

Current ENERGY STAR Multifamily New Construction Policy Record

How to Use This Document

EPA regularly receives partner questions and comments regarding various aspects of the program documents. This document is a record of the issues that have been received since the release of the last revision to the program documents. These issues are either pending resolution by EPA or have been resolved, sometimes resulting in modifications that will be incorporated into the next revision of the program documents. The primary purpose of this document is to allow all partners to have equal access to the latest policy issues and resolutions.

EPA intends to formally incorporate policy modifications into the next revision of the program documents. Those edits will then be enforced for projects permitted after a specified transition period, typically 60 days from the release of the revised program requirements. Partners may, at their discretion, use the determinations in this document immediately, in advance of the formal implementation dates. If they do so, they should be sure to document the permit dates of the affected projects and to include a copy of the policy record in the files retained by the Rater. Should the need arise, this will allow partners to demonstrate that they acted with the best information available.

Policy changes related to Supplemental Program Documents are all in the [Single-Family New Homes Policy Record](#).

Definitions

Each issue listed here is classified as a Change, Clarification, Refinement, Comment, or as an Issue Under Review. These are defined as follows:

- **Change** – The addition, deletion, or modification of a program requirement. A change will typically result from a partner question or feedback indicating that EPA's original intent is not being met or from changes in relevant standards (e.g., ENERGY STAR labeled product requirements, NAECA standards, IECC codes). A change is the most significant type of edit for partners because it is likely to change the way that partners comply with the program.
- **Clarification** – The clarification of a program requirement, typically resulting from a partner question indicating confusion or ambiguity. Clarifications are not intended to significantly change the scope of the program guidelines, but rather to clarify the original intent of the requirement. A clarification is secondary in importance to a change; it should not significantly alter the way that most partners comply with the program.
- **Refinement** – A minor revision, such as an improved choice of words, a grammatical correction, or a correction to a typographical error. A refinement is the least important type of edit; it should have no impact on the way that partners comply with the program.
- **Comment** – A comment provided by EPA in response to a question, which results in no change to the program documents. This may occur, for example, if the question can be answered by referring to already established policy. Aside from the partner asking the question, such comments will typically have no impact on the way that partners comply with the program.
- **Issue Under Review** – An issue that has been submitted and that EPA is still evaluating. Once EPA has evaluated the issue, it will offer a resolution and reclassify the issue using one of the four categories above.

ENERGY STAR Multifamily New Construction Policy Record

Contents

(Version 1 / 1.1 / 1.2, Rev. 03) 162

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
00646	12/01/2023	All National and Regional Program Requirements (Rev. 03)	Clarification	Partnership, Training, and Credentialing Requirements Section – Raters must be credentialed by oversight organization and complete training prior to inspections
				<p>Issue: Partners have asked about the intent of the requirement that Energy Rating Companies (ERC's) "operate under either a Home Certification Organization (HCO) or Multifamily Review Organization (MRO)" because the requirements for training, credentials, and oversight generally relate to individual Raters rather than their company.</p> <p>In addition, partners have asked when Raters must complete their EPA-recognized training - prior to conducting any field inspections, prior to filling out either Rater checklist, or prior to certification of the dwelling unit.</p>
				<p>Resolution: EPA agrees that the oversight requirements are better stated as a requirement of individual Raters, rather than ERC's.</p> <p>Furthermore, EPA's intent is for the Rater to complete training prior to filling out either Rater checklist or conducting any inspections. The closest associated documentation of these events is the Date of Review and Inspection Date entered on the Rater Design Review Checklist and Rater Field Checklist, respectively. Therefore, Rater training must be completed prior to these dates.</p> <p>To clarify this intent, the language in this Section will be adjusted as follows:</p> <ul style="list-style-type: none"> “Energy Rating Companies (e.g., rater companies and Providers) are required to sign an ENERGY STAR Partnership Agreement, which can be found at www.energystar.gov/homesPA, and operate under a Home Certification Organization (HCO) or a Multifamily Review Organization (MRO). Learn more and find a current list of HCOs at www.energystar.gov/hco and MROs at www.energystar.gov/mro. Raters are required to complete EPA-recognized training, which can be found at www.energystar.gov/mftraining, and be credentialed by a Home Certification Organization (HCO) or meet the credential requirements of a Multifamily Review Organization (MRO) prior to completing inspections. Learn more at www.energystar.gov/hco and at www.energystar.gov/mro.”
00547	12/01/2023		Clarification	Eligibility Requirements Section – Attached Dwellings are eligible for MFNC

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		National Program Requirements (Version 1, Rev. 03)		<p>Issue: Partners have asked whether only detached Dwellings are eligible to be certified using the Single-Family New Homes (SFNH) program, or if attached Dwellings may also be certified.</p> <p>The Eligibility Requirements for SFNH state that Dwellings (e.g., single-family homes and duplexes) and Townhouses may be certified using the Single-Family New Homes program. In contrast to Townhouses, which are explicitly defined as attached structures, the definition of Dwelling does not distinguish between detached and attached structures: "...any building that contains one or two Dwelling Units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes."</p> <p>Through the examples of Dwellings that are listed (single-family homes and duplexes), however, EPA intended to convey that only detached structures are eligible to be certified using the SFNH program.</p> <p>Similarly, the MFNC Eligibility Requirements state that</p> <p>"The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR • Townhouses, if following the requirements listed in Footnote 3" <p>Resolution: To reinforce the original intent that only detached dwellings are not eligible for MFNC, the MFNC Eligibility Requirements will be revised as follows:</p> <p>"The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a <u>detached</u> dwelling (e.g., not a single-family home or a duplex); OR

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<ul style="list-style-type: none"> Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR Townhouses, if following the requirements listed in Footnote 3”
00614	12/01/2023	National Program Requirements ,Version 1 (Rev. 03)	Clarification	Eligibility Requirements Section – Link to new program document defining applicable program requirements, including the minimum Version and Revision, to which a building is eligible to be certified
				<p>Issue: The Eligibility Requirements Section defines what types of buildings are eligible to participate in the MFNC program. However, it does not define the applicable program requirements, including the minimum version and revision, to which a building in a particular location is eligible to be certified. This is currently defined in the Mandatory Compliance Date Section of the same program document. Combining the two sections, such that all requirements related to eligibility are located in a single section, would be clearer.</p> <p>Furthermore, the current Mandatory Compliance Date Section lacks, or only implies, certain information that would be clearer if stated explicitly, including: a) expanding the table to include which program version(s) are applicable to buildings in all locations; b) expanding the table to include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and c) a statement that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
				<p>Resolution: To more clearly convey all eligibility requirements, the Mandatory Compliance Date Section, as well as Footnote 16 and references to this section, will be deleted and the following sentence will be added to the Eligibility Requirements Section:</p> <p><u>“To determine the applicable MFNC program requirements, including the minimum Version and Revision, to which a building is eligible to be certified, visit www.energystar.gov/MFNCVersions.”</u></p> <p>The new program document linked to in the sentence above will contain the applicable program requirements, including the minimum Version and Revision, for all locations; will include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and will state that the listed</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.
00537	05/01/2023	National Program Requirements Version 1 (Rev. 03)	Clarification	ENERGY STAR Certification Process Section – Pre-drywall inspection is always required
				<p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 6 of the ENERGY STAR Certification Process states that “the Rater must review all items on the National Rater checklists.. In the event that an item on a National Rater checklist cannot be inspected by the Rater, the building also cannot earn the ENERGY STAR.”</p> <p>In addition, ANSI / RESNET / ICC 301 requires visual inspection of multiple Minimum Rated Features per Normative Appendix B, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of Minimum Rated Features of ANSI / RESNET / ICC 301 as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, Grade I or II insulation, air sealing details, a complete air barrier, advanced framing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p>
				<p>Resolution: To reinforce EPA’s current policy that a pre-drywall inspection is always required, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, Step 6 will be revised as follows:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>This will require a minimum of two inspections: one at pre-drywall and the other at final.</u>”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
00594	12/01/2023	National Program Requirements, Version 1 (Rev. 03)	Change	ENERGY STAR Certification Process – Sunset of sampling protocols for Townhouses
				<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC) program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p>
				<p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Step 6 of the ENERGY STAR Certification Process:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>For Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p><u>other multifamily building types, sampling protocols are permitted to be used within the limitations defined in Fn. 8.”</u></p> <p>In addition, the reference to Footnote 8 will be moved to the end of this new sentence and the footnote will be edited as follows to emphasize that Townhouses are not permitted to be sampled:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by an HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>For multifamily building types other than Townhouses,</u> Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00582	12/01/2023	National Program Requirements , Version 1 (Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section – Raters are to verify that items have been met within program-defined tolerances; not use discretion to discern intent of items</p> <p>Issue: The Certification Process Section contains statements regarding the verification of items on the program checklists that may incorrectly imply that Raters have the authority to interpret program intent, potentially leading to inconsistent implementation of the program requirements. Instead, it is the responsibility of EPA to ensure that each program requirement is sufficiently clear that all Raters can implement that policy consistently.</p> <p>Rather, the purpose of these statements was to clarify that minor deviations from a stated program requirement may be acceptable. Since the time that this language was first drafted, EPA has worked to define quantitative tolerances (e.g., Rater-measured ventilation rate must</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>be within either ± 15 CFM or $\pm 15\%$ of design report value) to more clearly define how much variation is acceptable.</p> <p>Resolution: To better convey that Raters are to verify that checklist items have been met within program-defined tolerances, the following edits will be made to the Certification Process section:</p> <p>“The Rater must review all items on the National Rater checklists for the whole building- Raters are expected to use their experience and discretion to verify that the overall intent of each inspection checklist item has been met <u>within program-defined tolerances</u> (i.e., identifying major defects that undermine the intent of the checklist item versus identifying minor defects that the Rater may deem acceptable)...”</p> <p>In the event that a Rater determines that a program requirement has not been met <u>finds an item that is inconsistent with the intent of the checklists</u>, the building cannot earn the ENERGY STAR until the item is corrected...</p> <p>In the event that a Rater is not able to determine whether <u>a program requirement has been met</u> an item is consistent with the intent (e.g., an alternative method of meeting a checklist requirement has been proposed), then the Rater shall consult their Provider or MRO.</p> <p>If EPA believes the current program requirements are sufficiently clear to determine whether the <u>item in question</u> intent has been met, then this guidance will be provided to the partner and enforced beginning with the house in question.”</p> <p>In addition, the following minor edit will be made to Footnote 5 for consistency:</p> <p>“Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the intent of the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).”</p>
00661	12/01/2023	National Program Requirements , Version 1 (Rev. 03)	Clarification	Step 6 - Rater may use HCO or MRO-approved Sampling Protocol
				Issue: The language regarding when Sampling is allowed only refers to HCO-approved sampling protocols and the text could be more concise.
				Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 8 will be revised as follows:

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an <u>MRO or HCO-approved sampling protocol</u>. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. <u>No other parties are permitted to use sampling.</u> All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00625	12/01/2023	National Program Requirements , Version 1 (Rev. 03)	Change	Exhibit 1 – Removal of EER requirements for cooling and heating equipment
				<p>Issue: Partners have expressed difficulty finding heat pumps in cold climates that meet all the required metrics (i.e., HSPF, SEER, EER). Specifically, there are many units which meet the required SEER and HSPF, but not the EER.</p> <p>A requirement for EER exists in the MFNC program for air conditioners (in Climate Zones 1-3) and heat pumps (in all Climate Zones) only for the Prescriptive Path and common spaces in the ERI Path. EER is not part of the ERI Target Procedure, creating some inconsistency in requirements among paths.</p> <p>Version 1.2 does not have an EER requirement, so as this Version is implemented it will not be required.</p> <p>Finally, the Single-Family New Homes program lists EER in Version 3 and 3.1 National Program Requirements, but it is not a requirement in practice because there is no prescriptive path in this program, and it is not part of the ERI Target Procedure.</p>
				<p>Resolution: To better align all MFNC program paths, improve consistency with the Single-Family program, and reduce the required verification steps; all instances of EER requirements for air-source heat pumps and air conditioners in Exhibit 1 will be removed. For example, the following edit will be made to the Mixed and Cold Climate column for Residential Heating Equipment:</p> <p>“CZ 4: 8.5 HSPF / 14.5 SEER / 12 EER air-source w/ electric or dual-fuel backup,”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic																																						
00691	12/01/2023	National Program Requirements , Version 1 (Rev. 03)	Change	Exhibit 1 – SEER2, EER2 and HSPF2 Conversions																																						
				<p>Issue: As of January 1, 2023 air conditioners and heat pumps must be rated with new efficiency metrics (e.g., SEER2, EER2, and HSPF2) according to new test procedures from the U.S. DOE. Equipment used in buildings pursuing the Prescriptive Path need to meet the efficiency level in the ENERGY STAR Reference Design, but it does not currently list efficiencies with the updated metrics. Therefore, it is necessary to add a conversion to the new ratings.</p>																																						
				<p>Resolution: Due to the new efficiency metrics from DOE, the Reference Design efficiency levels will be converted to the new efficiency metrics using conversion factors from Draft PDS-02, BSR/RESNET/ICC 301-2022 Addendum C-202x. While this addendum is not finalized, EPA will monitor progress and update the conversions if needed.</p> <p>A new footnote will be added to the Residential Cooling Equipment and Residential Heating Equipment rows in Exhibit 1 as follows:</p> <p>“Where equipment is rated in SEER2, or HSPF2, the following table shall be used to determine the required efficiency. The first two rows show the efficiency listed in Exhibit 1, and below are rows for the converted metric by equipment type.</p> <table><tr><td></td><td colspan="2">SEER</td><td colspan="4">HSPF</td></tr><tr><td></td><td>13</td><td>14.5</td><td>8.2</td><td>8.5</td><td>9.25</td><td>9.5</td></tr><tr><td>Equipment Type</td><td colspan="2">SEER2</td><td colspan="4">HSPF2</td></tr><tr><td>Ductless Systems</td><td>13.0</td><td>14.5</td><td>7.3</td><td>7.6</td><td>8.3</td><td>8.5</td></tr><tr><td>Ducted Split System</td><td>12.3</td><td>13.7</td><td>6.9</td><td>7.2</td><td>7.8</td><td>8.0</td></tr><tr><td>Ducted Single Packaged System</td><td>12.3</td><td>13.7</td><td>6.8</td><td>7.1</td><td>7.7</td><td>7.9</td></tr></table>		SEER		HSPF					13	14.5	8.2	8.5	9.25	9.5	Equipment Type	SEER2		HSPF2				Ductless Systems	13.0	14.5	7.3	7.6	8.3	8.5	Ducted Split System	12.3	13.7	6.9	7.2	7.8	8.0	Ducted Single Packaged System	12.3	13.7
	SEER		HSPF																																							
	13	14.5	8.2	8.5	9.25	9.5																																				
Equipment Type	SEER2		HSPF2																																							
Ductless Systems	13.0	14.5	7.3	7.6	8.3	8.5																																				
Ducted Split System	12.3	13.7	6.9	7.2	7.8	8.0																																				
Ducted Single Packaged System	12.3	13.7	6.8	7.1	7.7	7.9																																				
00567	12/01/2023	National Program	Change	Exhibit 3 – Removal of Provider’s and Multifamily Oversight Organization’s discretion to define ‘Permit Date’ and addition of allowance to use Rater’s first site visit																																						

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Requirements, Version 1 (Rev. 03)		<p>Issue: Exhibit 3 defines which Versions and Revisions are required to be used and is dependent, in part, on the permit date of buildings. A footnote associated with this exhibit delineates the various ways that the permit date can be determined and includes an allowance for Providers and Multifamily Oversight Organizations to use their discretion when determining it. The allowance to use discretion may result in inconsistent implementation of the program requirements.</p> <p>Resolution: To ensure more consistent implementation of the program requirements, the allowance for Providers and Multifamily Oversight Organizations to use their discretion to define 'permit date' will be removed. At the same time, an additional alternative to 'permit date' that is commonly used in the industry and results in a more conservative (i.e., later) permit date will be added, based on the date of the Rater's first inspection.</p> <p>As a result, the following edits will be made to Footnote 4:</p> <p>"The Rater may define the 'permit date' as either is the date on which that the permit authorizing construction of the building was issued. Alternatively, the date of the Rater's first site visit or the application date of the permit is allowed to be used as the 'permit date'. In cases where permit or application dates are not available, Providers or Multifamily Oversight Organizations have discretion to estimate permit dates based on other construction schedule factors. These assumptions should be both defensible and documented."</p>
00583	12/01/2023	National Program Requirements, Version 1 (Rev. 03)	Change	<p>Footnote 16: Continued use of Rev. 01, 02, and 03 HVAC Design Report</p> <p>Issue: Due to the effort required to collect the HVAC Design Report, partners have asked whether previously collected Rev. 01, Rev. 02 and Rev. 03 HVAC Design Reports can continue to be used after the release of the next Revision of the program requirements, so long as no aspect of the system design changes.</p> <p>Resolution: Because the next Revision of the program checklists will not require collection of any additional information or impose any new requirements, and will maintain or increase compliance tolerances, a design documented using Rev. 01, Rev. 02, or Rev. 03 of the National HVAC Design Report would, by definition, meet the requirements of Rev. 04.</p> <p>Therefore, previously collected Rev. 01, Rev. 02, or Rev. 03 National HVAC Design Reports will be permitted to be used after the release of the next Revision of the program requirements, so long as no aspect of the building design changes. For building designs that</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>are not identical to prior designs (e.g., due to new equipment that is rated in SEER2 instead of SEER), then a new HVAC Design Report must be completed and collected.</p> <p>To reflect this change, Footnote 16 will be updated as follows:</p> <p>“Buildings certified under Rev. 01, Rev. 02, and Rev. 03 <u>Rev. 04</u> of the program requirements are permitted to use any <u>Revision-version</u> of the MFNC National HVAC Design Report.”</p>
00530	05/10/2023	National Program Requirements, Version 1.1 (Rev. 03)	Clarification	<p>Eligibility Requirements Section – Attached Dwellings are eligible for MFNC</p> <p>Issue: Partners have asked whether only detached Dwellings are eligible to be certified using the Single-Family New Homes (SFNH) program, or if attached Dwellings may also be certified.</p> <p>The Eligibility Requirements for SFNH state that Dwellings (e.g., single-family homes and duplexes) and Townhouses may be certified using the Single-Family New Homes program. In contrast to Townhouses, which are explicitly defined as attached structures, the definition of Dwelling does not distinguish between detached and attached structures: “...any building that contains one or two Dwelling Units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.”</p> <p>Through the examples of Dwellings that are listed (single-family homes and duplexes), however, EPA intended to convey that only detached structures are eligible to be certified using the SFNH program.</p> <p>Similarly, the MFNC Eligibility Requirements state that</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR • Townhouses, if following the requirements listed in Footnote 3”

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To reinforce the original intent that only detached dwellings are not eligible for MFNC, the MFNC Eligibility Requirements will be revised as follows:</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a <u>detached dwelling</u> (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation;; OR • Townhouses, if following the requirements listed in Footnote 3”
00615	12/01/2023	National Program Requirements , Version 1.1 (Rev. 03)	Clarification	<p>Eligibility Requirements Section – Link to new program document defining applicable program requirements, including the minimum Version and Revision, to which a building is eligible to be certified</p>
				<p>Issue: The Eligibility Requirements Section defines what types of buildings are eligible to participate in the MFNC program. However, it does not define the applicable program requirements, including the minimum version and revision, to which a building in a particular location is eligible to be certified. This is currently defined in the Mandatory Compliance Date Section of the same program document. Combining the two sections, such that all requirements related to eligibility are located in a single section, would be clearer.</p> <p>Furthermore, the current Mandatory Compliance Date Section lacks, or only implies, certain information that would be clearer if stated explicitly, including: a) expanding the table to include which program version(s) are applicable to buildings in all locations; b) expanding the table to include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and c) a statement that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
				<p>Resolution: To more clearly convey all eligibility requirements, the Mandatory Compliance Date Section, as well as Footnote 16 and references to this section, will be deleted and the following sentence will be added to the Eligibility Requirements Section:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p><u>"To determine the applicable MFNC program requirements, including the minimum Version and Revision, to which a building is eligible to be certified, visit www.energystar.gov/MFNCVersions."</u></p> <p>The new program document linked to in the sentence above will contain the applicable program requirements, including the minimum Version and Revision, for all locations; will include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and will state that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
00538	05/01/2023	National Program Requirements Version 1.1 (Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section – Pre-drywall inspection is always required</p>
				<p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 6 of the ENERGY STAR Certification Process states that "the Rater must review all items on the National Rater checklists.. In the event that an item on a National Rater checklist cannot be inspected by the Rater, the building also cannot earn the ENERGY STAR."</p> <p>In addition, ANSI / RESNET / ICC 301 requires visual inspection of multiple Minimum Rated Features per Normative Appendix B, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of Minimum Rated Features of ANSI / RESNET / ICC 301 as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, Grade I or II insulation, air sealing details, a complete air barrier, advanced framing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To reinforce EPA's current policy that a pre-drywall inspection is always required, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, Step 6 will be revised as follows:</p> <p>"Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>This will require a minimum of two inspections: one at pre-drywall and the other at final.</u>"</p>
00581	12/01/2023	National Program Requirements, Version 1.1 (Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section – Raters are to verify that items have been met within program-defined tolerances; not use discretion to discern intent of items</p>
				<p>Issue: The Certification Process Section contains statements regarding the verification of items on the program checklists that may incorrectly imply that Raters have the authority to interpret program intent, potentially leading to inconsistent implementation of the program requirements. Instead, it is the responsibility of EPA to ensure that each program requirement is sufficiently clear that all Raters can implement that policy consistently.</p> <p>Rather, the purpose of these statements was to clarify that minor deviations from a stated program requirement may be acceptable. Since the time that this language was first drafted, EPA has worked to define quantitative tolerances (e.g., Rater-measured ventilation rate must be within either ± 15 CFM or $\pm 15\%$ of design report value) to more clearly define how much variation is acceptable.</p>
				<p>Resolution: To better convey that Raters are to verify that checklist items have been met within program-defined tolerances, the following edits will be made to the Certification Process section:</p> <p>"The Rater must review all items on the National Rater checklists for the whole building- Raters are expected to use their experience and discretion to verify that the overall intent of each inspection checklist item has been met within program-defined tolerances (i.e., identifying major defects that undermine the intent of the checklist item versus identifying minor defects that the Rater may deem acceptable)....</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>In the event that a Rater determines that a program requirement has not been met finds an item that is inconsistent with the intent of the checklists, the building cannot earn the ENERGY STAR until the item is corrected...</p> <p>In the event that a Rater is not able to determine whether <u>a program requirement has been met</u> an item is consistent with the intent (e.g., an alternative method of meeting a checklist requirement has been proposed), then the Rater shall consult their Provider or MRO.</p> <p>If EPA believes the current program requirements are sufficiently clear to determine whether the <u>item in question</u> intent has been met, then this guidance will be provided to the partner and enforced beginning with the house in question.”</p> <p>In addition, the following minor edit will be made to Footnote 5 for consistency:</p> <p>“Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the intent of the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).”</p>
00595	12/01/2023	National Program Requirements , Version 1.1 (Rev. 03)	Change	ENERGY STAR Certification Process – Sunset of sampling protocols for Townhouses
				<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC)</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p> <p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Step 6 of the ENERGY STAR Certification Process:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>For Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, sampling protocols are permitted to be used within the limitations defined in Fn. 8.</u>”</p> <p>In addition, the reference to Footnote 8 will be moved to the end of this new sentence and the footnote will be edited as follows to emphasize that Townhouses are not permitted to be sampled:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by an HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>For multifamily building types other than Townhouses,</u> Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00662	12/01/2023		Clarification	Step 6 - Rater may use HCO or MRO-approved Sampling Protocol

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		National Program Requirements , Version 1.1 (Rev. 03)		<p>Issue: The language regarding when Sampling is allowed only refers to HCO-approved sampling protocols and the text could be more concise.</p> <p>Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 8 will be revised as follows:</p> <p>“Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an MRO or HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. <u>No other parties are permitted to use sampling.</u> All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00612	12/01/2023	National Program Requirements , Version 1.1 (Rev. 03)	Change	<p>Exhibit 1 – Remove reference to ENERGY STAR windows</p> <p>Issue: Partners have asked whether ENERGY STAR windows and doors are required for buildings following the Prescriptive Path because Exhibit 1 contains the following text:</p> <p>“Dwelling unit ENERGY STAR windows and doors, unless Class AW, as illustrated below.”</p> <p>The above text is followed by a table detailing required U-Factor and SHGC. At the time this Version was developed these aligned with ENERGY STAR window and door specifications. While it was EPA’s intent that Prescriptive Path projects meet the applicable U-Factor and SHGC and be ENERGY STAR certified at the time the Version was developed, it was not the intent to require more stringent values be met upon updates to the ENERGY STAR windows and doors specification.</p> <p>Resolution: With the recent increase in stringency to the windows specification, Prescriptive Path projects will no longer need to include ENERGY STAR certified windows and doors; they must only meet the applicable U-Factor and SHGC values. Exhibit 1 will be revised as follows to remove the reference to ENERGY STAR for windows and doors:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				“Dwelling unit ENERGY STAR windows and doors, unless Class AW, as illustrated below meet the following:”
00626	12/01/2023	National Program Requirements (Version 1.1, Rev. 03)	Change	Exhibit 1 – Removal of EER requirements for cooling and heating equipment
				<p>Issue: Partners have expressed difficulty finding heat pumps in cold climates that meet all the required metrics (i.e., HSPF, SEER, EER). Specifically, there are many units which meet the required SEER and HSPF, but not the EER.</p> <p>A requirement for EER exists in the MFNC program for air conditioners (in Climate Zones 1-3) and heat pumps (in all Climate Zones) only for the Prescriptive Path and common spaces in the ERI Path. EER is not part of the ERI Target Procedure, creating some inconsistency in requirements among paths.</p> <p>Version 1.2 does not have an EER requirement, so as this Version is implemented it will not be required.</p> <p>Finally, the Single-Family New Homes program lists EER in Version 3 and 3.1 National Program Requirements, but it is not a requirement in practice because there is no prescriptive path in this program, and it is not part of the ERI Target Procedure.</p>
				<p>Resolution: To better align all MFNC program paths, improve consistency with the Single-Family program, and reduce the required verification steps; all instances of EER requirements for air-source heat pumps and air conditioners in Exhibit 1 will be removed. For example, the following edit will be made to the Mixed and Cold Climate column for Residential Heating Equipment:</p> <p>“CZ 4: 8.5 HSPF / 15 SEER / 12 EER air-source w/ electric or dual-fuel backup,”</p>
00629	12/01/2023	National Program Requirements , Version 1.1 (Rev. 03)	Refinement	Exhibit 1 – ESRD configured with ASHP instead of GSHP in Climate Zone 7 and 8
				<p>Issue: Policy Record Entry 00456 revised the Version 1.1 National ERI Target procedure to configure the ENERGY STAR Reference Design with an Air-Source Heat Pump instead of a Ground-Source Heat Pump. However, the corresponding change was inadvertently not made to Exhibit 1 of this document, which could potentially cause confusion.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic																																
				<p>Resolution: To reduce potential confusion and fully implement the change described in Policy Record Entry 00456, the Mixed and Cold Climate Heating Equipment for Climate Zones 7 and 8 in Exhibit 1 will be revised as follows:</p> <p>“• CZ 7-8: <u>9.2 HSPF / 16 SEER air-source</u> 3.6 COP / 17.1 EER ground-source w/ electric or dual-fuel backup”.</p>																																
00692	12/01/2023	National Program Requirements , Version 1.1 (Rev. 03)	Change	Exhibit 1 – SEER2, EER2 and HSPF2 Conversions																																
				<p>Issue: As of January 1, 2023 air conditioners and heat pumps must be rated with new efficiency metrics (e.g., SEER2, EER2, and HSPF2) according to new test procedures from the U.S. DOE. Equipment used in buildings pursuing the Prescriptive Path need to meet the efficiency level in the ENERGY STAR Reference Design, but it does not currently list efficiencies with the updated metrics. Therefore, it is necessary to add a conversion to the new ratings.</p>																																
				<p>Resolution: Due to the new efficiency metrics from DOE, the Reference Design efficiency levels will be converted to the new efficiency metrics using conversion factors from Draft PDS-02, BSR/RESNET/ICC 301-2022 Addendum C-202x. While this addendum is not finalized, EPA will monitor progress and update the conversions if needed.</p> <p>A new footnote will be added to the Residential Cooling Equipment and Residential Heating Equipment rows in Exhibit 1 as follows:</p> <p>“Where equipment is rated in SEER2, or HSPF2, the following table shall be used to determine the required efficiency. The first two rows show the efficiency listed in Exhibit 1, and below are rows for the converted metric by equipment type.</p> <table><tr><td colspan="2"></td><td colspan="2">SEER</td><td colspan="5">HSPF</td></tr><tr><td colspan="2"></td><td>13</td><td>15</td><td>8.2</td><td>8.5</td><td>9.2</td><td>9.25</td><td>9.5</td></tr><tr><td colspan="2">Equipment Type</td><td colspan="2">SEER2</td><td colspan="5">HSPF2</td></tr><tr><td colspan="2">Ductless Systems</td><td>13.0</td><td>15.0</td><td>7.3</td><td>7.6</td><td>8.2</td><td>8.3</td><td>8.5</td></tr></table>			SEER		HSPF							13	15	8.2	8.5	9.2	9.25	9.5	Equipment Type		SEER2		HSPF2					Ductless Systems		13.0	15.0	7.3
		SEER		HSPF																																
		13	15	8.2	8.5	9.2	9.25	9.5																												
Equipment Type		SEER2		HSPF2																																
Ductless Systems		13.0	15.0	7.3	7.6	8.2	8.3	8.5																												

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic									
				Ducted Split System	12.3	14.2	6.9	7.2	7.8	7.8	8.0		
				Ducted Single Packaged System	12.3	14.2	6.8	7.1	7.7	7.7	7.9		
00568	12/01/2023	National Program Requirements , Version 1.1 (Rev. 03)	Change	Exhibit 3 – Removal of Provider’s and Multifamily Oversight Organization’s discretion to define ‘Permit Date’ and addition of allowance to use Rater’s first site visit									
				<p>Issue: Exhibit 3 defines which Versions and Revisions are required to be used and is dependent, in part, on the permit date of buildings. A footnote associated with this exhibit delineates the various ways that the permit date can be determined and includes an allowance for Providers and Multifamily Oversight Organizations to use their discretion when determining it. The allowance to use discretion may result in inconsistent implementation of the program requirements.</p>									
				<p>Resolution: To ensure more consistent implementation of the program requirements, the allowance for Providers and Multifamily Oversight Organizations to use their discretion to define ‘permit date’ will be removed. At the same time, an additional alternative to ‘permit date’ that is commonly used in the industry and results in a more conservative (i.e., later) permit date will be added, based on the date of the Rater’s first inspection.</p> <p>As a result, the following edits will be made to Footnote 4:</p> <p>“The Rater may define the ‘permit date’ as either <u>is the date on which</u> that the permit authorizing construction of the building was issued. Alternatively, the date of the Rater’s first site visit or the application date of the permit <u>is allowed to be used as the ‘permit date’</u>. In cases where permit or application dates are not available, Providers or Multifamily Oversight Organizations have discretion to estimate permit dates based on other construction schedule factors. These assumptions should be both defensible and documented.”</p>									
00705	12/01/2023	National Program Requirements	Change	Exhibit 4 – Removal of ASHRAE 90.1-2007 performance target									
				<p>Issue: Exhibit 4, ASHRAE Performance Targets, makes several mentions to 90.1-2007 as a baseline for buildings permitted prior to 1/1/2024. As part of the national transition to Version 1.1, buildings permitted after this date will now have a performance target based on 90.1-</p>									

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic																														
		, Version 1.1, (Rev. 03)		<p>2010. Revision 04 of the program will be implemented for buildings permitted after this date, therefore this policy will no longer be applicable and can be removed.</p> <p>Resolution: To improve conciseness of the program documents references to ASHRAE Performance targets based on 90.1-2007 for buildings permitted prior to 1/1/2024 will be removed. With this change the references to the 2012 IECC and ASHRAE 90.1-2010 in the first sentence can be remove because they are now covered by “All other buildings” in the last sentence. To reflect this the following edits will be made to Exhibit 4.</p> <p>“Buildings using the ASHRAE Path in states that have adopted as the commercial code the 2012 IECC, 2015 IECC, 2018 IECC, 2021 IECC, ASHRAE 90.1-2010, ASHRAE 90.1-2013, ASHRAE 90.1-2016 or equivalent, will be required to meet a Performance Target of 15% energy cost savings when compared to the energy code under which the building is permitted (unless otherwise noted below). Buildings using the ASHRAE Path in states that have adopted as the commercial code the 2021 IECC or ASHRAE 90.1-2019 will be required to meet a Performance Target of 15% energy cost savings when compared to ASHRAE 90.1-2016. All other buildings must meet the national requirement of 15% over ASHRAE 90.1-2007 if permitted prior to 1/1/2024, and 15% over ASHRAE 90.1- 2010 if permitted on or after 1/1/2024.”</p> <table border="1"> <thead> <tr> <th></th><th colspan="4">Performance Target Options: Savings (%) above varying ASHRAE 90.1 Baselines</th></tr> <tr> <th>State Commercial Code</th><th>90.1-2007</th><th>90.1-2010</th><th>90.1-2013</th><th>90.1-2016</th></tr> </thead> <tbody> <tr> <td>2009 IECC / 90.1-2007</td><td>15%</td><td>N/A</td><td>N/A</td><td>N/A</td></tr> <tr> <td>2012 IECC / 90.1-2010</td><td>20%</td><td>15%</td><td>N/A</td><td>N/A</td></tr> <tr> <td>2015 IECC / 90.1-2013</td><td>25%</td><td>20%</td><td>15%</td><td>N/A</td></tr> <tr> <td>2018 IECC / 90.1-2016</td><td>N/A</td><td>N/A</td><td>N/A</td><td>15%</td></tr> </tbody> </table>		Performance Target Options: Savings (%) above varying ASHRAE 90.1 Baselines				State Commercial Code	90.1-2007	90.1-2010	90.1-2013	90.1-2016	2009 IECC / 90.1-2007	15%	N/A	N/A	N/A	2012 IECC / 90.1-2010	20%	15%	N/A	N/A	2015 IECC / 90.1-2013	25%	20%	15%	N/A	2018 IECC / 90.1-2016	N/A	N/A	N/A	15%
	Performance Target Options: Savings (%) above varying ASHRAE 90.1 Baselines																																	
State Commercial Code	90.1-2007	90.1-2010	90.1-2013	90.1-2016																														
2009 IECC / 90.1-2007	15%	N/A	N/A	N/A																														
2012 IECC / 90.1-2010	20%	15%	N/A	N/A																														
2015 IECC / 90.1-2013	25%	20%	15%	N/A																														
2018 IECC / 90.1-2016	N/A	N/A	N/A	15%																														

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<div>2021 IECC / 90.1-2019</div> <div>N/A</div> <div>N/A</div> <div>N/A</div> <div>15%</div>
00584	12/01/2023	National Program Requirements , Version 1.1 (Rev. 03)	Change	Footnote 16: Continued use of Rev. 01, 02, and 03 HVAC Design Report
				Issue: Due to the effort required to collect the HVAC Design Report, partners have asked whether previously collected Rev. 01, Rev. 02 and Rev. 03 HVAC Design Reports can continue to be used after the release of the next Revision of the program requirements, so long as no aspect of the system design changes.
				Resolution: Because the next Revision of the program checklists will not require collection of any additional information or impose any new requirements, and will maintain or increase compliance tolerances, a design documented using Rev. 01, Rev. 02, or Rev. 03 of the National HVAC Design Report would, by definition, meet the requirements of Rev. 04. Therefore, previously collected Rev. 01, Rev. 02, or Rev. 03 National HVAC Design Reports will be permitted to be used after the release of the next Revision of the program requirements, so long as no aspect of the building design changes. For building designs that are not identical to prior designs (e.g., due to new equipment that is rated in SEER2 instead of SEER), then a new HVAC Design Report must be completed and collected. To reflect this change, Footnote 16 will be updated as follows: “Buildings certified under Rev. 01, Rev. 02, and Rev. 03 <u>Rev. 04</u> of the program requirements are permitted to use any <u>Revision-version</u> of the MFNC National HVAC Design Report”
00531	05/10/2023	National Program Requirements (Version 1.2, Rev. 03)	Clarification	Eligibility Requirements Section – Attached Dwellings are eligible for MFNC
				Issue: Partners have asked whether only detached Dwellings are eligible to be certified using the Single-Family New Homes (SFNH) program, or if attached Dwellings may also be certified. The Eligibility Requirements for SFNH state that Dwellings (e.g., single-family homes and duplexes) and Townhouses may be certified using the Single-Family New Homes program. In contrast to Townhouses, which are explicitly defined as attached structures, the definition of Dwelling does not distinguish between detached and attached structures: “...any building

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>that contains one or two Dwelling Units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.”</p> <p>Through the examples of Dwellings that are listed (single-family homes and duplexes), however, EPA intended to convey that only detached structures are eligible to be certified using the SFNH program.</p> <p>Similarly, the MFNC Eligibility Requirements state that</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR • Townhouses, if following the requirements listed in Footnote 3”
				<p>Resolution: To reinforce the original intent that only detached dwellings are not eligible for MFNC, the MFNC Eligibility Requirements will be revised as follows:</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a <u>detached</u> dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR • Townhouses, if following the requirements listed in Footnote 3”
00616	12/01/2023	National Program Requirements	Clarification	<p>Eligibility Requirements Section – Link to new program document defining applicable program requirements, including the minimum Version and Revision, to which a building is eligible to be certified</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		, Version 1.2 (Rev. 03)		<p>Issue: The Eligibility Requirements Section defines what types of buildings are eligible to participate in the MFNC program. However, it does not define the applicable program requirements, including the minimum version and revision, to which a building in a particular location is eligible to be certified. This is currently defined in the Mandatory Compliance Date Section of the same program document. Combining the two sections, such that all requirements related to eligibility are located in a single section, would be clearer.</p> <p>Furthermore, the current Mandatory Compliance Date Section lacks, or only implies, certain information that would be clearer if stated explicitly, including: a) expanding the table to include which program version(s) are applicable to buildings in all locations; b) expanding the table to include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and c) a statement that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p> <p>Resolution: To more clearly convey all eligibility requirements, the Mandatory Compliance Date Section, as well as Footnote 17 and references to this section, will be deleted and the following sentence will be added to the Eligibility Requirements Section:</p> <p><u>“To determine the applicable MFNC program requirements, including the minimum Version and Revision, to which a building is eligible to be certified, visit www.energystar.gov/MFNCVersions.”</u></p> <p>The new program document linked to in the sentence above will contain the applicable program requirements, including the minimum Version and Revision, for all locations; will include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and will state that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
00580	12/01/2023	National Program Requirements , Version 1.2 (Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section – Raters are to verify that items have been met within program-defined tolerances; not use discretion to discern intent of items</p> <p>Issue: The Certification Process Section contains statements regarding the verification of items on the program checklists that may incorrectly imply that Raters have the authority to interpret program intent, potentially leading to inconsistent implementation of the program</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>requirements. Instead, it is the responsibility of EPA to ensure that each program requirement is sufficiently clear that all Raters can implement that policy consistently.</p> <p>Rather, the purpose of these statements was to clarify that minor deviations from a stated program requirement may be acceptable. Since the time that this language was first drafted, EPA has worked to define quantitative tolerances (e.g., Rater-measured ventilation rate must be within either ± 15 CFM or $\pm 15\%$ of design report value) to more clearly define how much variation is acceptable.</p> <p>Resolution: To better convey that Raters are to verify that checklist items have been met within program-defined tolerances, the following edits will be made to the Certification Process section:</p> <p>“The Rater must review all items on the National Rater checklists for the whole building- Raters are expected to use their experience and discretion to verify that the overall intent of each inspection checklist item has been met within program-defined tolerances (i.e., identifying major defects that undermine the intent of the checklist item versus identifying minor defects that the Rater may deem acceptable)....</p> <p>In the event that a Rater <u>determines that a program requirement has not been met</u> finds an item that is inconsistent with the intent of the checklists, the building cannot earn the ENERGY STAR until the item is corrected...</p> <p>In the event that a Rater is not able to determine whether a <u>program requirement has been met</u> an item is consistent with the intent (e.g., an alternative method of meeting a checklist requirement has been proposed), then the Rater shall consult their Provider or MRO.</p> <p>If EPA believes the current program requirements are sufficiently clear to determine whether the <u>item in question</u> intent has been met, then this guidance will be provided to the partner and enforced beginning with the house in question.”</p> <p>In addition, the following minor edit will be made to Footnote 5 for consistency:</p> <p>“Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the intent of the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).”</p>
00539	05/01/2023	National Program	Clarification	ENERGY STAR Certification Process Section – Pre-drywall inspection is always required

