

October 28, 2024



CTAC Residential Topics

PROUD SPONSORS OF



Agenda IV – Process Discussion: Utility Presentations (HES & HES-IE)

a.

Communications & Program Modifications

(see separate presentation for IV a)

d.

QA/QC Standards

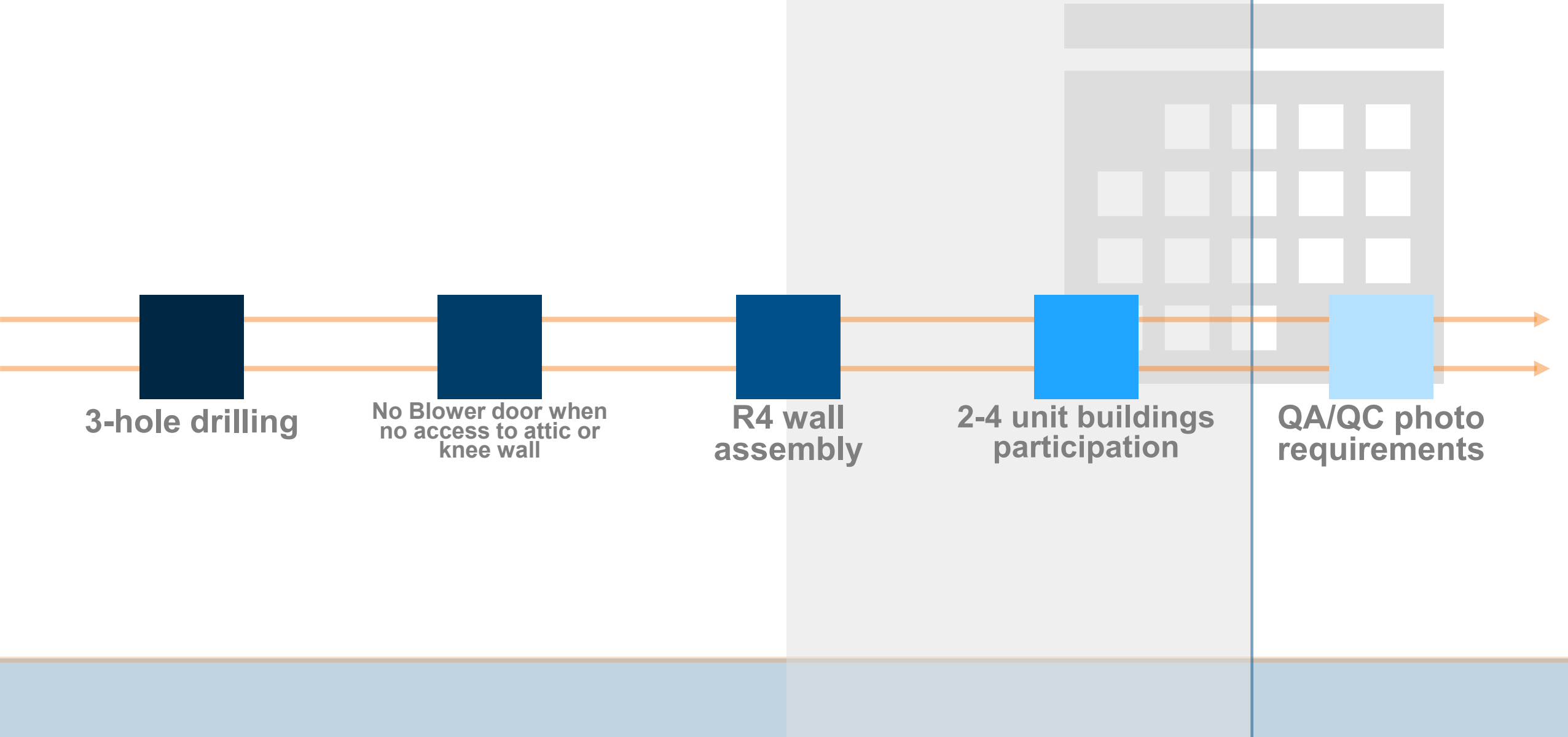
b.

