

Changes to EnergyGauge USA from FlaRes2007 to FlaRes2008

The basic code changes made in last release (February 2008) under 2008 code:

- 1) Baseline window area changed to 15% of conditioned floor area;
- 2) Baseline window characteristics changed to $U=0.40$, $SHGC=0.30$
- 3) Baseline distribution system efficiency changed to $DSE=0.88$

Changes made to improve or fix simulation modeling program:

- 4) Corrected an error in the heat pump model where the electric resistance heating system was running for the full hour instead of the appropriate fraction of the hour.
- 5) Tweaking of the attic volume calculation and roof description to ensure a proper attic type is chosen regardless of case of text entered. This fixes a problem with importing files from older versions or third party vendors.
- 6) Fixed a bug that caused some user interface problems when deleting the cooling system.
- 7) New bounds for Solar Hot Water Integrated Collector Storage (Transmittance product) must be between .6 and 1.0 (done so that old, erroneous default value of 0.54 will get flagged)
- 8) The capacity of heating and cooling systems that are used in the baseline home is sized using a correction for climate specific variables in accordance with ACCA Manual S recommendations.

Changes to be implemented based on suggestions at last code meeting or other DCA discussions (can some of these be added after March 19th):

- 9) Disable / hide tabs and features that are not used for code.
- 10) Add error checking for 2006 SEER-13 and HSPF-7.7 minimum standards (what about special limits for special subtypes like 'Space constrained systems', and 'Small duct, high velocity', which were added in the last 2004 Glitch cycle?).
- 11) Add cross-vent, programmable thermostat and whole house fan to Conservation features on FORM 1100A-07 and FORM 1100A-08.
- 12) Add electronic 2008 code manual to HELP once it is available.
- 13) Add a calculation that would do the same weighted averaging of cooling efficiencies or heating system efficiencies as described in the code (would not change the code just make it easier for users and assure the math was done correctly)