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Requirements Version 1.2 (Rev. 03)		<p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 6 of the ENERGY STAR Certification Process states that “the Rater must review all items on the National Rater checklists.. In the event that an item on a National Rater checklist cannot be inspected by the Rater, the building also cannot earn the ENERGY STAR.”</p> <p>In addition, ANSI / RESNET / ICC 301 requires visual inspection of multiple Minimum Rated Features per Normative Appendix B, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of Minimum Rated Features of ANSI / RESNET / ICC 301 as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, Grade I or II insulation, air sealing details, a complete air barrier, advanced framing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p>
				<p>Resolution: To reinforce EPA’s current policy that a pre-drywall inspection is always required, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, Step 6 will be revised as follows:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>This will require a minimum of two inspections: one at pre-drywall and the other at final.</u>”</p>
00596	12/01/2023		Change	ENERGY STAR Certification Process – Sunset of sampling protocols for Townhouses

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		National Program Requirements , Version 1.2 (Rev. 03)		<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC) program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p> <p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Step 6 of the ENERGY STAR Certification Process:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>For Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, sampling protocols are permitted to be used within the limitations defined in Fn. 8.</u>”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>In addition, the reference to Footnote 8 will be moved to the end of this new sentence and the footnote will be edited as follows to emphasize that Townhouses are not permitted to be sampled:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by an HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>For multifamily building types other than Townhouses,</u> Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00663	12/01/2023	National Program Requirement, Version 1.2 (Rev. 03)	Clarification	Step 6 - Rater may use HCO or MRO-approved Sampling Protocol
				Issue: The language regarding when Sampling is allowed only refers to HCO-approved sampling protocols and the text could be more concise.
				<p>Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 8 will be revised as follows:</p> <p>“Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an <u>MRO or</u> HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. <u>No other parties are permitted to use sampling.</u> All other items shall be verified for each certified</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				building. For example, no builder verified items are permitted to be verified using a sampling protocol.”
00613	12/01/2023	National Program Requirements , Version 1.2 (Rev. 03)	Change	Exhibit 1 – Remove reference to ENERGY STAR windows
				<p>Issue: Partners have asked whether ENERGY STAR windows and doors are required for buildings following the Prescriptive Path because Exhibit 1 contains the following text:</p> <p>“Dwelling unit ENERGY STAR windows and doors, unless Class AW, as illustrated below:”</p> <p>The above text is followed by a table detailing required U-Factor and SHGC. At the time this Version was developed these aligned with ENERGY STAR window and door specifications. While it was EPA’s intent that Prescriptive Path projects meet the applicable U-Factor and SHGC and be ENERGY STAR certified at the time the Version was developed, it was not the intent to require more stringent values be met upon updates to the ENERGY STAR windows and doors specification.</p>
				<p>Resolution: With the recent increase in stringency to the windows specification, Prescriptive Path projects will no longer need to include ENERGY STAR certified windows and doors; they must only meet the applicable U-Factor and SHGC values. Exhibit 1 will be revised as follows to remove the reference to ENERGY STAR for windows and doors:</p> <p>“Dwelling unit ENERGY STAR windows and doors, unless Class AW, as illustrated below meet the following:”</p>
00693	12/01/2023	National Program Requirements , Version 1.2 (Rev. 03)	Change	Exhibit 1 – SEER2, EER2 and HSPF2 Conversions
				<p>Issue: As of January 1, 2023 air conditioners and heat pumps must be rated with new efficiency metrics (e.g., SEER2, EER2, and HSPF2) according to new test procedures from the U.S. DOE. Equipment used in buildings pursuing the Prescriptive Path need to meet the efficiency level in the ENERGY STAR Reference Design, but it does not currently list efficiencies with the updated metrics. Therefore, it is necessary to add a conversion to the new ratings.</p>
				<p>Resolution: Due to the new efficiency metrics from DOE, the Reference Design efficiency levels will be converted to the new efficiency metrics using conversion factors from Draft</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic																								
				<p>PDS-02, BSR/RESNET/ICC 301-2022 Addendum C-202x. While this addendum is not finalized, EPA will monitor progress and update the conversions if needed.</p> <p>A new footnote will be added to the Residential Cooling Equipment and Residential Heating Equipment rows in Exhibit 1 as follows:</p> <p>“Where equipment is rated in SEER2, or HSPF2, the following table shall be used to determine the required efficiency. The first two rows show the efficiency listed in Exhibit 1, and below are rows for the converted metric by equipment type.</p> <table><tr><td></td><td colspan="2">SEER</td><td>HSPF</td></tr><tr><td></td><td>14</td><td>16</td><td>9.2</td></tr><tr><td>Equipment Type</td><td colspan="2">SEER2</td><td>HSPF2</td></tr><tr><td>Ductless Systems</td><td>14.0</td><td>16.0</td><td>8.2</td></tr><tr><td>Ducted Split System</td><td>13.3</td><td>15.2</td><td>7.8</td></tr><tr><td>Ducted Single Packaged System</td><td>13.3</td><td>15.2</td><td>7.7</td></tr></table>		SEER		HSPF		14	16	9.2	Equipment Type	SEER2		HSPF2	Ductless Systems	14.0	16.0	8.2	Ducted Split System	13.3	15.2	7.8	Ducted Single Packaged System	13.3	15.2	7.7
	SEER		HSPF																									
	14	16	9.2																									
Equipment Type	SEER2		HSPF2																									
Ductless Systems	14.0	16.0	8.2																									
Ducted Split System	13.3	15.2	7.8																									
Ducted Single Packaged System	13.3	15.2	7.7																									
00569	12/01/2023	National Program Requirements , Version 1.2 (Rev. 03)	Change	<div><div>Exhibit 3 – Removal of Provider’s and Multifamily Oversight Organization’s discretion to define ‘Permit Date’ and addition of allowance to use Rater’s first site visit</div><div><p>Issue: Exhibit 3 defines which Versions and Revisions are required to be used and is dependent, in part, on the permit date of buildings. A footnote associated with this exhibit delineates the various ways that the permit date can be determined and includes an allowance for Providers and Multifamily Oversight Organizations to use their discretion when determining it. The allowance to use discretion may result in inconsistent implementation of the program requirements.</p></div><div><p>Resolution: To ensure more consistent implementation of the program requirements, the allowance for Providers and Multifamily Oversight Organizations to use their discretion to</p></div></div>																								

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>define 'permit date' will be removed. At the same time, an additional alternative to 'permit date' that is commonly used in the industry and results in a more conservative (i.e., later) permit date will be added, based on the date of the Rater's first inspection.</p> <p>As a result, the following edits will be made to Footnote 4:</p> <p>"The Rater may define the 'permit date' as either is the date on which that the permit authorizing construction of the building was issued. Alternatively, the date of the Rater's first site visit or the application date of the permit is allowed to be used as the 'permit date'. In cases where permit or application dates are not available, Providers or Multifamily Oversight Organizations have discretion to estimate permit dates based on other construction schedule factors. These assumptions should be both defensible and documented."</p>
00585	12/01/2023	National Program Requirements , Version 1.2 (Rev. 03)	Change	Footnote 17: Continued use of Rev. 01, 02, and 03 HVAC Design Report
				<p>Issue: Due to the effort required to collect the HVAC Design Report, partners have asked whether previously collected Rev. 01, Rev. 02 and Rev. 03 HVAC Design Reports can continue to be used after the release of the next Revision of the program requirements, so long as no aspect of the system design changes.</p>
				<p>Resolution: Because the next Revision of the program checklists will not require collection of any additional information or impose any new requirements, and will maintain or increase compliance tolerances, a design documented using Rev. 01, Rev. 02, or Rev. 03 of the National HVAC Design Report would, by definition, meet the requirements of Rev. 04.</p> <p>Therefore, previously collected Rev. 01, Rev. 02, or Rev. 03 National HVAC Design Reports will be permitted to be used after the release of the next Revision of the program requirements, so long as no aspect of the building design changes. For building designs that are not identical to prior designs (e.g., due to new equipment that is rated in SEER2 instead of SEER), then a new HVAC Design Report must be completed and collected.</p> <p>To reflect this change, Footnote 17 will be updated as follows:</p> <p>"Buildings certified under Rev. 01, Rev. 02, and Rev. 03 <u>Rev. 04</u> of the program requirements are permitted to use any <u>Revision-version</u> of the MFNC National HVAC Design Report"</p>
00535	05/10/2023		Clarification	Eligibility Requirements Section – Attached Dwellings are eligible for MFNC

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Oregon and Washington Program Requirements (Version 1.2, Rev. 03)		<p>Issue: Partners have asked whether only detached Dwellings are eligible to be certified using the Single-Family New Homes (SFNH) program, or if attached Dwellings may also be certified.</p> <p>The Eligibility Requirements for SFNH state that Dwellings (e.g., single-family homes and duplexes) and Townhouses may be certified using the Single-Family New Homes program. In contrast to Townhouses, which are explicitly defined as attached structures, the definition of Dwelling does not distinguish between detached and attached structures: "...any building that contains one or two Dwelling Units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes."</p> <p>Through the examples of Dwellings that are listed (single-family homes and duplexes), however, EPA intended to convey that only detached structures are eligible to be certified using the SFNH program.</p> <p>Similarly, the MFNC Eligibility Requirements state that</p> <p>"The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR • Townhouses, if following the requirements listed in Footnote 3" <p>Resolution: To reinforce the original intent that only detached dwellings are not eligible for MFNC, the MFNC Eligibility Requirements will be revised as follows:</p> <p>"The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a <u>detached</u> dwelling (e.g., not a single-family home or a duplex); OR

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<ul style="list-style-type: none"> Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR Townhouses, if following the requirements listed in Footnote 3”
00617	12/01/2023	Oregon and Washington Program Requirements , Version 1.2 (Rev. 03)	Clarification	Eligibility Requirements Section – Link to new program document defining applicable program requirements, including the minimum Version and Revision, to which a building is eligible to be certified
				<p>Issue: The Eligibility Requirements Section defines what types of buildings are eligible to participate in the MFNC program. However, it does not define the applicable program requirements, including the minimum version and revision, to which a building in a particular location is eligible to be certified. This is currently defined in the Mandatory Compliance Date Section of the same program document. Combining the two sections, such that all requirements related to eligibility are located in a single section, would be clearer.</p> <p>Furthermore, the current Mandatory Compliance Date Section lacks, or only implies, certain information that would be clearer if stated explicitly, including: a) expanding the table to include which program version(s) are applicable to buildings in all locations; b) expanding the table to include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and c) a statement that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
				<p>Resolution: To more clearly convey all eligibility requirements, the Mandatory Compliance Date Section, as well as Footnote 16 and references to this section, will be deleted and the following sentence will be added to the Eligibility Requirements Section:</p> <p><u>“To determine the applicable MFNC program requirements, including the minimum Version and Revision, to which a building is eligible to be certified, visit www.energystar.gov/MFNCVersions.”</u></p> <p>The new program document linked to in the sentence above will contain the applicable program requirements, including the minimum Version and Revision, for all locations; will include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and will state that the listed</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.
00579	12/01/2023	Oregon and Washington Program Requirements , Version 1.2 (Rev. 03)	Clarification	ENERGY STAR Certification Process Section – Raters are to verify that items have been met within program-defined tolerances; not use discretion to discern intent of items
				<p>Issue: The Certification Process Section contains statements regarding the verification of items on the program checklists that may incorrectly imply that Raters have the authority to interpret program intent, potentially leading to inconsistent implementation of the program requirements. Instead, it is the responsibility of EPA to ensure that each program requirement is sufficiently clear that all Raters can implement that policy consistently.</p> <p>Rather, the purpose of these statements was to clarify that minor deviations from a stated program requirement may be acceptable. Since the time that this language was first drafted, EPA has worked to define quantitative tolerances (e.g., Rater-measured ventilation rate must be within either ± 15 CFM or $\pm 15\%$ of design report value) to more clearly define how much variation is acceptable.</p>
				<p>Resolution: To better convey that Raters are to verify that checklist items have been met within program-defined tolerances, the following edits will be made to the Certification Process section:</p> <p>“The Rater must review all items on the National Rater checklists for the whole building- Raters are expected to use their experience and discretion to verify that the overall intent of each inspection checklist item has been met within program-defined tolerances (i.e., identifying major defects that undermine the intent of the checklist item versus identifying minor defects that the Rater may deem acceptable)....</p> <p>In the event that a Rater determines that a program requirement has not been met finds an item that is inconsistent with the intent of the checklists, the building cannot earn the ENERGY STAR until the item is corrected...</p> <p>In the event that a Rater is not able to determine whether <u>a program requirement has been met</u> an item is consistent with the intent (e.g., an alternative method of meeting a checklist requirement has been proposed), then the Rater shall consult their Provider or MRO.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>If EPA believes the current program requirements are sufficiently clear to determine whether the <u>item in question</u> intent has been met, then this guidance will be provided to the partner and enforced beginning with the house in question.”</p> <p>In addition, the following minor edit will be made to Footnote 5 for consistency:</p> <p>“Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the intent of the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).”</p>
00540	05/01/2023	Oregon and Washington Program Requirements (Version 1.2, Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section – Pre-drywall inspection is always required</p> <p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 6 of the ENERGY STAR Certification Process states that “the Rater must review all items on the National Rater checklists.. In the event that an item on a National Rater checklist cannot be inspected by the Rater, the building also cannot earn the ENERGY STAR.”</p> <p>In addition, ANSI / RESNET / ICC 301 requires visual inspection of multiple Minimum Rated Features per Normative Appendix B, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of Minimum Rated Features of ANSI / RESNET / ICC 301 as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, Grade I or II insulation, air sealing details, a complete air barrier, advanced framing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To reinforce EPA's current policy that a pre-drywall inspection is always required, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, Step 6 will be revised as follows:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>This will require a minimum of two inspections: one at pre-drywall and the other at final.</u>”</p>
00597	12/01/2023	Oregon and Washington Program Requirements , Version 1.2 (Rev. 03)	Change	<p>ENERGY STAR Certification Process – Sunset of sampling protocols for Townhouses</p>
				<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC) program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Step 6 of the ENERGY STAR Certification Process:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>For Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, sampling protocols are permitted to be used within the limitations defined in Fn. 8.</u>”</p> <p>In addition, the reference to Footnote 8 will be moved to the end of this new sentence and the footnote will be edited as follows to emphasize that Townhouses are not permitted to be sampled:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by an HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>For multifamily building types other than Townhouses,</u> Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00669	12/01/2023	Oregon and Washington Program Requirements	Clarification	Step 6 - Rater may use HCO or MRO-approved Sampling Protocol
				Issue: The language regarding when Sampling is allowed only refers to HCO-approved sampling protocols and the text could be more concise.

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		, Version 1.2 (Rev. 03)		<p>Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 8 will be revised as follows:</p> <p>“Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an MRO or HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. <u>No other parties are permitted to use sampling.</u> All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00627	12/01/2023	OR WA Program Requirements (Version 1.2, Rev. 03)	Change	Exhibit 1 – Removal of EER requirements for cooling and heating equipment
				<p>Issue: Partners have expressed difficulty finding heat pumps in cold climates that meet all the required metrics (i.e., HSPF, SEER, EER). Specifically, there are many units which meet the required SEER and HSPF, but not the EER.</p> <p>A requirement for EER exists in the MFNC program for heat pumps (in all Climate Zones) only for the Prescriptive Path and common spaces in the ERI Path. EER is not part of the ERI Target Procedure, creating some inconsistency in requirements among paths.</p> <p>The National Program Requirements Version 1.2 does not have an EER requirement, so as this Version is implemented it will not be required.</p> <p>Finally, the Single-Family New Homes program lists EER in Version 3 and 3.1 National Program Requirements, but it is not a requirement in practice because there is no prescriptive path in this program, and it is not part of the ERI Target Procedure.</p>
				<p>Resolution: To better align all MFNC program paths, improve consistency with the Single-Family program, and reduce the required verification steps; The EER requirements for Residential Heating Equipment in Exhibit 1 will be updated as follows:</p> <ul style="list-style-type: none"> “9.5 HSPF / 15 SEER / 12 EER air-source with electric or dual-fuel backup,”

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic						
00624	12/01/2023	Oregon and Washington Program Requirements, Version 1.2 (Rev. 03)	Clarification	Exhibit 1 – Adding equivalent U-factors to reference design envelope						
				Issue: The Envelope, Windows, & Doors section of this Exhibit requires the thermal envelope to meet certain R-values in the Prescriptive Path, and a partner asked EPA if compliance could be demonstrated through an equivalent U-factor.						
				<p>Resolution: EPA's intent was to align with the general structure of the other MFNC Versions where compliance is demonstrated through a U-factor to accommodate a variety of assemblies and align with the Target Procedures. Therefore, the first bullet in the Envelope, Windows, & Doors section of Exhibit 1 will be updated to include U-factors as follows:</p> <ul style="list-style-type: none"> “Dwelling unit insulation levels meet the levels below and Grade I installation per ANSI / RESNET / ICC 301. For common spaces, refer to Item 3.2 of the National Rater Design Review Checklist for insulation levels. 						
				<table> <tr> <td>Above-Grade Wall</td><td>Ceiling</td><td>Floor</td><td>Basement Wall</td><td>On-Grade & Below-Grade Slab</td></tr> <tr> <td>R-24 <u>U-0.056</u></td><td>R-49 <u>U-0.026</u></td><td>R-38 <u>U-0.028</u></td><td>R-15 continuous or, R-21 cavity <u>U-0.042</u></td><td>R-10 at perimeter for entire depth of slab and under entire slab area</td></tr> </table>	Above-Grade Wall	Ceiling	Floor	Basement Wall	On-Grade & Below-Grade Slab	R-24 <u>U-0.056</u>
Above-Grade Wall	Ceiling	Floor	Basement Wall	On-Grade & Below-Grade Slab						
R-24 <u>U-0.056</u>	R-49 <u>U-0.026</u>	R-38 <u>U-0.028</u>	R-15 continuous or, R-21 cavity <u>U-0.042</u>	R-10 at perimeter for entire depth of slab and under entire slab area						
00694	12/01/2023	Oregon and Washington Program Requirements, Version 1.2 (Rev. 03)	Change	Exhibit 1 – SEER2, EER2 and HSPF2 Conversions						
				<p>Issue: As of January 1, 2023 air conditioners and heat pumps must be rated with new efficiency metrics (e.g., SEER2, EER2, and HSPF2) according to new test procedures from the U.S. DOE. Equipment used in buildings pursuing the Prescriptive Path need to meet the efficiency level in the ENERGY STAR Reference Design, but it does not currently list efficiencies with the updated metrics. Therefore, it is necessary to add a conversion to the new ratings.</p> <p>Resolution: Due to the new efficiency metrics from DOE, the Reference Design efficiency levels will be converted to the new efficiency metrics using conversion factors from Draft</p>						

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic																								
				<p>PDS-02, BSR/RESNET/ICC 301-2022 Addendum C-202x. While this addendum is not finalized, EPA will monitor progress and update the conversions if needed.</p> <p>A new footnote will be added to the Residential Cooling Equipment and Residential Heating Equipment rows in Exhibit 1 as follows:</p> <p>“Where equipment is rated in SEER2, or HSPF2, the following table shall be used to determine the required efficiency. The first two rows show the efficiency listed in Exhibit 1, and below are rows for the converted metric by equipment type.</p> <table><tr><td></td><td colspan="2">SEER</td><td>HSPF</td></tr><tr><td></td><td>13</td><td>15</td><td>9.5</td></tr></table> <table><tr><td>Equipment Type</td><td colspan="2">SEER2</td><td>HSPF2</td></tr><tr><td>Ductless Systems</td><td>13.0</td><td>15.0</td><td>8.5</td></tr><tr><td>Ducted Split System</td><td>12.3</td><td>14.2</td><td>8.0</td></tr><tr><td>Ducted Single Packaged System</td><td>12.3</td><td>14.2</td><td>7.9</td></tr></table>		SEER		HSPF		13	15	9.5	Equipment Type	SEER2		HSPF2	Ductless Systems	13.0	15.0	8.5	Ducted Split System	12.3	14.2	8.0	Ducted Single Packaged System	12.3	14.2	7.9
	SEER		HSPF																									
	13	15	9.5																									
Equipment Type	SEER2		HSPF2																									
Ductless Systems	13.0	15.0	8.5																									
Ducted Split System	12.3	14.2	8.0																									
Ducted Single Packaged System	12.3	14.2	7.9																									
00570	12/01/2023	Oregon and Washington Program Requirements , Version 1.2 (Rev. 03)	Change	<div>Exhibit 3 – Removal of Provider’s and Multifamily Oversight Organization’s discretion to define ‘Permit Date’ and addition of allowance to use Rater’s first site visit</div> <div>Issue: Exhibit 3 defines which Versions and Revisions are required to be used and is dependent, in part, on the permit date of buildings. A footnote associated with this exhibit delineates the various ways that the permit date can be determined and includes an allowance for Providers and Multifamily Oversight Organizations to use their discretion when determining it. The allowance to use discretion may result in inconsistent implementation of the program requirements.</div> <div>Resolution: To ensure more consistent implementation of the program requirements, the allowance for Providers and Multifamily Oversight Organizations to use their discretion to</div>																								

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>define 'permit date' will be removed. At the same time, an additional alternative to 'permit date' that is commonly used in the industry and results in a more conservative (i.e., later) permit date will be added, based on the date of the Rater's first inspection.</p> <p>As a result, the following edits will be made to Footnote 4:</p> <p>"The Rater may define the 'permit date' as either is the date on which that the permit authorizing construction of the building was issued. Alternatively, the date of the Rater's first site visit or the application date of the permit is allowed to be used as the 'permit date'. In cases where permit or application dates are not available, Providers or Multifamily Oversight Organizations have discretion to estimate permit dates based on other construction schedule factors. These assumptions should be both defensible and documented."</p>
00706	12/01/2023	Oregon and Washington Program Requirements, Version 1.2, (Rev. 03)	Change	Exhibit 4 – Removal of ASHRAE 90.1-2007 performance target
				<p>Issue: Exhibit 4, ASHRAE Performance Targets, makes several mentions to 90.1-2007 as a baseline for buildings permitted prior to 1/1/2024. As part of the national transition to Version 1.1, buildings permitted after this date will now have a performance target based on 90.1-2010. Revision 04 of the program will be implemented for buildings permitted after this date, therefore this policy will no longer be applicable and can be removed.</p>
				<p>Resolution: To improve conciseness of the program documents references to ASHRAE Performance targets based on 90.1-2007 for buildings permitted prior to 1/1/2024 will be removed. With this change the references to the 2012 IECC and ASHRAE 90.1-2010 in the first sentence can be remove because they are now covered by "All other buildings" in the last sentence. To reflect this the following edits will be made to Exhibit 4.</p> <p>"Buildings using the ASHRAE Path in states that have adopted as the commercial code the 2012 IECC, 2015 IECC, 2018 IECC, 2021 IECC, ASHRAE 90.1-2010, ASHRAE 90.1-2013, ASHRAE 90.1-2016 or equivalent, will be required to meet a Performance Target of 15% energy cost savings when compared to the energy code under which the building is permitted (unless otherwise noted below). Buildings using the ASHRAE Path in states that have adopted as the commercial code the 2021 IECC or ASHRAE 90.1-2019 will be required to meet a Performance Target of 15% energy cost savings when compared to ASHRAE 90.1-2016. All other buildings must meet the national requirement of 15% over ASHRAE</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic																																			
				<p>90.1-2007 if permitted prior to 1/1/2024, and 15% over ASHRAE 90.1-2010 if permitted on or after 1/1/2024.”</p> <table border="1"> <thead> <tr> <th></th><th colspan="4">Performance Target Options: Savings (%) above varying ASHRAE 90.1 Baselines</th></tr> <tr> <th>State Commercial Code</th><th>90.1-2007</th><th>90.1-2010</th><th>90.1-2013</th><th>90.1-2016</th></tr> </thead> <tbody> <tr> <td>2009 IECC / 90.1-2007</td><td>45%</td><td>N/A</td><td>N/A</td><td>N/A</td></tr> <tr> <td>2012 IECC / 90.1-2010</td><td>20%</td><td>15%</td><td>N/A</td><td>N/A</td></tr> <tr> <td>2015 IECC / 90.1-2013</td><td>25%</td><td>20%</td><td>15%</td><td>N/A</td></tr> <tr> <td>2018 IECC / 90.1-2016</td><td>N/A</td><td>N/A</td><td>N/A</td><td>15%</td></tr> <tr> <td>2021 IECC / 90.1-2019</td><td>N/A</td><td>N/A</td><td>N/A</td><td>15%</td></tr> </tbody> </table>		Performance Target Options: Savings (%) above varying ASHRAE 90.1 Baselines				State Commercial Code	90.1-2007	90.1-2010	90.1-2013	90.1-2016	2009 IECC / 90.1-2007	45%	N/A	N/A	N/A	2012 IECC / 90.1-2010	20%	15%	N/A	N/A	2015 IECC / 90.1-2013	25%	20%	15%	N/A	2018 IECC / 90.1-2016	N/A	N/A	N/A	15%	2021 IECC / 90.1-2019	N/A	N/A	N/A	15%
	Performance Target Options: Savings (%) above varying ASHRAE 90.1 Baselines																																						
State Commercial Code	90.1-2007	90.1-2010	90.1-2013	90.1-2016																																			
2009 IECC / 90.1-2007	45%	N/A	N/A	N/A																																			
2012 IECC / 90.1-2010	20%	15%	N/A	N/A																																			
2015 IECC / 90.1-2013	25%	20%	15%	N/A																																			
2018 IECC / 90.1-2016	N/A	N/A	N/A	15%																																			
2021 IECC / 90.1-2019	N/A	N/A	N/A	15%																																			
00587	12/01/2023	Oregon and Washington Program Requirements, Version 1.2 (Rev. 03)	Change	<p>Footnote 16: Continued use of Rev. 01, 02, and 03 HVAC Design Report</p> <p>Issue: Due to the effort required to collect the HVAC Design Report, partners have asked whether previously collected Rev. 01, Rev. 02 and Rev. 03 HVAC Design Reports can continue to be used after the release of the next Revision of the program requirements, so long as no aspect of the system design changes.</p> <p>Resolution: Because the next Revision of the program checklists will not require collection of any additional information or impose any new requirements, and will maintain or increase compliance tolerances, a design documented using Rev. 01, Rev. 02, or Rev. 03 of the National HVAC Design Report would, by definition, meet the requirements of Rev. 04.</p> <p>Therefore, previously collected Rev. 01, Rev. 02, or Rev. 03 National HVAC Design Reports will be permitted to be used after the release of the next Revision of the program requirements, so long as no aspect of the building design changes. For building designs that</p>																																			

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>are not identical to prior designs (e.g., due to new equipment that is rated in SEER2 instead of SEER), then a new HVAC Design Report must be completed and collected.</p> <p>To reflect this change, Footnote 16 will be updated as follows:</p> <p>“Buildings certified under Rev. 01, Rev. 02, and Rev. 03 <u>Rev. 04</u> of the program requirements are permitted to use any <u>Revision-version</u> of the MFNC National HVAC Design Report.”</p>
00532	05/10/2023	California Program Requirements (Version 1.2, Rev. 03)	Clarification	<p>Eligibility Requirements Section – Attached Dwellings are eligible for MFNC</p> <p>Issue: Partners have asked whether only detached Dwellings are eligible to be certified using the Single-Family New Homes (SFNH) program, or if attached Dwellings may also be certified.</p> <p>The Eligibility Requirements for SFNH state that Dwellings (e.g., single-family homes and duplexes) and Townhouses may be certified using the Single-Family New Homes program. In contrast to Townhouses, which are explicitly defined as attached structures, the definition of Dwelling does not distinguish between detached and attached structures: “...any building that contains one or two Dwelling Units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.”</p> <p>Through the examples of Dwellings that are listed (single-family homes and duplexes), however, EPA intended to convey that only detached structures are eligible to be certified using the SFNH program.</p> <p>Similarly, the MFNC Eligibility Requirements state that</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation.; OR • Townhouses.”

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To reinforce the original intent that only detached dwellings are not eligible for MFNC, the MFNC Eligibility Requirements will be revised as follows:</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a <u>detached dwelling</u> (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation;; OR • Townhouses.”
00619	12/01/2023	California Program Requirements , Version 1.2 (Rev. 03)	Clarification	<p>Eligibility Requirements Section – Link to new program document defining applicable program requirements, including the minimum Version and Revision, to which a building is eligible to be certified</p>
				<p>Issue: The Eligibility Requirements Section defines what types of buildings are eligible to participate in the MFNC program. However, it does not define the applicable program requirements, including the minimum version and revision, to which a building in a particular location is eligible to be certified. This is currently defined in the Mandatory Compliance Date Section of the same program document. Combining the two sections, such that all requirements related to eligibility are located in a single section, would be clearer.</p> <p>Furthermore, the current Mandatory Compliance Date Section lacks, or only implies, certain information that would be clearer if stated explicitly, including: a) expanding the table to include which program version(s) are applicable to buildings in all locations; b) expanding the table to include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and c) a statement that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
				<p>Resolution: To more clearly convey all eligibility requirements, the Mandatory Compliance Date Section, as well as Footnote 14 and references to this section, will be deleted and the following sentence will be added to the Eligibility Requirements Section:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“To determine the applicable MFNC program requirements, including the minimum Version and Revision, to which a building is eligible to be certified, visit www.energystar.gov/MFNCVersions.”</p> <p>The new program document linked to in the sentence above will contain the applicable program requirements, including the minimum Version and Revision, for all locations; will include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and will state that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
00578	mm/dd/yy yy	California Program Requirements , Version 1.2 (Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section – Raters are to verify that items have been met within program-defined tolerances; not use discretion to discern intent of items</p>
				<p>Issue: The Certification Process Section contains statements regarding the verification of items on the program checklists that may incorrectly imply that Raters have the authority to interpret program intent, potentially leading to inconsistent implementation of the program requirements. Instead, it is the responsibility of EPA to ensure that each program requirement is sufficiently clear that all Raters can implement that policy consistently.</p> <p>Rather, the purpose of these statements was to clarify that minor deviations from a stated program requirement may be acceptable. Since the time that this language was first drafted, EPA has worked to define quantitative tolerances (e.g., Rater-measured ventilation rate must be within either ± 15 CFM or $\pm 15\%$ of design report value) to more clearly define how much variation is acceptable.</p>
				<p>Resolution: To better convey that Raters are to verify that checklist items have been met within program-defined tolerances, the following edits will be made to the Certification Process section:</p> <p>“The Rater must review all items on the National Rater checklists for the whole building- Raters are expected to use their experience and discretion to verify that the overall intent of each inspection checklist item has been met <u>within program-defined tolerances</u> (i.e., identifying major defects that undermine the intent of the checklist item versus identifying minor defects that the Rater may deem acceptable)....”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>In the event that a Rater determines that a program requirement has not been met finds an item that is inconsistent with the intent of the checklists, the building cannot earn the ENERGY STAR until the item is corrected...</p> <p>In the event that a Rater is not able to determine whether <u>a program requirement has been met</u> an item is consistent with the intent (e.g., an alternative method of meeting a checklist requirement has been proposed), then the Rater shall consult their Provider or MRO.</p> <p>If EPA believes the current program requirements are sufficiently clear to determine whether the <u>item in question</u> intent has been met, then this guidance will be provided to the partner and enforced beginning with the house in question.”</p> <p>In addition, the following minor edit will be made to Footnote 5 for consistency:</p> <p>“Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the intent of the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).”</p>
00541	05/01/2023	California Program Requirements Version 1.2 (Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section – Pre-drywall inspection is always required</p> <p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 6 of the ENERGY STAR Certification Process states that “the Rater must review all items on the National Rater checklists.. In the event that an item on a National Rater checklist cannot be inspected by the Rater, the building also cannot earn the ENERGY STAR.”</p> <p>In addition, the Data Input requirements and On-Site Inspection Procedures for California HERS Ratings require visual inspection of multiple features, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of the features pertaining to the Data Input requirements and On-Site Inspection Procedures for California HERS Ratings as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, Grade I or II insulation, air sealing details, a</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>complete air barrier, advanced framing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p> <p>Resolution: To reinforce EPA's current policy that a pre-drywall inspection is always required, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, Step 6 will be revised as follows:</p> <p>"Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with Data Input requirements and with the On-Site Inspection Procedures for California HERS Ratings. <u>This will require a minimum of two inspections: one at pre-drywall and the other at final.</u>"</p>
00709	12/01/2023	California Program Requirements (Version 1.2, Rev. 03)	Change	<p>ENERGY STAR Certification Process – In California, low-rise buildings using combined dwelling unit model may certify using an HCO or MRO</p>
				<p>Issue: The ENERGY STAR Multifamily new Construction (MFNC) California Program Requirements, Version 1.2, requires all buildings with whole-building models to be certified through an MRO, consistent with policy in the National Program Requirements, Version 1/1.1/1.2. In contrast, the California Program Requirements, Version 1.4, requires all low-rise buildings to be modeled as a whole-building and to be certified by an HCO, based on the updated scope and organization of Title 24-2022. Given this more recent policy, Partners have suggested it would also be appropriate for low-rise buildings pursuing certification under California Program Requirements, Version 1.2, with models that combine all dwelling units to have the option to be certified through an HCO. Partners noted that where common spaces are over a certain size they must be modeled using a different software and therefore these models are not always a 'whole-building', but instead a model of all of the dwelling units.</p>
				<p>Resolution: Given that EPA-recognized California HCOs have the ability to review whole building models and are eligible to do so for California Program Requirements, Version 1.4, low-rise buildings (as defined by the 2016 Building Energy Efficiency Standards) modeled with a whole-building approach have the option to be certified through either an MRO or</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>HCO under California Program Requirements, Version 1.2. Since common spaces are not always included in the model, a new performance target will be added under Step 1a and will still be considered part of the “Dwelling Unit modeling” path. All dwelling units in the building must be included in the model, and common spaces may optionally be included in the model. The overall model must meet the performance target defined as a Compliance Margin $\geq 10\%$ compared to the Compliance Total of the Standard Design corresponding to the building, as defined by the 2016 Building Energy Efficiency Standards and determined by a CEC-approved software program. Note that the Delta EDR target defined in Step 1a is not an approved compliance option for these models. These buildings must follow the requirements under Step 2a, for dwelling-unit modeling, as well as Step 7a for certification under an HCO using the same oversight procedures (e.g., quality assurance, recordkeeping, and reporting) as all other low-rise dwellings.</p> <p>While this policy may be used immediately, EPA intends to seek additional stakeholder feedback on related topics before drafting detailed edits for integration into the next revision of the Program Requirements.</p>
00598	12/01/2023	California Program Requirements , Version 1.2 (Rev. 03)	Change	<p>ENERGY STAR Certification Process – Sunset of sampling protocols for Townhouses</p> <p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC) program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p>
				<p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Step 6 of the ENERGY STAR Certification Process:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with Data Input requirements and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>For Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, sampling protocols are permitted to be used within the limitations defined in Fn. 7.</u>”</p> <p>In addition, the reference to Footnote 7 will be moved to the end of this new sentence and the footnote will be edited as follows to emphasize that Townhouses are not permitted to be sampled:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by an HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>For multifamily building types other than Townhouses,</u> Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an HCO or CEC-approved sampling protocol for buildings in CA. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC Functional Testing Checklist Sampling Protocols. All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
00665	12/01/2023	California Requirement, Version 1.2 (Rev. 03)	Clarification	Step 6 - Rater may use HCO, CEC or MRO-approved Sampling Protocol
				Issue: The language regarding when Sampling is allowed only refers to HCO and CEC-approved sampling protocols and the text could be more concise.
				<p>Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 7 will be revised as follows:</p> <p>“Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an <u>MRO, HCO or CEC-approved sampling protocol</u> for buildings in CA. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. <u>No other parties are permitted to use sampling.</u> All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00628	12/01/2023	CA Program Requirements (Version 1.2, Rev. 03)	Change	Exhibit 1 – Removal of EER requirements for cooling and heating equipment
				<p>Issue: Partners have expressed difficulty finding heat pumps in cold climates that meet all the required metrics (i.e., HSPF, SEER, EER). Specifically, there are many units which meet the required SEER and HSPF, but not the EER.</p> <p>A requirement for EER exists in the MFNC program for air conditioners (in Climate Zones 1-3) and heat pumps (in all Climate Zones) only for the Prescriptive Path and common spaces in the ERI Path,. EER is not part of the ERI Target Procedure, creating some inconsistency in requirements among paths.</p> <p>The National Program Requirements Version 1.2 does not have an EER requirement, so as this Version is implemented it will not be required.</p> <p>Finally, the Single-Family New Homes program lists EER in Version 3 and 3.1 National Program Requirements, but it is not a requirement in practice because there is no prescriptive path in this program, and it is not part of the ERI Target Procedure.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic																												
				<p>Resolution: To better align all MFNC program paths, improve consistency with the Single-Family program, and reduce the required verification steps; all instances of EER requirements for air-source heat pumps and air conditioners in Exhibit 1 will be removed. For example, the following edit will be made to the Mixed and Cold Climate column for Residential Heating Equipment:</p> <p>“CZ 4: 8.5 HSPF / 15 SEER / 12 EER air-source w/ electric or dual-fuel backup,”</p>																												
00695	12/01/2023	California Program Requirements , Version 1.2 (Rev. 03)	Change	Exhibit 1 – SEER2, EER2 and HSPF2 Conversions																												
				<p>Issue: As of January 1, 2023 air conditioners and heat pumps must be rated with new efficiency metrics (e.g., SEER2, EER2, and HSPF2) according to new test procedures from the U.S. DOE. Equipment used in buildings pursuing the Prescriptive Path need to meet the efficiency level in the ENERGY STAR Reference Design, but it does not currently list efficiencies with the updated metrics. Therefore, it is necessary to add a conversion to the new ratings.</p>																												
				<p>Resolution: Due to the new efficiency metrics from DOE, the Reference Design efficiency levels will be converted to the new efficiency metrics using conversion factors from Draft PDS-02, BSR/RESNET/ICC 301-2022 Addendum C-202x. While this addendum is not finalized, EPA will monitor progress and update the conversions if needed.</p> <p>A new footnote will be added to the Residential Cooling Equipment and Residential Heating Equipment rows in Exhibit 1 as follows:</p> <p>“Where equipment is rated in SEER2, or HSPF2, the following table shall be used to determine the required efficiency. The first two rows show the efficiency listed in Exhibit 1, and below are rows for the converted metric by equipment type.</p> <table><tr><td colspan="2"></td><td colspan="2">SEER</td><td colspan="4">HSPF</td></tr><tr><td colspan="2"></td><td>13</td><td>15</td><td>8.2</td><td>8.5</td><td>9.25</td><td>9.5</td></tr><tr><td colspan="2">Equipment Type</td><td colspan="2">SEER2</td><td colspan="4">HSPF2</td></tr><tr><td colspan="2">Ductless Systems</td><td>13.0</td><td>15.0</td><td>7.3</td><td>7.6</td><td>8.3</td><td>8.5</td></tr></table>			SEER		HSPF						13	15	8.2	8.5	9.25	9.5	Equipment Type		SEER2		HSPF2				Ductless Systems		13.0	15.0
		SEER		HSPF																												
		13	15	8.2	8.5	9.25	9.5																									
Equipment Type		SEER2		HSPF2																												
Ductless Systems		13.0	15.0	7.3	7.6	8.3	8.5																									

