ANSI/RESNET/ICC 301-2019: What has changed since 2014 & how it addresses Multifamily

Gayathri Vijayakumar, Steven Winter Associates
Chair, RESNET SDC300
February 25, 2019

Session Overview

- What is ANSI/RESNET/ICC 301-2014?
- Why, when, how was it updated to the 2019 edition?
- What is different in ANSI/RESNET/ICC 301-2019?
  - 11 Addenda from ANSI/RESNET/ICC 301-2014
  - Purpose, Scope, and Definitions
  - Major technical changes:
    - Air Leakage & Duct Leakage testing
    - Shared Systems (HVAC, DHW, OPP, appliances)
    - Sampling
    - Inspections & Insulation Grading
- How does it impact my ERI & when is it required?

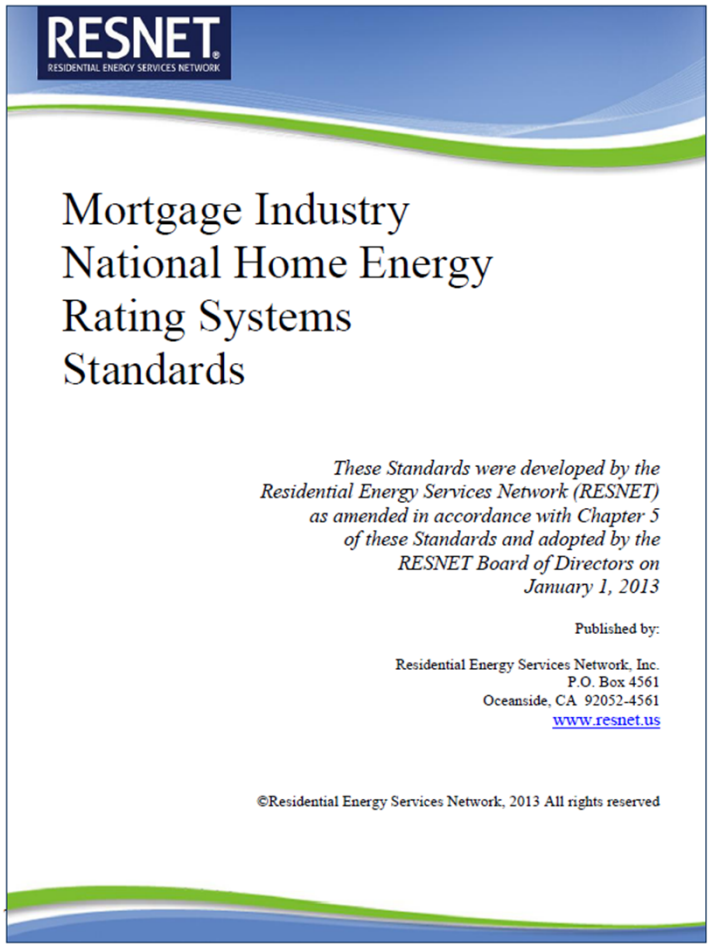
History Lesson

We started with the RESNET Mortgage Industry National Home Energy Rating Systems 'Standards' (aka MINHERS).

Written for 'homes' but allowed for multifamily under 3 stories; 4 & 5 stories if ENERGY STAR certified

It covered everything, from how to calculate a HERS index, do a blower door test, do inspections, sampling, maintain your Rater credential, QA stuff

Good, but not an ANSI Standard, and not specific to multifamily


RESNET
RESIDENTIAL ENERGY SERVICES NETWORK

Mortgage Industry
National Home Energy
Rating Systems
Standards

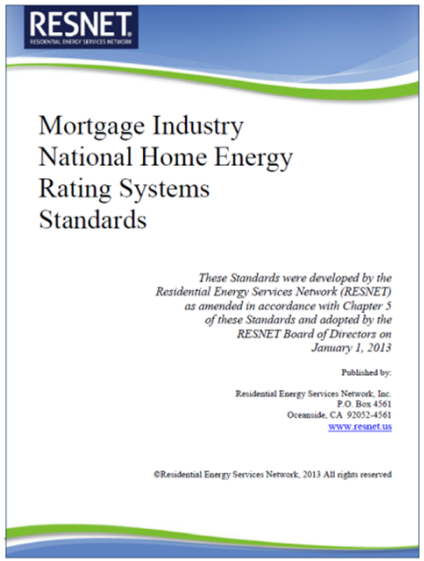
These Standards were developed by the Residential Energy Services Network (RESNET) as amended in accordance with Chapter 5 of these Standards and adopted by the RESNET Board of Directors on January 1, 2013

Published by:

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

MINHERS Chapter 3 >>> ANSI 301-2014

Sometime in 2011, RESNET began the process of taking chapters from MINHERS and developing them into ANSI Standards, with the goal of them being part of the IECC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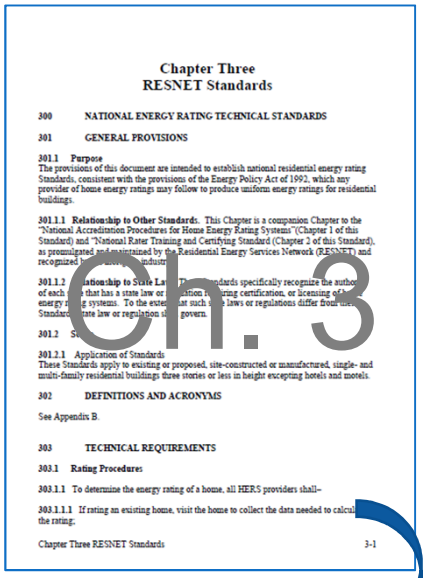

Chapter Three
RESNET Standards

300 NATIONAL ENERGY RATING TECHNICAL STANDARDS

301 GENERAL PROVISIONS

301.1 Purpose
The provisions of this document are intended to establish national residential energy rating Standards, consistent with the provisions of the Energy Policy Act of 1992, which any provider of home energy ratings may follow to produce uniform energy ratings for residential buildings.

301.1.1 Relationship to Other Standards. This Chapter is a companion Chapter to the "National Accreditation Procedures for Home Energy Rating Systems" (Chapter 1 of this Standard) and "National Rater Training and Certifying Standard (Chapter 2 of this Standard), as promulgated and maintained by the Residential Energy Services Network (RESNET) and recognized

Ch. 3

301.2

301.2.1 Application of Standards
These Standards apply to existing or proposed, site-constructed or manufactured, single- and multi-family residential buildings three stories or less in height excepting hotels and motels.

302 DEFINITIONS AND ACRONYMS

See Appendix B.

