

## Rater News Summer 2021

Welcome to the summer 2021 issue of *Rater News*, brought to you by the Washington State University Energy Program.

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# Washington State University Energy Program EARNS 2021 ENERGY STAR<sup>®</sup> MARKET LEADER AWARD

Olympia WA June 30, 2021 – The Washington State University (WSU) Energy Program is proud to announce that it has received the 2021 ENERGY STAR<sup>®</sup> Market Leader Award for its outstanding efforts to promote energy efficient residential construction and help homebuyers and residents experience the quality, comfort, and value that come with living in an ENERGY STAR certified home or apartment. The WSU Energy Program 800 home benchmark is an amazing achievement that was only accomplished with the full support from our ENERGY STAR rater partners and your commitment to encourage and help market the value of ENERGY STAR certified homes to builders and long-term advantages to consumers.

Each year, the ENERGY STAR Residential New Construction program presents Market Leader Awards to outstanding partners who have made important contributions to energy efficient construction and environmental protection by building or verifying a significant number of ENERGY STAR certified homes and apartments, or by sponsoring a local program that supported these activities during the previous year 2020, for a total exceeding 2 million homes since 1995.

"The ENERGY STAR program proudly recognizes the efforts of our outstanding partners who have made important contributions to energy-efficient construction and environmental protection. Our 2021 Market Leader Award winners demonstrate a high level of commitment to making ENERGY STAR certified homes and apartments available to American consumers. EPA proudly recognizes Washington State University Energy Program's efforts as an ENERGY STAR partner," said Jonathan Passe, Chief of the ENERGY STAR Residential Branch at the U.S. Environmental Protection Agency.

# The WSU Energy Program HERS Program Partnership with the Idaho Power Residential New Construction Program

Consistent with our mission to encourage energy efficiency in residential new construction homes, WSU Energy Program is excited to announce its supporting partnership role with Idaho Power as part of its ongoing <u>Residential New Construction Program</u> for builders.

Started in March 2018, Idaho Power provides tier level structured cash incentives for all electric, energy-efficient, single-family homes in the Idaho Power service area. The program uses independent third party RESNET-certified HERS Raters recognized by Idaho Power before construction begins. Our integral role as a partner will be to ensure the accuracy of work performed by HERS Raters through randomly selected File and Field Quality Assurance Services. The work will be consistent with the activities WSU Energy Program has been performing since 2005 as a recognized RESNET Service Provider. We are excited about supporting Idaho Power and their selected raters. For additional details about the Idaho Power program, including contact information, visit: http://www.idahopower.com/newhomes

#### **News from Jonathan Jones**



I hope that everyone is staying busy as the high volume construction season approaches. I would like to take a moment and remind everyone what is required for a File QA. RESNET has been positioning itself as the gold standard for residential modeling and code compliance. As such, they have increased requirements for QA. In order to perform and complete the QA requirements and updated/mandated checklists created by RESNET, we need the appropriate information in a timely manner.

Our providership does not currently charge for file QAs as a value added service to you. As such, we try to provide the minimum number of QA requirements by RESNET. Failure on a File QA requires the next registered home to have a File QA. The additional File QAs may be billed to the raters at additional charges beyond the typical fees paid. Delays in the submission of required items will most likely result in failure, as I will not be able to verify modeling entries without them. It can also result in our need to suspend a rater temporarily. In one instance, we were mandated directly by RESNET to temporarily suspend a rater until the QA process was completed. I have provided a list below as well as some tips and tricks to speed up the process.

Please remember that the requested documentation is required to be collected with every home registered. RESNET requires information be kept for 3 years. Washington State requires 7 years retention.

