

Workforce Guidelines for Home Energy Upgrades FAQs

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- I. Overview
- II. Development Process
- III. Implementation
- IV. SWSs, JTAs, and KSAs
- V. Glossary

I. Overview—Workforce Guidelines for Home Energy Upgrades

Q: What are the *Workforce Guidelines for Home Energy Upgrades*?

A: A suite of voluntary national guidelines for the work and workforce involved in the Weatherization Assistance Program (WAP) and all other residential energy efficiency retrofits.

Q: Why were the *Workforce Guidelines* developed?

A: The *Workforce Guidelines for Home Energy Upgrades* are designed to lay a permanent foundation for a stronger WAP and to foster the growth of a high-quality home energy retrofit industry with a skilled and credentialed workforce.

Q: How will the *Workforce Guidelines* help the retrofit workforce?

A: The Guidelines will help increase workforce mobility establishing a clear and consistent skill set upon which to base worker credentials that are recognized, portable, and transferable nationwide.

Q: How will the *Workforce Guidelines* help the Weatherization Assistance Program and the larger retrofit industry?

A: The *Workforce Guidelines* contain a comprehensive set of Standard Work Specifications, which provide a clear definition and baseline for residential retrofit work quality.

Q: How will the *Workforce Guidelines* help improve workforce training?

A: The *Workforce Guidelines* will assist training providers in developing course content and curricula consistent with an industry-recognized suite of job tasks, and knowledge, skills, and abilities (KSAs) appropriate for each occupation.

Q: How will the *Workforce Guidelines* benefit homeowners?

A: The *Workforce Guidelines* will help strengthen homeowner confidence that energy upgrades will be completed correctly and safely and provide the expected energy savings and health benefits. This confidence, in turn, will result in increased demand.

Q: Who is the intended audience for the *Workforce Guidelines*?

A: The *Workforce Guidelines* are intended for a diverse audience, including: workers, contractors, and program administrators in the Weatherization Assistance Program, state, municipal, utility and private retrofit programs nationwide who are seeking to increase the quality and effectiveness of the work performed. The *Workforce Guidelines* are also intended to be used by training providers to improve course curriculum and other training materials.

Q: The *Workforce Guidelines* contain standard work specifications (SWSs), job task analyses (JTAs)

and knowledge, skills, and abilities (KSAs) for workers performing upgrades on single family homes. What about energy upgrade work for multi-family housing and modular (manufactured) housing?

A: EERE is developing separate SWSs for both multi-family buildings (garden style, mid-rise and high-rise residential buildings) and modular housing. These SWSs will follow the release of the residential *Workforce Guidelines* and will go through a similar process of collaborative development and public review.

Q: Where can I get more information on the *Workforce Guidelines*?

A: All materials related to the *Workforce Guidelines* will be available at: http://www.weatherization.energy.gov/retrofit_guidelines

A recorded webinar is also available for viewing at: http://www.eere.energy.gov/wip/residential_retrofit_webinars.html

You may receive updates in the future by joining EERE's WAP listserve at: https://service.govdelivery.com/service/subscribe.html?code=USEERE_155

Q: When will the *Workforce Guidelines* be available for public review? How can I comment?

A: The public comment period is from November 9, 2010 to January 7th, 2011. Directions for submitting public review comments will be posted at: http://www.weatherization.energy.gov/retrofit_guidelines

Q: Will the *Workforce Guidelines* address the ways that climate variations affect retrofit measures?

A: Yes, in developing the *Workforce Guidelines*, dozens of experts focused on considerations unique to each of six different U.S. climate zones.

Q: Will material standards, such as ENERGY STAR® lighting specifications, be referenced?

A: Yes, technical standards, including ENERGY STAR specifications, have been referenced throughout the Guidelines.

Q: How will the *Workforce Guidelines* effect existing certifications?

A: The *Workforce Guidelines*—specifically the JTAs and KSAs—will help strengthen and expand the availability of workforce certifications. Additional details are still in development.

II. Process to Develop the *Workforce Guidelines for Home Energy Upgrades*

Q: Who created the *Workforce Guidelines*?

A: The *Workforce Guidelines* were created through a collaborative process by Weatherization Assistance Program technicians and trainers, home performance contractors, building scientists, organized labor, healthy homes and worker safety experts, and other professionals in the building trades and throughout the retrofit industry. The guidelines build upon the large body of existing technical material and the cumulative knowledge gathered throughout the 30-year history of the energy efficiency retrofit industry.

Q: Have all existing standards organizations been included in this process?

A: NREL has researched and incorporated many relevant technical standards from recognized organizations, such as BPI, ASTM and ASHRAE.

Q: Will these Guidelines support the 2009 International Energy Conservation Code?

A: Yes, the International Energy Conservation Code is referenced in several standards.

Q: Will the Guidelines address health and safety issues like radon, lead, mold, air quality, and asbestos abatement?

A: Health and safety experts from industry and the Federal government participated in drafting and reviewing the Standard Work Specifications. The applicable required worker training programs and safety procedures are supported in the Guidelines.

Q: Is worker safety written into the Guidelines?

