

RESNET HERS Certification

A certified home energy rater must successfully complete training by a RESNET Accredited Rater Training Provider and must be certified by a RESNET Accredited Rating Provider.

A rater must successfully complete training by a RESNET accredited rater training organization. The training is conducted in accordance with a syllabus developed by RESNET. The training addresses:

- Basic principles of building science (i.e., viewing the home as a system)
- Thermal resistance of insulation materials
- The minimum rated features for buildings
- Blower door testing procedures
- Duct leakage testing procedures
- Variations in construction types and their ramifications
- Types and efficiencies of windows
- Types and efficiencies of heating, cooling, water heating, and lighting systems
- Types and characteristics of space conditioning and domestic hot water distribution systems
- Types of thermostatic controls
- Determination of azimuth
- Determination of air leakage
- Determination of fuels used by major appliances
- Utility rate structures
- On-site inspection procedures
- Producing a scaled and dimensioned drawing of a home
- Calculating the area of rectangles, triangles, circles, ovals and combinations of these shapes
- Calculating the volume of boxes, pyramids, spheres, and other geometric shapes
- Completing a home energy rating checklist or entering data into a home energy rating software program
- Completing a home energy improvement analysis or entering data into a home energy rating software program that performs improvements analysis
- Basic knowledge of financial incentive programs and energy efficient mortgages
- Communicating the benefits of energy saving measures and practices to the consumer
- Quality assurance

Each candidate rater must perform two ratings, including software operations, in the presence of trainers.

Certified Raters must also pass examinations that demonstrate a practical, working ability to effectively use the knowledge and skills set contained in Section 5.3 of Chapter Two of the national home energy rating standard to produce accurate and fair Home Energy Ratings. This examination may either follow training or it may be taken as a challenge examination.

RESNET National Rater Test

The RESNET National Rater Test is an on-line 50 question true or false / multiple choice test. The test is open book and raters have two hours to complete the test. The test is on building science concepts and rating procedures. Raters receive the results from the test immediately after completing the test. A passing score is 80%. The test must be administered by a RESNET accredited rater training provider. A [directory of accredited rater training providers](#) is posted on RESNET's website. There is a \$50.00 fee to RESNET for taking the test.

A Rater Trainer or Rating Quality Assurance Designee who has passed the RESNET Rater Trainer/Quality Assurance Test with a score of 90 or better is considered having met the testing requirement for rater re-certification.

The RESNET National Rater Test's questions are divided into the key categories of building science and home energy ratings. The following are the categories of the test questions and the percentage of questions in each category that are contained in the test:

- Building Science/Heat Transfer (12%)
- Building Diagnostics (10%)
- Air Distribution Leakage (8%)
- Calculating Gross and Net Areas (6%)
- Definitions/Energy Terminology (6%)
- Energy Units (6%)
- Health & Safety Concerns (6%)
- Envelope Leakage (6%)
- Determining Envelope Insulation (4%)
- Determining Equipment Efficiencies (4%)
- Potential Comfort Problems (2%)
- Household Appliances (2%)
- Measuring Building Dimensions (2%)
- Understanding Building Drawings (2%)
- Completing Scaled Sketches (2%)
- Ethics and Disclosure (2%)
- Understanding Real Estate Financing (2%)
- ID & Document Features of the Rated Home (2%)
- Specifications (2%)
- Quality Assurance (2%)
- Cooling and Heating Design Tradeoffs (2%)
- Reference Home as Defined (2%)
- Projected and Confirmed Ratings (1%)
- Determining Window and Door Efficiency (1%)
- Building and Durability Issues (1%)
- Energy Code Compliance (1%)
- Program Qualifications (1%)
- Determining Building Orientation (1%)
- HERS Score Computation (1%)
- Major U.S. Climate Zones (1%)

RESNET National Rating Inspector Test

The RESNET Standards includes a category of rater certification called the Rating Field Inspector. The Rater Field Inspector test will be open-book, consist of a total of 50 questions with a two hour limit and cost \$50.00 - as is the case with the current Rater test. The passing score is 80%.