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic							
				Ducted Split System	12.3	14.2	6.9	7.2	7.8	8.0	
				Ducted Single Packaged System	12.3	14.2	6.8	7.1	7.7	7.9	
00571	12/01/2023	California Program Requirements , Version 1.2 (Rev. 03)	Change	Exhibit 3 – Removal of Provider’s and Multifamily Oversight Organization’s discretion to define ‘Permit Date’ and addition of allowance to use Rater’s first site visit							
				<p>Issue: Exhibit 3 defines which Versions and Revisions are required to be used and is dependent, in part, on the permit date of buildings. A footnote associated with this exhibit delineates the various ways that the permit date can be determined and includes an allowance for Providers and Multifamily Oversight Organizations to use their discretion when determining it. The allowance to use discretion may result in inconsistent implementation of the program requirements.</p>							
				<p>Resolution: To ensure more consistent implementation of the program requirements, the allowance for Providers and Multifamily Oversight Organizations to use their discretion to define ‘permit date’ will be removed. At the same time, an additional alternative to ‘permit date’ that is commonly used in the industry and results in a more conservative (i.e., later) permit date will be added, based on the date of the Rater’s first inspection.</p> <p>As a result, the following edits will be made to Footnote 4:</p> <p>“The Rater may define the ‘permit date’ as either <u>is the date on which</u> that the permit authorizing construction of the building was issued. Alternatively, the date of the Rater’s first site visit or the application date of the permit <u>is allowed to be used as the ‘permit date’</u>. In cases where permit or application dates are not available, Providers or Multifamily Oversight Organizations have discretion to estimate permit dates based on other construction schedule factors. These assumptions should be both defensible and documented. The ‘plan approval date’ is the date that a jurisdiction approves a building plan and its efficiency features for use on a specific lot or tract. As an exception, if a new plan is added to a specific tract’s existing plan set and the new plan is subject to the same version of the energy code as the existing plan set, then the ‘plan approval date’ is considered to be the existing plan set’s original plan approval date.”</p>							
00593	12/01/2023		Change	Exhibit 3 – Revised implementation timeline for California Version 1.4							

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		California Program Requirements , Version 1.2 (Rev. 03)		<p>Issue: In May 2023, EPA released the finalized program requirements for Version 1.4 of the California Program Requirements, including the implementation date for the new version. Where the 2022 edition of the Building Energy Efficiency Standards (BEES) is required by the AHJ, buildings permitted on or after 1/1/2024 are required to be certified using Version 1.4.</p> <p>Since that time, the IRS has released guidance related to ENERGY STAR program versions for the Section 45L Tax Credit for Energy Efficient Homes.</p> <p>Resolution: To better align with recently released guidance from the IRS related to eligible ENERGY STAR program versions for the Section 45L Tax Credit for Energy Efficient Homes, the previously announced implementation timeline for California Version 1.4 will be changed to 01/01/2027.</p>
00508	12/01/2023	California Program Requirements (Version 1.2, Rev. 03)	Clarification	<p>Exhibit 3 – Implementation timeline does not change with enforcement of new edition of CA Building Energy Efficiency Standards (BEES)</p> <p>Issue: Partners have asked whether the applicable Version and Revision changes for buildings with a pre-existing plan approval date when an AHJ begins enforcing a new edition of the BEES.</p> <p>For example, consider a development of townhouses being certified under the Multifamily New Construction program that has a plan approval date of May 1, 2022, for which the 2019 edition of the BEES is enforced. The AHJ begins enforcing the 2022 edition of the BEES for that development for townhouses that are permitted after January 1, 2023. Does the applicable Version and Revision change with enforcement of the new code?</p> <p>Resolution: EPA recognizes that the current policy is ambiguous about which Version and Revision is applicable when an AHJ begins enforcing a new edition of the BEES, after initial plan approval. At this time, EPA is clarifying that the Version and Revision that is applicable does not change with the enforcement of a new edition of the BEES. While new editions of the BEES may trigger revisions to the plans, the original Plan Approval Date remains unchanged and is to be used to determine the applicable Version and Revision.</p> <p>With that said, EPA recognizes that the clarified policy may result in buildings being developed over an extended period of time that are not subjected to the latest Version of ENERGY STAR, even as codes continue to progress. For this reason, EPA intends to revisit</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				how to define the implementation timeline for its California program requirements during the development of the next Version. At that time, EPA will also propose and seek partner feedback on revising the implementation timeline for Version 1.2 and 1.3 of its California program requirements.
00688	12/01/2023	California Program Requirements , Version 1.2 (Rev. 03)	Refinement	Footnote 9 – Deletion of hyperlink
				Issue: Partners have noted that the hyperlink for the website that provides information on the Delta EDR is no longer working.
				Resolution: EPA could not locate that this resource currently exists on any website, and EPA notes that the California 2016 Building Energy Efficiency Standards are an older version of code that is less likely to be used going forward. Therefore, the first sentence of Footnote 9, including the broken hyperlink, will be deleted.
00588	12/01/2023	California Program Requirements , Version 1.2 (Rev. 03)	Change	Footnote 14: Continued use of Rev. 01, 02, and 03 HVAC Design Report
				Issue: Due to the effort required to collect the HVAC Design Report, partners have asked whether previously collected Rev. 01, Rev. 02 and Rev. 03 HVAC Design Reports can continue to be used after the release of the next Revision of the program requirements, so long as no aspect of the system design changes.
				Resolution: Because the next Revision of the program checklists will not require collection of any additional information or impose any new requirements, and will maintain or increase compliance tolerances, a design documented using Rev. 01, Rev. 02, or Rev. 03 of the National HVAC Design Report would, by definition, meet the requirements of Rev. 04. Therefore, previously collected Rev. 01, Rev. 02, or Rev. 03 National HVAC Design Reports will be permitted to be used after the release of the next Revision of the program requirements, so long as no aspect of the building design changes. For building designs that are not identical to prior designs (e.g., due to new equipment that is rated in SEER2 instead of SEER), then a new HVAC Design Report must be completed and collected. To reflect this change, Footnote 14 will be updated as follows:

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				“Buildings certified under Rev. 01, Rev. 02, and Rev. 03 <u>Rev. 04</u> of the program requirements are permitted to use any <u>Revision</u> version of the MFNC National HVAC Design Report.”
00533	05/10/2023	California Program Requirements (Version 1.3, Rev. 03)	Clarification	Eligibility Requirements Section – Attached Dwellings are eligible for MFNC
				<p>Issue: Partners have asked whether only detached Dwellings are eligible to be certified using the Single-Family New Homes (SFNH) program, or if attached Dwellings may also be certified.</p> <p>The Eligibility Requirements for SFNH state that Dwellings (e.g., single-family homes and duplexes) and Townhouses may be certified using the Single-Family New Homes program. In contrast to Townhouses, which are explicitly defined as attached structures, the definition of Dwelling does not distinguish between detached and attached structures: “...any building that contains one or two Dwelling Units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.”</p> <p>Through the examples of Dwellings that are listed (single-family homes and duplexes), however, EPA intended to convey that only detached structures are eligible to be certified using the SFNH program.</p> <p>Similarly, the MFNC Eligibility Requirements state that</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation;; OR • Townhouses.”
				<p>Resolution: To reinforce the original intent that only detached dwellings are not eligible for MFNC, the MFNC Eligibility Requirements will be revised as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a <u>detached</u> dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR • Townhouses.”
00620	12/01/2023	California Program Requirements , Version 1.3 (Rev. 03)	Clarification	<p>Eligibility Requirements Section – Link to new program document defining applicable program requirements, including the minimum Version and Revision, to which a building is eligible to be certified</p>
				<p>Issue: The Eligibility Requirements Section defines what types of buildings are eligible to participate in the MFNC program. However, it does not define the applicable program requirements, including the minimum version and revision, to which a building in a particular location is eligible to be certified. This is currently defined in the Mandatory Compliance Date Section of the same program document. Combining the two sections, such that all requirements related to eligibility are located in a single section, would be clearer.</p> <p>Furthermore, the current Mandatory Compliance Date Section lacks, or only implies, certain information that would be clearer if stated explicitly, including: a) expanding the table to include which program version(s) are applicable to buildings in all locations; b) expanding the table to include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and c) a statement that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
				<p>Resolution: To more clearly convey all eligibility requirements, the Mandatory Compliance Date Section, as well as Footnote 14 and 15 and references to this section, will be deleted and the Eligibility Requirements Section will be revised as follows:</p> <p>“To determine the applicable MFNC program requirements, including the minimum Version and Revision, to which a building is eligible to be certified, visit www.energystar.gov/MFNCVersions.”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				The new program document linked to in the sentence above will contain the applicable program requirements, including the minimum Version and Revision, for all locations; will include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and will state that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.
00577	12/01/2023	California Program Requirements , Version 1.3 (Rev. 03)	Clarification	ENERGY STAR Certification Process Section – Raters are to verify that items have been met within program-defined tolerances; not use discretion to discern intent of items
				<p>Issue: The Certification Process Section contains statements regarding the verification of items on the program checklists that may incorrectly imply that Raters have the authority to interpret program intent, potentially leading to inconsistent implementation of the program requirements. Instead, it is the responsibility of EPA to ensure that each program requirement is sufficiently clear that all Raters can implement that policy consistently.</p> <p>Rather, the purpose of these statements was to clarify that minor deviations from a stated program requirement may be acceptable. Since the time that this language was first drafted, EPA has worked to define quantitative tolerances (e.g., Rater-measured ventilation rate must be within either ± 15 CFM or $\pm 15\%$ of design report value) to more clearly define how much variation is acceptable.</p>
				<p>Resolution: To better convey that Raters are to verify that checklist items have been met within program-defined tolerances, the following edits will be made to the Certification Process section:</p> <p>“The Rater must review all items on the National Rater checklists for the whole building- Raters are expected to use their experience and discretion to verify that the overall intent of each inspection checklist item has been met within program-defined tolerances (i.e., identifying major defects that undermine the intent of the checklist item versus identifying minor defects that the Rater may deem acceptable)....</p> <p>In the event that a Rater <u>determines that a program requirement has not been met</u> finds an item that is inconsistent with the intent of the checklists, the building cannot earn the ENERGY STAR until the item is corrected...</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>In the event that a Rater is not able to determine whether <u>a program requirement has been met</u> an item is consistent with the intent (e.g., an alternative method of meeting a checklist requirement has been proposed), then the Rater shall consult their Provider or MRO.</p> <p>If EPA believes the current program requirements are sufficiently clear to determine whether the <u>item in question</u> intent has been met, then this guidance will be provided to the partner and enforced beginning with the house in question.”</p> <p>In addition, the following minor edit will be made to Footnote 4 for consistency:</p> <p>“Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the intent of the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).”</p>
00542	05/01/2023	California Program Requirements Version 1.3 (Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section – Pre-drywall inspection is always required</p>
				<p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 6 of the ENERGY STAR Certification Process states that “the Rater must review all items on the National Rater checklists.. In the event that an item on a National Rater checklist cannot be inspected by the Rater, the building also cannot earn the ENERGY STAR.”</p> <p>In addition, the Data Input requirements and On-Site Inspection Procedures for California HERS Ratings require visual inspection of multiple features, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of the features pertaining to the Data Input requirements and On-Site Inspection Procedures for California HERS Ratings as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, Grade I or II insulation, air sealing details, a complete air barrier, advanced framing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To reinforce EPA's current policy that a pre-drywall inspection is always required, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, Step 6 will be revised as follows:</p> <p>"Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with Data Input requirements and with the On-Site Inspection Procedures for California HERS Ratings. <u>This will require a minimum of two inspections: one at pre-drywall and the other at final.</u>"</p>
00710	12/01/2023	California Program Requirements (Version 1.3, Rev. 03)	Change	<p>ENERGY STAR Certification Process – In California, low-rise buildings using combined dwelling unit model may certify using an HCO or MRO</p>
				<p>Issue: The ENERGY STAR Multifamily new Construction (MFNC) California Program Requirements, Version 1.3, requires all buildings with whole-building models to be certified through an MRO, consistent with policy in the National Program Requirements, Version 1/1.1/1.2. In contrast, the California Program Requirements, Version 1.4, requires all low-rise buildings to be modeled as a whole-building and to be certified by an HCO, based on the updated scope and organization of Title 24-2022. Given this more recent policy, Partners have suggested it would also be appropriate for low-rise buildings pursuing certification under California Program Requirements, Version 1.3, with models that combine all dwelling units to have the option to be certified through an HCO. Partners noted that where common spaces are over a certain size they must be modeled using a different software and therefore these models are not always a 'whole-building', but instead a model of all of the dwelling units.</p>
				<p>Resolution: Given that EPA-recognized California HCOs have the ability to review whole building models and are eligible to do so for California Program Requirements, Version 1.4, low-rise buildings (as defined by the 2019 Building Energy Efficiency Standards) modeled with a whole-building approach have the option to be certified through either an MRO or HCO under California Program Requirements, Version 1.3. Since common spaces are not always included in the model, a new performance target will be added under Step 1a and will</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>still be considered part of the “Dwelling Unit modeling” path. All dwelling units in the building must be included in the model, and common spaces may optionally be included in the model. The overall model must meet the performance target defined as a Compliance Margin $\geq 10\%$ compared to the Compliance Total of the Standard Design corresponding to the building, as defined by the 2019 Building Energy Efficiency Standards and determined by a CEC-approved software program. Note that the EDR target defined in Step 1a is not an approved compliance option for these models. These buildings must follow the requirements under Step 2a, for dwelling-unit modeling, as well as Step 7a for certification under an HCO using the same oversight procedures (e.g., quality assurance, recordkeeping, and reporting) as all other low-rise dwellings.</p> <p>While this policy may be used immediately, EPA intends to seek additional stakeholder feedback on related topics before drafting detailed edits for integration into the next revision of the Program Requirements.</p>
00599	12/01/2023	California Program Requirements, Version 1.3 (Rev. 03)	Change	ENERGY STAR Certification Process – Sunset of sampling protocols for Townhouses
				<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC)</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p> <p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Step 6 of the ENERGY STAR Certification Process:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with Data Input requirements and with On-Site Inspection Procedures for California HERS Ratings. <u>For Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, sampling protocols are permitted to be used within the limitations defined in Fn. 6.</u>”</p> <p>In addition, the reference to Footnote 6 will be moved to the end of this new sentence and the footnote will be edited as follows to emphasize that Townhouses are not permitted to be sampled:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by an HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>For multifamily building types other than Townhouses,</u> Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an HCO or CEC-approved sampling protocol for buildings in CA. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC Functional Testing Checklist Sampling Protocols. All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00666	12/01/2023		Clarification	Step 6 - Rater may use HCO or MRO-approved Sampling Protocol

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		California Requirement, Version 1.3 (Rev. 03)		<p>Issue: The language regarding when Sampling is allowed only refers to HCO-approved sampling protocols and the text could be more concise.</p> <p>Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 6 will be revised as follows:</p> <p>“Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using <u>the an MRO or HCO-approved sampling protocol</u>. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. <u>No other parties are permitted to use sampling</u>. All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00696	12/01/2023	California Program Requirements , Version 1.3 (Rev. 03)	Change	<p>Exhibit 1 – SEER2, EER2 and HSPF2 Conversions</p> <p>Issue: As of January 1, 2023 air conditioners and heat pumps must be rated with new efficiency metrics (e.g., SEER2, EER2, and HSPF2) according to new test procedures from the U.S. DOE. Equipment used in buildings pursuing the Prescriptive Path need to meet the efficiency level in the ENERGY STAR Reference Design, but it does not currently list efficiencies with the updated metrics. Therefore, it is necessary to add a conversion to the new ratings.</p> <p>Resolution: Due to the new efficiency metrics from DOE, the Reference Design efficiency levels will be converted to the new efficiency metrics using conversion factors from Draft PDS-02, BSR/RESNET/ICC 301-2022 Addendum C-202x. While this addendum is not finalized, EPA will monitor progress and update the conversions if needed.</p> <p>A new footnote will be added to the Residential Cooling Equipment and Residential Heating Equipment rows in Exhibit 1 as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic																								
				<p>“Where equipment is rated in SEER2, or HSPF2, the following table shall be used to determine the required efficiency. The first two rows show the efficiency listed in Exhibit 1, and below are rows for the converted metric by equipment type.</p> <table><tr><td></td><td colspan="2">SEER</td><td>HSPF</td></tr><tr><td></td><td>14</td><td>16</td><td>9.2</td></tr><tr><td>Equipment Type</td><td colspan="2">SEER2</td><td>HSPF2</td></tr><tr><td>Ductless Systems</td><td>14.0</td><td>16.0</td><td>8.2</td></tr><tr><td>Ducted Split System</td><td>13.3</td><td>15.2</td><td>7.8</td></tr><tr><td>Ducted Single Packaged System</td><td>13.3</td><td>15.2</td><td>7.7</td></tr></table>		SEER		HSPF		14	16	9.2	Equipment Type	SEER2		HSPF2	Ductless Systems	14.0	16.0	8.2	Ducted Split System	13.3	15.2	7.8	Ducted Single Packaged System	13.3	15.2	7.7
	SEER		HSPF																									
	14	16	9.2																									
Equipment Type	SEER2		HSPF2																									
Ductless Systems	14.0	16.0	8.2																									
Ducted Split System	13.3	15.2	7.8																									
Ducted Single Packaged System	13.3	15.2	7.7																									
00592	12/01/2023	California Program Requirements , Version 1.3 (Rev. 03)	Change	Exhibit 3 – Revised implementation timeline for California Version 1.4																								
				<p>Issue: In May 2023, EPA released the finalized program requirements for Version 1.4 of the California Program Requirements, including the implementation date for the new version. Where the 2022 edition of the Building Energy Efficiency Standards (BEES) is required by the AHJ, buildings permitted on or after 1/1/2024 are required to be certified using Version 1.4.</p> <p>Since that time, the IRS has released guidance related to ENERGY STAR program versions for the Section 45L Tax Credit for Energy Efficient Homes.</p>																								
				<p>Resolution: To better align with recently released guidance from the IRS related to eligible ENERGY STAR program versions for the Section 45L Tax Credit for Energy Efficient Homes, the previously announced implementation timeline for California Version 1.4 will be changed to 01/01/2027.</p>																								
00509	11/10/2022	California Program	Clarification	Exhibit 3 – Implementation timeline does not change with enforcement of new edition of CA Building Energy Efficiency Standards (BEES)																								

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Requirements Version 1.3 (Rev.03)		<p>Issue: Partners have asked whether the applicable Version and Revision changes for buildings with a pre-existing plan approval date when an AHJ begins enforcing a new edition of the BEES.</p> <p>For example, consider a development of townhouses being certified under the Multifamily New Construction program that has a plan approval date of May 1, 2022, for which the 2019 edition of the BEES is enforced. The AHJ begins enforcing the 2022 edition of the BEES for that development for townhouses that are permitted after January 1, 2023. Does the applicable Version and Revision change with enforcement of the new code?</p> <p>Resolution: EPA recognizes that the current policy is ambiguous about which Version and Revision is applicable when an AHJ begins enforcing a new edition of the BEES, after initial plan approval. At this time, EPA is clarifying that the Version and Revision that is applicable does not change with the enforcement of a new edition of the BEES. While new editions of the BEES may trigger revisions to the plans, the original Plan Approval Date remains unchanged and is to be used to determine the applicable Version and Revision.</p> <p>With that said, EPA recognizes that the clarified policy may result in buildings being developed over an extended period of time that are not subjected to the latest Version of ENERGY STAR, even as codes continue to progress. For this reason, EPA intends to revisit how to define the implementation timeline for its California program requirements during the development of the next Version. At that time, EPA will also propose and seek partner feedback on revising the implementation timeline for Version 1.2 and 1.3 of its California program requirements.</p>
00572	12/01/2023	California Program Requirements , Version 1.3 (Rev. 03)	Change	<p>Exhibit 3 – Removal of Provider’s and Multifamily Oversight Organization’s discretion to define ‘Permit Date’ and addition of allowance to use Rater’s first site visit</p> <p>Issue: Exhibit 3 defines which Versions and Revisions are required to be used and is dependent, in part, on the permit date of buildings. A footnote associated with this exhibit delineates the various ways that the permit date can be determined and includes an allowance for Providers and Multifamily Oversight Organizations to use their discretion when determining it. The allowance to use discretion may result in inconsistent implementation of the program requirements.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To ensure more consistent implementation of the program requirements, the allowance for Providers and Multifamily Oversight Organizations to use their discretion to define 'permit date' will be removed. At the same time, an additional alternative to 'permit date' that is commonly used in the industry and results in a more conservative (i.e., later) permit date will be added, based on the date of the Rater's first inspection.</p> <p>As a result, the following edits will be made to Footnote 14:</p> <p>"The Rater may define the 'permit date' as either is the date on which that the permit authorizing construction of the building was issued. Alternatively, the date of the Rater's first site visit or the application date of the permit is allowed to be used as the 'permit date'. In cases where permit or application dates are not available, Providers or Multifamily Oversight Organizations have discretion to estimate permit dates based on other construction schedule factors. These assumptions should be both defensible and documented. The 'plan approval date' is the date that a jurisdiction approves a building plan and its efficiency features for use on a specific lot or tract. As an exception, if a new plan is added to a specific tract's existing plan set and the new plan is subject to the same version of the energy code as the existing plan set, then the 'plan approval date' is considered to be the existing plan set's original plan approval date."</p>
00589	12/01/2023	California Program Requirements, Version 1.3 (Rev. 03)	Change	Footnote 15: Continued use of Rev. 01, 02, and 03 HVAC Design Report
				<p>Issue: Due to the effort required to collect the HVAC Design Report, partners have asked whether previously collected Rev. 01, Rev. 02, and Rev. 03 HVAC Design Reports can continue to be used after the release of the next Revision of the program requirements, so long as no aspect of the system design changes.</p>
				<p>Resolution: Because the next Revision of the program checklists will not require collection of any additional information or impose any new requirements, and will maintain or increase compliance tolerances, a design documented using Rev. 01, Rev. 02, or Rev. 03 of the National HVAC Design Report would, by definition, meet the requirements of Rev. 04.</p> <p>Therefore, previously collected Rev. 01, Rev. 02, or Rev. 03 National HVAC Design Reports will be permitted to be used after the release of the next Revision of the program requirements, so long as no aspect of the building design changes. For building designs that</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>are not identical to prior designs (e.g., due to new equipment that is rated in SEER2 instead of SEER), then a new HVAC Design Report must be completed and collected.</p> <p>To reflect this change, Footnote 15 will be updated as follows:</p> <p>“Buildings certified under Rev. 01, Rev. 02, and Rev. 03 <u>Rev. 04</u> of the program requirements are permitted to use any <u>Revision-version</u> of the MFNC National HVAC Design Report.”</p>
00621	12/01/2023	California Program Requirements , Version 1.4 (Rev. 03)	Clarification	<p>Eligibility Requirements Section – Link to new program document defining applicable program requirements, including the minimum Version and Revision, to which a building is eligible to be certified</p>
				<p>Issue: The Eligibility Requirements Section defines what types of buildings are eligible to participate in the MFNC program. However, it does not define the applicable program requirements, including the minimum version and revision, to which a building in a particular location is eligible to be certified. This is currently defined in the Mandatory Compliance Date Section of the same program document. Combining the two sections, such that all requirements related to eligibility are located in a single section, would be clearer.</p> <p>Furthermore, the current Mandatory Compliance Date Section lacks, or only implies, certain information that would be clearer if stated explicitly, including: a) expanding the table to include which program version(s) are applicable to buildings in all locations; b) expanding the table to include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and c) a statement that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p>
				<p>Resolution: To more clearly convey all eligibility requirements, the Mandatory Compliance Date Section, as well as Footnote 11 and 12 and references to this section, will be deleted and the Eligibility Requirements Section will be revised as follows:</p> <p>“<u>To determine the applicable MFNC program requirements, including the minimum Version and Revision, to which a building is eligible to be certified, visit www.energystar.gov/MFNCVersions.</u>”</p> <p>The new program document linked to in the sentence above will contain the applicable program requirements, including the minimum Version and Revision, for all locations; will</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and will state that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.
00543	05/01/2023	California Program Requirements Version 1.4 (Rev. 03)	Clarification	ENERGY STAR Certification Process Section – Pre-drywall inspection is always required
				<p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 6 of the ENERGY STAR Certification Process states that “the Rater must review all items on the National Rater checklists.. In the event that an item on a National Rater checklist cannot be inspected by the Rater, the building also cannot earn the ENERGY STAR.”</p> <p>In addition, the Data Input requirements and On-Site Inspection Procedures for California HERS Ratings require visual inspection of multiple features, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of the features pertaining to the Data Input requirements and On-Site Inspection Procedures for California HERS Ratings as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, Grade I or II insulation, air sealing details, a complete air barrier, advanced framing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p>
				<p>Resolution: To reinforce EPA’s current policy that a pre-drywall inspection is always required, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, Step 6 will be revised as follows:</p> <p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Buildings and with Data Input requirements and</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				with the On-Site Inspection Procedures for California HERS Ratings. <u>This will require a minimum of two inspections: one at pre-drywall and the other at final.</u>
00576	12/01/2023	California Program Requirements , Version 1.4 (Rev. 03)	Clarification	ENERGY STAR Certification Process Section – Raters are to verify that items have been met within program-defined tolerances; not use discretion to discern intent of items
				<p>Issue: The Certification Process Section contains statements regarding the verification of items on the program checklists that may incorrectly imply that Raters have the authority to interpret program intent, potentially leading to inconsistent implementation of the program requirements. Instead, it is the responsibility of EPA to ensure that each program requirement is sufficiently clear that all Raters can implement that policy consistently.</p> <p>Rather, the purpose of these statements was to clarify that minor deviations from a stated program requirement may be acceptable. Since the time that this language was first drafted, EPA has worked to define quantitative tolerances (e.g., Rater-measured ventilation rate must be within either ± 15 CFM or $\pm 15\%$ of design report value) to more clearly define how much variation is acceptable.</p>
				<p>Resolution: To better convey that Raters are to verify that checklist items have been met within program-defined tolerances, the following edits will be made to the Certification Process section:</p> <p>“The Rater must review all items on the National Rater checklists for the whole building- Raters are expected to use their experience and discretion to verify that the overall intent of each inspection checklist item has been met within program-defined tolerances (i.e., identifying major defects that undermine the intent of the checklist item versus identifying minor defects that the Rater may deem acceptable)....</p> <p>In the event that a Rater determines that a program requirement has not been met finds an item that is inconsistent with the intent of the checklists, the building cannot earn the ENERGY STAR until the item is corrected...</p> <p>In the event that a Rater is not able to determine whether <u>a program requirement has been met</u> an item is consistent with the intent (e.g., an alternative method of meeting a checklist requirement has been proposed), then the Rater shall consult their Provider or MRO.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>If EPA believes the current program requirements are sufficiently clear to determine whether the <u>item in question</u> intent has been met, then this guidance will be provided to the partner and enforced beginning with the house in question.”</p> <p>In addition, the following minor edit will be made to Footnote 3 for consistency:</p> <p>“Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the intent of the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).”</p>
00667	12/01/2023	California Program Requirements, Version 1.4 (Rev. 03)	Clarification	Step 6 - Rater may use HCO or MRO-approved Sampling Protocol
				Issue: The language regarding when Sampling is allowed only refers to HCO-approved sampling protocols and the text could be more concise.
				<p>Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 5 will be revised as follows:</p> <p>“Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using the an <u>an MRO or</u> HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling, with the exception of the Functional Testing Checklist. Functional Testing Agents, except the installing contractor, may follow the sampling protocol described in the MFNC HVAC Functional Testing Checklist Sampling Protocols. No other parties are permitted to use sampling. All other items shall be verified for each certified building. For example, no builder verified items are permitted to be verified using a sampling protocol.”</p>
00573	12/01/2023	California Program Requirements , Version 1.4 (Rev. 03)	Change	Exhibit 2 – Removal of Provider’s and Multifamily Oversight Organization’s discretion to define ‘Permit Date’ and addition of allowance to use Rater’s first site visit
				Issue: Exhibit 2 defines which Versions and Revisions are required to be used and is dependent, in part, on the permit date of buildings. A footnote associated with this exhibit delineates the various ways that the permit date can be determined and includes an allowance for Providers and Multifamily Oversight Organizations to use their discretion when

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>determining it. The allowance to use discretion may result in inconsistent implementation of the program requirements.</p> <p>Resolution: To ensure more consistent implementation of the program requirements, the allowance for Providers and Multifamily Oversight Organizations to use their discretion to define 'permit date' will be removed. At the same time, an additional alternative to 'permit date' that is commonly used in the industry and results in a more conservative (i.e., later) permit date will be added, based on the date of the Rater's first inspection.</p> <p>As a result, the following edits will be made to Footnote 11:</p> <p>"The Rater may define the 'permit date' as either is the date on which that the permit authorizing construction of the building was issued. Alternatively, the date of the Rater's first site visit or the application date of the permit is allowed to be used as the 'permit date'. In cases where permit or application dates are not available, Providers or Multifamily Oversight Organizations have discretion to estimate permit dates based on other construction schedule factors. These assumptions should be both defensible and documented. The 'plan approval date' is the date that a jurisdiction approves a building plan and its efficiency features for use on a specific lot or tract. As an exception, if a new plan is added to a specific tract's existing plan set and the new plan is subject to the same version of the energy code as the existing plan set, then the 'plan approval date' is considered to be the existing plan set's original plan approval date."</p>
00591	12/01/2023	California Program Requirements , Version 1.4 (Rev. 03)	Change	<p>Exhibit 2 – Revised implementation timeline for California Version 1.4</p> <p>Issue: In May 2023, EPA released the finalized program requirements for Version 1.4 of the California Program Requirements, including the implementation date for the new version. Where the 2022 edition of the Building Energy Efficiency Standards (BEES) is required by the AHJ, buildings permitted on or after 1/1/2024 are required to be certified using Version 1.4.</p> <p>Since that time, the IRS has released guidance related to ENERGY STAR program versions for the Section 45L Tax Credit for Energy Efficient Homes.</p> <p>Resolution: To better align with recently released guidance from the IRS related to eligible ENERGY STAR program versions for the Section 45L Tax Credit for Energy Efficient</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				Homes, the previously announced implementation timeline for California Version 1.4 will be changed to 01/01/2027.
00590	12/01/2023	California Program Requirements, Version 1.4 (Rev. 03)	Change	Footnote 12: Continued use of Rev. 01, 02, and 03 HVAC Design Report
				Issue: Due to the effort required to collect the HVAC Design Report, partners have asked whether previously collected Rev. 01, Rev. 02 and Rev. 03 HVAC Design Reports can continue to be used after the release of the next Revision of the program requirements, so long as no aspect of the system design changes.
				<p>Resolution: Because the next Revision of the program checklists will not require collection of any additional information or impose any new requirements, and will maintain or increase compliance tolerances, a design documented using Rev. 01, Rev. 02, or Rev. 03 of the National HVAC Design Report would, by definition, meet the requirements of Rev. 04.</p> <p>Therefore, previously collected Rev. 01, Rev. 02, or Rev. 03 National HVAC Design Reports will be permitted to be used after the release of the next Revision of the program requirements, so long as no aspect of the building design changes. For building designs that are not identical to prior designs (e.g., due to new equipment that is rated in SEER2 instead of SEER), then a new HVAC Design Report must be completed and collected.</p> <p>To reflect this change, Footnote 12 will be updated as follows:</p> <p>“Buildings certified under Rev. 01, Rev. 02, and Rev. 03 Rev. 04 of the program requirements are permitted to use any <u>Revision</u> version of the MFNC National HVAC Design Report.”</p>
00534	05/10/2023	Caribbean Program Requirements (Version 1, Rev. 03)	Clarification	Eligibility Requirements Section – Attached Dwellings are eligible for MFNC
				<p>Issue: Partners have asked whether only detached Dwellings are eligible to be certified using the Single-Family New Homes (SFNH) program, or if attached Dwellings may also be certified.</p> <p>The Eligibility Requirements for SFNH state that Dwellings (e.g., single-family homes and duplexes) and Townhouses may be certified using the Single-Family New Homes program. In contrast to Townhouses, which are explicitly defined as attached structures, the definition of Dwelling does not distinguish between detached and attached structures: “...any building</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>that contains one or two Dwelling Units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.”</p> <p>Through the examples of Dwellings that are listed (single-family homes and duplexes), however, EPA intended to convey that only detached structures are eligible to be certified using the SFNH program.</p> <p>Similarly, the MFNC Eligibility Requirements state that</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR • Townhouses, if following the requirements listed in Footnote 3”
				<p>Resolution: To reinforce the original intent that only detached dwellings are not eligible for MFNC, the MFNC Eligibility Requirements will be revised as follows:</p> <p>“The following multifamily building types are eligible to participate in the ENERGY STAR Multifamily New Construction (MFNC) program:</p> <ul style="list-style-type: none"> • Any multifamily building with dwelling or sleeping units that is NOT a <u>detached</u> dwelling (e.g., not a single-family home or a duplex); OR • Any mixed-use buildings with dwelling or sleeping units, where the dwelling units, sleeping units, and common space exceed 50% of the building square footage. Parking garage square footage is excluded from this calculation,; OR • Townhouses, if following the requirements listed in Footnote 3”
00618	12/01/2023	Caribbean Program Requirements	Clarification	<p>Eligibility Requirements Section – Link to new program document defining applicable program requirements, including the minimum Version and Revision, to which a building is eligible to be certified</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		, Version 1 (Rev. 03)		<p>Issue: The Eligibility Requirements Section defines what types of buildings are eligible to participate in the MFNC program. However, it does not define the applicable program requirements, including the minimum version and revision, to which a building in a particular location is eligible to be certified. This is currently defined in the Mandatory Compliance Date Section of the same program document. Combining the two sections, such that all requirements related to eligibility are located in a single section, would be clearer.</p> <p>Furthermore, the current Mandatory Compliance Date Section lacks, or only implies, certain information that would be clearer if stated explicitly, including: a) expanding the table to include which program version(s) are applicable to buildings in all locations; b) expanding the table to include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and c) a statement that the listed versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.</p> <p>Resolution: To more clearly convey all eligibility requirements, the Mandatory Compliance Date Section, as well as Footnote 16 and references to this section, will be deleted and the Eligibility Requirements Section will be revised as follows:</p> <p>“Townhouses are also eligible to participate in the ENERGY STAR Single-Family New Homes program, which is a certification program for dwellings (e.g., single-family homes, duplexes) and townhouses. Multifamily buildings 5 stories or less with permit dates prior to July 1, 2022 may be eligible to participate in the ENERGY STAR Single-Family New Homes. For more information, visit: www.energystar.gov/newhomesrequirements. In addition, multifamily buildings with a MFHR Project Application submitted prior to January 1, 2021 and a permit date prior to July 1, 2021, may be eligible to participate in the ENERGY STAR Multifamily High Rise program. For more information, visit: www.energystar.gov/mfhr/eligibility.</p> <p><u>To determine the applicable MFNC program requirements, including the minimum Version and Revision, to which a building is eligible to be certified, visit www.energystar.gov/MFNCVersions.</u>”</p> <p>The new program document linked to in the sentence above will contain the applicable program requirements, including the minimum Version and Revision, for all locations; will include, where applicable, both the national version and regional version of the program requirements to which a building is eligible to be certified; and will state that the listed</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				versions are the minimum required; therefore, buildings are eligible to be certified to higher versions of the same program.
00575	12/01/2023	Caribbean Program Requirements , Version 1 (Rev. 03)	Clarification	ENERGY STAR Certification Process Section – Raters are to verify that items have been met within program-defined tolerances; not use discretion to discern intent of items
				<p>Issue: The Certification Process Section contains statements regarding the verification of items on the program checklists that may incorrectly imply that Raters have the authority to interpret program intent, potentially leading to inconsistent implementation of the program requirements. Instead, it is the responsibility of EPA to ensure that each program requirement is sufficiently clear that all Raters can implement that policy consistently.</p> <p>Rather, the purpose of these statements was to clarify that minor deviations from a stated program requirement may be acceptable. Since the time that this language was first drafted, EPA has worked to define quantitative tolerances (e.g., Rater-measured ventilation rate must be within either ± 15 CFM or $\pm 15\%$ of design report value) to more clearly define how much variation is acceptable.</p>
				<p>Resolution: To better convey that Raters are to verify that checklist items have been met within program-defined tolerances, the following edits will be made to the Certification Process section:</p> <p>“The Rater must review all items on the Caribbean checklists for the whole building. Raters are expected to use their experience and discretion to verify that the overall intent of each inspection checklist item has been met within program-defined tolerances (i.e., identifying major defects that undermine the intent of the checklist item versus identifying minor defects that the Rater may deem acceptable)....</p> <p>In the event that a Rater determines that a program requirement has not been met <u>finds an item that is inconsistent with the intent of the checklists</u>, the building cannot earn the ENERGY STAR until the item is corrected...</p> <p>In the event that a Rater is not able to determine whether <u>a program requirement has been met</u> an item is consistent with the intent (e.g., an alternative method of meeting a checklist requirement has been proposed), then the Rater shall consult their Provider or MRO.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>If EPA believes the current program requirements are sufficiently clear to determine whether the <u>item in question</u> intent has been met, then this guidance will be provided to the partner and enforced beginning with the house in question.”</p> <p>In addition, the following minor edit will be made to Footnote 5 for consistency:</p> <p>“Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the intent of the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).”</p>
00545	05/01/2023	Caribbean Program Requirements Version 1 (Rev. 03)	Clarification	<p>ENERGY STAR Certification Process Section - Pre-drywall inspection is always required</p>
				<p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 3 of the ENERGY STAR Certification Process states that “the Rater must review all items on the Caribbean checklists.. In the event that an item on a Caribbean checklist cannot be inspected by the Rater, the project also cannot earn the ENERGY STAR.”</p> <p>In addition, ANSI / RESNET / ICC 301 requires visual inspection of multiple Minimum Rated Features per Normative Appendix B, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of Minimum Rated Features of ANSI / RESNET / ICC 301 as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, air sealing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p>
				<p>Resolution: To reinforce EPA's current policy that a pre-drywall inspection is always required if drywall is to be installed, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, Step 3 will be revised as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Projects and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>If drywall will be installed, this will require a minimum of two inspections: one at pre-drywall and the other at final.</u>”</p>
00600	12/01/2023	Caribbean Program Requirements, Version 1 (Rev. 03)	Change	ENERGY STAR Certification Process – Sunset of sampling protocols for Townhouses
				<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC) program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p>
				<p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Step 3 of the ENERGY STAR Certification Process:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“Construct the building using the measures selected in Step 1 and the Mandatory Requirements for All Certified Multifamily Buildings, Exhibit 2.</p> <p>Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Multifamily Projects and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. <u>For Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, sampling protocols are permitted to be used within the limitations defined in Fn. 9.</u>”</p> <p>In addition, the reference to Footnote 9 will be moved to the end of this new sentence and the footnote will be edited as follows to emphasize that Townhouses are not permitted to be sampled:</p> <p><u>“For multifamily building types other than Townhouses, Raters who operate under an HCO or MRO with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling. All other items shall be verified for each certified building. For example, no items on the National HVAC Design Report are permitted to be verified using a sampling protocol.”</u></p>
00664	12/01/2023	Caribbean Program Requirements, Version 1 (Rev. 03)	Clarification	Step 6 - Rater may use HCO or MRO-approved Sampling Protocol
				Issue: The language regarding when Sampling is allowed only refers to HCO-approved sampling protocols and the text could be more concise.
				<p>Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 9 will be revised as follows:</p> <p>“Raters who operate under an HCO or MRO <u>or HCO</u> with a Sampling Protocol are permitted to verify the minimum rated features of the building and to verify any Checklist Item designated “Rater Verified” using an <u>MRO or HCO</u>-approved sampling protocol. No parties other than Raters are permitted to use sampling. All other items shall be verified for each certified building. For example, no items on the National HVAC Design Report are permitted to be verified using a sampling protocol.”</p>
00697	12/01/2023		Change	Exhibit 1 – SEER2, and EER2 Conversions

