

Setting the **Standards** for **Home Energy Efficiency**

RESNET 101 What is RESNET and the HERS Index? A Primer for Beginners

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February 29, 2016





Presentation Topics

- ✓ Introduction to RESNET
- ✓ What is RESNET's mission
- ✓ Who is "RESNET" and how the organization operates
- ✓ Overview of the HERS Index
- ✓ Lots of Q & A along the way...



Miss-information

"Does RESNET really mean ENERGY STAR?"

"Is REM/Rate RESNET's software?"

"What is the difference between RESNET and RESCheck?"

RESNET 101 - What is RESNET and the HERS Index? A Primer for Beginners



Introduction to RESNET

- ✓ Residential Energy Services Network (RESNET)
- ✓ 501c3 Non-profit organization
- ✓ Founded in 1995 by the National Association of State Energy Officials and Energy Rated Homes of America





- ✓ Original mission: Develop a national market for <u>Home Energy Rating</u> Systems (HERS) and <u>energy efficient mortgages</u>
- ✓ Updated mission (2012): Build and maintain, in collaboration with industry partners, a credible and reliable marketplace infrastructure that significantly improves the energy performance of all buildings.

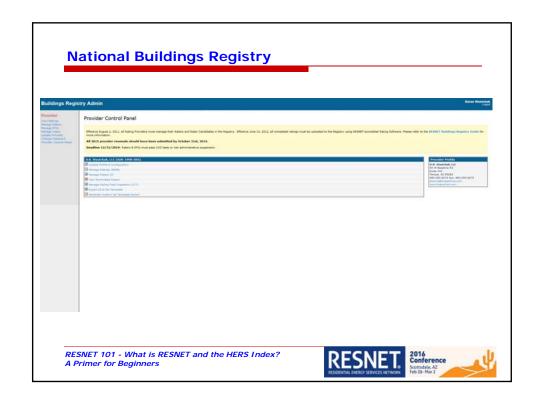
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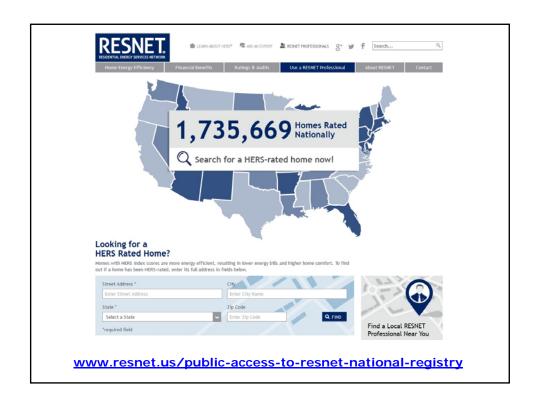


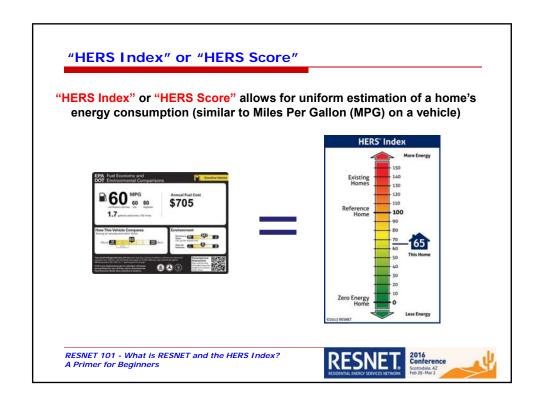


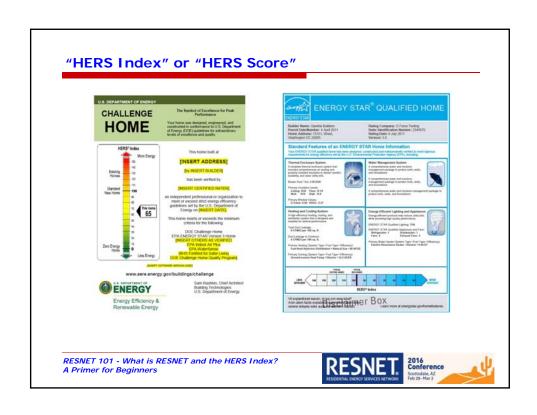


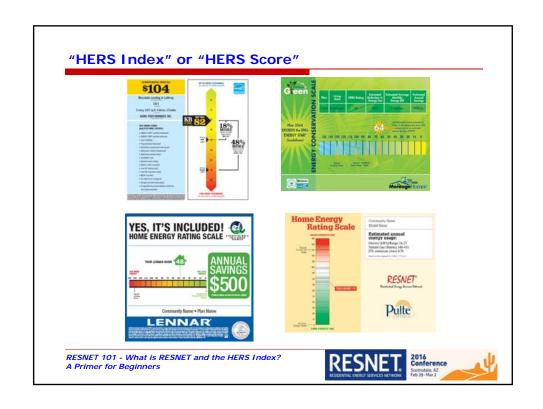








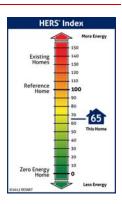




"HERS Index" or "HERS Score"

