



# Opportunities for Energy Code Compliance Verification by HERS Raters

Mark Johnson, International Code Council



## What We Will Cover

- Brief Background on ICC
- Energy Code Compliance Landscape and Opportunities
- IECC/HERS Compliance Specialist Certification
- Special Offer for HERS Raters

# Brief Background on ICC

- Nonprofit corporation
- Membership of over 64,000 +
- Developer/Publisher of the International Codes which includes the IECC
- Currently maintain 15 base codes and 16 standards
- Provides integrated family of solutions to support adoption/implementation of building codes



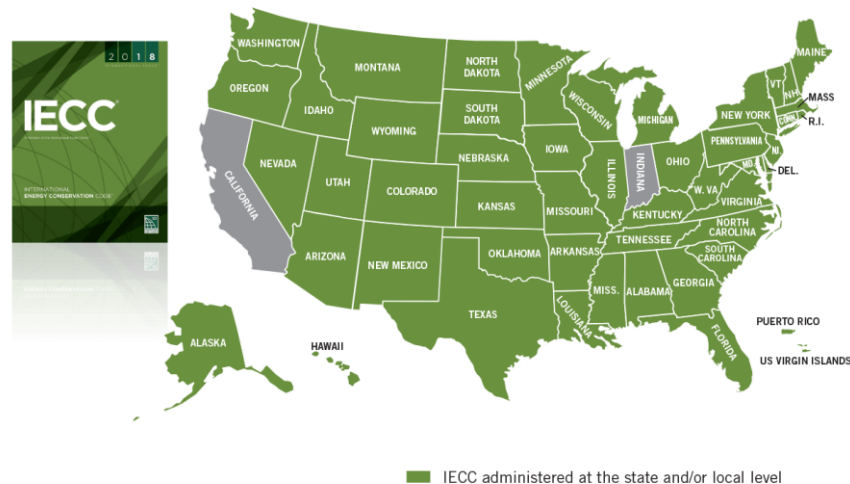
# Brief Background on ICC

- IECC is widely used (Adopted in 48 states)
  - Caribbean, Abu Dhabi, etc. – growing globally
- Governs residential and commercial requirements for all occupancies
- Three Compliance Paths
  - Prescriptive
  - Performance
  - ERI



## INTERNATIONAL ENERGY CONSERVATION CODE ADOPTION MAP

*The IECC is in use or adopted in 48 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands.*



# Brief Background on ICC

- RESNET- ICC Collaboration include:
  - Standards Development
  - Training
  - Certification
  - Membership