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Caribbean Program Requirements , Version 1 (Rev. 03)		<p>Issue: As of January 1, 2023 air conditioners and heat pumps must be rated with new efficiency metrics (e.g., SEER2, EER2, and HSPF2) according to new test procedures from the U.S. DOE. Equipment used in buildings pursuing the Prescriptive Path need to meet the efficiency level in the ENERGY STAR Reference Design, but it does not currently list efficiencies with the updated metrics. Therefore, it is necessary to add a conversion to the new ratings.</p> <p>Resolution: Due to the new efficiency metrics from DOE, the Reference Design efficiency levels will be converted to the new efficiency metrics using conversion factors from Draft PDS-02, BSR/RESNET/ICC 301-2022 Addendum C-202x. While this addendum is not finalized, EPA will monitor progress and update the conversions if needed.</p> <p>Because the cooling systems specified in the Reference Design of Exhibit 1 is ductless and the conversation factors of SEER/SEER2 and EER/EER2 is 1.0 for ductless system, the language in Exhibit 1 Cooling Equipment & Water Heating Equipment will be revised as follows:</p> <p>“using mini- or multi-split AC’s or HP’s ≥ 15 SEER <u>or SEER2</u>,..., OR PTACs with ≥ 11.6 EER <u>or EER2</u>...”</p>
00711	02/15/2024	Caribbean Program Requirements (Version 1, Rev. 03)	Change	<p>Exhibit 1 – Annual Solar Fraction to be determined using US DOE Draw Profile reflective of the dwelling units and sleeping units</p> <p>Issue: Several partners have reported challenges meeting the solar fraction required by this program version. They note that the SRCC OG-300 Draw Pattern, which is required to be used when determining the annual solar fraction, is based upon hot water consumption of 64 gallons per day, while a typical dwelling or sleeping unit in the Caribbean or Pacific is likely to use considerably less. This is, in part, due to warm water inlet temperatures, which result in the need for less heated water to achieve desired fixture outlet temperatures. Therefore, systems that achieve a Solar Fraction $\geq 87\%$ at the SRCC OG-300 Draw Pattern are typically oversized, making them prone to overheating issues. The partners suggested that determining the solar fraction using alternative US DOE Draw Profiles that are more appropriate to the needs of the dwelling or sleeping unit would result in better-performing systems.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>To estimate the actual hot water needs of a typical dwelling unit in the Caribbean and Pacific, EPA used ANSI / RESNET / ICC 301-2022, which estimates daily service hot water use in Equation 4.2-29. The maximum daily use for each home configuration was identified and then mapped to the closest US DOE Draw Profile, which was generally the Low or Medium profile depending on the number of bedrooms in the dwelling unit.</p> <p>Resolution: The policy will be revised to specify that the annual solar fraction must be determined using a US DOE Draw Profile that is reflective of the home, in lieu of the SRCC OG-300 Draw Pattern. Specifically, Footnote 11 will be revised as follows:</p> <p>“Solar fraction shall be determined using the ICC-SRCC OG-300 Solar Water Heating System Certification Program’s annual solar fraction rating (SF_A) for the rating location closest to the building. For dwelling units or sleeping units with ≤ 3 bedrooms, determine SF_A using the Low U.S. DOE Draw Pattern; otherwise, use Medium and for the SRCC OG-300 Draw Pattern. A solar water heater system with a Solar Fraction $\geq 87\%$ that has no backup water heater is permitted to be used. For the OG-300 directory, visit https://solar-rating.org/directories/certified-companies/.”</p>
00574	12/01/2023	Caribbean Program Requirements , Version 1 (Rev. 03)	Change	<p>Exhibit 3 – Removal of Provider’s and Multifamily Oversight Organization’s discretion to define ‘Permit Date’ and addition of allowance to use Rater’s first site visit</p> <p>Issue: Exhibit 3 defines which Versions and Revisions are required to be used and is dependent, in part, on the permit date of buildings. A footnote associated with this exhibit delineates the various ways that the permit date can be determined and includes an allowance for Providers and Multifamily Oversight Organizations to use their discretion when determining it. The allowance to use discretion may result in inconsistent implementation of the program requirements.</p> <p>Resolution: To ensure more consistent implementation of the program requirements, the allowance for Providers and Multifamily Oversight Organizations to use their discretion to define ‘permit date’ will be removed. At the same time, an additional alternative to ‘permit date’ that is commonly used in the industry and results in a more conservative (i.e., later) permit date will be added, based on the date of the Rater’s first inspection.</p> <p>As a result, the following edits will be made to Footnote 4:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“The Rater may define the ‘permit date’ as either is the date on which that the permit authorizing construction of the building was issued. Alternatively, the date of the Rater’s first site visit or the application date of the permit is allowed to be used as the ‘permit date’. In cases where permit or application dates are not available, Providers or Multifamily Oversight Organizations have discretion to estimate permit dates based on other construction schedule factors. These assumptions should be both defensible and documented.”</p>
00586	12/01/2023	Caribbean Program Requirements, Version 1 (Rev. 03)	Change	Footnote 16: Continued use of Rev. 02 and 03 HVAC Design Report
				<p>Issue: Due to the effort required to collect the HVAC Design Report, partners have asked whether previously collected Rev. 02 and Rev. 03 HVAC Design Reports can continue to be used after the release of the next Revision of the program requirements, so long as no aspect of the system design changes.</p>
				<p>Resolution: Because the next Revision of the program checklists will not require collection of any additional information or impose any new requirements, and will maintain or increase compliance tolerances, a design documented using Rev. 02 or Rev. 03 of the National HVAC Design Report would, by definition, meet the requirements of Rev. 04.</p> <p>Therefore, previously collected Rev. 02 or Rev. 03 National HVAC Design Reports will be permitted to be used after the release of the next Revision of the program requirements, so long as no aspect of the building design changes. For building designs that are not identical to prior designs (e.g., due to new equipment that is rated in SEER2 instead of SEER), then a new HVAC Design Report must be completed and collected.</p> <p>To reflect this change, Footnote 16 will be updated as follows:</p> <p>“Buildings certified under Rev. 02, and Rev. 03, Rev. 04 of the program requirements are permitted to use any <u>Revision</u> version of the MFNC National HVAC Design Report.”</p>
00647	12/01/2023	National Rater Design Review Checklist (Version 1 / 1.1 / 1.2, Rev. 03)	Change	Partnership Status Section – Verification of Energy Rating Company partnership, Rater training and Rater credential
				<p>Issue: All National and Regional Program Requirements documents include partnership, training, and credentialing requirements for Energy Rating Companies (ERC’s) and Raters, as clarified in Policy Record 00xxx. These requirements are not reflected on the Rater checklists, which may result in Raters inadvertently overlooking them.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To ensure that ERC and Rater partnership, training, and credentialing requirements are verified, two new Items will be added at the end of Section 1 - Partnership Status.</p> <p>The first new Item will read as follows:</p> <p>“Rater has verified and documented that their company has an ENERGY STAR partnership agreement using www.energystar.gov/ResPartnerDirectory.”</p> <p>A new footnote will be associated with this Item, as follows:</p> <p>“Raters are only required to document the partnership status of their company once, for the first home that the Rater certifies for them.”</p> <p>The second new Item will read as follows:</p> <p>“Rater(s) signing checklists attest that they have completed EPA-recognized training and are credentialed by a Home Certification Organization (HCO) or meet the credential requirements of a Multifamily Review Organization (MRO).”</p>
00670	12/01/2023	National Rater Design Review Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	<p>Partnership Status Section – Verification that all units and common spaces meet program requirements</p>
				<p>Issue: All National and Regional Program Requirements documents include the requirement for all units and common spaces in the building to meet the Program Requirements. This requirement is not reflected on the Rater checklists, which may result in Raters inadvertently overlooking it.</p>
				<p>Resolution: To ensure that all units and common spaces meet the requirements, a new Item and footnote will be added at the end of Section 1 - Partnership Status.</p> <p>The new Item will read as follows:</p> <p>“Certification is being pursued for the whole building; all units and common spaces in the building are designed to meet the requirements below.”</p> <p>The new Footnote associated with this Item will read as follows:</p> <p>“The whole building must be submitted to the HCO or MRO for certification after required verification is complete for all units and common spaces, unless using the conditional</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				certification process described in the ENERGY STAR Certification Process in the applicable Program Requirements.”
00637	12/01/2023	National Rater Design Review Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Section 3 - Remove fasteners and service openings from insulation derate
				Issue: A Partner asked whether fasteners and service openings are exempt from Footnote 8’s requirement that “interrupted portions” cannot contribute to the assembly U-factor and therefore must result in a derate of the insulation, in light of the fact that the Footnote already exempts “thermally broken shelf-angles” which are similarly or less insulated, as well as the fact that it may be unreasonably difficult to count the sheer number of these fasteners and service openings.
				<p>Resolution: The Single-Family New Homes (SFNH) program does not require insulation to be derated for fasteners and service openings. Therefore, to better align with the SFNH program, fasteners and service openings will be exempted from the insulation derate in Footnote 8, which will be updated as follows:</p> <p>“8. Items 3.1 and 3.2 are applicable to walls that are adjacent to other buildings, the exterior, or a garage. Where the wall assembly includes continuous insulation that is interrupted by fasteners or service openings, an assembly U factor must be calculated. For the interrupted portions, the continuous insulation cannot contribute to the assembly U factor and an overall U factor shall be calculated based on an area weighted ratio. Thermally broken shelf angles are exempt from de-rating.”</p>
00674	12/01/2023	National Rater Design Review Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Section 3 – Allowing equivalent slab insulation assemblies using F-Factors
				Issue: This Section specifies minimum enclosure requirements that must be met for dwelling units and common spaces. While trade-offs are generally allowed, Item 3.4 of the National Rater Field Checklist imposes a minimum insulation level and depth that must be met for slabs on grade or at grade without ground contact in CZ 4-8. Partners have asked whether alternative slab insulation R-values and depths are allowed to be used if they result in an F-Factor that is equivalent to the amount specified by Item 3.4. The F-factor for a slab is an approximation of the total amount of heat transmitted through the slab expressed per unit length of slab perimeter. For example, installing R-10 insulation to a depth of 12 in. for an unheated slab would result in an F-Factor of 0.58. This is equivalent to the F-Factor when R-

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>5 insulation is installed to a depth of 24 in. for an unheated slab, which is the amount specified in Item 3.4.</p> <p>Resolution: Given that assemblies with equivalent F-Factors result in equivalent thermal performance, EPA will add a new allowance to use an assembly that has an equivalent or more stringent F-Factor than that of the insulation required by Item 3.4 of the National Rater Field Checklist.</p> <p>Footnote 10 will be revised as follows:</p> <p>“Slab edge insulation is required for slab-on-grade floors with a floor surface less than 24 inches below grade. Slab-on-grade perimeter insulation shall extend to the top of the slab to provide a complete thermal break. If the top edge of the insulation is installed between the exterior wall and the edge of the interior slab, it shall be permitted to be cut at a 45-degree angle away from the exterior wall. <u>The following alternatives apply:</u></p> <p>a) <u>Slab assemblies with an F-Factor equivalent to that of the insulation required in Item 3.4 of the National Rater Field Checklist may be used. F-Factors shall be determined using Table A6.3.1-1 from ASHRAE 90.1-2022 Appendix A. See www.energstar.gov/F-Factor for more details.</u></p> <p>b) <u>Alternatively, the thermal break is permitted to be created using ≥ R-3 rigid insulation on top of the slab. In such cases, up to 10% of the slab surface is permitted to not be insulated (e.g., for sleepers, for sill plates). Insulation installed on top of slab shall be covered by a durable floor surface (e.g., hardwood, tile, carpet).”</u></p>
00676	12/01/2023	National Rater Design Review Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	<p>Section 3 – UA penalty when using slab edge exemption</p> <p>Issue: Currently the Multifamily Workbook does not include slab edge insulation in the overall UA calculation. While F-Factors may be entered, it is not multiplied by the length of the slab edge and included in the overall UA total. When a slab edge exemption is used, it is not clear how to show compliance with the overall UA when using the ASHRAE or Prescriptive Paths.</p> <p>Resolution: Where a slab edge exemption is used, the building must make up for the lack of slab edge insulation with additional insulation elsewhere to comply with Section 3. To accommodate this, the Multifamily Workbook will be updated to incorporate the F-Factors into the UA calculation. For the ASHRAE and Prescriptive Paths, where an exemption is</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>used, the Multifamily Workbook Total UA Compliance option (5c) must be used to demonstrate compliance with Section 3. For the ERI Path, partners will be able to continue using rating software to demonstrate compliance with the dwelling-unit-level thermal backstop. Alternatively, the workbook may be used to demonstrate compliance with the whole-building UA target.</p> <p>To clarify how to assess compliance with the thermal backstop when an EPA-approved exemption is used, Footnote 11 will be revised as follows:</p> <p>“Where an insulated wall separates a garage, patio, porch, or other unconditioned space from the conditioned space of the building, slab perimeter insulation shall also be installed at this interface to provide a thermal break between the conditioned and unconditioned slab, if the slab is in contact with the ground at that interface. Where specific details cannot meet this requirement, partners shall provide the detail to EPA to request an exemption prior to the building’s certification. EPA will compile exempted details and work with industry to develop feasible details for use in future revisions to the program. A list of currently exempted details is available at: www.energystar.gov/slabeledge. If an exemption is used, then the Total UA Compliance option (5c) within the Multifamily Workbook must be used to demonstrate compliance with Section 3 if the ASHRAE Path or Prescriptive Path is used, and may be used to demonstrate compliance if the ERI Path is used. F-Factors shall be determined using Table A6.3.1-1 from ASHRAE 90.1-2022 Appendix A. See www.energystar.gov/F-Factor for more details.”</p>
00639	12/01/2023	National Rater Design Review Checklist (Version 1 / 1.1 / 1.2, Rev. 03)	Change	Section 4 – Rater verified ventilation rates in common spaces
				<p>Issue: Currently, the Rater Design Review Checklist does not require the Rater to confirm that the HVAC Design Report includes all of the common spaces that require outdoor supply air. If the designer does not report a particular common space in the building, then that space potentially would not meet ASHRAE 62.1.</p>
				<p>Resolution: The intent of the program is for common spaces to meet ASHRAE 62.1 required rates. Since the Rater is not expected to know all of the spaces that require ventilation under ASHRAE 62.1, EPA will list the spaces in multifamily buildings that require outdoor air. The Rater must confirm these are included on the HVAC Design Report or the HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems. If there is a</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>space in ASHRAE 62.1 that is not listed, EPA did not anticipate that space would be in a Multifamily building, and ventilation is recommended but not required.</p> <p>To achieve the intent of the program, new Items will be added to Section 4a and Section 4b as follows:</p> <p>Section 4a:</p> <p>“Common spaces: Item 2.3 is completed for all spaces in the building listed in Footnote [New Footnote].”</p> <p>Common spaces: Item 2.4 is equal to or greater than Item 2.3”</p> <p>Section 4b:</p> <p>“Common spaces: Item 2.8 is completed for all spaces in the building listed in Footnote [New Footnote].”</p> <p>Common spaces: Item 2.9 is equal to or greater than Item 2.8.”</p> <p>A new Footnote will be added to these Items as follows:</p> <p>“The following spaces require outdoor air ventilation: corridors, offices, break rooms, gyms, fitness centers, exercise rooms, lobbies, community rooms, meeting rooms, multi-purpose rooms, lounges, laundry rooms, swimming pools, daycares, classrooms, shared or commercial kitchens, shared dining rooms, and computer rooms.”</p> <p>Additionally, Footnote 17 provides guidance on completing Section 4b, and will be updated to reflect these new items as follows:</p> <p>“If pursuing Track B, then Section 4b shall be fully completed if any dwelling unit contains split air conditioners, unitary air conditioners, air-source heat pumps, and water-source (i.e., geothermal) heat pumps up to 65 kBtuh with forced-air distribution systems (i.e., ducts), or furnaces up to 225 kBtuh with forced-air distribution systems (i.e., ducts). For a building without any of these system types in the dwelling units, collection of the National HVAC Design Report is still required and <u>reviewed per Items 4b.2.1, 4b.2.11 and 4b.2.12 where applicable.</u> for all buildings pursuing the Prescriptive Path the report must be reviewed per Item 4b.2.4, but EPA does not require that the report be reviewed per Item 4b.2.2 – 4b.2.10. For Track B systems that are documented using the SFNH HVAC Design Report, where room-by-room loads are calculated using Unabridged ACCA Manual J v8 and where occupant gains and non-occupant gains are not reported, items 4b.2.3 and 4b.2.8 may be</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				marked “N/A”. Where the HVAC designer has checked the “N/A” box in Section 3 of the National HVAC Design Report, the Rater shall confirm that all dwelling unit heating and cooling systems are exempt (i.e., non-ducted mini-splits or multi-splits, PTACs, or PTHPs) and mark “N/A” for Items 4b.2.2-4b.2.10.”
00524	12/16/2022	Rater Design Review Checklist, Version 1/1.1/1.2 (Rev.03)	Clarification	Item 4a.3 & Item 4b.2.1 – Maximum ventilation rate when using continuous exhaust
				Issue: The Rater Design Review Checklist limits the dwelling-unit mechanical ventilation rate to 150% of the minimum airflow rates recommended by ASHRAE 62.2-2013 for buildings pursuing the Prescriptive Path. For dwelling units using continuous exhaust systems to simultaneously meet dwelling-unit mechanical ventilation requirements and local mechanical exhaust requirements in bathrooms and kitchens, this maximum is a challenge to meet due to the minimum airflow rates required for continuous local mechanical exhaust.
				<p>Resolution: The intent of this requirement in the Prescriptive Path is to provide a maximum ventilation rate that limits energy usage without sacrificing indoor air quality. Given the importance of providing minimum local exhaust at the rates recommended by ASHRAE 62.2-2013, the maximum should be revised.</p> <p>Footnote 15 will be revised as follows: “Raters may use this table to determine the maximum ventilation rate allowed. <u>Where the Exhaust Fan Type in Item 2b of the HVAC Design Report indicates “Continuous” for both Bathroom and Kitchen, the Rater may use this equation to determine the maximum ventilation rate allowed: 30 CFM x number of bathrooms + 75 CFM</u>”.</p>
00551	12/01/2023	National Rater Design Review Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Refinement	Section 4b – Relocation of Footnote allowing prior Revisions of HVAC Design Report
				<p>Issue: All National and Regional Program requirements contain the following Footnote, which allows partners to use the National HVAC Design Report from prior Revisions:</p> <p>“Buildings certified under Rev. 01, Rev. 02 and Rev. 03 of the program requirements are permitted to use any version of the National HVAC Design Report.”</p> <p>There have been limited changes to that document across these Revisions. Therefore, the intent of this allowance is to reduce the burden on HVAC Designers and Raters by not</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>requiring them to produce and collect new editions of the report, which would be substantially the same as the documentation that they already have.</p> <p>The current placement of the allowance is not optimal given that partners interact with the National Rater Design Review Checklist more often than the program requirements documents.</p> <p>Resolution: To increase the visibility and usage of the allowance by partners, Footnote 18 of the National Rater Design Review Checklist will be updated by adding this allowance at the end. The existing footnote will be removed from all National and Regional Program requirements documents.</p>
00699	12/1/2023	Rater Design Review Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Items 5.1.8 – Updating ‘doorsweep’ to ‘door seal’ to align with Standard 380 language
				<p>Issue: Item 5.1.8 mentions a “doorsweep” as a requirement for air sealing doors, and partners have asked for clarification on the use of this term. The intent of these Items are based on ANSI / RESNET / ICC Standard 380 that specifies the presence of a “door seal” to minimize air leakage between the door and door frame. Therefore, the language in Item 5.1.8 will be updated to align with Standard 380.</p>
				<p>Resolution: In order to align with the language in ANSI / RESNET / ICC Standard 380, Item 5.1.8 will be updated as follows:</p> <p>“Doors adjacent to unconditioned space (e.g., attics, garages, basements), ambient conditions, or a unit entrance to a corridor / stairwell, made substantially air-tight with doorsweep <u>door seal</u> and weatherstripping or equivalent gasket*.”</p>
00601	12/01/2023	National Rater Design Review Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Footnote 4 – Sunset of sampling protocols for Townhouses
				<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC) program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p>
				<p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Footnote 4:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by a HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>As stated in the National Program Requirements, for Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, Raters who operate under an MRO or an HCO Sampling Protocol are permitted to verify any Checklist Item designated “Rater Verified” using an MRO or HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling to complete this Checklist.”</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				Note that the National Rater Design Review Checklist did not previously include language about sampling, but it is being added here to align with the National Rater Field Checklist and with the Single-Family New Homes program.
00548	12/01/2023	National Rater Field Checklist (Version 1 / 1.1 / 1.2, Rev. 03)	Clarification	Items 1.2 and 1.3 – Builder-verified allowance limited to 10% of insulated assemblies
				<p>Issue: This Checklist allows up to eight items in Sections 1-4 to be verified by the builder or developer, at the Rater's discretion. For Items 1.2 and 1.3, which generally require that insulation exceed specified levels and achieve Grade I, partners have asked whether builders or developers are permitted to verify these Items for the entire building.</p> <p>EPA did not intend to allow builders to verify the entirety of these Items, but rather specific areas of the thermal enclosure that may be difficult for the Rater to visually inspect during their site visits. For example, if insulation is installed behind a rigid air barrier prior to the installation of a bathtub, such that the insulation will be concealed prior to the Rater's visit, or if an area of wall insulation requires re-work to achieve Grade I, the Rater may elect to have the builder verify the R-value and/or installation quality (e.g., by inspecting, photographing, and sending documentation to the Rater).</p>
				<p>Resolution: To clarify this intent, a qualifier stating "Up to 10%" will be added next to the builder-verified checkboxes for these two Items. In addition, Footnote 3 will be modified, as follows:</p> <p>"At the discretion of the Rater, the builder or developer may verify up to eight items in Sections 1-4 of this Checklist. For the purpose of this Checklist, "Builder" represents either the builder or the developer. <u>When this allowance is used for Item 1.2 or 1.3, a maximum of 10% of the total surface area of the non-adiabatic insulated assemblies are permitted to be builder-verified; the remainder must be verified by the Rater.</u> When exercised, the builder's responsibility will be formally acknowledged by the builder, or their designated agent, signing off on the checklist for the item(s) that they verified. However, if a quality assurance review indicates that Items have not been successfully completed, the Rater will be responsible for facilitating corrective action."</p>
00550	12/01/2023	National Rater Field	Clarification	Item 1.2, 1.3, and 3.7.1 – Reflective insulation can be used to satisfy R-value and insulation grade requirements, but is not considered continuous rigid insulation

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)		<p>Issue: Partners have asked for permission to use reflective insulation to fulfill Items 1.2, 1.3, and 3.7.1. These items specify minimum required insulation levels, insulation installation grades, and reduced thermal bridging requirements, respectively.</p> <p>For the Single-Family New Homes Program, Policy Record Entry 00024 did not allow this practice because the R-values for reflective insulation products rely on air spaces that are not integral to the products and because the ICC Evaluation Service typically classifies such products as weather barriers rather than as insulation products. In response to this guidance, partners have asked EPA to reevaluate the acceptability of reflective insulation products on the grounds that they reduce heat transfer when installed properly, they are treated as insulation products under the Federal Trade Commission 16 CFR Part 460 – Labeling and Advertising of Home Insulation, and there are applicable standards that govern their specification and installation (ASTM C727 and ASTM C1224).</p> <p>Resolution: Since this issue was raised, ANSI/RESNET/ICC 301-2019 has been released, which includes guidance on assessing the R-value and installation quality of reflective insulation in Normative Appendix A, Inspection Procedures for Insulation Grading and Assessment. Specifically, Section A-2.3 provides installation requirements for reflective or radiant products that are assigned an R-value or installation grade.</p> <p>In addition, Single-Family New Homes Policy Record Entry 00965 has clarified that reflective insulation is required to achieve Grade I. This clarification is also applicable to reflective insulation in buildings being certified using the Multifamily New Construction Program.</p> <p>With the guidance provided in ANSI/RESNET/ICC 301-2019 and Policy Record Entry 00965, the R-value and insulation grade of reflective insulation can now be assessed and, therefore, used to satisfy Items 1.2 and 1.3. However, it must be emphasized that reflective airspaces cannot claim R-values “except where the cladding and perimeter of the airspace creates a totally enclosed and unventilated cavity”.</p> <p>In contrast, typical reflective insulation products are not rigid and therefore would not satisfy the requirement in Item 3.7.1.</p>
00630	12/01/2023	Rater Field Checklist,	Change	Item 3.4 – Allowance of 45-degree slab insulation cut between exterior wall and exterior slab

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Version 1 / 1.1 / 1.2 (Rev. 03)		<p>Issue: Current policy permits that the top edge of insulation installed between the exterior wall and the edge of the interior slab can be cut at a 45-degree angle away from the wall.</p> <p>Partners have requested that this policy be extended to allow slab edge insulation to be cut at a 45-degree angle away from the wall when the insulation is installed between the exterior wall and an exterior slab (e.g., a patio slab).</p> <p>Resolution: EPA has determined that allowing this practice between the exterior wall and an exterior slab will result in similar performance to the current allowance. Therefore, this detail should be available for partners to use, if desired.</p> <p>To reflect this change, the fourth sentence in Footnote 21, associated with Item 3.4, will be updated as follows:</p> <p>“If the top edge of the insulation is installed between the exterior wall and the edge of the an interior, <u>or exterior</u>, slab, it shall be permitted to be cut at a 45-degree angle away from the exterior wall.”</p>
00673	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	<p>Item 3.4 – Allowing equivalent slab insulation assemblies using F-Factors</p> <p>Issue: This Item specifies a minimum insulation level and depth that must be met for slabs on grade or at grade without ground contact in CZ 4-8. Partners have asked whether alternative R-values and depths are allowed to be used if they result in an F-Factor that is equivalent to the amount specified by Item 3.4. The F-factor for a slab is an approximation of the total amount of heat transmitted through the slab expressed per unit length of slab perimeter. For example, installing R-10 insulation to a depth of 12 in. for an unheated slab would result in an F-Factor of 0.58. This is equivalent to the F-Factor when R-5 insulation is installed to a depth of 24 in. for an unheated slab, which is the amount specified by Item 3.4.</p> <p>Resolution: Given that assemblies with equivalent F-Factors result in equivalent thermal performance, EPA will add a new allowance to use an assembly that has an equivalent or more stringent F-Factor than that of the insulation required by Item 3.4.</p> <p>Footnote 21 will be revised as follows:</p> <p>“Slab edge insulation is required for slab-on-grade floors with a floor surface less than 24 inches below grade. Slab perimeter insulation shall extend to the top of the slab to provide a complete thermal break. If the top edge of the insulation is installed between the exterior wall</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>and the edge of the interior slab, it shall be permitted to be cut at a 45-degree angle away from the exterior wall. <u>The following alternatives apply:</u></p> <p>a) <u>Slab assemblies with an F-Factor equivalent to that of the insulation required in Item 3.4 may be used. F-Factors shall be determined using Table A6.3.1-1 from ASHRAE 90.1-2022 Appendix A. See www.energstar.gov/F-Factor for more details.</u></p> <p>c) <u>Alternatively, the thermal break is permitted to be created using \geq R-3 rigid insulation on top the slab. In such cases, up to 10% of the slab surface is permitted to not be insulated (e.g., for sleepers, for sill plates). Insulation installed on top of slab shall be covered by a durable floor surface (e.g., hardwood, tile, carpet)."</u></p>
00675	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Item 3.4 – UA penalty when using slab edge exemption
				<p>Issue: Currently the Multifamily Workbook does not include slab edge insulation in the overall UA calculation. While F-Factors may be entered, it is not multiplied by the length of the slab edge and included in the overall UA total. When a slab edge exemption is used, it is not clear how to show compliance with the overall UA when using the ASHRAE or Prescriptive Paths.</p>
				<p>Resolution: Where a slab edge exemption is used, the building must make up for the lack of slab edge insulation with additional insulation elsewhere to comply with Item 1.2. To accommodate this, the Multifamily Workbook will be updated to incorporate the F-Factors into the UA calculation. For the ASHRAE and Prescriptive Paths, where an exemption is used, the Multifamily Workbook Total UA Compliance option (5c) must be used to demonstrate compliance with Item 1.2. For the ERI Path, partners will be able to continue using rating software to demonstrate compliance with the dwelling-unit-level thermal backstop. Alternatively, the workbook may be used to demonstrate compliance with the whole-building UA target.</p> <p>To clarify how to assess compliance with the thermal backstop when an EPA-approved exemption is used, Footnote 22 of the National Rater Field Checklist will be revised as follows:</p> <p>“Where an insulated wall separates a garage, patio, courtyard, porch, or other unconditioned space from the conditioned space of the building, slab perimeter insulation shall also be installed at this interface to provide a thermal break between the conditioned and unconditioned slab, if the slab is in contact with the ground, ambient, or unconditioned space</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				at that interface. Where specific details cannot meet this requirement, partners shall provide the detail to EPA to request an exemption prior to the building's certification. EPA will compile exempted details and work with industry to develop feasible details for use in future revisions to the program. A list of currently exempted and non-exempted details is available at: www.energystar.gov/slabeledge . If an exemption is used, then the Total UA Compliance option (5c) within the Multifamily Workbook must be used to demonstrate compliance with Item 1.2 if the ASHRAE Path or Prescriptive Path is used, and may be used to demonstrate compliance if the ERI Path is used. F-Factors shall be determined using Table A6.3.1-1 from ASHRAE 90.1-2022 Appendix A. See www.energystar.gov/F-Factor for more details."
00690	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Item 3.4 – Exemption from slab insulation at wall separating conditioned space from garage for monolithic slab that extends into the garage
				<p>Issue: EPA has provided exemptions from the requirement in Climate Zone 4 and higher to insulate 100% of the edge of slabs-on-grade for various specific details that have presented challenges. A Partner has recently asked for an exemption for a new detail.</p> <p>This Item generally requires that where an insulated wall separates an unconditioned space from the conditioned space of the building, slab insulation be installed at this interface to provide a thermal break between the conditioned and unconditioned slab.</p> <p>The detail in question involves a monolithic slab that extends from conditioned space into an adjacent garage, where a thickened slab is provided under the wall that separates the two spaces to provide structural integrity at the intersection. Among other reasons, monolithic slabs can be used to overcome soil-bearing conditions that are compromised and not able to support a stem wall with floating slab.</p> <p>Because the monolithic slab needs to extend to the outer garage wall, the partner has stated that this precludes the installation of insulation in the slab between the house and the garage.</p>
				<p>Resolution: After consulting with subject matter experts, EPA agrees that no commonplace details exist to insulate a monolithic slab at the intersection between the conditioned and unconditioned space. However, it recommends that alternative slab designs that can accommodate a thermal break be considered.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>As a result, a new exemption will be added to the Slab Edge Insulation Exemptions and Alternatives document as follows, where the figures referenced below can be found:</p> <p>“For the scenario illustrated in Figure 2, where a monolithic slab extends from conditioned space to an adjacent garage, slab insulation is not required to be provided at this boundary. This exemption is provided because of the challenge of incorporating a thermal break at this location when there is a need to maintain the structural continuity of the slab into the garage (e.g., to support a wall at the exterior of the garage).</p> <p>EPA recommends, but does not require, that alternative slab designs that can accommodate a thermal break be considered. For example, in Figure 3 the soil-bearing conditions are not compromised and the site can support a stem wall with a floating slab.”</p>
00638	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Refinement	Item 3.4 & 3.5 – Simplification of Slab Edge Insulation Depth Requirements
				<p>Issue: Item 3.4 specifies the minimum R-value and depth of slab edge insulation for slabs on grade or at grade with ground contact in Climate Zones (CZ) 4-8. Item 3.4 currently states:</p> <p>“For slabs on grade or at grade without ground contact in CZ 4-8, 100% of slab edge insulation to \geq R-5 at the depth specified by 2009 IECC Table 502.2(1) & aligned with the thermal boundary of the walls.”</p> <p>Footnote 24 for Item 3.5 also has language that refers the slab insulation depth in 2009 IECC Table 502.2(1). Footnote 24 currently states:</p> <p>“...For podiums that continue below-grade, insulate to a minimum of 8ft below the bottom of the slab edge, or to the depth below grade specified for slab edge insulation by Table 502.2(1) of the 2009 IECC...”</p> <p>This Item and Footnote currently refers partners to the 2009 IECC Table 502.2(1) to find the required slab insulation depth. For CZ 4-8 the table requires all insulation to reach a depth of 24 in. or 2 ft. Because the depth for slab edge insulation is the same for CZ 4-8, referring partners to the 2009 IECC Table 502.2(1) is an unnecessary step and Item 3.4 can be simplified to explicitly state the single slab insulation depth requirement for CZ 4-8.</p>
				<p>Resolution: To improve conciseness, Item 3.4 will be revised as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“For slabs on grade or at grade without ground contact in CZ 4-8, 100% of slab edge insulation to \geq R-5 at the depth of 2 ft., or 4 ft. for heated slabs in CZ 6-8, specified by 2009 IECC Table 502.2(1) & aligned with the thermal boundary of the walls.”</p> <p>Footnote 24 will be revised as follows:</p> <p>“For podiums that continue below-grade, insulate to a minimum of 8ft below the bottom of the slab edge, or at the depth of 2ft., or 4 ft. for heated slabs in CZ 6-8, below-grade specified for slab edge insulation by Table 502.2(1) of the 2009 IECC.”</p>
00682	12/01/2023	National Rater Field Checklist, (Version 1 / 1.1 / 1.2 (Rev. 03))	Change	Item 3.5 – Alternative to slab edge insulation for podiums and projected slabs
				<p>Issue: Partners have asked for additional alternatives or exemptions for insulating the slab edge for podiums. Code has started to incorporate accounting for thermal bridging using ‘psi factor’ calculations as part of the overall UA calculation. The psi factor is defined as “The heat loss factor per unit length of a thermal bridge characterized as a linear element of a building thermal envelope” and can be used to characterize a thermal bridge (e.g., an uninsulated slab edge). Using psi factors could allow the UA calculation to take energy lost from thermal bridging into account and allow for a more appropriate tradeoff.</p>
				<p>Resolution: EPA recognizes the value of reducing thermal bridging. However, there are many different building types and details in multifamily where insulation may not be possible at the slab edge. Given that code is moving towards incorporating the thermal losses from thermal bridges into the overall UA calculation, EPA will adjust the current alternatives for projected slabs and podiums documented in Footnote 24 to align better with the psi factors used in code, as well as allow podiums to use this new derate option. With this change EPA has specified U-factors to use for thermal bridges that were developed based on psi factors for projects to use in UA calculations.</p> <p>This new policy will be for podiums both above and at-grade, therefore, Item 3.5 will also be updated to include all at-grade slabs, and at-grade slabs will be removed from Item 3.4.</p> <p>Item 3.4 will be revised as follows:</p> <p>“ For slabs on grade or at grade without ground contact in CZ 4-8, 100% of slab edge insulated to \geq R-5 at the depth-specified by 2009 IECC Table 502.2(1) & aligned with the thermal boundary of the walls.”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Item 3.5 will be revised as follows:</p> <p>“For above and at-grade concrete floor slab edges (e.g., podiums, balconies) in CZ 4-8, 100% of floor slab edge insulated to \geq R-5 & aligned with the thermal boundary of the above-grade walls. At this boundary, for slabs concrete floors resting on mass walls, <u>must provide</u> insulation must that extends \geq8 ft. below the bottom of the slab floor edge, & for slabs floors resting on columns, the insulation must surround the column, at a depth of 4ft. Alternatives in Footnote Fn. 24”</p> <p>Footnote 21, associated with Item 3.4, will be revised as follows:</p> <p>“Slab edge insulation is required for slab-on-grade floors with a floor surface less than 24 inches below grade. Slab edge insulation is also required for slab floors with a floor surface less than 24 inches below grade, even if the slab itself is not in contact with the ground. Slab perimeter insulation shall extend to the top of the slab to provide a complete thermal break. If the top edge of the insulation is installed between the exterior wall and the edge of the interior slab, it shall be permitted to be cut at a 45-degree angle away from the exterior wall. Alternatively, the thermal break is permitted to be created using \geq R-3 rigid insulation on top the slab. In such cases, up to 10% of the slab surface is permitted to not be insulated (e.g., for sleepers, for sill plates). Insulation installed on top of slab shall be covered by a durable floor surface (e.g., hardwood, tile, carpet).”</p> <p>Footnote 23, associated with Item 3.5, will be revised as follows:</p> <p>Item 3.5 does not apply to the repeated concrete floor perimeter edges of a multistory building as those are subject to Item 3.7.1. Item 3.5 also does not apply where floor insulation meeting the requirements of Item 3.6 is installed above the slab and provides a continuous thermal boundary where it intersects the wall. Where specific details cannot meet this requirement, partners shall provide the detail to EPA to request an exemption prior to the building's certification. EPA will compile exempted details and work with industry to develop feasible details for use in future revisions to the program. A list of currently exempted and non-exempted details is available at: www.energystar.gov/slabeledge.</p> <p>To accommodate the new Policy there will be several changes to Footnote 24.</p> <p>Fist, the following section in Footnote 24 will be moved to the beginning of the footnote and revised as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“For the following podium constructions, a minimum of 8ft <u>insulation</u> is not required <u>below the floor edge</u>:</p> <p>a) Where the podium wall is less than 8ft in height, insulation must instead be installed for the full height of the podium.</p> <p>b) For podiums that are <u>at-grade or continue below-grade</u>, insulate to a minimum of 8ft below the bottom of the concrete floor edge, or to the depth below-grade specified for slab edge insulation by Table 502.2(1) of the 2009 IECC.</p> <p>c) Where a minimum of 4ft of insulation is installed on both interior and exterior surfaces of the wall.</p> <p>d) For podiums where the horizontal concrete floor is not in direct contact with the exterior wall and R-5 insulation is provided at the floor edge, continuous with the under-slab insulation. See energystar.gov/slabeledge for example.”</p> <p>Second, the rest of Footnote 24 will be revised to include the new policy based on psi factors, and remove the previous alternative, as follows:</p> <p>“EPA has developed the following alternatives for projected concrete floors and podiums to comply with Item 3.5, <u>instead of installing the insulation required</u>:</p> <p>a. For p-Projected slabs concrete floors (e.g., podiums, balconies), where a minimum of R-5 slab edge insulation is not installed between conditioned space and the unconditioned projected slab, may use one of the options below:</p> <p>i. <u>Install minimum R-2 insulation at the floor edge between conditioned space and the projected slab, AND:</u></p> <p>a) <u>ASHRAE and Prescriptive Paths: Use the Total UA Compliance option (5c) within the Multifamily Workbook to demonstrate compliance with Item 1.2 and include a row that represents the floor edge.</u></p> <p>b) <u>ERI Path: Model the floor edge using the R-value of the insulation provided (e.g., not the R-value of above-grade wall).</u></p> <p>a. Modify the UA calculation for the wall assembly that accounts for this projected slab when demonstrating compliance with Item 1.2.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>ii. Where no insulation is installed, modify the UA calculation such that the area of the wall that is uninsulated due to the projected slab is calculated as 400% of that actual area. For example, for a projected slab without any thermal break that is 20 feet wide, and has a thickness of 1 foot, the area to be used in the UA calculation is 80 ft² instead of 20 ft².</p> <p>iii. Where insulation R-2 and greater is installed, the area is not required to be modified.</p> <p>ii. Install minimum R-5 insulation, above and below the concrete slab that extends horizontally for a minimum of 4 ft. Insulation installed on top of slab shall be covered by a durable floor surface. See energystar.gov/slabeledge for example. When demonstrating compliance with Item 1.2, R-1 insulation may be associated with the area of the wall that is uninsulated due to the projected slab.</p> <p>b. <u>All podiums and projected concrete floors, in lieu of installing the insulation required in Item 3.5, meet all of the following requirements:</u></p> <p>i. <u>Use the Total UA Compliance option (5c) within the Multifamily Workbook to demonstrate compliance with Item 1.2 and use the following U-factors:</u></p> <p>a) <u>Where the above grade wall is in contact with a concrete floor above conditioned space, include a row that represents the floor-edge condition using a U-Factor of 1.20.</u></p> <p>b) <u>Where the above grade wall is in contact with a concrete floor above unconditioned space, include a row that represents the floor-edge condition using a U-Factor of 1.64.</u></p> <p>ii. <u>Where using the ASHRAE or ERI Paths, in the energy model the concrete floor edge area must be modeled with R-0.</u></p>
00672	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Item 3.6 – Removal of extra derate for uninsulated structural columns
				Issue: Item 3.6 requires uninsulated structural columns without thermal breaks to use a modified UA calculation where the area is 400% of the actual floor area. To streamline the program and reduce Rater effort, this extra derate requirement will be removed.
				<p>Resolution: Footnote 25 will be revised as follows:</p> <p>“Where structural columns without thermal breaks cause a discontinuity in the installed floor insulation, the UA calculation for the floor assembly must account for this uninsulated area of</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>the floor. For the purpose of this UA calculation, the area of the floor that is uninsulated due to the structural columns is required to be calculated as 400% of that actual area. For example, for a 4'x4' column, the area to be used in the UA calculation is 64 ft² instead of 16 ft². The height of the column is not used in this calculation. Alternatively, if the structural column is insulated for a minimum of R-5 for 4 vertical feet, the modification to the UA calculation is not required, and R-5 may be associated with the area of the floor that is uninsulated due to the column. If the structural column has a thermal break, the R-value of the thermal break shall be associated with the area of the floor that is uninsulated due to the column.</p> <p>While EPA recommends insulating <u>interior columns</u> for a minimum of R-5 for 4 vertical feet <u>and</u> vertically along other areas of discontinuity, such as where walls intersect the concrete slab; this is not required. These uninsulated areas of the floor are not subject to the UA modification."</p>
00658	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Item 3.7.1 – Calculating the 10% wall area exempted from continuous insulation
				<p>Issue: Given the variety of intentionally designed details used by designers of multifamily buildings, some Partners have asked for further clarification on the types of details that must be included when calculating the wall area not covered by continuous insulation and could be included in the up to 10% of the total exterior wall surface area that is exempt from this Item. Partners have also asked for clarification on how to calculate the 'area bypassed by the fastener', when they are relatively small, such as brick ties.</p>
				<p>Resolution: EPA agrees that additional guidance is needed to clarify which types of intentionally designed features should be included when assessing the 10% exemption to continuous insulation. EPA also agrees that fasteners that occupy a very small area, such as screws, bolts, and brick ties, should be excluded from the calculation.</p> <p>Footnote 28 will be revised as follows:</p> <p>"Up to 10% of the total exterior wall surface area is exempted from the reduced thermal bridging requirements to accommodate intentionally designed details. <u>This exemption does not apply to steel columns or the repeated concrete floor perimeter edges of a multistory building. To calculate the exempted wall area, the Rater shall sum the areas of the following features that either prevent the use of, or interrupt, continuous insulation when they are present in the design: architectural details (e.g., architectural details such as thermal fins,</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				wing walls, <u>shading devices</u> , <u>roof overhangs</u> , <u>projected balconies</u> , brick returns, stone window sills, metal panels, or masonry fireplaces); structural cladding details, such as fasteners (e.g., <u>non-thermally broken shelf angles</u> , metal clips, <u>metal brackets</u> , and metal z-girts; but not stand-off shelf angles, screws, bolts, or brick ties); projected balconies, and service-mechanical openings (e.g., PTACs, or PTHPs, through-wall air conditioners), but not steel columns or wall area occupied by intermediate floors). It shall be apparent to the Rater that the exempted areas are intentionally designed details, or the exempted area shall be documented in a plan provided by the builder, architect, or engineer. The entire area of the wall area that is bypassed by the fastener must be used in the calculation. The Rater need not evaluate the necessity of the designed detail to certify the building.”
00698	12/01/2023	Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Items 4.7 and 4.9 – Updating ‘doorsweep’ to ‘door seal’ to align with Standard 380 language
				Issue: Items 4.7 and 4.9 mention a “doorsweep” as a requirement for air sealing doors, and partners have asked for clarification on the use of this term. The intent of these Items are based on ANSI / RESNET / ICC Standard 380 that specifies the presence of a “door seal” to minimize air leakage between the door and door frame. Therefore, the language in Items 4.7 and 4.9 will be updated to align with Standard 380.
				<p>Resolution: In order to align with the language in ANSI / RESNET / ICC Standard 380, Item 4.7 will be updated as follows:</p> <p>“Doors adjacent to unconditioned space (e.g., attics, garages, basements) or ambient conditions made substantially air-tight with doorsweep <u>door seal</u> and weatherstripping or equivalent gasket.”</p> <p>Similarly, Item 4.9 will be updated as follows:</p> <p>“Doors serving as a unit entrance from a corridor/stairwell made substantially air-tight with doorsweep <u>door seal</u> and weatherstripping or equivalent gasket. “</p>
00650	12/01/2023		Change	Item 4.10.1 – generalize language on non-ducted returns

