

The Future of Third Party Enforcement

November 28, 2017 | BCAP Building Code Advocates Meeting

Ryan Meres, RESNET



Agenda

- Background on special inspections
- Why use third parties for IECC compliance?
- Who are third party specialists?
- What roles do they play?
- What is the role of HERS Raters?
- What impact does ERI have?
- What does the future hold?

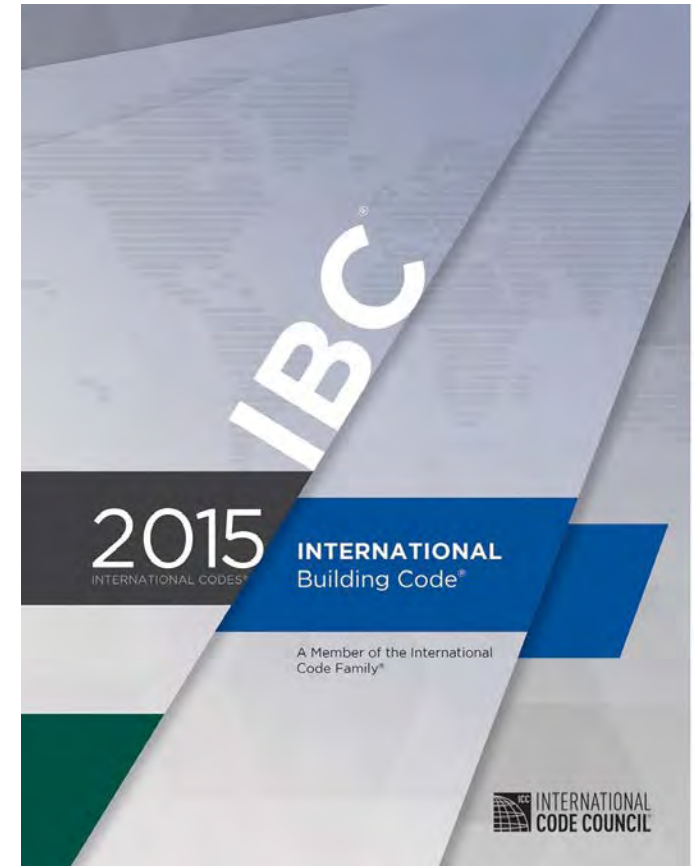
Third party inspections and testing aren't new to the codes!

IBC Chapter 17-Special Inspections and Tests

- Included in 1961 ICBO and UBC
- Result of major building failures
- Gained momentum after 2000 IBC

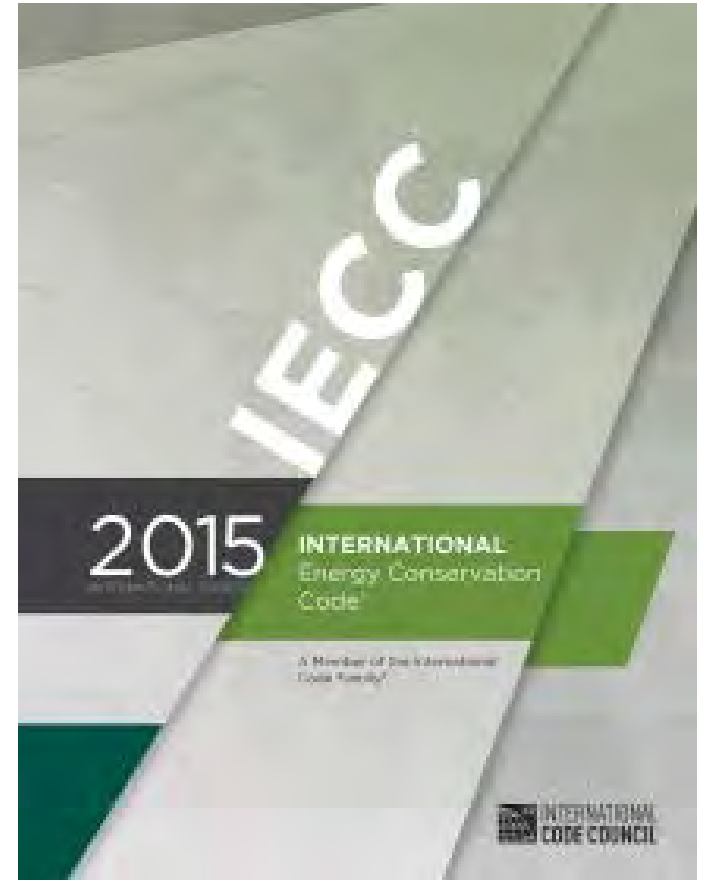
Approved Agency required to inspect/test:

