

ENERGY STAR® Version 6.1 CAC/HP Draft Specification Stakeholder Comment Matrix

Topic	Comment Summary	EPA Response
Cold Climate Criteria	<p>Four stakeholders support the decision to remove EER/EER2 requirements from ENERGY STAR Cold Climate criteria because they believe products designed for use in colder climates should focus on their ability to heat a space efficiently.</p> <p>Two stakeholders suggest retaining EER/EER2 requirements so utilities can continue to rely on peak cooling day savings offered by ENERGY STAR certified products.</p>	<p>EPA thanks stakeholders for offering their perspectives on EER/EER2 requirements for Cold Climate Heat Pumps. While peak cooling demand is important in some areas, a unit sized for the full heating load in a cold climate won't be close to full capacity on a hot summer day. Though this won't be easy to claim as savings for utility programs, EPA believes that allowing manufacturers more freedom to design for efficient heating will ultimately provide more energy and cost savings for consumers and nationally. As such, EPA has sustained the removal of EER/EER2 requirements for Cold Climate certification. EPA will work with utilities that need to claim peak savings to find another way.</p>
Installation Capabilities	<p>Five stakeholders have expressed concern with the Installation Capabilities requirements posed in the Version 6.1 Draft specification. All acknowledge that a quality installation is key to achieving efficient performance but believe that setting such requirements only for variable-speed products will result in less-efficient single and 2-stage products earning certification while their more-efficient variable speed counterparts do not, confusing the market.</p> <p>Several stakeholders state that the implementation of features to satisfy these criteria is simply not achievable within the next few years and suggest that trying to do so would make these products ultra-premium and thus unaffordable for most consumers.</p> <p>Two stakeholders suggest that EPA create some reference sheet (e.g., a FAQ page) to clarify the intent behind the requirements. They base this recommendation on their perception that many manufacturers are unclear about whether some features they already have may satisfy the intent of the requirements.</p>	<p>EPA thanks stakeholders for sharing their concerns. EPA recognizes the difficulties expressed and will not be requiring installation capabilities in this specification. Instead, EPA has created an optional distinction for models which are able to meet these criteria. EPA requests feedback from industry on what consumer-facing language to use for this distinction. We also look forward to continuing discussion with manufacturers about technical capabilities of equipment to aid installation, which will be a critical need for the future.</p>

EER/EER2 Requirements	Two stakeholders expressed that they do not support the lower of EER/EER2 requirements based solely whether a product is variable-capacity. Two stakeholders suggest to instead align EER/EER2 requirements with DOE.	EPA has removed the distinction between multi-capacity and all other products in favor of the simpler original Version 6.0 requirement. While higher EER requirements impose additional cost, weight, and size on units, the additional complexity in the specification did not deliver enough advantage to maintain it.
Short Ducted Units	One stakeholder requested a definition for horizontally ducted mini-split systems and encourages EPA to consider criteria intermediate between those for ducted and non-ducted systems for mini-split systems with short ducts.	Inclusion of the term “horizontally ducted” was an error. EPA’s intention was to refer to multi-split and multi-head systems with short duct runs as subject to the requirements of ducted units. These systems are tested as either low-static blower-coil systems or mid-static blower-coil systems, depending on design of the indoor units (Appendix M1). One-to-one mini-split systems with short duct runs are considered part of the “conventional” ducted system category and are subject to testing at 0.5 in. w.c. external static pressure. We have updated the document to reflect this. Additional distinction between system types will overcomplicate the specification without providing sufficient benefit.
CVP Testing	<p>One stakeholder points out that the CVP at 5°F will not add value to consumers as the majority of heating energy savings will still take place at higher temperatures. In addition, conducting the test with maximum thermostat setting condition eliminates the influence of the units’ control logic.</p> <p>One stakeholder requests support from EPA or DOE to manufacturers regarding the 5°F testing.</p>	<p>EPA thanks stakeholders for these comments. EPA regards the CVP as a first step to validating performance at 5F that begins to take the influence of controls into account.. EPA notes that even though the majority of heating hours occur at temperatures warmer than 5°F, the CVP adds significant utility to consumers to help ensure efficient performance at the colder conditions. The CVP verifies functionality and performance at the coldest outdoor temperatures, which is key information for consumers in colder climates seeking heat pump heating solutions.</p> <p>In addition, EPA looks forward to continuing to support manufacturers as use the CVP required for version 6. DOE will continue to answer any technical questions related to performing the CVP as they arise and is willing to host a lab demonstration of testing if interest is expressed.</p>
Minimum Capacity Requirements	One stakeholder requests that future revisions include performance requirements in low load heating conditions, stating that minimum capacity performance is more indicative of annual energy use than maximum system performance.	EPA agrees performance at minimum load is critical to minimizing energy use and maximizing customer satisfaction. We look forward to working with stakeholders to develop appropriate requirements in the future.

<p>Static Pressure Requirement</p>	<p>Regarding mobile home blower coil systems, one stakeholder seeks clarification on if the maximum static pressure requirements are for static pressure external to the AHU. One stakeholder requests that EPA consider a higher maximum pressure for modulating units to accommodate for the smaller ductwork found in manufactured homes.</p>	<p>It is unclear why modulating systems would require different static pressure requirements as compared to single- and two-stage counterparts (since all three configurations are paired with smaller ductwork). EPA will maintain definitions consistent with the CFR. If the CFR definition for mobile-home blower coil systems is updated in a future rulemaking, EPA would also update its specification.</p>
<p>Connected Criteria</p>	<p>One stakeholder supports AHRI 1380 as the demand response standard and believes that compliance with the standard should be the only requirement for the Connected designation.</p>	<p>EPA is pleased to be able to refer to an industry standard but reiterates that the final form of the standard is not sufficient for EPA connected recognition.</p>
<p>Effective Date</p>	<p>One stakeholder does not support a January 1, 2023 effective date and prefers January 1, 2022 as manufacturers will be releasing new products ahead of the new Federal standard.</p>	<p>The effective date of this specification was set during the Version 6.0 process to align with the federal standard. However, partners may certify to these updated criteria as soon as they are published, which will be in January 2022.</p>