

Technical Management Areas

WEATHERIZATION ASSISTANCE PROGRAM

May 2021



Session Overview

- How we got here
- Brief Overview Technical Management Areas
 - SWS & Field Guides
 - Training & Certifications
 - Inspections & Monitoring
- Open to Discussion

How we got here



Why Quality Work Plan?

Shoddy Work Found in \$22.3 Million
Federal Contract to Fix Up Low Income
Homes

Energy Efficiency Work
Leaves Homeowner Cold



Stimulus Weatherization Contract
Halted:
Subpar Work Found Statewide

What is the Quality Work Plan?



- **Standard Work Specifications**
 - Field Guides
- **Training and Certifications**
 - [Home Energy Professional Occupations](#)
 - [Accredited Training](#)
- **Inspections and Monitoring**

Resources: [WPN 15-4](#)

Standard Work Specifications (SWS)

- Consistent national standards
- Ensures work is effective, durable and safe
- Consensus-based
- Maintained and regularly updated (5-year cycle)



<https://sws.nrel.gov/>

Field Guides - What you need to know

- 5-year approval cycle
- Must align with SWS
 - Or have approved variance request
- Must communicate standards & notify network

Resources: [Training Videos](#),
WAP [Memo 70](#), [WPN 15-4](#)



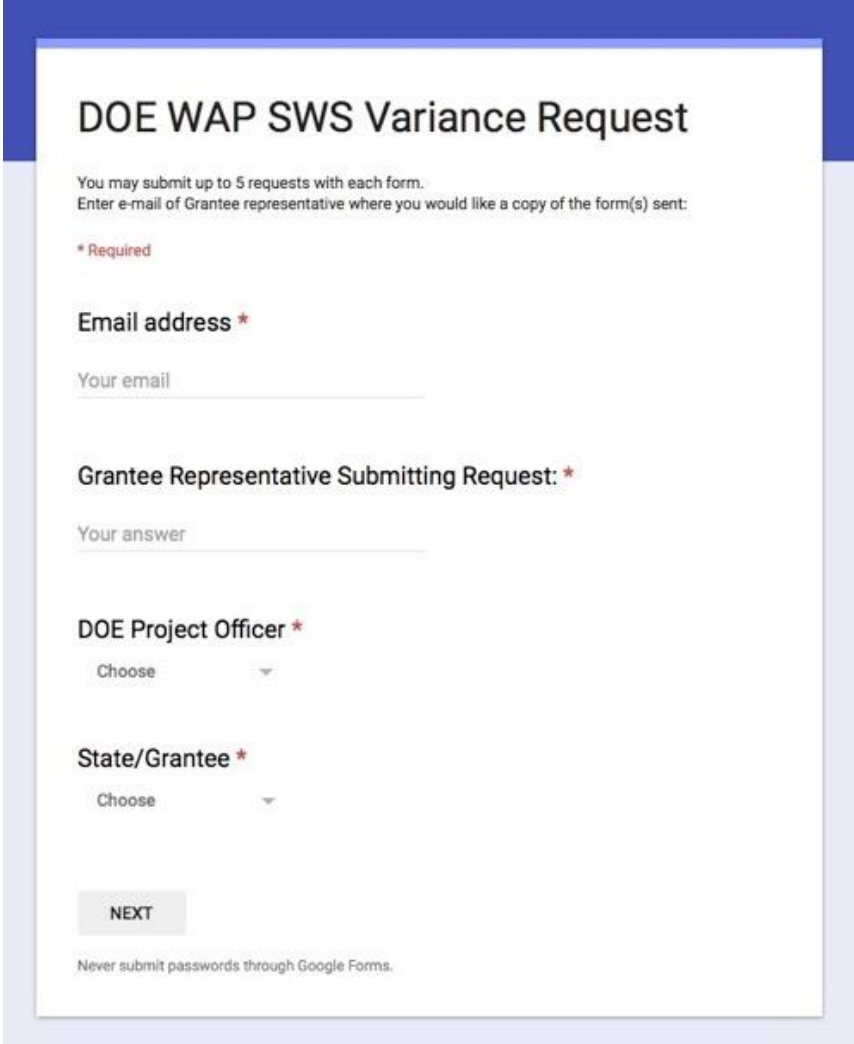
Field Guides – SWS and Variance Requests

A Conundrum:

- Field guides must align with the SWS.
- Sometimes the SWS don't work for you.

