

# What's in store for the 2021 IECC Cycle?

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# Code Development Process-Stage One

STAGE ONE



## CODE DEVELOPMENT COMMITTEES

Anyone can apply to serve on one of the committees that preside over the Committee Action Hearings (CAH).

The Codes and Standards Council makes recommendations based on these applications to the ICC Board, which appoints members to the committees.

Members of each committee fall into one of three interest categories:

- **General:** government regulatory agencies.
- **User:** building owners, designers, insurance companies, private inspection agencies, academics.
- **Producer:** builders, contractors, manufacturers, distributors.



## CODE CHANGE SUBMISSION AND REVIEW

Anyone can submit code change proposals via ICC's cloud-based program, **cdpACCESS™**.

ICC staff reviews each proposal and assigns them to the applicable Code Development Committee.

# Code Development Process-Stage Two

## STAGE TWO



CAH

### COMMITTEE ACTION HEARINGS

At the CAH, code development committees **approve**, **approve with modifications** or **disapprove** each code change proposal.

Any participants may challenge the committee actions. ICC members vote on these challenges online. Approved challenges result in an automatic public comment to be considered at the PCH.



### PUBLIC COMMENT SUBMISSION AND REVIEW

**Anyone can submit public comments via cdpACCESS™ on the results of the CAH.**



### PUBLIC COMMENT HEARINGS

At the PCH, eligible voters discuss and vote on code change proposals.



PCH

Eligible voters work for government agencies protecting the public's health and safety and have no financial stake in the outcome.

# Code Development Process-Stage Three

## STAGE THREE



### ONLINE GOVERNMENTAL CONSENSUS VOTE

Following the PCH, eligible voters vote online. **The final vote count combines the in-person PCH and online votes.** The Validation Committee reviews and the ICC Board confirms the final results.



### NEW EDITION PUBLISHED

An updated edition of the International Codes is published every three years.

# IECC Development Timeline

March 4:  
Publication  
of Code  
Change  
Proposals

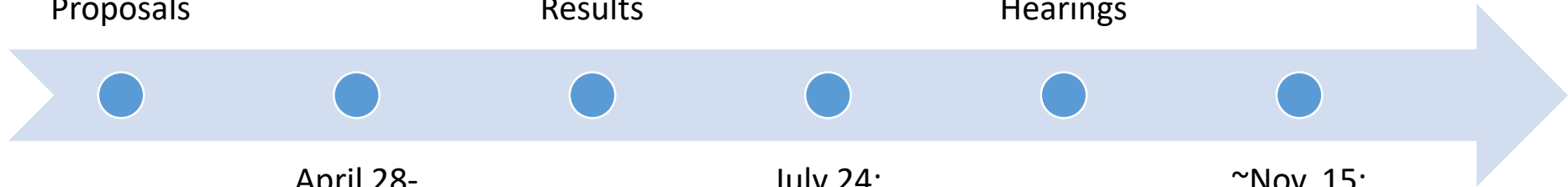
May 22:  
Committee  
Action  
Hearing  
Results

