

Draft WD-01 MINHERS Addendum 42, Adoption of Standards ANSI/RESNET/ICC 301-2019 and ANSI/ RESNET/ICC 380-2019

Revise the Sections of the MINHERS as follows

102.1 Minimum Standards for Rating Quality Assurance (QA) Provider Accreditation

102.1.4.2 Field verification of rated features of all homes in compliance with Chapter 3 and **standard ANSI/RESNET/ICC 301, Appendix B**, Inspection Procedures for Minimum Rated Features.

102.1.4.10.1.1.7 Rating Type for the home (**Confirmed, Threshold** or **Sampled**)

102.1.4.10.1.1.8 Home Type (single-family, duplex, low-rise Multi-family)

102.1.4.12 All QA Providers shall collect and register the Energy Simulation File for each home rated (**Confirmed, Threshold** or **Sampled**) by each Certified Rater with RESNET using the RESNET Buildings Registry. The QA Provider will register ratings and maintain this Registry in accordance with the policies and procedures established by RESNET related to the RESNET Buildings Registry.

102.1.4.13 Site data collection manual. All QA Providers shall provide Raters with a manual containing procedures for the on-site collection of data that at a minimum shall include the on-site inspection procedures for minimum rated features for new and existing homes provided in **standard ANSI/RESNET/ICC 301, Appendix B**, Inspection Procedures for Minimum Rated Features.

206.2 Certification

Prior to issuing a candidate's certification, a RESNET Accredited Rating Quality Assurance Provider shall confirm that the candidate has completed at a minimum, all of the following tasks appropriate to their desired certification within a 12-month period (unless otherwise indicated). Only RESNET Accredited Rating Quality Assurance Providers may certify candidates. Rating Providers may require candidates have successfully completed additional instruction beyond these requirements as needed to address their specific program, climate, software, or administrative requirements.

206.2.1 Home Energy Survey Professional (HESP)

206.2.1.1 Complete the national HESP Exam with a minimum (passing) score to be determined by RESNET.

206.2.2 Rating Field Inspector (RFI)

206.2.2.1 Pass the following RESNET Tests:

206.2.2.1.1 The RESNET Combustion Appliance Test

206.2.2.1.2 RESNET approved graded field evaluation

206.2.2.1.2.1 The graded field evaluation shall be performed under the observation of a Candidate Field Assessor.

206.2.2.2 Complete at least three mentored rating field inspections observed by a certified HERS rater or a RESNET Candidate Field Assessor. The certified HERS Rater or RESNET Candidate Field Assessor shall use the RESNET graded field evaluation to document the results of mentored inspections. The mentored Rating Field Inspections shall comprise at a minimum the following tasks.

206.2.2.2.1 Use pressure differential diagnostics to identify intermediate buffer zones including (but not limited to) attics, garages, or crawlspaces.

206.2.2.2.2 Identify insulation defects and account for them in energy analysis tool inputs.

206.2.2.2.3 Identify insulation types, thickness, and alignment with air barriers.

206.2.2.2.4 Measure pressure differences across the [Compartmentalization Boundary](#) imposed by the operation of the home's equipment.

206.2.2.2.5 Perform envelope leakage testing in accordance with the airtightness testing protocols contained in [ANSI/RESNET/ICC 380](#).

206.2.2.2.6 Perform duct leakage testing in accordance with the duct testing protocols contained in [ANSI/RESNET/ICC 380](#) and interpret results.

206.2.2.2.7 Identify room and zone pressure imbalances caused by lack of ducted return air or pressure relief mechanisms such as transfer grilles or jumper ducts.

[206.2.2.2.8](#) Perform CAZ, spillage, and CO testing in accordance with Carbon Monoxide (CO) Test and Depressurization Test for the Combustion Appliance Zone (CAZ) protocols contained in ANSI/ACCA 12 QH, Appendix A, Sections A4 and A5.

206.2.2.3 RFI's shall not complete independent field testing and inspections until they have satisfactorily completed the requisite three mentored rating field inspections per [206.2.2.2](#) and pass the RESNET graded field evaluation.

206.2.2.4 After successfully completing the mentored rating field inspections and passing the RESNET graded field evaluation, RFI's may be permitted to conduct all rating tasks contained under [ANSI/RESNET/ICC 301 Appendix B, Inspection Procedures for Minimum Rated Features](#) without having a certified Rater on site."

206.2.3 Home Energy Rater (HERS Rater)

206.2.3.1 Successfully complete a Rater training course provided through a RESNET Accredited Training Provider that meets the minimum standards as defined in Section 202 - Accredited Training Providers.

206.2.3.2 Complete the following National RESNET HERS series of tests with the minimum (passing) scores to be determined by RESNET:

206.2.3.2.1 Pass the national HERS Rater Test(s)

206.2.3.2.2 The RESNET Combustion Appliance Simulation Tests

206.2.3.2.3 RESNET Rater Simulation Practical Test

206.2.3.3 After passing the all of the RESNET tests, but prior to being certified, the candidate shall complete five probationary ratings with a Rating Quality Assurance Provider overseen by a RESNET certified Candidate Field Assessor. At least three of the five probationary ratings shall be accomplished using field verification of all rated features of the home in accordance with [ANSI/RESNET/ICC 380](#) and shall be completed in the presence of a RESNET Certified Field Assessor, at least one of which shall be completed one-on-one. Probationary ratings shall not be considered Confirmed Ratings.

206.2.3.4 A HERS Rater Candidate that does not complete, to the satisfaction of a Quality Assurance Provider, a minimum of three (3) of the five (5) required probationary ratings within fifteen (15) months of passing the National RESNET HERS series of tests as defined in 205.2.3.1, or otherwise does not achieve certification within the allowed fifteen month timeframe, must at a minimum, complete the original requirements and do the following in order to maintain eligibility for certification:

206.2.3.4.1 Pass the RESNET National Rater Test again; and

206.2.3.4.2 Complete three (3) additional probationary ratings. One of the three (3) additional probationary ratings shall be accomplished using field verification of all rated features of the home in accordance with Section 303.8 and Chapter 8, with the exception that the work is not being performed by a currently Certified Rater and shall be completed in the presence of a RESNET certified Candidate Field Assessor. Probationary ratings shall not be considered Confirmed Ratings.