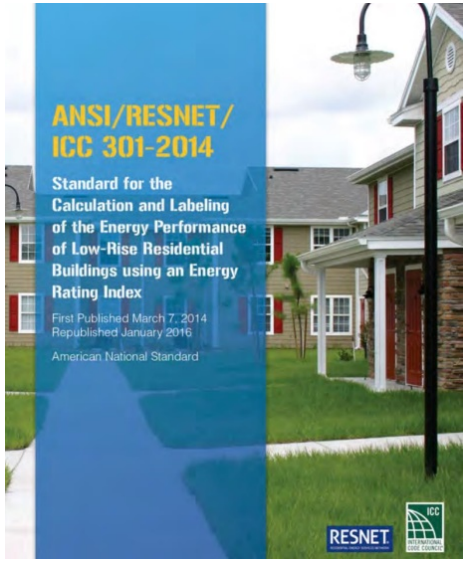
303 TECHNICAL REQUIREMENTS

303.1 Rating Procedures

303.1.1 To determine the energy rating of a home, all HERS providers shall–

303.1.1.1 If rating an existing home, visit the home to collect the data needed to calcu the rating;

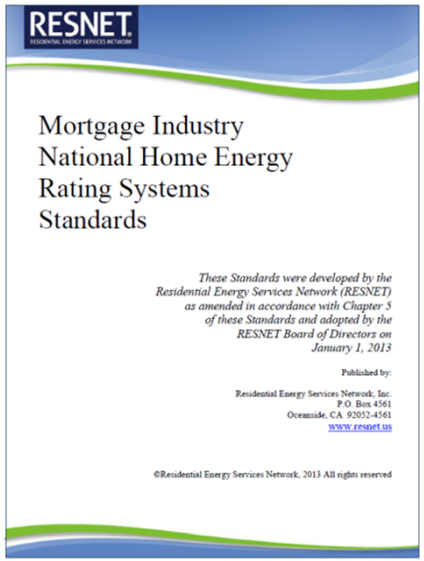
Chapter Three RESNET Standards 3-1

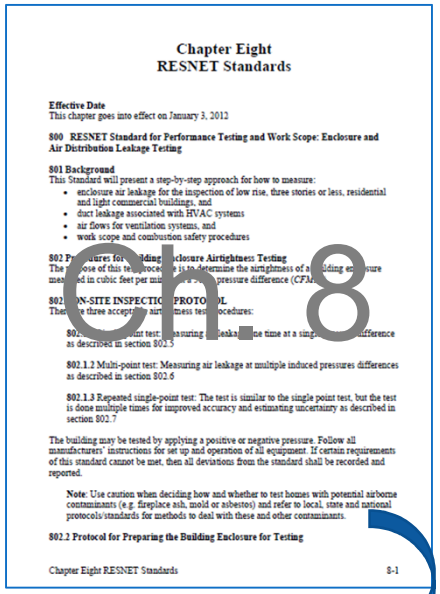


How to calculate a HERS index

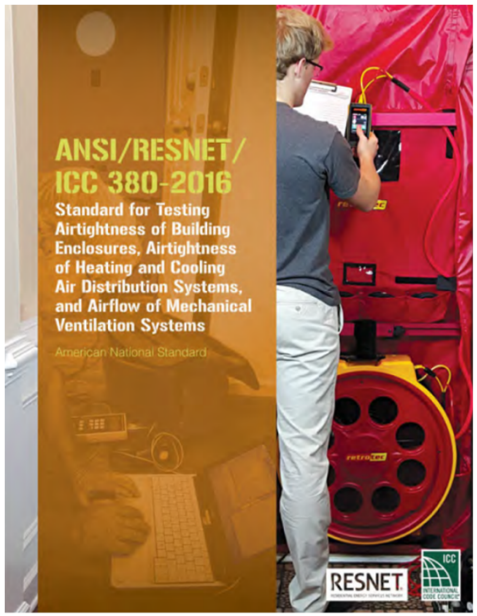
MINHERS Chapter 8 >>> ANSI 380-2016

Sometime in 2011, RESNET began the process of taking chapters from MINHERS and developing them into ANSI Standards, with the goal of them being part of the IECC



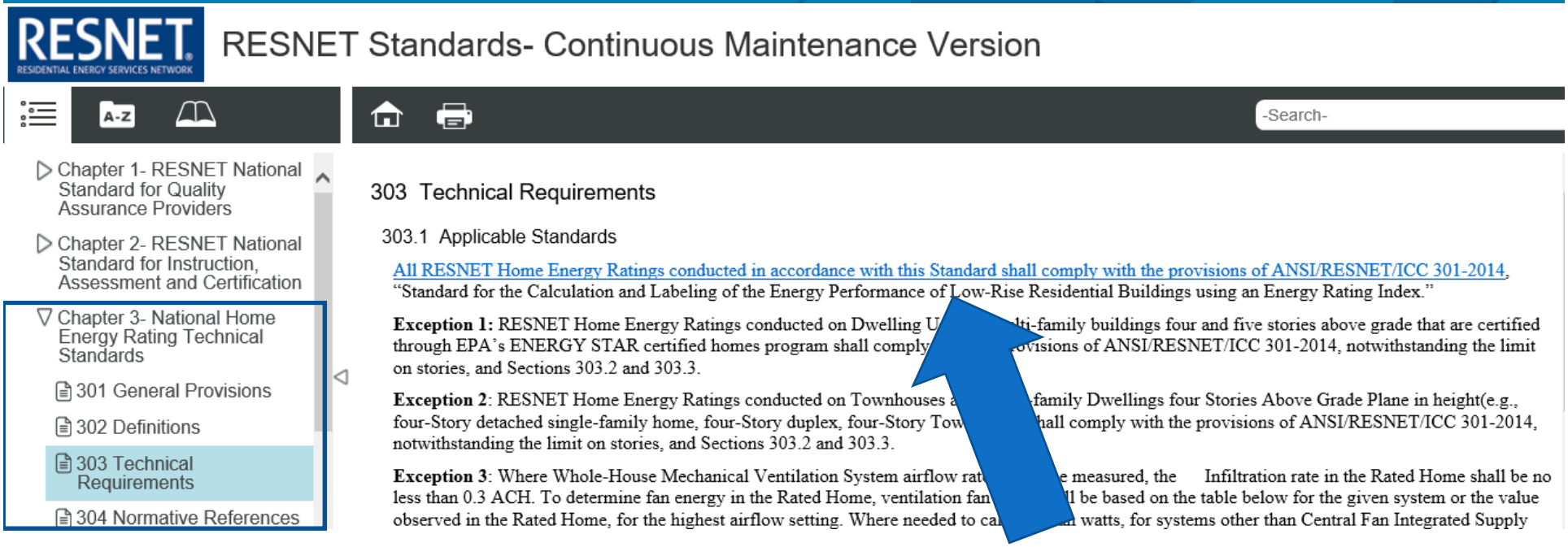


Ch. 8



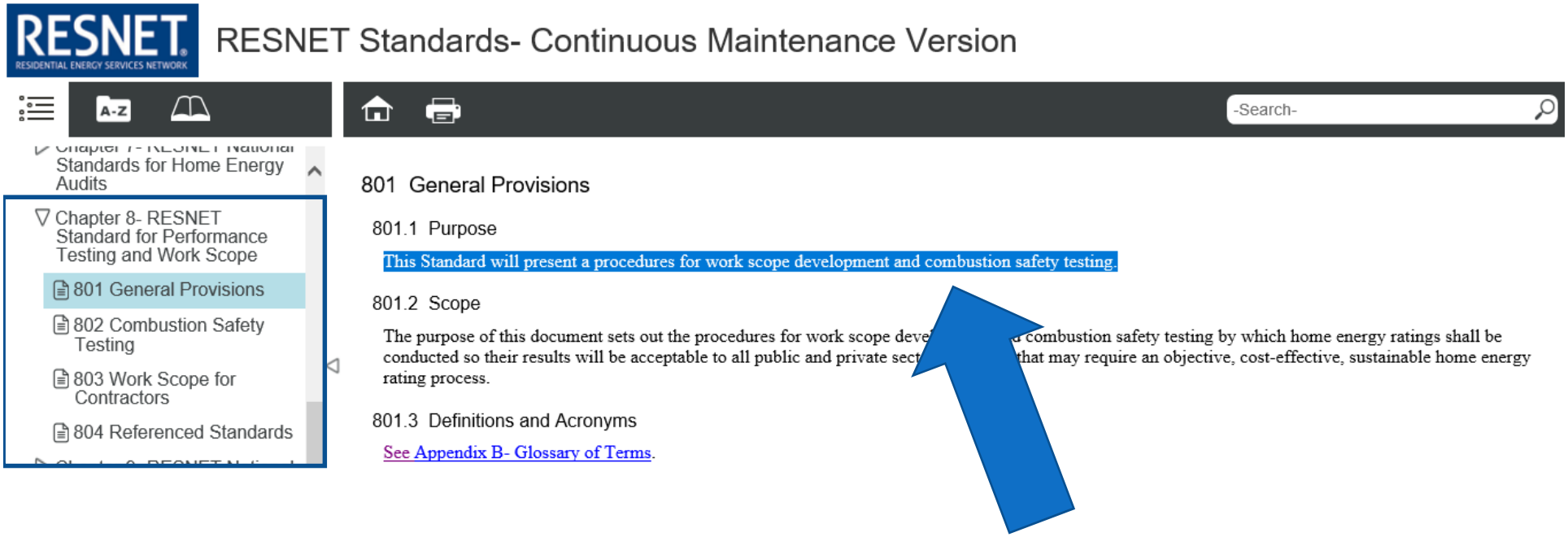
How to do blower door & duct blaster tests

MINHERS Chapter 3 >>> ANSI 301-2014



All RESNET Home Energy Ratings conducted in accordance with this Standard shall comply with the provisions of ANSI/RESNET/ICC 301-2014, "Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating Index," **including addenda and normative appendices.**

MINHERS Chapter 8 >>> ANSI 380-2016



This Standard will present a procedures for work scope development and combustion safety testing.

