



Rater News for Summer 2022

Welcome to the Summer 2022 issue of **Rater News**, brought to you by the Washington State University Energy Program Home Energy Rater Program

In this issue:

[News from Jonathan Jones](#)

[WSU Energy Program News](#)

[News from RESNET](#)

[Energy Code News](#)

[U.S. EPA Program News](#)

[Technical Q&As Answered](#)

[Home Energy Rating Software and Equipment](#)

[Articles of Interest](#)

[Upcoming Events](#)

Washington State University Energy Program EARNS 2022 ENERGY STAR® MARKET LEADER AWARD



Olympia, WA, June 1, 2022. Washington State University (WSU) Energy Program is proud to announce that it has earned a 2022 ENERGY STAR® Market Leader Award from the U.S. Environmental Protection Agency (EPA) in recognition of its contribution to building or verifying energy-efficient new homes and/or apartments that have earned ENERGY STAR certification. ENERGY STAR certified homes and/or apartments are at least 10 percent more energy efficient than those built to code and achieve a 20 percent improvement on average, while providing homeowners and/or residents with better quality, performance and comfort.

The Market Leader Award recognizes partners participating in EPA's ENERGY STAR Residential New Construction program that have made a significant positive impact in energy-efficient construction and environmental protection by building or verifying at least 50 ENERGY STAR certified homes and apartments – or by sponsoring a local program that supported these activities – over the past year. More than 120,000 ENERGY STAR certified single-family homes and multifamily units were built in 2021, for a total exceeding 2.3 million since 1995.

“Our 2022 Market Leader Award winners demonstrate true leadership in bringing energy efficiency to the residential new construction marketplace,” said Jonathan Passe, Chief of the ENERGY STAR Residential Branch. “ENERGY STAR offers a proven whole-house approach that is transforming the residential market to a higher standard of construction quality while protecting the environment for all.”

This year's ENERGY STAR® Market Leader Awards also include the following raters we are excited to work with: *Earth Advantage, Four Walls, Inc., Swiftsure, The Energy Auditor, and Vital Spec.*

News from Jonathan Jones



Did you miss RESNET's 2022 Virtual “*Into The Future Together*” Building Conference?

Over the course of three days, the 21st Annual RESNET Conference offered well over a hundred informative sessions available live and in webinar format for attendees. Each day of RESNET 2022 was filled with dynamic and informative keynotes, timely sessions, and it provided networking to connect with peers. Topics covered Business Development Strategies, the latest in building science, equipment, finance and real estate, performance based codes, and career development. It was one jammed packed three-day event offering a lot to learn and gain.

Below are some of the Keynote Presentations:

- Leading the Path to Net Zero Carbon Homes
- A Conversation with the RESNET Executive Director
- Energy Efficiency and Climate Challenge
- Work Force Development Challenges and Opportunities in the Building Industry
- Sustainability for Builders
- Opportunities for Raters with the IECC/HERS Code Compliance Program

This annual conference is a great place to earn Professional Development credits. Raters still have access to 100+ on-demand sessions from the industry's best professionals. These sessions will be available through **July 31, 2022** for referral and/or to earn Professional Development credits. Register on the [RESNET 2022 Virtual Conference](#)



website, attend sessions and earn credits by watching the content on demand. Credit will automatically be tracked. Remember to download the certificate and send it to:
NWrater@energy.wsu.edu.

WSU Energy Program News

WSU Energy Program Virtual Home Energy Rater Training: August 15-17 and August 22-24 8:00 a.m. to 4:00 p.m. PDT

The WSU Energy Program, a RESNET® certified provider, is offering a HERS class for prospective home energy raters. HERS is a nationally recognized rating certification program and it is a prerequisite for the U.S. EPA ENERGY STAR®, Indoor airPLUS®, and other certification programs. A computer with REM/Rate® (PC only) or Ekotrope is required (free trial subscriptions are available for this). For Course Content Questions contact our instructor, Jonathan Jones at: NWrater@energy.wsu.edu. Click here to: [Register Now](#)

2018 Washington State Energy Code-Residential Training

Training on the 2018 Washington State Energy Code-Residential (WSEC-R) is provided by the WSU Energy Program in partnership with [BetterBuiltNW](#) and [Earth Advantage](#). These trainings are designed for building department staff, builders, sub-contractors, architects, and other building industry professionals who need to understand the 2018 WSEC-R.

- Live Webinar: June 21, 10:00 a.m. to 12:00 noon PDT. ***Deeply Buried Ducts: What You Need to Know to Comply with the 2018 WSEC-R.*** [Register](#)

News from RESNET

RESNET Instructors, Accredited Rating Providers and Training Providers:

The latest revisions to the RESCAZ exam are live now. ***Effective immediately, RESNET will resume enforcement of the RESCAZ exam for all new RTIN and RFIIN applicants.***

Background and additional details:

- Late in 2021, RESNET issued a policy temporarily suspending the RESCAZ exam requirement for new candidates.
- Access remained open and many candidates successfully took and passed the exam. Some candidates still reported issues, even after following the latest guidance in the revised version.
- During this time, RESNET allowed Providers to submit RFIN and RTIN applications for candidates who have met all other certification requirements.
- Candidates certified during this period were granted temporary certification for 90 days to allow additional time for passing the RESCAZ test.
- Providers with new raters or RFIs who successfully pass the RESCAZ test after earning temporary certification do not need to re-submit the RTIN or RFIIN application.



