Introduction to the ENERGY STAR Single-Family New Homes (SFNH) Program

The U.S. Environmental Protection Agency’s ENERGY STAR SFNH program is designed to reduce energy usage in single-family homes while improving comfort, indoor air quality, and durability.

What homes may participate in the ENERGY STAR Single-Family program?

Site-built or modular single-family homes, duplexes, and townhouses are eligible to participate in the ENERGY STAR Single-Family New Homes program. The program is primarily intended for new construction. You can learn about other ENERGY STAR Residential New Construction programs for multifamily new buildings and manufactured new homes on EPA’s website.

What are the elements of an ENERGY STAR Single-Family New Home?

| Efficiency & Testing       | • Above-code performance  
|                           | • Energy rating, with third-party inspections |
| Comfort                   | • Complete thermal enclosure system  
|                           | • Bedroom comfort vents |
| Air Quality               | • Whole-house fresh air system  
|                           | • Kitchen and bath fans that perform well and exhaust outside  
|                           | • MERV 6+ filter, properly installed  
|                           | • Combustion safety |
| Durability                | • Complete water management system |

It all starts with above-code performance. An independent Rater will use energy modeling and on-site inspections to complete an energy rating. This is an assessment of a home’s efficiency, resulting in an Energy Rating Index (ERI) between 0 and 100. The lower the value, the better. The above-code ERI target for ENERGY STAR varies; however, a score between 50 and 65 is typically required. As part of the rating, Raters can also assess and credit installations that meet the following conditions:

- **Grade I insulation installation.** This means that insulation is installed properly, which will maximize efficiency and comfort benefits.
- **Grade I or II HVAC installation.** This means that a basic assessment has demonstrated that the heating and cooling systems have been properly designed and installed. While EPA provides an alternative option for demonstrating this, HVAC grading will provide the most benefits.

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1 Requirements differ in CA, PR, and USVI. Consult with a Rater working in these locations for more details.
And adds seven key features. If your homes are already demonstrating above-code performance using an energy rating, you’re well on your way to ENERGY STAR. Now, just include these seven key features, which your Rater will verify during their inspections:

1. **Complete thermal enclosure system.** Minimum requirements for insulation levels and window performance, properly installed insulation, comprehensive air sealing, and advanced framing or other strategies to reduce thermal bridging. This helps keep homes comfortable year-round.

2. **Bedroom comfort vents.** A return-air pathway in each bedroom using transfer grills, jump ducts, dedicated return ducts, and/or undercut doors. This creates more comfortable bedrooms with even temperatures and good air circulation.

3. **Whole-house fresh air system.** This system delivers a consistent amount of fresh air into the home using strategies such as a bath fan with a controller, a motorized damper on the HVAC system, or a heat or energy recovery ventilator. This dilutes any contaminants in the home to improve indoor air quality.

4. **Kitchen and bath fans that perform well and exhaust outside.** A range hood or exhaust fan in kitchens and full baths that vents outside and meets minimum airflow rates. This removes moisture and contaminants at the source.

5. **MERV 6+ filter, properly installed.** A MERV 6 or better filter in heating and cooling systems, installed with a gasket to ensure air goes through it rather than around it, and located to facilitate routine maintenance. This traps dust, allergens, and other asthma triggers.

6. **Combustion safety.** To prevent dangerous combustion gases from accumulating in the home, furnaces, boilers, water heaters, and fireplaces must be power-vented or direct-vented, installed in lower-risk areas such as garages or attics, or tested for proper operation.

7. **Complete water management system.** Construction details (like proper flashing), which builders are responsible for implementing, ensure that bulk moisture drains away from the home and safeguards the materials inside.

To view the full program requirements, visit: energystar.gov/newhomesrequirements.

**How can ENERGY STAR certified homes earn the federal tax credit?**

The Inflation Reduction Act revised the 45L New Energy Efficient Home Credit and extended it through 2032. A home that is eligible to participate in the ENERGY STAR Single-Family New Homes program can earn $2,500 if it is certified to the following versions, based on the date the home is acquired (e.g., sold or leased):

- Jan. 1, 2023 – Dec. 21, 2024: National Version 3.1*
- Jan. 1, 2025 – Dec. 31, 2032: National Version 3.2*

*EPA is awaiting guidance from the IRS on the applicability of state/regional versions of the ENERGY STAR program requirements.

**How can a builder get started?**

1. **Find a Rater** to analyze how close your home plans are to achieving ENERGY STAR.
2. Sign EPA’s free **Partnership Agreement** to make you eligible to certify homes.