Oct. 23-30:  
Public  
Comment  
Hearings

April 28-  
May 8:  
Committee  
Action  
Hearings

July 24:  
Public  
Comments  
Due

~Nov. 15:  
Online  
voting on  
public  
comments



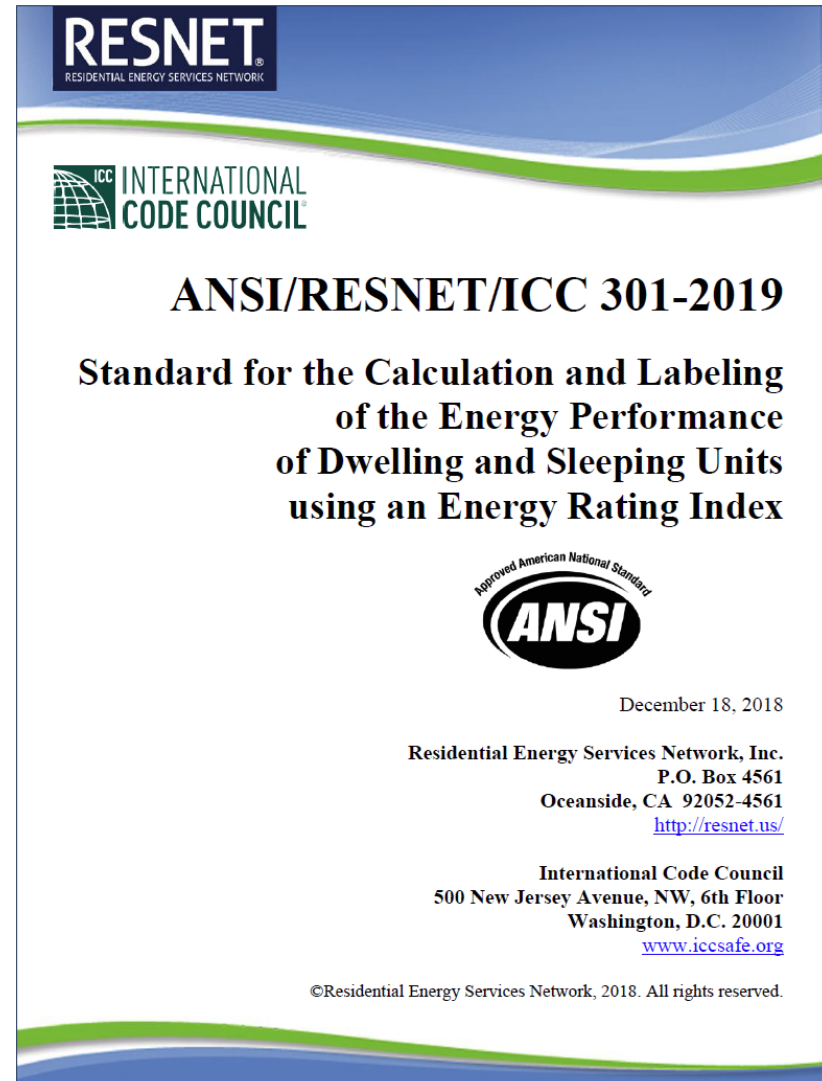
# RESNET's IECC Proposals

# Standards Update Proposals

## ANSI/RESNET/ICC 301-2019: Energy Rating Index

### Key Updates:

- More robust calculations to estimate the energy consumption of domestic hot water systems,
- A house size adjustment factor treats all home sizes fairly,
- Recognizes technology advancements in solid state lighting,
- Improved and expanded consideration of multifamily dwelling units,
- Better recognition of dwellings with air distribution systems located within conditioned space



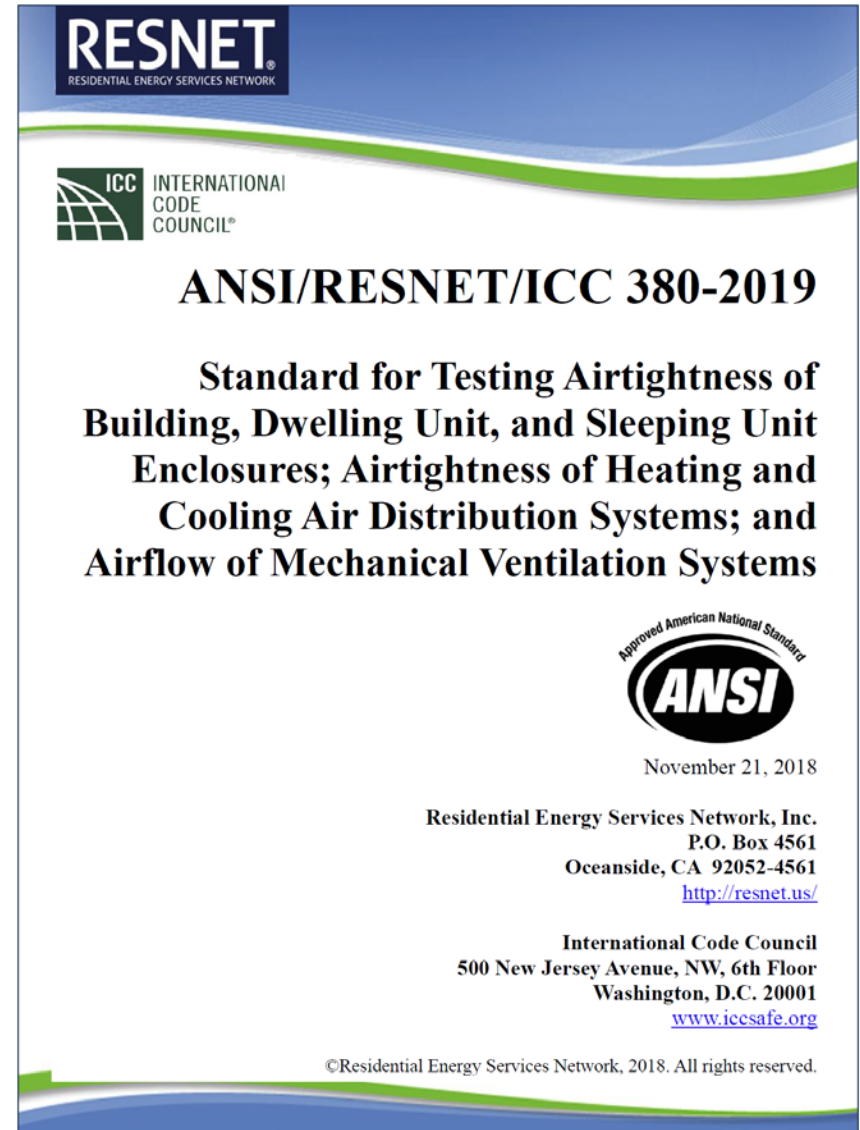
# Standards Update Proposals

## ANSI/RESNET/ICC 380-2019: Airtightness and Airflow testing

Currently only referenced for envelope leakage testing.

