



WEATHERIZATION

TOPIC OF STUDY

Weatherization



90 MINUTES

KEY TERMS

Work Scope: full list of work to be performed and materials to be installed; also known as a work order.

LESSON

The Roles and Duties of a Weatherization Retrofit installer/Technician

BIG IDEA(S)

Auditors and weatherization technicians need to understand the cost-effectiveness of such work in saving energy and providing explanations to clients. The role of the installer is to successfully fulfill the work site's work scope (work order) while keeping in mind health and safety concerns.

TASK LIST SUBCATEGORY

- 102 Describe how energy is fundamental to our everyday lives
- 104 Describe sources and uses of energy
- 801 Identify the principles of building science
- 810 Use energy efficiency industry vocabulary

OVERVIEW

Auditors and weatherization technicians need to understand the cost-effectiveness of such work in saving energy and providing explanations to clients. The role of the installer is to successfully fulfill the work site's work scope (work order) while keeping in mind health and safety concerns. Installers must 1) have knowledge of how to apply weatherization measures, and 2) have the physical ability to apply the measures on the job. Installers must also keep safety a top priority for themselves and the occupants of the home.

STANDARDS

PA/SDP

3.2.10.B6. Explain how behavior of matter and energy follow predictable patterns that are defined by laws.

INSTRUCTIONAL

TEXT/REFERENCES

Training Handbook, pp. 15-17; 69-71

MATERIALS NEEDED

Content: Sample Work Scope

Technology: Device with internet to watch YouTube video

OBJECTIVES

Students will:

- Recognize that building science guides the selection of measures installed with program dollars
- Interpret work orders
- Identify potential health and safety concerns related to a work order's installation
- Summarize the principles of cost-effectiveness and the savings-to-investment ratio (SIR)





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IMPLEMENTATION (LESSON PLAN)

ENGAGE

- Ask the class what they think the role of a Weatherization Installer to be. Write ideas on the board. Complete the Weatherization Tech Job checklist together (Year 1 Lesson 4 worksheet).
- Use the video presentation and discussion to teach students about the work of a technician involved in the Weatherization Assistance Program (WAP). <https://www.youtube.com/watch?v=qGOWR2jKDpA>. Ask students to pay attention to what technicians are doing in the video to get a sense of the work and how they are related to the main goals of the main goals of weatherization.

EXPLORE

1. Provide each student with a copy of a sample work order. Ask students to explain the various sections.
2. Have groups of 2-3 students work together to analyze the work order and develop a plan of action for the work. Students should include:
 - a. A list of all tools needed
 - b. A list of weatherization materials needed and their amounts
 - c. A list of safety considerations that will need to be enacted

EXPLAIN

- Have student teams present their action plan for their work order. As a whole class have point out the strengths and weaknesses of each team's plan.

EXTEND/EVALUATE

- As individuals or in pairs, have student construct a classified ad/job description for a Weatherization Retrofit Installer Technician for their future business.

HOMEWORK

Using Indeed.com conduct a job search and find 2 current job openings for a weatherization installer.

RESOURCES/LINKS

The Weatherization Assistance Program: 40 Years of Improving Homes and Lives

<https://youtu.be/qGOWR2jKDpA>

Wisconsin Weatherization Assistance Program Manual 2021:

<http://homeenergyplus.wi.gov/docview.asp?docid=28958&locid=25>





SAMPLE CLASSIFIED ADVERTISEMENT (FOR INSTRUCTOR USE)

FULL JOB DESCRIPTION

Home Energy and Comfort, Pennsylvania's only BPI GoldStar Contractor focused on whole home performance, is looking for Insulation and Weatherization Technicians and Installers to support the installation of home performance recommendations in primarily residential settings. The ideal candidate will be punctual, hard working, and good at communicating with both staff and customers. We are looking for motivated individuals with a desire to learn, secure long-term employment, and help people and the planet.

Either BPI credentials or experience in the home performance industry are preferred. We will certainly consider candidates that do not, as we can train anyone. Please send a resume and a list of at least 2 professional references. Message with any questions. We are conducting interviews on a rolling basis until the positions are filled.

Hourly wage is dependent on experience, training, and certifications and shall be no lower than \$15 an hour. Technicians and installers typically earn \$15 - \$20 an hour. A typical work week is 32-40 hrs with overtime available some weeks. Worker's Compensation, paid holidays, and earned vacation time provided. Annual bonuses and pay raises provided based on performance.

Work Experience Requirements:

- Experience in the weatherization and insulation trades preferred

Education/Certification/License Requirements:

- High school diploma or GED preferred
- Associate's or Bachelor's degree preferred
- BPI, HERS, and/or LEED credentials strongly preferred
- Must have valid PA driver's license and safe, reliable transportation

Computer Skill/Training Requirements:

- Basic knowledge of and experience with computers, tablets, smart phones
- Building science, carpentry, and/or construction training/experience preferred

Primary Responsibilities:

- Review work scopes and prep/plan for installations (10%)
- Travel to and from job sites using personal transportation and/or company vehicle (10%)
- Installing home performance recommendations including insulation (fiberglass, cellulose, spray foam, rigid board, etc.), air sealing, weather stripping, as well as associated prep and clean up of project sites (80%)

Environmental Conditions:

- Work areas are typically residential attics, basements, and crawl spaces.
- We will provide all safety equipment for employee to work safely and effectively.

Physical Requirements:

- Must be able to lift 50 lbs. regularly and occasionally 75+ lbs.
- Must be able to work safely and effectively in different conditions and spaces
- Must be able to smile and have a good time even on a tough day
- Good sense of humor highly recommended and preferred

Please send a professional resume and at least 2 professional references.

Job Type: Full-time

Salary: \$15.00 to \$20.00 /hour



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SAMPLE CLASSIFIED ADVERTISEMENT - CONTINUED

Experience:

- Building trades: 1 year (Preferred)

License:

- PA driver's license (Required)

Work Location:

- Multiple locations

Typical start time:

- 7AM

Typical end time:

- 3PM

Company's website:

- www.EnergyAndComfort.com



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