- Structural steel
 - Concrete construction
 - Seismic resistance
 - Wind-resisting components
 - Soils
 - Fire-resistant coatings
-
- Many reference standards to define requirements



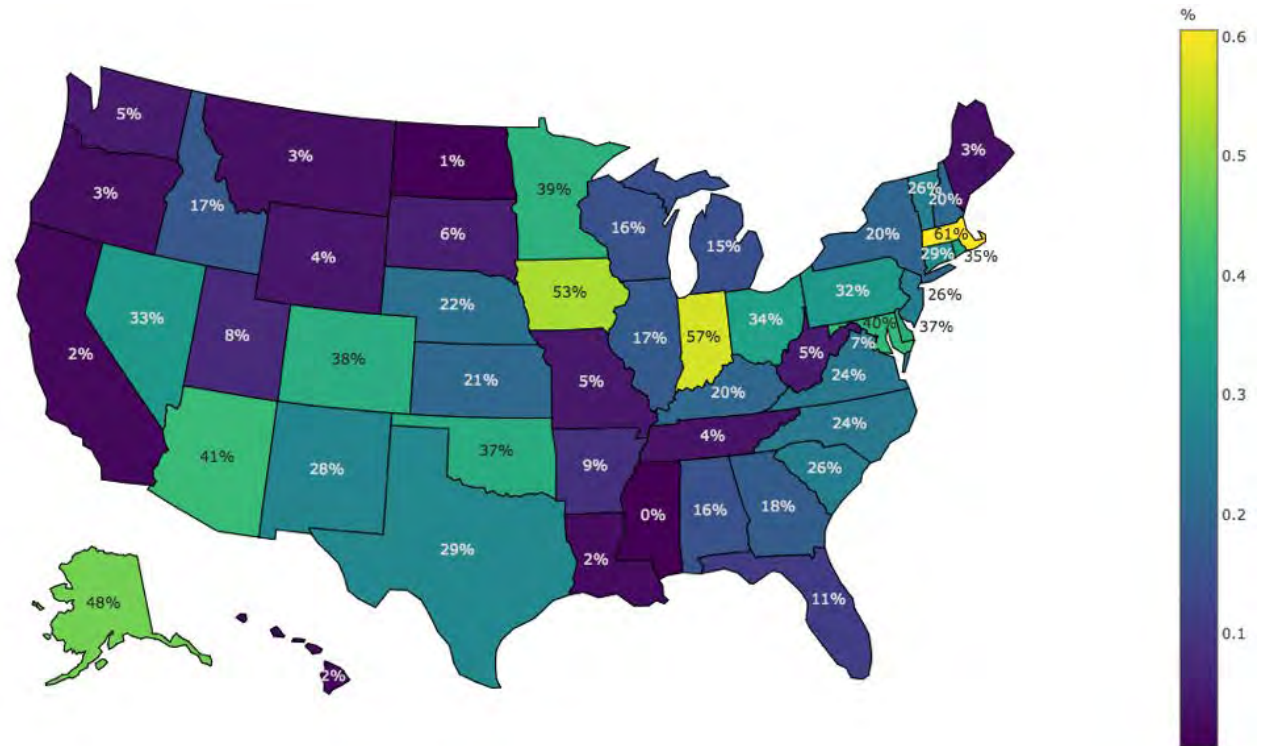
Why Use Third Parties for IECC?

- Increasing builder and consumer demand for EE
- Aging code official workforce
- More testing and inspection requirements
- A qualified and professional workforce exists



Increasing Builder and Consumer Demand

- Tide is turning for energy efficiency, indoor air quality, healthy homes
- Consumer awareness of EE benefits is driving more demand
- Builders turning to certification programs to meet demand
- Nearly a quarter of all new homes receive a HERS Rating



Aging Code Official Workforce



Code officials are leaving the workforce and few are filling their ranks.

