MINHERS Addendum 76

Adoption of ANSI/RESNET/ICC 301-2022 and Addenda A and B

Date Approved:	September 30, 2024
Voluntary Compliance Date:	January 1, 2025
Mandatory Compliance Date[1]:	July 1, 2025
Transition Period:	January 1, 2025 – June 30, 2025
Proponent:	SDC 300
Organization:	RESNET

Purpose:

Updates the RESNET HERS® by adopting ANSI/RESNET/ICC 301-2022 plus addenda for the basis of the HERS Index

Amendment:

Modify the MINHERS Chapter 3 as follows:

301 General Provisions

[1] The Mandatory Compliance Date- The date on which compliance with an amendment approved for publication shall be required for any Dwelling Unit or Sleeping Unit with a Building Permit Date on or after that date. Alternatively, the date of the HERS Rater or RFI's first site visit, the date of the application of the permit, or the date of the contract on the home is permitted to be used as the Building Permit Date.

301.1 Purpose

The provisions of this Standard establish residential energy rating and labeling standards, consistent with the provisions of the Energy Policy Act 1992 that any provider of home energy ratings may follow to produce uniform energy ratings for Residential Buildings.

301.2 Scope

These Standards apply to existing or proposed, site-constructed or manufactured Dwelling Units and Sleeping Units in Residential and Commercial Buildings, excepting hotels and motels.

~~**Exception 3**: These Standards also apply to Dwelling Units and Sleeping Units in multifamily buildings over three Stories Above Grade Plane in height, if they are compliant with RESNET's Guidelines for Multifamily Energy Ratings~~.

301.3 Relationship to Other Standards.

This Standard is a companion to Standard MINHERS Chapter 1, "National Accreditation Procedures for Home Energy Rating Systems"; Standard MINHERS Chapter 2, "National Rater Training and Certifying Standard; Standard MINHERS Chapter 6, "National Standard for Sampled Ratings", and; Standard and; MINHERS Chapter 9 "RESNET National Standard for Quality Assurance".

302 Definitions

The following terms of section 302.1 through 302.5 have specific meanings as used in this Standard. In the event that definitions given here differ from definitions given elsewhere, including those given in ANSI/RESNET/ICC 301, the definitions given here shall govern.

302.1 Approved Rating Provider

Shall mean a RESNET-accredited Quality Assurance Provider who is listed in good standing in the National RESNET Registry.

302.2 Approved Software Rating Tool

Shall mean a RESNET-accredited HERS® Rating Tool that has been tested and approved in accordance with RESNET Publication 002 and that is listed in the RESNET National Registry of Accredited Rating Software Programs https://www.resnet.us/providers/accredited-providers/hers-software-tools/

302.3 Approved Tester

Shall mean a RESNET Rater or Rating Field Inspector (RFI) who has been certified by a RESNET-accredited Quality Assurance Provider and who is listed in good standing in the National RESNET Registry.

302.4 Certified Rater

Shall mean a RESNET Rater who has become qualified to conduct home energy ratings through certification by a RESNET-accredited Quality Assurance Provider and who is listed in good standing in the National RESNET Registry.

302.5 Approved IDR Review Authority

Shall mean the RESNET Standards Development Committee 300 (SDC 300).

303 Technical Requirements

303.1 Applicable Standards

All RESNET Home Energy Ratings conducted in accordance with this Standard shall comply with the provisions of ANSI/RESNET/ICC 301, ~~"~~Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index~~."~~ and its MINHERS adopted addenda.

Exception 1: RESNET Home Energy Ratings conducted in Puerto Rico and the US Virgin Islands shall comply with the provisions of ANSI/RESNET/ICC 301, except that Ratings of homes ~~with a permit date prior to January 1, 2024~~ are permitted to use a default infiltration rate of 10 ACH50 in lieu of conducting an airtightness test in accordance with Standard ANSI/RESNET/ICC 380. In addition, for a home in the Tropical Climate Zone for which its Living Space is not serviced by a space heating mechanical system and not more than one-half of its Living Space is serviced by a space cooling mechanical system, the Conditioned Space Volume shall be defined as the volume of its Living Space and the Conditioned Floor Area shall be defined as the floor area of its Living Space.