References to ANSI/RESNET/ICC 380-2016 are seen throughout MINHERS.

Are ANSI Standards referenced elsewhere?

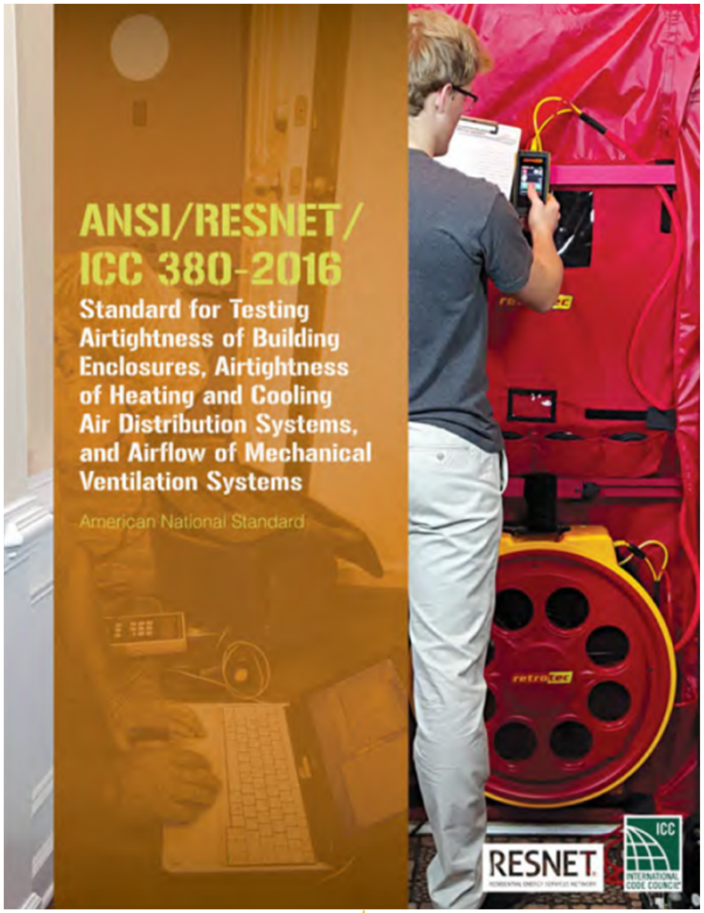
2015 IECC (R406): 1st time an "ERI" path is offered as an alternative performance path but ANSI 301-2014 was not published in time to be referenced

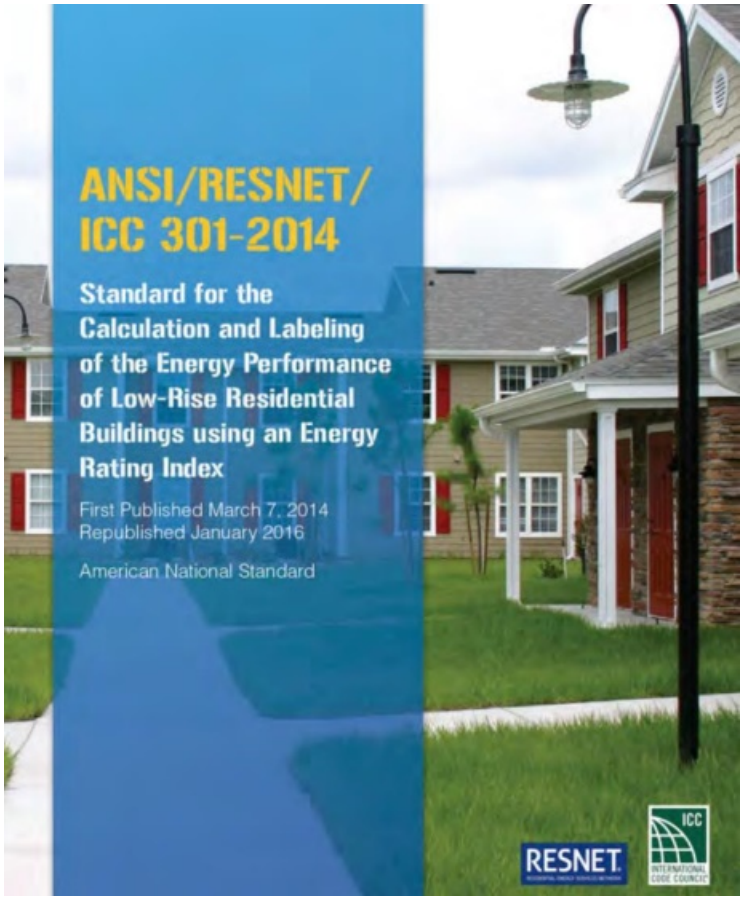
2018 IECC (R406): ANSI/RESNET/ICC 301-2014 is referenced as the standard that should be used when calculating an "ERI" (with a modification to ventilation rate)

2018 IECC (R402.4): ANSI/RESNET/ICC ANSI 380-2016 referenced as one of the standards that can be used for blower door testing, but not successful for duct leakage

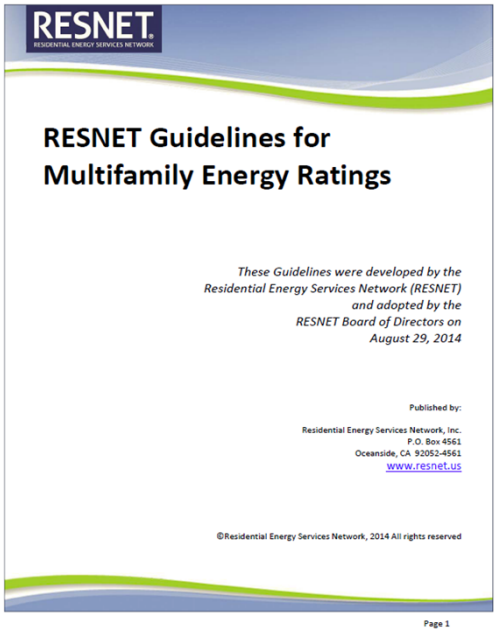
2021 IECC: Stay tuned (Tuesday @10:30am and 1:30pm), but ANSI 301 & 380-2019 have been proposed!

