

ENERGY STAR[®]

Residential New Construction Programs

Historical Document

This document is provided for reference because it has been superseded by a more recent Version or Revision. Please find current program documents on the [Program Requirements](#) webpage.

Use of older Versions and Revisions, such as this document, are typically limited to homes and buildings with a permit date (or, for manufactured homes, a production date) prior to a specified date. Consult the [Implementation Timeline](#) table to assess whether a home or apartment is still eligible to be certified using this document.

For questions or more information, contact us at energystarhome@energystar.gov.



ENERGY STAR Single-Family New Homes Caribbean Program Requirements, Version 3 (Rev. 13)

These Program Requirements shall only be used in Puerto Rico & the U.S Virgin Islands

Eligibility Requirements

Site-built or modular ¹ detached Dwellings ² (e.g., single-family homes and duplexes) and Townhouses ³ are eligible to participate in the ENERGY STAR Single-Family New Homes (SFNH) program. To determine the applicable SFNH program requirements, including the minimum Version and Revision, to which a home is eligible to be certified, visit www.energystar.gov/SFNHversions.

Dwelling Units in certain low-rise multifamily buildings are also eligible to participate in the ENERGY STAR SFNH program if permitted prior to July 1, 2022. See Footnote 4 for details. ⁴

While primarily intended for new construction, existing homes (e.g., undergoing a gut rehabilitation) are also eligible to participate in the ENERGY STAR SFNH program, with guidance available at: www.energystar.gov/GutRehabGuidance.

For information about other ENERGY STAR residential new construction programs, visit www.energystar.gov/newhomesrequirements.

Note that compliance with these requirements is not intended to imply compliance with all local code requirements. ⁵

Partnership and Training Requirements

The following requirements must be met prior to certifying homes:

- Builders are required to sign an ENERGY STAR Partnership Agreement and complete the online Version 3 Builder Orientation, which can be found at www.energystar.gov/homesPA.
- Energy Rating Companies (e.g., rater companies and Providers ⁶) are required to sign an ENERGY STAR Partnership Agreement, which can be found at www.energystar.gov/homesPA.
- Raters ⁷ are required to complete EPA-recognized training which can be found at www.energystar.gov/newhomestraining, and be credentialed by a Home Certification Organization (HCO) ⁸ prior to completing inspections. Learn more at www.energystar.gov/hco.

ENERGY STAR Certification Process for the Caribbean

1. The certification process provides a prescriptive set of measures that must be used, coupled with an ERI rating for quality assurance purposes. Use an EPA-recognized HCO's Approved Software Rating Tool to configure the home to be certified. While the resulting ERI is not required to meet a specific target value, it is required that each individual measure listed in Exhibit 1, ENERGY STAR Prescriptive Efficiency Measures, be included in the home and meet or exceed the listed performance level. The ERI value shall be calculated using ANSI / RESNET / ICC 301 including all Addenda and Normative Appendices, with new versions and Addenda implemented according to the HCO that the home is being certified under, with approved exceptions listed at www.energystar.gov/ERIEExceptions.
2. Construct the home using the measures selected in Step 1 and the Mandatory Requirements for All Certified Homes, Exhibit 2.
3. Using a Rater, verify that all requirements have been met in accordance with the Mandatory Requirements for All Certified Homes and with the inspection procedures for minimum rated features in ANSI / RESNET / ICC 301, Appendix B. ⁷ If drywall will be installed, this will require a minimum of two inspections: one at pre-drywall and the other at final. All items shall be verified for each certified home and sampling protocols shall not be used. For modular homes, a Rater must verify any requirement in the plant not able to be verified on-site because a feature will be concealed prior to shipment. Finally, submit the home to the HCO for final certification and follow the HCO's certification and oversight procedures (e.g., quality assurance, recordkeeping, and reporting). The Rater is required to keep electronic or hard copies of the completed and signed Caribbean and Pacific Rater checklists and the National HVAC Design Report.

The Rater must review all items on the Caribbean and Pacific Rater checklists to verify that each inspection checklist item has been met within program-defined tolerances.

