



Compliance Rater Field House Exercise

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| Location: | TBD |
| Times: | By Appointment |
| Instructional Time: | 2 Hours of Instructional Time |
| CEUs: | 0 Continuing Education Units are obtained after successful completion of this course |
| Cost: | \$300.00 per person* |

***Please Note:** There is an annual \$120.00 subscription fee due if you choose to become a CalCERTS HERS Rater. This fee covers your CalCERTS HERS membership and the administrative duties on our part to maintain your records.

***Prices subject to change**

Project uploads for compliance verifications, whole-house ratings, and/or Energy Star certifications are subject to additional fees.

You can sign up for an appointment by calling 916.985.3400 x301

Target Market for this Course:

This class is only for CalCERTS HERS candidates who wish to become Field Verification & Diagnostic Testing Raters and who have already attended (at a minimum) Classes I, II, and III **OR** Classes I, II, and IV. The intent of **Compliance Rater Field House Exercise** class is to meet the CEC requirements of Title 20 Section 1673(a)(6) “. . . to satisfactorily perform a rating for a least one home that includes field verification and diagnostic testing in the presence and under the direct supervision of the provider’s trainer or Quality Assurance Reviewer.”

Incoming Skills Necessary:

It is expected that those choosing to enter the HERS program as a FV/DT Rater possess some knowledge, skills, and abilities in the construction industry. An understanding of how homes are constructed and put together helps a Rater perform his/her duties and shows clients that they are competent in their role as a rater.

In the course of rater work candidates may be required to have the following knowledge, skills, and abilities required which are not taught in any CalCERTS trainings:

- High School diploma or GED
- 10th Grade English & Math minimal (especially fractions, percentages, geometry)
- Computer literacy
- Firm grasp of the English language (most codes and regulations are only in English)
- Ability to lift heavy objects (50 lbs. or more)
- Ability to inspect dark, tight, spaces

Field House Exercise Objectives:

The **Compliance Rater Field House Exercise** is meant to reveal the talents and skills of newly trained HERS Raters. Candidates are no longer instructed at this event. The Trainer/Proctor is there to observe and evaluate the candidate's performance as they conduct various field verifications and diagnostic tests.

The following skills will be assessed and graded:

1. Raters should demonstrate the ability to perform a basic duct leakage test without assistance.
2. Raters should demonstrate the ability to perform a blower test without assistance, including setting up door frame.
3. Raters should demonstrate the ability to perform an airflow test using one of the methods of RA3.3
4. Raters should demonstrate the ability to perform a fan-watt draw test using one of the approved methods.
5. Raters should demonstrate the ability to collect adequate data necessary to verify the EER of the A/C system.
6. Raters should demonstrate the ability to collect appropriate data.

Upon successful completion of this exercise the candidate will be able to collect the credential that allows them to perform work as a California HERS Field Verification Diagnostic Testing (FV/DT) Compliance Rater.

Prerequisites (for achieving the HERS FV/DT Rater credential):

It is assumed that All candidates attending any of our HERS training courses have completed 10th grade English and math as well as being computer literate. These skills are not taught in any of our trainings and you'll need them as a HERS Rater in California.

Additionally, candidates must also have successfully passed the following classes in order to attend Compliance Rater Field House:

- Class I: HERS Basics
- Class II: Hands-On Lab
- Class III: Alterations to Existing Homes AND/OR Class IV: Newly Constructed Homes

Standards of Student Evaluation (for individual HERS FV/DT Rater certificate issuance):

All candidates must successfully demonstrate the following tests/verifications in the presence of a CalCERTS Trainer/Proctor without assistance:

Duct Leakage Test (RA 3.1)

Air Infiltration/Blower Door Test (ASTM E779-03)

Air Flow Test (RA 3.3)

Fan Watt Draw

EER Verification (RA 3.4)

Verified presence/absence of TXV/EXV

Field House Exercise Re-test Policies

1. Students will be given one re-test opportunity to pass their Field House exam without having to re-take the course.
2. Students must wait at least 48 hours between exams.
3. There is a \$300 charge for the first Field House re-test attempt.
4. Students who do not pass their second attempt must retake Class II again (at full price), pass the written exam again, and then attempt the Field House exam one last time.
5. If a student fails the Field House exam on their third attempt (after re-taking Class II) they are excluded from becoming a CalCERTS HERS Rater indefinitely.

