



Weatherization Guidance No. 42

Effective Date: October 7, 2019

Updated: April 1, 2022

### Updated Policy and Procedure Using Weatherization Assistant 8.9 Audit Tool

The purpose of this guidance is to inform local agencies of updated policy and procedure regarding the use of the Weatherization Assistance 8.9 (NEAT/MHEA) audit tool. This guidance pertains to all CT WAP weatherization work. Due to recommendations by the Department of Energy and Quality Work Plan requirements, CT WAP is requiring agencies to update procedures in accordance with the following guidance:

#### **1. ASHRAE 62.2-2016 Calculation Process and File Documentation**

All ASHRAE 62.2-2016 Calculations shall be performed using the Residential Energy Dynamics (REDCalc 62.2-2016) Tool. Building height and floor area must be calculated and entered as defined within the RED CALC software tool.

**Note:** CT WAP recognizes Addendum to ASHRAE 62.2-2016 as approved on 1/24/2018. Revised definition of floor area as defined in ANSI Standard Z765 1 that includes below grade unfinished spaces in the calculation of floor area if they are within the pressure boundary of the home.

#### **2. REDCalc Calculations Required**

Subgrantees are required to document conditions at:

- Existing conditions at the time of the on-site audit.
- Projected infiltration reduction ventilation requirements.
- In-Process and Final Inspection Quality Control Inspection verification of ASHRAE 62.2-2016 compliance.

#### **3. Infiltration Reduction Database**

Subgrantees are required to maintain and utilize the CT WAP infiltration reduction databases for the purpose of projecting target infiltration goals for specific housing stocks when entering values into the RED CALC and NEAT/MHEA Tools.

#### **4. Energy Audit Building Component Inputs**

Increased accuracy in building component input will be accomplished via:

- Updated definition of conditioned space values

- existing and proposed insulation values
- Infiltration reduction measures and goals

Door and Window classification and Foundation details will be applied in all cases

### **Conditioned Space**

Purposefully heated by a heating system to maintain a desired temperature, usually utilizing a thermostat to control the space temperature. For example, a basement or crawl space heated by supply registers or radiators in the space would be heated, as would a basement heated continuously by a space heater.

### **Unintentionally Conditioned Space**

Partially heated by a heat source in the space that adds heat unintentionally to the space. For example, a basement or crawl space that is heated because furnace, boiler, or water heaters are in the basement or because un-insulated ductwork runs through the basement.

### **Unconditioned Space**

There are no sources of heat in the space other than conduction through walls, floors, and perhaps insulated ductwork.

**Note:** Floor area calculations in NEAT will be prepared in accordance with DOE Standards.

**Note:** All Existing exposed Insulation R-Values will be calculated using the Building Performance Institute Technical Standards for the Building Analyst Professional Version 1/4/12 to reference Typical Insulation R-Values and Effective R-Values for Batt Insulation.

## **5. Updated building components entry practices into the NEAT/MHEA programs.**

Updated building components including best practices when grouping shell measures for retrofit evaluation. Updated measures definition of all ancillary, incidental and itemized User Defined and Health and Safety Measures in the CT WAP approved Program Year Setup Library is mandatory.

## **6. Enhanced review procedures at the Auditor, Coordinator and Quality Control Inspection level.**

Subgrantees will conduct increased Quality Assurance of all audits entered the Weatherization Assistant 8.9 audit tool at the coordinator and local agency management level. Increased State level Monitoring and assessment of training effectiveness will be ongoing throughout the program year.

## **7. Forcing Measures in the Energy Audit**

Updated policy mandates that all initial measures evaluations be conducted utilizing the "Evaluate All" Retrofit Option in developing Recommended Measures Reports.

**Note:** This practice will include:

- Doors
- Windows

- Primary Heating System Clean, Tune, Test and Replacements

**Note:** Upon review of initial measures evaluations, subsequent evaluations may be conducted utilizing optional Retrofit Option menu items, given justification and documentation is provided, and all program regulations are considered.

All subsequent Retrofit Options will follow procedures as outlined in Chapter 9 of The Weatherization Assistant User's Manual (Version 8.9) and result in either Recommended Energy Conservation Measures with an individual SIR, or as an incidental cost included in the overall SIR or possibly a Health and Safety Measure when appropriate and allowable.

**Note:** Heating System Replacement Options considered subsequent "Evaluate All" include in SIR, will follow procedures as outlined in Chapter 9 of The Weatherization Assistant User's Manual (Version 8.9) given justification and documentation is provided, and all program regulations are considered.

All subsequent Retrofit Options will result in either Recommended Energy Conservation Measures with an individual SIR, or as an incidental cost included in the overall SIR or possibly a Health and Safety Measure when appropriate and allowable.

**Note:** Subgrantees are reminded that all current Prior State Approval requirements remain in effect to include software-generated measures as well as measures identified within Ancillary, Incidental or Health and Safety measures definitions and related energy savings.

## **8. Itemized Costs and User Defined Measures Costs**

Updated policy requires State level review of all itemized costs including User Defined and Health and Safety measures. Only State approved libraries may be used to include these costs and energy savings in developing Recommended Measures Reports.

## **9. Reduced Measures Costs**

Subgrantees are required to comply with DOE WAP Memorandum 035 in all cases going forward. Subgrantee Coordinators, Quality Assurance and State level Monitoring will be increased to ensure that all future audit preparation complies.

## **10. Added Measures Frequency**

Subgrantees are required to track type and frequency of all measures added to work scopes in the course of job completion.

While final measures reports and QCI inspections routinely accounted for these additional costs it is necessary to track these measures and costs to identify trends, code-specific requirements, and potential missed opportunities during the audit process.

Use of such data to support expanded libraries, Health and Safety budgets and training needs is highly recommended.

**Note:** State level Technical and Programmatic Monitoring will focus on implementation of all updated

Audit Tool policy and procedures.

Subgrantees will be cited for any failure to implement updates after this guidance is published.

Failure to successfully comply with all updated policy and procedure may result in disallowed costs at the State and Federal level.