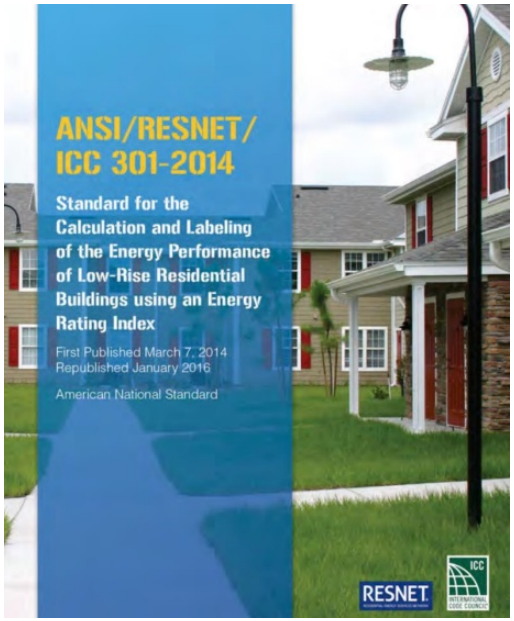
Updating to the 2019 editions

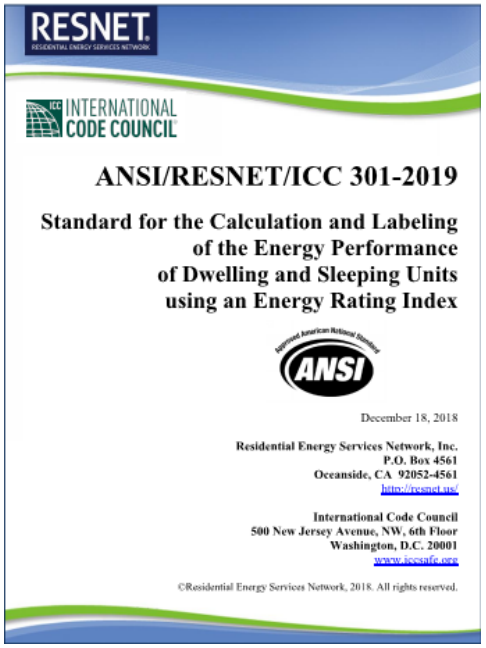




Updating to the 2019 editions







So many volunteers to thank!!!

Multifamily Working Group (2013-2014)

Ben Adams, MaGrann
James Brauer, TexEnergy
Brian Christensen, AEC
Krista Egger, Enterprise
Dave Epley, DC DCRA
Pat Fitzgerald, NYSERDA
Asa Foss, USGBC
Bruce Harley, CSG
Abe Kruger, SK Collaborative
Scott Lee, Southface
Ted Leopkey, EPA **(Chair)**
Ken Owens, Franklin Energy
Matthew Root, CSG
Rob Salcido, AEC
Brian Stanfill, MaGrann
Gayathri Vijayakumar, SWA
Meghan Walsh, USDA
Li Ling Young, VEIC

So many volunteers to thank!!!

RESNET Multifamily Sub-Committee & 4 TGs (2016-2018)

Thiel Butner, Pando Alliance
Brian Christensen, NORESCO
Sean Denniston, NBI
Asa Foss, USGBC
Paul Gay, US Ecologic
Bob Grindrod, CLEAResult
Bruce Harley
Rebecca Hudson, EPA
Chris McTaggart, BER
Troy Maharg, TexEnergy
Gary Nelson, TEC
Matthew Root
Robert Salcido, Ekotrope
Brian Stanfill, MaGrann
Gayathri Vijayakumar, SWA
Daran Wastchak
Joel Williams, TexEnergy

So many volunteers to thank!!!

RESNET SDC300 & Sub-Committees (2018-2019)

Thiel Butner, Pando Alliance

Brian Christensen, NORESCO

Terry Clausing

Charles Cottrell

Philip Fairey, FSEC

Dean Gamble, EPA

Bruce Harley

Kelly Parker

Jerry Phelan

Dave Roberts, NREL

Robert Salcido, Ekotrope

Amy Schmidt

Brian Shanks

Brian Stanfill, MaGrann

Gayathri Vijayakumar, SWA

Iain Walker, LBNL

Dan Wildenhaus

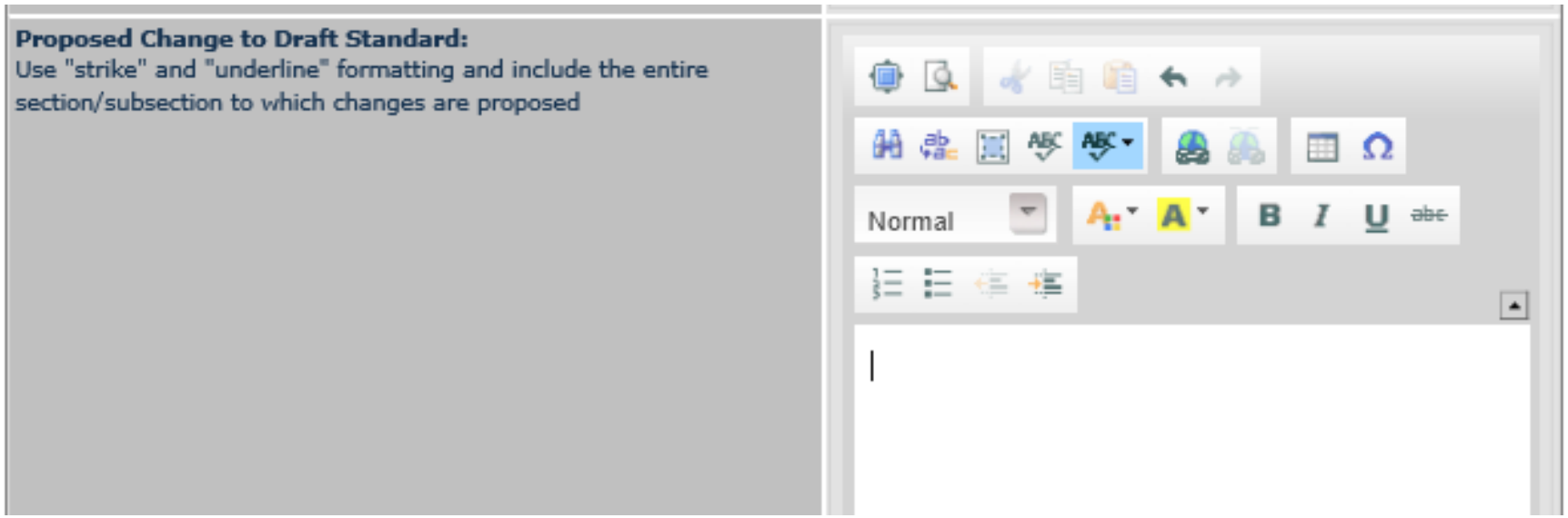
Rick Dixon (Standards Mgr)*

…and all of you who submitted comments!

Public Comments on PDS-01 (March 2 - April 16): 22

Public Comments on PDS-02 (June 29 - August 13): 4

Public Comments on PDS-03 (September 28 - November 12): 3



Summary of Key Changes in 2019 Update

- ✓Incorporates all interpretations and 11 approved addenda from 301-2014 (A, B, D, E, F, G, K, L, N, T, R)
  - Fun Fact! ANSI Addenda are letters; MINHERS Addenda are #'s
- ✓Improves language to better address multifamily & to model central HVAC, DHW, laundry, solar, etc
- ✓Expands scope to cover dwelling units AND sleeping units
- ✓Expands scope to cover units in ANY height building
- ✓Explicitly prohibits whole-building Energy Ratings, but provides a way to 'calculate' one
- ✓Adds Insulation and Inspection Appendices (A & B)

ANSI/RESNET/ICC 301-2014 Addendum A-R

- Addendum A & B: Domestic Hot Water Systems & IDR
- Addendum K: Updates Roof Solar Absorptance Test Standard
- Addendum D: Adopts ANSI/RESNET/ICC 380-2016 (not Ch 8)
- Addendum E: House Size Index Adjustment Factors (IAF)
- Addendum G: Add Tier II Lighting for LED
- Addendum T: Remove ASHRAE 152 reference for DSE calcs
- Addendum L: Modify duct leakage test exception from Add. D
- Addendum R: Add Threshold Ratings
- Addendum F & N: Adds Appendix A (Insulation Grading) & Appendix B (Inspection procedures)

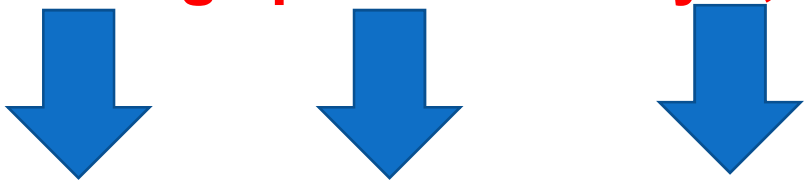
ANSI/RESNET/ICC 301-2014 Addendum A-R

Addendum A & B: Domestic Hot Water Systems & IDR

Addendum K: Updates Roof Solar Absorptance Test Standard

Addendum D: Adopts ANSI/RESNET/ICC 380-2016 (not Ch 8)

Required for buildings permitted July 1, 2019 and after!



