Weatherization & Healthy Home Training

Residential Energy Analyst Program Training

- Energy Analyst
- Diagnostic Technician
- Weatherization Installer
- Weatherization Crew Leader
- Quality Control Inspector

“What we liked most about the training was that we learned both specific techniques and a philosophical approach for how to adapt to unique situations so we can do whatever we need to do in the future.”

Healthy Home & Energy Education Training

- Healthy Homes Education
- Introduction to Building Science
- Mold & Moisture Control
- Energy Education

It’s easy!

All equipment provided • Online registration • www.oregonenergy.org
Mobile training options • Customized courses
BPI Training
Building Analyst
Envelope Professional
Heating Professional

Advanced Weatherization Training
Combustion Appliance Zone
Heat Rise, Static Pressure & Air Flow Measurement
Duct Testing & Repair
Room Pressure Balancing
Advance REM/Design
ASHRAE 62.2 Ventilation Compliance

Customized Training at Your Location!!

Oregon Training Institute
27501 SW 95th Ave., # 980
Wilsonville, Oregon 97070
www.oregonenergy.org
503-990-8221
Energy Analyst Course

This course is designed for the comprehensive evaluation and documentation of a performance based energy audit of the building shell, assessment of the efficiency and safety of the mechanical systems, and to establish the most cost-effective weatherization strategy using skills learned in the course. Topics include: principles of energy and the building shell, energy auditing, air leakage and the dynamics of pressure differentials, insulation types, windows and doors, heating and cooling systems, indoor air quality, lighting and appliances, water heating, and health and safety. Hands-on training in the lab with diagnostic tools, blower door, and duct blaster are included. This is an intensive week long training course.

Weatherization Installer Courses

Weatherization Installer - Stick Built Homes. Two days in the classroom and two days of hands-on lab and installation of stick-built home measures (installing attic, wall and floor insulation, replacing windows and doors, and sealing ducts).

Weatherization Installer - Mobile Homes. This course focuses on demonstration and hands-on application with two days in the classroom and two days of hands-on lab installations. Students get their hands dirty installing attic, wall and floor insulation, replacing windows and doors, and sealing ducts on manufactured (mobile) homes.

Diagnostic Technician Course

Participants become familiar with gas appliance components and operational characteristics with the goal being competent inspection and testing. "Worst Case" draft and CO testing are featured. HVAC duct leakage topics include how duct leaks can impact occupant safety, building durability, HVAC system performance, and energy consumption. Participants will learn how to use diagnostic tools such as the blower door, duct blaster, combustion analyzer and flow meter. Participants will learn to use a digital manometer to measure appliance draft, combustion appliance zone (CAZ) depressurization, and room-to-room pressure imbalances. Hands-on work in the lab is included in this session. This course will also cover CO health effects, CO alarms, how CO is produced, and proper inspection, testing and mitigation techniques.

Weatherization Crew Leader

This two day course provides training in work order preparation, crew supervision, job planning and execution, materials selection and ordering, and processing paperwork. It includes a job planning exercise and a visit to the job site. Successful candidates will be able to plan, manage, and complete weatherization installation projects. This class is not just for people who run crews - it will help anybody in the organization who works with contractors and must facilitate or expedite projects.

Quality Control Inspector

This training consists of one day in the classroom discussing aspects of quality control, quality assurance and quality supervision, in addition to discussing how to conduct quality inspections. The second day is in the field, inspecting both stick built and mobile homes that have recently undergone weatherization measures. Trainees will each conduct inspections of the homes, and then return to the classroom to discuss results and further courses of action. The third morning includes an in-depth review of the exercises completed the previous day, and the afternoon is set aside for the written exam.

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Healthy Home and Energy Education

Healthy Homes

This one day course is an overview of weatherization and healthy home topics that are important in maintaining a safe, energy efficient and comfortable living environment. Topics discussed include: asthma triggers, mold & moisture control, lead poisoning, radon exposure risk, carbon monoxide, pest control, trip & fall injury prevention, low cost energy savers and basic weatherization concepts. A great introduction to home performance and healthy homes! No prerequisites.

