RESNET
RESIDENTIAL ENERGY SERVICES NETWORK

Standard Revision

MINHERS Addendum 50
HERS Modeler

Date Approved: December 10, 2020
Mandatory Compliance Date: January 1, 2022
Voluntary Compliance Date: July 1, 2021
Proponent: Standards Management Board
Organization: RESNET

Purpose:

Addendum 50, HERS Modeler, implements a RESNET Board of Directors policy requiring that all persons using Accredited Software Tools to develop HERS ratings must be certified to use that software. The Addendum requires: development of a core curriculum for use in HERS Modeler training; HERS Modeler training by approved Training Providers; HERS Modeler demonstration of proficiency in the use of each Accredited Software Tool they use to develop HERS ratings, and; HERS Modeler certification by a HERS Provider.

Amendment:

Revise Sections of the MINHERS as follows

Chapter 2- RESNET NATIONAL STANDARD FOR INSTRUCTION, ASSESSMENT AND CERTIFICATION

201 Purpose and Scope

201.1 Purpose

The purpose of these standards is to ensure that Home Energy Rater Training is consistent and robust; to increase the credibility of the Training and Quality Assurance Providers with consumers, the housing and mortgage finance industry, federal government, state governments, local governments, utility companies, and the private sector; and to promote voluntary participation in an objective, cost-effective, sustainable home

energy rating process.

201.2 Scope

This document defines the requirements of Accredited Training Providers, Certified Rater Instructors, and Certification Candidates. RESNET shall confirm that the requirements defined in this standard have been met when accrediting Training Providers and certifying Rater Instructors. Accredited Training Providers shall confirm that the requirements defined in this standard have been met when certifying individuals. This enhances the goal of producing a nationally recognized and uniform program.

202 General Provisions

202.1 Definitions and Acronyms

See Appendix B- Glossary of Terms.

203 Accredited Training Providers

203.1 Achieving Accreditation

Training Providers are accredited in accordance with the Accreditation Process specified in Section 910.2 Provider Accreditation Process. Training Providers shall complete the RESNET Rater Training Provider Application.

203.2 Maintaining Accreditation

In order to maintain their accreditation in good standing, all Accredited Training Providers shall fully discharge the following duties and responsibilities. Failure to properly discharge any of these duties and responsibilities constitutes grounds for disciplinary action in accordance with *Section 911 - Probation, Suspension, and Revocation of Accreditation*. Renew their accreditation in accordance with the renewal process found in Section 910.3 - Accreditation Renewal Process.

203.2.1 Maintain Certified Rater Instructors. Only RESNET Certified Rater Instructors can offer rater training through a RESNET Accredited Training Provider.

203.2.2 Hold the exam questions administered by RESNET in strictest confidence.

203.2.3 Maintain records for three years of all training materials and trainee data, training schedules, curricula, attendance records, examinations and individual examination results. This information shall be made available to RESNET upon request by RESNET.

203.2.4 Provide candidates with a certificate or letter of completion, which accurately includes the candidate's legal name and completion dates of any items required for the candidate's certification.

203.2.5 Maintain curricula that align with the most up-to-date RESNET standards.

203.2.6 Provide for training facilities and equipment appropriate to the training being delivered.

203.2.7 Only RESNET Accredited Training Providers may offer Rater Training using RESNET Certified Rater Instructors.

203.3 Privileges and rights

Accredited Training Providers in good standing have the following privileges and rights:

203.3.1 The privilege to make and use any materials trademarked, copyrighted, or otherwise restricted by RESNET (other than the tests developed by RESNET) for marketing Training Courses or Training Providers or for recruiting Rater trainees, instructors or trainers.

203.3.2 The right to present evidence, arguments and a vigorous defense in any action brought under these standards by any party against an Accredited Training Provider.

203.4 Revocation of Accreditation

See Chapter 9- RESNET National Standard for Quality Assurance.

204 Certification of Rater Instructors

204.1 Achieving Certification

Individuals shall meet the following requirements to be certified as a Certified Rater Instructor. Only RESNET Certified instructors may conduct rater training under the auspices of RESNET Accredited Training Providers.

204.1.1 Demonstrate ability to effectively communicate with adults in a training environment. This ability is demonstrated through completion of a minimum sixteen (16) hour RESNET approved adult education program.

204.1.2 Demonstrate mastery of the Home Energy Rating System knowledge and ability sets provided in Section 208 - Capabilities. Mastery is demonstrated by completing the following RESNET tests with a minimum (passing) score to be determined by RESNET.