# Brief Background: Free Online Access to Codes – [codes.iccsafe.org](https://codes.iccsafe.org)

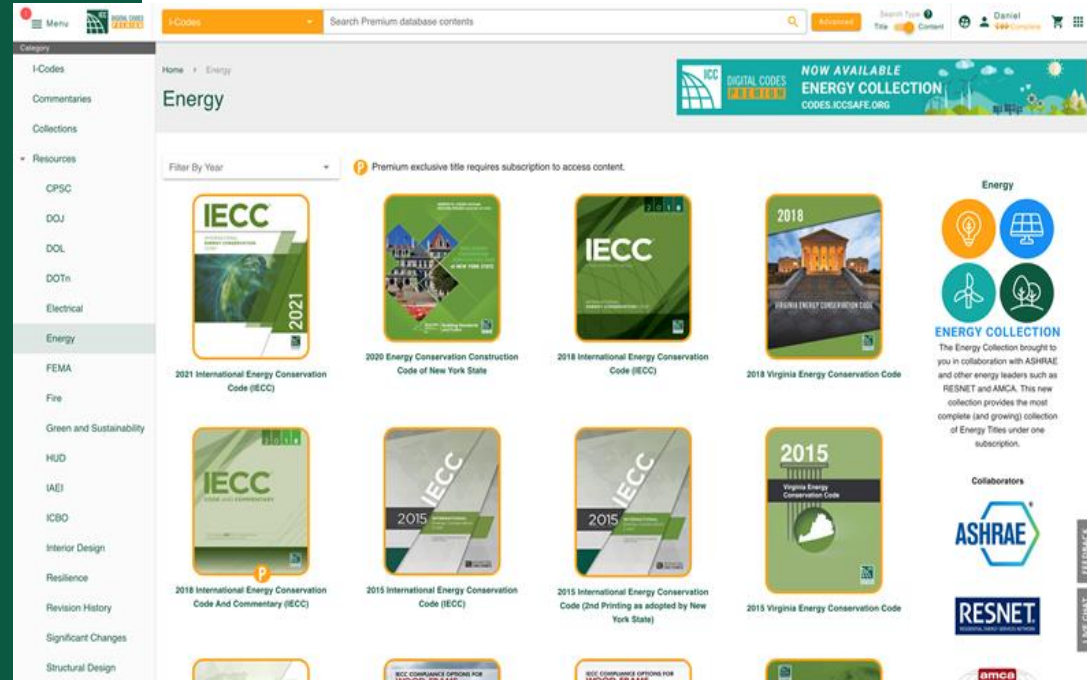
## A New Energy Collection

*Coming Soon!*

ICC's Energy Collection – A Comprehensive Resource

- I-Codes: IECC, IRC and IgCC
- State and Local Energy Codes
- Commentaries
- Special I-Code Versions: IECC/90.1 and ISEP
- Support Products
- ICC Referenced Standards
- ASHRAE Standards and Support Titles
- AMCA Standards

Nearly 100 documents and growing!



## Energy Code Compliance Landscape and Opportunities

- Code Official Profile (2014 ICC Survey)
  - 3,850 respondents covering all 50 states
  - Typical respondent between ages of 55 and 64
  - 51% surveyed indicated they plan to leave profession within 5 to 15 years

# Employment Trends/Outlook



- Exodus of talent due to retirements resulting in a shortage of Code Compliance expertise
- Many who left the industry during the 2008 recession did not return
- Labor force reduction exacerbated by COVID pandemic
- Increase in privatization (outsourcing) of Bldg. Department activities
- Sustained economic recovery is driving up demand for code officials, inspectors, etc.
- The building industry in general is experiencing similar trends
- Complexity of codes/standards demands more specialization



# Energy Code Compliance Landscape and Opportunities

- Building and Construction Inspectors\*
  - Median wages: \$62,860 (2020)
  - Highest 10 percent earn over \$101,170 (2020)
  - Number of jobs: 120,800 (2019)
  - Job Outlook (2019-2029): 3% growth
  - 42% employed directly by state or local government
  - Certified construction/code officials have best jobs

# Expanding Opportunities for RESNET HERS Raters

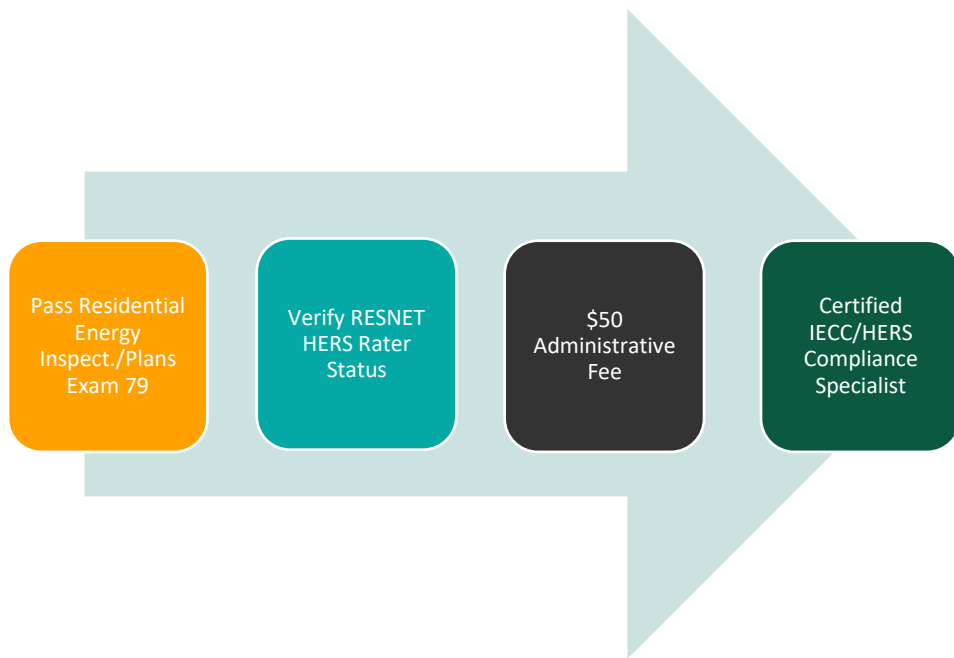
## Energy Code Compliance Verification

- Opportunity to expand into areas with higher demand
- Broaden Portfolio of service offerings



## IECC/HERS Compliance Specialist

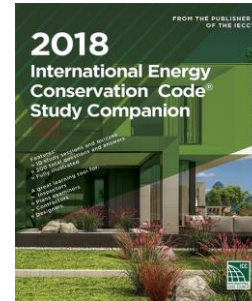
If you Are Not currently Certified as  
an ICC Residential Energy  
Inspector/Plans Examiner