In the event that a Rater determines that a program requirement has not been met, the home cannot earn the ENERGY STAR until the item is corrected. If correction of the item is not possible, the home cannot earn the ENERGY STAR. In the event that an item on a Caribbean and Pacific Rater checklist cannot be inspected by the Rater, the home also cannot earn the ENERGY STAR.

In the event that a Rater is not able to determine whether a program requirement has been met (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 and will receive an initial response within 5 business days. If EPA believes the current program requirements are sufficiently clear to determine whether the item in question has been met, then this guidance will be provided to the partner and enforced beginning with the house in question. In contrast, if EPA believes the program requirements require revisions to make the intent clear, then this guidance will be provided to the partner but only enforced for homes permitted after a specified transition period after the release of the revised program requirements, typically 60 days in length.

This will allow EPA to make formal policy decisions as partner questions arise and to disseminate these policy decisions through the [Policy Record](#) and the periodic release of revised program documents to ensure consistent application of the program requirements.



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Exhibit 1: ENERGY STAR Prescriptive Efficiency Measures

The ENERGY STAR Prescriptive Efficiency Measures are the set of efficiency measures required to be used to construct an ENERGY STAR Certified Home in the Caribbean. Note that either Measure A: Solar Water Heater or Measure B: Bedroom Mini-Split HVAC must be selected and used in combination with all measures in the Envelope, Windows, & Doors section and Ceiling Fans & Lighting section. No tradeoffs are allowed. In addition, note that the Mandatory Requirements for All Certified Homes, Exhibit 2, contain additional requirements such as prescriptive air sealing requirements and mini-split wiring requirements.

Cooling Equipment & Water Heating Equipment				
<ul style="list-style-type: none"> At least one of the following two measures shall be selected and met: <ul style="list-style-type: none"> 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 <u>if</u> any space cooling is provided, it must be provided using mini-split AC's or HP's ≥ 15 SEER or SEER2, each with ≤ 10 ft. of ductwork. A single mini-split head is permitted to serve one or more bedrooms using up to 10 ft. of ductwork per head. Measure B: Bedroom Mini-Split HVAC - Mini-split AC's or HP's ≥ 15 SEER or SEER2, each with ≤ 10 ft. of ductwork, shall serve all bedrooms. No space cooling is required outside of bedrooms, but <u>if</u> any space cooling is provided outside bedrooms, it must be provided using mini-split AC's or HP's ≥ 15 SEER or SEER2, each with ≤ 10 ft. of ductwork. A single mini-split head is permitted to serve one or more bedrooms using up to 10 ft. of ductwork per head. 				
Envelope, Windows, & Doors				
<ul style="list-style-type: none"> Wall insulation shall be $\geq R-5$. Windows in all bedrooms shall meet the following specifications: <table border="1" style="margin-left: 40px; border-collapse: collapse; width: 200px;"> <tr> <td style="padding: 2px;">Window U-Value:</td> <td style="padding: 2px; text-align: right;">≤ 1.2</td> </tr> <tr> <td style="padding: 2px;">Window SHGC:</td> <td style="padding: 2px; text-align: right;">≤ 0.35</td> </tr> </table> 	Window U-Value:	≤ 1.2	Window SHGC:	≤ 0.35
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Ceiling Fans & Lighting				
<ul style="list-style-type: none"> Ceiling fans shall be installed in all primary living areas greater than 75 ft² and be ENERGY STAR certified.¹⁰ LED light bulbs shall be installed in 100% of ANSI / RESNET / ICC 301-defined Qualifying Light Fixture Locations. 				