204.1.2.1 National Rater Instructor Competency Test

204.1.2.2 RESNET Combustion Appliance Tests

204.1.2.3 RESNET Rater Simulation Practical Test

204.2 Professional Development (PD)

RESNET Certified Rater Instructors shall complete a two-hour annual RESNET Roundtable each year and also every three years:

204.2.1 Document twelve (12) hours of attendance at RESNET conferences or other conference approved by RESNET; and

204.2.2 Complete eighteen (18) hours of RESNET approved Professional Development courses delivered by RESNET Accredited Training Providers or other events or venues approved by RESNET. Additional documented hours of attendance at RESNET Conferences qualify under this provision.

An individual that is both a Certified Rater Instructor and Quality Assurance Designee shall complete both the two-hour RESNET roundtable for Certified Rater Instructors and the two-hour roundtable for Quality Assurance Designees.

204.3 Revocation

The following items are ground for revocation of RESNET Certified Instructor designation.

204.3.1 Compromising the security or integrity of any RESNET certification test.

204.3.2 Intentionally misrepresenting their Accredited Training Provider by training to curricula that differ from that submitted.

204.3.3 Violation of RESNET defined test-proctoring procedures.

204.3.4 Non-payment of RESNET provider accreditation fees.

205 Certification of Candidate Field Assessors

205.1 Achieving Certification

Individuals shall meet the following requirements to be a certified as a RESNET Candidate Field Assessor.

205.1.1 Certified HERS Rater in good standing.

205.1.2 As a certified Home Energy Rater, complete confirmed ratings on a minimum of twenty-five (25) homes prior to becoming a Candidate Field Assessor. These 25 homes shall have met the minimum quality assurance processes defined in Section 904.4 – Quality Assurance of Raters and Ratings.

206 Certification Candidates

206.1 General Provisions

206.1.1 Examinations

Examinations allow a candidate to demonstrate the knowledge required appropriate to their desired certification. RESNET online examinations are time-limited and open-book allowing any reference materials but excluding any form of communication with other individuals during the examination session. Examinations are administered by RESNET, set up by a RESNET Accredited Training Provider and overseen by a RESNET approved proctor. Approved proctors include BPI exam proctors, faculty and staff of libraries, trade schools, colleges, independent testing institutions, or others as approved by RESNET. Approved proctors shall adhere to RESNET's defined test proctoring procedures.

206.1.2 Simulated Practical Examinations

Simulated practical examinations allow a candidate to demonstrate their ability to perform certain tasks appropriate to their desired certification. Rater practical examinations shall be administered by RESNET and will include:

206.1.2.1 Rater Simulation Practical Test.

206.1.2.2 RESNET Combustion Appliance Simulation Test

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 Rating Field Inspector (RFI)

206.2.1.1 Pass the following RESNET Tests:

206.2.1.1.1 The RESNET Combustion Appliance Test

206.2.1.1.2 RESNET approved graded field evaluation

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

206.2.1.2   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.

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

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

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

206.2.1.2.4   Measure pressure differences across the building envelope imposed by the operation of the home's equipment.

206.2.1.2.5   Perform envelope leakage testing in accordance with the airtightness testing protocols contained in ANSI/RESNET/ICC 380-2016 .

206.2.1.2.6   Perform duct leakage testing in accordance with the duct testing protocols contained in ANSI/RESNET/ICC 380-2016 and interpret results.

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

206.2.1.2.8   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.

206.2.1.3 RFI's shall not complete independent field testing and inspections until they have satisfactorily completed the requisite three mentored rating field inspections per 206.2.1.2 and pass the RESNET graded field evaluation.

206.2.1.4 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 Appendix A without having a certified Rater on site."

206.2.2   HERS Modeler

206.2.2.1   Pass the following RESNET Test:

206.2.2.1.1   The RESNET HERS Modeler Practical Evaluation, as developed by RESNET and

administered by a RESNET Training Provider.

