

Energy Rating Index Performance Path

Implementation Guidelines for the ERI Performance Path

The Energy Rating Index (ERI) performance path gives builders yet another option for complying with the International Energy Conservation Code (IECC). In addition to the prescriptive and performance paths of previous versions of the IECC, builders now have the option of meeting a target ERI score through a wide range of performance options to demonstrate compliance. The ERI performance path also requires builders to meet the mandatory code requirements of the IECC, including piping provisions for water heating, as well as comply with the minimum insulation and window envelope prescriptive requirements of the 2009 IECC.

The ERI performance path allows a state or jurisdiction adopting the IECC to specify which qualifying Energy Rating Index method it will use. The Residential Energy Services Network (RESNET's) Home Energy Rating System (HERS) Index, based on ANSI/RESNET Standard 301-2014, is the existing compliant ERI method and is nationally recognized for inspecting and calculating a home's energy performance. To date, over 1.5 million homes have been rated in the U.S. under the RESNET standards and in 2013, half of all new homes were rated and issued a HERS Index Score.

The ERI compliance path, implemented through the HERS rating process, provides independent, third-party analysis and review of the energy using features of a house that includes:

- An initial analysis and preliminary energy rating of the proposed home prior to permit submittal
- Review for compliance with the energy code
- On-site inspection of energy features in the home
- A final energy rating of the home once construction is completed

A home complying with the ERI performance path demonstrates compliance with the IECC. The thoroughness of the HERS rating process reduces the need for the jurisdiction to conduct plan review and specific inspections focused on compliance with the energy code. Jurisdictions are encouraged to participate in the rating process as an observer to better understand how the ERI approach, as implemented through a HERS rating, demonstrates compliance with the energy code.

The Implementation Guidelines for the ERI Performance Path are provided for the successful implementation of the ERI approach within a jurisdiction. A RESNET HERS rater that provides energy code plan review and inspection verification for a jurisdiction falls under the category of a Special Inspector as defined in Chapter 17, Special Inspections and Tests, of the ICC International Building Code (IBC). The recommended guidelines follow specific provisions within Chapter 17 that are applicable to the ERI and HERS rating process to ensure compliance with the IECC.

HERS RATING DOCUMENTATION

Documentation should be requested from the HERS rater to show that that the following requirements are met.

Independence. The HERS rater should be objective and competent for the work performed. The HERS rater should also disclose possible conflicts of interest so that objectivity can be confirmed. RESNET HERS Raters follow the Rating and Home Energy Survey Code of Ethics¹ that stresses the obligation of a home energy rater/auditor to present accurate and unbiased information on energy performance in a professional manner and disclose any potential conflicts of interest.

Personnel. The HERS Rater should provide certifications to demonstrate that they are experienced and educated in conducting, supervising and evaluating a HERS rating. The following RESNET HERS certifications demonstrate competency in this field:

- Home Energy Rater Certification
- Rating Field Inspector Certification (Can provide the infield testing and inspection but are not certified to provide an ERI)

Qualifications for each certification level are found in the Mortgage Industry National Home Energy Rating Systems Standard.²

The HERS rater should also demonstrate their knowledge of the residential provisions of the IECC. This is accomplished by holding the ICC IECC Residential Energy Inspector/Plan Examiner certification. In addition, the HERS rater must have knowledge of any state or local jurisdiction amendments to the IECC.

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DOCUMENTATION AND REPORTING REQUIREMENTS

As required by the IBC, records should be kept of all inspections and should be provided to the building official upon request. The Approved Rating Software Tool that is defined in ANSI/ RESNET 301-2014³ will generate reports and contain the following information:

- Property location, including city, state, zip code, street address or community/subdivision name, lot number and Plan Name for the rating
- Name and contact information (phone number and email address) of the Certified Rater conducting the rating
- Name, mailing address and telephone number of the Approved Rating Quality Assurance (Q/A) Provider under whose auspices the Rater is certified
- Date the rating was conducted
- Name of the Approved Software Rating Tool (including version number) used to determine the rating

In addition, the rating report must have the following statement in no less than 10 point font:

"The Home Energy Rating Standard Disclosure for this home is available from the Rating Provider."

Home Ratings. Documentation should be submitted to the building official for the following ratings:

Projected Rating: This rating shall be determined from the building plans that account for construction specifications, planned location and orientation of the home. Guidelines for generating the projected ratings are included in ANSI/RESNET 301-2014. Guidelines are also available for generating ratings for multifamily (3 stories and less) buildings in the RESNET Guidelines for Multifamily Energy Ratings. The projected rating should be provided as part of the plan submittal for permit. The HERS rating must be equal to or less than the maximum ERI referenced in the IECC.

Confirmed Rating: This rating shall be determined from field verified values. The HERS Rating from the confirmed rating must be equal to or less than the maximum ERI referenced in the IECC. The confirmed rating will be provided to the building official prior to issuance of the certificate of occupancy.

Sampled Rating (Option): Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standards outlines a process by which homes can be rated using a sample testing and inspection process. This formal process has been in place since 2008 and is recognized by the US Environmental Protection Agency, US Department of Energy and Internal Revenue Service. Raters working with a RESNET Accredited Sampling Provider are eligible to oversee and conduct a sampling process that follows Chapter 6.

Mandatory Requirements. Documentation must be provided to the building official demonstrating that the mandatory requirements contained in the residential provisions of the 2015 IECC have been met. This includes meeting the minimum requirements of the building envelope, heating and cooling, water heating and lighting systems. Documentation must also be provided that demonstrates that the building envelope meets the minimum insulation and glazing requirements as defined in the 2009 IECC.

QUALITY ASSURANCE REVIEW FOR ACCREDITED PROVIDERS

The Mortgage Industry National Home Energy Rating Systems Standard requires that a quality assurance review be conducted by a Quality Assurance Designee. The Quality Assurance Designee must not be involved in any part of the rating or inspection on the homes in this process. The greater of one (1) home or ten percent (10%) of each Rater's annual total of homes must be reviewed.

¹ http://www.resnet.us/professional/standards/ethics

² http://www.resnet.us/professional/standards/mortgage

³ http://www.resnet.us/standards/ANSI-RESNET_301-2014.pdf