The solution:

- [Submit a Variance Request](#)



DOE WAP SWS Variance Request

You may submit up to 5 requests with each form.
Enter e-mail of Grantee representative where you would like a copy of the form(s) sent:

*** Required**

Email address *

Your email

Grantee Representative Submitting Request: *

Your answer

DOE Project Officer *

Choose

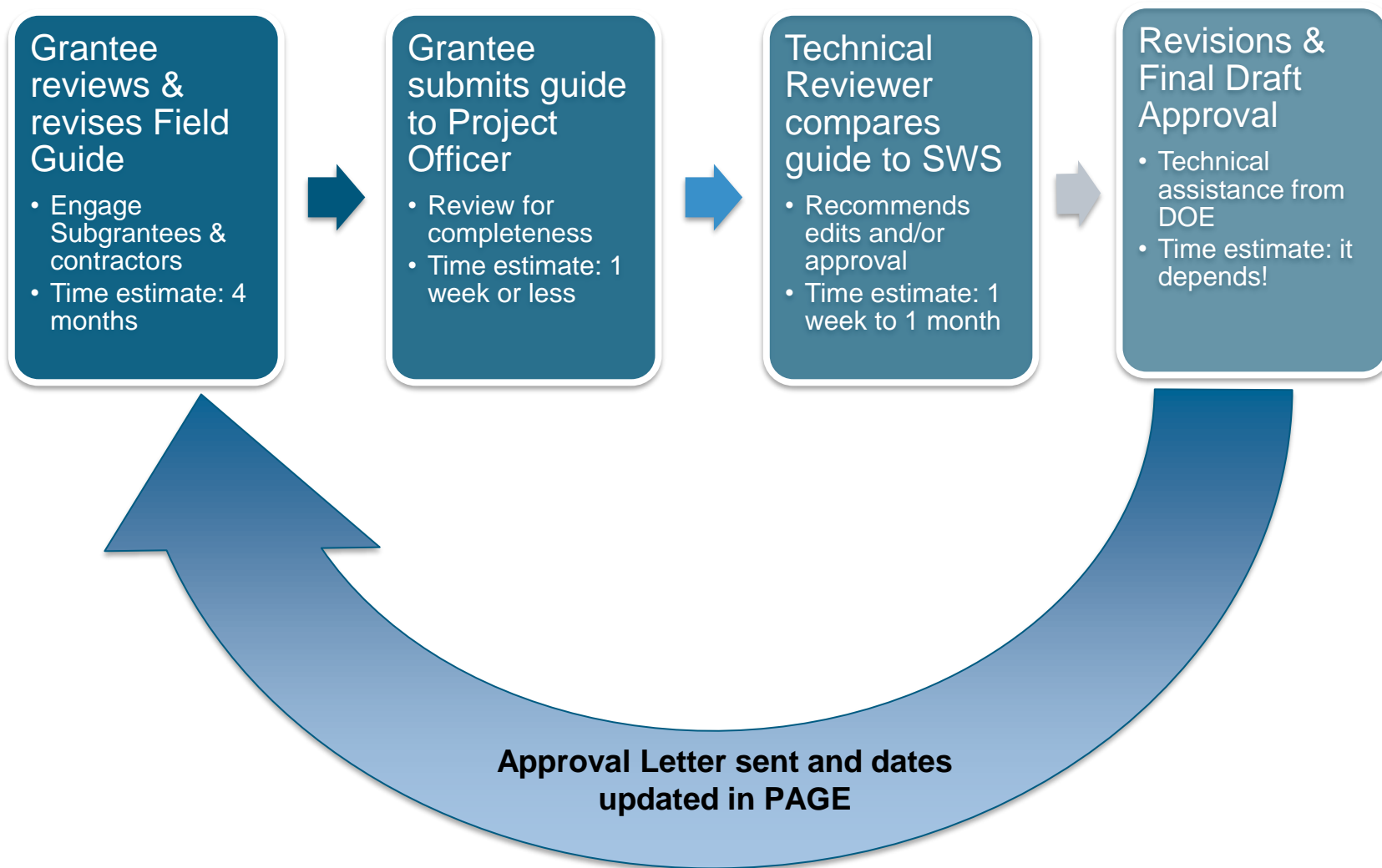
State/Grantee *

Choose

NEXT

Never submit passwords through Google Forms.

