

# HERS Rater Training Field Syllabus

### **Part 1: Course Information**

#### **Instructor Information**

**Instructor(s):** Ben Graham & Steve Eagleburger

**Location:** EnergyLogic Denver Office

**Class Duration:** Four days

Class Hours: 8:00am - 5:30pm daily

# **Prerequisites**

In order to join EnergyLogic or a proxy trainer for the field portion of training you must:

- Complete EnergyLogic Online HERS Rater Training
- Purchase a RESCAZ Simulator license, available here: http://store.resnetcazsimtest.com/

# **Course Description**

The field portion of HERS Rater Training is 4 days of field training designed to introduce the HERS Rater inspection processes and diagnostic testing.

During the field training we will complete 2 practice ratings according to the RESNET training standard. Practice ratings will be performed on an existing and new home.

This is an instructor facilitated course. Students will have one-on-one instruction on the testing equipment. Much of the field work will be

done in a group setting where peer to peer interaction is used to complete the practice ratings.

The course will provide each student ample time to have hands on experience with the diagnostic equipment. By the end of the course each student will demonstrate competency with the Blower Door system, Duct Blaster system, gas leak detector, CO meter, and Worst Case set-up for Combustion Safety Testing. This will be a one-on-one evaluation with an instructor to measure the students' competence with the testing equipment.

#### **Textbook & Course Materials**

#### **Required Materials**

- Laptop computer
- RESCAZ Simulator license, available here: <u>http://store.resnetcazsimtest.com/</u>

#### **Suggested Materials**

- Tape Measure
- Hard Hat & Respirator
- Clipboard
- Architect Scale or Ruler
- Pencil
- Shoe Cover(s)
- Computer

#### **Recommended Text**

- Energy Auditor Field Guide John Krigger and Chris Dorsi http://srmi.biz/bookstore/field-guides/
- Builder's Guide "to your climate" Joseph Lstiburek <a href="http://www.buildingsciencepress.com/%2FBuildersGuide-to-Cold-Climates--P1.aspx">http://www.buildingsciencepress.com/%2FBuildersGuide-to-Cold-Climates--P1.aspx</a>
- Insulate & Weatherize Bruce Harley
   http://www.tauntonstore.com/build-like-a-pro-insulateand-weatherize-bruce-harley-070649.html

# **Course Requirements**

Students are required to attend every class for the entire scheduled time. Students will be evaluated in one on one session with the course instructor for competency using the diagnostic equipment.

#### **Course Structure**

This course will be delivered using a combination of classroom presentations and field work. In addition, students will have access to the EnergyLogic Academy. The EnergyLogic Academy will have online lessons, course materials, and resources. The course will be delivered over 4 days with an optional fifth day to complete 1-on-1 field evaluation on a home with an instructor/QAD. Please make sure to review the schedule posted on the EnergyLogic Academy course page for details on dates and times.

# **Part 2: Course Objectives**

The field portion of HERS Rater Training is designed to give participants in depth training on the processes and diagnostic equipment required to complete a home energy rating.

#### **Objectives:**

- 1. To develop a full understanding of measuring and inspecting a home for home energy ratings.
- 2. To develop competency using the manometer.
- 3. To develop competency using the blower door system.
- 4. To develop competency using the duct blaster system.
- 5. To develop competency with CST equipment.
- 6. To complete 2 practice ratings.

You will meet the objectives listed above through a combination of the following activities in this course:

- Review the blower door, duct blaster, and pressure diagnostic, CST, and Work Scope modules prior to attending class
- Participate fully in the labs
- Engage in the one-on-one coaching with the instructors
- Assume a leadership role when necessary: voluntarily help other students when you have knowledge they don't have
- Approach the course with a desire to learn
- Complete the practice ratings.

# Part 3: Topic Outline/Schedule

Diagnostic Labs		
Day 1	Instruction	
8:00:00 AM	Classroom Week outline, expectations, introductions	
9:00:00 AM	Classroom Principles of Diagnostic Testing & Manometers	
10:00:00 AM	Blower Door Lab	
11:00:00 AM	Blower Door Lab	
12:00:00 PM	Lunch	
1:00:00 PM	Pressure Diagnostics Lab	
2:00:00 PM	Duct Blaster Lab (Total Leakage Test)	
3:00:00 PM	Duct Blaster Lab (Leakage to Outside Test)	
4:00:00 PM	Duct Blaster Lab (Leakage to Outside Test)	
5:00:00 PM	Identifying Construction Materials Lab	

Practice Rating 1		
Day 2	Instruction	
8:00:00 AM	Practice Rating 1, Blower Door Practice	
9:00:00 AM	Practice Rating 1, Blower Door Practice	
10:00:00 AM	Practice Rating 1, Blower Door Practice	
11:00:00 AM	Practice Rating 1, Blower Door Practice	
12:00:00 PM	Lunch	
1:00:00 PM	Take offs	
2:00:00 PM	Take offs	
3:00:00 PM	REM Input	
4:00:00 PM	REM Input	
5:00:00 PM	REM Input	

Practice Rating 2		
Day 3	Instruction	
8:00:00 AM	Field Practice Rating 2, Duct Testing Practice	
9:00:00 AM	Field Practice Rating 2, Duct Testing Practice	
10:00:00 AM	Field Practice Rating 2, Duct Testing Practice	
11:00:00 AM	Field Practice Rating 2, Duct Testing Practice	
12:00:00 PM	Lunch	
1:00:00 PM	Take offs	
2:00:00 PM	Take offs	
3:00:00 PM	REM Input	
4:00:00 PM	REM Input	
5:00:00 PM	REM Input	

Existing Home		
Day 4	Instruction	
8:00:00 AM	Pressure Diagnostics Lab	
9:00:00 AM	Gas Leak Detection Lab	
10:00:00 AM	Worst Case Depressurization Lab	
11:00:00 AM	Worst Case Depressurization Lab	
12:00:00 PM	Lunch	
1:00:00 PM	Combustion Safety Testing Lab	
2:00:00 PM	Combustion Safety Testing Lab	
3:00:00 PM	Work Scope Development	
4:00:00 PM	Work Scope Development	
5:00:00 PM	Review	

# **Part 4: Grading Policy**

# **Successful Completion of Course**

Successful completion of the field training portion of Rater training is two parts. First, you must pass the equipment certification process with an instructor. This will be a one-on-one session to demonstrate your proficiency with the equipment.

The second part of completing your field training is submitting your practice ratings to your instructor. The instructor will evaluate your rating for accuracy and provide feedback on improvements. Once the practice ratings meet the satisfaction of the instructor you will have met this requirement.