The following test question categories will be used for the Rater Field Inspector test:

- Building Science/Heat Transfer
- Building Performance Testing
- Air Distribution Leakage
- Calculating Gross and Net Areas
- Definitions/Energy Terminology
- Health & Safety Concerns
- Envelope Leakage
- Determining Envelope Insulation
- Determining Equipment Efficiencies
- Household Appliances
- Energy Units
- Measuring Building Dimensions
- Understanding Building Drawings
- Completing Scaled Sketches
- ID & Document Features of the Rated Home
- Specifications
- Determining Window and Door Efficiency
- Determining Building Orientation

To view the supporting documentation on this action, click on [RESNET Rating Field Inspector Test Specifications](#).

How the RESNET Rater Test Was Developed

The test was developed over a four-year period using the best minds in the rating industry. The test is based on the tests previously used by RESNET's accredited rater training providers. A training committee composed of representatives of the nation's leading rating providers and rater training providers including Southface Energy Institute, Conservation Services Group, Florida Solar Energy Center, Kansas Building Science Institute, Energy Rated Homes, Northeast HERS® Alliance, and California Home Energy Efficiency Rating Services spent three years culling the best questions and weighing their priority among the categories listed above to write the pool of test questions.

Once the test question pool was developed, RESNET conducted an alpha test. The alpha test was open to all rater trainers and involved a review and the ability to comment on all questions. Upon completion of the beta test, RESNET staff and the RESNET Training Committee reviewed the comments and reworded a number of questions for clarity, as well as, replacing some of the

questions. Upon the completion of this process, a professional technical editor was retained to review and edit each question for consistency and clarity.

After the professional edit of the test, RESNET conducted a beta test, which every rater was invited to take. Upon completion of the beta test, RESNET staff compiled those questions that were most often missed and again, RESNET's Technical Committee reviewed and edited the questions for accuracy and clarity.

This entire effort was led by Kathy Spigarelli, RESNET's Education and Training Coordinator. Kathy is an adult education professional and has over three decades of professional testing experience.

RESNET Rater Test Study Guide Outline

All of the questions in the national rater test were supported by publications and web sites. It would be good to familiarize or secure these resources prior to taking the test. The following are the source documents for the national rater test:

- Builder's Guide, Energy and Environmental Building Association (EEBA)
- Handbook of Fundamentals, ASHRAE
- Manual J, Air Conditioning Contractors of America (ACCA)
- Residential Energy, John Krigger
- Minneapolis Duct Blaster and Blower Door Manuals, The Energy Conservatory
- [RESNET](#), especially the links to:
 - Energy code compliance
 - Energy efficient financing/Fannie Mae product offerings
 - 2006 National Mortgage Industry Technical Standards, especially Chapter 3 and Appendix A
 - Formal Technical Interpretations

To assist certified raters to prepare for the national rater test, RESNET has developed a study guide line. To download the study guide click on [RESNET Rater Test Study Guide Outline](#).

In addition to the study guide outline, it is suggest that raters review the following documents prior to taking the test:

- The rater's rating provider's program's policy and procedures manual
- The rater's accredited rater training provider's rater training manual
- Chapters Two and Three of the [Mortgage Industry National Home Energy Rating Standards](#)

Many training providers supply rater students with training materials such as John Krigger's "*Residential Energy: Cost Savings and Comfort for Existing Homes*" and the EEBA Builder Guide.

Studying these resources should provider a rater with the information needed to pass the test.

Please remember, this is a **national test** and may cover topics that are not addressed in detail in a particular state's program.

If you do not have a copy of your rating provider's training manual, you should contact one of RESNET's accredited rater training providers to secure a copy. Click on [directory of accredited rater training providers](#).

How to Take the RESNET National Rater Test

An accredited rater trainer must administer the RESNET rater test. Contact an accredited RESNET accredited rater training provider to schedule a test. Click on [directory of accredited rater training providers](#) for a listing of accredited rater training providers.

After successfully completing the rater training, the rater has one year to be certified by a RESNET accredited rating provider.

Supporting Information

- [What and how of becoming a rater](#)
- [Directory of Accredited Rater Training Providers](#)
- [Directory of Accredited Rating Providers](#)
- [Directory of RESNET Certified Rater Members](#)