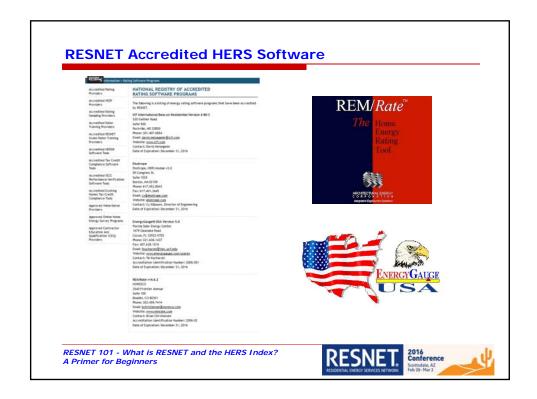
IECC 2015.....

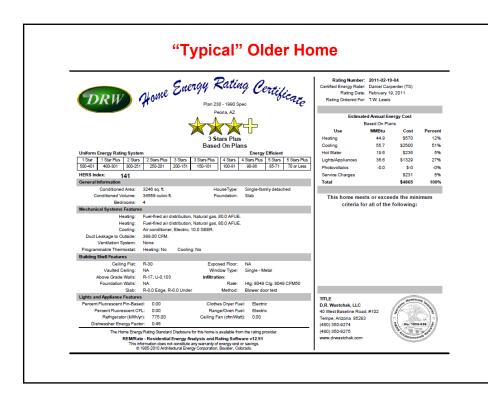
Climate Zone Energy Rating Index 1 52 2 52 3 51 4 54 5 55 6 54 7 53 8 53			
2 52 3 51 4 54 5 55 6 54 7 53	Climate Zone	Energy R	ating Index
3 51 4 54 5 55 6 54 7 53	FR. 6 C. 6		
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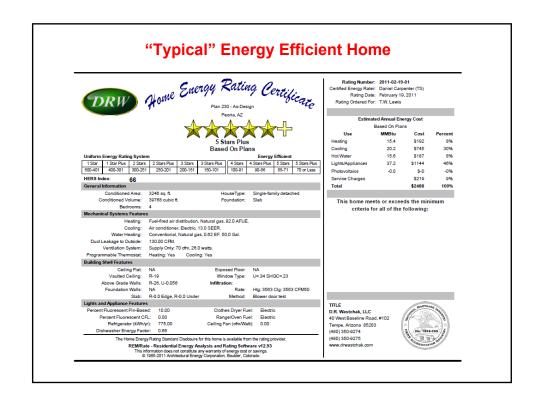


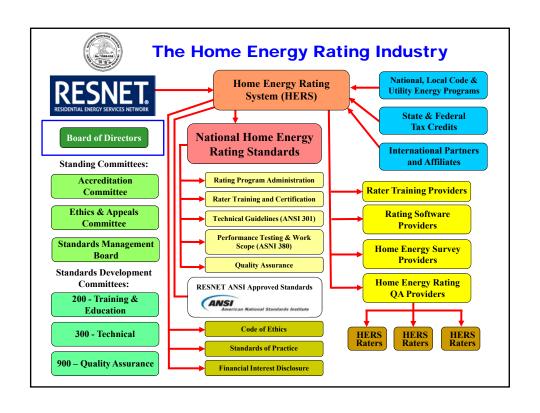
- Adopted by ICC on October 7, 2013ERI Energy Rating Index

