

**Summary of Comments, EPA Responses, and Resulting Policy Changes on Draft 2  
ENERGY STAR Single-Family New Homes (SFNH), National Program Requirements, Version 3.2, and  
ENERGY STAR Multifamily New Construction (MFNC), National Program Requirements, Version 1.2**

EPA has posted a compilation on its website of all comments received during the stakeholder feedback period, which ended April 15, 2022, for its second draft of the ENERGY STAR SFNH, National Program Requirements, Version 3.2, and ENERGY STAR MFNC, National Program Requirements, Version 1.2.

This document contains a summary of these comments, along with EPA's responses and the resulting policy change, if any.

When similar comments were received from multiple respondents, EPA has consolidated these ideas into a single summary bullet. However, EPA has attempted to retain all unique comments received, including those submitted by a single respondent.

# ENERGY STAR SFNH National Program Requirements, v3.2, and MFNC National Program Requirements, v1.2

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ID	Comment Summary	EPA's Response
<b>Reference Design Configuration and Performance Targets</b>		
1	<ul style="list-style-type: none"> <li>Two commenters suggested that the efficiency of gas space heating equipment in the ENERGY STAR Reference Designs be increased in hot and mixed climates to align with the ENERGY STAR product specification for furnaces.</li> </ul>	<ul style="list-style-type: none"> <li>EPA has configured the ENERGY STAR Reference Designs with furnaces that align with the efficiency required in the ENERGY STAR product specification in mixed and cold climates. It has only deviated in hot climates. While the ENERGY STAR product specification has defined a single level of furnace efficiency that is appropriate, overall, for hot and mixed climates, the ENERGY STAR Reference Designs are developed using a more fine-grained approach.</li> </ul> <p>EPA's intent for the proposed ENERGY STAR Reference Designs is to achieve savings of at least 10% relative to the 2021 IECC. Note that the measures in the reference design are not mandatory and builders are free to select a preferred package of efficiency upgrades based on cost, availability, and other factors so long as the overall performance target is achieved. When designing the Reference Design, EPA has attempted to align the packages with the upgrades most likely to be selected by partners. This has been accomplished, for example, by optimizing the equipment measures for each climate zone, selecting high-efficiency cooling equipment in hot climates, high-efficiency heating equipment in cold climates, and specifying both for mixed climates.</p>
2	<ul style="list-style-type: none"> <li>One commenter suggested that the efficiency of windows in the ENERGY STAR Reference Designs be aligned with the current draft of the next version of the ENERGY STAR product specification for residential windows, doors, and skylights.</li> </ul>	<ul style="list-style-type: none"> <li>EPA does not believe that it is appropriate to incorporate a draft specification that is subject to change into the ENERGY STAR Reference Designs. The next version of the ENERGY STAR product specification for residential fenestration products will likely be incorporated into the ENERGY STAR Reference Designs when the next versions of the residential new construction program requirements are developed, along with any other product specifications updated since the development of SFNH v3.2 and MFNC v1.2.</li> </ul>
<b>Mandatory Requirements</b>		
3	<ul style="list-style-type: none"> <li>Twelve of sixteen commenters who provided feedback on the revised thermal backstop proposed in Draft 2 were supportive.</li> </ul> <p>One additional commenter suggested a further increase in stringency by limiting the use of the interim thermal backstop to the subset of climate zones with the largest increase in stringency between the 2012 and 2021 IECC thermal enclosure requirements.</p> <p>Three commenters expressed concerns that the revised proposal was too stringent. One area of concern raised by two of these commenters was the proposal to phase out the interim thermal backstop in 2025 for all states. They instead proposed that the interim backstop be allowed for a two-year transition period as the SFNH</p>	<ul style="list-style-type: none"> <li>EPA appreciates the support from the large majority of commenters on the revised proposal for the thermal backstop.</li> </ul> <p>While the revised proposal adds a layer of complexity by defining an interim thermal backstop, EPA recognizes that increasing the thermal backstop from the 2009 IECC (as used in the prior versions) to the 2021 IECC is a significant advancement in all climate zones. Based on the feedback received, EPA believes that providing partners with additional time to prepare for such a change is warranted, particularly in the first states to have the new versions enforced.</p> <p>Limiting the use of the interim thermal backstop to a subset of climate zones, as one commenter suggested, would make enforcement even more complex. In addition, while the commenter noted that the increase in stringency between the 2012 and 2021 IECC is more limited in some climate zones, the thermal backstop of the current program versions is the 2009 IECC. Relative to the 2009 IECC, all locations will have a meaningfully more stringent backstop in SFNH v3.2 and MFNC v1.2. Therefore, EPA continues to believe that providing a transition period in all locations is appropriate.</p>