## IECC/HERS Compliance Specialist

- Preparation for Certification Exam
  - Copy of the IECC
  - Supplementary IECC support references
  - IECC Training

AVAILABLE NOW!  
New training helps  
prepare you for  
IECC/HERS Compliance  
Specialist Designation



# Becoming Certified as IECC/HERS Compliance Specialist

- Residential Energy Inspector/Plans Examiner test
  - 50 multiple-choice questions
    - ✓ General Plans and Inspection 28%
    - ✓ Alterations, Additions, and Change of Use or Occupancy 16%
    - ✓ Building Envelope 46%
    - ✓ Mechanical Systems 10%
  - Open book, 2-hour exam
  - Test available online through PRONTO
  - Exam cost: \$219
  - Once passed, it is good for three years
  - Renewed every three years by obtaining CEUs



## Importance of Certification

- Certification increases marketability to jurisdictions/building industry
- Certification has portability
- Code Officials are struggling to keep up and often rely on third parties for help
- ICC is a trusted brand with jurisdictions throughout the US and around the globe
- Certification reflects code competency



## Importance of ICC Certification

- Energy Certificants by the numbers
  - **2,910** Residential Energy Inspector/Plans Examiner
  - **227** RESNET HERS Raters are Certified as IECC/HERS Compliance Specialist
  - **1,588** ICC Commercial Energy Inspectors
  - **1,028** ICC Commercial Energy Plans Examiners
  - **63** Commercial Energy Inspector/Plans Examiner w/ASHRAE 90.1

## Next Steps: ICC/RESNET Special Offer

Bundle includes:

- 1 year ICC Professional Membership
- Free code opinions on all ICC Codes
- Member discounts
- Complimentary IECC
- Complimentary ANSI/RESNET/ICC 301, ANSI/RESNET/ICC 380, RESNET/ICC 850
- Voucher to take Certification exam
- Online subscription to Building Safety Journal
- Savings of more than \$250.00

**Your RESNET HERS Rater  
or Rating Field Inspector  
Designation *Qualifies You* for  
the ICC/RESNET Member Value Package**

The International Code Council (ICC), in cooperation with RESNET, is offering RESNET HERS Raters or Rating Field Inspectors the opportunity to build their professional qualifications and enjoy the valuable benefits offered exclusively to ICC Members at a savings of more than \$250.

Through the ICC/RESNET Member Value Package, you will receive:

- 1-year ICC Building Safety Professional Membership
- A digital download of the 2018 or 2021 *International Energy Conservation Code®* (IECC®)
- A hard copy or digital download of *RESNET/ICC 301-2019: Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating Index.*
- A hard copy or digital download of *RESNET/ICC 380-2019: Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems.*
- A hard copy or digital download of *ANSI/RESNET/ICC 850-2019: Standard for Water Efficiency Rating Index. (Available for fulfillment later in 2020)*
- A voucher good for one ICC Certification Examination\* that can be redeemed at any of hundreds of exam locations throughout the country.

\*Satisfactory completion of the IECC certification exam results in a 3-year ICC certification. Code Officials looking to outsource inspections often look for HERS Raters that have ICC credentials—so now is a great time to get yours!

**The ICC/RESNET Member Value Package also includes:**

- One year of free code opinions by ICC's expert technical staff—an ICC Member favorite
- Special ICC Member pricing on many publications and digital products, training and other products and services.

Don't miss out on this opportunity that is only available to RESNET HERS Raters or Rating Field Inspectors! Simply submit the application on the back of this flyer and begin to enjoy all the benefits of being an ICC Member.

For more information on ICC Member benefits visit [www.iccsafe.org/RESNETraters](http://www.iccsafe.org/RESNETraters)

**ICC INTERNATIONAL CODE COUNCIL®**  
Building Confidence. Building Community.





# The International Code Council (ICC) and RESNET Dynamic Collaboration to Increase Energy Code Compliance and Home Energy Efficiency

Laurel Elam, RESNET

# Why HERS Raters are the Logical Choice for Providing Code Compliance Verification

- HERS Raters have Inspected, Tested and Labeled over 3 million homes to Date (Almost 300,000 homes in 2020)
- Demonstrated Proficiency in Building Science through RESNET HERS Certification
- Recognized by ICC as Energy Code Compliance Specialists Through ICC HERS/IECC Compliance Specialist Certification




# New ICC/RESNET IECC Performance Compliance Path Certificate and Report

- Certificate and report includes options for
  - Proposed from plans for permits
  - Confirmed for certificate for occupancy
- Based on checklist developed by the ICC for code officials
- Will cover 2009 and 2018 versions of IECC
- Other versions to be added