Project Completion Challenges

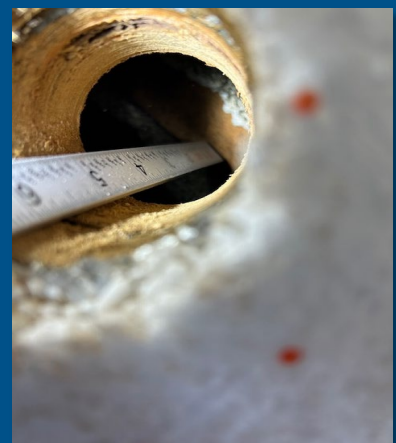
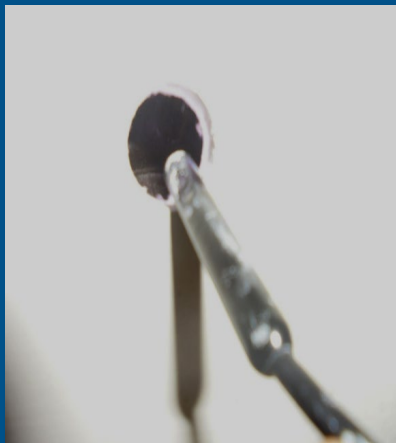
c.

Contractor Recommendations

b. Project Completion Challenges



3 Hole Drilling



Exterior Wall Photo Documentation Options

1. Borescope
2. Obtain a sample
3. First (original) layer of attic Insulation, if applicable
4. Exterior wall cavity photo
5. Infrared Scan
6. Balloon Frame Accessibility

Blower Door Testing



Must be able to confirm
the absence of any health
and safety barriers

Asbestos

Vermiculite

Mold



BPI Protocol

Do No Harm

To the building or
it's occupants



Potential risk does
not outweigh the
reward

Prescriptive path
option

Exterior Wall R Value

Subject: **Exterior Wall Insulation R-Value Assessment**

Sent to all HES and HES-IE Contractors via Bcc email

Dear HES & HES-IE Contractors,

Thank you for your continued feedback and input on field implementation of our program. Recent conversations with contractors have highlighted an important clarification from the Companies' HES and HES-IE teams as it relates to the assessment of exterior wall insulation R-Values.





Up to 1.25" (R-4) of existing exterior wall batt insulation may be permitted for qualifying wall insulation recommendations. Insulation depths greater than 1.25" (R-4) will not qualify for exterior wall insulation rebates or incentives. Walls should be checked at a minimum of 3 original-dwelling locations, excluding closets, commonly renovated areas (Bathrooms, Kitchens), or newer additions.

HES Rebate Form & HES-IE IQT must be filled out appropriately:

- Empty R-0
- 1" Fiberglass Batt R-3
- 1.25" Fiberglass Batt R-4

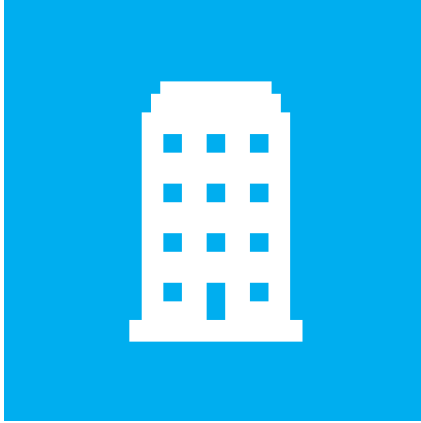
Walls with existing Urea Formaldehyde Foam Insulation (UFFI), Vermiculite, or existing blown material are not eligible for incentives or rebates.

Check the first layer of attic insulation or other insulation sources in the home, which may indicate what was on site during the home building process to help assess wall insulation material. The guidance below (including material colors) can also be utilized when additional information is not available. Homes built 1980-Present may be qualified for exterior wall insulation with proof of no existing insulation and may be subject to in-process insulation inspection.