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)		<p>Issue: The Item references a “closet”, but its intent was that this test whenever the “space containing the air handler” is adjacent to unconditioned space, which includes closets but also dropped ceilings/plenums. The word “closet” may need to be generalized to be consistent with this intent.</p> <p>In addition, the related Footnote 39’s definition of “ducted returns” assumes that Raters would not want to test the non-ducted returns and would prefer the lower leakage allowance associated with just testing the supply side of the system. By contrast, in the SFNH program, Partners are allowed to use building framing cavities (e.g., panned returns) and treat and test them as ducts. This definition may also need to be generalized to align with the SFNH program.</p> <p>Resolution: In order to improve consistency and align with the SFNH program, the MFNC program will allow Partners wishing to test plenums and building cavities to do so and to consider them as ducted returns.</p> <p>Accordingly, Item 4.10.1 and Footnote 39 will be updated as follows:</p> <p>“4.10.1 For dwelling units with forced air distribution systems without ducted returns and <u>air handlers located in a closet or space adjacent to unconditioned space</u>, the Rater-measured pressure difference between the space containing the air handler and the conditioned space during the compartmentalization test is no greater than 5 Pa.”</p> <p>“39. A ‘ducted return’ is defined as a continuous duct made of sheet metal, duct board, or flexible duct that connects one or more return grilles to the return-side inlet of the air handler. Any other approach to convey air from return or transfer grille(s) to the air handler, such as the use of building cavities, does not constitute a ‘ducted return’. <u>Where there are no ‘ducted returns’, the duct leakage test shall include the leakage from the air handler and supply side of the forced air system. Where building cavities used to return air to the air handler are included in the duct leakage test, the allowances for “One or two ducted returns” shall be permitted.</u>”</p>
00701	12/01/2023	National Rater Field Checklist (Version 1 / 1.1 / 1.2, Rev. 03)	Change	<p>Item 5.5 – Allowing electric-resistance space heating as a supplement to heat pumps</p> <p>Issue: Item 5.5 states clearly that electric resistance space heating is not installed in dwelling units when following the Prescriptive Path. Given that prohibition, it can be challenging for project teams to select a heat pump that has no electric-resistance heating for emergencies or</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>occasions where the heat pump capacity cannot meet the heating load. In common spaces under the ERI path, electric resistance heating must have a total heating capacity of 3.5 kW or less per enclosed space. Some Partners may also read this requirement to mean standalone electric resistance space heating, like baseboards, are prohibited (or restricted in common spaces), but auxiliary heat to a heat pump is permitted.</p> <p>Resolution: Standalone electric resistance space heating systems will continue to not be permitted in dwelling units in the Prescriptive Path. The limit of 3.5 kW of electric resistance heating per enclosed space for common spaces in the ERI and Prescriptive Paths will be maintained.</p> <p>EPA recognizes that some amount of supplemental heating should be permitted when integral to a heat pump. EPA also recognizes that proper sizing and controls will significantly reduce the need for supplemental heating. EPA will therefore revise the requirement for dwelling units following the prescriptive path, and common spaces following the prescriptive and ERI paths, to allow supplemental electric resistance heating without restriction, but only when it is integral to a heat pump. EPA recommends, but does not require at this time, that heat pumps have controls to limit the use of back-up heat to heat pump failures or when the heat pump cannot meet the heating load, and that ENERGY STAR certified cold-climate heat pumps be used in Climate Zones 5 through 8.</p> <p>Therefore, Footnote 47 will be revised as follows:</p> <p><u>"Electric resistance limitations do not apply to heat pumps with integral supplemental or emergency electric resistance heating. EPA recommends but does not require that heat pumps have controls to limit the use of emergency or supplemental heat to heat pump failures or when the heat pump cannot meet the heating load. EPA also recommends but does not require that heat pumps in CZ 5-8 are ENERGY STAR certified cold-climate heat pumps. These requirements apply to systems that provide primary space heating and cooling. Electric resistance limitations do not apply to systems dedicated to heating outdoor air supplied by a mechanical ventilation system, as long as the space served is primarily heated by a non-electric-resistance system that meets the efficiency requirements noted in Exhibit X. Electric resistance limitations apply to garages, but do not apply to heated plenums meeting Item 5.11, or stairwells where automatic thermostatic controls prevent operation above 50°F."</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Additionally, to further clarify this policy the “Electric resistance space heating” rows in Exhibit X will reference Footnote 47.</p> <p>This policy may be revisited to require additional requirements for heat pumps when new products or sizing guidance are available.</p>
00521	12/16/2022	Rater Field Checklist, Version 1/1.1/1.2 (Rev.03)	Change	Item 5.5 – Allowing electric-resistance space heating as a supplement to heat pumps
				<p>Issue: Policy Record Entry 00547 contains the most recent resolution of this issue. This issue (ID 00521) is only being retained to maintain a complete Policy Record. Item 5.5 states clearly that electric resistance space heating is not installed in dwelling units when following the Prescriptive Path. Given that prohibition, it can be challenging for project teams to select a heat pump that has no electric-resistance for auxiliary space heating or for defrost. Some Partners may also read this requirement to mean standalone electric resistance space heating, like baseboards, are prohibited, but auxiliary heat to a heat pump is permitted. While it is understood that this limitation is removed in the modeling paths where this heating energy is captured by the model, some nominal allowance for electric resistance heating in dwelling units would remove a barrier to choosing the Prescriptive Path.</p>
				<p>Resolution: Standalone electric resistance space heating systems will continue to not be permitted in the Prescriptive Path. EPA recognizes that some amount of supplemental heating should be permitted where internal to a heat pump, when limited through proper controls.</p> <p>Footnote 47 will be revised as follows: “These requirements apply to systems that provide primary space heating and cooling. Heat pumps with internal supplemental electric space heating may use up to 3 kW of electric resistance heating per dwelling unit. This supplemental electric resistance heating may only be used when the heat pump cannot satisfy the thermostat setpoint or when the heat pump is operating in defrost mode. In addition, the programmable thermostat must include adaptive recovery technology. Electric resistance limitations do not apply to systems dedicated to heating outdoor air supplied by a mechanical ventilation system, as long as the space served is primarily heated by a non-electric-resistance system that meets the efficiency requirements noted in Exhibit X. Electric resistance limitations apply to garages, but do not apply to heated plenums meeting Item 5.11, or stairwells where automatic thermostatic controls prevent operation above 50°F.”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				This policy may be revisited to require additional requirements for heat pumps when new products or sizing guidance are available.
00711	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 Rev. 03)	Clarification	Items 5.5 and 5.6 – Clarifying minimum heat pump efficiencies for packaged heat pumps
				Issue: For the ERI and Prescriptive Path, minimum efficiencies for “residential” equipment can be found in Exhibit 1 of the National Program Requirements (ENERGY STAR Multifamily Reference Design). Equipment not listed there can be found in Exhibit X of the Rater Field Checklist. Equipment not listed in Exhibit X are required to use minimum efficiencies based on ASHRAE 90.1. For a “commercial” packaged rooftop heat pump (less than 65,000 Btu/h) serving common spaces, it is unclear whether the minimum HSPF values shown in the Reference Design for “residential” equipment should be met, or if these rooftop heat pumps are an example of a system that is not listed in Exhibit X, and can instead meet the minimums in ASHRAE 90.1-2010.
				Resolution: The header in Exhibit 1 of the Reference Design intended to clarify that the efficiencies applied only for ‘residential’ equipment. The intent is that ‘commercial’ equipment serving common spaces would look to Exhibit X for requirements, and ASHRAE 90.1-2010 (or, for National v1.2, a 5% improvement over the efficiency listed in ASHRAE 90.1-2019,) if not listed there. While a packaged rooftop heat pump that is less than 65,000 Btu/h has a lower capacity similar to some residential split systems, it is considered ‘commercial’ equipment. Where serving common spaces, it is a system type that is not listed in Exhibit X, and should follow the requirements for ASHRAE 90.1-2010, or, for National v1.2, a 5% improvement over the efficiency listed in ASHRAE 90.1-2019. Where serving dwelling units, this system would still need to meet the ENERGY STAR Reference Design criteria.
00689	12/01/2023	National Rater Field Checklist, Version 1/1.1/1.2 (Rev. 03)	Clarification	Item 6.2 – Re-testing bedroom pressures after HVAC airflow changes recommended, but not required
				Issue: A partner has asked whether bedroom pressure balancing limits must be re-verified if the airflow of the HVAC system blower fan changes. The most obvious example is if the HVAC contractor changes the HVAC system fan-speed setting during commissioning, or re-commissioning after the Rater has completed HVAC grading.

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>To re-verify that the bedroom pressure-balancing limits have been met, the Rater would typically have to return to the site in a short period of time. Furthermore, the change in total airflow will be distributed among all rooms, meaning that the change in room pressure for any one bedroom will likely be marginal.</p> <p>Resolution: Because of the logistical challenges of returning to the site and the likelihood that the changes would be marginal, EPA recommends, but does not require, that bedroom pressure limits be re-verified if blower fan airflow changes after initial assessment.</p>
00652	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	<p>Item 6.7 – Clarifying the central exhaust duct leakage test requirement</p> <p>Issue: Multiple partners have submitted questions that indicate the intent of Item 6.7 is not clear. The item requires duct leakage to be tested for central exhaust ductwork that serves four or more dwelling units. Additionally, Partners have asked for specific guidance on how the tests are impacted if an aerosol-based sealant is used and the test is performed by the sealing contractor.</p> <p>Resolution: EPA agrees that the Items and associated Footnote 58 could be improved to better convey the program’s intent, and clarify how to perform tests when aerosol-based sealant contractor performs the test.</p> <p>Item 6.7 will be revised as follows: “6.7 Duct leakage of central exhaust <u>ductwork serving systems that serve</u> four or more dwelling units, meets one of the following two options:”</p> <p>Item 6.7.1 will be revised as follows to remove a comma. “6.7.1 Rough-in: Tested including horizontal run outs, trunks, branches, and take-offs up to, but not including, the grilles, the leakage does not exceed 25% of exhaust fan flow. ⁵⁸ “</p> <p>Footnote 58 will be revised as follows: “For the purpose of computing leakage allowance, <u>at rough-in, the ‘exhaust fan flow’</u> shall be the lesser of the rated fan flow (<u>i.e., nameplate rating</u>) and <u>at rough-in</u>, 133% of the sum of the design exhaust airflow of the dwelling units that are exhausted by that central fan or at final,</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>served by that fan. At final, the 'exhaust fan flow' shall be the lesser of the rated fan flow (i.e., nameplate rating) and 143% of the sum of the design exhaust airflow of the dwelling units served by that fan that are exhausted by that central fan. To calculate central exhaust duct leakage allowance, EPA recommends using worksheet 3b of the Multifamily Workbook. Measured fan flow (either at the fan itself or the total airflow measured from all exhaust grilles served by the fan) may be used in lieu of the rated fan flow to determine the leakage allowance. Duct leakage shall be tested at the design or average operating pressure and shall use the procedures in the RESNET Guidelines for Multifamily Energy Ratings, available at www.resnet.us/blog/resnet-adopts-guidelines-for-multifamily-energy-ratings/. Where testing at the design or average operating pressure is not feasible, testing at 50 Pa is permitted, however the following flow equation must be used to determine the leakage allowance at 50 Pa.</p> $CFM_{50} = CFM_{design} / [P_{design}^{(0.65)} / 50^{(0.65)}]$ <p>No less than 50% of the ductwork, based on total linear feet, shall be tested and must include ductwork other than the main trunks. Where portions of ductwork are tested, rather than entire risers, the percentage of leakage allowed is based upon the design airflow of the dwelling units that are exhausted in that portion. Where failures occur, the percentage of total linear feet required to be tested increases by 10%.</p> <p>Where aerosol-based sealant is used on 100% of the exhaust ductwork between the fan and the grilles, the duct-sealing contractor is permitted to perform the test, but sampling is not permitted. Where tested at 25 Pa, the leakage allowance is permitted to be reduced according to the equation above by substituting "25" for "50". The Rater is not required to witness these tests. Where aerosol-based sealant is used on some but not all ductwork risers, the ductwork selected for testing must be representative of all sealing strategies used. This test is not required of central exhaust systems serving clothes dryers but is required for the central exhaust portion of balanced systems such as HRVs and ERVs."</p>
00555	12/01/2023	National Rater Field Checklist,	Clarification	Item 7.2 – How to verify when the designer has provided multiple acceptable combinations of a design ventilation airflow rate and run-time

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Version 1 / 1.1 / 1.2 (Rev. 03)		<p>Issue: The National HVAC Design Report is currently structured to accommodate a single combination of a design ventilation airflow rate and run-time per plan. Raters are required to verify that the Rater-measured ventilation rate is within the program-specified tolerance relative to the design report value.</p> <p>Partners have noted that some HVAC designers prefer to specify a range of ventilation run-time and airflow combinations that would be acceptable, rather than a single combination. They have asked whether that is acceptable and how the Rater should verify that the ventilation airflow is within the program-specified tolerance in such cases.</p> <p>Resolution: As addressed in Policy Record #00xxx, designers are permitted to provide multiple combinations of a design ventilation airflow rate, run-time per cycle, and cycle time, all of which are acceptable to the designer.</p> <p>When a single combination of a design ventilation airflow rate, run-time per cycle, and cycle time are documented on the National HVAC Design Report, the Rater is not required to verify run-time of the ventilation system, because the design ventilation airflow rate is known.</p> <p>However, when multiple combinations are provided, the Rater is required to first assess the run-time setting of the installed system and use that to determine the corresponding design ventilation rate. The Rater-measured ventilation rate must fall within the program-specified tolerance relative to that design ventilation rate.</p> <p>To reflect this Footnote 61 will be updated as follows:</p> <p>“The dwelling-unit ventilation air flows and local exhaust air flows shall be determined and documented by a Rater using ANSI / RESNET / ICC 380 including all Addenda and Normative Appendices, with new versions and Addenda implemented according to the schedule defined by the HCO or MRO that the building is being certified under. In Item 7.2, the dwelling-unit ventilation rates required by ASHRAE 62.2-2010 can be calculated using the Multifamily Workbook or the following equation: $0.01 \times \text{Conditioned Floor Area} + 7.5 \times (\text{number of bedrooms} + 1)$. For sleeping units, the following equation may be used: $0.01 \times \text{Conditioned Floor Area} + 7.5 \times (\text{number of beds})$. Where local codes do not permit dwelling-unit ventilation to exceed ASHRAE 62.2-2010 rates, Rater-measured ventilation rate is permitted to be 0-15 CFM less than rates required by ASHRAE 62.2-2010. <u>Designers are permitted to provide multiple combinations of a design ventilation airflow rate, run-time per cycle, and cycle time. When multiple combinations are provided, the Rater shall first assess the run-time setting of the installed system and use that to determine the corresponding</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<u>design ventilation rate. The Rater-measured ventilation rate must fall within the program-specified tolerance relative to that design ventilation rate."</u>
00677	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Item 7.2 – Required use of sleeping unit ventilation formula
				<p>Issue: Partners have expressed confusion on how to determine the minimum mechanical ventilation air flow needed for sleeping units to meet the requirement detailed in Item 7.2. Currently, Footnote 61 specifies that sleeping units ‘may’ use the formula:</p> <p>“0.01 x Conditioned Floor Area + 7.5 x (number of beds)”</p> <p>The fact that sleeping units can use the formula, but are not required to has caused partners confusion given that when the number of beds exceeds 8, the formula will have a higher ventilation requirement than when using Table 4.1a from ASHRAE 62.2.</p>
				<p>Resolution: EPA’s intent is that any building with sleeping units is required to use the formula determined by the number of beds. Therefore, to clarify this requirement the language of Footnote 61 will be updated to ensure that buildings with sleeping units ‘must’ use the formula:</p> <p>“0.01 x Conditioned Floor Area + 7.5 x (number of beds)”</p> <p>Footnote 61 will be revised as follows:</p> <p>“The dwelling-unit ventilation air flows and local exhaust air flows shall be determined and documented by a Rater using ANSI / RESNET / ICC 380 including all Addenda and Normative Appendices, with new versions and Addenda implemented according to the schedule defined by the HCO or MRO that the building is being certified under. In Item 7.2, the dwelling-unit ventilation rates required by ASHRAE 62.2-2010 can be calculated using the Multifamily Workbook or the following equation: 0.01 x Conditioned Floor Area + 7.5 x (number of bedrooms + 1). For sleeping units, the following equation may must be used: 0.01 x Conditioned Floor Area + 7.5 x (number of beds). Where local codes do not permit dwelling-unit ventilation to exceed ASHRAE 62.2-2010 rates, Rater-measured ventilation rate is permitted to be 0-15 CFM less than rates required by ASHRAE 62.2-2010. Designers are permitted to provide multiple combinations of a design ventilation airflow rate, run-time per cycle, and cycle time. When multiple combinations are provided, the Rater shall first assess the run-time setting of the installed system and use that to determine the corresponding design</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				ventilation rate. The Rater-measured ventilation rate must fall within the program-specified tolerance relative to that design ventilation rate.”
00642	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Item 7.3 – Limited common space ventilation allowance
				Issue: Occasionally the only common space in a multifamily building is a short corridor which requires a small amount of outdoor air supply (< 15 CFM) under ASHRAE 62.1. Partners have asked whether buildings with only a small corridor and no other common spaces need to have a ventilation system installed in the corridor.
				<p>Resolution: The intent of Item 7.3 is to measure common space ventilation to meet ASHRAE 62.1 levels. While there is value to providing outdoor air to corridors, given design challenges from partners, where the building requires less than 15 CFM of outdoor air for the corridors and does not contain any of the other common spaces listed in Policy Record Entries 00551, 00552, and 00553, outdoor air is recommended but not required to be provided. Where systems are installed, they do need to be tested.</p> <p>Note that Policy Record Entries 00551, 00552, and 00553 add a Footnote which states:</p> <p>“The following spaces require outdoor air ventilation: corridors, offices, break rooms, gyms, fitness centers, exercise rooms, lobbies, community rooms, meeting rooms, multi-purpose rooms, lounges, laundry rooms, swimming pools, daycares, classrooms, shared or commercial kitchens, shared dining rooms, and computer rooms.”</p> <p>Therefore, to reflect this change, Footnote 62 will be revised as follows: “While common spaces are not under the scope of ANSI / RESNET / ICC 380, the ventilation air flow and exhaust air flows in common spaces shall be measured in accordance with the procedures in ANSI / RESNET / ICC 380. The air flows may be measured by a Rater or a certified air-balancing contractor under the observation of a Rater. Where a system provides supply air that is a mix of return and outdoor air, and not 100% outdoor air, the outdoor air airflow shall be measured and compared to the total supply airflow to determine percentage of outdoor air supplied. This percentage shall be applied to airflow measured at supply registers to determine outdoor air provided for comparison to design airflow rates. <u>Where the building has total corridor space \leq 250 ft² and does not contain any of the other common spaces</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<u>which require outdoor air per Item 2.2 of the National HVAC Design Report, outdoor air is not required to be provided to the corridor.”</u>
00656	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Item 7.3 - Clarifying that the air-balancing contractor cannot use sampling
				Issue: Item 7.3 requires measurement of ventilation airflows in common spaces and Footnote 62 permits a certified air-balancing contractor to perform these measurements while under the observation of a Rater. Footnote 4 is clear when Raters are allowed to used sampling, but does not directly address whether Raters can still use sampling when observing the contractor's measurements.
				<p>Resolution: EPA recognizes that this allowance in Footnote 62 could be clarified to reflect EPA's intent that only the Rater may use sampling for this Item; and that when the Rater is observing a certified air-balancing contractor performing the test sampling is not permitted.</p> <p>Footnote 62 will be revised as follows:</p> <p>62. While common spaces are not under the scope of ANSI / RESNET / ICC 380, the ventilation air flow and exhaust air flows in common spaces shall be measured in accordance with the procedures in ANSI / RESNET / ICC 380. The air flows may be measured by a Rater or a certified air-balancing contractor under the observation of a Rater. <u>Sampling is only permitted where airflows are measured directly by the Rater.</u> Where a system provides supply air that is a mix of return and outdoor air, and not 100% outdoor air, the outdoor air airflow shall be measured and compared to the total supply airflow to determine percentage of outdoor air supplied. This percentage shall be applied to airflow measured at supply registers to determine outdoor air provided for comparison to design airflow rates.</p>
00565	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Item 7.6 – Fans located above ceiling drywall are outside habitable space
				<p>Issue: A Partner has asked whether a continuous exhaust in-line fan located above the ceiling drywall would be considered to be outside habitable space and, therefore, eligible for the exemption from the Item's sone requirements found in Footnote 66.</p> <p>ASHRAE 62.2 defines “habitable space” as “building space intended for continual human occupancy; such space generally includes areas used for living, sleeping, dining, and cooking but does not generally include bathrooms, toilets, hallways, storage areas, closets, or utility rooms.”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>This definition does not clearly indicate whether a fan located above the ceiling drywall of one of these spaces (e.g., above a living room) is considered habitable space. Therefore, a clarification is needed on this issue.</p> <p>Resolution: EPA has determined that a fan located above the ceiling drywall will not be considered to be located in habitable space because the space above the drywall is not “intended for continual human occupancy.” Therefore, a remote-mounted fan located \geq 4ft from the intake grill and located above the ceiling drywall is exempt from the sone requirement for Item 7.6.</p>
00559	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	<p>Item 7.9 – Adding alternative metrics to meet fan motor efficiency requirement</p> <p>Issue: Given the challenge and time it can take to verify that certain central exhaust fan motors have efficiencies equivalent to NEMA Premium motors, some Partners have asked whether other equivalent metrics could be used to meet Item 7.9.</p> <p>Resolution: EPA agrees that other metrics that can evaluate fan performance in an equivalent way should be added in order to reduce the level of effort to meet this efficiency requirement. EPA has identified two equivalent metrics to the current requirement of a NEMA Premium efficiency standard. First is a fan energy index (FEI) of 1.2, as defined by AMCA Standard 208. Second is a fan efficacy of 1.1 CFM/Watt determined by either field measurements or design conditions.</p> <p>A new footnote will be added to Item 7.9 to reflect these alternative metrics as follows:</p> <p>“As an alternative to meeting or exceeding the efficiency standards for NEMA Premium motors, documentation that an exhaust fan motor has a fan energy index (FEI) \geq 1.2 at the design point of operation OR a fan efficacy \geq 1.1 CFM/Watt is permitted.”</p>
				<p>Item 7.10.2 – Minimum separation distance reduced between air inlets and outlets of exhaust ventilation systems</p> <p>Issue: Partners have indicated challenges in locating dwelling unit outdoor air inlets on exterior walls of multifamily buildings and Townhouses that are at least 10 ft from the outlets of dwelling unit exhaust systems given the proximity to adjacent dwelling units and limited exterior wall</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>area to locate intakes and outlets. A reduced separation distance would reduce the barrier to providing multifamily dwelling units and Townhouses with a dedicated supply of outdoor air.</p> <p>Resolution: EPA agrees that reducing the minimum required separation distance between air inlets and the outlets of both exhaust dwelling unit mechanical ventilation systems and local mechanical exhaust systems would increase the ability of project teams to design systems that provide outdoor air directly to multifamily dwelling units and Townhouses. Note that the minimum required separation distance between air inlets and other known sources of contamination (e.g., combustion appliance vent terminations, vehicles) will remain the same.</p> <p>In considering this revision, it was also observed that the related footnotes should be re-organized to improve clarity.</p> <p>It was also observed that the current allowance for “balanced ventilation systems” to use smaller spacing requirements if instructed by the manufacturer should be more specific to balanced systems from one manufacturer, such as ERV’s or HRV’s, and should not be more broadly available to separate systems that may be ‘balanced’, but won’t have a single manufacturer’s instructions to reference.</p> <p>Therefore, Footnote 69 and 70 will be revised as follows:</p> <p>69. <u>Without proper maintenance, ventilation air inlet screens often become filled with debris. Therefore, EPA recommends, but does not require, that these ventilation air inlets be located so as to facilitate access and regular service by the building owner or maintenance staff. Ventilation air inlets that are only visible via rooftop access are exempted from Item 7.10 and the Rater shall mark “N/A”. The outlet and inlet of balanced ventilation systems shall meet these spacing requirements unless manufacturer instructions indicate that a smaller distance may be used. However, if this occurs the manufacturer’s instructions shall be collected for documentation purposes.</u></p> <p>70. <u>Without proper maintenance, ventilation air inlet screens often become filled with debris. Therefore, EPA recommends, but does not require, that these ventilation air inlets be located so as to facilitate access and regular service by the building owner or maintenance staff. Two alternatives to the required 10 ft. distance are provided: 1) inlets providing outdoor air to a dwelling unit are permitted to be ≥ 5 ft. of stretched-string distance from outlets of both exhaust dwelling-unit mechanical ventilation systems and local mechanical exhaust systems, and 2) the outlet and inlet of ERV’s and HRV’s may use a smaller distance if allowed by the manufacturer</u></p>

ENERGY STAR Multifamily New Construction Policy Record

				<u>of the system. If the second alternative is used, the manufacturer’s instructions shall be collected for documentation purposes.</u>
00517	12/16/2022	Rater Field Checklist, Version 1/1.1 (Rev.03)	Change	Item 8.1 – New allowance to use 50 CFM continuous kitchen exhaust for Dwelling Units and Sleeping Units
				<p>Issue: Partners have noted several challenges with the current policy requiring ≥ 5 kitchen air changes per hour for continuous kitchen exhaust systems.</p> <p>Continuous kitchen exhaust systems provided through a central riser are often used in high-rise multifamily buildings due to spacing restrictions for wall exhausts, challenges designing intermittent systems in a central riser with a fixed shaft size but fluctuating airflow, and codes that either require make-up air if exhaust exceeds certain rates or require smoke/fire dampers for ducts that exceed certain sizes.</p> <p>The current policy presents pragmatic challenges and can result in excessive energy costs. The airflow rate equivalent to 5 kitchen air changes per hour is dependent on certain design elements that are not directly related to indoor air quality (e.g., the placement of cabinets). Therefore, calculations are required for each kitchen layout, often resulting in different required airflow rates for each dwelling unit. Furthermore, the resulting required airflow rate can sometimes exceed the whole-dwelling ventilation rate required by ASHRAE 62.2, when coupled with a continuous bathroom exhaust system, resulting in higher energy costs.</p>
				<p>Resolution: To simplify the policy, an alternative will be added allowing a fixed minimum continuous kitchen exhaust rate of 50 CFM for Dwelling and Sleeping Units in multifamily buildings (but not Townhouses). This new alternative rate will be accompanied by a requirement that the fan or intake grille be located within 10 ft. of the edge of the range, as measured horizontally on the plan.</p> <p>The 50 CFM minimum continuous rate aligns with the requirements for kitchens in private dwellings in the 2021 International Mechanical Code and equates to 5 kitchen air changes per hour for an approximately 70 sq. ft. kitchen with an 8.75 ft ceiling.</p> <p>To reflect this change, Item 8.1 will be revised as follows:</p>
				Location
Location	Continuous Rate			

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic					
				<table><tr><td rowspan="2">8.1 Kitchen</td><td>Airflow</td><td>≥ 5 ACH, based on kitchen volume ^{74, 75} (Alternative in Fn. 74)</td></tr><tr><td>Sound</td><td>Recommended: ≤ 1 sone</td></tr></table> <p>Footnote 74 will be revised as follows: “Where 5 ACH is selected, kitchen volume shall be determined by drawing the smallest possible rectangle on the floor plan that encompasses all cabinets, pantries, islands, peninsulas, ranges / ovens, and the kitchen exhaust fan, and multiplying by the average ceiling height for this area. In addition, the continuous kitchen exhaust rate shall be ≥ 25 CFM, per 2009 IRC Table M1507.3, regardless of the rate calculated using the kitchen volume. Cabinet volume shall be included in the kitchen volume. <u>As an alternative to 5 ACH for Dwelling Units and Sleeping Units (but not Townhouses), 50 CFM of continuous exhaust is permitted to be used, regardless of kitchen volume. In such cases, the edge of the exhaust fan or intake grille shall be located within 10 ft of the edge of the range, as measured horizontally on the floor plan.</u>”</p>	8.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume ^{74, 75} (Alternative in Fn. 74)	Sound	Recommended: ≤ 1 sone
8.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume ^{74, 75} (Alternative in Fn. 74)							
	Sound	Recommended: ≤ 1 sone							
00708	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Comment	Items 11.1 and 11.2 – Guidance for small storage water heaters without efficiency ratings in common spaces					
				Issue: Partners have asked how to treat small water heaters in common spaces that do not have any of the metrics listed in Items 11.1 and 11.2 (e.g., UEF, EF, Et). DOE Energy Conservation Standards do not currently apply to storage water heaters less than 20 gallons, so any partner attempting to use one of those water heaters is unable to easily determine how they will meet the minimum efficiency requirements outlined in Items 11.1 and 11.2 since they are unable to determine the efficiency of those products.					
				Resolution: EPA has determined that storage water heaters < 20 gallons used in common spaces are not required to meet any efficiency metrics in Items 11.1 and 11.2 when the water heaters are not rated for any of the metrics listed. This is due to the fact that common space water heaters typically do not use a significant amount of the total energy use of the buildings, and because smaller un-rated water heaters are less common than larger water heaters that do have efficiency metrics. Additionally, DOE has indicated that they plan to extend energy conservation standards for water heaters to products < 20 gallons, so that in					