A: Yes, worker safety guidelines were written into each section. Experts from the Occupational Safety and Health Administration (OSHA) participated in the development of the *Workforce Guidelines*.

Q: What is the relationship between the *Workforce Guidelines for Home Energy Upgrades* and the Environmental Protection Agency Healthy Indoor Environment Protocols for Home Energy Upgrades?

A: The EPA Healthy Indoor Environment Protocols and the U.S Department of Energy (DOE) *Workforce Guidelines* were developed in parallel and are complementary. Both are intended to provide a set of voluntary measures that energy efficiency retrofit programs may adopt to increase the quality of the residential retrofit work performed while maintaining or improving the health and safety of the home occupant(s). DOE encourages reviewers of the *Workforce Guidelines* with a specific interest in healthy indoor environments to also review and comment on the EPA document, available at: <http://www.epa.gov/iaq/homes/retrofits.html>.

III. Implementation of The *Workforce Guidelines for Home Energy Upgrades*

Q: Will the Guidelines apply to other programs in addition to the Weatherization Assistance Program?

A: Yes, they are intended to be used in all residential energy efficiency retrofit programs.

Q: How do the Guidelines relate to the newly-announced Home Energy Score?

A: The Guidelines do not affect the Home Energy Score, but rather become relevant when the homeowner chooses to proceed with an energy efficiency upgrade.

Q: Do the Guidelines include EPA's Lead Renovation, Repair, and Painting Program (RRP) rule?

A: Yes.

Q: Will the Guidelines help companies that offer a retail energy efficiency service for homeowners? Will it help develop a higher quality workforce?

A: Yes to both questions; this is one of the primary goals of this effort.

Q: Will the JTAs and KSAs be developed for specific occupations or will they be generalized for all individuals involved in weatherization and retrofitting?

A: The Guidelines list JTAs and KSAs for four specific field occupations: installer, crew leader, auditor and inspector/quality assurance professional.

Q: Will the *Workforce Guidelines* increase the number of home energy upgrades?

A: The *Workforce Guidelines* are intended to increase demand by increasing the quality of the work and workforce involved in home energy retrofits. The JTAs and KSAs will also

provide training centers and community colleges with the tools needed to better train the retrofit workforce.

IV. SWSs, JTAs and KSAs

Q: What is a standard work specification (SWS)?

A: The standard work specifications (SWS) define the minimum requirements for high quality work and the conditions necessary to achieve the desired outcomes for each energy efficiency retrofit measure.

Q: What are job task analyses (JTAs)?

A: A job task analysis (JTA) identifies and catalogs all of the steps workers take in completing an energy efficiency improvement in a home. Training providers typically use job task analyses for developing their curricula and course content.

Q: What are knowledge, skills, and abilities (KSAs)?

A: KSAs identify the minimum qualifications that workers in each job classification should possess to perform high quality work.

Q: Will the standard work specifications include green products, recycled content and locally-made products?

A: The specifications describe the desired outcomes (energy use and savings, and necessary health and safety improvements) in terms of performance of the building once specific retrofit work is completed. Products to be used in the home upgrade work are not specified, but must meet functionality and safety guidelines.

V. Glossary

Job Task Analysis (JTA)

Job Task Analyses identify and catalog all of the steps workers take in completing energy efficiency improvements in homes. Different JTAs apply to each distinct role or job involved in the overall project. Training providers typically use detailed job task analyses for developing their curricula and course content. The *Workforce Guidelines* contain JTAs for four common Weatherization and home performance job classifications: Energy Auditor, Installer/Technician, Crew Chief, and Quality Assurance Professional/Inspector.

Knowledge, Skills and Abilities (KSAs)

KSAs identify the minimum qualifications that workers in each job classification should possess to perform high quality work.

Standard Work Specifications (SWS)

Define the minimum requirements for high quality work and the conditions necessary to achieve the desired outcomes for each energy efficiency upgrade measure.

Retrofit

An energy efficiency measure applied to an existing building, or an action improving the thermal performance or maintenance of a building. The U.S. Department of Energy also refers to residential “retrofits” as “upgrades.”

Weatherization Assistance Program (WAP)

The federal program managed by the U.S. Department of Energy that

provides home energy retrofit services free of charge to low-income families, up to a specified spending cap.

Workforce Guidelines for Home Energy Upgrades is a compilation of national SWSs, JTAs and KSAs for residential retrofit work that will:

1. Enable state and local weatherization officials and other residential retrofit program administrators to strengthen their field guides and other work manuals by incorporating the high quality Standard Work Specifications contained in the *Workforce Guidelines*.
2. Assist training providers in developing course content and curricula consistent with an industry-recognized suite of job task analyses for each of four distinct occupations in the residential weatherization field.
3. Increase workforce mobility up career ladders and across career lattices by establishing a clear set of essential knowledge, skills and abilities upon which worker credentials should be based, for each job or occupation.
4. Build confidence amongst consumers and the energy efficiency finance community that retrofit work will be completed consistently and with high quality, and produce the expected energy savings and health benefits.
5. Lay the foundation for a more robust worker certification and training program accreditation architecture.