

QA Review Checklist Guidance Document

June 28, 2021

The RESNET QA Team received some great questions regarding the revisions to the RESNET QA Review Checklist. This guidance document addresses the sunset of v4.1, the most common questions regarding which tab(s) to use for field QA reviews, and the scoring of missing photo documentation.

As always, please reach out to us directly if you have additional questions or issues. We will address these topics in more depth at the upcoming Q3 QAD Webinar Training.

VERSION 4.1 SUNSET:

Version 4.1 of the QA Review Checklist has been out for almost one year (since mid-July 2020). The **SUNSET date for v4.1 is this Wednesday 6/30/21. All QA reviews completed on or after this Thursday 7/1/21 shall be done using v5.0 (sent out on 4/5/21).**

- There have been too many significant updates made to the QA Review Checklist since July of 2020 to keep allowing it (such as the *FieldFinal* and *HVACQiEval* tabs as well as a lot of important content and scoring changes).

FIELD QA REVIEWS AND FILE QA REVIEWS:

Based on the MINHERS, our guidance on applying the QA Review Checklist for the required Rater of Record Field QA Reviews is to complete and score both the field QA tab (*FieldFinal* or *PreDrywall*) and the software-specific file QA tab (*REMRate*, *Ekotrope* or *EnergyGauge*) and then count as both a File QA Review and a Field QA Review. Per MINHERS, the 1% Field QA is required for the Rater of Record even when the RFI (or another Rater) completes the field work. On ratings for which someone other than the Rater of Record completed the field work, this ‘2-for-1’ Field QA Review really does not add work and allows QADs to meet the 1% for both Raters of Record and RFIs (or Raters-Field Only) without having to do extra Field QA.

Please see RESNET

MINHERS: https://standards.resnet.us/index.htm?rhtocid=toc7#t=minhers_adv%2FCh_9%2FQuality_Assurance_Requirements_for_Rating_Quality_Assurance.htm

904.3.3.2 *Requirements for QA Field reviews.*

904.3.3.2.1 *HERS Raters. The QA Field review shall confirm the accuracy of all stages of the rating process (e.g. data collection, reporting, and energy simulation file creation and/or updating) for the rating receiving a QA Field review.*

904.3.3.2.1.1 *Collect dimensional measurements in the field for the home to evaluate the accuracy of those determined by the HERS Rater in the field or from plans, including conformance to the requirements set forth in Chapters 3 and 8 and Appendix A of these Standards.*

904.3.3.2.1.2 *Complete in the field all necessary performance testing and all necessary inspections of minimum rated features for the home to evaluate the accuracy of those determined by the HERS Rater, including conformance to the requirements set forth in Chapters 3 and 8 and Appendix A of these Standards.*

904.3.3.2.1.3 **Evaluate inputs entered by the HERS Rater into the energy simulation file** for the rated home to determine conformance with data from 904.3.3.2.1.1 and 904.3.3.2.1.2 as well as Chapters 3 and 8 and Appendix A of these Standards.

904.3.3.2.2 **Rating Field Inspectors.** The QA Field review shall confirm the accuracy of data collection and reporting by the RFI for the rating receiving a QA Field review.

904.3.3.2.2.1 *As necessary, collect dimensional measurements in the field for the home to evaluate the accuracy of those that may have been determined by the RFI, including conformance to the requirements set forth in Chapter 8 and Appendix A of these Standards.*

904.3.3.2.2.2 *Complete in the field all necessary performance testing and all necessary inspections of minimum rated features for the home to evaluate the accuracy of those that may have been determined by the RFI, including conformance to the requirements set forth in Chapter 8 and Appendix A of these Standards.*

To clarify the different focuses between the Field QA versus the File QA tabs:

- Example Checklist Item Instructions for most line items in *FieldFinal* and *PreDrywall* field QA tabs:
“If applicable/visible, **Rater/RFI verifies and documents the correct** ____, ____, ____, ____ and ____”
- Example Checklist Item Instructions for most line items in *REMRate*, *Ekotrope* and *EnergyGauge* file QA tabs:
“For each _____, **confirm that the** ____, ____, ____, ____ and ____ **which are entered into the software correspond with plans and/or field data collected by the Rater/RFI for the actual condition of the rated home. ...”.**

NO PHOTOS:

Our logic in removing the automatic ‘CORRECT AND RESUBMIT’ (on the *REMRate*, *Ekotrope* and *EnergyGauge* tabs) by scoring NO PHOTOS as a ‘2’ instead of a ‘3’ is primarily based on:

- it is impractical to correct a rating file just because of a missing photo or missing photos (there is likely nothing to correct on the rating file)
- some of the questions we received had to do with QADs doing QA before the rater ultimately later provided photos
- only missing one photo (of a sealed attic, appliance or piece of mechanical equipment).

There could be many reasons why the photo or photos may not be provided at the time of QA. It may be a matter of one missing photo or a couple of missing photos as opposed to missing all the

photos, or the photo is blurry and does not capture the required information, or the photo is inadvertently deleted or lost. Sometimes it is provided later, and sometimes it is never provided.