Addendum L: Modify duct leakage test exception

Addendum R: Add Threshold Ratings

Addendum F & N: Adds Appendix A (Insulation Grading) & Appendix B (Inspection procedures)

ANSI/RESNET/ICC 301-2019 Structure

Section 1 & 2: Purpose & Scope (p 1-2)

Section 3: Definitions & Acronyms (p 2-14)

Section 4: Energy Rating Calculation Procedures (p 17-73)

Section 5: Certification, Labeling, IDR (p 74-83)

Section 6: Normative References (p 84)

Section 7: Informative References (p 85)

Normative Appendix A (11 pages) – Insulation Grading

Normative Appendix B (56 pages) – Inspection Procedures

Annex X – ECM Guidelines (Informative) (3 pages)

(….from 62 pgs to 160 pgs)

Changes in Title, Purpose, & Scope

New Title: Standard for the Calculation and Labeling of the Energy Performance of **Dwelling and Sleeping Units** using an Energy Rating Index

Purpose & Scope: This Standard provides a consistent, uniform methodology for evaluating and labeling the energy performance of Dwelling Units and Sleeping Units, including all detached and attached housing types. This standard is applicable to Dwelling Units and Sleeping Units in Residential or Commercial Buildings, excepting hotels and motels.

No more restriction on building height, but rating still has to be on the UNIT-level, not BUILDING-level.

Changes & Additions to Definitions

- Approved Inspector
- Attached & Detached Dwelling Unit
- Bedroom
- Balanced, Exhaust, Supply Ventilation Systems
- Compartmentalization Boundary
- Multifamily Buffer Boundary
- Non-Freezing Space
- Sleeping Unit
- Unrated Conditioned Space, Unrated Heated Space

Changes in Definitions

Bedroom: For one- and two-family Dwellings and Townhouses, a room[4] or space 70 square feet of floor area or greater, with egress window or skylight, and doorway to the main body of the Dwelling Unit, that can be used for sleeping. For all other Dwelling Units, a room[4] or space that can be used for sleeping. For all Dwelling or Sleeping Units, the number of Bedrooms shall not be less than one.

4.(Informative Note) A "den," "library," "home office" or other similar rooms with a closet, egress window, doorway to the main body of the Dwelling Unit, and 70 square feet of floor area or greater are considered a Bedroom, but living rooms, foyers, and other rooms not intended for sleeping, are not. The number of rooms identified as Bedrooms is used to determine the number of occupants.

MF Buffer Boundary & Non-Freezing Space

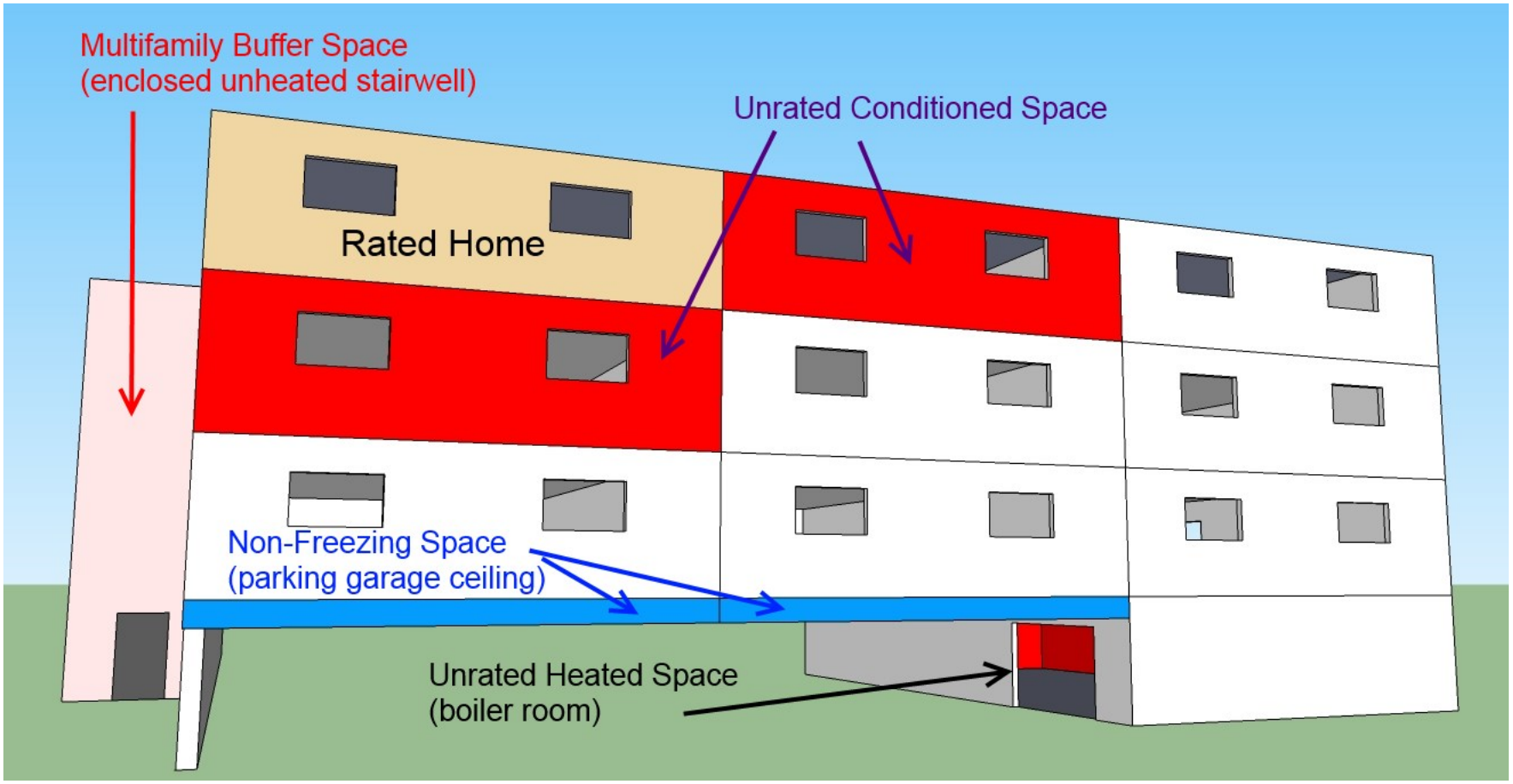


Image Credit: Brian Christensen

ANSI/RESNET/ICC 301-2019: Section 4

Section 1 & 2: Purpose & Scope (p 1-2)

Section 3: Definitions & Acronyms (p 2-14)

Section 4: Energy Rating Calculation Procedures (p 17-73)

Section 5: Certification, Labeling, IDR (p 74-83)

Section 6: Normative References (p 84)

Section 7: Informative References (p 85)

Normative Appendix A (11 pages) – Insulation Grading

Normative Appendix B (56 pages) – Inspection Procedures

Annex X – ECM Guidelines (Informative) (3 pages)

Table 4.2.2 (1) and its 23 notes (a)-(w)

4.2. Energy Rating Reference Home and Rated Home Configuration

4.2.1. General Requirements. Except as specified by this Section, the Energy Rating Reference Home and the Rated Home shall be configured and analyzed using identical methods and techniques.