208 Capabilities

Certified individuals shall have certain capabilities to perform the work required under their certification. The [capabilities for each certification category](#) listed in this section are contained in [Chapter 3, Standard ANSI/RESNET/ICC 380](#), and [Standard ANSI/RESNET/ICC 301 Appendix B, Inspection Procedures for Minimum Rated Features](#). Certification candidates shall demonstrate proficiency at these capabilities through successful completion of certification requirements specified in [See Section 206 Certification Candidates](#). Training providers should ensure that their curricula effectively cover these items.

208.2 Rating Field Inspector (RFI)

A Rating Field Inspector is permitted to conduct all tasks contained within [ANSI/RESNET/ICC 301 Appendix B, Inspection Procedures for Minimum Rated Features](#). A Certified Rating Field Inspector shall have proficiency at the capabilities of a HESP in addition to the following items.

208.2.1 General

208.2.1.1 Use field inspection forms to identify and document the minimum rated features of the Reference Home and Rated Home in accordance with the requirements of [ANSI/RESNET/ICC](#)

[301](#) – Energy Rating Reference Home and Rated Home Configuration and [ANSI/RESNET/ICC 301 Appendix B, Inspection Procedures for Minimum Rated Features](#).

208.2.1.2 Identify potential problems with the building such as health and safety concerns, building durability issues, potential comfort problems, and possible elevated energy use.

208.2.1.3 Identify basic home construction types and the ramifications of these for energy usage.

208.2.2 Determining Conditioned Space Volume

208.2.2.1 Determine the Conditioned Space Volume as defined in Appendix B.

208.2.3 Health and Safety

208.2.3.1 Identify problems related to poor indoor air quality (IAQ), building durability, and human comfort.

208.2.3.2 Identify potential presence of mold and potential causes.

208.2.4 Moisture Principles and Properties

208.2.4.1 Identify potential or existing moisture issues (bulk water intrusion, capillary action, air transport, vapor diffusion).

208.2.5 Measuring Building Components

208.2.5.1 Use construction documents such as building drawings and specification sheets, or actual measured building dimensions to produce a scaled and dimensioned sketch of a home.

208.2.6 Collecting Field Data (including photo documentation)

208.2.6.1 Determine building orientation.

208.2.6.2 Measure window overhang lengths, heights, and distances from top and bottom of windows.

208.2.6.3 Determine roof slopes, gable heights, etc.

208.2.6.4 Calculate gross and net areas and volumes.

208.2.7 Insulation

208.2.7.1 Identify insulation types, thickness measurements, common usage locations, and alignment with air barriers.

208.2.7.2 Identify insulation defects, and grading (I, II, III).

208.2.8 Building Foundations

208.2.8.1 Identify type as crawl space, basement, or slab.

208.2.8.2 Identify ventilation system types.

208.2.8.3 Identify location, type, and R-value of insulation systems.

208.2.9 Framed Floors

208.2.9.1 Determine if framed floors are exposed to Conditioned Space Volume, Unconditioned Space Volume, or the outdoors.

208.2.9.2 Determine floor system type and frequency of framing members.

208.2.9.3 Determine insulation thickness, type, and grade (I, II, or III).

208.2.10 Slab-on-Grade

208.2.10.1 Identify slab as covered or exposed.

208.2.11 Above Grade Walls

208.2.11.1 Determine if walls are exposed to Conditioned Space Volume, Unconditioned Space Volume, or outdoors.

208.2.11.2 Determine construction type, thickness, and exterior color.

208.2.12 Windows and Doors

208.2.12.1 Identify window labels, framing types and materials, U-factors, reflective and low-e films and coatings, shading and overhangs, and orientation.

208.2.12.2 Identify exterior door types, insulation, and orientation.

208.2.12.3 Identify glass-area of exterior doors and windows.

208.2.13 Heating and Cooling Systems

208.2.13.1 Determine equipment efficiencies using equipment data (make, model, nameplate data), AHRI or other current accepted guides, or age-based defaults.

208.2.13.2 Identify space-conditioning systems as active or passive.

208.2.13.3 Identify heating system properties: fuel type, burner type, venting type, distribution type, and efficiency.

208.2.13.4 Identify Ground-source heat pumps, air-source heat pumps, and air conditioning systems.

208.2.13.5 Identify ductless systems (hydronic, steam, electric).

208.2.13.6 Identify combo systems.

208.2.13.7 Identify solar thermal systems.

208.2.13.8 Identify control types (standard thermostats, programmable thermostats, multi-zone controls).

208.2.13.9 Identify sizing and design issues, control types, and their impacts on energy use and humidity control.

208.2.13.10 Identify summer and winter design temperatures.

208.2.13.11 Identify cooling and heating system design trade-offs.

208.2.14 Gas Leakage Testing

208.2.14.1 Identify gas leaks using combustible gas sensing equipment.

208.2.15 CAZ Testing

208.2.15.1 Perform CAZ depressurization, spillage, and CO testing in accordance with Carbon Monoxide (CO) Test and Depressurization Test for the Combustion Appliance Zone (CAZ) protocols contained in ANSI/ACCA 12 QH, Appendix A, Sections A4 and A5.

208.2.15.2 Identify room and zone pressure imbalances caused by lack of ducted return air or pressure relief mechanisms such as transfer grilles or jumper ducts.

208.2.15.3 Identify gas leaks using combustible gas sensing equipment. If a leak is found, recommend that a certified technician repair the leak.