Introduction to Building Science

This one day class discusses basic building science concepts and is recommended for anyone who is working in weatherization, and especially for those who are interested in obtaining weatherization certifications. The student is introduced to building science basics (temperature, pressure & energy movement), the thermal boundary, the house as a system, diagnostic testing, and basic energy auditing. Diagnostic tools and equipment used in performing an energy audit in residential homes are utilized as part of this training.

It’s easy!

All equipment provided - Online registration
Mobile training options - Customized courses

Mold & Moisture Control

This class covers typical types of molds found in homes; conditions that lead to mold growth, proper documentation of mold and moisture issues in homes; and methods of cleaning or remediating mold. The student will use infrared cameras and moisture meters to identify moisture within walls.

Energy Education

This class is designed for those who will be working with clients and educating them on energy efficiency and energy conservation practices. Participants will obtain a basic understanding of thermal, and energy flow, and how to apply them in a residential environment. Upon completion of the training, educators and other participants will; understand basic energy education concepts, understand do it yourself energy efficiency updates (free and low cost), basic weatherization measures, and apply theory and practices to help establish local energy education programs.

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BPI Building Analyst Course
This five day course will train you to go beyond a traditional energy audit to perform comprehensive, whole-home assessments, identify problems at the root cause and prescribe and prioritize solutions based on building science. This course provides fundamental concepts related to building science principles, air leakage testing, and performance based energy auditing. It also provides hands-on-training with state-of-the-art diagnostic tools, including blower door, combustion analyzer and infrared cameras.

BPI Envelope Professional Course
In this five day course students learn to quantify performance and prescribe improvements to help tighten the building envelope, stop uncontrolled air leakage and optimize comfort, durability and HVAC performance. In this course, you will learn health & safety and air flow & ventilation requirements. Understand duct leakage testing & repair and various insulation installation standards and best practices.

BPI Heating Professional Course
This five day course teaches participants how to optimize the performance of heating equipment to help save energy and ensure occupant comfort, health and safety. Participants will learn how to use diagnostic tools such as the blower door, duct blaster, monometer and furnace air flow test equipment. They will also learn how to use a combustion analyzer to test combustion appliances to assure proper operation and efficiency.

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Advanced Energy Efficiency Training & Mentoring

**Prerequisite:** Energy Analyst, Diagnostic Technician, BPI Building Analyst or equivalent experience.

**Comprehensive CAZ Testing**
In this day long course students will learn to use the latest test equipment to perform diagnostic tests on a comprehensive set of combustion appliances. Diagnostic tests will include appliance efficiency, safety, code compliance, combustion analysis, worst case draft, temperature rise, static pressure, flow plate, and gas pressure measurements.

**Heat Rise, Static Pressure & Air Flow Measurement**
In this half day course, participants who complete this class will learn about verifying the efficiencies of forced air distribution systems. Students will be able to perform and practice heat rise, static pressure and total system flow tests in our diagnostic lab. The equipment used will include thermometers, manometers and the True Flow Plate. This class is most applicable to Energy Auditors and Inspectors.

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**Duct Diagnostics & Repair**
This half day course will give students a solid foundation in the use of Duct testing in diagnosing duct leakage problems. Students will learn to perform pressurizing duct blaster test, depressurizing tests, dominant duct leakage, split system (supply/return) test, and air flow through a furnace, exhaust fan, and ventilation/heating ducts. Students will learn what test to use in a given situation and what measures to recommend based on test outcomes.

**Room Pressure Balancing**
In this half day course students will learn how to evaluate airflow inside a building. They will learn to perform room pressure testing and to quantify air flow imbalances. Students will then become familiar with different technologies used to balance airflow within a building.

**Advanced REM/Design**
Advanced - REM/Design™ - This one-day advanced class will focus on the proper use and understanding of REM/Design™ to improve the accuracy of modeling results. To ensure the session is useful and informative, please forward any questions your staff would like to see addressed during the training to training@warmandsafenow.com.

**ASHRAE 62.2 Ventilation Compliance**
This class provides a foundational understanding of the new ventilation standards. The course curriculum is suitable for those in the weatherization industry and those seeking a better understanding of ventilation requirements and techniques to achieve compliance. Includes; calculation of ASHRAE 62.2 ventilation needs, how to identify types of ventilation systems, proper installation of ventilation systems, how to set various controls, how to test for correct operation and flow and hands-on practice with these systems in our weatherization lab.

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