Local Code Officials:

80% will retire in less than 15 years

30% will retire in less than 5 years

3% are younger than 35

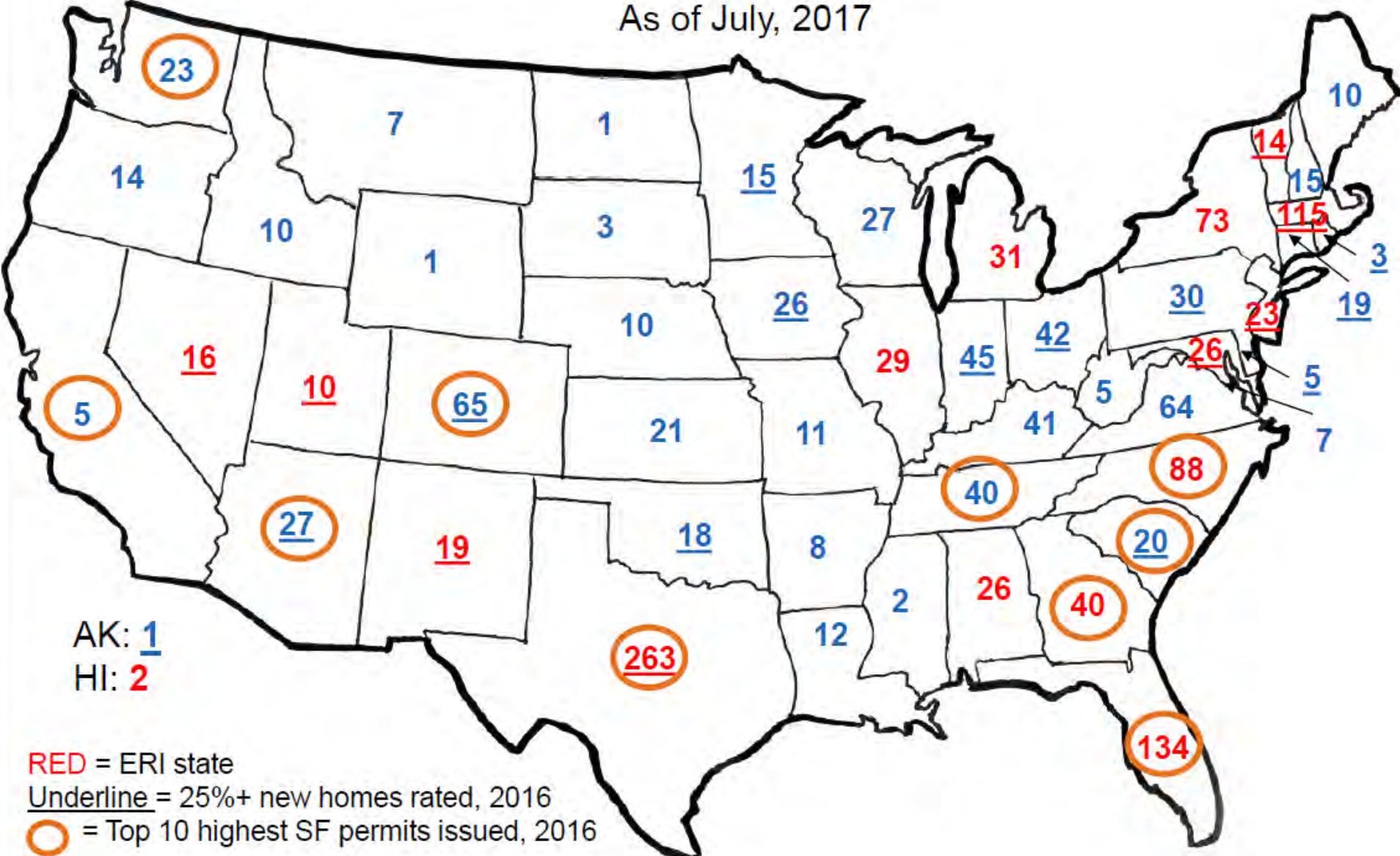
More Testing and Inspection Requirements



