 2015 IECC rather than following the prescriptive approach. The greater flexibility allows builders to select the most cost effective efficiency measures that perform the best for each home. Leading Builders of America (LBA) estimates that a level of energy performance that would have cost \$3,000 estra using the prescriptive approach of the IECC would cost only

\$1,300 with the ERI performance path, including the cost of the HERS rating. NRDC estimates that the extra costs of the down payment for the more energy-efficient home will pay back in net monthly savings in just over six months. Increased flexibility for builders also means lower construction costs, lower costs to the buyer and continual improvement in energy efficiency.

#### FROM A CONSUMER'S PERSPECTIVE

Utility Bill Savings. The ERI performance path provides substantial reductions in utility hills—about \$468 a year for a spical house compared to the 2012 IECC. As such, energy efficient homes following the ERI performance path are more affordable since the monthly utility bill savings more than pay for the increase in mortgage payments. In addition, ERI scores will be provided to the buyer, creating stronger markets for beyond-code homes by clearly demonstrating lower operating costs and providing guidance to the occupant on what utility bills should be.

Resale Value. The ERI score of a home will be included on the energy label that is required by the IECC and can be used to market the efficiency of the home. In addition, many markets around the US are including HERS scores on real estate MLS listings. Energy labels and inclusion in the MLS allow builders and homeowners to effectively demonstrate the extra value of energy efficient components and utility bill savings to the next buyer for a better selling price. The Institute for Market Transformation and the University of North Carolina also found a correlation between HERS ratings and mortgage loan foreclosure. The risk of defaulting on a mortgage was found to be 32% lower on HERS rated homes and reduced correspondingly with lower HERS rated homes and reduced correspondingly with lower HERS index scores.



## Factsheets on Adoption of Energy Rating Index Score

- Overview of the ERI Performance Path in the 2015 IECC
- Benefits of the Energy Rating Index Score\_Option
- Cost Effectiveness of Using the Energy Rating Index
- Energy Rating Index Scores for the 2009, 2012 and 2015 IECC
- Implementation Guidelines
- Case Studies
- Energy Rating Index Performance Path Frequently Asked Questions

### Builder Presentation on Adoption of Energy Rating Index



## ICC and RESNET Video for Code Officials on the HERS Index



### **Uniform Energy Rating Index Compliance Report**



#### 2015 IECC R-406 Energy Rating Index Report

#### Property

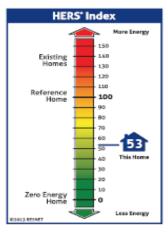
Name of Builder Building's Address

#### Organization

Name of Rating Company Phone Number of Rating Company Name of Certifled HERS Rater

#### **Energy Rating Index Information**

Confirmed Rating Rating No: 199838 Rater ID: 8893201 Date Rated: July 15, 2015



	Rated Home Calculated Energy Use (MBtu)	Rated Home Cost (\$/y
Heating	28.8	42
Cooling	41.4	50
Water Heating	4.0	9
Lights & Appliances	43.7	138
Photovoltaics	-0.0	
Total	117.9	336

Annual Estimates			
Electric (kWh):	16529	CO2 Emissions (Tons):	14
Natural Gas (Therms):	674	Energy Savings (\$)**:	2635
"Based on the 2015 IECC Energy	Rating Index i	Reference Design Home	

Energy Rating Index	Target Score: 53	Energy Rating Index: 53	PASS	
This home MEETS the Energy Rating Index Score requirement of Section 406 of the 2015 International Energy Conservation Code based on climate zone 7. In addition to the HERS Index Score other mandatory measures must be met (See Mandatory Requirements on second page).				
Name Organization		Signature Date		
_	i e		l .	