Materials utilized in this Exercise:

Each candidate will have access to all the diagnostic equipment necessary to conduct the required tests performed by a FV/DT Rater. There is no requirement of the candidates to bring any testing equipment however, candidates with their own equipment may bring it if they feel more comfortable using it.

Candidates should bring: a tape measure, graph paper, straight-edge, pencil, pen, calculator, clipboard, and notepad.

For questions about any of our trainings call 916-985-3400 x301 or e-mail training@calcerts.com.



Whole-House Rater Field House Exercise

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| Location: | TBD |
| Times: | By Appointment |
| Instructional Time: | 2 Hours of Instructional Time |
| CEUs: | 0 Continuing Education Units are obtained after successful completion of this course |
| Cost: | \$300.00 per person* |

***Please Note:** There is an annual \$120.00 subscription fee due if you choose to become a CalCERTS HERS Rater. This fee covers your CalCERTS HERS membership and the administrative duties on our part to maintain your records.

***Prices subject to change without notice**

Project uploads for compliance verifications, whole-house ratings, and/or Energy Star certifications are subject to additional fees.

You can schedule appointment by calling 916.985.3400 x301

Target Market for this Course:

This class is only for CalCERTS HERS candidates who wish to become Whole-House Raters and who have already attended (at a minimum) Classes I, II, III, and VII. The intent of the **Whole-House Rater Field House Exercise** class is to meet the CEC requirements of Title 20 Section 1673(a)(6) “. . . to satisfactorily perform a rating for a least one home that includes field verification and diagnostic testing in the presence and under the direct supervision of the provider’s trainer or Quality Assurance Reviewer.”

Incoming Skills Necessary:

To better prepare candidates for work as California Whole-House Raters, we strongly suggest that those who enter possess some knowledge, skills, and abilities in the California HERS Program, the HVAC industry, and the construction industry. A comprehensive understanding of the diagnostic tests required under the HERS Rater Protocols is also expected to be known and understood.

In the course of your work as a Whole-House Rater you may also be required to have the following knowledge, skills, and abilities which are not taught in any of our CalCERTS trainings:

- High School diploma or GED
- 10th Grade English & Math minimal (especially fractions, percentages, geometry)
- Computer literacy
- Firm grasp of the English language (most codes and regulations are only in English)
- Ability to lift heavy objects (50 lbs. or more)
- Ability to inspect dark, tight, spaces
- Knowledge of and experience in the construction industry (how homes are constructed)
- Ability to properly measure the inside or outside of a home and find it’s volume
- Ability and knowledge to identify and evaluate the fenestration (doors and windows) of a home

- Ability and knowledge to locate and identify HVAC equipment and components
- Ability and knowledge to locate and identify major appliances and lighting devices
- Ability and knowledge to find and collect data off appliance name plates
- Ability to draw a legible floor plan of a home while in the field

Field House Exercise Objectives:

The **Whole-House Rater Field House Exercise** is a two-step process. The first part involves collecting data and testing systems within a home. The second part focuses on energy modeling skills and abilities. It is meant to reveal the talents and skills of trained HERS FV/DT Raters. Candidates are not instructed at this event. The CalCERTS Trainer/Proctor is there to observe and evaluate the candidate's performance as they conduct various field verifications and diagnostic tests.

The following skills will be assessed and graded:

7. Field data collection.
8. Create an accurate and detailed sketch of the entire house
9. Ability to complete the attached field data collection forms without assistance.
10. Enter all the data collected, including the blower door and duct leakage test results into the CalRATE*pro* software and generate an accurate HERS index and energy use estimate.
11. Gather energy bill history on the home and use it to compare to the simulated energy use.
12. Generate a list of upgrades to the home.
13. Email the ZIP file to CalCERTS.

