

# Cover sheet for request for approval by the Florida Building Commission as a Compliance Software tool

Date of Submittal: 5/10/2016

Software Company: UCF/Florida Solar Energy Center

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Name of Product (If marketed under different editions or names list all that apply): EnergyGauge USA

Version Number: 5.1

## Code Compliance Methods this software calculates:

### Commercial Energy Efficiency Code Compliance

- ASHRAE Prescriptive Method
- ASHRAE Energy Cost Budget Method
- ASHRAE Envelope Trade-off Option Method
- IECC Prescriptive Method
- IECC Performance Method

### Residential Energy Efficiency Code Compliance

- ✓ Prescriptive R-value Method\*
- ~~Prescriptive U-factor Alternative Method~~
- ✓ Prescriptive Total UA Alternative Method\*
- ✓ Performance Method\*\*

As an official of the software company named above, I hereby indicate that the software listed meets the requirements of the Florida Energy Conservation Code for the methods indicated and that this submittal includes the required documentation as given in the Energy Simulation Tool Approval – Technical Assistance Manual or as requested by the Florida Building Commission:



Signature

5/10/2016

Date

Rob Vieira  
Printed Name

Director, Buildings Research Division  
Title

\*No changes to prescriptive methods from version 4. Test results for prescriptive not resubmitted.

\*\* No changes to performance tests from submittal for version 5.0.03 provided in January 2016.

## **Changes for Version 5.1**

We are requesting approval of Version 5.1 in order to fix a few minor bugs and comply with legislative action. These bug fixes do not affect the required software tests so we will refer back to our last full submission for the test results. The energy rater version of this release will include the HERS 2014 calculation feature that is required by RESNET to be available before July 1st.

### **Bug fixes in Version 5.1 from 5.0.03**

- Worst case selection not pulling the correct value/orientation from the table for Florida code.
- Manual J8 calculation was showing added load for neighbor walls.
- Metal ceiling studs was causing a crash.

### **Legislatively delayed code provisions related changes (these changes will be released only if corresponding 5<sup>th</sup> edition changes are approved by the FBC):**

- Users have been forced to enter an infiltration rate of 5 ACH50 if not tested. That is removed. Non-tested homes will default to 7 ACH50 for code calculation.
- A warning regarding mechanical ventilation being required below 5 ACH50 is changed to 3 ACH50.
- Reference home air exchange rate will be changed from 5 ACH50 to 7 ACH50.

Note that the Section R406 Energy Rating Index feature is already in Version 5.0.03 software available to energy raters. It provides rating indexes for homes with the calculation including and excluding solar electricity. Code officials can verify the index is below the FBC requirement (legislature level of 58).