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>the future these products are likely to be required to have a UEF metric by DOE and then meeting the requirements of Items 11.1 and 11.2 would be required.</p> <p>Since EPA has determined that these types of water heaters are not required to meet the requirements of Items 11.1 and 11.2, Raters are permitted to check the Rater Verified box. By checking Rater Verified, this indicates that the Rater verified that the metrics are not available for this product, rather than “N/A” which would indicate that there is not a water heater where this item was applicable.</p> <p>Note that this policy does not apply to water heaters located in dwelling units.</p>
00558	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev 03)	Change	Item 11.3 – Remove heat trap inspection item
				<p>Issue: This Item, which requires that in-unit storage water heaters are confirmed to have a heat trap by visual inspection or on their AHRI certificate, was adapted from a requirement in the previous Multifamily High-Rise (MFHR) program, which required compliance with ASHRAE 90.1-2007, Section 7.4. However, this is not a requirement in residential energy codes, nor is it a requirement in the Single-Family New Homes (SFNH) program, and in today’s market where check valves/heat traps are almost always integrated with storage tanks with vertical inlets, this Item may be a redundant requirement which could be removed.</p>
				<p>Resolution: Since integrated heat traps/check valves are now commonly integrated to the inlet and outlet that are at the top of storage water heaters, and in order to better align the MFNC program with the SFNH program, the Item will no longer be required and will be removed.</p>
00633	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Item 11.4 – Removal of Rater-measured hot water delivery temperature
				<p>Issue: Partners have pointed out that ENERGY STAR Single Family New Homes does not have a requirement for rater-measured hot water delivery temperatures, and that this is a time-consuming task in multifamily buildings. Partners have reported that central systems generally have delivery temperatures below 125°F.</p>
				<p>Resolution: Rater measured hot water delivery temperatures rarely exceeds 125°F on central systems, and this is a time-consuming task that deviates from the single-family new homes</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				program. Therefore, EPA will remove MFNC Rater Field Checklist Item 11.4, and the associated Footnote 83.
00622	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2, (Rev. 03)	Change	Item 12.1.1 – allow programmed timers for common space lighting controls
				Issue: A Partner asked whether a programmed timer could be used instead of the occupancy sensors or automatic bi-level lighting controls required for common spaces by the Item, as this fitted better with the needs of the hearing-impaired building occupants.
				<p>Resolution: Appendix G of ASHRAE 90.1-2010 allows credit for programmed timers in Table G3.2. Therefore, these still meet the program’s intent, and EPA will allow the use of these in lieu of occupancy sensors or automatic bi-level lighting controls.</p> <p>Accordingly, the Item will be revised as follows:</p> <p>“ERI and Prescriptive Path: All common spaces (including shared garages), except the building lobby, mechanical equipment rooms, and where automatic shutoff would endanger the safety of occupants, have occupancy sensors, <u>programmed timers</u>, or automatic bi-level lighting controls installed and operation has been verified.”</p>
00655	12/01/2023	National Rater Field Checklist , Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Item 12.3 – Footcandle measurements required for some ASHRAE Path buildings
				Issue: A partner suggested that a footnote be added to Item 12.3 to prompt the Rater that for buildings using the ASHRAE Path, a measurement of footcandles in certain spaces may be needed. This measurement requirement is currently only described in the Simulation Guidelines, a document Raters do not generally read.
				<p>Resolution: EPA agrees that it would benefit the Rater to be aware of this potential requirement and will revise Footnote 85, associated with Item 12.3, as follows:</p> <p>“As an alternative to the efficiency requirements in Item 12.3, installed lighting may instead meet the following lighting power allowances. In common spaces (except garages), for ERI and Prescriptive Path, total installed lighting power for the combined common spaces ² must not exceed ASHRAE 90.1-2007 allowances for those combined spaces, using the Space-by-Space or Building Area Method. For ASHRAE Path, total installed lighting power for the combined common spaces ² must not exceed ASHRAE 90.1-2007 allowances for those combined spaces, using the Space-by-Space or Building Area Method, by more than 20%. In</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>addition, for ASHRAE Path, where the proposed lighting power in a given space is modeled with 30% or greater savings compared to the allowance in the Simulation Guidelines, field measurement of footcandles is required. For all Paths, see Footnote 86 and 87 for allowances.</p> <p>In shared garages, installed lighting shall not exceed 0.24 W/ft².”</p>
00544	05/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	<p>Signature Block – Pre-drywall inspection is always required; reinforce purpose of pre-drywall and final inspection</p>
				<p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 6 of the ENERGY STAR Certification Process states that “the Rater must review all items on the National Rater checklists.. In the event that an item on a National Rater checklist cannot be inspected by the Rater, the building also cannot earn the ENERGY STAR.”</p> <p>In addition, ANSI / RESNET / ICC 301 requires visual inspection of multiple Minimum Rated Features per Normative Appendix B, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of Minimum Rated Features of ANSI / RESNET / ICC 301 as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, Grade I or II insulation, air sealing details, a complete air barrier, advanced framing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p>
				<p>Resolution: To reinforce EPA’s current policy that a pre-drywall inspection is always required, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, a new Footnote will be added after the “Rater Pre-Drywall Inspection Date(s)” field, as follows:</p> <p><u>“Any Item that will be concealed by drywall (e.g., wall insulation) must be verified during the pre-drywall inspection.</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p><u>If drywall is installed prior to the inspection, then it must be entirely removed to fully verify all Items. It is not sufficient to remove only portions of drywall to inspect a subset of areas. Furthermore, it is not acceptable to complete a Sampled Rating on a unit that has missed the pre-drywall inspection. Additional information is available in the Technical Bulletin: Pre-Drywall Inspection Is Always Required.</u></p> <p>While not directly related to the pre-drywall clarification, a new Footnote will also be added after the “Rater Final Inspection Date(s)” field to clarify the purpose of that inspection, as follows:</p> <p><u>“Some Items can typically only be verified at a later stage of construction than when the pre-drywall inspection occurs (e.g., bath fan airflow). Any Item that has not been verified during the pre-drywall inspection must be verified prior to or during the final inspection.”</u></p>
00602	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	<p>Footnote 4 – Sunset of sampling protocols for Townhouses</p> <p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC)</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p> <p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Footnote 4:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by a HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p>As stated in the National Program Requirements, <u>for Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, Raters who operate under an MRO or an HCO Sampling Protocol are permitted to verify any Checklist Item designated “Rater Verified” using an HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling to complete this Checklist.”</u></p>
00668	12/01/2023	National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Footnote 4 - Rater may use HCO or MRO-approved Sampling Protocol
				Issue: The language regarding when Sampling is allowed only refers to HCO-approved sampling protocols and the text could be more concise.
				<p>Resolution: Raters may use a Sampling Protocol that is approved by the HCO or MRO for the building. To clarify this intent, Footnote 4 will be revised as follows:</p> <p>“As stated in the National Program Requirements, Raters who operate under an MRO or an HCO with a Sampling Protocol are permitted to verify any Checklist Item designated “Rater Verified” using an <u>MRO or</u> HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling to complete this Checklist.”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
00556	12/01/2023	Caribbean Rater Field Checklist, Version 1 (Rev. 03)	Clarification	Item 1.2 – How to verify when the designer has provided multiple acceptable combinations of a design ventilation airflow rate and run-time
				<p>Issue: The National HVAC Design Report is currently structured to accommodate a single combination of a design ventilation airflow rate and run-time per plan. Raters are required to verify that the Rater-measured ventilation rate is within the program-specified tolerance relative to the design report value.</p> <p>Partners have noted that some HVAC designers prefer to specify a range of ventilation run-time and airflow combinations that would be acceptable, rather than a single combination. They have asked whether that is acceptable and how the Rater should verify that the ventilation airflow is within the program-specified tolerance in such cases.</p>
				<p>Resolution: As addressed in Policy Record #00xxx, designers are permitted to provide multiple combinations of a design ventilation airflow rate, run-time per cycle, and cycle time, all of which are acceptable to the designer.</p> <p>When a single combination of a design ventilation airflow rate, run-time per cycle, and cycle time are documented on the National HVAC Design Report, the Rater is not required to verify run-time of the ventilation system, because the design ventilation airflow rate is known.</p> <p>However, when multiple combinations are provided, the Rater is required to first assess the run-time setting of the installed system and use that to determine the corresponding design ventilation rate. The Rater-measured ventilation rate must fall within the program-specified tolerance relative to that design ventilation rate.</p> <p>To reflect this Footnote 9 will be updated as follows:</p> <p>“The dwelling-unit ventilation air flows and local exhaust air flows shall be determined and documented by a Rater using ANSI / RESNET / ICC 380 including all Addenda and Normative Appendices, with new versions and Addenda implemented according to the schedule defined by the HCO or MRO that the building is being certified under. In Item 1.2, the dwelling-unit ventilation rates required by ASHRAE 62.2-2010 can be calculated using the Multifamily Workbook or the following equation: $0.01 \times \text{Conditioned Floor Area} + 7.5 \times (\text{number of bedrooms} + 1)$. For sleeping units, the following equation may be used: $0.01 \times \text{Conditioned Floor Area} + 7.5 \times (\text{number of beds})$. Where local codes do not permit dwelling-unit ventilation to exceed ASHRAE 62.2-2010 rates, Rater-measured ventilation rate is permitted to be 0-15 CFM less than rates required by ASHRAE 62.2-2010. <u>Designers are</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<u>permitted to provide multiple combinations of a design ventilation airflow rate, run-time per cycle, and cycle time. When multiple combinations are provided, the Rater shall first assess the run-time setting of the installed system and use that to determine the corresponding design ventilation rate. The Rater-measured ventilation rate must fall within the program-specified tolerance relative to that design ventilation rate."</u>
00678	12/01/2023	Caribbean Rater Field Checklist, Version 1 (Rev. 03)	Clarification	Item 1.2 - Required use of sleeping unit ventilation formula
				<p>Issue: Partners have expressed confusion on how to determine the minimum mechanical ventilation air flow needed for sleeping units to meet the requirement detailed in Item 1.2. Currently, Footnote 9 specifies that sleeping units 'may' use the formula:</p> <p>"0.01 x Conditioned Floor Area + 7.5 x (number of beds)"</p> <p>The fact that sleeping units can use the formula but are not required to has caused partners confusion given that when the number of beds exceeds 8, the formula will have a higher ventilation requirement than when using Table 4.1a from ASHRAE 62.2.</p>
				<p>Resolution: EPA's intent is that any building with sleeping units is required to use the formula determined by the number of beds. Therefore, to clarify this requirement the language of Footnote 9 will be updated to ensure that buildings with sleeping units 'must' use the formula:</p> <p>"0.01 x Conditioned Floor Area + 7.5 x (number of beds)"</p> <p>Footnote 9 will be revised as follows:</p> <p>"The dwelling-unit ventilation air flows and local exhaust air flows shall be determined and documented by a Rater using ANSI / RESNET / ICC 380 including all Addenda and Normative Appendices, with new versions and Addenda implemented according to the schedule defined by the HCO or MRO that the building is being certified under. In Item 7.2, the dwelling-unit ventilation rates required by ASHRAE 62.2-2010 can be calculated using the Multifamily Workbook or the following equation: 0.01 x Conditioned Floor Area + 7.5 x (number of bedrooms + 1). For sleeping units, the following equation maymust be used: 0.01 x Conditioned Floor Area + 7.5 x (number of beds). Where local codes do not permit dwelling-unit ventilation to exceed ASHRAE 62.2-2010 rates, Rater-measured ventilation rate is permitted to be 0-15 CFM less than rates required by ASHRAE 62.2-2010. Designers are permitted to provide multiple combinations of a design ventilation airflow rate, run-time per cycle, and cycle time. When multiple combinations are provided, the Rater shall first assess the</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				run-time setting of the installed system and use that to determine the corresponding design ventilation rate. The Rater-measured ventilation rate must fall within the program-specified tolerance relative to that design ventilation rate.”
00643	12/01/2023	Caribbean Rater Field Checklist, Version 1 (Rev. 03)	Change	Item 1.3 – Limited common space ventilation allowance
				Issue: Occasionally the only common space in a multifamily building is a short corridor which requires a small amount of outdoor air supply (< 15 CFM) under ASHRAE 62.1. Partners have asked whether buildings with only a small corridor and no other common spaces need to have a ventilation system installed in the corridor.
				<p>Resolution: The intent of Item 1.3 is to measure common space ventilation to meet ASHRAE 62.1 levels. While there is value to providing outdoor air to corridors, given design challenges from partners, where the building requires less than 15 CFM of outdoor air for the corridors and does not contain any of the other common spaces listed in Policy Record Entries 00551, 00552, and 00553, outdoor air is recommended but not required to be provided. Where systems are installed, they do need to be tested.</p> <p>Note that Policy Record Entries 00551, 00552, and 00553 adds a Footnote which states:</p> <p>“The following spaces require outdoor air ventilation: corridors, offices, break rooms, gyms, fitness centers, exercise rooms, lobbies, community rooms, meeting rooms, multi-purpose rooms, lounges, laundry rooms, swimming pools, daycares, classrooms, shared or commercial kitchens, shared dining rooms, and computer rooms.”</p> <p>Therefore, to reflect this change, Footnote 10 will be revised as follows: “While common spaces are not under the scope of ANSI / RESNET / ICC 380, the ventilation air flow and exhaust air flows in common spaces shall be measured in accordance with the procedures in ANSI / RESNET / ICC 380. The air flows may be measured by a Rater or a certified air-balancing contractor under the observation of a Rater. Where a system provides supply air that is a mix of return and outdoor air, and not 100% outdoor air, the outdoor air airflow shall be measured and compared to the total supply airflow to determine percentage of outdoor air supplied. This percentage shall be applied to airflow measured at supply registers to determine outdoor air provided for comparison to design airflow rates. <u>Where the building has total</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<u>corridor space $\leq 250 \text{ ft}^2$ and does not contain any of the other common spaces which require outdoor air per Item 2.2 of the National HVAC Design Report, outdoor air is not required to be provided to the corridor."</u>
00657	12/01/2023	Caribbean Rater Field Checklist, Version 1 (Rev. 03)	Clarification	Item 1.3 - Clarifying that the air-balancing contractor cannot use sampling
				Issue: Item 1.3 requires measurement of ventilation airflows in common spaces and Footnote 10 permits a certified air-balancing contractor to perform these measurements while under the observation of a Rater. The Caribbean Program Requirements is clear when Raters are allowed to used sampling, but does not directly address whether Raters can still use sampling when observing the contractor's measurements.
				<p>Resolution: EPA recognizes that this allowance in Footnote 10 could be clarified to reflect EPA's intent that only the Rater may use sampling for this Item; and that when the Rater is observing a certified air-balancing contractor performing the test sampling is not permitted.</p> <p>Footnote 10 will be revised as follows:</p> <p>10. While common spaces are not under the scope of ANSI / RESNET / ICC 380, the ventilation air flow and exhaust air flows in common spaces shall be measured in accordance with the procedures in ANSI / RESNET / ICC 380. The air flows may be measured by a Rater or a certified air-balancing contractor under the observation of a Rater. <u>Sampling is only permitted where airflows are measured directly by the Rater.</u> Where a system provides supply air that is a mix of return and outdoor air, and not 100% outdoor air, the outdoor air airflow shall be measured and compared to the total supply airflow to determine percentage of outdoor air supplied. This percentage shall be applied to airflow measured at supply registers to determine outdoor air provided for comparison to design airflow rates.</p>
00560	12/01/2023	Caribbean Rater Field Checklist, Version 1 (Rev. 03)	Change	Item 1.9 – Adding alternative metrics to meet fan motor efficiency requirement
				Issue: Given the challenge and time it can take to verify that certain central exhaust fan motors have efficiencies equivalent to NEMA Premium motors, some Partners have asked whether other equivalent metrics could be used to meet Item 1.9.
				Resolution: EPA agrees that other metrics that can evaluate fan performance in an equivalent way should be added in order to reduce the level of effort to meet this efficiency requirement. EPA has identified two equivalent metrics to the current requirement of a NEMA Premium

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>efficiency standard. First is a fan energy index (FEI) of 1.2, as defined by AMCA Standard 208. Second is a fan efficacy of 1.1 CFM/Watt determined by either field measurements or design conditions.</p> <p>A new footnote will be added to Item 1.9 to reflect these alternative metrics as follows:</p> <p>“As an alternative to meeting or exceeding the efficiency standards for NEMA Premium motors, documentation that an exhaust fan motor has a fan energy index (FEI) ≥ 1.2 at the design point of operation OR a fan efficacy ≥ 1.1 CFM/Watt is permitted.”</p>
00687	12/01/2023	Caribbean Rater Field Checklist, Version 1 (Rev. 03)	Change	<p>Item 1.10.2 – Minimum separation distance reduced between air inlets and outlets of exhaust ventilation systems</p>
				<p>Issue: Partners have indicated challenges in locating dwelling unit outdoor air inlets on exterior walls of multifamily buildings and Townhouses that are at least 10 ft from the outlets of dwelling unit exhaust systems given the proximity to adjacent dwelling units and limited exterior wall area to locate intakes and outlets. A reduced separation distance would reduce the barrier to providing multifamily dwelling units and Townhouses with a dedicated supply of outdoor air.</p>
				<p>Resolution: EPA agrees that reducing the minimum required separation distance between air inlets and the outlets of both exhaust dwelling unit mechanical ventilation systems and local mechanical exhaust systems would increase the ability of project teams to design systems that provide outdoor air directly to multifamily dwelling units and Townhouses. Note that the minimum required separation distance between air inlets and other known sources of contamination (e.g., combustion appliance vent terminations, vehicles) will remain the same.</p> <p>In considering this revision, it was also observed that the related footnotes should be re-organized to improve clarity.</p> <p>It was also observed that the current allowance for “balanced ventilation systems” to use smaller spacing requirements if instructed by the manufacturer should be more specific to balanced systems from one manufacturer, such as ERV’s or HRV’s, and should not be more broadly available to separate systems that may be ‘balanced’, but won’t have a single manufacturer’s instructions to reference.</p> <p>Therefore, Footnote 17 and 18 will be revised as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>17. <u>Without proper maintenance, ventilation air inlet screens often become filled with debris. Therefore, EPA recommends, but does not require, that these ventilation air inlets be located so as to facilitate access and regular service by the building owner or maintenance staff. Ventilation air inlets that are only visible via rooftop access are exempted from Item 1.10 and the Rater shall mark "N/A". The outlet and inlet of balanced ventilation systems shall meet these spacing requirements unless manufacturer instructions indicate that a smaller distance may be used. However, if this occurs the manufacturer's instructions shall be collected for documentation purposes.</u></p> <p>18. <u>Without proper maintenance, ventilation air inlet screens often become filled with debris. Therefore, EPA recommends, but does not require, that these ventilation air inlets be located so as to facilitate access and regular service by the building owner or maintenance staff. Two alternatives to the required 10 ft. distance are provided: 1) inlets providing outdoor air to a dwelling unit are permitted to be ≥ 5 ft. of stretched-string distance from outlets of both exhaust dwelling-unit mechanical ventilation systems and local mechanical exhaust systems, and 2) the outlet and inlet of ERV's and HRV's may use a smaller distance if allowed by the manufacturer of the system. If the second alternative is used, the manufacturer's instructions shall be collected for documentation purposes.</u></p>
00519	12/16/2022	Caribbean Rater Field Checklist, Version 1 (Rev.03)	Change	<p>Item 2.1 – New allowance to use 50 CFM continuous kitchen exhaust for Dwelling Units and Sleeping Units</p> <p>Issue: Partners have noted several challenges with the current policy requiring ≥ 5 kitchen air changes per hour for continuous kitchen exhaust systems.</p> <p>Continuous kitchen exhaust systems provided through a central riser are often used in high-rise multifamily buildings due to spacing restrictions for wall exhausts, challenges designing intermittent systems in a central riser with a fixed shaft size but fluctuating airflow, and codes that either require make-up air if exhaust exceeds certain rates or require smoke/fire dampers for ducts that exceed certain sizes.</p> <p>The current policy presents pragmatic challenges and can result in excessive energy costs. The airflow rate equivalent to 5 kitchen air changes per hour is dependent on certain design elements that are not directly related to indoor air quality (e.g., the placement of cabinets). Therefore, calculations are required for each kitchen layout, often resulting in different required airflow rates for each dwelling unit. Furthermore, the resulting required airflow rate</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic								
				<p>can sometimes exceed the whole-dwelling ventilation rate required by ASHRAE 62.2, when coupled with a continuous bathroom exhaust system, resulting in higher energy costs.</p> <p>Resolution: To simplify the policy, an alternative will be added allowing a fixed minimum continuous kitchen exhaust rate of 50 CFM for Dwelling and Sleeping Units in multifamily buildings (but not Townhouses). This new alternative rate will be accompanied by a requirement that the fan or intake grille be located within 10 ft. of the edge of the range, as measured horizontally on the plan.</p> <p>The 50 CFM minimum continuous rate aligns with the requirements for kitchens in private dwellings in the 2021 International Mechanical Code and equates to 5 kitchen air changes per hour for an approximately 70 sq. ft. kitchen with an 8.75 ft ceiling.</p> <p>To reflect this change, Item 2.1 will be revised as follows:</p> <table><tr><th colspan="2">Location</th><th>Continuous Rate</th></tr><tr><td rowspan="2">2.1 Kitchen</td><td>Airflow</td><td>≥ 5 ACH, based on kitchen volume ^{22, 23} (Alternative in Fn. 22)</td></tr><tr><td>Sound</td><td>Recommended: ≤ 1 sone</td></tr></table> <p>Footnote 22 will be revised as follows: “Where 5 ACH is selected, kitchen volume shall be determined by drawing the smallest possible rectangle on the floor plan that encompasses all cabinets, pantries, islands, peninsulas, ranges / ovens, and the kitchen exhaust fan, and multiplying by the average ceiling height for this area. In addition, the continuous kitchen exhaust rate shall be ≥ 25 CFM, per 2009 IRC Table M1507.3, regardless of the rate calculated using the kitchen volume. Cabinet volume shall be included in the kitchen volume. <u>As an alternative to 5 ACH for Dwelling Units and Sleeping Units (but not Townhouses), 50 CFM of continuous exhaust is permitted to be used, regardless of kitchen volume. In such cases, the edge of the exhaust fan or intake grille shall be located within 10 ft of the edge of the range, as measured horizontally on the floor plan.</u>”</p>	Location		Continuous Rate	2.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume ^{22, 23} (Alternative in Fn. 22)	Sound	Recommended: ≤ 1 sone
Location		Continuous Rate										
2.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume ^{22, 23} (Alternative in Fn. 22)										
	Sound	Recommended: ≤ 1 sone										
00700	12/01/2023	Caribbean Rater Field	Clarification	Items 7.4 and 7.6 – Updating ‘doorsweep’ to ‘door seal’ to align with Standard 380 language								

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Checklist, Version 1 (Rev. 03)		<p>Issue: Items 7.4 and 7.6 mention a “doorsweep” as a requirement for air sealing doors, and partners have asked for clarification on the use of this term. The intent of these Items are based on ANSI / RESNET / ICC Standard 380 that specifies the presence of a “door seal” to minimize air leakage between the door and door frame. Therefore, the language in Items 7.4 and 7.6 will be updated to align with Standard 380.</p> <p>Resolution: In order to align with the language in ANSI / RESNET / ICC Standard 380, Item 7.4 will be updated as follows:</p> <p>“Doors adjacent to unconditioned space (e.g., attics, garages, basements, unconditioned living space) or ambient conditions made substantially air-tight with doorsweep <u>door seal</u> and weatherstripping or equivalent gasket.”</p> <p>Similarly, Item 7.6 will be updated as follows:</p> <p>“Doors serving as a unit entrance from a corridor/stairwell made substantially air-tight with doorsweep <u>door seal</u> and weatherstripping or equivalent gasket.”</p>
00713	02/15/2024	Caribbean Rater Field Checklist, (Version 1, Rev. 03)	Change	<p>Item 8.1 – Annual Solar Fraction to be determined using US DOE Draw Profile reflective of the dwelling units and sleeping units</p> <p>Issue: Several partners have reported challenges meeting the solar fraction required by this program version. They note that the SRCC OG-300 Draw Pattern, which is required to be used when determining the annual solar fraction, is based upon hot water consumption of 64 gallons per day, while a typical dwelling or sleeping unit in the Caribbean or Pacific is likely to use considerably less. This is, in part, due to warm water inlet temperatures, which result in the need for less heated water to achieve desired fixture outlet temperatures. Therefore, systems that achieve a Solar Fraction $\geq 87\%$ at the SRCC OG-300 Draw Pattern are typically oversized, making them prone to overheating issues. The partners suggested that determining the solar fraction using alternative US DOE Draw Profiles that are more appropriate to the needs of the dwelling or sleeping unit would result in better-performing systems.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>To estimate the actual hot water needs of a typical dwelling unit in the Caribbean and Pacific, EPA used ANSI / RESNET / ICC 301-2022, which estimates daily service hot water use in Equation 4.2-29. The maximum daily use for each home configuration was identified and then mapped to the closest US DOE Draw Profile, which was generally the Low or Medium profile depending on the number of bedrooms in the dwelling unit.</p> <p>Resolution: The policy will be revised to specify that the annual solar fraction must be determined using a US DOE Draw Profile that is reflective of the home, in lieu of the SRCC OG-300 Draw Pattern. Specifically, Footnote 33 will be revised as follows:</p> <p>“Solar fraction shall be determined using the ICC-SRCC OG-300 Solar Water Heating System Certification Program’s annual solar fraction rating (SF_A) for the rating location closest to the building. <u>For dwelling units or sleeping units with ≤ 3 bedrooms, determine SF_A using the Low U.S. DOE Draw Pattern; otherwise, use Medium</u> and for the SRCC OG-300 Draw Pattern. A solar water heater system with a Solar Fraction ≥ 87% that has no backup water heater is permitted to be used. For the OG-300 directory, visit https://solar-rating.org/directories/certified-companies/.”</p>
00557	12/01/2023	Caribbean Rater Field Checklist, Version 1 (Rev. 03)	Change	Item 10.1 – Remove heat trap inspection item
				<p>Issue: This Item, which requires that in-unit storage water heaters are confirmed to have a heat trap by visual inspection or on their AHRI certificate, was adapted from a requirement in the previous Multifamily High-Rise (MFHR) program, which required compliance with ASHRAE 90.1-2007, Section 7.4. However, this is not a requirement in residential energy codes, nor is it a requirement in the Single-Family New Homes (SFNH) program, and in today’s market where check valves/heat traps are almost always integrated with storage tanks with vertical inlets, this Item may be a redundant requirement which could be removed.</p>
				<p>Resolution: Since integrated heat traps/check valves are now commonly integrated to the inlet and outlet that are at the top of storage water heaters, and in order to better align the MFNC program with the SFNH program, the Item will no longer be required and will be removed.</p>
00634	12/01/2023	Caribbean Rater Field Checklist,	Change	Item 10.2– Removal of Rater-measured hot water delivery temperature
				<p>Issue: Partners have pointed out that ENERGY STAR Single Family New Homes does not have a requirement for rater-measured hot water delivery temperatures, and that this is a time-</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Version 1 (Rev. 03)		<p>consuming task in multifamily buildings. Partners have reported that central systems generally have delivery temperatures below 125°F.</p> <p>Resolution: Rater measured hot water delivery temperatures rarely exceeds 125°F on central systems, and this is a time-consuming task that deviates from the single-family new homes program. Therefore, EPA will remove MFNC Rater Field Checklist Item 10.2, and the associated Footnote 34.</p>
00623	12/01/2023	Caribbean Rater Field Checklist, Version 1, (Rev. 03)	Change	<p>Item 11.1.1 – allow programmed timers for common space lighting controls</p> <p>Issue: A Partner asked whether a programmed timer could be used instead of the occupancy sensors or automatic bi-level lighting controls required for common spaces by the Item, as this fitted better with the needs of the hearing-impaired building occupants.</p> <p>Resolution: Appendix G of ASHRAE 90.1-2010 allows credit for programmed timers in Table G3.2. Therefore, these still meet the program’s intent, and EPA will allow the use of these in lieu of occupancy sensors or automatic bi-level lighting controls.</p> <p>Accordingly, the Item will be revised as follows:</p> <p>“ERI and Prescriptive Path: All common spaces (including shared garages), except the building lobby, mechanical equipment rooms, and where automatic shutoff would endanger the safety of occupants, have occupancy sensors, <u>programmed timers</u>, or automatic bi-level lighting controls installed and operation has been verified.”</p>
00546	05/01/2023	Caribbean Rater Field Checklist, Version 1 (Rev. 03)	Clarification	<p>Signature Block - Pre-drywall inspection is always required; reinforce purpose of pre-drywall and final inspection</p> <p>Issue: Partners have periodically asked if there are alternative verification protocols available when a developer installs drywall before a dwelling unit has had a pre-drywall inspection by the Rater.</p> <p>Step 3 of the ENERGY STAR Certification Process for the Caribbean Program Requirements states that “the Rater must review all items on the Caribbean checklists.. In the event that an item on a Caribbean checklist cannot be inspected by the Rater, the project also cannot earn the ENERGY STAR.”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>In addition, ANSI / RESNET / ICC 301 requires visual inspection of multiple Minimum Rated Features per Normative Appendix B, including framing members and wall insulation installation, which cannot be completed if the features are concealed.</p> <p>Given these current policies, the only recourse when drywall has been installed prior to visual verification is to remove the drywall to allow the inspection of Minimum Rated Features of ANSI / RESNET / ICC 301 as well as the mandatory features of the ENERGY STAR Multifamily New Construction program (e.g. minimum insulation levels, air sealing details, and ductwork installed without kinks and bends). No alternative protocol has been identified that will deliver the same certainty as a pre-drywall inspection that all program requirements have been met.</p> <p>Resolution: To reinforce EPA's current policy that a pre-drywall inspection is always required if drywall is to be installed, and that drywall must be entirely removed to fully verify all Items if it has been installed prior to the inspection, a new Footnote will be added after the "Rater Pre-Drywall Inspection Date(s)" field, as follows:</p> <p><u>"Any Item that will be concealed by drywall (e.g., wall insulation) must be verified during the pre-drywall inspection."</u></p> <p><u>If drywall is installed prior to the inspection, then it must be entirely removed to fully verify all Items. It is not sufficient to remove only portions of drywall to inspect a subset of areas. Furthermore, it is not acceptable to complete a Sampled Rating on a unit that has missed the pre-drywall inspection. Additional information is available in the Technical Bulletin: Pre-Drywall Inspection Is Always Required."</u></p> <p>While not directly related to the pre-drywall clarification, a new Footnote will also be added after the "Rater Final Inspection Date(s)" field to clarify the purpose of that inspection, as follows:</p> <p><u>"Some Items can typically only be verified at a later stage of construction than when the pre-drywall inspection occurs (e.g., bath fan airflow). Any Item that has not been verified during the pre-drywall inspection must be verified prior to or during the final inspection."</u></p>
00604	12/01/2023		Change	Footnote 4 – Sunset of sampling protocols for Townhouses

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Caribbean Rater Field Checklist, Version 1 (Rev. 03)		<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC) program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p> <p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Footnote 4:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by a HCO or MRO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>As stated in the Caribbean Program Requirements, for Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, Raters who operate under an MRO or an HCO Sampling Protocol</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p><u>are permitted to verify any Checklist Item designated “Rater Verified” using an MRO or HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling to complete this Checklist.”</u></p> <p>Note that the Caribbean Rater Field Checklist did not previously include language about sampling, but it is being added here to align with the National Rater Field Checklist and with the Single-Family New Homes program.</p>
00648	12/01/2023	Caribbean Rater Design Review Checklist (Version 1 / 1.1 / 1.2, Rev. 03)	Change	Partnership Status Section – Verification of Energy Rating Company partnership, Rater training and Rater credential
				<p>Issue: All National and Regional Program Requirements documents include partnership, training, and credentialing requirements for Energy Rating Companies (ERC’s) and Raters, as clarified in Policy Record 00xxx. These requirements are not reflected on the Rater checklists, which may result in Raters inadvertently overlooking them.</p>
				<p>Resolution: To ensure that ERC and Rater partnership, training, and credentialing requirements are verified, two new Items will be added at the end of Section 1 - Partnership Status.</p> <p>The first new Item will read as follows:</p> <p>“Rater has verified and documented that their company has an ENERGY STAR partnership agreement using www.energystar.gov/ResPartnerDirectory.”</p> <p>A new footnote will be associated with this Item, as follows:</p> <p>“Raters are only required to document the partnership status of their company once, for the first home that the Rater certifies for them.”</p> <p>The second new Item will read as follows:</p> <p>“Rater(s) signing checklists attest that they have completed EPA-recognized training and are credentialed by a Home Certification Organization (HCO) or meet the credential requirements of a Multifamily Review Organization (MRO).”</p>
00671	12/01/2023	Caribbean Rater Design	Change	Partnership Status Section – Verification that all units and common spaces meet program requirements

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Review Checklist, Version 1 (Rev. 03)		<p>Issue: All National and Regional Program Requirements documents include the requirement for all units and common spaces in the building to meet the Program Requirements. This requirement is not reflected on the Rater checklists, which may result in Raters inadvertently overlooking it.</p> <p>Resolution: To ensure that all units and common spaces meet the requirements, a new Item and footnote will be added at the end of Section 1 - Partnership Status.</p> <p>The new Item will read as follows:</p> <p>“Certification is being pursued for the whole building; all units and common spaces in the building are designed to meet the requirements below.”</p> <p>The new Footnote associated with this Item will read as follows:</p> <p>“The whole building must be submitted to the HCO or MRO for certification after required verification is complete for all units and common spaces, unless using the conditional certification process described in the ENERGY STAR Certification Process in the applicable Program Requirements.”</p>
00552	12/01/2023	Caribbean Rater Design Review Checklist, Version 1 (Rev. 03)	Refinement	Section 2 – Relocation of Footnote allowing prior Revisions of HVAC Design Report
				<p>Issue: All National and Regional Program requirements contain the following Footnote, which allows partners to use the National HVAC Design Report from prior Revisions:</p> <p>“Buildings certified under Rev. 01, Rev. 02 and Rev. 03 of the program requirements are permitted to use any version of the National HVAC Design Report.”</p> <p>There have been limited changes to that document across these Revisions. Therefore, the intent of this allowance is to reduce the burden on HVAC Designers and Raters by not requiring them to produce and collect new editions of the report, which would be substantially the same as the documentation that they already have.</p> <p>The current placement of the allowance is not optimal given that partners interact with the Caribbean Rater Design Review Checklist more often than the program requirements documents.</p>
				<p>Resolution: To increase the visibility and usage of the allowance by partners, Footnote 5 of the Caribbean Rater Design Review Checklist will be updated by adding this allowance at</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				the end. The existing footnote will be removed from all National and Regional Program requirements documents.
00712	02/15/2024	Caribbean Rater Design Review Checklist, (Version 1, Rev. 03)	Change	Item 3.2 – Annual Solar Fraction to be determined using US DOE Draw Profile reflective of the dwelling units and sleeping units
				<p>Issue: Several partners have reported challenges meeting the solar fraction required by this program version. They note that the SRCC OG-300 Draw Pattern, which is required to be used when determining the annual solar fraction, is based upon hot water consumption of 64 gallons per day, while a typical dwelling or sleeping unit in the Caribbean or Pacific is likely to use considerably less. This is, in part, due to warm water inlet temperatures, which result in the need for less heated water to achieve desired fixture outlet temperatures. Therefore, systems that achieve a Solar Fraction $\geq 87\%$ at the SRCC OG-300 Draw Pattern are typically oversized, making them prone to overheating issues. The partners suggested that determining the solar fraction using alternative US DOE Draw Profiles that are more appropriate to the needs of the dwelling or sleeping unit would result in better-performing systems.</p> <p>To estimate the actual hot water needs of a typical dwelling unit in the Caribbean and Pacific, EPA used ANSI / RESNET / ICC 301-2022, which estimates daily service hot water use in Equation 4.2-29. The maximum daily use for each home configuration was identified and then mapped to the closest US DOE Draw Profile, which was generally the Low or Medium profile depending on the number of bedrooms in the dwelling unit.</p>
				<p>Resolution: The policy will be revised to specify that the annual solar fraction must be determined using a US DOE Draw Profile that is reflective of the home, in lieu of the SRCC OG-300 Draw Pattern. Specifically, Footnote 7 will be revised as follows:</p> <p>“Solar fraction shall be determined using the ICC-SRCC OG-300 Solar Water Heating System Certification Program’s annual solar fraction rating (SF_A) for the rating location closest to the building. <u>For dwelling units or sleeping units with ≤ 3 bedrooms, determine SF_A using the Low U.S. DOE Draw Pattern; otherwise, use Medium</u> and for the SRCC OG-300 Draw Pattern. A solar water heater system with a Solar Fraction $\geq 87\%$ that has no backup</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				water heater is permitted to be used. For the OG-300 directory, visit https://solar-rating.org/directories/certified-companies/ .”
00603	12/01/2023	Caribbean Rater Design Review Checklist, Version 1 (Rev. 03)	Change	Footnote 3 – Sunset of sampling protocols for Townhouses
				<p>Issue: In July 2023, EPA held a stakeholder feedback period for a proposed sunset of sampling for the ENERGY STAR Single-Family New Homes (SFNH) program and for all townhouses.</p> <p>When first conceived, the sampling allowance was designed, in part, to broaden the reach of the ENERGY STAR program. Today, however, the use of sampling is prevalent only in a single market (Arizona), and outside of that state, more than 95% of single-family certifications in 2022 were based on individual inspections of each home.</p> <p>Because the data indicate that the national market at large has moved to individual inspections of homes, EPA believes it is appropriate to sunset the use of sampling for the ENERGY STAR Single-Family New Homes program.</p> <p>To provide greater assurance that all program requirements have been met in every certified home, EPA proposed to sunset the allowance to use sampling inspection protocols in the ENERGY STAR Single-Family New Homes program for homes permitted on or after 01/01/2025.</p> <p>Further, townhouses were proposed to not be allowed to use sampling inspection protocols, even when certified using the ENERGY STAR Multifamily New Construction (MFNC) program. However, all other building types eligible to be certified using the ENERGY STAR MFNC program would continue to be permitted to use sampling inspection protocols.</p> <p>EPA posted a response to comments and a finalized policy announcement in alignment with the proposal in the Fall of 2023.</p>
				<p>Resolution: To reflect the sunset of the allowance to use sampling inspection protocols for Townhouses permitted on or after 01/01/2025, the following sentence will be added to Footnote 3:</p> <p>“The term ‘Rater’ refers to the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or an equivalent designation as determined by a HCO or MRO;</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/mftraining.</p> <p><u>As stated in the Caribbean Program Requirements, for Townhouses, all items shall be verified for each certified home and sampling protocols shall not be used. For other multifamily building types, Raters who operate under an MRO or an HCO Sampling Protocol are permitted to verify any Checklist Item designated "Rater Verified" using an MRO or HCO-approved sampling protocol. No parties other than Raters are permitted to use sampling to complete this Checklist."</u></p> <p>Note that the Caribbean Rater Design Review Checklist did not previously include language about sampling, but it is being added here to align with the National Rater Field Checklist and with the Single-Family New Homes program.</p>
00635	12/01/2023	HVAC Design Report (Version 1 / 1.1 / 1.2, Rev. 03)	Clarification	Item 2.1- Addition of 150% limit of ASHRAE 62.2 to dwelling unit ventilation airflow design rate
				<p>Issue: Item 2.1, specifies the dwelling unit ventilation airflow rate and run-time requirements that must be met.</p> <p>In the Prescriptive Path there is a limit on a maximum rate that can be specified; generally, 150% of ASHRAE 62.2-2013 based on Item 4a.3 and Item 4b.2.1 of the MFNC Rater Design Review Checklist.</p> <p>This requirement is missing from the current language in Item 2.1 and could be added to make the Designer more aware of this limit.</p>
				<p>Resolution: To increase clarity of requirements and potentially reduce confusion to Designers. Item 2.1 will be revised as follows:</p> <p>"Dwelling unit ventilation airflow design rate & run-time meet the requirements of Section 4 of ASHRAE 62.2⁷</p> <p><u>Prescriptive Path Only: Rates shall not exceed 2013 rates by more than 50%."</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>A new Footnote will also be associated with this Item which will say:</p> <p>“Where the Exhaust Fan Type in Section 2b indicates “Continuous” for both Bathroom and Kitchen, the Rater may use this equation to determine the maximum ventilation rate allowed: 30 CFM x number of bathrooms + 75 CFM.”</p>
00640	12/01/2023	National HVAC Design Report (Version 1 / 1.1 / 1.2, Rev. 03)	Change	Items 2.2, 2.8 and 2.9 – Common spaces requiring outdoor air
				<p>Issue: Currently, the Rater Design Review Checklist does not require the Rater to confirm that the HVAC Design Report includes all of the common spaces that require outdoor supply air. If the designer does not report a particular common space in the building, then that space potentially would not meet ASHRAE 62.1.</p>
				<p>Resolution: The intent of Items 2.2, 2.8 and 2.9 is for common spaces to meet ASHRAE 62.1 required rates. For clarity, EPA will list the spaces in multifamily buildings that require outdoor air and the Rater will verify they are included on the HVAC Design Report. If there is a space in ASHRAE 62.1 that is not listed, EPA did not anticipate that space would be in a Multifamily building, and ventilation is recommended but not required.</p> <p>A new Footnote will be added to Items 2.2, 2.8 and 2.9:</p> <p>“The following spaces require outdoor air ventilation: corridors, offices, break rooms, gyms, fitness centers, exercise rooms, lobbies, community rooms, meeting rooms, multi-purpose rooms, lounges, laundry rooms, swimming pools, daycares, classrooms, shared or commercial kitchens, shared dining rooms, and computer rooms.”</p>
00518	12/16/2022	HVAC Design Report, Version 1 / 1.1 (Rev. 03)	Change	Item 2b – New allowance to use 50 CFM continuous kitchen exhaust for Dwelling Units and Sleeping Units
				<p>Issue: Partners have noted several challenges with the current policy requiring ≥ 5 kitchen air changes per hour for continuous kitchen exhaust systems.</p> <p>Continuous kitchen exhaust systems provided through a central riser are often used in high-rise multifamily buildings due to spacing restrictions for wall exhausts, challenges designing intermittent systems in a central riser with a fixed shaft size but fluctuating airflow, and codes</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic								
				<p>that either require make-up air if exhaust exceeds certain rates or require smoke/fire dampers for ducts that exceed certain sizes.</p> <p>The current policy presents pragmatic challenges and can result in excessive energy costs. The airflow rate equivalent to 5 kitchen air changes per hour is dependent on certain design elements that are not directly related to indoor air quality (e.g., the placement of cabinets). Therefore, calculations are required for each kitchen layout, often resulting in different required airflow rates for each dwelling unit. Furthermore, the resulting required airflow rate can sometimes exceed the whole-dwelling ventilation rate required by ASHRAE 62.2, when coupled with a continuous bathroom exhaust system, resulting in higher energy costs.</p>								
				<p>Resolution: To simplify the policy, an alternative will be added allowing a fixed minimum continuous kitchen exhaust rate of 50 CFM for Dwelling and Sleeping Units in multifamily buildings (but not Townhouses). This new alternative rate will be accompanied by a requirement that the fan or intake grille be located within 10 ft. of the edge of the range, as measured horizontally on the plan.</p> <p>The 50 CFM minimum continuous rate aligns with the requirements for kitchens in private dwellings in the 2021 International Mechanical Code and equates to 5 kitchen air changes per hour for an approximately 70 sq. ft. kitchen with an 8.75 ft ceiling.</p> <p>To reflect this change, Item 2b will be revised as follows:</p> <table><tr><th colspan="2">Location</th><th>Continuous Rate</th></tr><tr><td rowspan="2">Kitchen</td><td>Airflow</td><td>≥ 5 ACH, based on kitchen volume ^{19, 20, 21} <u>(Alternative in Fn. 19)</u></td></tr><tr><td>Sound</td><td>Recommended: ≤ 1 sone</td></tr></table> <p>Footnote 19 will be revised as follows: “Where 5 ACH is selected, kitchen volume shall be determined by drawing the smallest possible rectangle on the floor plan that encompasses all cabinets, pantries, islands, peninsulas, ranges / ovens, and the kitchen exhaust fan, and multiplying by the average ceiling height for this area. In addition, the continuous kitchen exhaust rate shall be ≥ 25 CFM, per 2009 IRC Table M1507.3, regardless of the rate calculated using the kitchen volume. Cabinet volume shall be included in the kitchen volume.</p>	Location		Continuous Rate	Kitchen	Airflow	≥ 5 ACH, based on kitchen volume ^{19, 20, 21} <u>(Alternative in Fn. 19)</u>	Sound	Recommended: ≤ 1 sone
Location		Continuous Rate										
Kitchen	Airflow	≥ 5 ACH, based on kitchen volume ^{19, 20, 21} <u>(Alternative in Fn. 19)</u>										
	Sound	Recommended: ≤ 1 sone										

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<u>As an alternative to 5 ACH for Dwelling Units and Sleeping Units (but not Townhouses), 50 CFM of continuous exhaust is permitted to be used, regardless of kitchen volume. In such cases, the edge of the exhaust fan or intake grille shall be located within 10 ft of the edge of the range, as measured horizontally on the floor plan."</u>
00561	12/01/2023	National HVAC Design Report, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Item 2.22 – Adding alternative metrics to meet fan motor efficiency requirement
				Issue: Given the challenge and time it can take to verify that certain central exhaust fan motors have efficiencies equivalent to NEMA Premium motors, some Partners have asked whether other equivalent metrics could be used to meet Item 2.22.
				<p>Resolution: EPA agrees that other metrics that can evaluate fan performance in an equivalent way should be added in order to reduce the level of effort to meet this efficiency requirement. EPA has identified two equivalent metrics to the current requirement of a NEMA Premium efficiency standard. First is a fan energy index (FEI) of 1.2, as defined by AMCA Standard 208. Second is a fan efficacy of 1.1 CFM/Watt determined by either field measurements or design conditions.</p> <p>A new footnote will be added to Item 2.22 to reflect these alternative metrics as follows:</p> <p>"As an alternative to meeting or exceeding the efficiency standards for NEMA Premium motors, documentation that an exhaust fan motor has a fan energy index (FEI) ≥ 1.2 at the design point of operation OR a fan efficacy ≥ 1.1 CFM/Watt is permitted."</p>
00684	12/01/2023	National HVAC Design Report, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Item 2.24 – Minimum separation distances reduced between air inlets and outlets of exhaust ventilation systems
				Issue: HVAC designers have indicated challenges in locating dwelling unit outdoor air inlets on exterior walls of multifamily buildings and Townhouses that are at least 10 ft from the outlets of dwelling unit exhaust systems given the proximity to adjacent dwelling units and limited exterior wall area to locate intakes and outlets. A reduced separation distance would reduce the barrier to providing multifamily dwelling units and Townhouses with a dedicated supply of outdoor air.
				Resolution: EPA agrees that reducing the minimum required separation distance between air inlets and the outlets of both exhaust dwelling unit mechanical ventilation systems and local