~~**Exception 2:** RESNET Home Energy Ratings shall comply with the requirements of ANSI/RESNET/ICC 301and its Addenda except that Ratings on homes with a building permit date, or alternate pursuant to Addendum 43, prior to January 1, 2021 are permitted to use the following exception:~~

~~When the following condition is met and documented, duct leakage testing is not required.~~

~~At a pre-drywall stage of construction, 100% of the distribution system and air handler shall be visible and visually verified to be contained inside the Conditioned Space~~

~~Volume. At a final stage of construction, ductwork that is visible and the air handler shall again be verified to be contained in the Conditioned Space Volume.~~

~~To calculate the energy impacts on the Rated Home, a DSE of 0.88 shall be applied to both the heating and cooling system efficiencies.~~

~~**Exception 3:** RESNET Home Energy Ratings conducted on Dwelling and Sleeping Units in multifamily buildings over three stories in height shall comply with one of the following as determined by the Mandatory Compliance Date requirements for ANSI/RESNET/ICC 301-2019 and this section,~~
~~a) ANSI/RESNET/ICC 301-2014 and ANSI/RESNET/ICC 380-2016 and their addenda and with RESNET's Guidelines for Multifamily Energy Ratings, or~~
~~b) ANSI/RESNET/ICC 301-2019 and ANSI/RESNET/ICC 380-2019 and their addenda~~
~~*(Note: Option a) applies only if the building permit was issued prior to January 1, 2022, otherwise HERS ratings must comply with option b).)*~~

Exception 34: RESNET Home Energy Ratings shall be calculated using the modifications of ~~Standards ANSI/RESNET/ICC 301-2019 and~~ ANSI/RESNET/ACCA/ICC 310-2020 established by Addendum 53f. (See Addendum 53f).

Exception 45: Sampled Ratings for Townhouses and Detached Dwelling Units are not permitted. For Sampled Ratings of Attached Dwelling Units, the requirements of MINHERS Chapter 6 shall supersede the requirements of ANSI/RESNET 301-2022, Section 7.1.4.4. ~~The field inspection and testing sampling requirements in the RESNET Guidelines for Multifamily Energy Ratings (consecutive sections titled "Sample Set of Multifamily Dwelling Units" through "Quality Assurance by Multifamily Sampling Providers") are authorized for Sampled Ratings of Dwelling Units and Sleeping Units in multifamily buildings until the MINHERS Chapter 6 or other RESNET standard is updated to include sampling requirements specific to multifamily buildings~~.

Exception 56: ~~RESNET Home Energy Ratings shall comply with the requirements of ANSI/RESNET/ICC 301 and its Addenda except~~ Home Energy Ratings shall be calculated using the rated HVAC equipment efficiency modifications ~~of~~ to Standard ANSI/RESNET/ICC 301~~-2019~~ as follows:

Heating Seasonal Performance Factor 2 (HSPF2) – A standardized measure of Heat Pump efficiency, based on the total heating output of a Heat Pump in Btu and divided by the total electric energy input in watt-hours and under test conditions specified by the Air Conditioning and Refrigeration Institute Standard 210/240 2023.

Seasonal Energy Efficiency Ratio 2 (SEER2) – A standardized measure of Air Conditioner efficiency based on the total cooling output of an Air Conditioner in Btu/h, divided by the total electric energy input, in Watt-hours, under test conditions specified by the Air Conditioning and Refrigeration Institute Standard 210/240 2023.

4.4.4. Air Source Heat Pumps and Air Conditioners.

4.4.4.1. For Heat Pumps and Air Conditioners where a detailed, hourly HVAC simulation is used to separately model the compressor and evaporator energy (including part-load performance), the back-up heating energy, the distribution fan or blower energy and crank case heating energy, the Manufacturer's Equipment Performance Rating (HSPF and SEER[1]) shall be modified to represent the performance of the compressor and evaporator components alone.[2] The energy uses of all components, including compressor and distribution fan/blower and crank case heater, shall then be added together to obtain the total energy uses for heating and cooling.

For Heat Pumps and Air Conditioners with the more recent Manufacturer's Equipment Performance Ratings (HSPF2 or SEER2) available, and HSPF or SEER are not available, these ratings shall be converted to HSPF and SEER values by dividing HSPF2 or SEER2 by the conversion factors in Table 4.4.4.1(1). If the type of equipment is not determined, the conversion shall default to the "Ducted Split System" factors. All calculations, including Equation 4.1-1a, shall use HSPF or SEER values as made available by the Manufacturer or converted as specified in this section.