## New ICC/RESNET IECC Performance Compliance Path Certificate and Report

- Presents single ICC uniform report that differentiates HERS Raters from other verification parties
- Uniform reports provide consistency for code officials
- Will be uploaded to RESNET National Registry
- Compliance Certificates and Reports Covered by RESNET's Industry Leading Quality Assurance Procedures
- Program participation is optional


# New ICC/RESNET IECC Performance Compliance Path Certificate and Report Example



2018 IECC Simulated Performance Alternative Compliance Certificate

Compliance Report for

**Certificate of Occupancy**



**Property**

Builder: xxxxxxxx  
 Address: xxxxxx  
 City/State: xxxxxx, xx  
 Climate Zone: x

**Rating Organization**

Company: xxxxxxxx  
 Phone: (xxx) xxx-xxxx  
 Rater: xxxxx xxxxxx  
 Rater ID: xxxxxxxx

**Performance Path Information**

Report: Certificate of Occupancy  
 Report No: xxxxxxxx  
 Date Completed: xx/xx/xxxx  
 Rating Field Insp: xxxxxxx xxxxxxxx  
 RFI ID: xxxxxxx

**COMPLIANCE: PASSES using R405 Simulated Performance Alternative**

IECC Standard Reference Design: \$ xxxxx

This home: \$ xxxxx

Annual Energy Cost

Annual Energy Cost by End Use	2018 IECC	As Designed
Heating	19.26	11.77
Cooling	831.23	692.59
Water heating	257.48	254.20
Mechanical Ventilation Fan Energy	12.00	8.00
<b>Total Estimated Energy Cost</b>	<b>\$ 1119.97</b>	<b>\$ 966.56 PASS</b>

**Utility Rates:**  
 \$XX/kWh, \$XX/therm

**Key Building Design Features**

Ceiling Under Vented Attic: R-X	Envelope Leakage Rate: xx ACH50	Windows: U-Value: x.xx, SHGC: x.xx
Sealed Attic Assembly: R-X	Heating System 1: System Type, Efficiency	
Above Grade Walls: R-X (Avg. R-value)	Heating System 2: System Type, Efficiency	
Foundation Walls: Basement Exterior: R-X, Crawlspace wall: R-X	Cooling System 1: System Type, Efficiency	
Exposed Floor: R-X	Cooling System 2: System Type, Efficiency	
Slab Edge: R-X	Water Heating System 1: System Type, Efficiency, Capacity	
Under Slab: R-X	Water Heating System 2: System Type, Efficiency, Capacity	
Duct Insulation: R-X		

This home, as built, MEETS the Simulated Performance Alternative requirements of Section R405.3 of the 2018 International Energy Conservation Code based on climate zone. In addition to the Simulated Performance Compliance, the other mandatory measures must be met. (See Mandatory Requirements on second page.)

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Organization: \_\_\_\_\_

Date: \_\_\_\_\_

**Building Components Summary**

This report is provided in accordance with Sections R405.4.2.1 and R405.4.3 of the 2018 IECC. The purpose of this report is to allow the authority having jurisdiction to verify the Proposed Design Inputs against the plans and specifications during the permit application process and the as-built home during inspections. The Standard Reference Design is automatically generated by the software and is defined in accordance with Table R405.5.2(1) of the 2018 IECC. The Compliance Certificate on page one of these documents demonstrates the results of the inputs on this Building Components Summary.

Project Information			
Builder Name:		Address:	
Name of individual performing analysis:		City:	
Compliance Software tool:		State:	
Compliance software version:		Zip Code:	
New/Existing Construction:		Lot #: (if applicable)	
IECC Climate Zone:		Conditioned Floor Area: (ft²)	
Home Type:		Conditioned Volume: (ft³)	
Bedrooms:		Floors Above Grade:	
		Worst Case?:	

Proposed Design Inputs		Standard Reference Design	
Above-grade walls			
Wall 1 type: xxxxx	Area: xxx ft²	Wall 1 type: xxxxx	Area: xxx ft²
R-value: x.xx		U-factor: x.xx	
Solar absorptance = x.xx	Orientation: x	Solar absorptance = 0.75	Orientation: x
Emissance = x.xx		Emissance = 0.90	
(Repeat as necessary for each software entry)		(Repeat as necessary for each software entry)	
Basement and crawl space walls			
Basement/crawl wall 1 type: xxxxx		Basement/crawl wall 1 type: xxxxx	
Area: xxx ft²	R-value: x.xx	Area: xxx ft²	U-factor: x.xx
(Repeat as necessary for each software entry)		(Repeat as necessary for each software entry)	
Above-grade floors			
Above-grade floor 1 type: xxxxx		Above-grade floor 1 type: Wood frame	
Area: xxx ft²	R-value: x.xx	Area: xxx ft²	U-factor: x.xx
(Repeat as necessary for each software entry)		(Repeat as necessary for each software entry)	

