

EnergyGauge USA Version 8.2.00

RELEASE NOTES

GENERAL NEW FEATURES

IECC 2024 Rvalue, UA(TC), R405, R406 methodologies all enabled in this version.

Version 8.2.00 is an update to version 8.1.08 and includes bug fixes, new features and compliance for calculating HERS 2022 with Addendum C.

Concrete block wall detailed entry: You can now specify concrete density, web shape, core insulation value and number of concrete pours to obtain more accurate concrete block U value.

Updated Photovoltaic database to modules currently sold. Temperature coefficient now part of entry for modules. Some data previously required for new module entries now optional.

GENERAL BUG FIXES

- Added more detail to the duct system error message and set calculation to continue if user selects ok.
- Fixed mouse scroll on climate screen.
- Now provide warning if user selects door or window screen and no walls have been entered.
- For unvented attics with insulation at roof deck, may have obtained incorrect infiltration volume when in “proposed” house mode vs. tested. This has been fixed.
- For some houses may have obtained different results based on how infiltration was entered (Ach50 vs. ach) –this has been fixed.
- PV Battery entry that caused “Not a valid integer error” has been fixed.

FLORIDA ENERGY CODE

- Some 2022 and 2023 R value and UA reports showed 2020 on footer or header –this is fixed.

ACCA Manual J and S and D

- Fixed an incorrect unit label on step 6 in Manual S.
- Manual J now will show summary by whole house or by system –including pie charts.

Kwik Model 3D

- A number of small changes made.

IECC

- IECC 2024 implemented.
- IECC 2021 ERI compliance with and without PV implemented.
- Fixed issue where the R-Value method was not enforcing window U-Value limits.

- Fixed lighting issue with IECC 2021 reference so that it is 100% Tier I.
- Fixed so house with no cooling can still print IECC 2021 reports.
- Fix for 2021 IECC for house with tankless DHW when heating uses different fuel.

HERS RATERS CHANGES

- For HERS2022 calculations there are a number of changes that may impact HERS2022 results:
 - o The window covering shading coefficient has been changed, resulting in higher cooling energy use for rated and reference home.
 - o There have been small changes to the hot water use schedule.
 - o Small change to the clothes washer hot water use.
 - o Small changes to the dishwasher hot water use.
 - o New minimum continuous mechanical ventilation system requirements for the Rated Home.
- Default solar absorptance based on defaults consistent with RESNET HERS2022 Addendum C have been added.

ENERGY STAR and DOE ZERH

- ENERGY STAR v3.2 rev. 13 now checks for missing AHU data and does not crash.
- Fixed a DOE ZERH multifamily error with referencing a 6th wall when only 5 exist.