



Setting the Standards for
Home Energy Efficiency

DRAFT
**RESNET Staff Recommendation on Additional Quality Assurance
Oversight of Raters Where Errors Are Found in the Quality Review
Process**

September 10, 2014

Introduction

As part of the policies on enhancing the national consistency of HERS Index Scores the RESNET Board adopted the following policy on errors found in the quality review process:

That the RENSET quality assurance standards maintain the current requirement of annual quality assurance review of raters consisting of 1% field reviews and 10% building file reviews with provisions through modification to the standard to add additional oversight of HERS Raters when errors are found in these reviews

The RESNET Quality Improvement Quality Assurance Working Group did not have the time to develop a recommendation on this RESNET Board policy so RESNET staff has developed the following recommendations.

RESNET Standard Requirements for Building File Quality Assurance Reviews

904.4.1.1 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 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.

904.4.1.3.3 For of 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;

RESNET Standard Requirements for Field Quality Assurance Reviews

904.4.2.1 For each Rater, the Provider's QA Designee shall be responsible for an annual onsite 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 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.

904.4.2.5 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 303.1 of Chapter 3 of these Standards.

904.4.2.7 Confirm that HERS Index scores for each home reviewed in accordance with 904.4.2.5 be no more than three percent (3%) (+/-) variation in the HERS Index from the HERS Index result as determined by the QA Designee. When calculating the HERS Index point variance allowed for a given Index, round down to the nearest whole Index point, with the allowable variance never less than two (2) HERS Index points.

It must be kept in mind that there is little difference between errors in Rating Building Files and errors detected in field quality assurance reviews. All the ratings in the registry are confirmed ratings. Errors in the building files represent errors in the field. In many respects the building file should be seen as the "canary in the coal mine" that can point to problems in the field.

Errors Detected in Quality Assurance Reviews

There are two categories by which to judge errors in ratings:

- Errors that results in a 3% +/- or more variation in the HERS Index Score
- Errors in properly documenting critical take offs – The following are what a rater must absolutely get right:
 - Envelope floor areas, type and insulation levels
 - Envelope ceiling areas, type and insulation levels
 - Foundation perimeter, type and insulation levels
 - Framed floor area, type and insulation levels
 - Window areas, type, orientation and overhang
 - Door areas, type and orientation
 - Heating and cooling system size, type, location, and efficiency
 - Water heating system size, type and location
 - Mechanical ventilation type, fan wattage and measured rate

- Duct system location and leakage test results
- Blower door test results

Errors That Results in Less of a 3% +/- or More Variation in the HERS Index Score

If minor errors are discovered during a file or field quality assurance review that does not affect the HERS Index Score the errors shall be noted and the rater shall be directed to correct the errors in the building file and submit to the Provider to upload into the RESNET Building Registry. The provider shall conduct a file quality assurance review on all of the amended ratings.

Errors Discovered in the Critical Takeoffs

- The rater is placed on administrative probation
- A field quality assurance review must be completed by the Quality Assurance Designee on every home with an error
- As terms of probation the rater shall have 15% or 15 (whichever is greater) of the rater's rated homes undergo a file quality assurance review
- As terms of probation the rater shall have 5% or 5 (whichever is greater) of the rater's rated homes undergo a field quality assurance review

Errors That Results in a 3% to 5 % +/- Variation in the HERS Index Score

Errors Discovered in File Reviews

When in the course of quality assurance review the file quality assurance reviews for a rater reveals errors greater than 3%, the home must have a field quality assurance review by the QAD.

Errors Discovered in Field or Field Reviews

- The rater is placed on administrative probation
- A field quality assurance must be completed by the Quality Assurance Designee on every home with an error
- As terms of probation the rater shall have 15% or 15 (whichever is greater) of the rater's rated homes undergo a file quality assurance review
- As terms of probation the rater shall have 5% or 5 (whichever is greater) of the rater's rated homes undergo a field quality assurance review

Errors That Results in a Greater Than 5 % +/- Variation in the HERS Index Score

- The rater is placed on disciplinary probation
- A field quality assurance must be completed by the Quality Assurance Designee on every home with an error

- As terms of probation the rater shall have 20% or 20 (whichever is greater) of the rater's rated homes undergo a file quality assurance review
- As terms of probation the rater shall have 10% or 10 (whichever is greater) of the rater's rated homes undergo a field quality assurance review

If additional major errors are discovered during the next file quality assurance reviews the QAD or delegate shall review 100% of the next five (5) rating files submitted. If major errors continue to be discovered the QAD or delegate shall conduct a two (2) hour training session with the rater using the RESNET rating field tablet tool to mentor them on errors discovered and 100% of the rater's rating files will be reviewed until no major errors are discovered.

Rater Disciplinary Action

If a rater violates the terms of the probation the rater shall be suspended.