## RESNET/ICC Education Campaign

- Campaign to Code Officials on Why HERS Raters with ICC HERS/IECC Compliance Specialist Certification Should be the Go-to Source for Code Officials
- ICC Direct Communications to Code Officials
- RESNET will Develop Collateral for HERS Raters to use to Educate Their Code Officials



## Code Officials - Use IECC/HERS Compliance Specialists for Energy Code Compliance



 <https://www.youtube.com/watch?v=yIhTRNCHAoY>

 [https://www.youtube.com/watch?v=vYQhtyIKoBk&ab\\_channel=RESNET](https://www.youtube.com/watch?v=vYQhtyIKoBk&ab_channel=RESNET)



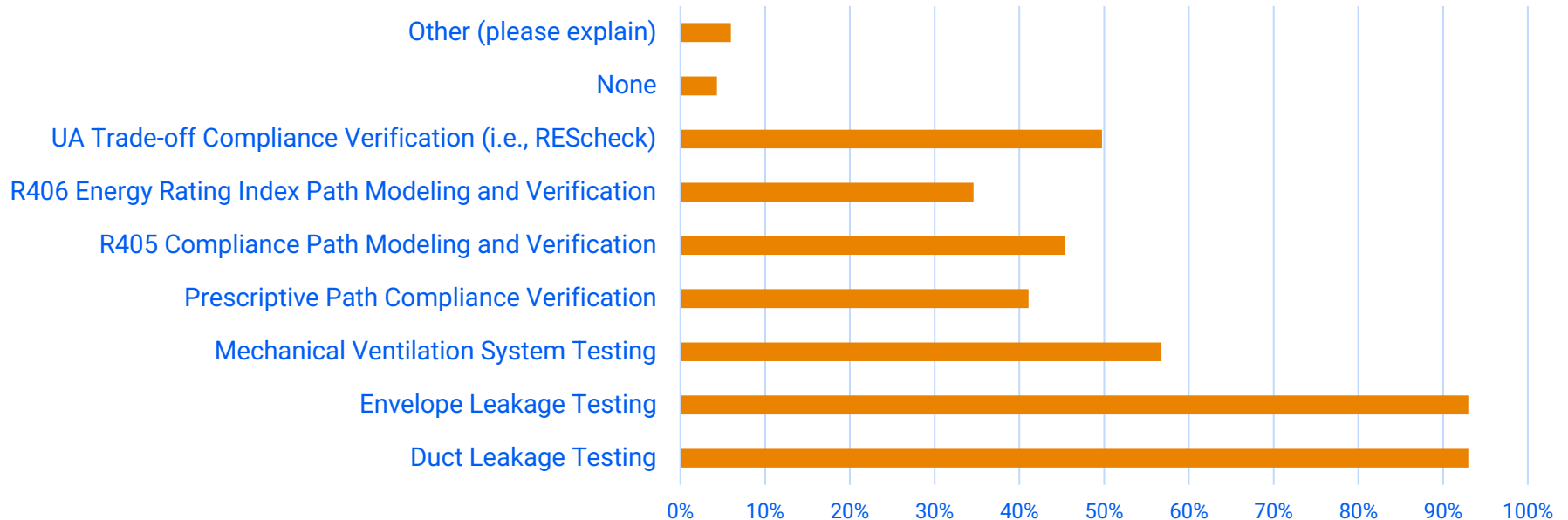
# The IECC/HERS Code Compliance Program

Ryan Meres, Program Director

RESNET Webinar Series  
August 11, 2021

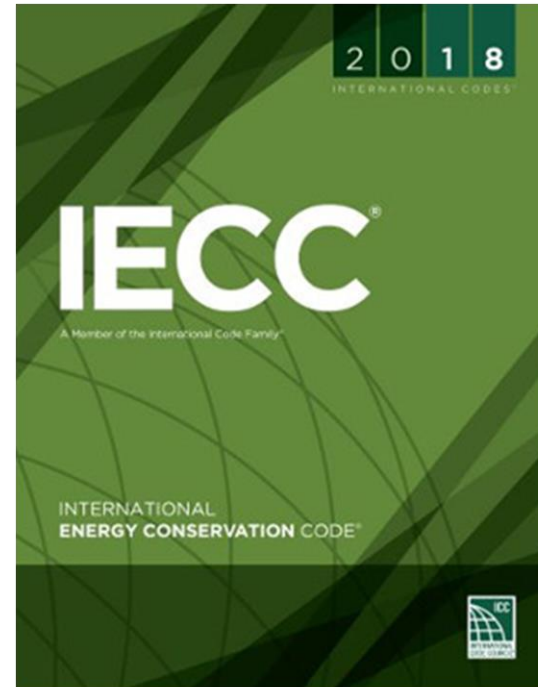


## What type of energy code compliance verification work do you perform? (check all that apply)



## Why a new RESNET Program?

- Many code officials think all work by HERS Raters is subject to QA oversight
- Bad actors are falsifying compliance docs.
- Provide consistency in energy code compliance documentation
- Maintain trust with quality assurance oversight
- **Program is voluntary**