208.2.16 Air Leakage

208.2.16.1 Identify air leakage mechanisms and drivers, energy and comfort implications, and health and safety issues.

208.2.16.2 Perform single-point and multi-point [airtightness](#) testing in accordance with the airtightness testing protocols contained in [ANSI/RESNET/ICC 380](#).

208.2.16.3 Identify potential air sealing using zonal pressure differentials and measurement techniques.

208.2.16.4 Measure pressure differences across the [Compartmentalization Boundary](#) imposed by the operation of the home's equipment.

208.2.17 Conditioned Air Distribution Systems

208.2.17.1 Identify impacts of designed and imposed flaws (closed interior doors, blocked registers and grilles, air handler filters, etc).

208.2.17.2 Identify duct supply and return types (flexible, rigid metal, building chase, insulated panels) and locations with respect to thermal and air barriers.

208.2.17.3 Identify room and zone pressure imbalances caused by lack of ducted return air or pressure relief mechanisms such as transfer grilles or jumper ducts.

208.2.17.4 Perform duct leakage testing in accordance with the duct testing protocols contained in [ANSI/RESNET/ICC 380](#) and recommend sealing as needed based on test results.

208.2.17.5 Determine need for duct insulation in Unconditioned Space Volumes and specify thickness of retrofit insulation if needed.

208.2.18 Ventilation

208.2.18.1 Identify fresh air ventilation from supply, exhaust and balanced flow systems.

208.2.18.2 Identify heat-recovery ventilation (HRV) and energy-recovery ventilation (ERV) systems.

208.2.18.3 Determine HRV or ERV efficiency, fan power and duty cycle characteristics.

208.3 Home Energy Rating System Rater (HERS Rater)

A Certified Home Energy Rater shall have proficiency at the knowledge and abilities of a HESP and a Rating Field Inspector in addition to the following.

208.3.1 General

208.3.1.1 Understand and be familiar with local climate conditions, housing stock, and climate-specific practices.

208.3.1.2 Understand local utility pricing structures (flat vs. tiered rates, net-metering regulations) and sources for reliable utility information.

208.3.1.3 Prepare a detailed work scope.

208.3.1.4 Develop field inspection forms.

208.3.1.5 Identify major U.S. climate zones and energy consumption impacts of local climate zone.

208.3.2 RESNET Rating System

208.3.2.1 Communicate the business aspects of being a RESNET HERS Rater.

[208.3.2.2 Maintain current knowledge of the HERS Rating method using the Reference Home as defined in ANSI/RESNET/ICC 301.](#)

208.3.2.3 Conduct both projected and confirmed building simulation and performance analysis to provide HERS Ratings in accordance with the requirements in [Chapter 3 and Standards ANSI/RESNET/ICC 301](#) and [ANSI/RESNET/ICC 380](#).

208.3.2.4 Use RESNET approved energy analysis software capable of producing a HERS Index, data entry procedures, reporting, and analysis of results.

208.3.2.5 Calculate HERS Score computation using the Normalized Modified Loads Rating Method.

208.3.2.6 Communicate the benefits of the Home Energy Rating System to homeowners, builders, finance and real estate agents and cultivate partnerships between those individuals.

208.3.2.7 Assist and educate customers and builders with:

208.3.2.7.1 Home Energy Surveys and Home Energy Ratings.

208.3.2.7.2 Cost effectiveness of energy efficient building design.

208.3.2.7.3 Quality assurance.

208.3.2.7.4 Marketing of HERS Rated Homes.

208.3.2.7.5 Qualifications for programs such as ENERGY STAR®.

208.3.2.7.6 Real estate financing, economic terminology, and energy code compliance.

208.3.2.7.7 Financing advantages of Energy Efficient Mortgages (EEM) and Energy Improvement Mortgages (EIM).

208.3.2.7.8 Adding appraisal value through energy improvements.

208.3.2.8 Provide excellent customer service in an ethical and fully disclosed manner.

208.3.2.9 Produce reports which meet minimum reporting requirements and improvement analysis.

208.3.2.10 Maintain standard operating procedures and office administration.

208.3.2.11 Maintain knowledge of current technical guidelines.

210 Normative References

ANSI/ACCA 12 QH-2014, Home Evaluation and Performance Improvement

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.”, including addenda and normative appendices.

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”, including addenda and normative appendices.

301 General Provisions

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**.

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 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 http://www.resnet.us/professional/programs/energy_rating_software

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.”

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, “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.

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”, including addenda and normative appendices.

MINHERS- Mortgage Industry National Home Energy Rating Systems

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 Publication 002-2017, “Procedures for Verification of RESNET Accredited HERS Software Tools”

602.6 Application of Sampling

The application of the sampling controls in this standard are only required for those tests and inspections that are not conducted on every home. Sampling controls shall be conducted for any tests and inspections not conducted on every home, according to the field testing and inspection requirements of Standards ANSI/RESNET/ICC 301, Appendix B and ANSI/RESNET/ICC 380.

Chapter 8- RESNET STANDARD FOR COMBUSTION SAFETY TESTING AND WORK SCOPE

903.4.1.1 For each Rater, the Provider’s QA Designee shall be responsible for an annual QA file review of the greater of one (1) home or ten percent (10%) of the Rater’s annual total of homes for which Confirmed, Threshold or Sampled Ratings were provided. When determining the number of homes to review for a Rater, round up to the next whole number when the percentage calculation yields a decimal point, e.g. 101 homes x 10% = 10.1 means that 11 homes shall be reviewed.

903.4.1.3.3 For each Confirmed Rating, confirm that the values entered into the Rating Software for all Minimum Rated Features are supported by actual on-site field-verified test data;

903.4.2.1 For each Rater, the Provider's QA Designee shall be responsible for an annual on-site QA field review of the greater of one (1) home or one percent (1%) of the Rater's annual total of homes for which Confirmed, Threshold or Sampled ratings and diagnostic testing services were provided. When determining the number of QA field reviews to complete for a Rater, round up to the next whole number when the percentage calculation yields a decimal point, e.g. 101 homes x 1% = 1.01 means that 2 QA field reviews shall be completed.

