EnergyGauge USA 5.1.00 Release Notes

The latest release of EnergyGauge USA, Version 5.1.00 implements new features for Florida energy code that will take effect July 1, 2016 and new RESNET HERS 2014 calculation which can be used to register homes beginning July 1, 2016. This version includes ERI calculations for HERS raters.

KEY FEATURES ADDED

HERS 2014 Calculations

Florida 5th Edition Energy Conservation Calculation consistent with July 1, 2016 implementation of changes requested by the 2016 Florida legislature and approved by the Florida Building Commission glitch cycle in June 2016.

ERI (Energy Rating Index) reports (ERI currently only available to energy raters)

IMPORTANT NOTE TO ALL** Loading files from EnergyGauge USA 5.0.03. This EnergyGauge USA 5.1.00 install will update the EnergyGaugeUSA5003 folders and install a new database. As a result, your projects will need to be loaded into 5.1.00. The bldgs folder which contains the Backup and Examples folders will remain in the EnergyGaugeUSA5003 folder and can be access under My Documents. For instance, if your username is jsmith and the EnergyGauge USA version is 5.0.03 the file location will be: c:\users\jsmith\Documents\EnergyGauge5.0.03. This is also the default folder location for the "Load *.enb" and "Save *.enb" options.

WINDOWS VERSIONS SUPPORTED

Minimum System Requirements: Windows Vista, Windows 7, Windows 8, Windows 8.1 or Windows 10.

GENERAL BUG FIXES AND FEATURES

- ASHRAE 62-2 2013 and 62-2 2010 buttons were incorrectly calculating (low) the amount of fan cfm for blocks with unconditioned spaces such as houses with an unconditioned basement
- ASHRAE 62-2 2010 infiltration calculation has been updated to be consistent with ASHRAE 62-2 2013 infiltration. This will result in a higher 62-2 2010 Fan CFM result for moderate or leaky homes.
- Dishwasher capacity error checking improved and now allows input of 16 place settings
- Clothes washer vintage for default new was not being correctly set for annual simulation runs

- Clothes dryer input page correctly showing when entering screen (visual error only)
- You will no longer receive an annoying warning if knee wall insulation and roof decking insulation coexist
- Florida Code worst case selection was fixed to select the correct worst case orientation
- Manual J8 Sizing now correctly ignores, instead of includes, neighbor walls as loads
- Error running neighbor ceiling with metal studs was fixed

FLORIDA CODE CHANGES AND OTHER FEATURES

- The reference home for the R405 Performance calculation is changed to an envelope air tightness of 7 ACH50.
- Best guess infiltration is allowed, but will default to 7 ACH50 for Florida energy code runs only, for selections of good, average or poor.
- Proposed ACH50 will be required to be 7 ACH50 or less.
- If the Proposed or measured envelope leakage is < 3 ACH50 a mechanical ventilation system will be required.

NEW ENERGY RATING INDEX CALCULATION (RATING VERSIONS) - ALSO IN 5.0.03

In addition to an IECC section 406 calculation, there is an ERI calculation under the main calculation menu on rater versions of the software that is called **Energy Rating Index.** This is different than the IECC 2015 ERI in that the Summary and report display the rating index but do not display the IECC 2015 Target or indicate a PASS/FAIL status. This calculation allows users in states/jurisdictions, such as Florida and others, which have implemented a code ERI Target that is different than the 2015 IECC to qualify with this modified ERI form. This form requires the code official to verify that the ERI Index qualifies. The mandatory requirements page and input summary are included.

Note that the ERI calculation uses the ANSI/RESNET/ICC 301-2014 calculation consistent with the IECC R406 referenced standard.

NEW INPUT OPTIONS FOR HERS RATERS

RESNET Standard: This version of EnergyGauge USA is significantly different than previous versions in that it allows the ability to calculate the HERS Index using either the 2013 RESNET standard or the ANSI/RESNET/ICC 301-2014 Standard. This RESNET Standard input is on the project screen and will default to 2014 when bring in an existing file. Thus, in version 5.1 of EnergyGauge USA, homes that were initiated prior to July 1, 2016 using the 2013 Standard can utilize the same software tool as homes that are initiated following July 1, 2016. One piece of

software is all that is needed. This allows completion of projects under the current Standard while also allowing starting new projects using the new Standard after July 1, 2016.

IMPORTANT: Because the newer standard may be stricter for many buildings and there is no way for the software to know why a building is being imported, any enb created prior to version 5.1 will default to RESNET standard 2014, but will warn the user. If this is a project that started earlier than July 1, you may want to set the standard input on the Project page to 2013. Once the project is saved with this new input selected, it will remain in the file.

RESNET rules indicate that any home *permitted* after September 1, 2016 will need to be registered with RESNET Standard 2014 selected.