

EnergyGauge Summit 8.00 Revision 6 Release Notes - March 4, 2024

Version 8.00 Revision 6

1) The output report for lighting controls is more descriptive

Acronym	ID	Description	Area (sq.ft)	Compliance
<u>Space 1</u>	<u>1</u>	<u>Space 1 (Electrical Mechanical Equipment Room - General)</u>	<u>100</u>	COMPLIANCE: PASSES REQUIRED: All of {1 8}; one of {2 3} CONTROLS IN SPACE: 1-Manual (Local Control) 2-Occupancy Sensor - Manual ON only EXCEPTION(S)CLAIMED: 8-Occupant Sensor Auto Full OFF JUSTIFICATION: Justification: sections
<u>Space 2</u>	<u>12</u>	<u>Space 2 (Lobby (General) - Reception and Waiting)</u>	<u>906</u>	COMPLIANCE: FAILS Control type 3 required for compliance not found Atleast one additional control type {9} required for compliance REQUIRED: All of {3}; one of {9} CONTROLS IN SPACE: 0-None

2) Character limit of Control exception justification. The limit is now 100 Characters and should not give an error even if that is exceeded. It should just trim the saved text to 100 characters.

Use input column "FBC 8thEd ..." for FBC 8th Edition, ASHRAE 2019, IECC 2021 and beyond
 Use input columns "All Other Codes ..." for prior codes

Hide Pre-8th Ed Columns

	Type	Category	No. of Luminaires	Watts per Luminaire	FBC 8thEd Control Type	FBC 8thEd Control Exception	Area Lighted
1	LED	General	15	50.00	{1 2}	{8}	

Enter below justification for any Control Exception taken, such as, code section etc Max 100 Characters

Justification: sections

Compliance Feedback set to: Florida 8th Edition 2023 (IECC option)
 Lighting Power Compliance FAILS
 Lighting Power Design: 750 Effective: 750 Allowance: 43 Compliance:

- 3) Corrected baseline system for residential single zone systems consistent with ASHRAE ECB system Map
- 4) Other minor formatting changes.

Prior Version 8.00 Revision 5

Ease of Use In both input and output reports, the space description is added for clarity.

Use input columns: All Other Codes ... for prior codes

Hide Pre-8th Ed Columns

	Type	Category	No. of Luminaires	Watts per Luminaire	FBC 8thEd Control Type	FBC 8thEd Control Exception	Area Lighted
1	LED	General	15	50.00	{2 3 9}	{1 8} ...	

Enter below justification for any Control Exception taken, such as, code section etc

section 405.22 page 223

Compliance Feedback set to: Florida 8th Edition 2023 (IECC option)
 Lighting Power Compliance FAILS
 Lighting Power Design: 750 Effective: 750 Allowance: 43 Compliance:

Lighting Controls PASSES
 Required Controls All of {1|8}; one of {2|3}
 Note: Lighting Power Compliance is based on entire building

Ease of Use Lighting Grid in the Space form has been sorted to show LED-type lighting first.

Ease of Use: A check box “Hide Pre-8th Ed Columns” displays only 8th edition control columns for easy input.

Ease of Use: The “FBC 8th Ed Control Exception” column has been added to display control exemptions claimed by the user.

Ease of Use: A justification input field has been added for users to justify any lighting control exemption claimed. The justification is then shown on the output report for submission.