Duct Testing?	Mandatory	Mandatory	Mandatory	Mandatory
Envelope Testing?	Optional	Mandatory	Mandatory	Mandatory
Duct Test Ref. Std.?	No	No	No	No
Envelope Test Ref. Std.?	No	No	Yes, ASTM E779 or E1827	Yes, ASTM E779 or E1827 or RESNET/ICC 380

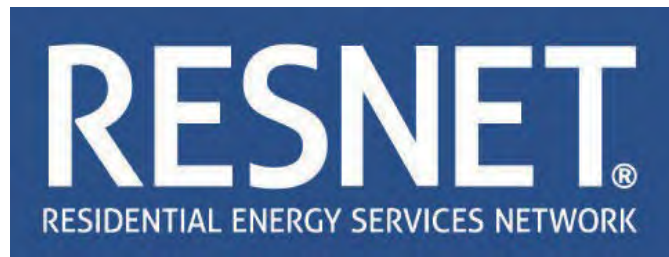
Qualified, Professional Workforce

Certified HERS Raters by State



Potential Third Party Specialists

- Duct and Envelope Tightness Verifiers
- HERS Raters
- BPI Building Analysts
- Architects and Engineers



Third Party Roles

- Plan Review
- Duct and Envelope Tightness Testing
- Energy Rating Index Compliance Verification
- Performance Path Energy Modeling
- System commissioning
- Pre-drywall inspection
- Manual J load calcs



Role for HERS Raters

- Many Raters already providing code compliance services
- Have relationships with builders
- ERI compliance verification
- Duct and envelope leakage testing
- Pre-drywall inspection
- Manual J load calcs
- REScheck and prescriptive compliance

The graphic features a blue background with a white house silhouette on the right. A man in a dark blue shirt and grey pants walks towards the left, carrying a blue ribbon with five yellow stars. The RESNET logo is in the top left, and the main title is in the center. Below the title is a paragraph of text.

RESNET
RESIDENTIAL ENERGY SERVICES NETWORK

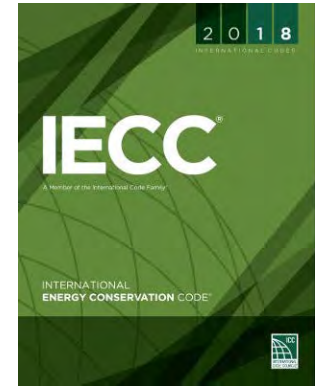
**RESNET HERS RATERS:
YOUR TRUSTED THIRD PARTY
ENERGY CODE INSPECTOR**

HERS Raters' substantial **training, education, knowledge and strict adherence to quality assurance standards** form the foundation for why code officials can rely upon them to conduct energy code compliance verification.

They are experienced professionals with a high level of technical proficiency who are committed to maintaining and improving their knowledge through continuing education.