Pre-1940s	1940-1960	1960-1980	1980-Present
Unlikely insulated Check for signs of retrofit	Highly Variable Check for signs of retrofit	Thin fiberglass batts Check for signs of retrofit	Full cavity fiberglass batts ≥R-4
			

- **June 10, 2024:** the Companies issued a memo regarding exterior wall R value assessment after learning some Contractors were utilizing the DOE Home Energy Score Assessor Calculator default values
- Alignment ensures Contractors are following Program Savings Document (PSD) requirements for incentive qualification to ensure cost effectiveness of the measure
- Enclosed cavities require ~3" of available cavity space to properly densepack

2-4 Unit Buildings



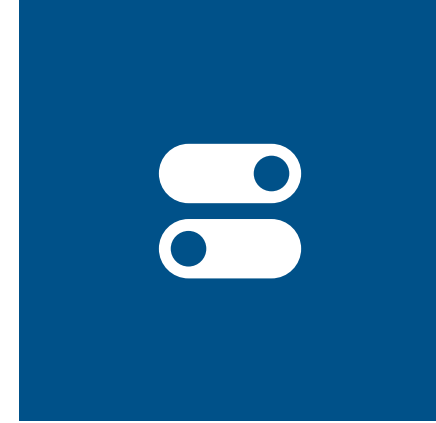
Home Energy Assessment requires access to:

- Attics
- Basements
- Exterior walls
- Mechanicals



It is **recommended** that all units participate during the initial assessment.

Landlords may complete an authorization form for one or more units



Individual unit owners may participate individually, however a full building assessment is recommended

A full-building assessment is allowed even if one unit has participated within the last 6 years. **However, duplicative services cannot be provided.**

QA/QC Photo Requirements








Subject: **Consolidated Photo Documentation Guidance**

Sent to all HES & HES-IE Vendors via Bcc Email

Hello HES and HES-IE Vendors,

This is a follow-up email to feedback received during the June 20, 2024 CTAC meeting regarding photo documentation requirements for the HES & HES-IE programs.

The following timeline and associated communications are provided below to help combine these procedures in one memo.

11/2/2022	12/15/2023	1/18/2024	2/1/2024	3/1/2024	6/11/2024
Q4 Principals Meeting Slide	2023 End-of-Year Updates Memo	Photo Count Guide & Examples	Q1 Principals Meeting Slides	Change Order Process	Exterior Wall Guidance
 Adobe Acrobat Document	 Adobe Acrobat Document	 Adobe Acrobat Document  Adobe Acrobat Document	 Adobe Acrobat Document <i>Slides 13-26</i>	 Adobe Acrobat Document	 Adobe Acrobat Document

The Companies have been asked to put together a checklist summarizing these photo expectations to document existing conditions, work completed, and recommendations. The following checklists document minimum expectations.

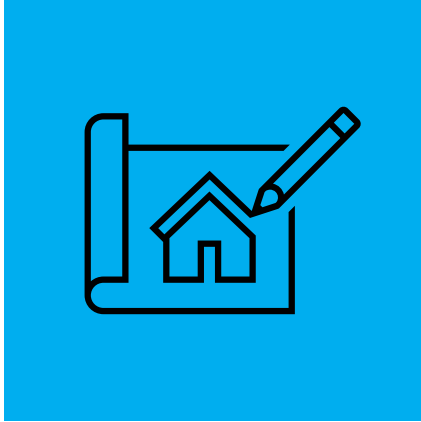
Photo Type	Quantity	Photo Type	Quantity
<input type="checkbox"/> Pre CFM 50	1	<input type="checkbox"/> Mechanicals	Min 2
<input type="checkbox"/> Attic	Min 3	<input type="checkbox"/> Heating System	1-2
Common Items	3-5	Water Heater	1-2
Attic Access	1-2	<input type="checkbox"/> Windows	Min 2
Unique Finds	1-2	Primary Type	1-2
Chimney	1-2	Secondary Type	1-2
Whole House Fan	1-2	<input type="checkbox"/> Duct Sealing	Min 5
Kitchen/Attic Area	3-4	Truflow (HSD CFM/ton)	1
<input type="checkbox"/> Basement	Min 2	Pre CFM 25	1
Basement	2-3	Air Handler	1-2
Unique Finds	1-2	Supply/Return Trunk	1-2
<input type="checkbox"/> Garage/Living Space	No Min	Duct Boots/Takeoffs	1-2
Common Items	1-2	Post CFM 25	1
Unique Finds	1-2	<input type="checkbox"/> Advanced Duct Sealing	Min 1
<input type="checkbox"/> Post CFM 50	1	Equipment Setup	1-2

If you have any questions or are in need of additional guidance, please do not hesitate to reach out.

