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.

Definitions

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

- <u>Change</u> 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.
- <u>Clarification</u> 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.
- <u>Refinement</u> 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.
- <u>Comment</u> 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.
- <u>Issue Under Review</u> 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.

ID	Log Date	Program Document	Classification	Торіс
00001 6/8	6/8/2019	National Program	Clarification	Versions of Supporting Documents that are required for use
		Requirements California Program Requirements		Issue: It is anticipated that the various Excel-based supporting documents, such as the ASHRAE Path Calculator and Multifamily Workbook, will be updated on an as-needed basis, between the release of Program revisions. It is not currently clear which versions of those files are required to be submitted to the MRO for review.
		ASHRAE Path Calculator Multifamily Workbook		Resolution: While there currently is only one version of each of the Excel based files, once upgrades are made to the files, they will be uploaded online, on an as-needed basis. While Partners are encouraged to always use the newest versions available, unless otherwise specified, file updates between Program revisions will not be required. After a Program revision, project teams will be required to use the updated document based on the enforcement timeline set for the revision. This timeline will be noted in the National Program Requirements and California Program Requirements.
00002	6/8/2019	National Program Requirements	Refinement	Updating file name from "Performance Path" Calculator to "ASHRAE Path" Calculator
				Issue: Partners have questioned why the MFNC program references a "Performance Path Calculator" when following the "ASHRAE Path". There is no "Performance Path" option, as there was in the MFHR program.
				Resolution: EPA agrees that the file naming causes unnecessary confusion and will replace the references to "Performance Path Calculator" with "ASHRAE Path Calculator" within the Program Documents in Rev01. In the interim, the Excel files have been uploaded to the website using the new terminology.
00003	6/8/2019	Rater Design Review Checklist	Refinement	High-Performance Fenestration Footnote 4
				Issue: Partners have noted an incorrect reference to items "a) through d), above", when describing the exclusion for PHIUS+ or PHI certified buildings with triple-glazed window assemblies.
				Resolution: EPA has confirmed that the reference was incorrect. As a result, the last sentence in footnote 4 of the Rater Design Review Checklist will be revised as follows:
				"In PHIUS+ or PHI certified buildings, where triple-glazed window assemblies with thermal breaks / spacers between the panes are used, such windows meet the intent of Items 2.1 and 2.2 and shall be excluded when assessing compliance of i) through iii), above."

ID	Log Date	Program Document	Classification	Торіс
00004	6/8/2019	Rater Field Checklist HVAC Design Report	Clarification	Item 6.7 - Central Exhaust Leakage Test
				Issue: Item 6.7 of the Rater Field Checklist indicates that "central exhaust systems that serve one or more dwelling units" shall be tested for duct leakage but is not explicit about whether this test applies to systems associated with clothes dryers.
				Resolution: This test was intended to be limited to central exhaust systems directly serving dwelling units, that either provide dwelling unit mechanical ventilation or local mechanical exhaust to bathroom and/or kitchens in accordance with ASHRAE 62.2. This test does not apply to central exhaust systems that provide exhaust for clothes dryers.
				"This test is not required of central exhaust systems serving clothes dryers."
00005	6/8/2019	Rater Field Checklist	Clarification	Item 13.1 - ENERGY STAR Certified Appliance Requirement
				Issue: Item 13.1 of the Rater Field Checklist indicates that appliances in dwelling units must be ENERGY STAR certified. An appliance used often in multifamily dwelling units is a "laundry center", which is a single piece of laundry equipment, with separate drums for clothes washing and clothes drying. This product category is only recently eligible to earn the ENERGY STAR and partners may have difficulty finding products that are certified.
				Resolution: While the ENERGY STAR Clothes Washer and Clothes Dryer specifications indicate that these laundry centers are eligible for certification, since the availability of certified models is still limited, EPA will recommend, but not require, that laundry centers meet Item 13.1 until EPA determines they are more widely available.
00006	6/8/2019	Rater Field Checklist	Clarification	Item 6.7 - Central Exhaust Leakage Test Pressure
				Issue: Partners have noted that the <u>RESNET Guidelines for Multifamily Energy Ratings</u> , which are referenced for this central exhaust duct leakage test procedure, only provide guidance for testing between 50 and 100 Pa and that these systems can often have average operating pressures above 100 Pa or have varying pressures due to variable speed systems.
				Resolution: Compliance with this requirement can be met by testing at the same pressure as the design or average operating pressure and calculating the 25% or 30% leakage allowance based on the exhaust fan flow at that pressure. 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.
				$CFM_{50} = CFM_{design} / [P_{design}^{(0.65)} / 50^{(0.65)}]$