903.4.2.2 QA field reviews for Rating Field Inspectors (RFIs)

903.4.2.2.1 For Raters utilizing Rating Field Inspectors (RFI's), the QA Designee shall ensure that a QA field review is completed on the greater of one (1) home or one percent (1%) of each RFI's annual total of homes for which Confirmed, Threshold or Sampled ratings and diagnostic testing services were provided by the RFI. The RFI QA field reviews may fulfill all or a portion of the Rater's annual QA field review requirement.

903.4.2.5 As part of the QA field review of Confirmed Ratings, the QA Designee shall ensure that the minimum rated features of a rating are independently confirmed (i.e. confirmation of geometric characteristics, inspection of minimum rated features, and completion of any necessary performance testing) to determine whether the rating and/or diagnostic testing were accurately completed by the Rater, and determine whether information was completely collected and reported as required in Chapter 3 of these Standards.

1005 References

ACCA - Air Conditioning Contractors of America (2800 Shirlington Road, Suite 300, Arlington, VA, 22206; tel: 703/575-4477; <http://www.acca.org>)

ACCA 4 QM - 2007 Maintenance of Residential HVAC Systems in One- and Two-Family Dwellings Less Than Three Stories

ACCA 5 QI -2010 HVAC Quality Installation Specification

ACCA 6 QR- 2007 Standard for Restoring the Cleanliness of HVAC Systems

ACCA 9 QIvp. 2011 HVAC Quality Installation Verification Protocols

ACCA 12 QH 201X Existing Home Evaluation and Performance Improvement

RESNET - Residential Energy Services Network (P.O. Box 4561, Oceanside, CA, 92052-4561; 1-800-836-7057; <http://www.resnet.us>)

Mortgage Industry National Home Energy Rating Standard
RESNET National Standard for Home Energy Audits
Rating and Home Energy Survey Ethics and Standards of Practice
RESNET Standards for Qualified Contractors and Builders

Appendix A- ON-SITE INSPECTION PROCEDURES FOR MINIMUM RATED FEATURES

See ANSI/RESNET/ICC 301-2019 Normative Appendix B for Inspection Procedures for Minimum Rated Features

Delete the content of Appendix A in its entirety and leave the heading with added reference.

Appendix B- Glossary of Terms

ACCA

[Air Conditioning Contractors of America](#)

ACCA QA Program

A quality assurance recognition program for HVAC contractors, in which participants (1) attest that they have implemented written policies and procedures in the ANSI/ACCA 5 QI-2010 Standard to effect quality on a consistent basis in the field, (2) complete and submit a detailed HVAC system installation checklist, and (3) have specific elements of the installation validated by a 3rd party Rater for compliance to the ENERGY STAR® New Homes Program requirements. More information can be found at <http://www.acca.org/qa>

Accreditation Identification Number (AIN)

A unique accreditation number assigned to each Rating Quality Assurance Provider.

Accreditation Committee

A Standing Committee of the RESNET organization that is responsible for the review and approval of all Applications for Provider accreditation submitted to RESNET.

Accredited Rating Quality Assurance or QA Provider

A Rating Quality Assurance Provider accredited by RESNET in accordance with [Chapter 1](#) and [Chapter 9](#) of the RESNET Standards to certify and perform quality assurance of Raters.

Accredited Rater Training Provider or Accredited Training Provider or Training Provider or Rater Trainer

A Rater Training Provider accredited by RESNET in accordance with [Chapter 2](#) and [Chapter 9](#) of RESNET Standards to instruct individuals to become Raters certified by Accredited Rating Quality Assurance Providers. Only RESNET Accredited Rater Training Providers may offer rater instruction and set up the national rater tests.

Additional Failure

When additional instances of initial failure(s) are identified in one or more of the other homes in the sample set being tested or inspected.

Air Barrier

Any solid material installed to control air leakage either into or out of the Compartmentalization Boundary. The material used shall have an air permeability not to exceed 0.004 cubic feet per minute per square foot under a pressure differential of 0.3 in. water (1.57 psf) (0.02 L/s.m² @ 75 Pa.) when tested in accordance with ASTM E 2178-01.

Infiltration

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index..

ANSI

American National Standards Institute

Approved IDR Review Authority

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

Approved Rating Provider

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

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 http://www.resnet.us/professional/programs/energy_rating_software

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.

As-measured Carbon Monoxide

A direct measurement of carbon monoxide CO in a sample of air or flue gas, usually measured in ppm (parts per million) units. (See “air-free carbon monoxide.”)

ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers

ASTM

ASTM International, originally known as the American Society for Testing and Materials (ASTM)

Back Draft

Sustained downdraft during burner operation.

Bedroom

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index.*BPI*

Building Performance Institute

Building Permit Date

The date on which the permit authorizing the construction of a building is issued by the authority having jurisdiction to issue such permits.

CAZ

See “Combustion appliance zone”

Carbon Monoxide (CO)

An odorless, colorless gas that can cause illness or death.

Carbon Monoxide Emissions

Carbon monoxide (CO) resulting from combustion as measured in ppm (parts per million). The measurement of CO emissions in flue gas requires a sample to be taken before dilution air enters the venting system. (See “air-free carbon monoxide” and “as-measured carbon monoxide.”)

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.

Climate Zone

A geographical area defined as having similar long-term climate

Combustion Appliance Zone (CAZ)

A contiguous air volume within a building that contains a combustion appliance; the zone may include, but is not limited to, a mechanical closet, mechanical room, or the main body of a house, as applicable.

Compartmentalization Boundary - See the definition in standard ANSI/RESNET/ICC 380 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.

Complaint Resolution Officer (CRO)

The individual assigned to manage complaint and resolution procedures for the CEQ Provider.

Conditioned Floor Area (CFA)

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index.

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Conditioned Space Volume

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index.