#### **Items needed for File QAs:**

- Floor Plan
- AHRI or OEM documentation (Heating, cooling, and H2O heating)
- HVI or OEM document for ASHRAE requirements and ERV/HRV data
- Energy Guide or model numbers of appliances (including ceiling fans when applicable)
- Photos of minimum rated features include but limited to
  - ✓ Wall insulation
  - ✓ Floor insulation
  - ✓ Attic insulation
  - ✓ Mechanical model numbers
  - ✓ H2O Heater model numbers
  - ✓ Appliance model numbers
- Electronic testing results (this is a 380-2019 requirement)
- PV equipment model numbers (if applicable)
- Checklists for any additional programs you are certifying to
  - ✓ Energy Star
  - ✓ Indoor Air Plus
  - ✓ DOE ZERH challenge
  - ✓ 310 Standard (include photos of results)
  - ✓ HERS H20 (and supporting photos)

#### Tips for repeat plans:

- Template homes in AXIS with supporting documentation. Update documents, as necessary. Click on this hyperlink for <u>Template floorplan</u> instructions in AXIS. This will save you a ton of time in getting documents to us for QA. By selecting the template in AXIS with the home entry, we will have a link to the templated documents.
- Template them in a data collection software, such as <u>Rater Pro</u> or <u>GoCanvas</u> or similar online apps, where you can print out a document with all of your supporting information and inspection photos.
- Use <u>Open as App</u> to convert Excel documents into apps that can be used. There are several other software/apps that can be used in this purpose ranging from free to paid services.

#### Generic tips:

Use the AXIS database as your file management/database software. Upload all your photos and checklists and "such" to the allocated tabs. This centralizes file storage and gives you and me access anywhere with Internet.

- Template your company name and general non-home specific information in REM/*Rate* and save it as the default. This way, all new homes that start in REM will have this information automatically. Where applicable, please use your ENERGY STAR rater partner name completely. The implications in the **ENERGY STAR and RESNET API** article are captured below.
- You can create homes in AXIS with a floor plan template. You may then upload another BLG file later with amended entries for blower door and duct blaster test results. This way, as the orders come in you can create the home in AXIS. This creates a flow process of work for your company, and you can use the scheduling feature in AXIS for inspections and tasks for your inspectors. This way, everyone in the company can easily find a file.
- Use the auto populated documents in AXIS, such as the Green Appraisal Addendum and the custom brochure. This can be a major time saver.
- Use a takeoff software or a form that you can save with your templates. This will also save you time in corrections and help ensure more accurate take offs.

#### **ENERGY STAR and RESNET API for ES and IAP Homes Reporting**

ENERGY STAR and RESNET teams have built a new API tool for quarterly reporting of ENERGY STAR and/or IndoorAirPLUS certified homes that will make the process simpler for all involved. Here is how it works and how your role as a rater is critically important for your builders and for us as your HERS program provider.



The largest builder you work with, "Your Special Home Construction LLC"

builds a 25 single-family home development. All of the homes are rated and you have processed them with ENERGY STAR certifications for the first time. Jonathan Jones confirms your rating data and it is entered into RESNET as a HERS/ES rated home.

From there, RESNET and ENERGY STAR takes the API steps and they are in ENERGY STAR as "to be confirmed" by us as your provider at the end of each quarter. Here is where things can get complex quickly. In the past, you have always entered the builder name into the software you are using as "Special Homes Construction" for a long list of logical reasons. BUT, when your builder signed up as

an ENERGY STAR residential new construction partner, they used their full company name – the API at the end of the quarter shows it as a mis-match and we need to work our way through a national list of builders to sometimes just guess at which builder this should be matched to – based only on the closest city we can find. We have created a simple ENERGY STAR residential builder partners list for Washington, Oregon and Idaho. Click this email link: <u>active ENERGY STAR Residential Builders</u>



The same process occurs when the name you have in rating software as your business name is not absolutely identical to how you as a rater signed up to be an ENERGY STAR partner. It does not matter UNTIL you certify ENERGY STAR homes. <u>Billy JJB Energy</u> in RESNET, but <u>Billy Joe Jim</u> <u>Bob Energy</u> as an ENERGY STAR partner. Currently half of all the raters we support regularly mismatch their name in RESNET vs ENERGY STAR partnership. Contact us if you would like to confirm your ENERGY STAR partner registration by clicking here: <u>Please confirm ENERGY STAR</u> <u>Partner name</u>. Or you can login to your <u>MY ENERGY STAR ACCOUNT</u>.

It is a time consuming fix in ENERGY STAR when this happens and is frowned upon by ENERGY STAR who partnered with RESNET to minimize time spent confirming/fixing ES submissions. During the quarter ending June 30, 2021, 233 homes were submitted into the RESNET Registry. Fifty-seven were certified as ENERGY STAR homes. None matched either builder partner name and/or your rater partner name.