206.2.2.2 Complete a formal HERS Modeler training course conducted by a RESNET Accredited Training Provider. Training shall be based on the HERS Modeler Core Curriculum developed by RESNET, including modules specific to RESNET Accredited Software Tool(s). The training shall include the following content:

206.2.2.2.1 Calculating Building Dimensions

206.2.2.2.2 Reading Plans

206.2.2.2.3 Modeling Software Basics: Navigation and Layout, Help Menu, Technical Support

206.2.2.2.4 Modeling General Rating Information

206.2.2.2.5 Modeling Structural Components

206.2.2.2.6 Modeling Mechanical Systems and Equipment

206.2.2.2.7 Modeling Infiltration

206.2.2.2.8 Modeling Lights and Appliances

206.2.2.2.9 Modeling On-Site Energy Generation

206.2.2.2.10 Modeling General Building and Site Information

206.2.2.2.11 Generating and Interpreting Rating Reports

206.2.2.3 HERS Modelers shall successfully complete a minimum of three mentored rating models from different plans as specified by RESNET and observed by a RESNET Training Provider.

206.2.2.4 HERS Modelers shall successfully complete a minimum of two additional probationary rating models under the supervision of a Rating Quality Assurance Provider for each RESNET Accredited Software Tool they will use.

206.2.2.5 HERS Modelers shall not complete independent modeling for HERS Rating purposes until they have satisfactorily completed the requisite three mentored rating models per 206.2.2.3, passed the RESNET HERS Modeler evaluation and completed the requisite probationary ratings per 206.2.2.4.

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:

206.2.2.2.1 Pass the national HERS Rater Test(s)

206.2.2.2.2 The RESNET Combustion Appliance Simulation Tests

206.2.2.2.3 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 380-2016 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 who 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.

207 Recertification

207.1 Certification Renewal:

RESNET certified Rating Field Inspectors, HERS Modelers, and HERS Raters, shall renew their certification every three years. They shall complete the following:

207.1.1 Rating Field Inspectors

Pass the RESNET graded field evaluation overseen by a RESNET certified Candidate Field Assessor once in a three year period.

207.1.2 HERS Modelers

207.1.2.1 Attend a HERS Modeler Professional Development course offered by a RESNET Accredited Training Provider. Each course shall be reviewed and approved by RESNET Accredited Software Provider(s) for which the course is being offered. The HERS Modeler must complete professional development once in a three year period for each RESNET Accredited Software program with which they create HERS models.

207.1.3 Certified Home Energy Raters

207.1.3.1 Attend a RESNET approved conference once every three years OR

207.1.3.2   Complete 18 hours of RESNET approved professional development from a RESNET Accredited Training Provider every three years

207.1.3.3   Certified Home Energy Raters who have not completed any Confirmed, Sampled, or Threshold ratings within the three-year certification period shall successfully complete one RESNET graded-field evaluation, in addition to satisfying either 207.1.2.1 or 207.1.2.2

207.2 Failure to Achieve Recertification Criteria

207.2.1   RESNET certified Rating Field Inspectors, HERS Modelers and HERS Raters that fail to meet the requirements for recertification shall be placed on "Suspension - Administrative" status in the RESNET Registry by their affiliated RESNET QA Provider on the date of the expiration of their certification, and shall be barred from conducting rating inspection or certification activities until they have successfully met the criteria for recertification.

207.2.2   RESNET certified Rating Field Inspectors, HERS Modelers and HERS Raters that fail to successfully meet the criteria for recertification by 180 days past the date of expiration of their certification shall be revoked by their affiliated RESNET QA Provider per Section 102.1.4.7.3.

208 Capabilities

Certified individuals shall have certain capabilities to perform the work required under their certification. The categories listed in this section are contained in Chapter 3 - , ANSI/RESNET/ICC 380-2016, and Appendix 1 - On-Site 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.

208.1 Rating Field Inspector (RFI)

A Rating Field Inspector is permitted to conduct all tasks contained within Appendix A. A Certified Rating Field Inspector shall have proficiency at the capabilities listed below.

208.1.1   General

208.1.1.1   Have a basic understanding of building performance evaluation.

208.1.1.2   Demonstrate customer communication skills, ethics, and privacy.

208.1.1.3   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 301-2014 – Energy Rating Reference Home and Rated Home Configuration and MINHERS Appendix A.

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

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

208.1.2   Basics of specifications

208.1.2.1   Have a basic understanding of energy improvement measure interactions, expected life, and bundling for optimal performance considering the house-as-a-system and the emerging need for deep energy savings.

208.1.3   Determining Conditioned Space Volume

208.1.3.1   Determine the Conditioned Space Volume of a dwelling unit as defined in Appendix B.

208.1.4   Health and Safety

208.1.4.1   Identify moisture issues such as condensation, leaks through building components, signs of mold or mildew, insect damage, efflorescence and stains.