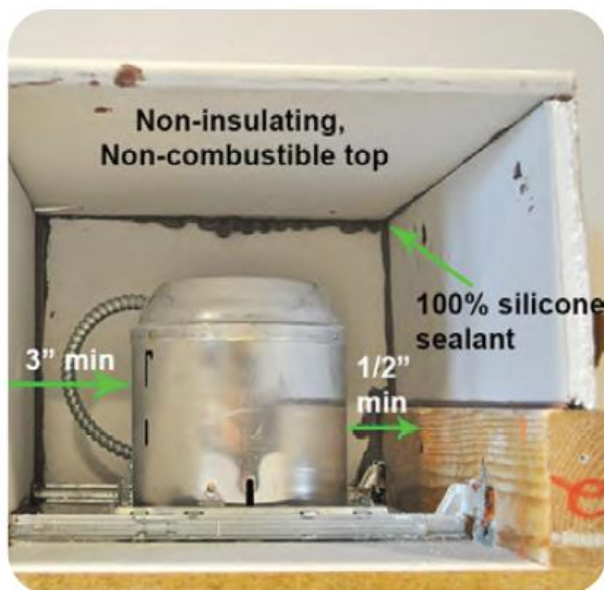
Field Guide Review Process



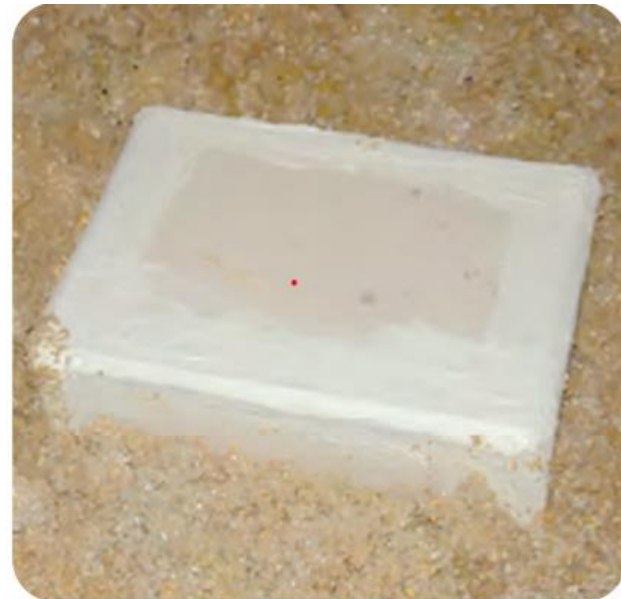
Field Guide Sample – Non-IC Can Lights



1. Clear any debris from around non-IC-rated can light



2. Enclosure has 3 inches of clearance from lamp to insulation on all sides, at least 1/2 inch from any combustible material, such as wood



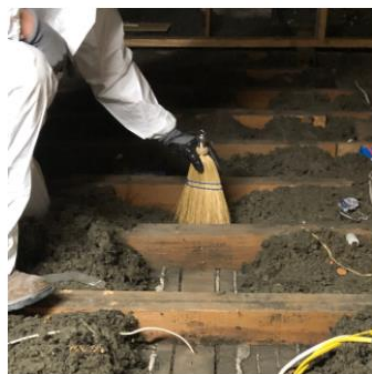
5. Top of box must be R-1 or less and left free of insulation. Flag enclosure for added visibility