However, there is a bigger issue in the API – especially if the same builder decides to no longer have homes certified for ENERGY STAR or a different builder is not an ENERGY STAR partner and does not want to become one for whatever reason. Data was confirmed registered in RESNET as ENERGY STAR homes. You AND Jonathan Jones AND in some/most circumstances RESNET staff are <u>required</u> by ENERGY STAR to change the software and re-submit each home rated without winding up with duplicate ratings for the same home. This is exceptionally time consuming for all involved, is time sensitive to complete, and prevents all other ENERGY STAR homes from being 'submitted' as confirmed. ENERGY STAR is adamant that this occur, but granted us "one time" fixes at their end during the previous two quarters – with increasing admonishment for needing to do this.

If you have any questions about how you can help us all succeed please do not hesitate to reach out to Gary Kaufman at: <u>mailto:nwrater@energy.wsu.edu</u>

## **Upcoming Events and Training Opportunities**

**Tips for Complying with the 2018 WSEC-R Webinar: July 23, 2021, 10:00 a.m. – 12:00 p.m. PDT** Mike Lubliner, Senior Building Science Specialist with the WSU Energy Program, reviews significant changes and requirements in the 2018 WSEC-R. He also provides insights that attendees can apply when designing, building, or permitting single-family and multifamily new construction, additions and remodels. This webinar features a live presentation, Q&A session, and tour of tools and resources. *Watch for new events and training opportunities from the WSU Energy Program <u>here</u>* 

# Decoded: Practical Guide to the Residential Energy Code (Webinar) July 30, 2021 from 12:00 – 2:00 p.m. PDT

The 2018 Washington State Energy Code went into effect earlier this year and includes several substantial changes for single-family and townhouse construction. Chief among these is an increase in the required number of additional efficiency credits, modified by fuel normalization credits. This webinar will examine those changes in detail, in addition to envelope performance requirements and mechanical system details. Registration costs apply. <u>Register here</u>.

### 2021 RESNET Webinar Series for July and August

# RESNET HERS Software Consistency Update with RESNET Energy Modeling Director Neal Kruis July 15, 2021 12:00 – 1:00 p.m. PDT

The intermediate RESNET's Software Consistency Committee (SCC) has been working toward improving consistency in HERS Index calculations across software tools for two years. On this webinar, RESNET's Energy Modeling Director (and SCC Chair) will provide an overview of the accomplishments of the committee and present a roadmap of strategic improvements to enforce greater accuracy and consistency moving forward.

Register at this link: Click here for more information and to register.

# Why HERS Raters Should Pursue the ICC IECC/HERS Compliance Specialist Designation: Aug. 11, 2021 11:00 -12:00 p.m. PDT

RESNET and the International Code Council (ICC) have collaborated to create the new ICC IECC/HERS Compliance designation. The designation is for those RESNET certified HERS Raters and Rating Field

Inspectors (RFIs) who have passed the ICC Residential Energy Inspector/Plans Examiner certification. Learn how this certification by ICC – the association of code officials and other building safety and sustainability professionals – could help you gain credibility with code officials amidst the increasing need for energy code verification. Learn about the business opportunities available to



broaden your portfolio of services and increase your HERS marketability to code officials and builders. <u>Click here for more information and to register.</u>

## Conferences

Covid restrictions are lifting just in time for some conferences and opportunities to add CEU credits. Click on the links below for face-to-face conferences worth checking out.

EBBA High Performance Home Summit: Sept. 14 – 16, 2021: Denver, CO

Energy & Environmental Building Alliance's (EBBA) annual summit focuses on providing the tools and networking that builders, raters, analysts, and architects need to build high performance, healthy, resilient homes.

#### <u>Built Green Conference: Equitable Futures</u>: Sept. 16, 2021: Lynnwood, WA 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.

<u>EnergyLogic's Rater Fest!</u> Sept. 24-25, 2021: Rocky Mountain Village, CO RaterFest! is an annual two-and-a-half-day training conference for home energy professionals. Attendees are eligible to receive RESNET<sup>®</sup> and BPI CEUs for attending.

