

August 8, 2019

Mr. Jonathan Passe  
U.S. Environmental Protection Agency Headquarters  
1200 Pennsylvania Ave. N.W.  
Washington, D.C. 20460

(Submitted electronically via email to [energystarhomes@energystar.gov](mailto:energystarhomes@energystar.gov) and [passe.jonathan@epa.gov](mailto:passe.jonathan@epa.gov))

**RE: CARIBBEAN PROGRAM REQUIREMENTS, VERSION 3**

Dear Mr. Passe,

On behalf of more than 140,000 members, the National Association of Home Builders (NAHB) submits these comments to the U.S. Environmental Protection Agency (EPA) on the draft of the “Caribbean Program Requirements, Version 3” published on July 8, 2019.

NAHB is a Washington, D.C.-based trade association that works to ensure that housing is a national priority and that all Americans have access to safe, decent and affordable housing. The federation is affiliated with 700 state and local home builders associations around the country including Puerto Rico. NAHB’s membership includes, those who design, construct, and supply single-family homes, build and manage multifamily projects, and remodel existing homes. Each year, NAHB’s members construct about 80 percent of the new homes built in the United States. NAHB supports the availability of voluntary, above-code programs such as ENERGY STAR that encourage energy-efficient construction practices and is always looking for ways to streamline processes and requirements in efforts to increase participation.

The EPA is inviting ENERGY STAR stakeholder comments on the recently released draft Version 3 of the ENERGY STAR Caribbean Program Requirements, a Draft Caribbean and Pacific Rater Field Checklist, and a Draft Caribbean and Pacific Rater Design Review Checklist. Feedback is being solicited to ensure that these documents sufficiently address current stakeholder concerns regarding a low perceived value of blower door infiltration testing, as well as challenges with certain building types that are difficult to reflect in modeling software in this geographic region. NAHB applauds the EPA’s intent to streamline processes for builders based on previous stakeholder feedback and supports the perspective that “one size does not fit all,” as it relates to climate-specific adjustments that were made in the requirements for Puerto Rico and the U.S. Virgin Islands. As with any new draft requirements, however, NAHB remains concerned with unintended consequences that could threaten housing affordability. Below please find some of our concerns and suggestions regarding the draft ENERGY STAR Caribbean Program Requirements, Version 3.

**I. Exhibit 1: ENERGY STAR Reference Design, Cooling Equipment and Water Heating Equipment**  
*(Draft Caribbean Program Requirements ENERGY STAR Certified Homes, Version 3 Rev. 10, Page 2)*

*“At least one of the following two measures shall be selected and met: 1) **Measure A:** Solar Water Heater - DHW equipment shall include a solar water heater system with a Solar Fraction  $\geq 87.9\%$ . No space cooling is required if Measure A is selected, but if any space cooling is provided, it must be provided using mini-split AC’s or HP’s  $\geq 15$  SEER, each with  $\leq 10$  ft. of ductwork; or 2) **Measure B:***

*Bedroom Mini-Split HVAC - Mini-split AC's or HP's  $\geq$  15 SEER, each with  $\leq$  10 ft. of ductwork, shall serve all bedrooms. No space cooling is required outside of bedrooms, but if any space cooling is provided outside bedrooms, it must be provided using mini-split AC's or HP's  $\geq$  15 SEER, each with  $\leq$  10 ft. of ductwork."*

**NAHB Comments:**

In reference to Measure B, NAHB strongly recommends that the EPA reconsider flexibility for partners to fulfill this requirement. For instance, requiring mini-splits in each bedroom may be excessive in some instances where homes are smaller in size and/or the layout allows for air to easily move from room to room. If the builder chooses Measure B, mandating mini-split ACs or HPs in all bedrooms could lead to significant additional costs, thus potentially pricing out future home owners who already have high energy burdens. According to a recent study by the NAHB, in Puerto Rico, for each \$1,000 increase in the cost of a median-priced newly-built home, 4684 prospective buyers are pushed out of the market. In other words, based on income, these households would be able to qualify for a mortgage to purchase the home before the price increase, but not afterward.

The desired effect of efficient heating and cooling could still be achieved with the addition of only one or two heads, for these smaller homes. NAHB is concerned with the big price tag that could come along with adding mini-splits to all bedrooms, and recommends that EPA offer alternatives or exemptions to achieve the intent of Measure B. For instance, instead of requiring a mini-split in all bedrooms, the EPA could provide a table of BTU rating requirements based on square footage. Accounting for square footage and layout to properly size these systems will be imperative to preventing arbitrarily oversized mini-split systems and unnecessary installation costs.