Confirmed Rating

A Rating accomplished using data gathered from verification of all rated features of the home in accordance with [Chapter 3- National Home Energy Rating Technical Standards](#) and [ANSI/RESNET/ICC 380](#) .

Contractor Education and Qualification Provider (CEQ Provider)

An organization approved by RESNET in accordance with the requirements of these guidelines to train and prepare individuals to be an Energy Smart Contractor's Designated Qualification Representative and to perform the other duties of a Contractor Education and Qualification Provider established herein.

Data Collection

The gathering of information on building energy features, energy use history and other relevant building and building operation information.

Design Temperature

99.0% (heating) or 1.0% (cooling) design temperature as published in the ASHRAE Handbook of Fundamentals for the city where the home is located or the most representative city for which design temperature data are available.

Diagnostic Testing

The use of building performance-testing equipment (e.g. blower door, duct blaster, flow hood, infrared camera, CO monitor, etc.) to measure, assess and document specific performance characteristics of the building system.

Dilution Air

Air that enters a draft diverter or draft regulator from the room in which the appliance is located.

Downdraft

Air flow from a chimney or venting system into an enclosed building space.

Draft

A pressure difference that causes combustion gases or air to move through a vent connector, flue, chimney, or combustion chamber.

Draft Diverter

A nonadjustable device built into an appliance or a part of a vent connector that is intended to (1) permit the escape of flue gases in the event of a blockage or backdraft; (2) prevent a downdraft of outdoor air from entering the combustion chamber of an appliance; (3) reduce the effect of the chimney's stack action; and (4) lower the dew point temperature of the flue gas by the infusion of room air.

Draft Regulator

A self-regulating damper attached to a chimney or vent connector for the purpose of controlling draft: A draft regulator can reduce draft; it cannot increase draft.

Dwelling
See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

Dwelling Unit

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

Effective Date

The date on which an amendment approved for publication shall be first allowed, but not required, to be used on any Dwelling Unit or Sleeping Unit. For an amendment that requires a change to Approved Software Rating Tools, the date by which updated Approved Software Rating Tools shall be approved and listed.

Energy Efficiency Program, or EEP

See "Third-Party Energy Efficiency Program"

Energy Analysis Tool

A computerized calculation procedure for determining a home's energy efficiency rating and estimating annual purchased energy consumption and cost.

Energy Efficiency Rating, or Energy Rating

See Home Energy Rating.

Energy Saving Measure, or Feature

Any material, component, device, system, construction method, process, or combination thereof that will result in a reduction of energy use.

Energy Simulation File

The complete set of input data used by a RESNET-accredited rating software tool to determine the Home Energy Rating for the specified home as listed in Section 102.1.4.11 of these Standards.

Energy Smart Contractor

A home improvement contracting company that has been approved by a CEQ Provider to implement energy-saving work scope recommendation prescribed by a certified CHERS Rater or Building Performance Auditor. A home improvement company from any of the trade categories defined on the Directory, who is compliant with the RESNET training, examination and the program requirements contained herein is eligible for designation as Energy Smart and may be listed on the Directory

Energy Smart Contractor Directory (Directory)

A listing of approved Energy Smart Contractors that is posted on the RESNET website.

Energy Smart Contractor Candidate for Recognition (Candidate)

A company with a Designated Qualification Representative who intends to become an Energy Smart Contractor, who shall list itself in the Candidate section, and who shall have 90 days to complete its qualification requirements and receive approval by a CEQ Provider. If the Candidate has not been approved within the time limits, their listing will be removed.

Energy Smart Contractor Representative (Representative)

An individual employed by or a representative of an Energy Smart Candidate, with the necessary level of authority who shall take the required course, pass the RESNET core exam, and otherwise ensure that the contractor, once approved as an Energy Smart Contractor, complies with the terms and conditions of the Directory.

Energy Smart Improved Home

A home that has undergone an Energy Smart Project for which the estimated energy savings calculated by an Independent Rater/Auditor using RESNET-approved software amounts to no less than a 30% reduction in estimated energy usage as a result of the improvements. A home that meets these requirements shall be labeled with the language, "This home is designated as an Energy Smart Home. As such, the estimated energy usage of the home has been reduced by XX%. It is estimated that the improvements to this home will save approximately \$XXX per year."

Energy Smart Project

A home performance improvement project with the goal of achieving a 30% reduction in estimated energy usage. The project shall be completed by an Energy Smart Home Performance Team; as such it must involve at least one Energy Smart Contractor and an Independent RESNET Rater/Auditor, one of which acts as the Project Manager, and in which applicable improvement measures are installed by one or more Energy Smart Contractors based upon the assessment and work scope from a RESNET Rater/Auditor. An Energy Smart project shall include Final Verification of the project post-improvement by an Independent Rater/Auditor, who shall calculate the estimated energy savings using RESNET-approved software.

Energy Smart Project Manager

The company or individual with whom the homeowner contracts for the coordinated installation of comprehensive energy-saving retrofits prescribed by a certified Rater/Auditor, and who is responsible for the duties of Project Manager. The Energy Smart Project Manager could be the Rater/Auditor or an Energy Smart Contractor that meets the additional qualification defined in Section 1004.6.

Energy Smart Home Performance Team (Energy Smart Team)

A team consisting of Energy Smart contracting companies and a RESNET certified Rater/Auditor who can collectively prescribe, complete and verify an Energy Smart Home Project.

Ethics and Appeals Committee

A Committee that is responsible for investigating ethics and consumer complaints and hearing a Provider's appeal of its non-approval or renewal of an application, probation, suspension, or revocation.

Evaluation

An analysis of the data collected from any survey or audit, on-site data collection and performance testing, available energy usage records to determine energy use and potential savings from improvements.

Examination

Test developed by RESNET and administered by an Accredited Rater Training Provider.

Excess Air

Air supplied to a burner in excess of the amount needed for complete combustion.