Table 4.4.4.1(1) SEER2 and HSPF2 Conversion Factors[3]

Equipment Type	SEER2/SEER	EER2/EER[4]	HSPF2/HSPF
Ductless Systems	1.00	1.00	0.90
Ducted Split System	0.95	0.95	0.85
Ducted Packaged System	0.95	0.95	0.84
Small Duct High Velocity System	1.00	Not Applicable	0.85
Ducted Space-Constrained Air Conditioner[5]	0.97	Not Applicable	Not Applicable
Ducted Space-Constrained Heat Pump[5]	0.99	Not Applicable	0.85

1(Normative Note) For Commercial Variable Refrigerant Flow (VRF) Multi-Split Air Conditioning and Heat Pump Equipment, use IEER in place of SEER.

2 (Informative Note) Such approaches are described in Cutler et al. 2011 and Fairey et al. 2004.

3 (Informative Note) Conversion factors developed by AHRI, and adopted by RESNET.

4 EER and EER2 are not required in this Standard for equipment relevant to this table, but the values are shared here for informative purposes.

5(Normative Note) Space Constrained AC or Heat Pump – A space constrained unit is a product that has two overall exterior dimensions or an overall displacement that is substantially smaller than those of other units that are of similar heating and/or cooling capacity, and has rated cooling capacities no greater than 30,000 BTU/hr., and that if increased, would result in considerable increase in cost of installation or utility, and was available for purchase in the United States as of December 1, 2000. (Aligns with Title 20 and AHRI Standard 210/240 definitions.)

303.2 Rating Registration

All Confirmed, Threshold and Sampled HERS Ratings shall be registered with the National RESNET Registry in accordance with Sections 102.1.4.10 and 102.1.4.12.

303.3 HERS Rating Tools

All RESNET-accredited HERS Rating Tools shall prohibit printing of Confirmed, Threshold and Sampled HERS Ratings until such rating has been registered with the National RESNET Registry and a unique registration identification has been assigned. Said registration identification shall be prominently displayed on all printed HERS Rating reports.

304 Normative References

ANSI/RESNET/ICC 301-~~2019~~2022, “Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index.”, including ~~addenda and~~ normative appendices, Addendum A RECs and Addendum B CO_2e and other MINHERS adopted addenda.

ANSI/RESNET/ICC 380-~~2019~~2022, "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", including ~~addenda and~~ normative appendices, Addendum A and other MINHERS adopted addenda.

ANSI/RESNET/ICC310-2020, “Standard for Grading the Installation of HVAC Systems MINHERS- Mortgage Industry National Home Energy Rating Systems”, including normative appendices and MINHERS adopted addenda.

RESNET MINHERS Chapter 1, “National Accreditation Procedures for Home Energy Rating Systems” including addenda.

RESNET MINHERS Chapter 2, “National Rater Training and Certifying Standard” including addenda.

RESNET MINHERS Chapter 6, "RESNET National Standard for Sampled Ratings"

RESNET MINHERS Chapter 9, “RESNET National Standard for Quality Assurance” including addenda.

~~RESNET Guidelines for Multifamily Energy Ratings, August 29, 2014~~
~~Note:~~

~~ANSI/RESNET/ICC 301-2014 Addenda~~

~~ANSI/RESNET/ICC 301-2014 Addendum A-2015, Domestic Hot Water Systems, January 15, 2016~~

ANSI/RESNET/ICC 301-2014 Addendum B-2015, Innovative Design Requests, January 15, 2016

ANSI/RESNET/ICC 301-2014 Addendum D-2017, Standard ANSI/RESNET/ICC 380-2016 and Addenda, January 1, 2018

ANSI/RESNET/ICC 301-2014 Addendum F-2018, Appendix A Inspection Procedures for Insulation Grading and Assessment, July 1, 2019

ANSI/RESNET/ICC 301-2014 Addendum E-2018, House Size Index Adjustment Factors, February 1, 2018

ANSI/RESNET/ICCC 301-2014 Addendum G-2018 , Solid State Lighting, February 2, 2018

ANSI/RESNET/ICC 301-2014 Addendum K-2017, Roof Solar Absorptance Test Standard, November 10, 2017

ANSI/RESNET/ICC 301-2014 Addendum L-2018, Duct Leakage to Outside Text Exception, July 1, 2019

ANSI/RESNET/ICC 301-2014 Addendum N-2018, Appendix B Inspection Procedures for Minimum Rated Features, July 1, 2019

ANSI/RESNET/ICC 301-2014 Addendum R-2018, Threshold Ratings, January 1, 2019

ANSI/RESNET/ICC 301-2014 Addendum T-2018, Thermal Distribution System Efficiency, December 30, 2018

ANSI/RESNET/ICC 380-2016 Addenda

ANSI/RESNET/ICC 380-2016 Addendum A-2017, Attics and Crawlspaces, January 1, 2018