**II. ENERGY STAR Certification Process for the Caribbean**

*A. (Draft Caribbean Program Requirements ENERGY STAR Certified Homes, Version 3 Rev. 10, Page 1, fourth paragraph of item 3)*

*"In the event that a Rater is not able to determine whether 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. If the Provider also cannot make this determination, then the Rater or Provider shall report the issue to EPA prior to project completion at: [energystarhomes@energystar.gov](mailto:energystarhomes@energystar.gov) and will typically receive an initial response within 5 business days."*

**NAHB Comments:**

While NAHB understands the need to allow flexibility for response time depending on the nature of the request, "will typically" is relatively vague, in turn making it difficult for builders to set expectations with their clients. NAHB suggests removing "will typically," and setting a defined maximum response time of 5 business days.

*B. (Draft Caribbean Program Requirements ENERGY STAR Certified Homes, Version 3 Rev. 10, Page 1, item 1)*

*"The certification process provides a single set of measures that must be used to construct an ENERGY STAR Certified Home in the Caribbean, coupled with an ERI rating for quality assurance purposes. Use an EPA-Recognized Verification Oversight Organization (VOO)'s Approved Software Rating Tool to configure efficiency measures that are equal to or better than the prescriptive*

*measures listed in Exhibit 1, ENERGY STAR Reference Design, for the home to be certified. The ERI value shall be calculated using ANSI / RESNET / ICC Standard 301 including all Addenda and Normative Appendices, with new versions and Addenda implemented according to the Effective Date and Transition Period End Date defined by RESNET. RESNET interpretations of Standard 301 shall also be followed. Any exceptions shall be approved by EPA and reported at [www.energystar.gov/ERIEExceptions](http://www.energystar.gov/ERIEExceptions). By configuring efficiency measures that are equal to or better than Exhibit 1, the resulting ERI is not required to meet a specific target value for the home to be certified.”*

**NAHB Comments:**

NAHB questions the stability, application and availability of RESNET’s Standard 301 Energy Rating Index (ERI). Initially the HERS standard was proprietary, but then shifted to an open ANSI standard in 2014 where it was first referenced in the 2018 International Energy Conservation Code (IECC). As demonstrated by recent litigation, it appears that RESNET attempted to limit the application of Standard 301 to once again be proprietary.<sup>1</sup> The suit was recently settled; however, without knowing the details, the uncertainty that surrounds Standard 301 could potentially give RESNET an unfair advantage as a Verification Oversight Organization (VOO) if it is able to restrict the use of the standard. While NAHB is not opposed to the incorporation by reference of specific standards, the standard must nonetheless be available and allowed to be used by the public. However, an important distinction exists between acquiring a standard and the application of that standard.

**III. Review of Thermal Comfort System Design**

*(Draft Caribbean & Pacific Rater Design Review Checklist Pages 1-2)*

*“For homes in GU, HI, and NMI: - Only required for homes in GU, HI, and NMI, otherwise check N/A”  
“For homes in PR and USVI: - Only required for homes in PR or USVI, otherwise check N/A”*

**NAHB Comments:**

NAHB recommends defining the areas included in the Pacific (Hawaii, Guam, and the Northern Mariana Islands) and the Caribbean (Puerto Rico and the US Virgin Islands) at the top of both the Rater Design Review Checklist and the Rater Field Checklist. To reduce confusion about which items apply or are exempted based on the area, the checklist can then refer to each region with this new branding. For instance, in the grey line above section 4.2a on the Design Review Checklist, remove the current language and replace with, “For homes in the Pacific ONLY. Homes in the Caribbean are exempt – check N/A.” In the grey line above section 4.2b, NAHB recommends replacing the current language with, “For homes in the Caribbean ONLY. Homes in the Pacific are exempt – check N/A.” In its current form, the text about what items are required for each region is unclear and repetitive.

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<sup>1</sup> See Appendix A, *Complaint, Residential Energy Services Network, Inc. v. Triconic, LLC*, No. 6:19-cv-00327 (M.D. Fla. Feb. 18, 2019)

While NAHB applauds the EPA's initiative to reduce barriers and simplify complex processes to encourage more ENERGY STAR certifications in both the Pacific and the Caribbean, we remain critical of any new requirements that could negatively impact housing affordability. As an ENERGY STAR stakeholder, NAHB appreciates the opportunity to provide comments on the EPA's request for feedback on the Caribbean Program Requirements, Version 3. Please direct any questions regarding this letter to Anna Stern, Program Manager, Sustainability & Green Building, 202-266-8325 or [astern@nahb.org](mailto:astern@nahb.org).

Sincerely,

A handwritten signature in black ink, appearing to read 'JST', with a long horizontal flourish extending to the right.

Jaclyn S. Toole, Assoc. AIA, CGP  
Assistant Vice President, Sustainability & Green Building