## QA Providers

- Basic application to RESNET
  - ▷ Declare Participation
- Comply with QA Procedures
- QAD must obtain designation (IECC/HERS Compliance Specialist)
- RESNET to provide program marketing materials
- QA protocols still being developed



## R405 Compliance Docs

- Three Parts:
  - ▷ Compliance Certificate
  - ▷ Mandatory Items Checklist
  - ▷ Building Components Summary
- Permit Application Docs
- Certificate of Occupancy Docs
- 2009 and 2018 IECC



## 2018 IECC Simulated Performance Alternative Compliance Certificate

### Compliance Report for Certificate of Occupancy



#### Property

Builder: **XXXXXX**  
 Address: **XXXXX**  
 City/State: **XXXXXX, XX**  
 Climate Zone: **X**

#### Rating Organization

Company: **XXXXXX**  
 Phone: **(XXX) XXX-XXXX**  
 Rater: **XXXXXX XXXXXXX**  
 Rater ID: **XXXXXXX**

#### Performance Path Information

Report: Certificate of Occupancy  
 Report No: **XXXXXXXX**  
 Date Completed: **XX/XX/XXXX**  
 Rating Field Insp: **XXXXXXXX XXXXXXXX**  
 RFI ID: **XXXXXX**

#### COMPLIANCE: *PASSES* using R405 Simulated Performance Alternative

IECC Standard Reference Design: \$ <b>XXXX</b>		This home: \$ <b>XXXX</b>	
Annual Energy Cost		Annual Energy Cost	
Annual Energy Cost by End Use		2018 IECC	As Designed
Heating		19.26	11.77
Cooling		831.23	692.59
Water heating		257.48	254.20
Mechanical Ventilation Fan Energy		12.00	8.00
Total Estimated Energy Cost		\$ <b>1119.97</b>	\$ <b>966.56</b>
			PASS

#### Utility Rates:

\$XX/kWh, \$XX/therm

#### Key Building Design Features

Ceiling Under Vented Attic:	R-X	Envelope Leakage Rate:	xx ACH50
Sealed Attic Assembly:	R-X	Windows:	U-Value: x.xx, SHGC: x.xx
Above Grade Walls:	R-X (Avg. R-value)	Heating System 1:	System Type, Efficiency
Foundation Walls:	Bsmt Interior: R-X Bsmt Exterior: R-X Crawlspace wall: R-X	Heating System 2:	System Type, Efficiency
Exposed Floor:	R-X	Cooling System 1:	System Type, Efficiency
Slab Edge:	R-X	Cooling System 2:	System Type, Efficiency
Under-Slab:	R-X	Water Heating System 1:	System Type, Efficiency, Capacity
Duct Insulation:	R-X	Water Heating System 2:	System Type, Efficiency, Capacity

This home, as built, MEETS the Simulated Performance Alternative requirements of Section R405.3 of the 2018 International Energy Conservation Code based on climate zone. In addition to the Simulated Performance Compliance, the other mandatory measures must be met. (See Mandatory Requirements on second page.)

Name:

Signature:

Organization:

Date:



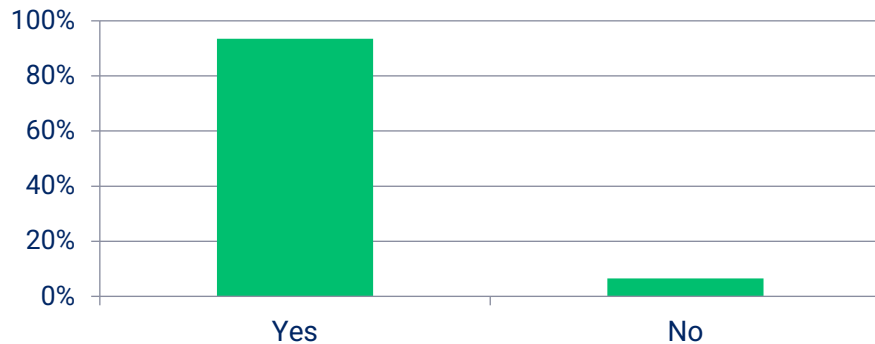
## Rating Field Inspectors

- Must obtain the designation
- Can provide these program services:
  - ▷ Verification of mandatory items
  - ▷ Inspections
  - ▷ Testing
- Must work under HERS Rater with the designation

