

# Standard Work Specifications (SWS)

The SWS are a free online tool and industry guide that defines the minimum acceptable outcomes for home energy upgrades installed on single-family, multifamily, and manufactured housing. These specifications provide objective-based outcomes for energy efficiency measures installed by the home performance industry. Access the SWS in English and Spanish at [sws.nrel.gov](https://sws.nrel.gov).

Developed by the U.S. Department of Energy, the National Renewable Energy Laboratory, and numerous industry stakeholders, the SWS synthesize more than 40 years of building science expertise within the U.S. Department of Energy's Weatherization Assistance Program and the greater industry. The SWS serve as a universal resource and provide home energy professionals, homeowners, and consumers with the same baseline for residential energy upgrades.

As the weatherization industry advances, the SWS are maintained on a 5-year cycle to reflect industry-accepted practices. The SWS have built-in commenting functionality to make it easy for users to provide feedback. This feedback is then reviewed by technical committees, and if the comment is accepted, the SWS are revised.

## Objectives for Efficiency Measures and Defining Quality Work

The SWS address a complete set of energy efficiency measures that comprise a whole-house energy upgrade, including air sealing, ventilation, insulation, and more. The SWS provide the Weatherization Assistance Program with a consistent definition of work quality by increasing the standardization of installation and technical monitoring outcomes across the industry.

The SWS is not a prescriptive list of actions that must be taken on every project. Rather, the SWS identify desired outcomes for each energy efficiency measure, listing the minimum requirements necessary to meet those outcomes when work is selected by an energy auditor or required by a program, which can vary by jurisdiction.

By establishing these overall objectives, the SWS remove potential confusion about what constitutes a quality energy



*Photo from Energy Resource Center*

efficiency upgrade that is effective, durable, and safe. Using the SWS in the field, supervisors can reference the tool to illustrate the desired result, and installers can check their work against the tool to ensure that the measure they are installing achieves the specified outcomes. The SWS can be used by energy auditors to ensure their work scopes align with industry best practices, and inspectors can also use the SWS to confirm installations meet the desired outcome.

## A Resource for Building Field Guides

The SWS online tool provides its users with the ability to build, customize, and share field guides. This feature allows users the flexibility they need to create guides for implementing weatherization measures specific to their needs. Features include:

- Branding the cover page with a customizable title, logo, and disclaimer
- Selecting relevant details and adding images and captions
- Choosing to make the field guide private or shared with the community
- Accessing other community-shared guides
- Downloading the customized field guide as a PDF.

**Access resources and learn how to create a field guide: [sws.nrel.gov/help](https://sws.nrel.gov/help).**