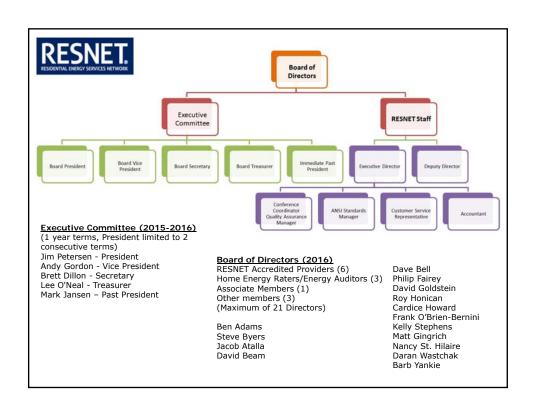


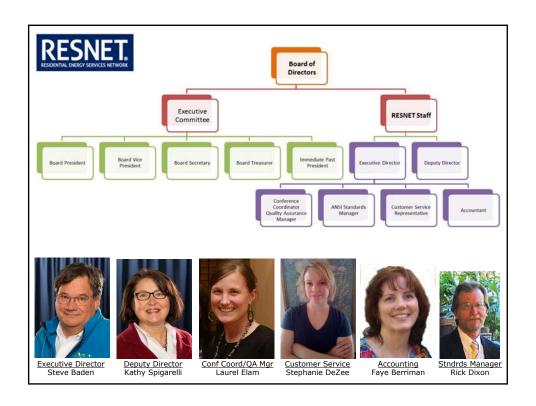


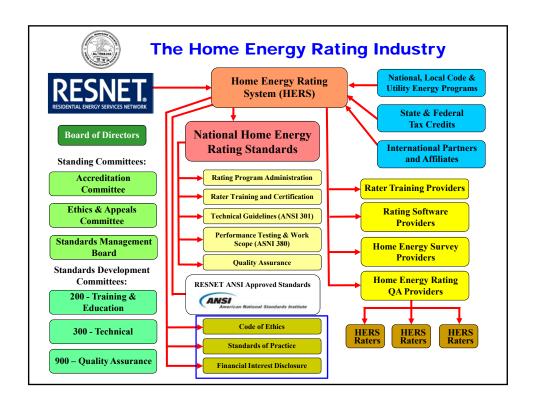


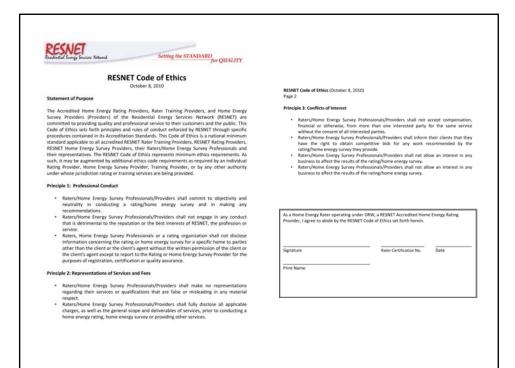














Setting the Standards for Home Energy Efficiency

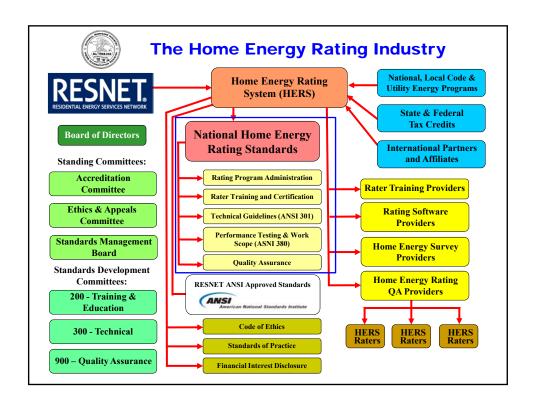
RESNET Home Energy Rating Standards of Practice

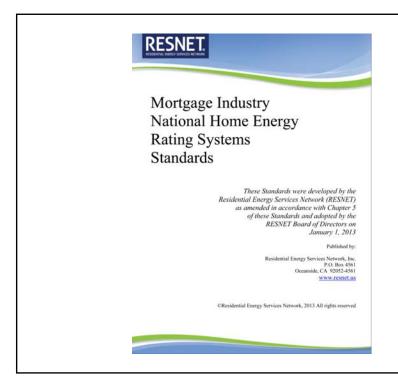
"The purposes of these standards of practice are to ensure that accurate and consistent home energy ratings are performed by accredited home energy rating systems nationwide, to increase the credibility of the rating systems with the mortgage finance industry, and to promote voluntary participation in an objective, cost-effective, sustainable home energy rating process.

"The Residential Energy Services Network (RESNET) Home Energy Rating Standards of Practice establish minimum and uniform standards for home energy raters who are certified by RESNET-accredited rating providers."