4.2.2. Residence Specifications. The Energy Rating Reference Home and Rated Home shall be configured and analyzed as specified by Table 4.2.2(1).

Table 4.2.2(1) Specifications for the Energy Rating Reference and Rated Homes

Building Component	Energy Rating Reference Home	Rated Home
Above-grade walls:	Type: wood frame	Same as Rated Home
	Gross Area: same as Rated Home	Same as Rated Home
	U-Factor: from Table 4.2.2(2)	Same as Rated Home
	Solar Absorptance = 0.75	Same as Rated Home
	Emittance = 0.90	Same as Rated Home
Conditioned basement walls:	Type: same as Rated Home	Same as Rated Home
	Gross Area: same as Rated Home	Same as Rated Home
	U-Factor: from Table 4.2.2(2) with the insulation layer on the interior side of walls	Same as Rated Home
Floors over	Type: wood frame	Same as Rated Home

Image Credit: Brian Christensen

What's new in Table 4.2.2(1) for MF?

Air Leakage Testing in Multifamily (page 20-22)

Building Component	Energy Rating Reference Home	Rated Home
Air exchange rate	Specific Leakage Area (SLA) [f] = 0.00036 assuming no energy recovery, supplemented as necessary to achieve the	In accordance with Standard ANSI/RESNET/ICC 380, obtain airtightness test results for:
	required Dwelling-Unit total air exchange rate (Qtot).[g], [h]	• Building enclosure (for Detached Dwelling Units) • Compartmentalization Boundary (for Attached Dwelling Units). For Attached Dwelling Units with airtightness test results $\leq$ 0.30 cfm50 per ft^2 of Compartmentalization Boundary, the test results

What's new in Table 4.2.2(1) for MF?

Air Leakage Testing in Multifamily

Test in accordance with ANSI/RESNET/ICC 380-2019

For Attached Dwelling Units with airtightness test results ≤ 0.30 cfm50 per ft^2 of "Compartmentalization Boundary", the test results shall be multiplied by reduction factor $A_{exterior}$

Otherwise, $A_{exterior}$ is 1

For comparison, 0.30 cfm50/ft^2 is ~ 4-7 ACH50

Compartmentalization Boundary is defined as "The surface that bounds the *Infiltration Volume* of the Dwelling Unit"

How to calculate the reduction factor, $A_{exterior}$

$A_{exterior}$: the ratio of exterior surface area to total surface area. [Table 4.2.2 (1), note (i)] …borrowed from ASHRAE 62.2

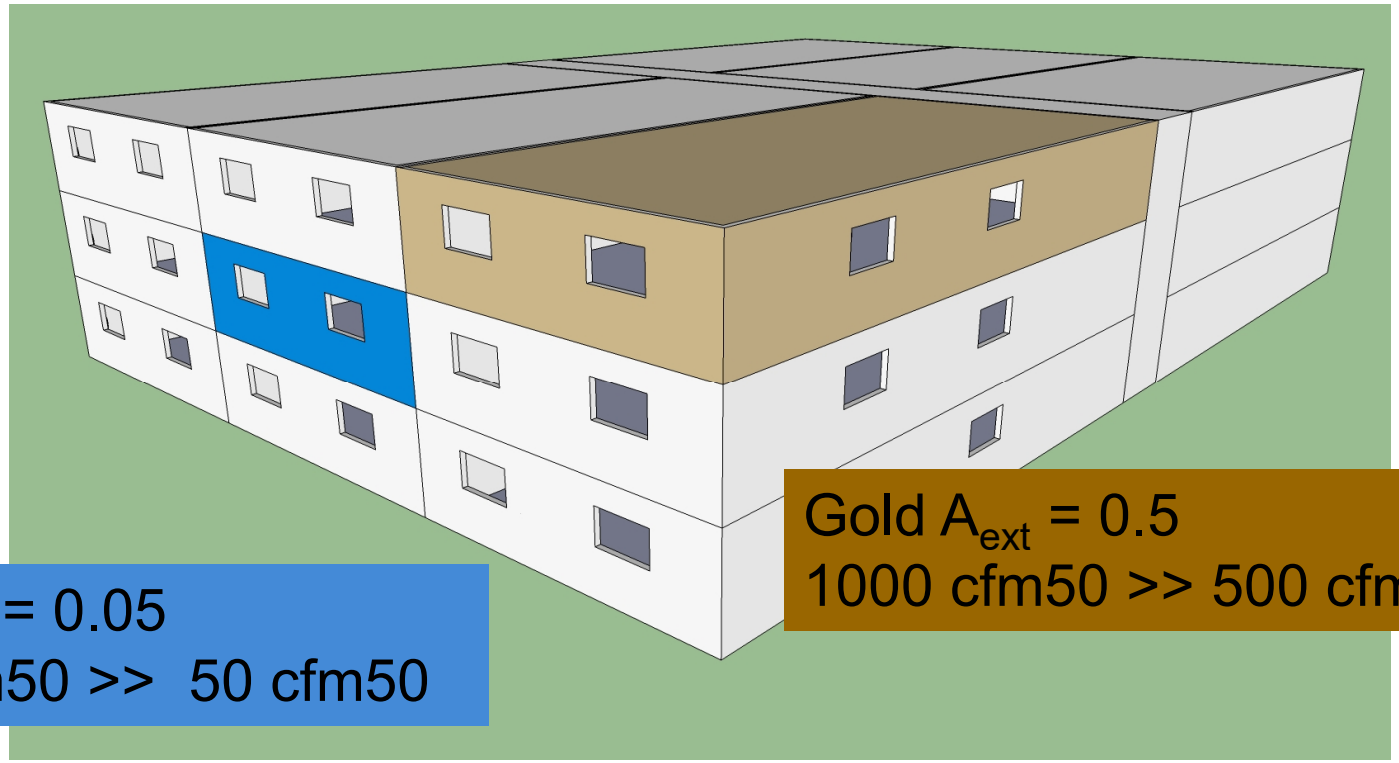


Image Credit: Brian Christensen

What's new in Table 4.2.2 (1) for MF & SF?

Ventilation Changes

- *Air exchange rate row*: For exhaust-only systems, where $A_{exterior} < 0.5$, treated the same as home without mechanical ventilation (limits credit for air-sealing to 0.3 ACH_{nat})
- (k), (n) Pro-rate fan energy and space conditioning from central ventilation systems that serve the dwelling unit.

The following notes affects both single and multifamily:

- (g) Update ASHRAE 62.2 references to 2016
- (m) Ventilation defaults stipulated for airflow and fan power, where not available (like MINHERS Addendum 39)

Table 4.2.2 (1) note (m) – default Watts/cfm

(m) Dwelling-Unit Mechanical Ventilation System fan watts shall be the value observed in the Rated Home for the highest airflow setting. Where not available, fan watts shall be based on Table 4.2.2(1b) for the given system. For systems other than Central Fan Integrated Supply (CFIS), where the airflow cannot be measured, the cfm used to determine fan watts shall be assumed to be equal to Qfan, as determined in accordance with endnote (g) of Table 4.2.2 (1). For CFIS systems, the cfm used to determine fan watts shall be the larger of 400 cfm per 12 kBtu/h cooling capacity or 240 cfm per 12 kBtu/h heating capacity.

Table 4.2.2(1b). Default Ventilation System Fan Power for Rated Home

Equipment Type	Watts/ cfm
Exhaust Ventilation fans	0.35
Supply Ventilation fans	0.35
Balanced Ventilation fans	0.70
HRV/ERV fans	1.00
CFIS fans	0.50
Range hoods	0.70

CFIS in Appendix B – Dwelling Unit Mechanical Ventilation Systems

Central Fan Integrated Supply (CFIS) Ventilation System – A central fan integrated Supply Ventilation System is a specific type of supply-only ventilation that includes a duct running from the outside into the return plenum of the heating/cooling system, a mechanical damper, and controls that ensure the system provides ventilation air even when there is no demand for heating or cooling.