Provider Data and Seal
TITLE
Company
Address
City, State, Zip
Phone #
Fax#
To determine if a Provider is properly accredited go to: www.resnet.us/professional/programs/search_directory

## Federal Tax Credit for Energy Efficient Homes (45L)

Congress Extended Credit for 2015 and 2016 (Expired on December 31, 2014) With No Changes

### RESNET Proposal for 2016:

- Multi-Year Credit Based Upon 2015 IECC Energy Rating Index
- Whole House (Not Simply Only Heating and Cooling Improvements of Current Credit)
- Credit Increased to \$3,000 (Self Correcting with Market Penetration)

## **RESNET Energy Smart Builder HERS Index Marketing Materials**



## Customizable HERS Index Consumer Brochure

### One Number That Says It All!

Like a miles-per-gallon (MPG) label for houses, the HERS Index Score is the one number that tells you how energy efficient a home is compared to other homes.

- Compare homes based on energy performance
- Know what the projected energy costs are for the home you want to buy
- Enjoy peace of mind by knowing the home was rated by a certified RESNET HERS Rater





#### What Is RESNET?

The Residential Energy Services Network (RESNET) is the independent, national non-profit organization that homeowners trust to improve home energy efficiency and realize substantial savings on their utility bills. It is the organization responsible for creating the national training and certification standards for Home Energy Rating System (HERS) Raters.

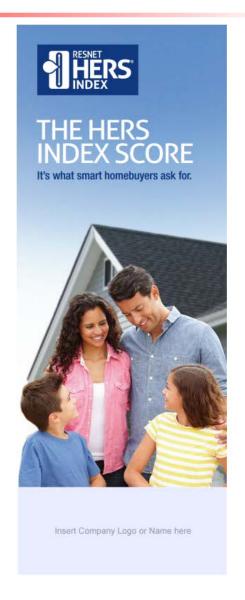
To qualify as a certified RESNET Rater, home energy professionals must first complete the rigorous training and testing required, and agree to abide by the RESNET Code of Ethics and Standards of Practice.

RESNET's industry-leading standards are recognized by the U.S. Department of Energy, U.S. Environmental Protection Agency, and the U.S. mortgage industry.

For more information about RESNET visit

#### www.resnet.us

Insert company information here and more about their HERS rated energy efficient homes.



## Customizable HERS Index Yard Sign

**Insert Company Logo or Name here** 



Insert company phone number and website address here

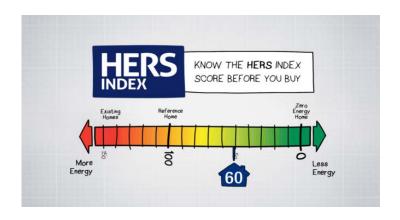


### **HERS Index Videos**

### Consumer Video

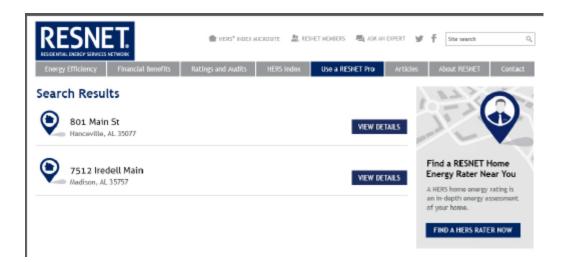


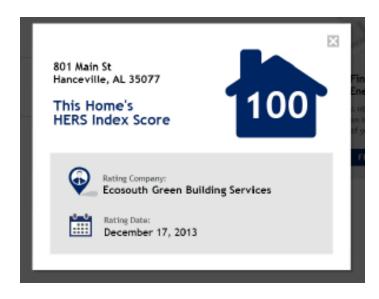
### Model Home Video



















**Energy Efficiency** 

Financial Benefits

Ratings and Audits

HERS Index

Use a RESNET Pro

Artic

#### This Home Is Not HERS Rated

If you're a homebuyer looking for a new home, it only makes sense to ask for the HERS Index Score. It's the one number that lets you comparison shop for homes based on energy performance. So ask for the HERS Index Score before you buy!

For homeowners, getting your home HERS-rated brings many advantages, such as:

- Increased home value
- Improved home comfort and lower energy bills
- Understanding the true cost of your home

### Social Media Campaign

- Google Ads
- Facebook Ads
- Post on RESNET Social Media

News Releases

### Join Us in Scottsdale in 2016

