

Date: 11/07/2011(revised 03/21/2012)

Amendment #2011-04

[\[revised 06/27/2012 in response to public comment – shown in track changes mode\]](#)

Title: Revising Confirmed and Projected Rating definitions

Proponent: Auxiliary End Use Subcommittee Signature: _____

Organization: RESNET Technical Subcommittee

Mailing Address: _____

City: _____ State: ____ Phone _____

Proposed Revision:

102.1.2.2 Performance evaluation of ability to perform accurate ratings.

102.1.2.2.1 In order for a Rater Candidate to be certified as a Home Energy Rater, they must satisfactorily complete two (2) supervised ratings as part of Rater training and a minimum of three (3) probationary ratings within twelve (12) months of successfully passing the National Core Rater Test. A maximum of one (1) of the three probationary ratings may be completed as a ~~p~~Projected ~~r~~Rating, with the remaining two (2) being ~~e~~Confirmed ~~r~~Ratings.

102.1.4 Minimum Standards for Home Energy Rating Provider’s Operation Policies and Procedures must be written and provide for the following:

102.1.4.1 ~~Ratings from plans~~Projected Ratings. If the home energy rating Provider’s program provides for Projected Ratings, the rating must be clearly labeled as a Projected Rating. Projected Rating reports shall stipulate as follows in 14 point type minimum: “Projected Rating Based on Plans – Field Confirmation Required.” ~~Projected Ratings may be used to demonstrate energy code compliance or programmatic qualification but shall not be classified as Confirmed Ratings until the home is subjected to field inspection and testing, if applicable, in accordance with Section 303.7 of RESNET Standards.~~

103.2.3 Persistence. Once a ~~p~~Projected ~~r~~Rating has been made on a property, the version of the rating software that was used initially may be used for the ~~e~~Confirmed ~~r~~Rating on that property. Providers, at their option, may update to the latest software version for in-process ratings.

303.7.1 A HERS provider may calculate the Projected Rating ~~of a to-be-built or to-be-improved home based on architectural drawings with material, mechanical and electrical specifications for a to-be-built home, or based on a site audit for a to-be-improved home;~~ and by:

303.7.1.3 Using the planned location and orientation of the proposed home, or if the proposed orientation is unknown, ~~completing a worst case analysis~~ Worst-Case Analysis ~~calculating ratings for the home facing each of the four cardinal directions, north, south, east and west, and using the largest HERS Index as the “worst case”~~ Projected Rating.

303.7.2 Upon completion of construction and verification of the proposed specifications for all rated features of the home ~~using site inspections and envelope air leakage rates and distribution system efficiencies derived~~

from on-site diagnostic tests conducted in accordance with Section 303.8.1 [and Chapter 8](#) of this Standard (e.g., on-site visual inspections, on-site diagnostic test results or default values for envelope air leakage rates and distribution system efficiencies), and entry of the field verified rated features into an accredited rating tool, a Projected Rating for the home shall become a Confirmed Rating for the home.

603.3 Analysis of Homes ~~A worst case analysis~~ Worst-Case Analysis shall be performed on each home plan ~~in the sample set, considering worst case orientation, all known option packages, and applicable site location(s).~~ If an option or change in the design of the structure is made that differs from those used in the initial analysis in a way that would require more stringent threshold specifications, then that home must be individually rated. At a minimum, a certified Rater shall oversee this process.

904.4.1.1 The Provider's QA Designee shall be responsible for an annual rating data file review of the greater of one (1) home or ten percent (10%) of each Rater's annual total of homes for which ~~Projected or Confirmed or Sampled~~ confirmed or sampled Ratings were provided. When determining the number of rating data files 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 rating data files shall be reviewed.

904.4.1.3.3 ~~For each Projected Ratings for Sampled Ratings, confirm that the values entered into the rating software for all Minimum Rated Features are either RESNET-defined defaults or are supported by architectural plans, threshold specifications, or field data. The values entered into the rating software for a Projected Rating are permitted to represent a worst case analysis~~ Worst-Case Analysis. ~~data were accurately entered into the rating software from data collection forms and/or plans, including worst case analysis;~~

904.4.1.3.4 ~~For Projected Ratings, confirm that the Minimum Rated Features and threshold specifications, including worst case analysis, for each plan are made available for verification in the field (i.e. geometric characteristics, duct leakage and envelope leakage thresholds).~~ **904.4.1.3.5** ~~For confirmed ratings on existing homes, review any field data collection forms or notes to confirm that data were accurately entered into the rating software.~~

904.4.1.3.4 ~~For In the case of each Confirmed Ratings, confirm that the values entered into the Rating sSoftware for all Minimum Rated Features are either RESNET-defined defaults or are supported by on-site field-confirmed test data using threshold diagnostic values or actual diagnostic values. The values entered into the rating software for a Confirmed Rating are permitted to represent a wWorst-eCase analysis. for homes built from architectural drawings, verify that Minimum Rated Features data from testing and specification findings from the field are accurately entered into the rating software after construction is completed;~~

904.4.1.3.6 ~~5~~ Confirm that files, paper and/or electronic files, are being maintained and archived by Raters and archived for each rating, including the ~~rRating sSoftware~~ Energy Simulation fFile and all supporting documentation required to validate the inputs into the rating software file (e.g., ~~and/or unique floor plan, including a set of architectural drawings, threshold specifications, field data) for Projected Ratings.~~ These files shall be maintained a minimum of three (3) years;

Modify Appendix B Glossary of Terms as follows:

Modify the following definition:

Threshold Specifications - ~~A set of qualification criteria which are established for a sample set based on a worst case analysis~~ Worst-Case Analysis ~~Projected Ratings with consideration of all options, and in worst case orientation,~~ or a set of prescriptive specifications such as the ENERGY STAR prescriptive path adopted by the U.S. Environmental Protection Agency.

Add the following new definitions:

Confirmed Rating – A Rating accomplished using data gathered from verification of all rated features of the home in accordance with Section 303.8 and Chapter 8 of this Standard (e.g., on-site visual inspections, on-site diagnostic test results or default values for envelope air leakage rates and distribution system efficiencies).

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.

Rating – See Home Energy Rating.

Worst-Case Analysis –A home energy rating [from a specified home plan](#) for which the minimum rated features of the home are configured to provide the poorest energy performance of the home (i.e. the largest HERS Index) when four ordinal home orientations and the least energy efficient minimum rated features for the specified home plan are considered by the Rating. [A Worst-Case analysis may use threshold diagnostic values to determine the least efficient minimum rated features for the specified home plan.](#)

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.](#)

Effective Date: This amendment shall become effective 90 days following final approval by the RESNET Board of Directors.

Justification:

RESNET Standards require all rated features of ratings from plans be confirmed through field inspection upon completion of construction of the home. Such ratings are to be labeled as "from plans" (RESNET Standards section 102.1.4.1). The label is inaccurate in that it suggests only a rating projected from plans. It does not necessarily promote the rigorous testing and inspections that back up the 'rating from plans'.

The change proposed is similar to the labeling of a sampled home. Ratings for Sampled homes, which are projected ratings, are required to be labeled "This home has been certified using a sampling protocol in accordance with Chapter 6 of the RESNET Standards". The proposed change also brings greater conformity to the labeling of projected ratings on homes.