



Building Your First ENERGY STAR Home

Step 1: Program Requirements

(BEFORE YOU BUILD!)

- Sign your builder business up for an ENERGY STAR Partnership by visiting www.energystar.gov.
- If you are already a partner, go to the ENERGY STAR website and ensure that you are still on [the list](#). If you did not certify a home in the last 12 months, you may have been dropped and will not need to sign up again, but you will need to have a home certified in order to get back on the list.
- After signing up, you'll need to pick your HERS Rater from the list of qualified raters. You will also need to complete an easy webinar and short quiz covering the program requirements.
- Ensure that your HVAC Contractor is on the [list of qualified contractors](#). If they are not, your project cannot qualify!
- Download and read the [program requirements and inspection checklists](#) for the house you're planning to build. Remember that the program requirements are ABOVE THE CODE, so you'll likely be doing some things different from your ordinary building practice.

It is imperative that you complete these steps

BEFORE building the home and

BEFORE contacting your HERS Rater!

Some Home Specifics



ENERGY STAR 3.0 Home requirements vary by climate zone; however, these are the most commonly overlooked requirements:

- Sealed sump pump crock
- Automatic Mechanical Ventilation System
- Pre-Drywall insulation inspection by the Rater
- Kitchen range hood vented to outdoors min. 100 CFM
- Bath fans with tested min. flow of 50 CFM
- HVAC contractor MUST be on the list of qualified contractors
- Furnace filter min. MERV 6 with cover and gaskets
- Duct leakage must be less than 4% to the outdoors and less than 8% or 12% to indoors. Be careful using building cavities for return ducts, and seal all ducts with mastic
- All vertical insulation must be enclosed on all six sides within an air-barrier material

Step 2:

Work with your Rater & Build the House

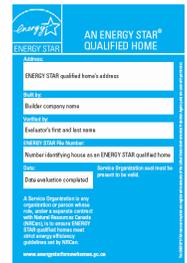


- Make sure you've done everything in step one otherwise you and your home will NOT qualify for ENERGY STAR Certification
- Include a statement on all your bid requests to sub-contractors and on your final plans that states:
 - *"This home shall meet or exceed ENERGY STAR 3.0 requirements. All subcontractors are responsible for knowing their role and including provisions in their bids to ensure the finished home meets those requirements."*
- Before you start construction, or ideally before you sign your final contract with the buyers, send the plans to your HERS Rater along with as many details about the energy related features including:
 - Street address of the proposed home
 - Orientation of the home on the property (front faces N/S/E/W?)
 - Window U-Factor and SHGC specifications
 - Proposed heating and cooling system efficiencies
 - Proposed water heating equipment
 - Foundation, above-grade wall, and attic insulation strategy
 - Planned automatic mechanical ventilation system
 - Any other details affecting the energy use of the house
- If you don't have all those details yet, your rater can make some assumptions, but will need the final details to be most accurate with the rating and to print compliance documents to bring to the final testing
- Review the projected rating certificates that your rater will send
- During the build, if any major details which will affect the energy use of the house, inform your rater who will review the change and make sure the changes do not disqualify the home from ENERGY STAR
- Your rater will need to inspect the house **AFTER INSULATION but BEFORE DRYWALL** to complete the Thermal Enclosure Checklist. This is a **critical** step, and if this is your first ENERGY STAR home, you should plan to have a site supervisor there to make note of any items the rater will need addressed before the drywall goes up. If you skip this step, your home will NOT QUALIFY for certification!
- When the house is complete, contact your rater to schedule the final inspection and testing. The final testing is typically done about the time the house is being cleaned and painters are touching up, right before final walk-thru and close
- Make sure the following last minute items are complete
 - Final doors and weather-stripping installed, thresholds adjusted
 - Attic access hatch has insulation attached to the lid and a gasket around the opening
 - Plumbing and electrical penetrations in the bond are sealed with caulk or foam
 - Water has been turned on and plumbing fixtures are set with traps filled
 - Electricity is turned on to the house
 - All flooring is installed and HVAC registers are in place
 - Final HVAC has been completed and the systems are all operating as they will be at occupancy



Step 3: Final Testing and Completion

- Final testing and inspection can take from 2 to 4 hours. During part of the testing, the rater will need to have all windows and doors remain closed
- The rater will primarily conduct the following tests:
 - Blower door test to measure air infiltration
 - Duct leakage test to measure leakage to outdoors and indoors
 - Bath fan and kitchen fan flow tests
 - Mechanical ventilation system operation and fan flows
- The results of the rating will not be known until the data collected at final, including the test results, is entered into the rating software to calculate the HERS Rating and ensure that the house meets the ENERGY STAR Program requirements
- The rater will send all the information to a Rating Provider who will enter the house into the building registry. The Provider will also send a copy of the certified report to the rater to forward to you. Ultimately you will provide the report to the homeowner
- In the final rating report, there will be a blue sticker which must be placed on the door of the electric service panel. This sticker contains the necessary information for future reprints of the rating certificate
- The ENERGY STAR website is updated quarterly, so the total number of homes you have built and certified in the program should be shown in the column next to your company name
- If there are any tax credits or rebates available for meeting or exceeding ENERGY STAR or other program requirements, your rater should be able to provide you with all the necessary documentation to submit your rebate applications
- In the event you have a problem with your rater which may constitute a conflict of interest, code of ethics violation, or standards of practice violation, contact RESNET to file a formal complaint at <http://www.resnet.us/complaint-resolution>



The Benefit of ENERGY STAR Partnership



Now that you've joined ENERGY STAR and built a home, take advantage of the additional marketing tools available to you. Use the logo on your business cards, vehicles, and all advertising. The little blue logo is one of the most recognized brands in the marketplace. Log into your My ENERGY STAR Account today to learn more!