

ENERGY STAR® Single-Family New Homes HVAC Grading for Builders



Overview

An exciting new option for meeting ENERGY STAR HVAC design and commissioning requirements is here. This option, called “Track A - HVAC Grading,” leverages ANSI / RESNET / ACCA / ICC Standard 310 for grading the installation of HVAC systems. Standard 310 integrates an HVAC design review and four sequential field tasks into a standard energy rating. Properly installed HVAC systems will be rewarded with better scores, which can help meet the ENERGY STAR ERI Target.



The Five Key Sequential Tasks in Standard 310

Task 1	Task 2	Task 3	Task 4	Task 5
Design Review	Total Duct Leakage	Blower Fan Airflow	Blower Fan Watt Draw	Refrigerant Charge

This new option can be used, but is not required for ENERGY STAR certification. Partners can continue to follow the original design and commissioning requirements if desired, which have been rebranded “Track B - HVAC Credential.” However, for projects using the new option, stepping up from an ERI rating to ENERGY STAR certification will be easier than ever.

HVAC grading makes it easier to certify ENERGY STAR single-family new homes:

- Integrates most ENERGY STAR HVAC requirements into an ERI rating
- Does not require the use of a credentialed HVAC contractor
- Does not require the contractor to complete the HVAC Commissioning Checklist
- Rewards proper installation with ERI points and helps meet the 45L tax credit

FAQs

ENERGY STAR Timeline: Can I use it now? When do I have to use it?

The “Track A - HVAC Grading” option can be used now. Note, though, that Raters will need to complete additional training and evaluation before using Standard 310. In addition, new HVAC design report templates that will streamline certification are being programmed into HVAC design software programs.

Partners who want to continue using the original requirements, rebranded “Track B - HVAC Credential,” may do so. While Track A offers many benefits, partners will not be forced to use it.

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What does this mean for me?

You now have a new option for assessing the quality of your HVAC systems. Proper design and installation translate to higher efficiency, greater comfort, and fewer homeowner complaints.

In addition, the added savings can help you meet the 45L federal tax credit for efficient new homes, as well as improve your ERI score, which will make it easier and more cost-effective to certify projects. For projects already doing an energy rating, the incremental cost to reach ENERGY STAR certification may be much smaller than before.

How much will it cost?

Your Raters' labor costs will increase somewhat because the three new field tests take approximately 30 minutes. However, this added time will be rewarded with a better ERI score for quality-installed HVAC systems. Therefore, HVAC grading can be used instead of measures that might be more expensive (e.g., higher efficiency HVAC equipment) to meet the ENERGY STAR ERI Target. Overall, this has the potential to lower the cost of certification.

Do HVAC designers and contractors have to do anything under this new path?

Yes! The HVAC system still must be properly designed and installed by them in order to meet ENERGY STAR requirements and achieve the lower ERI score.

The key difference is that Raters will be verifying key elements of the design and installation quality for the purpose of the rating. This is very similar to tight ducts – HVAC contractors must seal the ducts to achieve low leakage, while Raters are responsible for verifying their tightness.

Should the HVAC contractors I work with still be credentialed?

If using Track B - HVAC Credential, then the HVAC contractors must be credentialed, the same as before. If using Track A - HVAC Grading, it's recommended that you work with a credentialed contractor, at least until your Rater has used Track A long enough to ensure that your HVAC systems are consistently well-designed and properly installed. Only then is it recommended that you discuss with your contractors whether there's value in maintaining the credential.

What do I need to do next?

Check with your Rater to see if they're prepared to use Track A - HVAC Grading. If so, have them evaluate several projects to see whether the HVAC systems meet the ENERGY STAR requirements using this track. If so, consider developing a plan to use Track A on all projects.

Learn more by reading Std. 310 at www.resnet.us/resnet-ansi/. To see how ENERGY STAR integrates the HVAC grading option into its program, visit: www.energystar.gov/newhomesrequirements and review the national program requirements.