Tips for Participating in today’s Webinar

If you will listen in using the speakers on your computer:
• Select the “Computer Audio” button
• Unmute your desktop.
• Click on Audio Setup if you’re having any difficulty.

Everyone will be muted, but you can type in questions at any time. We’ll answer them at the end of the presentation.

If you are using your telephone:
• Select “Phone Call” button
• Dial in and enter your access code.
• Enter your audio pin and press

Use this button to expand or minimize your toolbar at any time.

Use the “Raise Your Hand” button to indicate your response to Agree/Disagree and Y/N questions.
Learning Objectives

- Understand the latest changes to the ENERGY STAR Certified Homes Program.
- Understand when to apply Revision 09 to ENERGY STAR homes.
- Get your questions answered!
Agenda

12:00  Welcome

12:05  ENERGY STAR Revision 09 Overview
      Dean Gamble, EPA

12:30  Q&A

12:45  Adjourn
What is a Revision?

1. It clarifies
2. It simplifies
3. It improves
What is a Revision?

1/3 reduction in rater tasks!
Rev. 09  It’s Fine.

• No new checklists.
• No new checklist items.
• No fewer checklist items.
• No fewer checklists.
• Just modifications to a handful of existing checklist items.
• Backwards compatible
  (i.e., Rev. 08 HVAC Design Report can be used for homes certified under Rev. 09)
#1. 4- and 5-story building eligibility requirements

- Criteria related to heating, cooling, and hot water systems have been removed from the prerequisite eligibility requirements for four and five story buildings.
- Footnote 5 of the Version 3 / 3.1 National Program Requirements has been revised to recommend that centralized heating, cooling, and hot water systems be modeled using the RESNET Guidelines for Multifamily Ratings.
#2. Sun-setting of plant-certification path for modular homes

- Only the Rater-verification pathway has been retained.
- Program requirements has been updated to reflect this and include a footnote defining a modular home.
#3. Required rating and registration with Verification Oversight Org. (VOO)

- While previously implied, we now explicitly require homes to receive a rating and be registered with an EPA-approved VOO.
**#4. Revised Effective Date section of National Program Requirements**

- The Implementation Timeline tables have been revised for clarity.
- Includes information about both the applicable Version and Revision.

### Old Format

<table>
<thead>
<tr>
<th>State</th>
<th>Applicable to Homes with the Following Permit Date</th>
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<tbody>
<tr>
<td>MA</td>
<td>On or after 01/01/2015</td>
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<tr>
<td>DC, IL, MD, RI</td>
<td>On or after 04/01/2015 (except for Calvert County and St. Mary's County in MD, for which the applicable permit date is on or after 07/01/2015)</td>
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<tr>
<td>IA</td>
<td>On or after 06/01/2015</td>
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<tr>
<td>DE</td>
<td>On or after 12/01/2015</td>
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<td>MT, OR, WA</td>
<td>On or after 01/01/2016</td>
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<tr>
<td>MN, VT</td>
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</tr>
<tr>
<td>NV</td>
<td>On or after 07/01/2016</td>
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<tr>
<td>NJ</td>
<td>On or after 04/01/2017</td>
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<tr>
<td>TX</td>
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### New Format

<table>
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<tr>
<th>State / Territory</th>
<th>Homes Permitted On or After This Date Must Meet the Adjacent Version &amp; Revision</th>
<th>Version</th>
<th>Revision</th>
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#5. Rater Design Review Checklist and Rater Field Checklist separated

- The National Rater Design Review and Field Checklists have been separated into their own individual documents:
#6. Low-end bedroom pressure-balancing limit specified

- A low-end bedroom pressure-balancing limit has been specified; this was ambiguous before Rev. 09.
- Low-end limit is -3 Pa, or -5 Pa for bedrooms with a design airflow ≥ 150 CFM.