- Newly certified raters and RFIs *whose temporary certification under this policy has expired* may be granted a second extension but must successfully complete the RESCAZ test by **July 1, 2022**, to retain certification.

Raters and RFIs with temporary certification shall not be allowed to perform combustion safety testing without qualified supervision. Please reach out to info@resnet.us with any questions.

Energy Code News

As we navigate the 2018 WSEC there have been many questions on how to interpret the new code. Local jurisdictions can request interpretations. Did you know you can review these to see if it impacts your current projects? The growing list of interpretations can be found on the State Building Code Council website: https://sbcc.wa.gov/answersopinions?field_code_target_id=34&combine=&=App

In addition, Washington State is in the middle of a new code cycle and the WSU Energy Program is proud to be part of the Technical Advisory Group hashing out potential changes. For more information about those meetings that are open to the public, visit the State Building Code Council website: <https://sbcc.wa.gov/meeting-schedules-agendas/technical-advisory-groups/energy-code-tag>

Technical Q&As Answered

Selected Washington State Energy Code FAQs on Whole House Ventilation

Carolyn C. Roos, PhD, WSU Energy Program Engineer

What are the requirements for supplying fresh air to habitable spaces?

All homes require mechanical ventilation. Provided below is the code basis for this answer. In Section R403.6, the Washington State Energy Code adopted the ventilation requirements of the [International Residential Code](#) (IRC) (see IRC Chapter 15 Section M1505.4, “Whole-house mechanical ventilation

IRC’s Section M1505.4.1, “System Design,” states:

“The whole-house ventilation system shall consist of one or more supply **or** exhaust fans, **or** a combination of such, and associated ducts and controls.”

systems,” starting on page 512):

We have bolded the “or”s in this section to emphasize that the system may be exhaust-only, supply-only, **or** a combination of exhaust and supply.

The latest version of our Excel-based Code Compliance Calculator, which you can download from our [energy code website](#), includes a ventilation calculator to assist you with sizing your whole house ventilation system.

Are inlet ports in walls and windows required for make-up air? No.

Fresh air intakes are not required for make-up air because houses are never airtight; air seeps in through cracks all around the house, no matter how tightly it is built. The code basis for this is Section M1504.4, which allows exhaust-only ventilation with no mention of air inlets.

Inlet air ports used to be required, often as slots in window frames or wall ports. But it was determined that these were not necessary due to natural infiltration. They also result in comfort problems so people often plugged them up.

Note: The International Mechanical Code does require make-up air for kitchen fans exceeding 400 cfm.

How do I meet the requirements for Option 2.1 in Table 406.3 of the 2018 WSEC?

Option 2.1 has two requirements:

- The whole-house ventilation fan must be a high-efficiency fan (0.35 watts/cfm). You can search for specific models of high-efficiency Energy Star-rated exhaust fans at the [Energy Star website](#). Look for an efficacy of 2.9 cfm/watt or above, which is equivalent to the code-required maximum of 0.35 watts/cfm or above.
- The building or dwelling unit must pass a blower door test with a maximum tested air leakage rate of 3.0 air changes per hour at 50 Pascals (ACH₅₀).

For more information:

You can find more answers to frequently asked questions about whole house ventilation at: https://www.energy.wsu.edu/documents/FAQ_Fresh%20air%20intake_rev%205-18-22.pdf

Home Energy Rating Software and Equipment

Rem/Rate Software

Currently REM/Rate Version 16.3.1 or newer is required and soon 16.3.2 will be required for HERS Index and ENERGY STAR®. V3 Utility Programs are currently using version 16.0.6

Please make sure your equipment is calibrated and that you are utilizing multipoint testing. Equipment calibration will be checked while in the field and we check for multipoint testing during file QA. In addition, keep in mind that if you upgrade to the TEC-1000 the calibration schedule has been updated and must be done every four years.

Articles of Interest

A New Tool for Measuring Decarbonization

Climate change is mostly caused by carbon dioxide emissions, and in the U.S. some 35 percent of these emissions result from burning fossil fuels to power, heat, and cool buildings. Decarbonization of our buildings is critical if we hope to meet the climate goal of reducing U.S. emissions by well over half by 2030. But until now, we have lacked an accurate tool to calculate the carbon impacts of an

individual house or building and the savings we are achieving through clean energy measures.