208.1.4.2   Identify potential combustion appliance safety hazards.

208.1.4.3   Identify evidence in combustion equipment of flame rollout, blocked chimneys, rust and corrosion, and missing or damaged vent connectors.

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

208.1.4.5   Identify potential presence of mold and potential causes.

208.1.5   Building Science Concepts

208.1.5.1   Identify areas of potential envelope leakage, thermal bypasses, and thermal bridging.

208.1.6   Moisture Principles and Properties

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

208.1.7   Building Components

208.1.7.1   Identify exterior building components.

208.1.7.2   Determine building orientation and shading characteristics.

208.1.7.3   Measure building dimensions and use them to calculate gross and net areas.

208.1.7.4   Estimate the approximate age of a building.

208.1.8   Measuring Building Components

208.1.8.1   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.

208.1.9   Collecting Field Data (including photo documentation)

208.1.9.1 Determine building orientation.

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

208.1.9.3 Determine roof slopes, gable heights, etc.

208.1.9.4 Calculate gross and net areas and volumes.

208.1.10 Insulation

208.1.10.1 Identify the presence or absence of insulation and the quality of its installation when visually accessible.

208.1.10.2 Determine thickness, R-value, and location of insulation.

208.1.10.3 Recommend levels of insulation by climate zone

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

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

208.1.11 Building Foundations

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

208.1.11.2 Identify ventilation system types.

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

208.1.12 Framed Floors

208.1.12.1 Identify location and type of floor system, its insulation type, thickness, and approximate R-value

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

208.1.12.3 Determine floor system type and frequency of framing members.

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

208.1.13 Slab-on-Grade

208.1.13.1 Identify slab as covered or exposed.

208.1.14 Above Grade Walls

208.1.14.1 Determine wall types, insulation thickness, and approximate R-value.

208.1.14.2 Identify signs of building additions.

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

208.1.14.4 Determine construction type, thickness, and exterior color.

208.1.15 Windows, Doors and Skylights

208.1.15.1 Identify window and skylight types, frame materials, and permanently installed shading devices.

208.1.15.2 Determine window, door, and skylight efficiencies and performance factors.

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

208.1.15.4 Identify exterior door types, insulation, and orientation.

208.1.15.5 Identify glass-area of exterior doors and windows.

208.1.16 Rim or Band Joist

208.1.16.1 Determine insulation type, thickness, and approximate R-value.

208.1.17 Ceilings

208.1.17.1 Determine ceiling type, insulation thickness, and approximate R-value.

208.1.18 Attic

208.1.18.1 Identify type of attic and location of attic venting.

208.1.19 Roof

208.1.19.1 Identify approximate age, type, and color of roofing materials.

208.1.19.2 Determine approximate R-value if insulated.

208.1.20 Heating and Cooling Systems

208.1.20.1 Identify types, model numbers, and location of systems.

208.1.20.2 Identify HVAC pros/cons, drivers and sensitivities for major system types.

208.1.20.3 Identify basic combustion appliance concerns

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

208.1.20.5 Identify space-conditioning systems as active or passive.

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

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

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

208.1.20.9 Identify combo systems.

208.1.20.10 Identify solar thermal systems.

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

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

208.1.20.13 Identify summer and winter design temperatures.

208.1.20.14 Identify cooling and heating system design trade-offs.

208.1.21 Domestic Hot Water Systems

208.1.21.1 Identify system types and efficiency factors from equipment labels, model numbers, or default tables.

208.1.22 Gas Leakage Testing

208.1.22.1 Identify gas leaks using combustible gas sensing equipment.

208.1.23 CAZ Testing

208.1.23.1 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.

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

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

208.1.24 Air Leakage

208.1.24.1 Identify common air-leakage sites and indicate likely opportunities for leakage reduction.

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

208.1.24.3 Perform single-point and multi-point building envelope leakage testing in accordance with the airtightness testing protocols contained in [ANSI/RESNET/ICC 380-2016](#).

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

208.1.24.5 Measure pressure differences across the building envelope imposed by the operation of the home's equipment.

208.1.25 Conditioned Air Distribution Systems

208.1.25.1 Determine duct type, location, and R-value.

208.1.25.2 Identify obvious leakage locations and indications of previous sealing.

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

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

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

208.1.25.6 Perform duct leakage testing in accordance with the duct testing protocols contained in [ANSI/RESNET/ICC 380-2016](#) and recommend sealing as needed based on test results.