Field Guide Sample – Attic Air Sealing



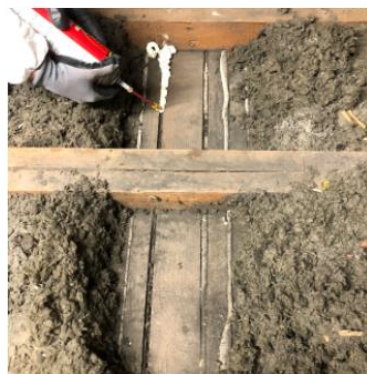
Remove existing
1. insulation

- Remove existing insulation as



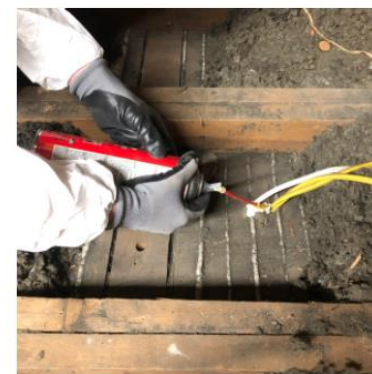
2. Remove dust and
debris

- Sweep or vacuum away any dust



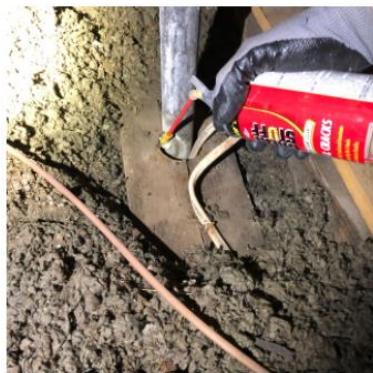
3. Seal all top plates

- Seal with caulk or one part foam to ensure proper adhesion.



4. Seal electrical
penetrations

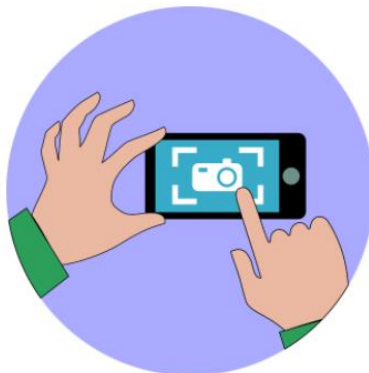
- Seal with caulk or one part foam to



5. Seal plumbing vent
stacks

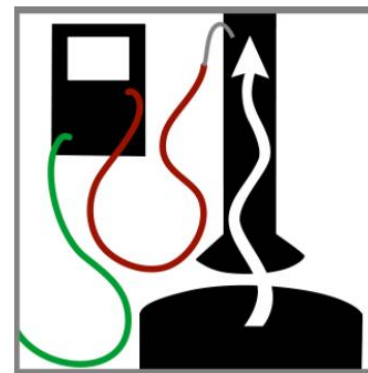


6. Air seal chases, drop
soffits



7. Photograph work

- Take photos of all work that is not easily accessible or that will be



8. Worst Case Draft
Test

Field Guides – Where to Learn More

- WAP Memo 70 – SWS 2020 Update, Field Guide Renewal Dates
- WPN 15-4, Sections 1 & 2 – Describe SWS alignment and distribution requirements
- Application Instructions Master File Section V.5.1 – Technical Guides and Materials
- WAP Website – Training Resources:
<https://www.energy.gov/eere/wap/weatherization-assistance-program-grantee-managers-training-toolkit>
 - SWS tool navigation training
 - Field Guide and Variance Request Review Process webinars
- SWS - <https://sws.nrel.gov>
- Variance Request Form:
 - <https://goo.gl/forms/GeLNgwYWEgK2aNup2>