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>mechanical exhaust systems would increase the ability of project teams to design systems that provide outdoor air directly to multifamily dwelling units and Townhouses. Note that the minimum required separation distance between air inlets and other known sources of contamination (e.g., combustion appliance vent terminations, vehicles) will remain the same.</p> <p>Therefore, a footnote will be added to Item 2.24 as follows:</p> <p><u>Two alternatives to the required 10 ft. distance are provided: 1) inlets providing outdoor air to a dwelling unit are permitted to be \geq 5 ft. of stretched-string distance from outlets of both exhaust dwelling-unit mechanical ventilation systems and local mechanical exhaust systems, and 2) the outlet and inlet of ERV's and HRV's may use a smaller distance if allowed by the manufacturer of the system. If the second alternative is used, the manufacturer's instructions shall be collected for documentation purposes.</u></p>
00554	12/01/2023	National HVAC Design Report, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	<p>Section 2 – Documenting multiple acceptable combinations of a design ventilation airflow rate and run-time is allowed</p>
				<p>Issue: The National HVAC Design Report is currently structured to accommodate a single combination of a design ventilation airflow rate and run-time per plan. Partners have noted that some HVAC designers prefer to specify a range of ventilation run-time and airflow combinations that would be acceptable, rather than a single combination, and have asked whether that is acceptable.</p>
				<p>Resolution: Footnote 4 already allows designers to provide supplemental documentation as needed to document the system design. Therefore, designers are permitted to provide multiple combinations of a design ventilation airflow rate, run-time per cycle, and cycle time, all of which are acceptable to the designer.</p> <p>It is worth noting that when multiple combinations are provided, the Rater will be required to first assess the run-time setting of the installed system and use that to determine the corresponding design ventilation rate. The Rater-measured ventilation rate then must fall within the program-specified tolerance relative to that design ventilation rate. In contrast, when a single combination of a design ventilation airflow rate, run-time per cycle, and cycle time are documented on the National HVAC Design Report, the Rater is not required to verify run-time of the ventilation system, because the design ventilation airflow rate is known.</p> <p>To reflect this, Footnote 4 of the National HVAC Design Report will be updated as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>“The dwelling-unit mechanical ventilation system shall have at least one supply or exhaust fan with associated ducts and controls. Local exhaust fans are allowed to be part of a dwelling-unit mechanical ventilation system. Designers may provide supplemental documentation as needed to document the system design. <u>For example, for Item 2.7, designers are permitted to provide multiple combinations of a design ventilation airflow rate, run-time per cycle, and cycle time. When multiple combinations are provided, the Rater will be required to first assess the run-time setting of the installed system and use that to determine the corresponding design ventilation rate. The Rater-measured ventilation rate then must fall within the program-specified tolerance relative to that design ventilation rate.</u>”</p>
00529	05/01/2023	National HVAC Design Report (Rev.03)	Clarification	<p>Section 3 – Clarifying the capacity of systems that result in an exemption from dwelling unit load calculations</p>
				<p>Issue: Section 3 of the HVAC Design Report requires that load calculations are performed for dwelling units if served by ‘ducted split AC, unitary AC, ASHP, WSHP, GSHP, and furnaces’. Footnote 25 adds additional details regarding capacity and duct length, but does not stipulate whether the maximum capacity referenced refers to the indoor unit or the outdoor unit when the system is a ducted multi-split heat pump.</p>
				<p>Resolution: While ENERGY STAR always recommends performing dwelling unit load calculations, regardless of system type selected, the current footnote is not clear regarding which capacity is used to determine if the exemption applies.</p> <p>Footnote 25 will be revised as follows: “This section / item applies to split air conditioners, unitary air conditioners, air-source heat pumps, and water-source (i.e., geothermal) heat pumps up to 65 kBtuh with forced-air distribution systems and to furnaces up to 225 kBtuh with forced-air distribution system serving individual dwelling units. Forced-air distribution systems are those that supply air through ductwork exceeding 0 ft. in length. <u>For VRF air conditioners or heat pumps, the capacity of the system is the rated cooling capacity of the outdoor unit.</u> This section / item is recommended, but not required for non-ducted systems, such as non-ducted mini-splits, multi-splits, PTHP’s, or PTAC’s.”</p>
00522	12/16/2022	HVAC Design Report,	Change	<p>Item 4.2 – Allowing electric-resistance space heating as supplement to heat pumps</p>
				<p>Issue: Item 4.2 states clearly that electric resistance space heating is not installed in dwelling units when following the Prescriptive Path. Given that prohibition, it can be</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Version 1 / 1.1 / 1.2 (Rev. 03)		<p>challenging for project teams to select a heat pump that has no electric-resistance for auxiliary space heating or for defrost. Some Partners may also read this requirement to mean standalone electric resistance space heating, like baseboards, are prohibited, but auxiliary heat to a heat pump is permitted. While it is understood that this limitation is removed in the modeling paths where this heating energy is captured by the model, some nominal allowance for electric resistance heating in dwelling units would remove a barrier to choosing the Prescriptive Path.</p> <p>Resolution: Standalone electric resistance space heating systems will continue to not be permitted in the Prescriptive Path. EPA recognizes that some amount of supplemental heating should be permitted where internal to a heat pump, when limited through proper controls.</p> <p>Footnote 36 will be revised as follows: <u>“These requirements apply to systems that provide primary space heating and cooling. Heat pumps with internal supplemental electric space heating may use up to 3 kW of electric resistance heating per dwelling unit. This supplemental electric resistance heating may only be used when the heat pump cannot satisfy the thermostat setpoint or when the heat pump is operating in defrost mode. In addition, the programmable thermostat must include adaptive recovery technology. Electric resistance limitations do not apply to systems dedicated to heating outdoor air supplied by a mechanical ventilation system, as long as the space served is primarily heated by a non-electric-resistance system that meets the efficiency requirements noted in Exhibit X. Electric resistance limitations apply to garages, but do not apply to heated plenums meeting Item 4.37, or stairwells where automatic thermostatic controls prevent operation above 50°F.”</u></p> <p>This policy may be revisited to require additional requirements for heat pumps when new products or sizing guidance are available.</p>
00704	12/01/2023	National HVAC Design Report (Version 1 / 1.1 / 1.2, Rev. 03)	Change	<p>Item 4.2 & 4.3 – Allowing electric-resistance space heating as a supplement to heat pumps</p> <p>Issue: Items 4.2 and 4.3 states clearly that electric resistance space heating is not installed in dwelling units when following the Prescriptive Path, and that there are restriction for common spaces in the ERI Path. Given that prohibition, it can be challenging for project teams to select a heat pump that has no electric-resistance heating for emergencies or occasions where the heat pump capacity cannot meet the heating load. In common spaces under the ERI path, electric resistance heating must have a total heating capacity of 3.5 kW or less per enclosed</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>space. Some Partners may also read this requirement to mean standalone electric resistance space heating, like baseboards, are prohibited (or restricted in common spaces), but auxiliary heat to a heat pump is permitted.</p> <p>Resolution: Standalone electric resistance space heating systems will continue to not be permitted in dwelling units in the Prescriptive Path. The limit of 3.5 kW of electric resistance heating per enclosed space for common spaces in the ERI and Prescriptive Paths will be maintained.</p> <p>EPA recognizes that some amount of supplemental heating should be permitted when integral to a heat pump. EPA also recognizes that proper sizing and controls will significantly reduce the need for supplemental heating. EPA will therefore revise the requirement for dwelling units following the prescriptive path, and common spaces following the prescriptive and ERI paths, to allow supplemental electric resistance heating without restriction, but only when it is integral to a heat pump. EPA recommends, but does not require at this time, that heat pumps have controls to limit the use of back-up heat to heat pump failures or when the heat pump cannot meet the heating load, and that ENERGY STAR certified cold-climate heat pumps be used in Climate Zones 5 through 8.</p> <p>Therefore, Footnote 36 will be revised as follows:</p> <p><u>“Electric resistance limitations do not apply to heat pumps with integral supplemental or emergency electric resistance heating. EPA recommends but does not require that heat pumps have controls to limit the use of emergency or supplemental heat to heat pump failures or when the heat pump cannot meet the heating load. EPA also recommends but does not require that heat pumps in CZ 5-8 are ENERGY STAR certified cold-climate heat pumps. These requirements apply to systems that provide primary space heating and cooling. Electric resistance limitations do not apply to systems dedicated to heating outdoor air supplied by a mechanical ventilation system, as long as the space served is primarily heated by a non-electric resistance system that meets the efficiency requirements noted in Exhibit X. Electric resistance limitations apply to garages, but do not apply to heated plenums meeting Item 4.37, or stairwells where automatic thermostatic controls prevent operation above 50°F.”</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				This policy may be revisited to require additional requirements for heat pumps when new products or sizing guidance are available.
00563	12/01/2023	National HVAC Design Report, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Item 4.10 – AHRI Reference # to encompass indoor and outdoor components of AC / HP
				<p>Issue: Partners have asked for clarification about the requirement to report the AHRI Reference # in Item 4.10. Specifically, they have asked whether the number provided is intended to represent the rating of the combined performance of both the indoor and outdoor components of the system (e.g., the evaporator, condenser, and blower fan) or if the rating of just an individual component (e.g., the condenser) would be sufficient.</p> <p>The AHRI # is serving two purposes: 1) To document the rated efficiency being used in the energy rating; 2) To demonstrate that the indoor and outdoor components of the air conditioner or heat pump are designed to be used together.</p> <p>This goal is conveyed in Footnote 37 of the National HVAC Design Report, specifically regarding alternative documentation that must be provided when an AHRI # is not present: “If an AHRI Reference # is not available, OEM-provided documentation shall be attached with the rated efficiency. For residential split air conditioners and heat pumps, the rated efficiency shall be for the specific combination of indoor and outdoor components of the air conditioner or heat pump, along with confirmation that the two components are designed to be used together. If the AHRI Reference # is reported in Item 4.10 (e.g., heat pumps), the AHRI Reference # does not need to be listed again in Item 4.27.”</p> <p>This goal is stated even more clearly in the ANSI / RESNET / ACCA 310 HVAC Design Report, Footnote 31: “If an AHRI Reference Number is not available, OEM-provided documentation shall be collected with the rated efficiency of the equipment. If the equipment contains multiple components, the rated efficiency shall reflect the specific combination of indoor and outdoor components, along with confirmation from the OEM that the two components are designed to be used together.”</p> <p>Item 4.10 does not explicitly state what components the AHRI Reference Number needs to encompass, just what must be provided in the alternative documentation. However, the intent is for the AHRI # to also reflect the specific combination of indoor and outdoor components, which also conveys that the two components are designed to be used together.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To clarify the intent that the AHRI # reflect the specific combination of indoor and outdoor components used by the equipment, the following sentence will be added to the beginning of Footnote 37:</p> <p><u>“If the equipment contains multiple components, the AHRI Reference # shall represent the rated efficiency of the specific combination of indoor and outdoor components. EPA recommends, but does not require, that the rating also encompass the furnace when such a rating is available.”</u></p>
00659	12/01/2023	National HVAC Design Report, Version 1 / 1.1 / 1.2, (Rev. 03)	Refinement	<p>Items 4.11 and 4.28 – Minor wording change to maintain consistency with SFNH</p>
				<p>Issue: The Single-Family New Homes (SFNH) National HVAC Design Report is being revised to add flexibility to report both the rated efficiency value and metric. The Multifamily New Construction National HVAC Design Report already has this flexibility but requires minor revisions to maintain consistency in wording.</p>
				<p>Resolution: To maintain consistency in wording with the SFNH program, Items 4.11 and 4.28 will be revised as follows: <u>“Listed Rated efficiency”</u></p>
00654	12/01/2023	National HVAC Design Report Version 1 / 1.1 / 1.2 (Rev. 03)	Change	<p>Item 6.8 – Clarifying the central exhaust duct leakage test requirement</p>
				<p>Issue: Multiple partners have submitted questions that indicate the intent of Item 6.8 is not clear. The item requires duct leakage to be tested for central exhaust ductwork that serves four or more dwelling units.</p>
				<p>Resolution: EPA agrees that the Items and associated Footnote 52 could be improved to better convey the program’s intent.</p> <p>Footnote 52 will be revised as follows:</p> <p><u>“For the purpose of computing leakage allowance, at rough-in, the ‘exhaust fan flow’ shall be the lesser of the rated fan flow (i.e., nameplate rating) and at rough-in, 133% of the sum of the design exhaust airflow of the dwelling units that are exhausted by that central fan or at final, served by that fan. At final, the ‘exhaust fan flow’ shall be the lesser of the rated fan flow (i.e., nameplate rating) and 143% of the sum of the design exhaust airflow of the</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				dwelling units <u>served by that fan</u> that are exhausted by that central fan . <u>To calculate central exhaust duct leakage allowance</u> , EPA recommends using worksheet 3b of the Multifamily Workbook. This test is not required of central exhaust systems serving clothes dryers but is required for the central exhaust portion of balanced systems such as HRVs and ERVs.”
00679	12/01/2023	National HVAC Design Report, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	Footnote 7 – Adding guidance on mechanical ventilation formula to use in sleeping units
				<p>Issue: Partners have expressed confusion on how to determine the minimum mechanical ventilation air flow needed for dwelling-units and sleeping units to meet the requirement detailed in Item 1.2.</p> <p>The National Rater Field Checklists describes that sleeping units ‘may’ use the formula: “0.01 x Conditioned Floor Area + 7.5 x (number of beds)”</p> <p>The fact that sleeping units can use the formula but are not required to has caused partners confusion given that when the number of beds exceeds 8, the formula will have a higher ventilation requirement than when using Table 4.1a from ASHRAE 62.2. This guidance is also not currently contained in the National HVAC Design Report.</p>
				<p>Resolution: EPA’s intent is that any building with sleeping units is required to use the formula determined by the number of beds. Therefore, to clarify this requirement the language of Footnote 7 will be updated to ensure that buildings with sleeping units ‘must’ use the formula: “0.01 x Conditioned Floor Area + 7.5 x (number of beds)”</p> <p>Footnote 7 will be revised as follows: “Airflow design rates and run-times shall be determined using ASHRAE 62.2-2010, or later. Designers are permitted, but not required, to use published addenda and/or more recent editions of the standard to assess compliance. The year of the standard that is used shall be listed in the space provided. <u>For dwelling units, the ventilation rate required by ASHRAE 62.2 can be calculated using either Equation 4.1a or Table 4.1a. For sleeping units, the following equation must be used to determine minimum airflow rates: 0.01 x Conditioned Floor Area + 7.5 x (number of beds).</u>”</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
00553	12/01/2023	National HVAC Design Report, Version 1 / 1.1 / 1.2 (Rev. 03)	Refinement	Footnote 27 – Relocation of Footnote allowing prior Revisions of HVAC Design Report
				<p>Issue: All National and Regional Program requirements contain the following Footnote, which allows partners to use the National HVAC Design Report from prior Revisions:</p> <p>“Buildings certified under Rev. 01, Rev. 02 and Rev. 03 of the program requirements are permitted to use any version of the National HVAC Design Report.”</p> <p>There have been limited changes to that document across these Revisions. Therefore, the intent of this allowance is to reduce the burden on HVAC Designers and Raters by not requiring them to produce and collect new editions of the report, which would be substantially the same as the documentation that they already have.</p> <p>The current placement of the allowance is not optimal given that partners interact with the National HVAC Design Report more often than the program requirements documents.</p>
				<p>Resolution: To increase the visibility and usage of the allowance by partners, Footnote 27 of the National HVAC Design Report will be updated by adding this allowance at the end. The existing footnote will be removed from all National and Regional Program requirements documents.</p>
00636	12/01/2023	MFNC HVAC Design Supplement – Dwellings & Units (Rev. 03 / 12)	Clarification	Item 2.1- Addition of 150% limit of ASHRAE 62.2 to dwelling unit ventilation airflow design rate
				<p>Issue: Item 2.1, specifies the dwelling unit ventilation airflow rate and run-time requirements that must be met.</p> <p>In the Prescriptive Path there is a limit on a maximum rate that can be specified; generally, 150% of ASHRAE 62.2-2013 based on Item 4a.3 and Item 4b.2.1 of the MFNC Rater Design Review Checklist.</p> <p>This requirement is missing from the current language in Item 2.1 and could be added to make the Designer more aware of this limit.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To increase clarity of requirements and potentially reduce confusion to Designers. A new Footnote will be added to Item 2.1 as follows:</p> <p>“MFNC Prescriptive Path Only: Rates shall not exceed 2013 rates by more than 50%. Where the Exhaust Fan Type in Section 3 indicates “Continuous” for both Bathroom and Kitchen, the Rater may use this equation to determine the maximum ventilation rate allowed: 30 CFM x number of bathrooms + 75 CFM.”</p>
00562	12/01/2023	HVAC Design Supplement to Std. 310 for Dwellings and Units, All Versions (Rev.03)	Change	Item 2.9 – Adding alternative metrics to meet fan motor efficiency requirement
				<p>Issue: Given the challenge and time it can take to verify that certain central exhaust fan motors have efficiencies equivalent to NEMA Premium motors, some Partners have asked whether other equivalent metrics could be used to meet Item 2.9.</p>
				<p>Resolution: EPA agrees that other metrics that can evaluate fan performance in an equivalent way should be added in order to reduce the level of effort to meet this efficiency requirement. EPA has identified two equivalent metrics to the current requirement of a NEMA Premium efficiency standard. First is a fan energy index (FEI) of 1.2, as defined by AMCA Standard 208. Second is a fan efficacy of 1.1 CFM/Watt determined by either field measurements or design conditions.</p> <p>A new footnote will be added to Item 2.9 to reflect these alternative metrics as follows:</p> <p>“As an alternative to meeting or exceeding the efficiency standards for NEMA Premium motors, documentation that an exhaust fan motor has a fan energy index (FEI) ≥ 1.2 at the design point of operation OR a fan efficacy ≥ 1.1 CFM/Watt is permitted.”</p>
00685	12/01/2023	National HVAC Design Supplement to Std. 310 for Dwellings and Units (All	Change	Item 2.11 – Minimum separation distances reduced between air inlets and outlets of exhaust ventilation systems
				<p>Issue: HVAC designers have indicated challenges in locating dwelling unit outdoor air inlets on exterior walls of Townhouses, as well as multifamily dwelling units certified using the Multifamily New Construction program, that are at least 10 ft from the outlets of dwelling unit exhaust systems given the proximity to adjacent dwelling units and limited exterior wall area</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Versions, Rev. 03)		<p>to locate intakes and outlets. A reduced separation distance would reduce the barrier to providing multifamily dwelling units and Townhouses with a dedicated supply of outdoor air.</p> <p>Resolution: EPA agrees that reducing the minimum required separation distance between air inlets and the outlets of both exhaust dwelling unit mechanical ventilation systems and local mechanical exhaust systems would increase the ability of project teams to design systems that provide outdoor air directly to multifamily dwelling units and Townhouses. For simplicity, the same allowance will be extended to other dwelling types eligible to participate in the Single-Family New Homes program. Note that the minimum required separation distance between air inlets and other known sources of contamination (e.g., combustion appliance vent terminations, vehicles) will remain the same.</p> <p>To reflect this change, a footnote will be added to Item 2.11 as follows:</p> <p><u>Two alternatives to the required 10 ft. distance are provided: 1) inlets providing outdoor air to a dwelling unit are permitted to be ≥ 5 ft. of stretched-string distance from outlets of both exhaust dwelling-unit mechanical ventilation systems and local mechanical exhaust systems, and 2) the outlet and inlet of ERV's and HRV's may use a smaller distance if allowed by the manufacturer of the system. If the second alternative is used, the manufacturer's instructions shall be collected for documentation purposes.</u></p>
00520	12/16/2022	HVAC Design Supplement to Std. 310 for Dwellings and Units, All Versions (Rev.03)	Change	<p>Item 3 – New allowance to use 50 CFM continuous kitchen exhaust for Dwelling Units and Sleeping Units</p> <p>Issue: Partners have noted several challenges with the current policy requiring ≥ 5 kitchen air changes per hour for continuous kitchen exhaust systems.</p> <p>Continuous kitchen exhaust systems provided through a central riser are often used in high-rise multifamily buildings due to spacing restrictions for wall exhausts, challenges designing intermittent systems in a central riser with a fixed shaft size but fluctuating airflow, and codes that either require make-up air if exhaust exceeds certain rates or require smoke/fire dampers for ducts that exceed certain sizes.</p> <p>The current policy presents pragmatic challenges and can result in excessive energy costs. The airflow rate equivalent to 5 kitchen air changes per hour is dependent on certain design elements that are not directly related to indoor air quality (e.g., the placement of cabinets). Therefore, calculations are required for each kitchen layout, often resulting in different required airflow rates for each dwelling unit. Furthermore, the resulting required airflow rate</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic								
				<p>can sometimes exceed the whole-dwelling ventilation rate required by ASHRAE 62.2, when coupled with a continuous bathroom exhaust system, resulting in higher energy costs.</p> <p>Resolution: To simplify the policy, an alternative will be added allowing a fixed minimum continuous kitchen exhaust rate of 50 CFM for Dwelling and Sleeping Units in multifamily buildings (but not Townhouses). This new alternative rate will be accompanied by a requirement that the fan or intake grille be located within 10 ft. of the edge of the range, as measured horizontally on the plan.</p> <p>The 50 CFM minimum continuous rate aligns with the requirements for kitchens in private dwellings in the 2021 International Mechanical Code and equates to 5 kitchen air changes per hour for an approximately 70 sq. ft. kitchen with an 8.75 ft ceiling.</p> <p>To reflect this change, Table 1 will be revised as follows:</p> <table><tr><th colspan="2">Location</th><th>Continuous Rate</th></tr><tr><td rowspan="2">Kitchen</td><td>Airflow</td><td>≥ 5 ACH, based on kitchen volume ^{26, 27, 28} <u>(Alternative in Fn. 26)</u></td></tr><tr><td>Sound</td><td>Recommended: ≤ 1 sone</td></tr></table> <p>Footnote 26 will be revised as follows: “Where 5 ACH is selected, kitchen volume shall be determined by drawing the smallest possible rectangle on the floor plan that encompasses all cabinets, pantries, islands, peninsulas, ranges / ovens, and the kitchen exhaust fan, and multiplying by the average ceiling height for this area. In addition, the continuous kitchen exhaust rate shall be ≥ 25 CFM, per 2009 IRC Table M1507.3, regardless of the rate calculated using the kitchen volume. Cabinet volume shall be included in the kitchen volume. <u>MFNC Only: As an alternative to 5 ACH for Dwelling Units and Sleeping Units (but not Townhouses), 50 CFM of continuous exhaust is permitted to be used, regardless of kitchen volume. In such cases, the edge of the exhaust fan or intake grille shall be located within 10 ft of the edge of the range, as measured horizontally on the floor plan.</u>”</p>	Location		Continuous Rate	Kitchen	Airflow	≥ 5 ACH, based on kitchen volume ^{26, 27, 28} <u>(Alternative in Fn. 26)</u>	Sound	Recommended: ≤ 1 sone
Location		Continuous Rate										
Kitchen	Airflow	≥ 5 ACH, based on kitchen volume ^{26, 27, 28} <u>(Alternative in Fn. 26)</u>										
	Sound	Recommended: ≤ 1 sone										
00525	12/16/2022		Change	Item 4.1 – Electric resistance space heating restrictions								

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		HVAC Design Supplement to Std. 310 for Dwellings and Units, All Versions (Rev.03)		<p>Issue: Partners have asked whether the restriction on electric resistance heating for the Prescriptive path is applicable to heating of ventilation supply air when the space served is otherwise not heated or has a separate primary heating system, such as a heat pump or a furnace, that complies with Exhibit X.</p> <p>Resolution: The intent of the restriction on electric resistance heating is to restrict the types of systems providing the space heating. Electric resistance heat may be used to pre-heat outdoor supply air to a given space if the primary space heating system meets the applicable MFNC efficiency requirements in Exhibit X and the air heated by the electric resistance system is associated with a mechanical ventilation system.</p> <p>A new footnote will be added to Item 4.1 as follows: “Electric resistance limitations do not apply to systems dedicated to heating outdoor air supplied by a mechanical ventilation system, as long as the space served is primarily heated by a non-electric-resistance system that meets the efficiency requirements noted in Exhibit X.”</p> <p>PR ID 00215 previously addressed this issue for the Rater Field Checklist and Policy Record PR ID 00320 addressed this issue for the National HVAC Design Report</p>
00526	12/16/2022	HVAC Design Supplement to Std. 310 for Dwellings and Units, All Versions (Rev.03)	Change	<p>Item 4.1 – Allowing electric-resistance space heating as supplement to heat pumps</p> <p>Issue: Item 4.1 states that electric resistance space heating is not installed in dwelling units when following the Prescriptive Path. Given that prohibition, it can be challenging for project teams to select a heat pump that has no electric-resistance for auxiliary space heating or for defrost. Some Partners may also read this requirement to mean standalone electric resistance space heating, like baseboards, are prohibited, but auxiliary heat to a heat pump is permitted. While it is understood that this limitation is removed in the modeling paths where this heating energy is captured by the model, some nominal allowance for electric resistance heating in dwelling units would remove a barrier to choosing the Prescriptive Path.</p> <p>Resolution: Standalone electric resistance space heating systems will continue to not be permitted in the Prescriptive Path. EPA recognizes that some amount of supplemental heating should be permitted where internal to a heat pump, when limited through proper controls.</p> <p>The following will be added to the beginning of the new footnote added in PR ID 00525 will be revised as follows: “Heat pumps with internal supplemental electric space heating may</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p><u>use up to 3 kW of electric resistance heating per dwelling unit. This supplemental electric resistance heating may only be used when the heat pump cannot satisfy the thermostat setpoint or when the heat pump is operating in defrost mode. In addition, the programmable thermostat must include adaptive recovery technology..”</u></p> <p>This policy may be revisited to require additional requirements for heat pumps when new products or sizing guidance are available.</p>
00702	12/01/2023	National HVAC Design Supplement to Std. 310 for Dwellings & Units (Rev. 03)	Change	Item 4.1 – Allowing electric-resistance space heating as a supplement to heat pumps
				<p>Issue: Item 4.1 states clearly that electric resistance space heating is not installed in dwelling units when following the Prescriptive Path. Given that prohibition, it can be challenging for project teams to select a heat pump that has no electric-resistance heating for emergencies or occasions where the heat pump capacity cannot meet the heating load. In common spaces under the ERI path, electric resistance heating must have a total heating capacity of 3.5 kW or less per enclosed space. Some Partners may also read this requirement to mean standalone electric resistance space heating, like baseboards, are prohibited (or restricted in common spaces), but auxiliary heat to a heat pump is permitted.</p>
				<p>Resolution: Standalone electric resistance space heating systems will continue to not be permitted in dwelling units in the Prescriptive Path. The limit of 3.5 kW of electric resistance heating per enclosed space for common spaced in the ERI and Prescriptive Paths will be maintained.</p> <p>EPA recognizes that some amount of supplemental heating should be permitted when integral to a heat pump. EPA also recognizes that proper sizing and controls will significantly reduce the need for supplemental heating. EPA will therefore revise the requirement for dwelling units following the prescriptive path, and common spaces following the prescriptive and ERI paths, to allow supplemental electric resistance heating without restriction, but only when it is integral to a heat pump. EPA recommends, but does not require at this time, that heat pumps have controls to limit the use of back-up heat to heat pump failures or when the heat pump cannot meet the heating load, and that ENERGY STAR certified cold-climate heat pumps be used in Climate Zones 5 through 8.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Therefore, a new Footnote will be added to Item 4.1 as follows:</p> <p><u>"Electric resistance limitations do not apply to heat pumps with integral supplemental or emergency electric resistance heating. EPA recommends but does not require that heat pumps have controls to limit the use of emergency or supplemental heat to heat pump failures or when the heat pump cannot meet the heating load. EPA also recommends but does not require that heat pumps in CZ 5-8 are ENERGY STAR certified cold-climate heat pumps. Electric resistance limitations do not apply to systems dedicated to heating outdoor air supplied by a mechanical ventilation system, as long as the space served is primarily heated by a non-electric-resistance system that meets the efficiency requirements noted in Exhibit X."</u></p> <p>This policy may be revisited to require additional requirements for heat pumps when new products or sizing guidance are available.</p>
00641	12/01/2023	HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems (Version 1 / 1.1 / 1.2, Rev. 03)	Change	Items 2.1, 2.3 and 2.4 – Limited common space ventilation allowance
				<p>Issue: Currently, the Rater Design Review Checklist does not require the Rater to confirm that the HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems includes all of the common spaces that require outdoor supply air. If the designer does not report a particular common space in the building, then that space potentially would not meet ASHRAE 62.1.</p>
				<p>Resolution: The intent of Items 2.1, 2.3 and 2.4 is for common spaces to meet ASHRAE 62.1 required rates. For clarity, EPA will list the spaces in multifamily buildings that require outdoor air and the Rater will verify they are included on the HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems. If there is a space in ASHRAE 62.1 that is not listed, EPA did not anticipate that space would be in a Multifamily building, and ventilation is recommended but not required.</p> <p>A new Footnote will be added to Items 2.1, 2.3 and 2.4:</p> <p>"The following spaces require outdoor air ventilation: corridors, offices, break rooms, gyms, fitness centers, exercise rooms, lobbies, community rooms, meeting rooms, multi-purpose rooms, lounges, laundry rooms, swimming pools, daycares, classrooms, shared or commercial kitchens, shared dining rooms, and computer rooms."</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
00645	12/01/2023	HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Item 2.4 – Limited common space ventilation allowance
				Issue: Occasionally the only common space in a multifamily building is a short corridor which requires a small amount of outdoor air supply (< 15 CFM) under ASHRAE 62.1. Partners have asked whether buildings with only a small corridor and no other common spaces need to have a ventilation system installed in the corridor.
				<p>Resolution: The intent of Item 2.4 is for common space ventilation to meet ASHRAE 62.1. While there is value to providing outdoor air to corridors, given design challenges from partners, where the building requires less than 15 CFM of outdoor air for the corridors and does not contain any of the other common spaces requiring outdoor air, outdoor air is recommended but not required to be provided. The corridor will still need to be listed on the design report for Items 2.3 and 2.4, where “N/A” may be used for Item 2.4.</p> <p>A sentence will be added to the end of Footnote 9 as follows: “<u>Where the building has total corridor space \leq 250 ft² and does not contain any of the other common spaces which require outdoor air per Item 2.1, outdoor air is not required to be provided to the corridor and “N/A” may be entered for Item 2.4.</u>”</p>
00686	12/01/2023	National HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems (All Versions, Rev. 03)	Change	Item 2.14 – Minimum separation distances reduced between air inlets and outlets of exhaust ventilation systems
				Issue: HVAC designers have indicated challenges in locating dwelling unit outdoor air inlets on exterior walls of multifamily buildings and Townhouses that are at least 10 ft from the outlets of dwelling unit exhaust systems given the proximity to adjacent dwelling units and limited exterior wall area to locate intakes and outlets. A reduced separation distance would reduce the barrier to providing multifamily dwelling units and Townhouses with a dedicated supply of outdoor air.
				Resolution: EPA agrees that reducing the minimum required separation distance between air inlets and the outlets of both exhaust dwelling unit mechanical ventilation systems and local mechanical exhaust systems would increase the ability of project teams to design systems that provide outdoor air directly to multifamily dwelling units and Townhouses. Note that the minimum required separation distance between air inlets and other known sources