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	<p>v3.2 and MFNC v1.2 program requirements are put into effect in each state, even after 2025.</p> <p>All three of these commenters also proposed changing the interim backstop from 105% to 110% of the 2021 IECC UA, with one commenter suggesting that it be relaxed only when paired with certain measures, like properly installed HVAC systems.</p> <p>One of these commenters expressed concern that the thermal backstop has been defined in a manner that's inconsistent with the underlying energy code.</p>	<p>With regards to the suggestion to allow the use of the interim thermal backstop for two years in each state, even in those with implementation dates later than 2025, EPA believes that is not necessary for several reasons. Once the new program versions are finalized, EPA can begin educating all partners about the need to be prepared for the new versions, including those in states with later implementation dates. Furthermore, with each passing year, construction practices will continue to improve, and additional products will become more widely available (e.g., highly efficient double-pane windows), which will ease compliance.</p> <p>Regarding the proposal to relax the interim thermal backstop, EPA believes that setting it at 105% of the 2021 IECC UA will negate the need for most partners to make significant architectural changes and therefore provides sufficient flexibility as proposed.</p> <p>Finally, regarding the concern that the thermal backstop is inconsistent with the underlying energy code, EPA does not believe that it is necessary to align the thermal backstop of its above-code program with one of the thermal backstops defined within the code, of which there are multiple, depending on the compliance path and edition of the code. Requiring a high-performance thermal enclosure as a prerequisite to certification is compatible with the goals of the ENERGY STAR program.</p>
4	<ul style="list-style-type: none"> <li>• Two commenters suggested that EPA require all heat pumps in homes located in cold climates that are certified using the proposed program requirements to meet the 'Cold Climate' criteria of Version 6.1 of the ENERGY STAR Program Requirements Product Specification for Central Air Conditioner and Heat Pump Equipment.</li> </ul>	<ul style="list-style-type: none"> <li>• EPA's intent is to minimize the number of new mandatory features added to incremental versions of its program requirements. In addition, the 'Cold Climate' criteria were only recently finalized, and no products are currently available that have been certified yet that meet them. For these reasons, EPA believes it is premature to add a mandatory requirement tied to these criteria to the proposed program requirements.</li> </ul> <p>However, EPA has proposed that heat pumps meet these criteria when used in homes and apartments certified using the new certification label focused on key next-generation features. This will allow EPA and its partners to develop experience with these emerging products in a smaller subset of the highest-performing homes so that these measures may be considered for inclusion in future versions of the program.</p>
5	<ul style="list-style-type: none"> <li>• Commenters suggested that EPA add a variety of mandatory features or recognition to the proposed program requirements related to electrification and renewable energy:             <ul style="list-style-type: none"> <li>○ Four commenters suggested promoting electrification through various additional requirements, including electrification of end-uses, making homes 'electric-ready' to ease electrification post-construction, and/or more stringent performance targets for homes that use gas.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• EPA agrees that strategic electrification will play an increasingly important role in meeting emissions reduction targets. It is for this reason that EPA has proposed a differentiated program, launching next year, to provide additional recognition for next-generation homes and apartments that meet this challenge now. EPA will monitor the success and uptake of the new certification to determine when it is appropriate to begin integrating such features into the base program.</li> </ul> <p>EPA does not prohibit states or other partners, such as utilities, from adding requirements to EPA's specifications for their own purposes. For example, a state could provide preferred permitting, or a utility could provide incentives for an all-electric home that meets any enhanced requirements that they choose to set beyond the base ENERGY STAR program requirements.</p>