Exhibit 2: Mandatory Requirements for All Certified Homes

Party Responsible	Mandatory Requirements
Rater	<ul style="list-style-type: none"> Completion of SFNH Caribbean and Pacific Rater Design Review Checklist, Version 3 / 3.2 Completion of SFNH Caribbean and Pacific Rater Field Checklist, Version 3 / 3.2
HVAC System Designer	<ul style="list-style-type: none"> Completion of SFNH National HVAC Design Report, Version 3 / 3.1 / 3.2 with the following exemptions: Section 3, Section 4, and Section 5
Builder	<ul style="list-style-type: none"> Completion of SFNH National Water Mgmt. System Builder Reqs., Version 3 / 3.1 / 3.2



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Footnotes:

1. A modular home is a prefabricated home that is made of multiple modules or sections that are manufactured and substantially assembled in a manufacturing plant. These pre-built sections are transported to the building site and constructed by a builder to meet all applicable building codes for site-built homes.
2. A Dwelling, as defined by ANSI / RESNET / ICC 301, is 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. ANSI / RESNET / ICC 301 defines a Dwelling Unit as a single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.
3. A Townhouse, as defined by ANSI / RESNET / ICC 301, is a single-family Dwelling Unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides. Townhouses are also eligible to participate in the ENERGY STAR Multifamily New Construction Program.
4. If permitted prior to July 1, 2022, the following are also eligible to participate in the ENERGY STAR SFNH program:
 - Dwelling units in any multifamily building with 4 units or fewer; OR
 - Dwelling units in multifamily buildings with 3 stories or fewer above-grade; OR
 - Dwelling units in multifamily buildings with 4 or 5 stories above-grade where dwelling units occupy 80% or more of the occupiable square footage of the building. When evaluating mixed-use buildings for eligibility, exclude commercial / retail space when assessing whether the 80% threshold has been met.

Any above-grade story with 20% or more occupiable space, including commercial space, shall be counted towards the total number of stories for the purpose of determining eligibility to participate in the program. The definition of an 'above-grade story' is one for which more than half of the gross surface area of the exterior walls is above-grade. All below-grade stories, regardless of type, shall not be included when evaluating eligibility.

Per ASHRAE 62.2-2010, occupiable space is any enclosed space inside the pressure boundary and intended for human activities or continual human occupancy, including, but not limited to, areas used for living, sleeping, dining, and cooking, toilets, closets, halls, storage and utility areas, and laundry areas.

5. While certification will result in compliance with many code requirements, a Rater is not responsible for ensuring that all code requirements have been met prior to certification. For more information about how these program requirements help satisfy code requirements, visit: www.energystar.gov/newhomesguidance. In the event that a code requirement, a manufacturer's installation instructions, or an engineering document conflict with a requirement of the ENERGY STAR program (e.g., slab insulation is prohibited to allow visual access for termite inspections), then the conflicting requirement within these program requirements shall not be met. Certification shall only be allowed if the Rater has determined that no equivalent option is available that could meet the conflicting requirement (e.g., switching from exterior to interior slab edge insulation).
6. The term 'Provider' refers to an Approved Rating Provider, as defined by ANSI / RESNET / ICC 301, that is approved by an HCO.
7. 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 or Approved Inspector, as defined by ANSI / RESNET / ICC 301, or an equivalent designation as determined by an HCO; and, b) have attended and successfully completed an EPA-recognized training class. See www.energystar.gov/newhomestraining.
8. HCOs are independent organizations recognized by EPA to implement an ENERGY STAR certification program for single-family and multifamily homes and apartments using an Energy Rating Index (ERI) compliance path. Learn more and find a current list of HCOs at www.energystar.gov/partner_resources/residential_new/working/other_participants/hco.
9. Solar fraction shall be determined using the [ICC-SRCC OG-300 Solar Water Heating System Certification Program's](http://www.iccsrcc.org/OG-300_Solar_Water_Heating_System_Certification_Program's) annual solar fraction rating (SFA) for the rating location closest to the home. For Dwellings or Dwelling Units with ≤ 3 bedrooms, determine SFA using the Low U.S. DOE Draw Pattern; otherwise, use Medium. 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/>.
10. Primary living areas include dining rooms, living rooms, family rooms, dens, bedrooms and home offices. Primary living areas do not include other spaces, such as kitchens, bathrooms, hallways, stairways, entrances, garages, and utility rooms.