For these systems, record the central fan model number from the nameplate data of the air handler fan and whether or not it is equipped with an ECM motor.

Use the fan model number to determine the fan cfm and either horsepower or wattage from the manufacturer's data sheet. Where fan wattage is not provided, use (HP x 746)/0.90 to calculate fan wattage. Where the fan has multiple speeds, use values associated with the high-speed setting to select or calculate the fan wattage.

What's new in Table 4.2.2 (1) for SF?

Duct Leakage testing (same as Addendum L)

Table 4.2.2(1) Specifications for the Energy Rating Reference and Rated Homes

Building Component	Energy Rating Reference Home	Rated Home
Thermal distribution systems	Thermal Distribution System Efficiency (DSE) of 0.80 shall be applied to both the heating and cooling system efficiencies.	Forced air distribution systems duct leakage to outside tests[w] shall be conducted and documented by an Approved Tester in accordance with requirements of Standard ANSI/RESNET/ICC 380 with the air handler installed, and the energy impacts calculated with the ducts located and insulated as in the Rated Home. For ductless distribution systems: DSE=1.00 For hydronic distribution systems: DSE=1.00

What's new in Table 4.2.2 (1) for SF?

Duct Leakage testing in "Single Family"

- Test DLTO in accordance with ANSI/RESNET/ICC 380-2019
- **OR** use alternative in (w) for single family detached, duplexes and Townhouses:
  - Ducts/AHU in CSV, fully ducted: no test, take DSE=0.88
  - Ducts/AHU in Infiltration Volume, fully ducted: test total to < 4 cfm25/100 ft^2 & airtightness < 3 ACH50, take HALF of total as DLTO (< 2 cfm25/100 ft^2)

Removes "visible" at final & creates a no-test option

What's new in Table 4.2.2 (1) for MF?

Duct Leakage testing in "Multifamily"

- Test DLTO in accordance with ANSI/RESNET/ICC 380-2019
- **OR** use alternative in (w) for Attached Dwelling Units, except duplexes and Townhouses:
  - Ducts/AHU in CSV, fully ducted: no test, take DSE=0.88
  - Ducts/AHU in CSV: test total, get DLTO = 0
  - Ducts or AHU outside CSV: test total, pro-rate based on duct area OUTSIDE Conditioned Space Volume, add default leakage for AHU

Other Changes in Section 4: Inspections

Section 4.2.2.2.1: The insulation of the Energy Rating Reference Home enclosure elements shall be modeled as Grade I…. or, if confirmed to be present but not fully inspected, shall be modeled as Grade III and shall be recorded as "not inspected" in the rating.

Thermographic inspection is permitted to be used to determine that an assembly is insulated and achieves a Grade II rating if the person doing the inspection is an ASNT NDT Level III or a licensed engineer, or if the person doing the inspection is working under the direction of an ASNT NDT Level III or a licensed engineer. Thermographic inspection shall not be used to determine an assembly achieves a Grade I rating.

Don’t get lost in Section 4!

4.2.2.5. Lighting, Appliances, Miscellaneous Energy Loads (MELs), Ventilation and Service Hot Water Systems.

4.2.2.5.1. Energy Rating Reference Home. Lighting, Appliance and Miscellaneous Energy Loads in the Energy Rating Reference Home shall be determined in accordance with the values provided in Table 4.2.2.5(1) and Table 4.2.2.5(2), as appropriate, and Equation 4.2-1:

4.2.2.5.2. Energy Rating Rated Homes. The lighting, appliance, hot water heating, and Miscellaneous Energy Loads in the Energy Rating Rated Home shall be determined in accordance with Sections 4.2.2.5.2.1 through 0. For a Rated Home without a refrigerator, dishwasher, range/oven, clothes washer or clothes dryer, the values from Table 4.2.2.5(1) shall be assumed for both the Energy Rating Reference Home and Rated Home.

Other Changes in Section 4: Shared Systems

Central DHW, Laundry, Dishwashers

- ❑ DHW: Pipe length from loop, not to DHW heater (p 47) but include recirculation pump energy (p 49), 24/7 or 2 hrs/day if demand controlled.
- ❑ DHW: Model DHW in common area separately from dwelling unit DHW, and assign loads accordingly (p 46)
- ❑ Shared laundry: need at least 1 washer per 14 apartments to take credit for ENERGY STAR (p 45)
- ❑ Shared dishwasher? Can sometime take credit for that

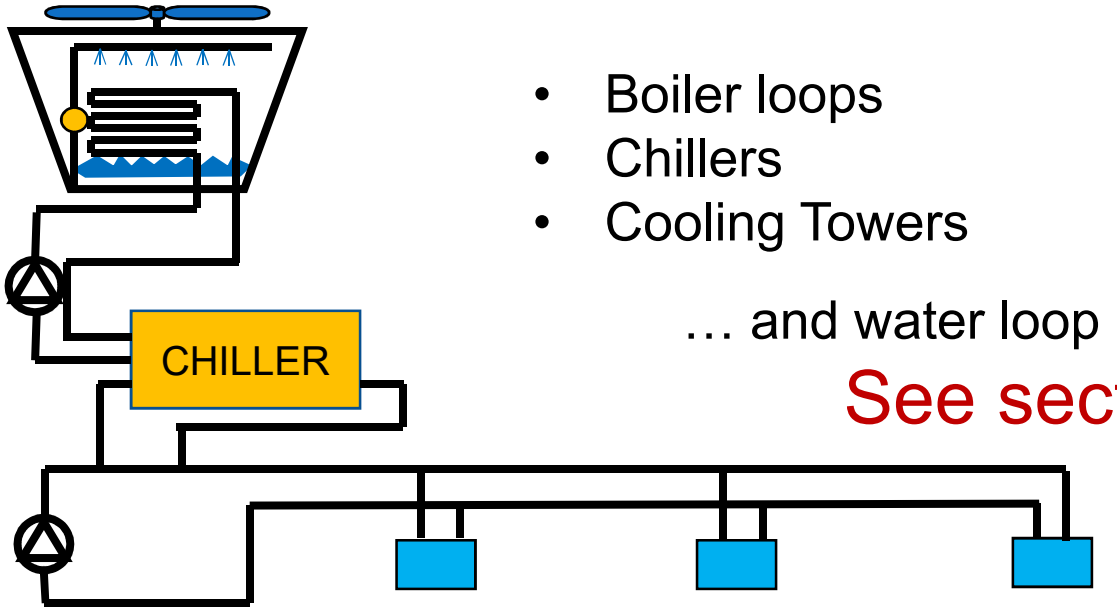
Other Changes in Section 4: Shared Systems

On-Site Power Production & Common Area Lighting

- On-Site Power: can pro-rate generation from a system on the project site, regardless of metering/ownership (p 51)
- Lighting in shared spaces does not affect the Energy Rating of the Dwelling Unit
- Ignore lighting in stairwells, corridors, parking lot, shared parking garages, landscape lighting
- Count lighting it if it's attached to the Dwelling Unit (ie. balcony fixture)

Other Changes in Section 4: Shared Systems

Central Heating & Cooling



- Boiler loops
- Chillers
- Cooling Towers

… and water loop HPs, radiators, fan coils

See sections 4.4.4 – 4.4.7

Image Credit: Bob Grindrod

Other Changes in Section 4: MRF's

Minimum Rated Features(MRFs),Table 4.5.2 (1), p61

- ❑ Added a 'General Project Info' row
- ❑ Expanded and clarified most of the existing 24 MRF's
- ❑ Added one for central systems providing pre-conditioning to ventilation air

Table 4.5.2(1) Minimum Rated Features

Building Element	Minimum Rated Feature
1. Floor/Foundation Assembly	Construction type (slab-on-grade, crawlspace, basement), boundary condition (adiabatic, above unconditioned space, above Non-Freezing Space), dimensions, insulation type, value, and location (edge, under slab, cavity, sheathing), framing material and on-center spacing, insulation installation (Grade I, II, or III), vented or unvented (crawlspace), capacitance (if slab or basement receives appreciable solar gain).