Training – How pieces fit together

Standard Work
Specifications

Defining Quality Work

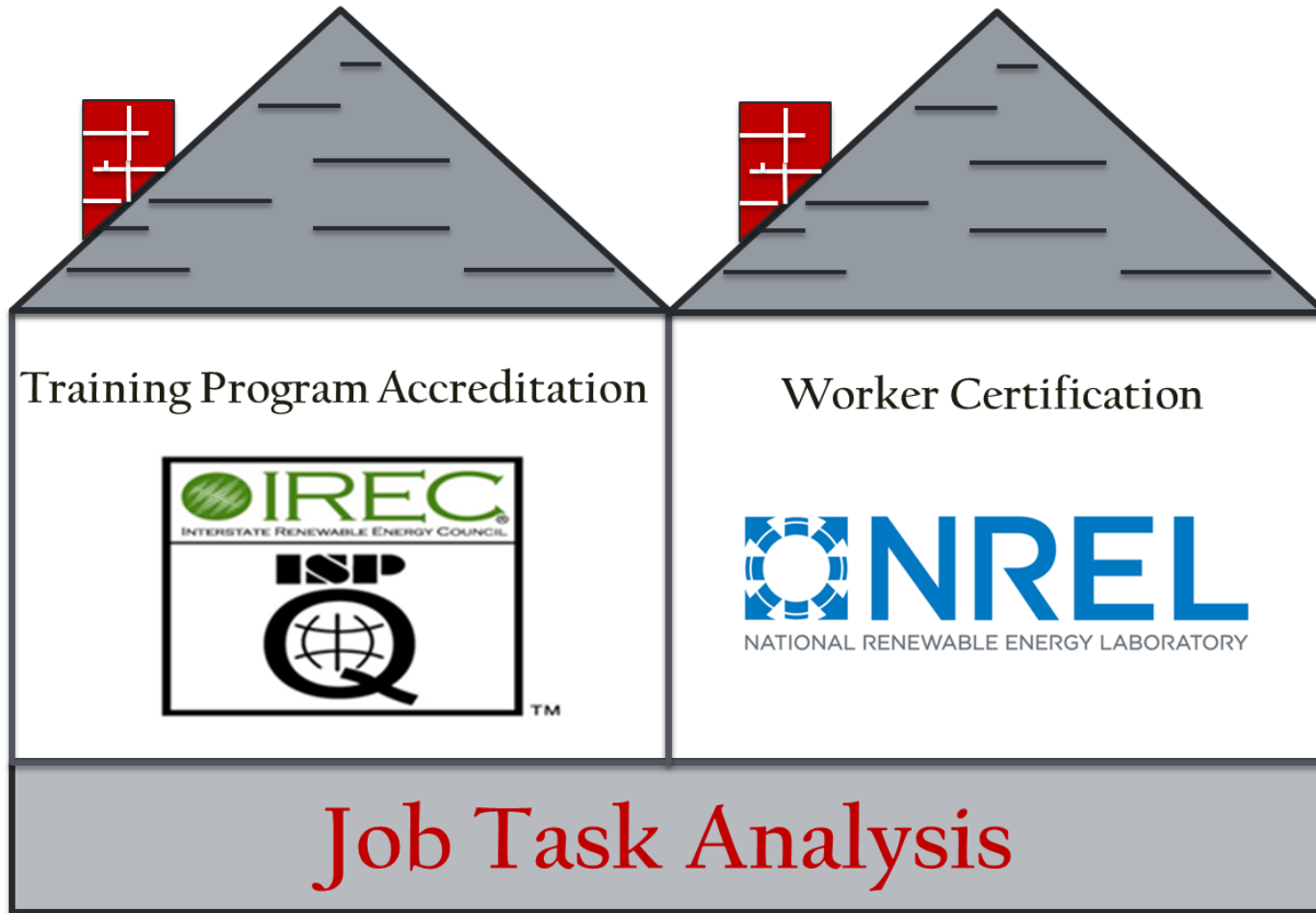
Job Task
Analysis (JTA)

Defining What a Worker
Needs to Know and Do

Accreditation/
Certification

Third Party Verification
of Quality Training and
Worker Skill

JTA is the Foundation



Training – Basic Requirements

- Analysis of training needs
- Plan to meet those needs
- Comprehensive training on Grantee-determined schedule
 - Accredited training providers
- Specific training on as-needed basis

Resources:

Annual Application Instructions - Master File V.8.4

WPN 15-4, WAP Memos 34, 36, 50, RFP Toolkit

Comprehensive Training Definition

- Home Energy Professional occupation.
 - Retrofit Installer Tech/Crew Lead
 - Energy Auditor/Quality Control Inspector
- Aligned with Job Task Analysis (JTA) for occupation.
- Administered by, or in cooperation with, accredited training center.



Specific Training Definition

- Single-issue.
- Addressing deficiencies in the field.
- No federal requirements for training provider.
- Management, administrative, fiscal and conference trainings are considered Specific (Tier 2)



If T&TA stood for Teeth and Tooth Aches

- Comprehensive is your regular bi-annual cleaning.
- Specific is the emergency visit when you break a tooth.