4. Ra	ating Report	
	4.1 Rating Score	1

RESNET HOME ENERGY RATING Standard Disclosure
For home(s) located at:
City:State:
Check the applicable disclosure(s) in accordance with the instructions on the reverse of this page:
1 [] The Rater or the Rater's employer is receiving a fee for providing the rating on this home.
2. [] In addition to the rating, the Rater or Rater's employer has also provided the following consuling services for this home: [] A. Mechanical system design [] B. Moisture control or indoor at quality consulting [] C. Performance testing and/or commissioning other than required for the rating itself [] D. Training for sales or construction personnel [] E. Offer (specify)
3. [] The Rater or Rater's employer is: [] A. The seller of this home or their agent [] B. The mortgager for some portion of the financed payments on this home [] C. An employee, contractor or consultant of the electric and/or natural gas utility serving this home
4 [] The Rater or Rater's employer is a supplier or installer of products, which may include:
Installed in this home by: OR is in the business of: HVAC systems. Raher Employer Raher Employer Thermal insulation systems Raher Employer Raher Employer All sealing of envelope or duct systems. Raher Employer Raher Employer Windows or window shading systems. Raher Employer Raher Employer Energy efficient appliances Raher Employer Construction (builder, developer, construction contractor, etc) Raher Employer Other (specify): Raher Employer
5 [] This home has been verified under the provisions of Chapter 6, Section 803. "Technical Requirements for Sampling" of the Mortgage (Industry National Home Energy Rating Standard as- set forth by the Residential Energy Services Network (RESNET).
Rater's Printed Name Certification #
Rater's Signature Date
I attest that the above information is true and correct to the best of my knowledge. As a Rater or Rating Provider I abide by the rating quality control provisions of the Mortgage Industry National Home Energy Rating Standard as set forth by the Residential Energy Services Network (RESNET). The national rating quality control provisions of the rating standard are contained in Chapter One 4.C.8. of the standard and are posted at

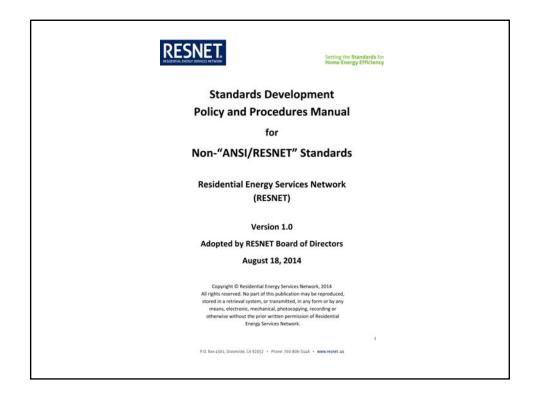




RESNET Standards

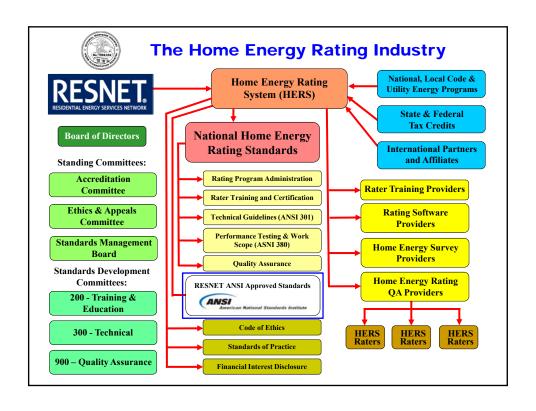
- ✓ Chp 1 RESNET National Standard for Rating Quality Assurance Providers
- ✓ Chp 2 Rater Training Providers, Rater Training and Certification
- ✓ Chp 3 National Energy Rating Technical Standard (ANSI 301-2014)
- √ Chp 4 Builder Option Packages (BOP) revoked
- ✓ Chp 5 Revision of Standards
- ✓ Chp 6 Sampling (ANSI?)
- ✓ Chp 7 Home Energy Audits
- ✓ Chp 8 Testing and Inspection Protocols (ANSI 380-201, Pending)
- ✓ Chp 9 Quality Assurance
- ✓ Chp 10 EnergySmart Contractors
- ✓ Appendix A On-site Inspection Procedures for Minimum Rated Features
- √ Appendix B Glossary of Terms