### Most Significant Update:

- Inclusion of criteria for testing of attached dwelling and sleeping units in buildings of all heights



**RESNET**  
RESIDENTIAL ENERGY SERVICES NETWORK

**ICC** INTERNATIONAL  
CODE  
COUNCIL®

**ANSI/RESNET/ICC 380-2019**

**Standard for Testing Airtightness of  
Building, Dwelling Unit, and Sleeping Unit  
Enclosures; Airtightness of Heating and  
Cooling Air Distribution Systems; and  
Airflow of Mechanical Ventilation Systems**

Approved American National Standard  
**ANSI**

November 21, 2018

Residential Energy Services Network, Inc.  
P.O. Box 4561  
Oceanside, CA 92052-4561  
<http://resnet.us/>

International Code Council  
500 New Jersey Avenue, NW, 6th Floor  
Washington, D.C. 20001  
[www.iccsafe.org](http://www.iccsafe.org)

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# Duct Leakage Testing Standard



- Adding Standard 380 as the duct leakage testing standard
- Currently no standard is referenced

**R403.3.3 Duct testing (Mandatory).** Ducts shall be pressure tested in accordance with ANSI/RESNET/ICC 380 or ASTM E1554 to determine air leakage by one of the following methods: (remainder left unchanged)

# ERI Ventilation Amendment

## Proposed Amendment:

**R406.3 Energy Rating Index.** The Energy Rating Index (ERI) shall be determined in accordance with RESNET/ICC 301, ~~except for buildings covered by the *International Residential Code*, the ERI Reference Design Ventilation rate shall be in accordance with Equation 4-1.~~ Ventilation rate, CFM =  ~~$(0.01 \times \text{total square foot area of house}) + [7.5 \times (\text{number of bedrooms} + 1)]$~~  (**Equation 4-1**)

- Deletes IRC ventilation reference and Equation 4.1
- As written in the 2018 IECC, this language increases ERI scores 2-10 points
- Standard 301 doesn't set ventilation rates!
- Std. 301 simply doesn't give "credit" for ventilation rates less than ASHRAE 62.2-2013
- SDC 300 rejected proposed amendment to Std. 301

# ERI Quality Assurance Proposals

- ERI has no quality assurance requirements!
- Only confirmed and sampled HERS Ratings require QA
- ERI = HERS has driven the QA misconception
- Confusion among code officials on implementation
- Series of three proposals to clarify:
  - Third party verifiers
  - QA standards
  - Documentation for compliance

# ERI Third Party Verifiers

## Proposed Amendment:

**R406.5 Verification by approved agency.** Verification of compliance with Section R406 shall be completed by an *approved* third party working under the auspices of an approved rating provider as defined in ANSI/RESNET/ICC 301.

## Goals of this proposal:

- Third party verifiers for ERI need to be working under a rating provider that provides QA oversight
- Provides guidance to local code officials on who should be “approved”

# Reference to QA Standards

**Add new section as follows:**

**R406.5.1 Quality Assurance.** *Approved third party verifiers and all residential buildings demonstrating compliance with Section R406 shall comply with the quality assurance requirements in accordance with ANSI/RESNET/ICC 301.*

Goals of this proposal:

- Provide a baseline for quality assurance requirements
- Does not require RESNET QA Standards be followed
- Std. 301 requires QA standards “equivalent” to Sect. 900 of MINHERS

# Compliance Documentation

Add new Section as follows:

**R406.5.2 Compliance documentation for certificate of occupancy. Third parties that have been *approved* to verify compliance with R406 shall provide the following documentation to the *code official*, prior to issuance of a certificate of occupancy:**

1. Documentation that the *approved* third party is certified by an approved rating provider in accordance with ANSI/RESNET/ICC 301;
2. Documentation demonstrating that the mandatory requirements in R406.2 have been met;
3. A compliance report in accordance with R406.6.2 that is clearly indicated as a “Confirmed Rating” or “Sampled Rating” as defined by ANSI/RESNET/ICC 301;
4. Documentation of air leakage testing results in accordance with R402.4.1.2;
5. Documentation of duct leakage testing results in accordance with R403.3.3.

# Compliance Documentation

## Reasons for each of the five documentation requirements:

1. This provision ensures that third party verifiers are subject to quality assurance procedures
2. This item ensures that third party verifiers are verifying the mandatory requirements of the IECC and not just what's required to conduct the rating
3. ANSI/RESNET/ICC 301 only requires “Confirmed” and “Sampled” ratings to be subject to quality assurance, so this item ensures that third parties are not submitting a “projected” rating to the code officials that is not subject to quality assurance
4. Documenting the envelope air leakage results ensures that those numbers are in alignment with the figures used in obtaining the ERI score
5. Documenting the duct leakage results ensures that those numbers are in alignment with the figures used in obtaining the ERI score.

Overall: provide clarity to the verifiers and code officials on required documentation.

# Thank you!

## Questions?

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Setting the Standards for  
Home Energy Efficiency