Thankfully, RESNET has developed such a tool—

David B. Goldstein, *NRDC*, March 8, 2022: <https://www.nrdc.org/experts/david-b-goldstein/new-tool-measuring-decarbonization>

Federal Income Tax Credits and Other Incentives for Energy Efficiency

**Please note: The current tax credits for Residential Energy Efficiency ([Equipment Tax Credits for Primary Residences](#)) as well as the tax credit for [builders of energy efficient homes](#) expired December 31, 2021. As of January 5, 2022, there is no approved extension of these tax credits. Any extension/renewal of these credits is still pending approved legislation by Congress. We will update our website with information when there is an approved bill. The tax credits for [Residential Renewable Energy Products](#) are still effective, as written on this site, through December 31, 2023—Energy Star website: https://www.energystar.gov/about/federal_tax_credits

REStalk EP 94: Embodied Carbon in Housing

More and more we hear of the impact of carbon on our society and environment. Recent data says that operational carbon (the carbon that comes from energy, heat, lighting, etc.) is becoming less of a factor. RESNET Certified Home Energy Raters already collect data to produce detailed reports defining Operational Emissions for the HERS Index. Much of the data collected for the HERS Index overlaps with the data needed to calculate Embodied Carbon Emissions. RESNET has recently released an [ANSI standard](#) on how to calculate the carbon impacts of an individual house or building to address the issue—RESNET, April 12, 2022: <https://www.resnet.us/articles/restalk-ep-94-embodied-carbon-in-housing/>

Understanding Energy Code Development

The International Code Council (ICC) manages the development of the model codes that inform how new buildings are constructed. This includes requirements for structural, mechanical, electrical, and other systems, and our personal favorite and today's topic—the International Energy Conservation Code (IECC). Right now, the ICC and code experts are in the thick of developing the 2024 national model energy code—but code development looks a lot different this year than it has in the past. That is because the organization that administers the process for developing the code made substantial changes to how it is created—Lauren Urbanek, *Green Building Advisor*, May 3, 2022:

https://www.greenbuildingadvisor.com/article/understanding-energy-code-development?source=W20005EN&tp=i-1NHD-BC-GYT-1kHGqA-1o-YRWx-1c-rrx-o3lWI-l7UUciAVgf-262D1e&sourcekey=W20005EN&utm_campaign=green-building-advisor-eletter&utm_source=eletter&utm_medium=eletter&utm_content=gba_eletter&cid=63641&mid=1599960602

WSU Everett Building Honored with ASHRAE Technology Award

The WSU Everett building, at 915 North Broadway in Everett, won first place for the ASHRAE Puget Sound Region in the New Education Facility Design category for 2022. The 95,000 square-foot building

uses photovoltaic arrays, natural ventilation, natural lighting, rainwater harvesting, radiant flooring, rain gardens, and advanced LED fixtures. According to the U.S. Green Building Council, WSU Everett is one of six LEED Gold buildings in Everett—*WSU Insider*, May 11, 2022:

https://news.wsu.edu/news/2022/05/11/wsu-everett-honored-with-ashrae-technology-award/?utm_source=WSUNews-eneewsletter&utm_campaign=wsunewsnewsletter&utm_medium=email

Puget Sound Energy Donates Blower Door Equipment to Habitat for Humanity Snohomish County

On Thursday morning, Puget Sound Energy (PSE) donated one of its blower doors to assist Habitat for Humanity Snohomish County with its new home repair service. The door will test houses for areas where air may be getting in or out of easily, such as around window and door frames. This testing tool is essential for Habitat's newly-formed Home Repair Service, which provides necessary repairs to low-income individuals across Snohomish County—Lauren Reichenbach, *My Edmonds News*, May 12, 2022: <https://myedmondsnews.com/2022/05/puget-sound-energy-donates-blower-door-equipment-to-habitat-for-humanity-snohomish-county/>

Upcoming Events

All About Indoor Air Quality: Webinar Thursday June 30, 2022 3:00 p.m. PDT

There are five main ways green building professionals approach healthy indoor air quality: moisture management, source control, filtration, ventilation, and dehumidification. In this Expert Exchange webinar, our panelists will identify conditions that create poor indoor air quality and explain how to prevent or fix them to ensure the indoor air we breathe is as fresh and healthy as possible--Kiley Jacques, Green Building Advisor, June 9, 2022. For more information and to register: click [here](#).

Built Green Conference: Equitable Futures: South Seattle College, Sept. 15, 2022

The Built Green Conference has been occurring annually for over a decade, with the aim of providing valuable and cutting-edge information on green building and sustainability. This year's conference theme is *Becoming the Change*—For more information: <https://betterbuiltnw.com/events/built-green-conference-equitable-futures>

EBBA High Performance Home Summit: Scottsdale, AZ, September 20-22, 2022

Join Energy & Environmental Building Alliance (EBBA) September 20-22, 2022 in Scottsdale, AZ for a High Performance Home Summit focused on providing the tools and networking that builders, raters, analysts, and architects need to take high performance, healthy, resilient homes to new heights. For more information and to register: <https://summit.eeba.org/>

12th EnergyLogic's RaterFest! September 24-23, 2022: Empire, CO

RaterFest! is an annual two-and-a-half-day training conference for home energy professionals. Grow as energy professionals and soak in Colorado's gorgeous Rocky Mountain scenery. For over 10 years, EnergyLogic has worked hard to create a deeply engaging, single-track training experience for energy

professionals. Attendees are eligible to receive RESNET® and BPI CEUs. For more information and to register: <https://theenergylogic.com/services-for-energy-professionals/raterfest/>

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