**Old Policy**

- < 150 CFM: ? to +3 Pa
- ≥ 150 CFM: ? to +5 Pa

**New Policy**

- < 150 CFM: -3 to +3 Pa
- ≥ 150 CFM: -5 to +5 Pa

- Footnote has clarified door configurations during testing:
  - Doors separating bedrooms from the main body of the house shall be closed (e.g., a door between a bedroom and a hallway)
  - Doors to rooms that can only be entered from the bedroom shall be open (e.g., a closet, a bathroom)
#7. Alternative compliance option added for filter access in attics

Old Policy

HVAC filters located in the attic are considered accessible if drop-down stairs provide access to attic and a permanently installed walkway has been provided between the attic access location and the filter…

New Policy

…or the filter location:

• Enables arm-length access from a portable ladder without the need to step into the attic, AND,
• The ceiling height where access is provided is ≤ 12 ft.
#8. Document retention period of three years specified in HVAC-C

- While previously ambiguous, a document retention period of 3 years has been specified for the HVAC contractor to retain their completed HVAC Commissioning Checklists.
- This ensures that completed checklists are available for quality assurance activities.
#9. Increased tolerance for conditioned floor area on HVAC Design Report

**Old Policy**
0 ft\(^2\) smaller - 300 ft\(^2\) larger than the rated home

**New Policy**
100 ft\(^2\) smaller - 300 ft\(^2\) larger than the rated home

Rated Home

HVAC Design Home

2,200 ft\(^2\)

2,100 ft\(^2\)

2,500 ft\(^2\)
#10. Increased tolerance for window area on HVAC Design Report

- The low-end limit of window area used in the loads, relative to the rated home, was lowered from 0 to 15 sq. ft.
- In addition, a secondary metric was added for homes with a large amount of window area.

**Old Policy**
Difference in window area: 0 ft\(^2\) smaller to 60 ft\(^2\) larger

**New Policy**
Difference in window area: 15 ft\(^2\) smaller to 60 ft\(^2\) larger

Or, for homes with > 500 ft\(^2\) of window area:
Difference in window area: 3% smaller to 12% larger
#11. Increased tolerance for furnace sizing on HVAC Design Report

- The heating sizing limit for furnaces paired with cooling increased.
- No changes to the cooling sizing limits.

**Old Policy**
- Recommended: 100 - 140%
- Allowed: 100 - 200%

**New Policy**
- Recommended: 100 - 140%
- Allowed: 100 - 400%
#12. Clarification on definition of mini-split / multi-split system

- The definition of a mini-split / multi-split system has been revised to state that the length of the duct system is not a determinant for meeting this definition.
- The implication is that even a mini-split with a longer duct run would be exempted from most of the HVAC Design Report and from the HVAC Commissioning Checklist.
#13. ENERGY STAR Reference Design updates

## Adjustments to ENERGY STAR Reference Design

<table>
<thead>
<tr>
<th>Applies To</th>
<th>Measure</th>
<th>Old Value</th>
<th>New Value</th>
<th>Approx. ERI Impact</th>
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<tr>
<td>National v3.1: CZ 3 Only</td>
<td>Furnace Efficiency</td>
<td>90 AFUE</td>
<td>80 AFUE</td>
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<td>Water Heater Efficiency, when Rated Home has instant gas water heater</td>
<td>40 gal, 0.61 EF</td>
<td>50 gal, 0.59 EF</td>
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Rev. 09

It’s Fine.
When to apply Revision 09

• You’re free to apply Revision 09 to any home being certified.
• However, homes permitted on or after 1/1/2019 must be certified using Revision 09.
• Homes certified under Rev. 09 are allowed to use either Rev. 08 or Rev. 09 of the National HVAC Design Report.
Access the Revision 09 Documents

Visit the Program Requirements page to download Checklists for the jurisdictions that you are working in.

Visit the Policy Changes and Clarifications page to view Revision 09 highlights, and detailed summaries of edits made to each program document.
Q&A

Please type your questions into the Questions box to be read aloud and addressed.
ENERGY STAR Certified Homes

Web:
Main: www.energystar.gov/newhomespartners
Technical: www.energystar.gov/newhomesrequirements
Training: www.energystar.gov/newhomestraining
Products: www.energystar.gov/products

Email: energystarhomes@energystar.gov

Contacts:

Dean Gamble
EPA
Technical Manager
ENERGY STAR Certified Homes
Gamble.Dean@epa.gov

Michael Brown
ICF
Technical Support
ENERGY STAR Certified Homes
Michael.Brown2@icf.com

Social Media:
@energystarhomes
facebook.com/energystar