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	<ul style="list-style-type: none"> <li>○ One commenter suggested that EPA create a new mark or added recognition for homes and apartments that are all-electric and meet the proposed program requirements.</li> <li>○ One commenter asked EPA to consider allowing states to require all-electric appliances in homes and apartments certified using the proposed program requirements.</li> <li>○ Three commenters suggested that renewable energy systems or ‘renewable-ready’ features be required in all certified homes.</li> </ul>	<p>In general, EPA’s intent is to minimize the number of new mandatory features added to incremental versions of its program requirements. EPA will consider whether it is appropriate to add renewable or renewable-ready requirements to its program when it develops its next non-incremental version (i.e., Version 4).</p>
6	<ul style="list-style-type: none"> <li>● One commenter reiterated their request that EPA update the minimum required ventilation rates to align with ASHRAE 62.2-2016, ASHRAE 62.2-2019, or higher; update requirements for ventilation terminations to better align with current codes, standards, and best practices; and add an exception to the sone rating requirement for dwelling unit mechanical ventilation systems with heat or energy recovery.</li> <li>● In addition, the commenter suggested that EPA require all ventilation products to be listed in the HVI Certified Product Directory.</li> </ul>	<ul style="list-style-type: none"> <li>● EPA continues to believe that referencing a more recent edition of ASHRAE 62.2 as the minimum mandatory requirement for the program would constitute a significant change that is most appropriate to add when developing the next non-incremental versions of the program (i.e., Version 4). Many codes, particularly in the multifamily sector, still do not require compliance with any edition of ASHRAE 62.2. Therefore, the current requirements in the ENERGY STAR program to include a whole-dwelling ventilation system, local mechanical exhaust, and enhanced filtration in every home and apartment often represent a significant improvement over standard construction practices.</li> </ul> <p>With regards to the evolving scope of ASHRAE 62.2, EPA successfully began enforcing the use of ASHRAE 62.2 in this sector even before the scope of the standard was formally expanded to encompass multifamily dwelling units. While EPA supports the expanded scope beginning with the 2016 edition, we do not believe it is necessary to reference this edition at this time.</p> <p>EPA appreciates the commenter’s clarification that the proposed revisions to vent terminations would not increase the stringency of the program and its reiteration that HRV and ERV systems are not rated for sound. Refinements that improve, clarify, and simplify the program are incorporated into Revisions, which are typically released annually. EPA will work with the commenter prior to the next Revision to assess whether these proposed changes should be incorporated at that time.</p> <p>EPA believes that a requirement that all ventilation products be listed in the HVI Certified Product Directory would be best suited for consideration when the next non-incremental version of the program is developed (i.e., Version 4).</p>
<b>Implementation Timeline</b>		
7	<ul style="list-style-type: none"> <li>● One commenter suggested that the proposed program versions be implemented simultaneously in all states, regardless of the stringency of the underlying code.</li> </ul>	<ul style="list-style-type: none"> <li>● As a voluntary market transformation program, EPA must define a threshold for its program requirements that is achievable by a critical mass of builders. Implementing the most stringent version of the program requirements when the code requirements vary so significantly across states could create a widely varying incremental cost for builders participating in different areas. In states with weaker codes, builders may be less likely to participate, diminishing the</li> </ul>

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		<p>market transformation effects of the program. For this reason, EPA is retaining its initial proposal to implement the new program versions only in states that adopt the 2021 IECC or an equivalently stringent code. In the future, as more states adopt the latest codes and builders' standard practice continues to improve, EPA may again advance the minimum program versions used to certify homes and apartments on a national level, as it recently did by establishing a national transition to move all states remaining at SFNH Version 3.0 to Version 3.1, and from MFNC Version 1.0 to 1.1.</p>
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