### Greenbuild International Conference + Expo: Sept. 21-23, 2021: San Diego, CA

Greenbuild is the world's largest conference and expo for green building professionals worldwide to learn cutting-edge solutions to improve resilience, sustainability and quality of life in our buildings, cities and communities.

<u>RESNET 2022 Conference</u> Feb. 21-23, 2022: Austin, TX More information will be coming in future issues of *Rater News*.

# Home Energy Rating Software and Equipment

#### **News From TEC**

The DG-1000 has been released for over four years, and TEC has sufficient supporting data to extend its calibration interval. The stated accuracy of the DG-1000 is +/- 0.9%, and the DG-700 is +/- 1.0%. Note that the DG-700 remains at two-year calibration interval. <u>Read more here</u>.

### DG-1000-1000 Software (1.7.0.26) is Released

A new software update to the DG-1000 Gauge is now available free of charge from The Energy Conservatory. This update adds stand-alone data logging, another update to the on-board tubing assistant app to include guidance on duct leakage to outside test set-up, and a pitot velocity mode. For more information – and to access the update – see: <u>https://energyconservatory.com/dg-1000-software-1-7-0-26-is-released/</u>

### Five Questions to Ask Yourself When Choosing a Blower Door System

For those looking to improve building and HVAC performance, a blower door is a must-have. This tool measures and exposes air leaks in buildings, one of the most vital contributors to high construction quality and correct HVAC equipment sizing. The blower door test removes a lot of the guesswork for builders, HVAC contractors, and insulators. It is also mandatory for HERS Raters, energy auditors, and building science consultants—Sam Meyers, *RetroTec*,



# March 2, 2021: <u>https://retrotec.com/blog/post/5-questions-to-ask-yourself-when-choosing-a-blower-door-system/</u>

# **Consumer Education and Marketing Materials**

## Performance Tested Comfort Systems Marketing Material

To help you promote your services and educate homeowners on PTCS duct sealing, heat pump installation and the benefits of increased energy efficiency, Bonneville Power Administration has created helpful marketing materials for your customers in both English and Spanish. For more information, see: <u>PTCS Contractor Marketing Materials</u>, free to download.

## **ENERGY STAR Updated Spring Communications Toolkit**

For ENERGY STAR raters, check out the new ES materials and resources to support your outreach

efforts available via your MESA account. Ready-to-print, cobrandable materials for display in your model homes and sales centers and a library of digital and content assets for use on your websites and social media. All materials have been created in

several versions, featuring diverse imagery from which you can choose to best address your market. If you are interested in the ENERGY STAR New Homes Program, visit:

https://www.energystar.gov/newhomes

If you are interested in joining, visit:

https://www.energystar.gov/partner resources/join energy star/new home construction

### Marketing Brochures Available to all Raters Via AXIS

AXIS provides all certified homes with an information two-page color brochure that details the many benefits of owning an energy-efficient home. This house specific brochure, which can include a photo of the house and your builder's logo, could help your builder sell homes to prospective customers. For more information, and to see a sample of the brochure, contact <u>NWrater@energy.wsu.edu</u>.

## Newsbriefs

### July 1, 2021 Updates and Changes to RESNET MINHERS and ANSI Standards

RESNET standard development procedures require that major changes to the RESNET HERS standards are implemented on January 1 and July 1 of each year. On July 1, 2021, there are several major changes that will go into effect that will impact ratings. These are the implementation of the 2019 editions of Standards ANSI/RESNET/ICC 301 and ANSI/RESNET/ICC 380 and implementation of the new HVAC grading Standard ANSI/RESNET/ACCA/ICC 310. Software accredited for compliance with Standard 301-2019 must be used for rating units with a building permit date of July 1, 2021, or later—RESNET, June 14, 2021: <a href="https://www.resnet.us/articles/july-1-2021-updates-and-changes-to-resnet-minhers-and-ansi-standards/">https://www.resnet.us/articles/july-1-2021-updates-and-changes-to-resnet-minhers-and-ansi-standards/</a>