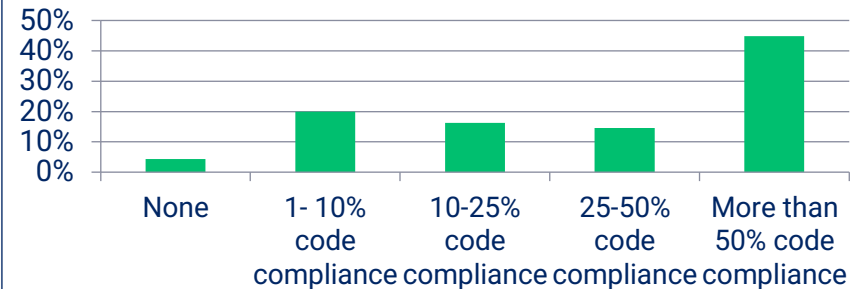


## 2020 HERS Rater/RFI Survey

Do you currently conduct energy code compliance verification services?



Approximately what percentage of your work is code compliance versus HERS ratings or other non-code compliance services?



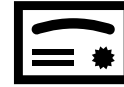
## IECC/HERS Code Compliance Program



Phase 1: R405 Performance  
Compliance Program for 2009  
and 2018 IECC



ICC/RESNET Developed Permit  
Application and Cert. of  
Occupancy Compliance  
Documents



Must have IECC/HERS  
Compliance Specialist  
Designation to participate



All homes subject to  
RESNET Quality  
Assurance



## HERS Raters

- Must obtain the designation
- Can provide all program services:
  - ▾ Modeling
  - ▾ Inspections
  - ▾ Testing
  - ▾ Verification of mandatory items
- Must work under QA Provider participating in this program





## Program Participation

- Requirements for:
  - ▽ QA Providers
  - ▽ HERS Raters
  - ▽ RFIs



How are compliance docs generated?

- Use RESNET Accredited Software
- For Permit Application Docs (optional)
  - ▾ Complete energy model from plans
  - ▾ Verify necessary mandatory items
  - ▾ Submit to RESNET Registry
- For C of O Docs
  - ▾ Finalize energy model
  - ▾ Verify all mandatory items
  - ▾ Submit to RESNET Registry
- Docs are generated upon submittal to registry



## R405 Mandatory Items Checklist

- Some items auto-populated from software
- Some require Rater verification in software
- Specific to 2009 and 2018 codes
- Permit and C of O

## Mandatory Requirements Checklist- Certification of Occupancy

Section #/Insp ID	Mandatory Requirements Checklist	Required Value (where applicable)	To be Completed by HERS Rater
			Passes/Fails (Verified value, where applicable)
R401.3	1. <b>Certificate</b> Permanent certificate posted on/near electrical panel with energy values		PASSES/FAILS
R402.1.1	2. <b>Vapor retarder.</b> Wall assemblies in the building thermal envelope shall comply with vapor retarder requirements of R702.7 of the International Residential Code or 1405.3 of the International Building Code, as applicable.		PASSES/FAILS
R402.4.1	3. <b>Building thermal envelope.</b> The sealing methods between dissimilar materials shall allow for differential expansion and contraction.		PASSES/FAILS
R402.4.1.1	4. <b>Building thermal envelope</b> Seal building envelope from air infiltration, see Table R402.4.1.1		PASSES/FAILS
R402.4.1.2	5. <b>Testing.</b> Blower Door Test REQUIRED for 1- and 2-family dwellings, townhouses, and apartments three stories or less.		Measured envelope leakage rate: X.X ACH50
R402.4.2	6. <b>Fireplaces</b> Wood-burning must have tight flue damper, outdoor combustion air		PASSES/FAILS OR Not Applicable
R402.4.3	7. <b>Fenestration Air Leakage</b> Windows, sliding glass doors, skylights (on label)	≤ 0.3 cfm/sf	PASSES/FAILS
R402.4.3	8. <b>Fenestration Air Leakage</b> Exterior swinging doors (on label)	≤ 0.5 cfm/sf	PASSES/FAILS
R402.4.4	9. <b>Rooms containing fuel-burning appliances</b> Climate Zones 3-8. Open combustion fuel burning appliances located outside thermal envelope or in sealed/insulated room		PASSES/FAILS OR Not Applicable
R402.4.5	10. <b>Recessed Lighting</b> IC-rated and air tight when in thermal envelope		PASSES/FAILS OR Not Applicable
R402.5	11. <b>Maximum fenestration U-factor and SHGC</b> Area-weighted average maximum fenestration U-factor and SHGC	Max U-factor, climate zones: 4 and 5: 0.48 6 – 8: 0.40  Max SHGC, climate zones: 1 – 3: 0.50	PASSES/FAILS  Maximum area-weighted U-factor: X.XX  Maximum area-weighted SHGC: X.XX
R403.1	12. <b>Controls.</b> Not less than one thermostat for each separate heating and cooling system		PASSES/FAILS
R403.1.1	13. <b>Programmable thermostat</b> Required for primary heating and cooling system		PASSES/FAILS
R403.1.2	14. <b>Heat pump supplementary heat</b> Shall not operate, except during defrost, when the heat pump compressor can meet the heating load		PASSES/FAILS OR Not Applicable

