

COURSE INFORMATION

RETROFIT INSTALLER—SHELL

National Renewable Energy Laboratory (NREL)
Job Task Analysis: **Retrofit Installer**

WHAT IS A RETROFIT INSTALLER ?

A Retrofit Installer is a residential energy efficiency technician who performs upgrades to site-built and manufactured homes. Installers use industry-recognized best practices to improve the safety, comfort, durability, air quality and energy efficiency of the homes on which they work.

COURSE DESCRIPTION

This course is basic training for Retrofit Installers, the technicians whose work activities are largely comprised of insulating and air-sealing residential buildings, and whose work forms the core of the U.S. Department of Energy (DOE) Weatherization Program. This is where installers learn the fundamental concepts of building science and how to use tools like the blower door to make buildings safe and efficient.

This course is also a critical prerequisite for personnel who will advance to become Crew Leaders, Energy Auditors and Quality Control Inspectors.

COURSE OBJECTIVES

This course will:

- expose participants to all requirements needed to function as a Retrofit Installer/Shell in the Department of Energy Weatherization Program, including (but not limited to):
 - maintaining safety by adhering to a code of conduct and professionalism, following local work rules and properly handling materials, equipment and tools
 - preparing for the job in advance
 - preparing and maintaining tools and materials on site
 - preparing and maintaining the job site
 - implementing appropriate work-scope measures, including: installing shell air-sealing measures, sealing and insulating duct work, preparing and installing attic and foundation insulation, installing or patching moisture barriers and much more
 - completing the project at the work site

(continued in next column)



COURSE OBJECTIVES, continued

- teach participants the proper installation of shell weatherization measures as called for on the weatherization audit work order
- give participants an opportunity to get hands-on experience on a site-built home with supervision and guidance by experienced trainers

COURSE DETAILS

- Five days of course instruction and demonstrations
- Written test at end of day five
- One day field experience
- Customized to meet your network's needs

(continued on other side)

COURSE INFORMATION

RETROFIT INSTALLER—SHELL, continued
National Renewable Energy Laboratory (NREL)
Job Task Analysis: **Retrofit Installer**

COURSE PREREQUISITE

There are no prerequisite courses.

WHAT YOU WILL LEARN

- A brief history of the Weatherization Program
- Important building-science concepts and the “whole-house” approach to weatherizing homes
- How to:
 - implement safety procedures
 - acquire and maintain materials and equipment
 - prepare for the job
 - maintain a safe job site, including ventilation of confined spaces, checking for electrical hazards, Lead-safe Work Practices, protecting the interior and exterior environments, and more.
 - implement the work scope
 - perform blower door-directed air sealing
 - prepare the attic for insulation
 - install new, and upgrade existing, ventilation duct work
 - install the various types of building insulation
 - perform minor electrical, plumbing, roofing and flashing repairs
 - perform a daily combustion-appliance safety test
 - address deviations from the work scope and wrap up the job

ABOUT NREL'S JOB TASK ANALYSIS

The Retrofit Installer Shell course follows the NREL's Quality Control Inspector Job Task Analysis (JTA) for Retrofit Installer. The JTA is the foundation for the IREC credentialing program, identifying critical knowledge areas, work functions and skills for a professional working in the field.

The JTA was created by subject matter experts (SMEs) and includes a blueprint for the examination used in the course.



ABOUT THE TRAINER

Michael Hastings is a Trainer for the Retrofit Installer and Crew Leader courses and a BPI Certified Professional. See his trainer biography page for more.



CERTIFIED
PROFESSIONAL

AN IREC-ACCREDITED COURSE

Retrofit Installer—Shell is a course that has been accredited by the Interstate Renewable Energy Council (IREC).