Upon successful completion of the data collection, systems testing, and accurate energy modeling the candidate will be able to collect the credential that allows them to perform work as a California HERS Whole-House Rater.

Prerequisites (for achieving the HERS Whole-House Rater credential):

It is assumed that All candidates attending any of our HERS training courses have completed 10th grade English and math as well as being computer literate. These skills are not taught in any of our trainings and you'll need them as a HERS Rater in California.

Additionally, candidates must also have successfully passed the following classes in order to attend Whole House Rater Field House:

- Class I: HERS Basics
- Class II: Hands-On Lab
- Class III: Alterations to Existing Homes
- Class IV: Newly Constructed Homes
- Class VII: Whole House Energy Rater

Standards of Student Evaluation (for individual HERS Whole-House Rater certificate issuance):

All candidates must successfully demonstrate the following tests/verifications in the presence of a CalCERTS Trainer/Proctor without assistance:

1. Field data collection. Data collection must be done under the direct supervision of the instructor (not prior to the instructor showing up at the house). All data collection must be done independently by each rater (not together with other raters).

Note: The homeowner may want to know information about shell and/or duct leakage. Since these tests are optional for this field house, they can be done on this house without the supervision of the instructor or the instructor's equipment. However, the rater may not issue a rating, audit or CalRATE*pro* certificate to the homeowner until the rater is actually certified to do so.

2. Raters must demonstrate the ability to create an accurate and detailed sketch of the entire house without assistance. (Refer to CalCERTS Whole House Rater Field Data Collection Manual, Section 2.2.)
3. Raters must demonstrate the ability to complete the attached field data collection forms without assistance.
4. Raters must enter all the data collected, including the blower door and duct leakage test results, if these tests were done, into the CalRATE*pro* software and generate an accurate HERS index and energy use estimate. (This can be done at a later time and sent to the instructor when finished.)
5. Raters must gather energy bill history on the home and use it to compare to the simulated energy use if the bill history is available.
6. Raters must generate a reasonable list of suggested upgrades to the home.
7. Raters must upload the ZIP file to the CalCERTS registry and generate a HERS certificate.
8. Originals or readable copies of all forms, certificates, and collected data must be provided to the instructor along with the ".bld" file. Adequate digital photos of the house should also be provided.

Field House Exercise Re-test Policies

Part A: Field Data Collection & Systems Diagnostics

6. Students will be given one re-test opportunity to pass their Field House exam without having to re-take the course.
7. Students must wait at least 48 hours between exams.
8. There is a \$300 charge for the first Field House re-test attempt.
9. Students who do not pass their second attempt must retake Class VII again (at full price), pass the written exam again, and then attempt the Field House exam one last time.
10. If a student fails the Field House exam on their third attempt (after re-taking Class VII) they are excluded from becoming a CalCERTS HERS Rater indefinitely.

Part B: Energy Modeling

1. Students will be given one re-submittal opportunity to pass their energy modeling exercise after receiving feedback from CalCERTS Technical Staff without having to re-take the Class VII.
2. Students do not have to wait to resubmit their exercise if they are confident it is correct.
3. Students who do submit an accurate model on their second attempt must retake Class VII again (at full price), pass the written exam again, and then attempt the Field House exam one last time.
4. If a student fails the Field House exam and energy modeling exercise on their third attempt (after re-taking Class II) they are excluded from becoming a CalCERTS HERS Whole House Rater indefinitely.

Materials utilized in this Exercise:

Each candidate will have access to all the diagnostic equipment necessary to conduct the required tests performed by a FV/DT Rater. There is no requirement of the candidates to bring any testing equipment however, candidates with their own equipment may bring it if they feel more comfortable using it.

Candidates should bring: a tape measure, flashlight, graph paper, straight-edge, pencil, pen, calculator, clipboard, and notepad.

For questions about any of our trainings call 916-985-3400 x301 or e-mail training@calcerts.com.