ID	Log Date	Program Document	Classification	Торіс
				For example, a central exhaust system is designed for a 1,000 CFM exhaust fan and the MEP determines the design pressure (P_{design}) to be 100 Pa. If testing at rough-in at 100 Pa, the leakage allowance (CFM _{design}) is 250 CFM, or 25% of 1,000. If the Rater instead tests at 50 Pa, applying the equation results in a lower leakage allowance (159 CFM) at the lower pressure (50 Pa). CFM ₅₀ = 250 / [100 ^(0.65) / 50 ^(0.65)] = 159 CFM50
				As a result, footnote 47 of the Rater Field Checklist will be revised as follows:
				"For the purpose of computing leakage allowance, exhaust fan flow shall be the lesser of the rated fan flow 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, 143% of the sum of the design exhaust airflow of the dwelling units that are exhausted by that central fan. Duct leakage shall be tested at the design or average operating pressure and-shall use the procedures in the <u>RESNET Guidelines</u> for <u>Multifamily Energy Ratings</u> . 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.
				$CFM_{50} = CFM_{design} / [P_{design}^{(0.65)} / 50^{(0.65)}]$
				No less than 50% of the ductwork, based on total linear feet, shall be tested. 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%. Where aerosol-based sealant is used on some but not all risers, the ductwork selected for testing must be representative of all sealing strategies used."
00007	7 6/8/2019	Rater Field Checklist	Refinement	Incorrect footnotes associated with Items 8.3, 9.1, and 9.1.1
				Issue: Partners have noted that certain footnotes were incorrectly associated with checklist items.
				Resolution: EPA has confirmed that Item 8.3 should reference footnote 49 and not footnote 48, that Item 9.1 should reference footnote 59 and not footnote 60, and that Item 9.1.1 should reference footnote 60 and not footnote 61. As a result, the Rater Field Checklist will be revised accordingly in Rev01.

ID	Log Date	Program Document	Classification	Торіс
00008	6/8/2019	HVAC Functional Testing Checklist	Change	Approved credential list for Functional Testing Agents (FTA)
				Issue: Partners have asked about other commissioning credentials that are not currently listed as a pre-approved credential for FTA's, such as the Certified Commissioning Authority (CxA) credential from ACG (AABC Commissioning Group) and the process through which EPA would consider other credentials.
				Resolution: EPA has reviewed the certification and re-certification process for both ACG's CxA and CxT (Certified Commissioning Technician) credentials and determined that they are equivalent to currently listed credentials and therefore will be added to the list. FTA's with this credential may complete the Functional Testing Checklist upon completion of the online orientation. Partners may submit other equivalent commissioning credentials for EPA to consider. If approved, they will be listed <u>online</u> .
00009	6/8/2019	HVAC Functional Testing Checklist	Refinement	Entities overseeing approved credentials for Functional Testing Agents
				Issue: Partners have asked which entities oversee some of the approved credentials listed in the Functional Testing Checklist and whether that information can be added and listed online.
				Resolution: EPA agrees that this information should be readily available and will add them to the <u>website</u> listing and to Rev01 of the Program Documents.
00010	6/8/2019	Target Procedure Version 1, Version 1.1, OR/WA Version 2	Change	Applying the 15% reduction factor to the Compartmentalization Rate
				Issue: Footnote 13 of the ERI Target Procedures Version 1 and 1.1 and footnote 12 of the OR-WA Target Procedures Version 2 indicate that for "a Rated Unit with conditioned space below, that does not indirectly use corridor air as the ventilation supply air, the ENERGY STAR Multifamily Reference Design shall be configured with an infiltration rate of 0.255 cfm50/ft2 and software shall either automatically apply a 15% reduction to the compartmentalization results of the Rated Unit or instruct the Rater to apply the reduction." Software developers have noted confusion related to the underlined phrase.
				Resolution: The intent of this footnote was to incorporate the same procedure currently permitted by the <u>RESNET Guidelines for Multifamily Energy Ratings</u> . EPA's interpretation of the underlined portion refers to multifamily buildings with corridors that have over-sized their ventilation rate with the purpose of indirectly providing ventilation supply air to the dwelling units, either through undercuts to the dwelling unit entry door or infiltration through the walls adjacent to the corridor. Rated Units in buildings with these types of systems would not be eligible for the 15% reduction factor. However, the footnote was incorrectly written as the reduction factor was intended to still apply to the Reference Design. This will be corrected in Rev01 as follows:

ID	Log Date	Program Document	Classification	Торіс
				"For a Rated Unit with conditioned space below, the ENERGY STAR Multifamily Reference Design shall instead be configured with an infiltration rate of 0.255 cfm50/ft2. For a Rated Unit with conditioned space below, that does not indirectly use corridor air as the ventilation supply air, software shall either automatically apply a 15% reduction to the compartmentalization results of the Rated Unit or instruct the Rater to apply the reduction."
00011	6/8/2019	Target Procedure, Version 1	Clarification	Duct Location in Version 1 Reference Design for Rated Units with some adiabatic ceiling
				Issue: Software developers have identified that certain configurations of Rated Units will have some portions of their ceiling that are 'Adiabatic' and some that are 'All Other'. The Version 1 Target Procedures are not clear if these mixed ceiling assemblies are considered 'All Other' with respect to determining the duct location in the Reference Design.
				Resolution: EPA has determined that the column currently labeled as "Adiabatic" is intended to mean "100% Adiabatic" and will update the Version 1 Target Procedures in Rev01.
00012	6/8/2019	Target Procedure, Version 1.1	Refinement	Inconsistent equipment efficiency from Reference Design
				Issue: Partners have noted an inconsistency between the Target Procedure for Version 1.1 and the Reference Design for Version 1.1, which is shown in Exhibit 1 of the National Program Requirements.
				Resolution: EPA has confirmed that the correct equipment efficiencies for gas furnaces and AC units in Climate Zones 4 and 5 are those from Exhibit 1 of the National Program Requirements. As a result, values from the Heating and Cooling Systems sections of Exhibit 1 of the Target Procedure, Version 1.1 will be revised from 90 to 95 for "Gas Furn. AFUE" in CZ 4, 4C & 5 and from 15 and 14 to 13 for "AC SEER" in CZ 4, 4C & 5.