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 home types can participate in the ENERGY STAR Single-Family program?

Site-built or modular detached single-family homes, detached duplexes, and townhouses are eligible to participate in the ENERGY STAR Single-Family New Homes program. The program is primarily intended for new construction. Learn more about the ENERGY STAR Residential New Construction programs for multifamily new buildings and manufactured new homes on the 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  
|                      | • Properly sized and installed HVAC 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\(^1\). The lower the value, the more efficient the home. The above-code ERI target for ENERGY STAR varies; however, a score between 45 and 65 is typically required.

And adds eight 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 eight key features, which your Rater will verify during their inspections:

\(^1\) Requirements differ in CA, PR, and USVI. Consult with a Rater working in these locations for more details.
 ENERGY STAR® Homes and Apartments Builder & Developer Fact Sheet

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. **Properly sized and installed HVAC systems.** Ideally, this will be demonstrated through an HVAC grading assessment completed by the Rater. This helps to ensure that the system will efficiently produce the expected amount of heating and cooling. The use of an accredited contractor and a third-party oversight organization is also available as an alternative option.

3. **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.

4. **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.

5. **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.

6. **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.

7. **Combustion safety.** 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. This helps to prevent dangerous combustion gases from accumulating in the home.

8. **Complete water management system.** Builders are responsible for including construction details, such as flashing, continuous drainage planes, and foundation capillary breaks. This ensures that bulk moisture drains away from the home and safeguards the materials inside.

To view the full program requirements, visit: [energystar.gov/newhomesrequirements](https://energystar.gov/newhomesrequirements).

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

As part of the Inflation Reduction Act (IRA), the Section 45L New Energy Efficient Home Credit was updated and extended through 2032. A home that is eligible to participate in the ENERGY STAR Single-Family New Homes program can earn a credit of $2,500 when certified to an eligible version of the ENERGY STAR program requirements (based on the date that the home is acquired). More details are available on the EPA’s website at: [energystar.gov/45Ltaxcredits](https://energystar.gov/45Ltaxcredits).

### How can a builder get started?

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