Thank you,
You Eversource and Avangrid Energy Efficiency Team

- **July 2024** the Companies issued a memo regarding all photo documentation guidance in a timeline format and provided a listing of photos that would be needed to support work completed or recommendations
- Q4 2022 – Insulation Change Orders
- Q4 2023 – Air Sealing Photo Requirements
- Q1 2024 – Air Sealing Photo Guide & Presentation at Q1 Principals Meeting
- Q2 2024 – Exterior Wall Photo Guidance

c. Contractor Recommendations



Project proposals
and
comprehensive
benefits



Encourage
weatherization
prior to heat pump
installations

Project Proposals & Comprehensive Benefits

The Companies agree that the customer reports need improvement and intend to include updates as part of the program redesign effort and have every intention to gather stakeholder input

Current program realization rates are negatively impacting the savings shown on customer reports for air sealing and insulation

Need to investigate and integrate initiatives regarding federal funding and/or other federal program alignment (DOE Home Energy Score report, IRA, Home Performance with Energy Star (DOE), Home Upgrade(EPA))

Allow recommendations for home performance upgrades regardless of CT incentive offerings

Heat Pumps + Weatherization

The Companies support weatherizing homes that are installing heat pumps and will be strengthening customer education about the impact of improved home weatherization when installing heat pumps.

New tactics will include:

- providing leave behind brochures
- expanding the Heat Pump Consultation Service messaging
- developing online customer facing training
- additional bonus in certain regions

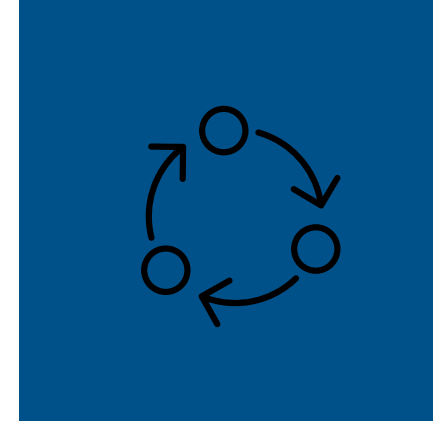
d. HES & HES-IE QA/QC



Standards and
Protocols

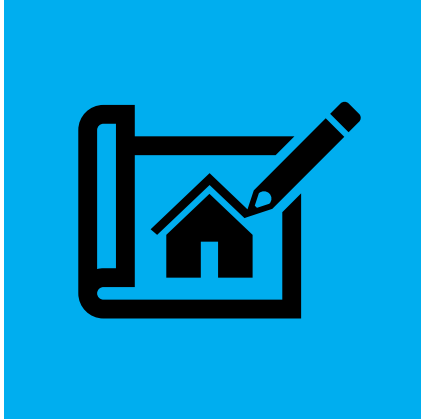


Common Errors
Missed air
sealing/insulation
opportunity
Missing
documentation



Remediation Action
Plans

QA/QC Standards & Protocols



Field
Implementation
Manual

Appendix A:
Quality Assurance
for inspection
processes



Contractual:

- Home Energy Solutions Statement of Work
- Home Energy Solutions – Income Eligible Statement of Work

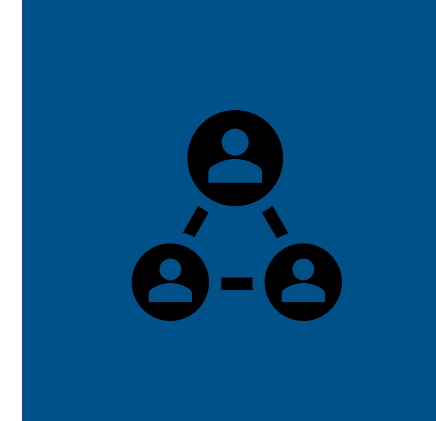
QA/QC Standards & Protocols include:



QA/QC Inspection
Contractors
In process
inspections
Pre-Inspections
Post Inspections



Data Quality
Reviews:
Tracking system
validation
Desk reviews by
contractor and the
Companies



Contractor Quality
Assurance Plans
Field/QA
Supervisor
Project Reviews
Inspections

October 28, 2024

Thank you

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