ANSI/RESNET/ICC 301-2019: Section 5

Section 1 & 2: Purpose & Scope (p 1-2)

Section 3: Definitions & Acronyms (p 2-14)

Section 4: Energy Rating Calculation Procedures (p 17-73)

Section 5: Certification, Labeling, IDR (p 74-83)

Section 6: Normative References (p 84)

Section 7: Informative References (p 85)

Normative Appendix A (11 pages) – Insulation Grading

Normative Appendix B (56 pages) – Inspection Procedures

Annex X – ECM Guidelines (Informative) (3 pages)

Changes in Section 5: Rating Types

Section 5.1.4.3 and 5.1.4.4

Sampled Ratings split into Attached and Detached Units

Detached – basically the same as in ANSI 301-2014

Attached – adopts much of language from Guidelines

- How to select units for modeling and worst-case analysis
- What to do with testing results

Section 5.1.4.5

Threshold Ratings added (Addendum R)

Changes in Section 5: Average DU ERI

Section 5.1.5: Average Dwelling Unit Energy Rating Index.

A single Energy Rating Index for a building with multiple units shall not be calculated by performing an Energy Rating on that building.

If a single Energy Rating Index is needed to represent the residential portions of a building or a group of multiple Detached Dwelling Units for code compliance or other programmatic reason, that substitute Energy Rating Index must be calculated using an average of the Energy Rating Index values from all the individual Dwelling Units in the building or group.

A Confirmed or Sampled Rating for each Dwelling Unit in the building or group shall be performed prior to this calculation.

ANSI/RESNET/ICC 301-2019: Appendix A & B

Section 1 & 2: Purpose & Scope (p 1-2)

Section 3: Definitions & Acronyms (p 2-14)

Section 4: Energy Rating Calculation Procedures (p 17-73)

Section 5: Certification, Labeling, IDR (p 74-83)

Section 6: Normative References (p 84)

Section 7: Informative References (p 85)

Normative Appendix A (11 pages) – Insulation Grading

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Appendix A – Insulation Grading

A-1. Insulation

A-1.1 Minimum General Installation Requirements

A-1.2 Minimum Specific Application Requirements

A-1.3 Minimum Specific Material Requirements

A-2. Insulation Grading

A-2.1 Grading Criteria for Batt, Loose-fill, OC, CC & Sheathing

A-2.2 SIPS Grading Criteria

A-2.3 Reflective/Radiant Grading Criteria

A-3. Normative References

Required for July 1 permits

Training Coming Soon!

Appendix B – Inspection Procedures

Started from Appendix A of MINHERS, but re-organized; updated the text to clarify if existing or new construction; removed outdated procedures; added documentation req'ts

Added a lot from RESNET Guidelines for Multifamily Ratings & created a procedure for a Minimum Rated Feature from Table 4.5.2 (1) if there wasn't one (ie. lights, appliances, OPP, etc)

Building Element: Floor/Foundation Assembly		
Rated Feature	**Task**	**On-Site Inspection Protocol**
Framing members	Determine the size of the framing members for all framed floors	Determine the framing member size and spacing for framed floors at each floor exposure. When framing cannot be directly observed, check the framing by looking for an access through another part of the building or by looking at the rim space from the outside.
Interior surface condition	Determine if the inside surface condition of floor is exposed or covered	*Covered* - Floors covered with wall-to-wall carpet are considered covered. Floors with only area rugs are not considered covered. *Exposed* - Floors covered with tile, linoleum, vinyl, or wood are considered exposed.

Required for July 1 permits
Training Coming Soon!

How does all of this change the ERI?

Won't know until software can calculate, but here's a guess if you weren't already using the RESNET MF Guidelines:

Change in air leakage tests? If <0.30 cfm/ft^2, ERI ↓

Central DHW with constant recirculation? ERI ↑

Central heating or cooling with circulation? ERI ↑

IAF reduced the bias against MF, so no new change to ERI ↔

OPP, common area laundry? ERI ↓ ↑

Exhaust-only ventilation in apartments? ERI ↑

When can I use ANSI/RESNET/ICC 301-2019?

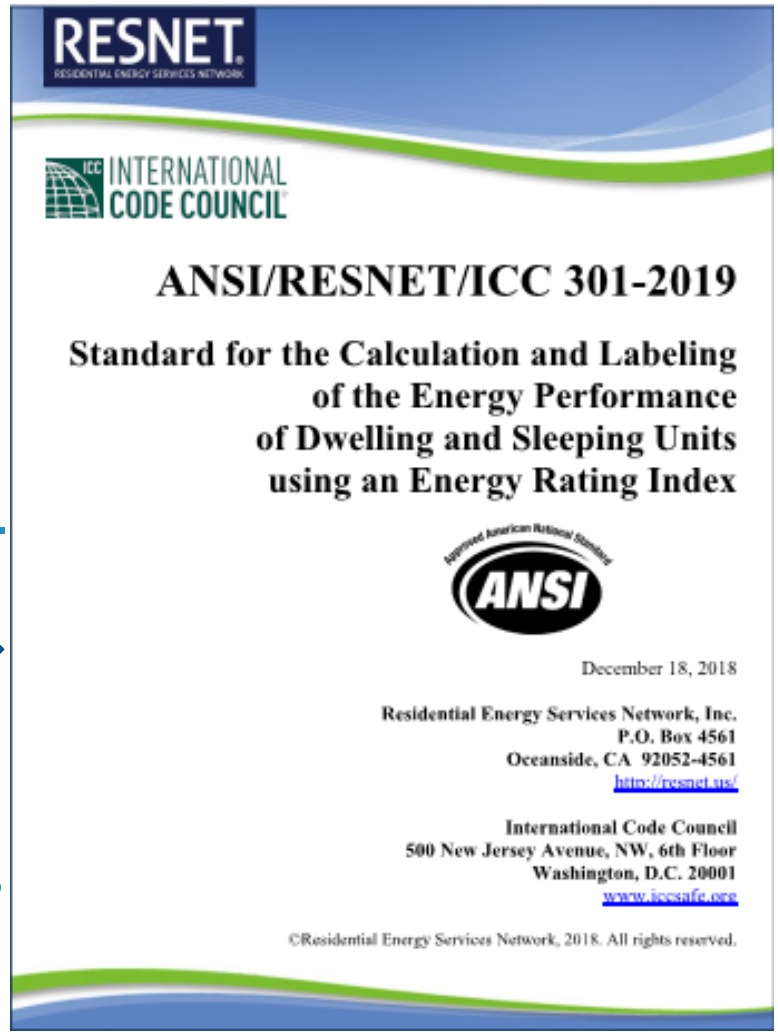
Not until RESNET MINHERS officially references it….

Step 1: Public Comment on Addendum 42 to MINHERS open February 21 – March 22.

Step 2: Respond to public comment. If no changes needed, approve Addendum 42 which references

Effective date: July 1, 2019?

Required for building with permits as of January 1, 2020?


RESNET
RESIDENTIAL ENERGY SERVICES NETWORK

INTERNATIONAL CODE COUNCIL

ANSI/RESNET/ICC 301-2019

Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

ANSI

December 18, 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

Have Questions? Concerns? Opinions?

Questions?

Email RESNET Staff, they forward on to the correct Committee, based on which Standard it relates to

- This is a reply to the individual, so others won't benefit

Interpretation Request?

If you have a question because you are not sure if your interpretation of the Standard is correct, submit an "IR" with your interpretation, and ask "Is this correct?" You will get an answer and so will the rest of the Rating industry

Didn't like 301-2019? Have suggestions for changes?

Submit a proposed amendment in tracked changes

Q&A