Controls Selection

Select	Id	Description	FBC 2023 Section	ASHRAE 2019 Section	Claim Exception?
<input checked="" type="checkbox"/>	1	Manual Controls (Visible W/Ready Access)	C405.2.6	9.4.1.1-a	
<input type="checkbox"/>	2	Occupancy Sensor - Manual ON only	C405.2.1	9.4.1.1-b	
<input type="checkbox"/>	3	Occupant Sensor Controls (DN 50% Power)	C405.2.1	9.4.1.1-c	
<input type="checkbox"/>	4	Light Reduction Controls (At Least 30%-70% Power)	C405.2.3	9.4.1.1-d	<input checked="" type="checkbox"/>
<input type="checkbox"/>	5	Daylight Responsive Controls (Sidelighting)	C405.2.4	9.4.1.1-e	
<input type="checkbox"/>	6	Daylight Responsive Controls (Toplighting)	C405.2.4	9.4.1.1-f	
<input checked="" type="checkbox"/>	7	Occupant Sensor Controls Auto Off (Full or Partial)	C405.2.1	9.4.1.1-g	
<input checked="" type="checkbox"/>	8	Occupant Sensor Controls Auto Full OFF	C405.2.1	9.4.1.1-h	
<input type="checkbox"/>	9	Time-Switch: Automatic Full Off or Scheduled Shut Off	C405.2.2	9.4.1.1-i	

OK Cancel

Editorial: On the Lighting Control Input Dialog, the section numbers have been corrected.

Enhancement: A new column has been added to the lighting control dialog where the user can claim exemption for lighting controls as per code.

The screenshot shows a software dialog box with three tabs: "Space", "Lighting", and "Internal Loads". The "Internal Loads" tab is active. It contains several input fields organized into sections:

- Equipment:** W/SqF (0.2), Kw (0), Total, Sensible (1), Latent (0).
- Lighting Loads:** W/SqF (1.5), Light KW (0), Task Lt W/SqF (0), Task Lt KW (0).
- Source:** Btu/Hr (0).
- Occupants:** Number of People (0), Area/Person (333.33334), Heat Gain (Total) (350), Heat Gain (Sensible) (0), Heat Gain (Latent) (0), Occp.Load.
- Outdoor Air:** CFM Per Person (0), CFM per SF (0.05).

Enhancement: Outdoor Air Parameters have now been moved to the space input form to help input data more specific to the space type.

The screenshot shows the "Settings" tab of a software interface. It contains the following elements:

- Navigation tabs: Project Information, Designers, Zone-Sys Assignment, **Settings**, Climate & Utility Rates, Summary.
- IECC:** IECC Prescriptive Option: Energy Efficient HVAC Option in accordance with Section C406 (dropdown menu).
- Compliance checkboxes:
 - Ashrae 90.1-2010/13 Section 5.5.4.5 Exception?
 - Use Building Area Method for Lighting Compliance
 - Append Input Report to Compliance Output Report (Applies only to FL Code 5th, 6th Ed. & Beyond)
 - Project Complies with IECC 2012/15 402.3.1.1 for increased Fenestration Area
 - Project Complies with IECC 2012/15 402.3.1.2 for increased Skylight Area
- Capacity Multiplier inputs:
 - *Baseline Cooling Plant Capacity Multiplier: 1
 - *Baseline Heating Plant Capacity Multiplier: 1
- Note: All Baseline System Capacity Multipliers have been moved to the System form under each system. The above multipliers apply only to the Baseline Plant.
- Override Internal Loads

Enhancement: On the Project page, Settings tab, checking the “Override Internal Loads” check box will use actual internal loads input on the space form rather than from Summit’s Standard library. This helps input and account for more relevant and known space internal loads.

Bug: Error “Invalid Climate DatasetID” for certain combinations of building space types.
Resolution: This has been fixed.

Bug: Error “Subscript out of range” for certain lighting control entries. **Resolution:** This has been fixed.

BUG: In some instances, although the lighting controls subsection of the compliance report shows all spaces "PASSING" concerning Lighting Controls, the summary section of the compliance report shows that the building has "FAILED." **Resolution:** This has been fixed.

BUG: Warning “Water Source Heat Pump requires SEER2” **Resolution:** This has been fixed.

BUG: For ASHRAE ECB Compliance, Dwelling units LPD for baseline has been corrected to 0.6 W/ft² per Table 11.5.1 6e page 206. **Resolution:** This has been fixed.

BUG: For ASHRAE ECB Compliance baseline Fan system efficiency has been corrected per ASHRAE 11.5.2 (h) Page 201.