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

208.1.26 Ventilation

208.1.26.1 Identify presence and type of exhaust fans and determine whether they vent to outdoors.

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

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

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

208.1.27 Appliances and Lighting

208.1.27.1 Estimate efficiency from model numbers or vintage.

208.1.27.2   Identify potential lighting upgrades.

208.2   HERS Modeler

A HERS Modeler is permitted to create and/or edit rating models for HERS rating purposes under the supervision of a Certified HERS Rater. A Certified HERS Modeler shall have proficiency in the capabilities listed below.

208.2.1   Understand and interpret plans, builder specifications, and field data forms/documentation.

208.2.2   Reference "Help Menu" and online technical support resources to resolve specific modeling questions.

208.2.3   Understand and reference RESNET Standards to maintain compliance with "user" modeling requirements for calculating HERS Ratings.

208.2.4   Create a projected HERS Rating from plans and Builder specifications using RESNET Accredited HERS Modeling software tool.

208.2.5   Create a Confirmed Rating from a rater/RFI's field data collection forms using RESNET Accredited HERS Modeling software tool.

~~208.2~~ 208.3   Home Energy Rating System Rater (HERS Rater)

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

~~208.2.1~~ 208.3.1   General

~~208.2.1.1~~ 208.3.1.1   Understand and be familiar with local climate conditions, housing stock, and climate-specific practices.

~~208.2.1.2~~ 208.3.1.2   Understand local utility pricing structures (flat vs. tiered rates, net-metering regulations) and sources for reliable utility information.

~~208.2.1.3~~ 208.3.1.3   Prepare a detailed work scope.

~~208.2.1.4~~ 208.3.1.4   Develop field inspection forms.

~~208.2.1.5~~ 208.3.1.5   Identify major U.S. climate zones and energy consumption impacts of local climate zone.

~~208.2.2~~ 208.3.2   RESNET Rating System

~~208.2.2.1~~ 208.3.2.1   Communicate the business aspects of being a RESNET HERS Rater.

~~208.2.2.2~~ 208.3.2.2   Maintain current knowledge of the HERS Rating method using the Reference Home as defined in ANSI/RESNET/ICC 301-2014.

~~208.2.2.3~~ 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 ANSI/RESNET/ICC 380-2016.

208.2.2.4 208.3.2.4 Use RESNET approved energy analysis software capable of producing a HERS Index, data entry procedures, reporting, and analysis of results.

208.2.2.5 208.3.2.5 Calculate HERS Score computation using the Normalized Modified Loads Rating Method.

208.2.2.6 208.3.2.6 Communicate the benefits of the Home Energy Rating System to homeowners, builders, finance and real estate agents and cultivate partnerships between those individuals.

208.2.2.7 208.3.2.7 Assist and educate customers and builders with:

208.2.2.7.1 208.3.2.7.1 Home Energy Surveys and Home Energy Ratings.

208.2.2.7.2 208.3.2.7.2 Cost effectiveness of energy efficient building design.

208.2.2.7.3 208.3.2.7.3 Quality assurance.

208.2.2.7.4 208.3.2.7.4 Marketing of HERS Rated Homes.

208.2.2.7.5 208.3.2.7.5 Qualifications for programs such as ENERGY STAR®.

208.2.2.7.6 208.3.2.7.6 Real estate financing, economic terminology, and energy code compliance.

208.2.2.7.7 208.3.2.7.7 Financing advantages of Energy Efficient Mortgages (EEM) and Energy Improvement Mortgages (EIM).

208.2.2.7.8 208.3.2.7.8 Adding appraisal value through energy improvements.

208.2.2.8 208.3.2.8 Provide excellent customer service in an ethical and fully disclosed manner.

208.2.2.9 208.3.2.9 Produce reports which meet minimum reporting requirements and improvement analysis.

208.2.2.10 208.3.2.10 Maintain standard operating procedures and office administration.

208.2.2.11 208.3.2.11 Maintain knowledge of current technical guidelines.

209 Reciprocity

Nationally accredited Home Energy Rating Providers shall accept certified training provided by an accredited Training Provider as meeting the core competencies for a Home Energy Rater. Accredited Home Energy Rating Providers may add additional training requirements needed to address their specific program, climate, software or administrative requirements.

210 Normative References

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

ANSI/RESNET/ICC 301-2014(Republished January 2016), "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.

ANSI/RESNET/ICC 380-2016, "Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems", including addenda and normative appendices.