RESNET QA staff do not take the position that lack of photo documentation should result in an automatic failure of the QA review. There are other Minimum Rated Features that are required by the standards that the Rater/RFI may not always account for in the rating (i.e. window overhangs), and these generally do not result in an automatic failure of the QA review. We contend that the scoring will generally determine pass or fail.

Based on the QAD's discretion and the specifics of the situation, the QAD will ultimately decide whether a QA Review will pass or fail. Remember that four failures in a calendar year will trigger disciplinary action on the Rater or RFI (per MINHERS 102.2.9.3.1.3).

- If photos are later provided after the QAD pursues the Rater/RFI for the required documentation, then the QA Review Checklist and QA Review is complete and either passes or fails based on the total score.
- If photos are either unable to be provided or are otherwise never provided after the QAD pursues the Rater/RFI for the required documentation, then the QA Review Checklist line item(s) will be scored accordingly (*Unsatisfactory* or 2). If a Rater/RFI continues to miss the same items even after QAD correction or if the Rater/RFI willfully ignores a requirement, then it would be appropriate for failure of the QA review. If all the line items that did not have the required photos were scored as *Unsatisfactory* or 2, that still may not be enough points to fail a QA.
 - The second to last line item "*Other items not specified in this checklist (describe in comments)*" is there for this kind of scoring adjustment. (*Instructions: "The QAD can choose how they wish to score this line item based on the importance, frequency and severity of this other item. Any points given here would be added separately to the final score; and would not be part of the Total Overall Rating Evaluation Points for pass or fail."*). The QAD could choose to score enough points in column K of this line item to increase the score and produce a failure of the QA Review.

Photo Requirements for QA Reviews described in MINHERS Chapter 9 differ slightly from the generic ERI Standards of Practice for On-site Procedures described in 301-2019 Normative Appendix B. For sake of QA Reviews of HERS ratings, the required photos are delineated in the more extensive MINHERS list. We will be adding more complete guidance in the Checklist Item Instructions in our next version to make them consistent with the MINHERS photo requirements.:

MINHERS 904.3.2.4.3.1

https://standards.resnet.us/index.htm?rhtocid=toc7#t=minhers_adv%2FCh_9%2FQuality_Assurance_Requirements_for_Rating_Quality_Assurance.htm

904.3.2.4.3.1 At minimum, the Rating Provider shall collect, review, and maintain (for a period of 3 years) the following supporting documentation for each file QA:

Date and time of the inspection/test

The name of the Certified Rater or RFI conducting the inspection/test

Plans (or alternative documentation showing building dimensions)

EEP Verification Checklist

RESNET Home Energy Rating Standard Disclosure

Photos of the following building features where applicable to the rated Dwelling Unit. Where photos lack sufficient detail, the Quality Assurance Designee shall require additional supporting documentation.

- a. Building assemblies as required by ANSI/RESNET 301 Appendix B Inspection Procedures for Minimum Rated Features.***
- b. All heating, cooling, and service hot water equipment including nameplate/model number***
- c. Dwelling Unit Mechanical Ventilation System including nameplate/model number and controls***
- d. Infiltration test result or automated test report***
- e. Duct leakage test result(s) for each system***
- f. Dwelling Unit Mechanical Ventilation System test result(s) for each system***
- g. The building's front, back, right, left elevations***
- h. Appliances (refrigerator, dishwasher, washer, dryer) including nameplate/model number***

¹. (Informative Note) For example, where equipment is located in narrow utility closets that prohibit clear photo of nameplate/model number, or when the building feature required is not present at the time of inspection.

ANSI/RESNET/ICC 301-2019 Normative Appendix B:

<https://codes.iccsafe.org/content/RESNET3012019P1/normative-appendix-b-inspection-procedures-for-minimum-rated-features>

General		
Rated Feature	Task	On-Site Inspection Protocol
Applies to relevant Minimum Rated Features (MRF) from Table 4.5.2(1)	Record field inspections and performance tests by digital/electronic means. All records shall be kept for a minimum of 3 years.	Clearly document the following: <ul style="list-style-type: none">• The date and time of the inspection/test;• The name of the Certified Rater, Approved Inspector or Approved Tester conducting the inspection/test;• The Dwelling Unit being inspected/tested containing sufficient detail to indicate the location of the inspection including the address or unit number of the inspected/tested Dwelling Unit;• If included in the Energy Rating and present in the Dwelling Unit, a minimum of one representative photo of items #2 (Wall Assembly), #3 (Roof/Ceiling Assembly), and either #11 (Heating Equipment), #12 (Cooling Equipment) or #14 (Service Hot Water Equipment) from Table 4.5.2(1) that reflect the reported data; and• If testing is conducted in the Dwelling Unit, a photo of the recorded test results or a report generated by automated software that communicates with the testing device showing the test result. Each photo and/or report shall be time/date stamped and geotagged.