Failed Item
A "failed item" constitutes a category of failure, such as insulation installation, duct leakage, prescriptive air sealing requirements, insulation enclosure, eave baffles, mechanical system efficiency, window specifications, etc. For the purpose of follow-up inspections, a "failed item" is not limited to the specific instance in a home but to that category of the minimum rated features as it applies to that home design.

Failure (as used in Chapter 6)

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index..

Final Verifier

The Final Verifier must be an independent RESNET Rater/Auditor that did not conduct the initial Energy Smart Project rating/audit, or that does not have a financial interest in any of retrofit work done for the Energy Smart Project, or that is not employed by a company who performs any part of the retrofit work

Flame Rollout

A condition in which burner flames discharge from the cabinet of a combustion appliance.

HERS Index

A numerical integer value that represents the relative energy use of a Rated Home as compared with the energy use of the HERS Reference Home and where an Index value of 100 represents the energy use of the HERS Reference Home and an Index value of 0 (zero) represents a home that uses zero net purchased energy.

Home

A Dwelling Unit or Sleeping Unit.

Home Energy Assessment

Defined by this standard as one of two levels of energy assessment of a home, including Home Energy Survey and Comprehensive Home Energy Audit.

Home Energy Rater, or HERS Rater or Rater

An individual meeting the minimum training requirements for Raters set forth in [Chapter 2](#) of these Standards, documented by an Accredited RESNET Training Provider, and certified by an Accredited Rating Quality Assurance Provider to inspect a home to evaluate the minimum rated features and complete Home Energy Ratings (see also Rating Field Inspector).

Home Energy Rater Candidate, or Rater Candidate

An individual who has received instruction from a RESNET Accredited Training Provider and has passed the required RESNET tests.

Home Energy Rating, or Rating

An unbiased indication of a home's relative energy performance based on consistent inspection procedures, operating assumptions, climate data and calculation methods in accordance with the "National Energy Rating Technical Standards" ([Chapter 3](#) of this Standard). See also "Rating, Confirmed" and "Rating, Projected".

Home Energy Rating Quality Assurance Provider, or HERS QA Provider, or Rating Provider

See Accredited Rating Quality Assurance Provider.

Home Energy Rating (HERS) Software Provider

An organization that develops software accredited by RESNET for use in home energy ratings.

Home Energy Rating System, or HERS®

The procedures, rules and guidelines by which Home Energy Ratings are conducted by accredited Providers (Rating Quality Assurance, Software, Training, Sampling), as specified in these Standards.

Home Energy Survey

A level of the RESNET Home Energy Audit process defined by this standard to include one of the following: Diagnostic Home Energy Survey, In-Home Home Energy Survey, On-Line Home Energy Survey

Home Energy Survey, In-Home

A level of the RESNET Home Energy Assessment process defined by this standard intended to assess both the general energy performance of the home and the level of the commitment to action on the part of the homeowner. The survey may include data be collected and reported on-line by the homeowner or by a home energy survey professional for the purpose of further analysis and general identification of home performance problems. The intent of the energy survey is to refer homeowners to the next level if it is determined that the home needs further analysis, and the homeowner is motivated to invest in improvements. The On-Line or In-Home Home Energy Survey is not required if the homeowner wishes to directly pursue a Diagnostic Home Energy Survey or Comprehensive Home Energy Audit.

Home Energy Survey, On-Line

A basic energy review of a home using an internet-based tool or software.

Home Energy Survey Provider

An organization accredited by RESNET in accordance with Section 703 of the Mortgage Industry National Home Energy Rating Systems Standards to certify Home Energy Survey Professionals to perform Home Energy Surveys and Auditors to perform Comprehensive Home Energy Audits in accordance with this Standard, and to maintain QUALITY assurance of the Home Energy Survey.

Home Energy Survey Professional (HESP)

An individual certified by an accredited Home Energy Survey Provider to conduct Home Energy Surveys.

Home Performance Assessment

A detailed evaluation of the condition of a home as a building system, including evaluation of all materials, components, features, systems and subsystems that affect the energy use of the home.

HVAC

Heating, Ventilating and Air Conditioning.

IECC

International Energy Conservation Code.

Independent Rater/Auditor

A RESNET Rater/Auditor who performs Final Verification of an Energy Smart Project in accordance with these sections and is certified by a RESNET-accredited Rating Provider in accordance with RESNET Standards. Independent Rater/Auditors shall be independent of the Auditor/Rater or Contractor(s) who installed the recommended measures, and may receive no financial compensation for any of the retrofits performed on the project.

Infrared Imaging System

An instrument that converts radiation differences associated with surface temperature variations into a two dimensional image by assigning specific colors or tones to the differing temperatures.

In-Home Home Energy Survey

A level of the RESNET Home Energy Assessment process defined by this standard intended to assess both the general energy performance of the home and the level of the commitment to action on the part of the homeowner. The survey may include data be collected and reported on-line by the homeowner or by a home energy survey professional for the purpose of further analysis and general identification of home performance problems. The intent of the energy survey is to refer homeowners to the next level if it is determined that the home needs further analysis, and the homeowner is motivated to invest in improvements. The On-Line or In-Home Home Energy Survey is not required if the homeowner wishes to directly pursue a Diagnostic Home Energy Survey or Comprehensive Home Energy Audit.

Initial Failure

When one or more failure(s) are first identified in a home during the sampling process.

International Energy Conservation Code (IECC)

The model code for building energy conservation as promulgated by the International Code Council.

Interim RESNET Standard or Addendum

A time-critical standard or addendum published by RESNET in accordance with its Standards Development Policy and Procedures Manual or its Standards Development Policy and Procedures Manual for Non-ANSI/RESNET Standards, which requires immediate implementation prior to completion of the final standard development process.

Light Fixture

A complete lighting unit consisting of a lamp or lamps, and ballasting (when applicable) together with the parts designed to distribute the light, position and protect the lamps, and connect the lamps to the power supply. For built-in valence lighting, strings of low-voltage halogens, and track lights, each individual bulb shall count as a fixture.