#### New Mandatory Compliance Date for Implementation of RESNET/ANSI Standard 301-2019

RESNET staff is receiving information that HERS scores are changing more than expected with the transition to ANSI RESNET/ICC Standard 301-2019. The new mandatory compliance date for using Standard 301-2019 is now January 1, 2022. This will allow a transition period for HERS raters and builders of single-family and low-rise multi-family dwellings to evaluate the impact of Standard 301-2019 changes on their products' ratings and to make any necessary adjustments to their designs—RESNET, June 30, 2021: <u>https://www.resnet.us/articles/new-mandatory-compliance-date-for-resnet-ansi-standard-301-2019/</u>

#### Proposed Legislation Would make the 45L and 179D Energy Efficiency Tax Incentives More Lucrative

The 'Growing Renewable Energy and Efficiency Now' (GREEN) Act aims to extend and boost tax incentives for energy efficiency and renewable energy. According to Alex Bagne, the President of ICS Tax, LLC, "If passed, the GREEN Act would make both the 45L Energy Efficient Home Credit (45L Credit) and the 179D Energy Efficient



Commercial Building Deduction (179D Deduction) more advantageous while furthering the green missions of these incentives"—Suzee Quanta, *Finance News*, April 13, 2021:

https://mortgageandfinancenews.com/news-proposed-legislation-would-make-the-45l-and-179denergy-efficiency-tax-incentives-more-lucrative-6950/

#### Freddie Mac GreenChoice Mortgage

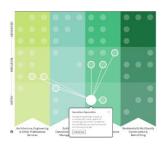
Based upon research on HERS® data provided by RESNET, Freddie Mac has developed a new mortgage product to finance energy efficiency in mortgage loans, the "GreenCHOICE Mortgage". The product will finance energy-efficient homes and upgrades of existing homes up to 15 percent of the home's appraised value. Improvements over \$6,500 will require an energy report that can be completed by a certified HERS Rater's® rating report. —Read more and view the Virtual RESNET 2021 Conference, Simone Beaty and James Cromartie of Freddie Mac's Single-Family Client and Community Engagement gave a presentation on the GreenCHOICE Mortgage: <a href="https://www.resnet.us/articles/freddie-mac-greenchoice-mortgage/">https://www.resnet.us/articles/freddie-mac-greenchoice-mortgage/</a>

### **EKOTROPE – The History Behind Its Creation**

The idea for Ekotrope, like so many successful businesses, came from a bad experience. Ed Crawley, Ford Professor of Engineering at MIT was working with a contractor and architect to build a new home and was disappointed that neither person could project the impact different materials and appliances would have on the overall energy efficiency of the home. At MIT, Crawley had worked with NASA and BP on projects in which researchers had to determine the impact of different parts on efficiency, performance, cost and more. For more information on Ekotrope see: Zach Winn, *MIT News*, May 9, 2021: <u>https://news.mit.edu/2021/ekotrope-building-efficient-homes-0509</u>

#### Green Buildings Career Map Offers Glimpse of Promising Energy-Efficiency Careers

A new recruiting tool funded by the Building Technologies Office offers job seekers hundreds of options to obtain and advance careers in the greenbuildings industry. As part of a nationwide effort to recruit an energyefficiency workforce focused on constructing, retrofitting, and maintaining healthy and energy-efficient buildings, BTO partnered with the Interstate Renewable Energy Council and other industry groups to develop the <u>Green</u> <u>Buildings Career Map</u>– For more information see: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, May 6, 2021:



https://www.energy.gov/eere/buildings/articles/green-buildings-career-map-offers-glimpsepromising-energy-efficiency

## **RESNET Releases 2021 Statistical Abstract "Trends in HERS® Rated Homes"**

Each year RESNET conducts a look at the trends across all homes that have received a HERS rating. RESNET has released its statistical abstract of the 299,755 homes that were HERS rated in 2020 in the "2021 Trends in HERS Rated Homes". The report was developed by Ryan Meres, RESNET Programs Director, on behalf of RESNET's Suppliers Advisory Board. —Read more and download the report RESNET, June 8, 2021: <u>https://www.resnet.us/articles/resnet-releases-2021-statistical-abstracttrends-in-hers-rated-homes/</u>

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**Rater News** 

Washington State University Energy Program. Home Energy Raters Program We welcome rater's questions, comments or ideas for articles. Please send to: <u>NWrater@energy.wsu.edu</u>