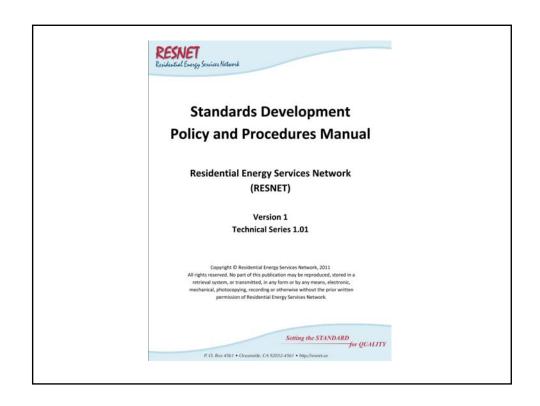




RESNET Standards

- ✓ Determining the Energy Rating Index
- ✓ Energy Rating Reference Home and Rated Home Configuration
- ✓ Operating Condition Assumptions
- ✓ Minimum Rated Features
- ✓ Existing Home Retrofit Savings
- ✓ Economic Cost Effectiveness
- ✓ Certification and Labeling
- ✓ Rating Requirements
- ✓ Innovative Design Requests
- ✓ Labeling









RESNET Guidelines for Multifamily Energy Ratings

These Guidelines were developed by the Residential Energy Services Network (RESNET) and adopted by the RESNET Board of Directors on August 29, 2014

Residential Energy Services Network, Inc. P.O. Box 4561 Oceanside, CA 92052-4561 www.fesnet.us

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Setting the Standards for Home Energy Efficiency

RESNET Formal Interpretation 2013-01
Approved by the RESNET Board of Directors, xx/xx/2013

Proponent: SDC 300 Calculations Subcommittee

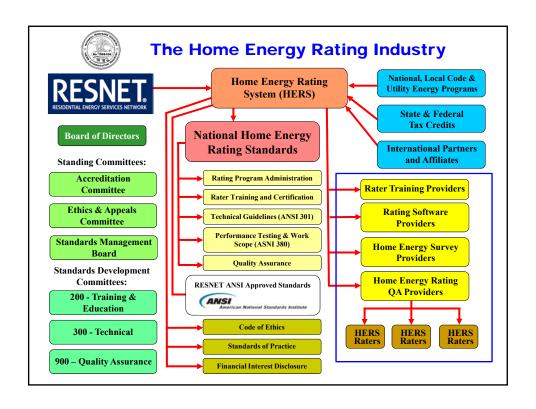
Applies to:
Mortgage Industry National Home Energy Rating Systems Standards (2013)
Sections 303.4.1.7.2.2 through 303.4.1.7.2.4

Qualifying Light Fixture - A light fixture located in a Qualified Light Fixture location and comprised of any of the following components: a) fluorescent hardwired (i.e. pin-based) lamps with ballast; b) screw-in compact fluorescent bulb(s); or c) light fixture controlled by a photocell and motion sensor.

Purpose:
As it applies to the definition of Qualifying Light Fixture, LED lights with a luminous efficacy equaling or exceeding 50 lumens/watt shall be considered equivalent to CFLs.

Interpretation:
Where the Home Energy Rater provides manufacturer's documentation that the luminous efficacy a LED light equals or exceeds 50 lumens/watt, said LED light shall be considered equivalent to a CFL and may be used to improve the HERS Index.

LED lighting with the above luminous efficacy is a relatively recent advancement and such LED lights should be considered equivalent to the efficiency of CFLs. Otherwise, this advanced lighting technology will not receive the credit it deserves in the HERS



How To Become A HERS Rater

✓ RESNET Training

- Participate in a RESNET Rater Training Course from a RESNET Accredited Rater Training Provider (or "challenge the exam")(typically 5 days)
- Pass the RESNET Rater Exams (80%) (on-line exams)
 - RESNET Standards and Rater Protocols (50 questions)
 - Combustion Safety Work Scope "Written Exam" (25 questions)
 - · Combustion Safety Practical 3-D Simulation
- Complete 5 "Probationary" Ratings
 - Two (2) "training ratings" with RESNET Certified Trainer
 - Three (3) "probationary ratings" with QA Provider



How To Become A HERS Rater

✓ EPA ENERGY STAR version 3.0 Rater Training Course

If planning to certify homes for ENERGY STAR:

- Participate in a training course from a RESNET Accredited Rater Training Provider (typically 2 days)
- Pass written Exam (80%) (50 questions)

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How To Become "Rating Field Inspector" (RFI)

- ✓ Effective July 1, 2015
- √ Five (5) mentored probationary "ratings"
- ✓ Pass JobWerks Test
- √ Pass Combustion Appliance Zone (CAZ) Simulation Test



RESNET Quality Assurance

- √ RESNET Quality Assurance
 - Ten percent (10%) File Review (quarterly)
 - One percent (1%) Field Review (quarterly)



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Questions?