Low-Volume Raters

Raters which complete less than twenty five (25) ratings per year or less than fifty (50) ratings over a two year period.

Metropolitan Area

Metropolitan and micropolitan statistical areas as defined by the United States Office of Management and Budget (OMB) and published by the United States Census Bureau at <http://www.census.gov> (the most current edition). In areas not included in any defined Metropolitan Area, individual counties may be substituted for the purpose of applying the sampling process.

Model Energy Code: 1993 (MEC '93)

The building energy code as promulgated by the Council of American Building Officials (CABO) in 1992 as amended in 1993. The RESNET representation of MEC '93 is the HERS Reference home as defined in the "Mortgage Industry National Home Energy Rating Standards" dated 1999.

Minimum Rated Features

The characteristics of the building elements which are the basis for the calculation of end use loads and energy consumption for the purpose of a Home Energy Rating, and which are evaluated by Home Energy Raters or Rating Field Inspectors, in accordance with ANSI/RESNET.ICC 301, Appendix B, in order to collect the data necessary to create a Home Energy Rating using an Approved Rating Software Tool.

National HERS Rater Test

Computer-based examination developed and administered by RESNET.

National RESNET Registry

The national online registry of all rated homes and Certified Raters and Accredited Home Energy Rating Providers which is maintained by RESNET.

On-Line Home Energy Survey

A level of the RESNET Home Energy Survey in accordance with this Standard that is a basic energy review of a home using an internet-based tool or software.

Performance Testing

Testing conducted to evaluate the performance of a system or component using specified performance metrics.

Probationary Rating

Ratings conducted by a Rater Candidate while supervised by a Candidate Field Assessor under the auspices of an Accredited RESNET Rating Provider.

Projected Rating

A Rating accomplished using minimum rated feature data derived from home plans and specifications or based on a site audit for a to-be-improved home which have not yet been implemented in the field. Projected Ratings are commonly generated prior to the construction of a new building or prior to the implementation of energy-efficiency improvements to an existing building.

Publication Date

Following approval by the Standards Management Board, the date on which an amendment is officially published with a title and/or reference number. This date indicates that an amendment is final, but it shall not be used until the Effective Date.

Purchased Energy

The portion of the total energy requirement of a home purchased from a utility or other energy supplier.

Quality Assurance (QA)

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

Quality Assurance Data File (QA Data File)

The collection of data that comprises the complete quality assurance information for a specific Home Energy Rating, including take-off forms, field data collection forms, energy simulation files, building plans, RESNET Standard Disclosure Forms, rating certificates, rating reports, QA records (including findings and the resolution of any issues), photo documentation, as well as any documentation required by Third-Party Energy Efficiency Programs (EEP's) such as checklists, copies of labels or third-party certificates), and the names of each certified individual (i.e. Raters and/or Rating Field Inspectors) who worked on the rating (field inspections, modeling, etc.).

Quality Assurance Designee (QA Designee)

An officer, employee, or contractor responsible for quality assurance within a Provider organization, who has met the requirements of section 905.3 of this Chapter and has signed an agreement with the Provider to be the Provider's QA Designee.

Quality Assurance Designee Delegate (QA Delegate)

An individual certified as a Home Energy Rater, appointed by a Quality Assurance Designee to complete a portion of the Quality Assurance process, who has met the requirements of section 904.7 of this Chapter.

Quality Assurance Designee, Primary (Primary QA Designee)

The one QA Designee for a Provider who shall have ultimate responsibility, on behalf of the Provider, for fulfilling the Provider's QA requirements/responsibilities and who shall be the single point of contact to RESNET regarding all Quality Assurance matters.

Quality Assurance Committee (QA Committee)

A Standing Committee of the RESNET organization that is responsible for the oversight of RESNET's rating quality assurance program, review and ruling on the merits of formal Ethics and Consumer Complaints received by RESNET, and review and rule on the merits of all appeals of non-approval or renewal of an application, probation, suspension, or revocation.

Quality Assurance Plan

A QA Provider's written quality assurance processes and procedures as specifically required in [Chapter 9](#) of these Standards.

Rated Home

The specific home being evaluated using the Home Energy Rating procedures contained in Chapter 3 and ANSI/RESNET/ICC 301.

Rater

See Home Energy Rater.

Rater Candidate

See Home Energy Rater Candidate.

Rater Instructor, Certified

An individual certified by RESNET and designated by an Accredited Training Provider to provide instruction and assistance to candidates. Only RESNET Certified Rater Instructors may provide rater instruction under the auspices of a RESNET Accredited Training Provider.

Rater Training Provider, Training Provider or Rater Trainer

See Accredited Rater Training Provider

Rating

See Home Energy Rating.

Rating Field Inspector (RFI)

A Field Inspector is the entry level of Rater certification. A Field Inspector under the direct supervision of a certified home energy Rater may conduct the inspections and necessary basic performance tests (blower door& duct blaster) to produce a home energy rating. This category requires the ability to identify and quantify building components and systems.

Rating Index

See HERS Index.

Rating Quality Assurance Provider or QA Provider

See Accredited Rating Quality Assurance Provider.

Rating, Projected

A rating performed prior to the construction of a new building or prior to implementation of energy-efficiency improvements to an existing building.

Rating Sampling Provider

See Sampling Provider.

Rating Software

A computerized procedure that is accredited by RESNET for the purpose of conducting home energy ratings and calculating the annual energy consumption, annual energy costs and a HERS Index for a home.

Rating Tool

A computerized procedure for calculating a home's energy efficiency rating, annual energy consumption, and annual energy costs.

Reference Home

A hypothetical home configured in accordance with the specifications set forth in Chapter 3 and Standard ANSI/RESNET/ICC 301 as the basis of comparison for the purpose of calculating the relative energy efficiency and Home Energy Rating Index of a Rated Home.

