

Appendix-B: Additional Approved 2020 Florida Energy Code Changes with Energy Impact

Table-B contains summary of additional approved code changes for the 7th Edition (2020) Florida Commercial Energy Code. The proposed energy code modifications that has been approved since November 1, 2018 and as of March 31, 2019.

Table-B: Summary of Proposed Commercial Code Changes between 6th and 7th Edition Florida Energy Code

S. No.	2018 IECC Section and Title, ICC Code # or Other Code	Mod # or Comment	Change Summary b/t 2017 FEC and Proposed 2020 FEC, and Analysis	Included in quantitative Analysis (Yes/No)	Included in Economic Analysis (Yes/No)
Section 402 Building Envelope Requirements					
1	CA02.4.1.2 Increased skylight area with daylight responsive controls, CE97-16	EN7499 Approved	<p>Modified code section CA02.4.1.2. Skylights area percentage allowed with daylight response control is used increased from 5% to 6%. No net first cost change is anticipated.</p> <p>Prototype Buildings Investigated: Primary School, Secondary School, and Non-refrigerated warehouse.</p> <p>Quantitative Analysis: there is no energy savings for changing skylight area fraction from 5.0% to 6.0% in gymnasium and bulk storage space type.</p> <p>Cost Benefit Analysis: savings to investment ratio (SIR) value for this change was much less than 1.0; hence, this code change is not cost effective.</p>	No	Yes

Table-B: Summary of Proposed Commercial Code Changes between 6th and 7th Edition Florida Energy Code (continued)

S. No.	2018 IECC Section and Title, ICC Code # or Other Code	Mod # or Comment	Change Summary b/t 2017 FEC and Proposed 2020 FEC, and Analysis	Included in quantitative Analysis (Yes/No)	Included in Economic Analysis (Yes/No)
Section 402 Building Envelope Requirements					
2	C402.5.6 Loading dock weathersels, CE116-16	EN7515 NAR	<p>Modified code section C402.5.6. Door openings shall be equipped with weathersels to restrict infiltration and provide direct contact along the top and sides of vehicles when parked in the doorway. Increase first cost of construction.</p> <p>Prototype Buildings Investigated: non-refrigerated warehouse.</p> <p>Quantitative Analysis: there is no significant energy savings for adding weathersels in loading dock.</p> <p>Cost Benefit Analysis: savings to investment ratio (SIR) value for this change was about 0.07; hence, this code change is not cost effective.</p>	No	Yes
Section 403 Building Mechanical Systems					
3	C403.4.1.4 Heated or cooled vestibules (Mandatory), CE136-16	EN7523 NAR	<p>Added new code section C403.4.1.4. Defines heating and cooling temperature limits for heated or cooled vestibules and air curtain. It is mandatory. Increases first cost.</p> <p>Prototype Buildings Investigated: Standalone-Retail.</p> <p>Quantitative Analysis: there is potential energy savings, about.</p> <p>Cost Benefit Analysis: savings to investment ratio (SIR) value for this change was about 9.0; hence, this code change is cost effective.</p>	No	Yes

Table-B: Summary of Proposed Commercial Code Changes between 6th and 7th Edition Florida Energy Code (continued)

S. No.	2018 IECC Section and Title, ICC Code # or Other Code	Mod # or Comment	Change Summary b/t 2017 FEC and Proposed 2020 FEC, and Analysis	Included in quantitative Analysis (Yes/No)	Included in Economic Analysis (Yes/No)
Section 403 Building Mechanical Systems					
4	C403.7.6 Automatic control of HVAC systems serving guest rooms, CE138-16		<p>Added new code section C403.7.6. Control requirement for each guest room in buildings containing over 50 guest rooms. Increases first cost but cost effective.</p> <p>Added new code section C403.7.6.1. Add set point temperature setback or setup control requirement when each guest room is not occupied. Increases first cost but cost effective.</p>		
	C403.7.6.1 Temperature setpoint controls, CE138-16	<p>EN7536 NAR</p> <p>Or</p> <p>EN8142 Approved</p>	<p>Added new code section C403.7.6.2. Controls shall be provided on each HVAC system that can automatically turn off the ventilation and exhaust fans 30 minutes after the occupant leaves the guest room. Increases first cost but cost effective.</p> <p>Added new code section C403.4.1.4. Defines heating and cooling temperature limits for heated or cooled vestibules and air curtain. It is mandatory. Increases first cost.</p> <p>Prototype Buildings Investigated: Small Hotel and Large Hotel.</p> <p>Quantitative Analysis: there is potential energy savings.</p> <p>Cost Benefit Analysis: savings to investment ratio (SIR) value for this change was found out to be about 1.2; hence, this code change is considered cost effective.</p>	Yes	Yes
	C403.7.6.2 Ventilation controls, CE138-16				