



---

## PHIUS+ Rater Training

Day 1 (8:30am – 5:00pm):

Passive House Principles, PHIUS+ and QAQC: Design verification and rating certification process

Day 2 (8:00am – 3:00pm):

In field testing and hands-on demonstration, exam

### Course Requirements:

1. Your own laptop with MS Excel 2000 and HERS Rating software
2. Basic knowledge of MS-Excel

### Reading recommendations:

1. Joe Lstiburek: **Builder's Guide to Various Climates**, 4 volumes, EEBA Energy & Environmental Building Association, [www.eeba.org](http://www.eeba.org), ISBN 0-9755127-1-4
2. **Details for Passive Houses – a Catalogue of Ecologically rated Constructions** IBO, Oesterreichisches Institut fuer Baubiologie und –oekologie, Springer Verlag 2008, ISBN 978-3-211-29763-6
3. K. Klingenberg, M. Kernagis, M. James: **Homes for a Changing Climate**, 2009 Passive House Institute US, [www.passivehouse.us](http://www.passivehouse.us), ISBN 978-0-615-22740-5
4. H. Krapmeier, E. Droessler: **CEPHEUS – Living Comfort without Heating**, Springer Verlag 2001, ISBN 3-211-83720-5

## **Day 1**

### **Morning Session Day I – Passive House Principles**

#### **8.30am - 9:00 am**

- Welcome and Introduction to the program

#### **9:00am - noon – Introduction to Passive House**

- Passive House history
- Passive House standard definition
- Passive House, resource depletion and climate change
- Overview of Passive House design principles – building envelope
- Overview of Passive House design principles – mechanical systems
- North American Examples
- European Examples
- Measured Performance of Passive Houses
- PHIUS certification/accreditation programs

#### **Noon – 1:00pm -- Lunch break (on your own)**

### **Afternoon Session Day I – QAQC for PHIUS+ Certification**

#### **1:00 pm-5:00 pm**

- Introduction to the PHIUS+ certification process
- Why quality assurance and quality control are critical to the success of the project
- Overview of the PHIUS+ checklist –
- Building envelope: testing and inspection requirements
- HVAC: inspections and testing requirements
- DHW: inspections and testing requirements
- Lighting and appliances
- Renewables (solar thermal and PV)
- Other special systems and considerations

## Day 2: In-field testing + hands-on demonstration, exam:

### **8:00 am – 9:00 am**

- Meet at Sheraton Atlanta Hotel (165 Courtland St. SE, Atlanta, GA 30303)
- Travel to “Proud Green Home” (10556 Serenbe Lane, Palmetto, GA 30268)

### **9:00am – noon Hands-on demonstrations**

- Multi-point, computer-controlled blower door testing
- Ventilation system airflow testing/balancing
- Heating/cooling airflow testing/balancing
- Multiple-fan blower door testing for large buildings
- Infrared imaging

**noon – 2:00pm Lunch break (on your own) and return to Sheraton Atlanta Hotel**

**2:00 pm-3:00 pm Exam (room location TBD) – 30 questions, multiple choice**