Comprehensive



Specific

Training - Timeline

- Training Plans must ensure that all Weatherization field staff receives regular Comprehensive (Tier 1) training.
- Each Grantee will decide on the regularity of training based on workforce needs and availability of funds.
- Tip: Use the T&TA [Planning and Reporting Template](#)
 - [Training Video](#)

T&TA Planning and Reporting Template

E34											
	A	B	C	D	E	F	G	H	I	J	K
	Training Topic(s)	Training Requested or Initiated by?	Training Category	Comprehensive or Specific Training?	Job Task Analysis (JTA)	Scheduled Date(s) of Training?	Duration of Training (hours)?	Continuing Education Unit(s) Offered?	Training Center/Provider	Attendance Mandatory?	Estimated Costs
1											
28	Auditor	Program Requirement	Technical	Comprehensive	EA	Online with field prep and exams in person later in the year	36 online plus 2 days in person	36	Energy Smart Academy	Yes	\$30,000.00
29	Crew Leader	Program Requirement	Technical	Comprehensive	CL	Online	15	15	Energy Smart Academy	Yes	\$15,000.00
30	Peer Exchanges	Program Requirement	Programmatic	Specific			8	0	MFA	No	\$2,000.00
31	HVAC Training	Subgrantee Request	Technical	Specific		Online or in person TBA	8	4	Energy Smart Academy	No	\$4,000.00
32	2 CFR 200	Subgrantee Request	Financial	Specific			10	0		No	\$2,000.00
33	Cost Allocation	Program Requirement	Financial	Specific			10	0		No	\$2,000.00
34	Program Management	Program Requirement	Programmatic	Specific			10	0		No	\$2,000.00
35	Conferences	Subgrantee Request	Technical	Specific		September, 2021, January 2022, April 2022	126	Usually	NASCSP, BPA	No	\$20,000.00
36	Other Specific Training	Subgrantee Request	Technical	Specific		TBA	16	Depends on class	Energy Smart Academy	No	\$67,225.70

<https://www.energy.gov/eere/wap/downloads/training-and-technical-assistance-plan-template>

Certifications

- 4 HEP Certifications available:
 - Energy Auditor (EA)
 - Micro-Credential Quality Control inspector (QCI)
 - Retrofit Installer/Technician (RIT)
 - DOE no longer maintains
 - Crew Leader (CL)
 - DOE no longer maintains
- 1 HEP Certification federally required:
 - Quality Control Inspector (QCI)



Installer Badges Toolkit

Installer Badges



Job Task Analysis (JTA) and Standard Work Specifications

(SWS) are the underlying foundation for certification schemes and for the accredited training programs. The Retrofit Installer Technician tasks are the basis of the 25 Installer Badges. Examples include:

- Work Lead-Safe
- Air Seal Attic Floor
- Seal and Dam High-Temperature Heat Sources in Attic
- Prep Attic Floor for Insulation



Download the toolkit: <https://sws.nrel.gov/installerbadges>

HEP Certifications – Where to Learn More

- BPI - <http://bpi.org/certified-professionals>
 - Includes application forms, prerequisites, exam fees, certification scheme handbooks, exam prep tips, and more, for each certification.
- JTAs that certifications are built on:
 - <https://energy.gov/eere/wipo/guidelines-home-energy-professionals-accredited-training#jta>
- DOE WAP Standardized Training Curricula aligned with JTAs (2.0 versions):
 - <https://www.energy.gov/eere/wap/weatherization-management-resources/weatherization-training-resources/weatherization-0>
- [WAP Memo 50](#) – RIT/Crew Lead Update
- [WAP Memo 36](#) – Energy Auditor/QCI Update

Inspections & Monitoring

We've defined the work, now hold everyone to it.



Inspections - Subgrantee

Every DOE WAP unit reported as a “completed unit” must receive a final inspection ensuring that all work meets the minimum specifications outlined in the SWS in accordance with 10 CFR 440.

- Every client file must have a form that certifies that the unit had a final inspection and that all work met the required standards.
- The form must be signed by a certified QCI.



Inspections – Grantee Monitoring

A minimum of 5% of completed units will receive a quality assurance review, performed by a certified QCI

- If a subgrantee staff person performs both the initial energy audit and the final QCI, then the Grantee will increase monitoring to at least 10% of completed units

Inspection & Monitoring Forms

- Do they align with your DOE approved field guides?
- Do they align with work orders?
- Do they account for missed opportunities?
- How often are they updated?
 - By whom?



Inspection & Monitoring

Master File V.5.3 Final Inspection

- Certification requirement.
 - **Disciplinary actions.**
- Grantees will provide a copy of relevant policies and procedures that will govern the quality control inspection process in accordance with WPN 15-4 Section 3 and **outline disciplinary actions for inadequate inspection practices.** This should include a description of how the inspector is related to the work being done on the home (i.e. did they also audit the home or are they an independent third-party?) as well as the percentage of homes that will be included in the Grantee monitoring process.