Refrigerant

A compound that absorbs heat when it under goes a phase change, e.g. gas to a liquid. Traditionally, the chlorofluorocarbon (CFC) R-22 was used as a refrigerant for residential air conditioners and heat pumps. Since 1992 time frames have been established for replacing chlorofluorocarbon refrigerants, with non chlorofluorocarbon refrigerants often referred to as R-410A. The ideal refrigerant has a boiling point somewhat below the target temperature, a high heat of vaporization, a moderate density in liquid form, a relatively high density in gaseous form, and a high critical temperature. Since boiling point and gas density are affected by pressure, refrigerants may be made more suitable for a particular application by choice of operating pressure.

Refrigerant Charge

Quantity of refrigerant in a vapor compression refrigeration/heating system, determined by measuring the discharge and suction pressures/temperatures in the system.

Energy Smart Contractor Registry

The database maintained by a CEQ Provider of all Energy Smart Contractors they have approved.

Residential Building

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

RESNET

Residential Energy Services Network

RESNET Accredited Software

See Approved Software Rating Tool

RESNET Candidate Field Assessor

An individual certified by RESNET and designated by an Accredited RESNET Rating Quality Assurance Provider to conduct probationary and field assessments for candidates.

RESNET Executive Director (Executive Director)

A person elected by the Board of Directors of the Residential Energy Services Network (RESNET) to be the Chief Executive Officer of RESNET.

RESNET National Rater Instructor Competency Test

Certification test developed and administered by RESNET to ensure that Accredited Rater Training Providers' trainers have the requisite knowledge and competence to serve as trainers for prospective certified Raters. The test is based on the national core competency exam developed and maintained by RESNET.

RESNET Rater Simulation Practical Test

Simulation based practical test adopted by RESNET used for the assessment of HERS Rater candidates.

RESNET Quality Assurance Checklist

Checklist developed by RESNET for use by a Quality Assurance Designee in evaluating a Rating Quality Assurance Provider's compliance with the requirements of accreditation and quality assurance as stipulated by Section 904.3 of these Standards, and which enumerates the individual requirements that must be verified annually.

R-Value

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

Sample Set

A specific group of homes from which one or more individual homes are randomly selected for sampling controls.

Sampling

An application of the Home Energy Rating process whereby fewer than 100% of a builder's new homes are randomly inspected and tested in order to evaluate compliance with a set of threshold specifications.

Sampling Controls

A collection or set of required tests and inspections performed for a sample set of homes in order to confirm that the threshold specifications have been met. "Sampling controls" may refer to the entire set of tests and inspections, or to a particular phase that constitutes a defined subset of those tests and inspections (e.g. pre-drywall, final, HVAC, windows and orientation, etc).

Sampling Provider

An entity, accredited through these standards, that oversees the sampling process and issues the sampling certifications that homes meet a particular set of threshold specifications such as the ENERGY STAR® specifications adopted by the U.S. Environmental Protection Agency.

Shall

As used in this Standard, the word ‘shall’ means that the action specified is mandatory and must be accomplished by the responsible party.

Sleeping Unit

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

Spillage, Spill

Combustion gases emerging from an appliance or venting system into the combustion appliance zone during burner operation.

Standards (HERS Standards)

The “Mortgage Industry National Home Energy Rating System Standards”, as maintained by the Residential Energy Services Network (RESNET).

Standards Management Board

A Standing Committee of the RESNET organization that is responsible overseeing the Standards Amendment process.

Story Above Grade Plane

Any Story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor next above is:

1. More than 6 feet (1 829 mm) above grade plane; or
2. More than 12 feet (3658 mm) above the finished ground level at any point.

Thermal Boundary

The line or boundary where the air barrier and insulation are installed in a building assembly. The air barrier and insulation should be adjacent to one another in a building assembly to prevent airflow from circumventing insulation.

Thermal bridging

Heat conduction through building components, typically framing, that are more conductive than the insulated envelope.

Thermal Bypass

Air movement, air leakage or convection “cell”, that circumvents the thermal barrier, is usually hidden and is the result of an incomplete or compromised air barrier.

Thermal Image

A recorded electronic or printed image provided by an infrared imaging system of the thermal surface variations of an object or a surface.

Third-Party Energy Efficiency Program, or EEP

A national or local program that has set a standard for energy efficiency in building performance and requires a HERS analysis for verification (e.g. ENERGY STAR® Qualified Homes, Building

America's Builders Challenge, building code, International Code Council, utility companies, etc.)

Threshold Rating - A Rating accomplished using Threshold Specifications to determine the Energy Rating Index where verification of all Minimum Rated Features is accomplished through field inspections and testing conducted on every home.

Threshold Specifications

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index.

Townhouse

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

Transition Period

The period of time beginning on the Effective Date, during which an amendment shall be allowed, but not required, to be used for any Dwelling Unit or Sleeping Unit.

Transition Period End Date

The date that concludes the Transition Period. An amendment shall be required to be used for a Dwelling Unit or Sleeping Unit whose Building Permit Date is after this date.

U-factor

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index

Unconditioned Space Volume

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index.

Unresolved Complaint

A complaint deemed by the CEQ Provider to require corrective action by the Energy Smart Contractor.

Unvented Combustion Appliance

Any appliances not used with a duct, chimney, pipe, or other device that carry the combustion pollutants outside the home. These appliances can release large amounts of pollutants directly into a home.

U-Value

Thermal transmittance value measured in Btu/h-ft²-F.

Vent Connector

The pipe that connects a combustion appliance to a vent or chimney.

Venting System

A passageway or passageways from a combustion appliance to the outdoors through which combustion gases pass.

Work Scope

A set of written recommendations, including specifications detailing repairs and improvements to be made to a home; a work scope may include pre- and post-work performance testing and acceptance criteria.

Worst-Case Analysis

See the definition in standard ANSI/RESNET/ICC 301 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index