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>of contamination (e.g., combustion appliance vent terminations, vehicles) will remain the same.</p> <p>Therefore, a footnote will be added to Item 2.14 as follows:</p> <p><u>Two alternatives to the required 10 ft. distance are provided: 1) inlets providing outdoor air to a dwelling unit are permitted to be \geq 5 ft. of stretched-string distance from outlets of both exhaust dwelling-unit mechanical ventilation systems and local mechanical exhaust systems, and 2) the outlet and inlet of ERV's and HRV's may use a smaller distance if allowed by the manufacturer of the system. If the second alternative is used, the manufacturer's instructions shall be collected for documentation purposes.</u></p>
00523	12/16/2022	HVAC Design Report Supplement for Central Systems and Common Spaces, All Versions (Rev. 03)	Change	Item 4.2 – Allowing electric-resistance space heating as supplement to heat pumps
				<p>Issue: Item 4.2 states that electric resistance space heating is not installed in dwelling units when following the Prescriptive Path. Given that prohibition, it can be challenging for project teams to select a heat pump that has no electric-resistance for auxiliary space heating or for defrost. Some Partners may also read this requirement to mean standalone electric resistance space heating, like baseboards, are prohibited, but auxiliary heat to a heat pump is permitted. While it is understood that this limitation is removed in the modeling paths where this heating energy is captured by the model, some nominal allowance for electric resistance heating in dwelling units would remove a barrier to choosing the Prescriptive Path.</p>
				<p>Resolution: Standalone electric resistance space heating systems will continue to not be permitted in the Prescriptive Path. EPA recognizes that some amount of supplemental heating should be permitted where internal to a heat pump, when limited through proper controls.</p> <p>Since this Supplement only relates to common space or central systems, the additional notes on heat pumps in dwelling units from PR ID 00522 will not be included. In alignment with that PR, footnote 13 will be revised as follows: “These requirements apply to systems that provide primary space heating and cooling. Electric resistance limitations do not apply to systems dedicated to heating outdoor air supplied by a mechanical ventilation system, as long as the space served is primarily heated by a non-electric-resistance system that meets the efficiency requirements noted in Exhibit X. Electric resistance limitations apply to</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				garages, but do not apply to heated plenums meeting Item 4.37, or stairwells where automatic thermostatic controls prevent operation above 50°F.
00703	12/01/2023	National HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems, All Versions (Rev. 03)	Change	Item 4.2 – Allowing electric-resistance space heating as a supplement to heat pumps
				Issue: Item 5.5 states clearly that electric resistance space heating is restricted when following the Prescriptive or ERI Path. Given that restriction, it can be challenging for project teams to select a heat pump that has no electric-resistance heating for emergencies or occasions where the heat pump capacity cannot meet the heating load. In common spaces under the ERI path, electric resistance heating must have a total heating capacity of 3.5 kW or less per enclosed space. Some Partners may also read this requirement to mean standalone electric resistance space heating, like baseboards, are prohibited (or restricted in common spaces), but auxiliary heat to a heat pump is permitted.
				<p>Resolution: Standalone electric resistance space heating systems will continue to not be permitted in dwelling units in the Prescriptive Path. The limit of 3.5 kW of electric resistance heating per enclosed space for common spaces in the ERI and Prescriptive Paths will be maintained.</p> <p>EPA recognizes that some amount of supplemental heating should be permitted when integral to a heat pump. EPA also recognizes that proper sizing and controls will significantly reduce the need for supplemental heating. EPA will therefore revise the requirement for dwelling units following the prescriptive path, and common spaces following the prescriptive and ERI paths, to allow supplemental electric resistance heating without restriction, but only when it is integral to a heat pump. EPA recommends, but does not require at this time, that heat pumps have controls to limit the use of back-up heat to heat pump failures or when the heat pump cannot meet the heating load, and that ENERGY STAR certified cold-climate heat pumps be used in Climate Zones 5 through 8.</p> <p>Therefore, Footnote 13 will be revised as follows:</p> <p><u>"Electric resistance limitations do not apply to heat pumps with integral supplemental or emergency electric resistance heating. EPA recommends but does not require that heat pumps have controls to limit the use of emergency or supplemental heat to heat pump failures or when</u></p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>the heat pump cannot meet the heating load. EPA also recommends but does not require that heat pumps in CZ 5-8 are ENERGY STAR certified cold-climate heat pumps. This requirement applies to systems that provide primary space heating and cooling. Electric resistance limitations do not apply to systems dedicated to heating outdoor air supplied by a mechanical ventilation system, as long as the space served is primarily heated by a non-electric resistance system that meets the efficiency requirements noted in Exhibit X. Electric resistance limitations apply to garages, but do not apply to heated plenums meeting Item 4.30, or stairwells where automatic thermostatic controls prevent operation above 50°F</p> <p>This policy may be revisited to require additional requirements for heat pumps when new products or sizing guidance are available.</p>
00564	12/01/2023	National HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems, Version 1 / 1.1 / 1.2 (Rev. 03)	Clarification	<p>Item 4.9 – AHRI Reference # to encompass indoor and outdoor components of AC / HP</p>
				<p>Issue: Partners have asked for clarification about the requirement to report the AHRI Reference # in Item 4.9. Specifically, they have asked whether the number provided is intended to represent the rating of the combined performance of both the indoor and outdoor components of the system (e.g., the evaporator, condenser, and blower fan) or if the rating of just an individual component (e.g., the condenser) would be sufficient.</p> <p>The AHRI # is serving two purposes: 1) To document the rated efficiency being used in the energy rating; 2) To demonstrate that the indoor and outdoor components of the air conditioner or heat pump are designed to be used together.</p> <p>This goal is conveyed in Footnote 14 of the National HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems, specifically regarding alternative documentation that must be provided when an AHRI # is not present: “If an AHRI Reference # is not available, OEM-provided documentation shall be attached with the rated efficiency. For residential split air conditioners and heat pumps, the rated efficiency shall be for the specific combination of indoor and outdoor components of the air conditioner or heat pump, along with confirmation that the two components are designed to be used together. If the AHRI Reference # is reported in Item 4.9 (e.g., heat pumps), the AHRI Reference # does not need to be listed again in Item 4.23.”</p> <p>This goal is stated even more clearly in the ANSI / RESNET / ACCA 310 HVAC Design Report, Footnote 31: “If an AHRI Reference Number is not available, OEM-provided documentation shall be collected with the rated efficiency of the equipment. If the equipment contains multiple components, the rated efficiency shall reflect the specific combination of</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>indoor and outdoor components, along with confirmation from the OEM that the two components are designed to be used together.”</p> <p>Item 4.9 does not explicitly state what components the AHRI Reference Number needs to encompass, just what must be provided in the alternative documentation. However, the intent is for the AHRI # to also reflect the specific combination of indoor and outdoor components, which also conveys that the two components are designed to be used together.</p> <p>Resolution: To clarify the intent that the AHRI # reflect the specific combination of indoor and outdoor components used by the equipment, the following sentence will be added to the beginning of Footnote 14:</p> <p><u>“If the equipment contains multiple components, the AHRI Reference # shall represent the rated efficiency of the specific combination of indoor and outdoor components. EPA recommends, but does not require, that the rating also encompass the furnace when such a rating is available.”</u></p>
00660	12/01/2023	National HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems, All Versions, (Rev. 03)	Refinement	Items 4.10 and 4.23 – Minor wording change to maintain consistency with SFNH
				<p>Issue: The Single-Family New Homes (SFNH) National HVAC Design Report is being revised to add flexibility to report both the rated efficiency value and metric. The National HVAC Design Supplement to Std. 310 for Common Spaces & Central Systems already has this flexibility but requires minor revisions to maintain consistency in wording.</p>
				<p>Resolution: To maintain consistency in wording with the SFNH program, Items 4.10 and 4.23 will be revised as follows: “Listed <u>Rated</u> efficiency”</p>
00653	12/01/2023	HVAC Design Report Supplement for Central Systems and Common Spaces,	Change	Item 5.5 – Clarifying the central exhaust duct leakage test requirement
				<p>Issue: Multiple partners have submitted questions that indicate the intent of Item 5.5 is not clear. The item requires duct leakage to be tested for central exhaust ductwork that serves four or more dwelling units.</p>
				<p>Resolution: EPA agrees that the Items and associated Footnote 20 could be improved to better convey the program’s intent.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Version 1 / 1.1 / 1.2 (Rev. 03)		<p>Footnote 20 will be revised as follows:</p> <p>“For the purpose of computing leakage allowance, at rough-in, the ‘exhaust fan flow’ shall be the lesser of the rated fan flow (i.e., nameplate rating) and at rough-in, 133% of the sum of the design exhaust airflow of the dwelling units that are exhausted by that central fan or at final, served by that fan. At final, the ‘exhaust fan flow’ shall be the lesser of the rated fan flow (i.e., nameplate rating) and 143% of the sum of the design exhaust airflow of the dwelling units <u>served by that fan that are exhausted by that central fan.</u> <u>To calculate central exhaust duct leakage allowance, EPA recommends using worksheet 3b of the Multifamily Workbook.</u> This test is not required of central exhaust systems serving clothes dryers but is required for the central exhaust portion of balanced systems such as HRVs and ERVs.”</p>
00651	12/01/2023	National HVAC Functional Testing Checklist, Version 1 / 1.1 / 1.2 (Rev. 03)	Change	Item 7.2.8 - Clarifying the requirement for functional testing of condensing boilers
				<p>Issue: A Functional Testing Agent asked how they should mark Item 7.2.8 of the HVAC Functional Testing Checklist if they have “verified” the return temperatures for a condensing boiler but do not expect that it will allow condensing.</p>
				<p>Resolution: EPA does not require installed boilers to be condensing boilers. The intent was to measure the temperatures to determine if the installed condensing boilers met the design and would then achieve the higher expected efficiency. When a measured return temperature does not enable condensing, the Functional Testing agent will be required to notify the building owner.</p> <p>To reflect this, Item 7.2.8 will be revised to the following:</p> <p>“Condensing Boiler Return Temperature: Design/ OEM temp: ____F Measured temp: ____F Where measured return temperature does not enable condensing, building owner has been notified. ⁷”</p>
00536	05/01/2023	National Water Management	Clarification	Item 4.2 – Moisture resistant materials only required if backers are present
				<p>Issue: Partners have asked whether this Item, which generally requires the use of cement board or equivalent moisture-resistant backing materials behind tubs and showers, applies to</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		System Requirements (Version 1 / 1.1 / 1.2, Rev. 03)		<p>enclosures that are not required to have backing materials (e.g., a 3-piece fiberglass tub enclosure).</p> <p>Resolution: The intent of this Item was to only require the use of moisture-resistant backing materials for enclosures where backing is present. The Item will be clarified, and better aligned with related code language, as follows:</p> <p>“Item 4.2: If present, backers for wall tile and wall panels in tub and shower enclosures are fiber-cCement board complying with ASTM C1288 or ISO 8336, Category C, or an alternate material listed in the Footnote or equivalent moisture-resistant backing material installed on all walls behind tub and shower enclosures composed of tile or panel assemblies with caulked joints. Paper-faced backerboard shall not be used.”</p> <p>And Footnote 18 will be revised as follows:</p> <p>“In addition to fiber-cement board, <u>fiber-mat reinforced cementitious panels complying with ASTM C1325; glass mat water-resistant gypsum panels complying with ASTM C1178; water-resistant fiber-reinforced gypsum panels complying with Section 6 of ASTM C1278; or materials that have been evaluated by ICC-ES per AC 115 may also be used to meet this requirement.</u> Monolithic tub and shower enclosures (e.g., fiberglass with no seams) are exempt from this backing material requirement unless required by the manufacturer. Paper-faced backerboard may only be used behind monolithic enclosures or waterproof membranes that have been evaluated by ICC-ES per AC 115, and then only if it <u>has received a rating of 10 when tested in accordance with</u> meets ASTM mold-resistant standards ASTM D3273 or ASTM D6329.”</p>
00605	12/01/2023	National ERI Target Procedure, Version 1 (Rev. 03) 2014	Clarification	<p>Lighting, Appliances, Fixtures & Internal Gains Section – Number of ceiling fans aligned with logic in ANSI / RESNET / ICC 301</p> <p>Issue: A partner has asked for clarification about the number of ceiling fans the ENERGY STAR Reference Design is intended to have.</p> <p>For context, ANSI / RESNET / ICC 301-2019 requires ceiling fans to be equal in number for both the reference and rated homes. However, if the number of ceiling fans present in the rated home is not at least equal to the number of bedrooms plus one, then neither home is modeled with ceiling fans.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>The National ERI Target Procedure was intended to apply the same logic. However, it states that the quantity of ceiling fans shall be equal to the number of bedrooms plus one “when ceiling fans are present in the Rated Unit”. The partner is unclear whether the ENERGY STAR Reference Design should be configured with ceiling fans when any ceiling fans are present in the Rated Unit, or only in cases where the Rated Unit has a quantity at least equal to the number of bedrooms plus one. The latter interpretation was the intent.</p> <p>Resolution: To clarify this intent, the language in the ‘Lighting, Appliances, Fixtures & Internal Gains’ Section will be revised as follows:</p> <p>“Ceiling Fan: 122 CFM per Watt; Quantity = <u>Same as Rated Unit per ANSI / RESNET / ICC 301, either 0 or</u> Number of bedrooms + 1 when ceiling fans present in the Rated Unit; otherwise Quantity = 0”</p>
00631	12/01/2023	ERI Target Procedure (Version 1, Rev. 03) 2014 ERI Target Procedure (Version 1, Rev. 03) 2019	Clarification	Service Water Heating Systems Section – Specifying low-flow fixtures for hot water use
				<p>Issue: Footnote 12 associated with this section specifies that service hot water heating use (gallons per day) is representative of “standard-flow plumbing fixtures.”</p> <p>This conflicts with the language in this section which says that usage shall be “Same as Energy Rating Reference Home, as defined by ANSI / RESNET / ICC 301, except for reduced usage resulting from the equipment specified in the Lighting, Appliances, Fixtures & Internal Gains Section” which specifies low-flow water fixtures (i.e., showers and faucets ≤ 2.0 gpm).</p>
				<p>Resolution: To reduce confusion to partners Footnote 12 will be updated to reflect that EPA’s intent that service water heating use should reflect low-flow fixtures as follows:</p> <p>“That is to say, representative of low-flow standard-flow plumbing fixtures, reference clothes washer gallons per day, standard distribution system water use effectiveness, a hot water piping ratio of 1.0, no pipe insulation, and no drain water heater recovery.”</p>
00510	11/10/2022	ERI Target Procedure,	Change	Exhibit 1 – ENERGY STAR Reference Design configured without on-site power
				<p>Issue: Partners have asked whether the ENERGY STAR Reference Design (ESRD) should be configured with On-Site Power Production (OPP) if such a system is present in the Rated</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Version 1 (Rev. 03) 2014		<p>Unit. Because OPP is not one of the building components listed in the Expanded ENERGY STAR Multifamily Reference Design Definition Exhibit and the document contains a footnote stating that “Any parameter not specified in this exhibit shall be identical to the value entered for the Rated Unit”, one might infer that it is EPA’s intent for the ESRD to be configured with OPP.</p> <p>Such a configuration would create unintended challenges because the related Program Requirements specify that “on-site power generation may not be used to meet the ENERGY STAR ERI Target”.</p> <p>Resolution: It is not EPA’s intent to make the ENERGY STAR ERI Target more stringent in cases where the Rated Unit has OPP. To align the ENERGY STAR ERI Target Procedure with EPA’s intent, a new row will be added to the end of the ENERGY STAR Multifamily Reference Design Definition Exhibit with the Building Component listed as “On-Site Power Production” and the Definition listed as “None”.</p>
00606	12/01/2023	National ERI Target Procedure, Version 1 (Rev. 03) 2019	Clarification	<p>Lighting, Appliances, Fixtures & Internal Gains Section – Number of ceiling fans aligned with logic in ANSI / RESNET / ICC 301</p> <p>Issue: A partner has asked for clarification about the number of ceiling fans the ENERGY STAR Reference Design is intended to have.</p> <p>For context, ANSI / RESNET / ICC 301-2019 requires ceiling fans to be equal in number for both the reference and rated homes. However, if the number of ceiling fans present in the rated home is not at least equal to the number of bedrooms plus one, then neither home is modeled with ceiling fans.</p> <p>The National ERI Target Procedure was intended to apply the same logic. However, it states that the quantity of ceiling fans shall be equal to the number of bedrooms plus one “when ceiling fans are present in the Rated Unit”. The partner is unclear whether the ENERGY STAR Reference Design should be configured with ceiling fans when any ceiling fans are present in the Rated Unit, or only in cases where the Rated Unit has a quantity at least equal to the number of bedrooms plus one. The latter interpretation was the intent.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To clarify this intent, the language in the 'Lighting, Appliances, Fixtures & Internal Gains' Section will be revised as follows:</p> <p>"Ceiling Fan: 122 CFM per Watt; Quantity = <u>Same as Rated Unit per ANSI / RESNET / ICC 301, either 0 or</u> Number of bedrooms + 1 when ceiling fans present in the Rated Unit; otherwise Quantity = 0"</p>
00511	11/10/2022	ERI Target Procedure, Version 1 (Rev. 03) 2019	Change	<p>Exhibit 1 – ENERGY STAR Reference Design configured without on-site power</p>
				<p>Issue: Partners have asked whether the ENERGY STAR Reference Design (ESRD) should be configured with On-Site Power Production (OPP) if such a system is present in the Rated Unit. Because OPP is not one of the building components listed in the Expanded ENERGY STAR Multifamily Reference Design Definition Exhibit and the document contains a footnote stating that "Any parameter not specified in this exhibit shall be identical to the value entered for the Rated Unit", one might infer that it is EPA's intent for the ESRD to be configured with OPP.</p> <p>Such a configuration would create unintended challenges because the related Program Requirements specify that "on-site power generation may not be used to meet the ENERGY STAR ERI Target".</p>
				<p>Resolution: It is not EPA's intent to make the ENERGY STAR ERI Target more stringent in cases where the Rated Unit has OPP. To align the ENERGY STAR ERI Target Procedure with EPA's intent, a new row will be added to the end of the ENERGY STAR Multifamily Reference Design Definition Exhibit with the Building Component listed as "On-Site Power Production" and the Definition listed as "None".</p>
00607	12/01/2023	National ERI Target Procedure, Version 1.1 (Rev. 03) 2014	Clarification	<p>Lighting, Appliances, Fixtures & Internal Gains Section – Number of ceiling fans aligned with logic in ANSI / RESNET / ICC 301</p>
				<p>Issue: A partner has asked for clarification about the number of ceiling fans the ENERGY STAR Reference Design is intended to have.</p> <p>For context, ANSI / RESNET / ICC 301-2019 requires ceiling fans to be equal in number for both the reference and rated homes. However, if the number of ceiling fans present in the</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>rated home is not at least equal to the number of bedrooms plus one, then neither home is modeled with ceiling fans.</p> <p>The National ERI Target Procedure was intended to apply the same logic. However, it states that the quantity of ceiling fans shall be equal to the number of bedrooms plus one “when ceiling fans are present in the Rated Unit”. The partner is unclear whether the ENERGY STAR Reference Design should be configured with ceiling fans when any ceiling fans are present in the Rated Unit, or only in cases where the Rated Unit has a quantity at least equal to the number of bedrooms plus one. The latter interpretation was the intent.</p>
				<p>Resolution: To clarify this intent, the language in the ‘Lighting, Appliances, Fixtures & Internal Gains’ Section will be revised as follows:</p> <p>“Ceiling Fan: 122 CFM per Watt; Quantity = <u>Same as Rated Unit per ANSI / RESNET / ICC 301, either 0 or</u> Number of bedrooms + 1 when ceiling fans present in the Rated Unit; otherwise Quantity = 0”</p>
00632	12/01/2023	ERI Target Procedure (Version 1.1, Rev. 03) 2014 ERI Target Procedure (Version 1.1, Rev. 03) 2019	Clarification	Service Water Heating Systems Section – Specifying low-flow fixtures for hot water use
				<p>Issue: Footnote 12 associated with this section specifies that service hot water heating use (gallons per day) is representative of “standard-flow plumbing fixtures.”</p> <p>This conflicts with the language in this section which says that usage shall be “Same as Energy Rating Reference Home, as defined by ANSI / RESNET / ICC 301, except for reduced usage resulting from the equipment specified in the Lighting, Appliances, Fixtures & Internal Gains Section” which specifies low-flow water fixtures (i.e., showers and faucets ≤ 2.0 gpm).</p>
				<p>Resolution: To reduce confusion to partners Footnote 12 will be updated to reflect that EPA’s intent that service water heating use should reflect low-flow fixtures as follows:</p> <p>“That is to say, representative of <u>low-flow standard-flow</u> plumbing fixtures, reference clothes washer gallons per day, standard distribution system water use effectiveness, a hot water piping ratio of 1.0, no pipe insulation, and no drain water heater recovery.”</p>
00512	11/10/2022		Change	Exhibit 1 – ENERGY STAR Reference Design configured without on-site power

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		ERI Target Procedure, Version 1.1 (Rev. 03) 2014		<p>Issue: Partners have asked whether the ENERGY STAR Reference Design (ESRD) should be configured with On-Site Power Production (OPP) if such a system is present in the Rated Unit. Because OPP is not one of the building components listed in the Expanded ENERGY STAR Multifamily Reference Design Definition Exhibit and the document contains a footnote stating that “Any parameter not specified in this exhibit shall be identical to the value entered for the Rated Unit”, one might infer that it is EPA’s intent for the ESRD to be configured with OPP.</p> <p>Such a configuration would create unintended challenges because the related Program Requirements specify that “on-site power generation may not be used to meet the ENERGY STAR ERI Target”.</p> <p>Resolution: It is not EPA’s intent to make the ENERGY STAR ERI Target more stringent in cases where the Rated Unit has OPP. To align the ENERGY STAR ERI Target Procedure with EPA’s intent, a new row will be added to the end of the ENERGY STAR Multifamily Reference Design Definition Exhibit with the Building Component listed as “On-Site Power Production” and the Definition listed as “None”.</p>
00608	12/01/2023	National ERI Target Procedure, Version 1.1 (Rev. 03) 2019	Clarification	<p>Lighting, Appliances, Fixtures & Internal Gains Section – Number of ceiling fans aligned with logic in ANSI / RESNET / ICC 301</p> <p>Issue: A partner has asked for clarification about the number of ceiling fans the ENERGY STAR Reference Design is intended to have.</p> <p>For context, ANSI / RESNET / ICC 301-2019 requires ceiling fans to be equal in number for both the reference and rated homes. However, if the number of ceiling fans present in the rated home is not at least equal to the number of bedrooms plus one, then neither home is modeled with ceiling fans.</p> <p>The National ERI Target Procedure was intended to apply the same logic. However, it states that the quantity of ceiling fans shall be equal to the number of bedrooms plus one “when ceiling fans are present in the Rated Unit”. The partner is unclear whether the ENERGY STAR Reference Design should be configured with ceiling fans when any ceiling fans are present in the Rated Unit, or only in cases where the Rated Unit has a quantity at least equal to the number of bedrooms plus one. The latter interpretation was the intent.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Resolution: To clarify this intent, the language in the 'Lighting, Appliances, Fixtures & Internal Gains' Section will be revised as follows:</p> <p>"Ceiling Fan: 122 CFM per Watt; Quantity = <u>Same as Rated Unit per ANSI / RESNET / ICC 301, either 0 or</u> Number of bedrooms + 1 when ceiling fans present in the Rated Unit; otherwise Quantity = 0"</p>
00513	11/10/2022	ERI Target Procedure, Version 1.1 (Rev. 03) 2019	Change	Exhibit 1 – ENERGY STAR Reference Design configured without on-site power
				<p>Issue: Partners have asked whether the ENERGY STAR Reference Design (ESRD) should be configured with On-Site Power Production (OPP) if such a system is present in the Rated Unit. Because OPP is not one of the building components listed in the Expanded ENERGY STAR Multifamily Reference Design Definition Exhibit and the document contains a footnote stating that "Any parameter not specified in this exhibit shall be identical to the value entered for the Rated Unit", one might infer that it is EPA's intent for the ESRD to be configured with OPP.</p> <p>Such a configuration would create unintended challenges because the related Program Requirements specify that "on-site power generation may not be used to meet the ENERGY STAR ERI Target".</p>
				<p>Resolution: It is not EPA's intent to make the ENERGY STAR ERI Target more stringent in cases where the Rated Unit has OPP. To align the ENERGY STAR ERI Target Procedure with EPA's intent, a new row will be added to the end of the ENERGY STAR Multifamily Reference Design Definition Exhibit with the Building Component listed as "On-Site Power Production" and the Definition listed as "None".</p>
00566	12/01/2023	National ERI Target Procedure (ANSI 301-2019), Version 1.2 (Rev. 03)	Change	Glazing Section – SHGC revised from 0.40 to 0.30 in CZ's 4-8
				<p>Issue: A Solar Heat Gain Coefficient (SHGC) of 0.40 is used to configure the ENERGY STAR Multifamily Reference Design in Climate Zones 4-8. This aligns with the value specified in the Single-Family New Homes program, which is derived from the maximum value allowed under the residential prescriptive path of the 2021 IECC in Climate Zones 4 and 5 and with the Standard Reference Design specifications in Table R405.4.4.2(1) for Climate Zones 4-8.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>However, windows with such a high SHGC are less common, are generally only appropriate for use in designs that are orientation-specific, and the stringency of the National v1.2 ENERGY STAR ERI Target makes it difficult to compensate when lower SHGC windows are used.</p> <p>A SHGC of 0.30 is commonly available in double silver window products that offer an appropriate balance between low U-factors and moderate SHGC in cold climates. This SHGC value was modeled in northern climates when analyzing the potential energy savings of the latest version of the ENERGY STAR Residential Windows, Doors, and Skylights specification.</p> <p>Resolution: To specify a more appropriate SHGC for cold climates, the value will be revised from 0.40 to 0.30 in Climate Zones 4-8 for both non-Class AW, and Class AW windows.</p> <p>Note that Exhibit 1 of the National Program Requirements, Version 1.2, contains the specifications of the Multifamily Reference Design, which generally align with the National ERI Target Procedure. However, it also defines the requirements that a Prescriptive Path project must meet or exceed. In the case of SHGC, there is some variation between what is in the National ERI Target Procedure and the values allowed under the Prescriptive Path. Depending on the climate zone and window type, the values in CZ 4 through 8 are either 0.40 (matching the current National ERI Target Procedure) or “Any”, meaning any value is acceptable for the Prescriptive Path.</p> <p>While the National ERI Target Procedure will be updated by changing the SHGC to 0.30 in CZ 4-8, higher values than 0.30 may be appropriate in some orientation-specific designs. Therefore, Exhibit 1 of the National Program Requirements will not be updated, meaning that SHGC values higher than 0.30 will continue to be allowed in Climate Zone 4-8, even when using the Prescriptive Path.</p>
00707	12/01/2023	ERI Target Procedure, Version 1.2 (Rev.03) 2019	Change	<p>Ceilings, adjacent to Exterior or Unconditioned Space Volumes Section – Correction to CZ 3 U-factor</p> <p>Issue: EPA's intent was to align the Version 1.2 ERI Target Procedure envelope values with the 2021 IECC Residential requirements. This document incorrectly lists '0.024' instead of the value of '0.026' for Climate Zone 3 from the 2021 IECC Table R402.1.2.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				Resolution: To align the ERI Target Procedure with EPA's intent, and the 2021 IECC, the ceiling insulation U-factor for Climate Zone 3 will be changed from 0.024 to 0.026
00609	12/01/2023	National ERI Target Procedure, Version 1.2 (Rev. 03) 2019	Clarification	Lighting, Appliances, Fixtures & Internal Gains Section – Number of ceiling fans aligned with logic in ANSI / RESNET / ICC 301
				<p>Issue: A partner has asked for clarification about the number of ceiling fans the ENERGY STAR Reference Design is intended to have.</p> <p>For context, ANSI / RESNET / ICC 301-2019 requires ceiling fans to be equal in number for both the reference and rated homes. However, if the number of ceiling fans present in the rated home is not at least equal to the number of bedrooms plus one, then neither home is modeled with ceiling fans.</p> <p>The National ERI Target Procedure was intended to apply the same logic. However, it states that the quantity of ceiling fans shall be equal to the number of bedrooms plus one “when ceiling fans are present in the Rated Unit”. The partner is unclear whether the ENERGY STAR Reference Design should be configured with ceiling fans when any ceiling fans are present in the Rated Unit, or only in cases where the Rated Unit has a quantity at least equal to the number of bedrooms plus one. The latter interpretation was the intent.</p>
				<p>Resolution: To clarify this intent, the language in the ‘Lighting, Appliances, Fixtures & Internal Gains’ Section will be revised as follows:</p> <p>“Ceiling Fan: 122 CFM per Watt; Quantity = <u>Same as Rated Unit per ANSI / RESNET / ICC 301, either 0 or Number of bedrooms + 1</u> when ceiling fans present in the Rated Unit; otherwise Quantity = 0”</p>
00549	12/01/2023	National ERI Target Procedure, Version 1.2 (Rev. 03) 2019	Clarification	Service Water Heating Systems Section - Specification of First-Hour Rating
				<p>Issue: Partners have noted that the ENERGY STAR Reference Design defines the efficiency of Service Water Heating Systems using the Uniform Energy Factor (UEF) metric, but does not specify an accompanying First-Hour Rating (FHR) value.</p> <p>In ANSI / RESNET / ICC 301-2022, FHR accompanies UEF as a Minimum Rated Feature. The FHR is used to assign a usage bin (i.e., low, medium, or high). For storage water</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>heaters, a single UEF with two different usage bins will result in different estimates of consumption.</p> <p>Spot modeling completed by NREL suggests that for a given UEF, a water heater modeled with an FHR assigned to a medium usage bin results in the smallest difference in consumption when compared to a water heater with an equivalent EF value, as determined using RESNET's UEF-to-EF conversion factor.</p> <p>In addition, the majority of ENERGY STAR heat pump water heaters, which is the type specified in Version 1.2 of the ENERGY STAR Reference Design, fall into the medium usage bin.</p> <p>Resolution: Based on this information, the following logic will be specified for determining the FHR for electric water heaters:</p> <p>a) If FHR is provided for the Rated Unit, the Reference Design's FHR will be set equal to the Rated Unit's FHR.</p> <p>b) If FHR is not provided for the Rated Unit, the Reference Design's FHR will be set to 63 (the midpoint of the 51-75 "medium" usage bin).</p> <p>To reflect this, the System Type within this Section will be revised as follows:</p> <p>"System Type (when Rated Unit is served by residential systems): Where Rated Unit has non-electric water heater. Reference Design shall be configured with a tankless gas water heater with 0.90 UEF. Where Rated Unit has electric water heater, Reference Design shall be configured with an electric heat pump water heater with 1.49 UEF; <u>and tank size shall be equal to the that of Rated Unit, or 60 gallons tank size if Rated Unit uses tankless electric water heater; and FHR shall be equal to the Rated Unit or 63 if Rated Unit does not specify FHR.</u>"</p> <p>Note that no FHR needs to be specified for gas water heaters because the National Version 1.2 ENERGY STAR Reference Design is configured with tankless (i.e., non-storage) equipment.</p>
00514	11/10/2022	ERI Target Procedure,	Change	Exhibit 1 – ENERGY STAR Reference Design configured without on-site power
				Issue: Partners have asked whether the ENERGY STAR Reference Design (ESRD) should be configured with On-Site Power Production (OPP) if such a system is present in the Rated

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Version 1.2 (Rev. 03) 2019		<p>Unit. Because OPP is not one of the building components listed in the Expanded ENERGY STAR Multifamily Reference Design Definition Exhibit and the document contains a footnote stating that “Any parameter not specified in this exhibit shall be identical to the value entered for the Rated Unit”, one might infer that it is EPA’s intent for the ESRD to be configured with OPP.</p> <p>Such a configuration would create unintended challenges because the related Program Requirements specify that “on-site power generation may not be used to meet the ENERGY STAR ERI Target”.</p>
				<p>Resolution: It is not EPA’s intent to make the ENERGY STAR ERI Target more stringent in cases where the Rated Unit has OPP. To align the ENERGY STAR ERI Target Procedure with EPA’s intent, a new row will be added to the end of the ENERGY STAR Multifamily Reference Design Definition Exhibit with the Building Component listed as “On-Site Power Production” and the Definition listed as “None”.</p>
00610	12/01/2023	Oregon and Washington ERI Target Procedure, Version 1.2 (Rev. 03) 2014	Clarification	<p>Lighting, Appliances, Fixtures & Internal Gains Section – Number of ceiling fans aligned with logic in ANSI / RESNET / ICC 301</p>
				<p>Issue: A partner has asked for clarification about the number of ceiling fans the ENERGY STAR Reference Design is intended to have.</p> <p>For context, ANSI / RESNET / ICC 301-2019 requires ceiling fans to be equal in number for both the reference and rated homes. However, if the number of ceiling fans present in the rated home is not at least equal to the number of bedrooms plus one, then neither home is modeled with ceiling fans.</p> <p>The Oregon and Washington ERI Target Procedure was intended to apply the same logic. However, it states that the quantity of ceiling fans shall be equal to the number of bedrooms plus one “when ceiling fans are present in the Rated Unit”. The partner is unclear whether the ENERGY STAR Reference Design should be configured with ceiling fans when any ceiling fans are present in the Rated Unit, or only in cases where the Rated Unit has a quantity at least equal to the number of bedrooms plus one. The latter interpretation was the intent.</p>
				<p>Resolution: To clarify this intent, the language in the ‘Lighting, Appliances, Fixtures & Internal Gains’ Section will be revised as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				“Ceiling Fan: 122 CFM per Watt; Quantity = <u>Same as Rated Unit per ANSI / RESNET / ICC 301, either 0 or</u> Number of bedrooms + 1 when ceiling fans present in the Rated Unit; otherwise Quantity = 0 ”
00515	11/10/2022	Oregon and Washington ERI Target Procedure, Version 1.2 (Rev. 03) 2014	Change	Exhibit 1 – ENERGY STAR Reference Design configured without on-site power
				<p>Issue: Partners have asked whether the ENERGY STAR Reference Design (ESRD) should be configured with On-Site Power Production (OPP) if such a system is present in the Rated Unit. Because OPP is not one of the building components listed in the Expanded ENERGY STAR Multifamily Reference Design Definition Exhibit and the document contains a footnote stating that “Any parameter not specified in this exhibit shall be identical to the value entered for the Rated Unit”, one might infer that it is EPA’s intent for the ESRD to be configured with OPP.</p> <p>Such a configuration would create unintended challenges because the related Program Requirements specify that “on-site power generation may not be used to meet the ENERGY STAR ERI Target”.</p>
				<p>Resolution: It is not EPA’s intent to make the ENERGY STAR ERI Target more stringent in cases where the Rated Unit has OPP. To align the ENERGY STAR ERI Target Procedure with EPA’s intent, a new row will be added to the end of the ENERGY STAR Multifamily Reference Design Definition Exhibit with the Building Component listed as “On-Site Power Production” and the Definition listed as “None”.</p>
00611	12/01/2023	Oregon and Washington ERI Target Procedure, Version 1.2 (Rev. 03) 2019	Clarification	Lighting, Appliances, Fixtures & Internal Gains Section – Number of ceiling fans aligned with logic in ANSI / RESNET / ICC 301
				<p>Issue: A partner has asked for clarification about the number of ceiling fans the ENERGY STAR Reference Design is intended to have.</p> <p>For context, ANSI / RESNET / ICC 301-2019 requires ceiling fans to be equal in number for both the reference and rated homes. However, if the number of ceiling fans present in the rated home is not at least equal to the number of bedrooms plus one, then neither home is modeled with ceiling fans.</p> <p>The Oregon and Washington ERI Target Procedure was intended to apply the same logic. However, it states that the quantity of ceiling fans shall be equal to the number of bedrooms</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>plus one “when ceiling fans are present in the Rated Unit”. The partner is unclear whether the ENERGY STAR Reference Design should be configured with ceiling fans when any ceiling fans are present in the Rated Unit, or only in cases where the Rated Unit has a quantity at least equal to the number of bedrooms plus one. The latter interpretation was the intent.</p> <p>Resolution: To clarify this intent, the language in the ‘Lighting, Appliances, Fixtures & Internal Gains’ Section will be revised as follows:</p> <p>“Ceiling Fan: 122 CFM per Watt; Quantity = <u>Same as Rated Unit per ANSI / RESNET / ICC 301, either 0 or</u> Number of bedrooms + 1 when ceiling fans present in the Rated Unit; otherwise Quantity = 0”</p>
00516	11/10/2022	Oregon and Washington ERI Target Procedure, Version 1.2 (Rev. 03) 2019	Change	Exhibit 1 – ENERGY STAR Reference Design configured without on-site power
				<p>Issue: Partners have asked whether the ENERGY STAR Reference Design (ESRD) should be configured with On-Site Power Production (OPP) if such a system is present in the Rated Unit. Because OPP is not one of the building components listed in the Expanded ENERGY STAR Multifamily Reference Design Definition Exhibit and the document contains a footnote stating that “Any parameter not specified in this exhibit shall be identical to the value entered for the Rated Unit”, one might infer that it is EPA’s intent for the ESRD to be configured with OPP.</p> <p>Such a configuration would create unintended challenges because the related Program Requirements specify that “on-site power generation may not be used to meet the ENERGY STAR ERI Target”.</p>
				<p>Resolution: It is not EPA’s intent to make the ENERGY STAR ERI Target more stringent in cases where the Rated Unit has OPP. To align the ENERGY STAR ERI Target Procedure with EPA’s intent, a new row will be added to the end of the ENERGY STAR Multifamily Reference Design Definition Exhibit with the Building Component listed as “On-Site Power Production” and the Definition listed as “None”.</p>
00649	12/01/2023		Change	Section 3.1 - Allowed ASHRAE 90.1 Appendix G Version

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
		Simulation Guidelines AppG2016, Version 1 (Rev. 03)		<p>Issue: ASHRAE 90.1-2019 and 2022 have been released since these Simulation Guidelines were created. These versions of ASHRAE use the same baseline requirements, however they have slight improvements in the Appendix G modeling requirements. The ENERGY STAR website notes that when using the ASHRAE Path of MFNC National v1.2, Appendix G from ASHARE 90.1-2019 must be used. It is not clear otherwise whether Appendix G from ASHRAE 90.1-2019 or 90.1-2022 may be used.</p> <p>Resolution: With the new modeling methodology starting with ASHRAE 90.1-2016, it is possible and even recommended to use later editions of ASHARE 90.1 Appendix G when modeling. Therefore, when modeling using these Simulation Guidelines, EPA will allow Appendix G from ASHRAE 90.1-2016, 2019 or 2021 to be used for all Versions except National v1.2; and will allow Appendix G from ASHARE 90.1-2019 or 2021 to be used for National v1.2.</p> <p>The first paragraph and exceptions of Section 3.1 will be updated as follows:</p> <p>“Buildings shall be simulated following <i>ASHRAE 90.1-2016 Appendix G</i> Performance Rating Method (PRM, Appendix G) and as described in this document.</p> <p>Exception 1: Compliance with <i>Appendix G</i> Section G.1.2.1 is not required.</p> <p>Exception 2: Where the <i>Performance Target</i> is based on ASHRAE 90.1-2019, ASHRAE 90.1-2019 Appendix G or later must be used. Where the <i>Performance Target</i> is based on ASHRAE 90.1-2016 or earlier, compliance with a later edition of ASHRAE 90.1 Appendix G (e.g., 2019, 2022) is permitted. Where modeling using ASHRAE 90.1-2019 Appendix G or later, that version of Appendix G must be used wherever “ASHRAE 90.1-2016 Appendix G” is mentioned in this document.”</p>
00680	12/01/2023	Simulation Guidelines – Appendix G 90.1-2016, Version 1 (Rev. 03)	Clarification	<p>Item 6.5.12.1 – Clarify mechanical ventilation formula for sleeping units</p> <p>Issue: Partners have expressed confusion on which formula to use in determining the minimum mechanical ventilation air flow required for sleeping units.</p> <p>Language in the MFNC National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03), the MFNC Caribbean Rater Field Checklist, Version 1 (Rev. 03), and the MFNC HVAC Design Report, Version 1 / 1.1 / 1.2 (Rev. 03) have all been updated to clarify that the formula to determine the minimum mechanical ventilation air flow for sleeping units is as follows:</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>"0.01 x Conditioned Floor Area + 7.5 x (number of beds)"</p> <p>Similar language needs to be added to keep consistency across policy documents.</p> <p>Resolution: EPA's intent is that any building with sleeping units is required to use a formula determined by the number of beds. Therefore, to clarify this requirement and maintain consistency of policy across documents the language of Item 6.5.12.1 will be updated to specify which formula to use for any MNFC building with sleeping units.</p> <p>Item 6.5.12.1 will be revised as follows:</p> <p>"The baseline local mechanical exhaust from bathrooms and kitchens, and the baseline dwelling-unit ventilation rate shall be modeled using the same rates as in the Proposed Design, without exceeding the minimum required by ASHRAE 62.2-2016 or the building code, whichever is greater, by more than 15 cfm or 15%. <u>For sleeping units, the "minimum required by ASHRAE 62.2-2016" shall be calculated as 0.03 x Conditioned Floor Area + 7.5 x (number of beds).</u>"</p>
00527	05/01/2023	Simulation Guidelines AppG 2016, Version 1 (Rev.03)	Change	<p>Section 6.9 - Alternative calculations for elevators</p>
				<p>Issue: Table G3.1 in Appendix G was revised in ASHRAE 90.1-2016 to include calculations related to elevator loads (motors, ventilation, and lighting). This guidance is different than what is specified in the Simulation Guidelines. Partners have requested to use the approach from Appendix G for consistency with Appendix G and also because those calculations are included in the Compliance Form. Partners have also requested that elevators be permitted to be classified as 'unregulated' if using the current guidance.</p>
				<p>Resolution: EPA would like to encourage the use of the Compliance Form and also aims to limit deviations from Appendix G. As this guidance is similar to that contained in the Simulation Guidelines and was developed after their release, they will be revised to allow this alternative approach for calculating energy use associated with elevator motors. Where using the current guidance to model this end-use as energy neutral, the Simulation Guidelines will be revised to permit elevators to be classified as unregulated.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>A sentence will be added to Section 6.9 as follows: <u>“As an alternative, energy associated with the elevator motor may be calculated using the guidance in Table G3.1 of ASHRAE 90.1-2016 Appendix G.”</u></p> <p>The following paragraph will be revised as shown below:</p> <p>If the elevator system is not modeled using the approaches described above, use the default table below to determine the total energy consumption associated with all elevators in the building for both the <i>Baseline Building Design</i> and the <i>Proposed Design</i>. If “NA”, model total energy consumption, using no less than 2.0 MWh per year. <u>Where using this table to model the elevator energy consumption as <i>energy neutral</i>, the elevator consumption may be classified as <i>unregulated</i>.</u></p> <p>In addition, the following sentence will be corrected to align with Appendix G and current lighting requirements from Section 6.3.2.1:</p> <p>Cab lighting in the baseline model shall be equal to 4.3 <u>3.14</u> W/ft² operated 24/7.</p>
00681	12/01/2023	Simulation Guidelines, Version 1 (Rev. 03)	Clarification	Item 3.12.2.2 - Clarify mechanical ventilation formula for sleeping units
				<p>Issue: Partners have expressed confusion on which formula to use in determining the minimum mechanical ventilation air flow required for sleeping units.</p> <p>Language in the MFNC National Rater Field Checklist, Version 1 / 1.1 / 1.2 (Rev. 03), the MFNC Caribbean Rater Field Checklist, Version 1 (Rev. 03), and the MFNC HVAC Design Report, Version 1 / 1.1 / 1.2 (Rev. 03) have all been updated to clarify that the formula to determine the minimum mechanical ventilation air flow for sleeping units is as follows:</p> <p>“0.01 x Conditioned Floor Area + 7.5 x (number of beds)”</p> <p>Similar language needs to be added to keep consistency across policy documents.</p>
				<p>Resolution: EPA’s intent is that any building with sleeping units is required to use a formula determined by the number of beds. Therefore, to clarify this requirement and maintain consistency of policy across documents the language of Item 6.5.12.1 will be updated to specify which formula to use for any MNFC building with sleeping units.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
				<p>Item 3.12.2.2 will be revised as follows:</p> <p>“The Baseline Building Design dwelling unit mechanical ventilation rates in all dwelling units shall be modeled using the same rates as <u>in the Proposed Design, without exceeding the minimum required by ASHRAE 62.2-2016 or the building code, whichever is greater, by more than 15 cfm or 15% except where the rates in the Proposed Design exceed the amount required by the building code or ASHRAE 62.2-2016 ($0.03 \times \text{Area} + 7.5 \times (\#BR + 1)$) by more than 15 cfm or 15%.</u> For sleeping units, the “minimum required by ASHRAE 62.2-2016” shall be calculated as $0.03 \times \text{Conditioned Floor Area} + 7.5 \times (\text{number of beds})$. In that case, the Baseline Building Design shall be modeled to reflect the greater of that required by either ASHRAE 62.2-2016 or the building code, plus 15 cfm or 15%, and will be less than the Proposed Design.”</p>
00714	04/01/2024	Applicable Program Requirements, Versions, and Revisions by Location (Rev. 04)	Change	Exhibit 1 - Implementation of National Version 1.2 in Virginia
				<p>Issue: Virginia has recently adopted a more efficient residential energy code. As a result, once the new codes are fully implemented, National Version 1.1 will no longer provide meaningful savings relative to code-compliant noncertified buildings in this state.</p>
				<p>Resolution: To continue to provide meaningful savings relative to non-certified buildings in states that have adopted more rigorous codes, a National Version 1.2 implementation date has been defined for Virginia. To reflect this change, Exhibit 1 will be modified to implement National Version 1.2 for buildings permitted on or after 01-01-2027.</p>
00715	04/01/2024	Applicable Program Requirements, Versions, and Revisions by Location (Rev. 04)	Change	Exhibit 1 - Implementation of National Version 1.2 in Illinois
				<p>Issue: Illinois has recently adopted a more efficient residential energy code. As a result, once the new codes are fully implemented, National Version 1.1 will no longer provide meaningful savings relative to code-compliant noncertified buildings in this state.</p>
				<p>Resolution: To continue to provide meaningful savings relative to non-certified buildings in states that have adopted more rigorous codes, a National Version 1.2 implementation date has been defined for Illinois. To reflect this change, Exhibit 1 will be modified to implement National Version 1.2 for buildings permitted on or after 01-01-2027.</p>

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
00716	04/01/2024	Applicable Program Requirements , Versions, and Revisions by Location (Rev. 04)	Change	Exhibit 1 - Implementation of National Version 1.2 in Ohio
				Issue: Ohio has recently adopted a more efficient building energy code that impacts multifamily buildings (2024 Ohio Construction Code). As a result, once the new codes are fully implemented, National Version 1.1 will no longer provide meaningful savings relative to code-compliant noncertified buildings in this state.
				Resolution: To continue to provide meaningful savings relative to non-certified buildings in states that have adopted more rigorous codes, a National Version 1.2 implementation date has been defined for Ohio. To reflect this change, Exhibit 1 will be modified to implement National Version 1.2 for buildings permitted on or after 01-01-2027.
00717	04/01/2024	Applicable Program Requirements , Versions, and Revisions by Location (Rev. 04)	Change	Exhibit 1 - Implementation of National Version 1.2 in Oregon
				Issue: Oregon has recently adopted a more efficient residential energy code. As a result, once the new codes are fully implemented, Oregon and Washington Version 1.2 will no longer provide meaningful savings relative to code-compliant noncertified buildings in this state.
				Resolution: To continue to provide meaningful savings relative to non-certified buildings in states that have adopted more rigorous codes, a National Version 1.2 implementation date has been defined for Oregon. To reflect this change, Exhibit 1 will be modified to implement National Version 1.2 for buildings permitted on or after 01-01-2027.
00718	04/01/2024	Applicable Program Requirements , Versions, and Revisions by Location (Rev. 04)	Change	Exhibit 1 - Implementation of National Version 1.2 in Connecticut
				Issue: Connecticut has recently adopted a more efficient residential energy code. As a result, once the new codes are fully implemented, National Version 1.1 will no longer provide meaningful savings relative to code-compliant noncertified buildings in this state.
				Resolution: To continue to provide meaningful savings relative to non-certified buildings in states that have adopted more rigorous codes, a National Version 1.2 implementation date has been defined for Connecticut. To reflect this change, Exhibit 1 will be modified to implement National Version 1.2 for buildings permitted on or after 01-01-2027.

ENERGY STAR Multifamily New Construction Policy Record

ID	Log Date	Program Document	Classification	Topic
00719	04/01/2024	Applicable Program Requirements , Versions, and Revisions by Location (Rev. 04)	Change	Exhibit 1 - Implementation of National Version 1.2 in New Jersey
				Issue: New Jersey has recently adopted a more efficient residential energy code. As a result, once the new codes are fully implemented, National Version 1.1 will no longer provide meaningful savings relative to code-compliant noncertified buildings in this state.
				Resolution: To continue to provide meaningful savings relative to non-certified buildings in states that have adopted more rigorous codes, a National Version 1.2 implementation date has been defined for New Jersey. To reflect this change, Exhibit 1 will be modified to implement National Version 1.2 for buildings permitted on or after 01-01-2027.
00720	04/01/2024	Applicable Program Requirements , Versions, and Revisions by Location (Rev. 04)	Change	Exhibit 1 - Implementation of National Version 1.2 in Maryland
				Issue: Maryland has recently adopted a more efficient residential energy code. As a result, once the new codes are fully implemented, National Version 1.1 will no longer provide meaningful savings relative to code-compliant noncertified buildings in this state.
				Resolution: To continue to provide meaningful savings relative to non-certified buildings in states that have adopted more rigorous codes, a National Version 1.2 implementation date has been defined for Maryland. To reflect this change, Exhibit 1 will be modified to implement National Version 1.2 for buildings permitted on or after 01-01-2027.
00721	04/01/2024	Applicable Program Requirements , Versions, and Revisions by Location (Rev. 04)	Change	Exhibit 1 - Implementation of National Version 1.2 in Florida
				Issue: Florida has recently adopted a more efficient residential energy code. As a result, once the new codes are fully implemented, National Version 1.1 will no longer provide meaningful savings relative to code-compliant noncertified buildings in this state.
				Resolution: To continue to provide meaningful savings relative to non-certified buildings in states that have adopted more rigorous codes, a National Version 1.2 implementation date has been defined for Florida. To reflect this change, Exhibit 1 will be modified to implement National Version 1.2 for buildings permitted on or after 01-01-2027.