V.5.3 Final Inspection – Disciplinary Actions



- Increased monitoring.
- Additional training.
- On the job training/mentoring.
- **MUST** have mechanism for suspension and/or debarment.

Thank you!

Questions?

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Resource Review

- All WPNs (Guidance) referenced is available here:
- <https://energy.gov/eere/wipo/weatherization-program-guidance>
 - Sortable by topic
 - Active vs. Inactive

The screenshot shows the 'Weatherization Program Guidance' page on the Energy.gov website. The page has a header with 'Energy.gov Offices', 'National Labs', and a search bar. Below the header, there's a navigation bar with 'SERVICES', 'EFFICIENCY', 'RENEWABLES', and 'TRANSPORTATION'. The main content area is titled 'Weatherization Program Guidance' and includes a search bar and a list of documents. The list is sorted by 'Effective Date' and shows 1 to 10 of 202 entries. The documents are listed in a table with columns for 'DESCRIPTION', 'EFFECTIVE DATE', 'TOPIC', and 'TYPE'.

DESCRIPTION	EFFECTIVE DATE	TOPIC	TYPE
WAP Memorandum 031: Allowable Use of Training Funds for the 2018 National Home Performance Conference and Trade Show. The 2018 National Home Performance Conference and Trade Show is being held April 12-16, 2018, in Indianapolis, IN. The national conference, featuring the nation's top experts in home performance and weatherization, provides education opportunities for all sectors of the residential and multifamily energy efficiency industry to advance the profession and the impact of DOE Weatherization Assistance Program (WAP) investments at the event is anticipated to be substantial. DOE is funding the technical assistance (TA) funds by WAP network organizations.	2/12/2018	Unclassified	Active Memorandums
WAP Memorandum 030: Allowable Use of Training Funds for Energy Outreach 2018. The 2018 Energy Outreach Conference is being held May 21-23, 2018, at the Arizona Grand Hotel in Phoenix, Arizona.	2/6/2018	Unclassified	Active Memorandums
WPS 18-1: Program Year 2018 Weatherization Grant. To issue grant guidance and management information for the weatherization assistance program for program year 2018 based on the following documents.	12/18/2017	Unclassified	Active Program Notices
WAP Memorandum 029: Field Guide Expiration Reminder for WAP Grantees. The U.S. Department of Energy (DOE) implemented the Weatherization Assistance Program (WAP) Field Guide Requirements and Procedures (WAP Field Guide) in March 2014. As part of the DOE's ongoing efforts to improve the WAP, DOE is updating the WAP Field Guide to reflect the most current information and standards for WAP grantees.	12/5/2017	Unclassified	Active Memorandums
WAP Memorandum 028: Allowable Use of Training Funds for the 2018 NACSP Mid-Winter Conference. The U.S. Department of Energy's Weatherization Assistance Program (WAP) is seeking applications for state and local weatherization managers to attend the 2018 NACSP Mid-Winter Conference for State Weatherization Managers, scheduled for Feb. 28 - March 2, 2018, in Arlington, VA.	12/5/2017	Unclassified	Active Memorandums
WAP Memorandum 027: FY 2018 Weatherization Assistance Program Grant Guidance. To aid grantees in development and submission of FY 2018 state plans.	10/26/2017	Unclassified	Active Memorandums
WPS 17-2: Weatherization Health and Safety Guidance. To clarify, update and provide additional information on health and safety requirements for WAP grantees.	8/9/2017	Health & Safety	Active Program Notices
WPS Notice 17-6: Property Acquired Under the Weatherization Assistance Program Including Vehicle and Equipment Purchases. To provide grantees with guidance on property and vehicle purchases under the WAP, including equipment for use in the WAP, for purchasing vehicles and equipment.	7/27/2017	Unclassified	Active Program Notices
WPS Notice 17-5: Closeout Procedures for Grants Under the Weatherization Assistance Program. To provide guidance to grantees for closeout of grants funded under WAP.	7/27/2017	Unclassified	Active Program Notices
WPS 17-24: Program Year 2017 Grants Allocation - Revised. To provide revised Grants Allocation for the preparation and submission of applications for funding of WAP for Program Year 2017.	10/3/2017	Funding, Grants	Active Program Notices