<insert date>

<insert Software Name and version>

## R405 Building Components Summary

- Auto-populated from software file
- Required by code
- Follows Table R405.5.2
- Document package is set-up to provide:
  - ▷ Easy compliance verification up front
  - ▷ Additional compliance documentation as desired by the code official

### Building Components Summary

This report is provided in accordance with Sections R405.4.2.1 and R405.4.3 of the 2018 IECC. The purpose of this report is to allow the authority having jurisdiction to verify the Proposed Design Inputs against the plans and specifications during the permit application process and the as-built home during inspections. The Standard Reference Design is automatically generated by the software and is defined in accordance with Table R405.5.2(1) of the 2018 IECC. The Compliance Certificate on page one of these documents demonstrates the results of the inputs on this Building Components Summary.

Project Information			
Builder Name:		Address:	
Name of individual performing analysis:		City:	
Compliance Software tool:		State:	
Compliance software version:		Zip Code:	
New/Existing Construction:		Lot #: (if applicable)	
IECC Climate Zone:		Conditioned Floor Area: (ft <sup>2</sup> )	
Home Type:		Conditioned Volume: (ft <sup>3</sup> )	
Bedrooms:		Floors Above Grade:	
		Worst Case?:	

Proposed Design Inputs		Standard Reference Design	
Above-grade walls			
<b>Wall 1 type:</b> xxxx <i>R-value:</i> x.xx Solar absorptance = x.xx      Orientation: x Emittance = x.xx (Repeat as necessary for each software entry)	Area: xxx ft <sup>2</sup>	<b>Wall 1 type:</b> xxxx <i>U-factor:</i> x.xx Solar absorptance = 0.75 Emittance = 0.90 (Repeat as necessary for each software entry)	Area: xxx ft <sup>2</sup> Orientation: x
Basement and crawl space walls			
<b>Basement/crawl wall 1 type:</b> xxxx Area: xxx ft <sup>2</sup> (Repeat as necessary for each software entry)	<i>R-value:</i> x.xx	<b>Basement/crawl wall 1 type:</b> xxxx Area: xxx ft <sup>2</sup> <i>U-factor:</i> x.xx (Repeat as necessary for each software entry)	
Above-grade floors			
<b>Above-grade floor 1 type:</b> xxxx Area: xxx ft <sup>2</sup> <i>R-value:</i> x.xx (Repeat as necessary for each software entry)		<b>Above-grade floor 1 type:</b> Wood frame Area: xxx ft <sup>2</sup> <i>U-factor:</i> x.xx (Repeat as necessary for each software entry)	
Ceilings			

<insert date>

<Insert Software Name and version>

## IECC/HERS Code Compliance Program

- Program elements:
  - ▽ IECC/HERS Compliance Specialist
  - ▽ ICC/RESNET Uniform Compliance Docs
  - ▽ R405 Compliance (phase 1)
  - ▽ Prescriptive/UA Trade-off (phase 2)
  - ▽ Code Official Portal (potential phase 3)
  - ▽ Submittal to RESNET Registry
  - ▽ QA Oversight



## Work Still to be Done

- Develop database (in progress)
- Software development (in progress)
- Finalize QA Protocols (in progress)
- Develop Marketing Materials
- Anticipated launch in Q4 2021



THANK YOU!


Questions?  
[ryan@resnet.us](mailto:ryan@resnet.us)



## Next Phases

- UA Trade-off compliance
- Code Official Portal (?)
  - ▾ Similar to the Appraiser Portal
  - ▾ Code official access to compliance docs
- 2021 IECC
- Duct/Envelope Leakage Certs.





## A Suite of Services

- HERS Ratings and ENERGY STAR Homes
- IECC Compliance
  - ▷ Modeling
  - ▷ Inspections
  - ▷ Testing
- HERS<sub>H2O</sub> and WaterSense Labeled Homes
- HVAC Installation Grading (Standard 310)
- Residential (IRC) Compliance