Energy Rating Index Path

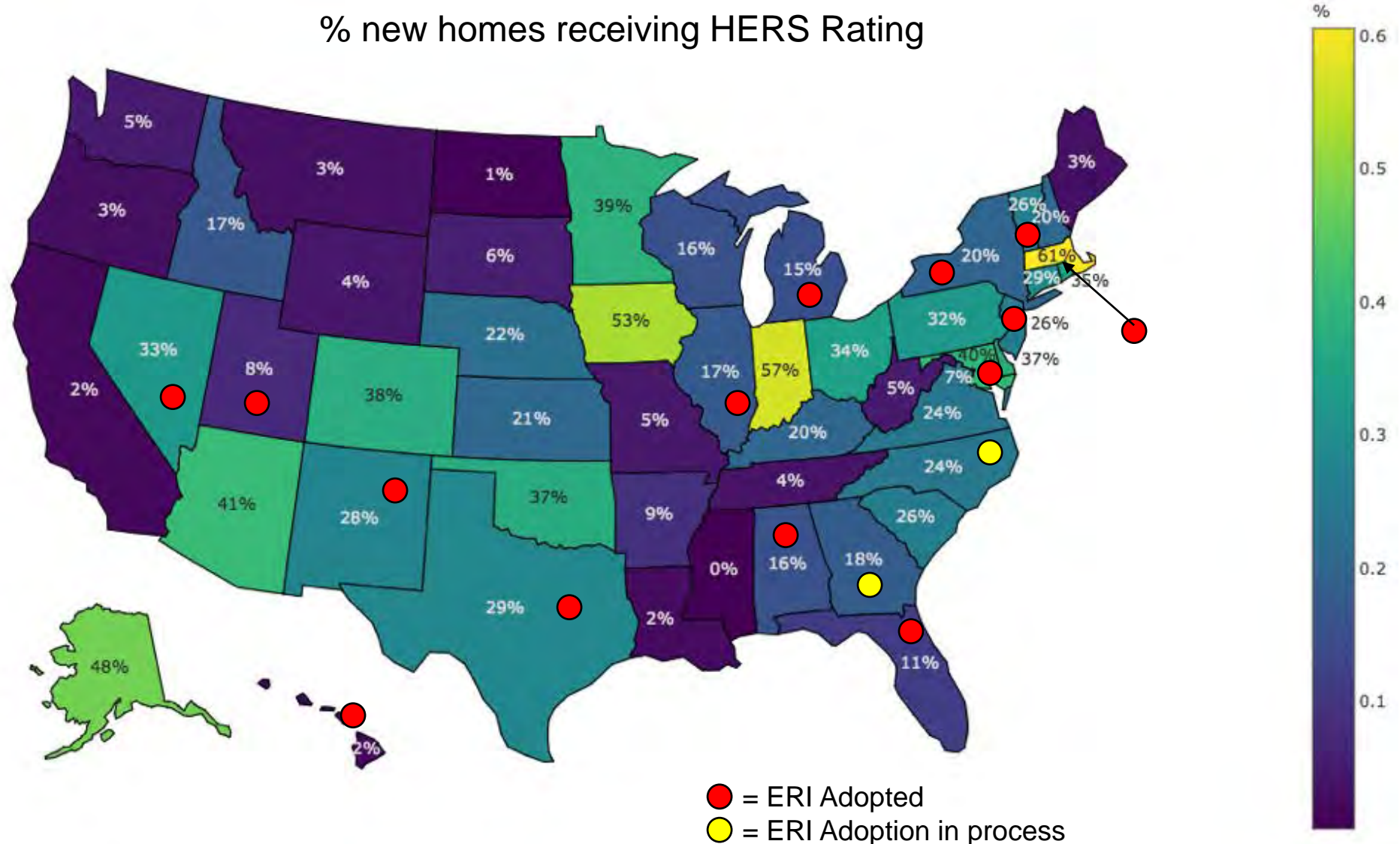
- First included in 2015 IECC.
- Also in 2018 IECC and based on ANSI/RESNET/ICC Standard 301
- Requires verification by an approved third party (only compliance path to do so)
- Where a HERS Rating is used to demonstrate compliance, work is subject to RESNET QA protocols.



Climate Zone	2015 IECC	2018 IECC
1	52	57
2	52	57
3	51	57
4	54	62
5	55	61
6	54	61
7	53	58
8	53	58

ERI Adoption

- ERI Adoption means potentially more HERS Raters involved with code compliance
- Two states without ERI are in top 3 by % ratings.



Potential Concerns

- Only “Confirmed”, “Threshold” and “Sampled” HERS Ratings are subject to RESNET QA
- Code officials should request a confirmed or sampled rating report, not “Projected”, before a C of O issued
- HERS Raters conducting duct and envelope leakage testing in the absence of an official HERS Rating are not subject to QA
- RESNET encourages all HERS Raters to obtain the IECC Residential Energy Inspector/Plans Examiner Certification

What does the future hold?

More reference standards for specialized testing

Move away from prescriptive compliance path



Increasing IECC requirements and complexity

Shortage of code officials, inspectors, plan reviewers

What does the future hold?

Third parties fill
larger role in
energy code
compliance

Third parties
expected to have
energy code
certification

Code officials
verify
documentation

Code officials
slowly begin to
play more of a QA
role for energy

Thank you!

Questions?

Contact Info:

Ryan Meres
Program Director
RESNET
ryan@resnet.us
760-681-2391

