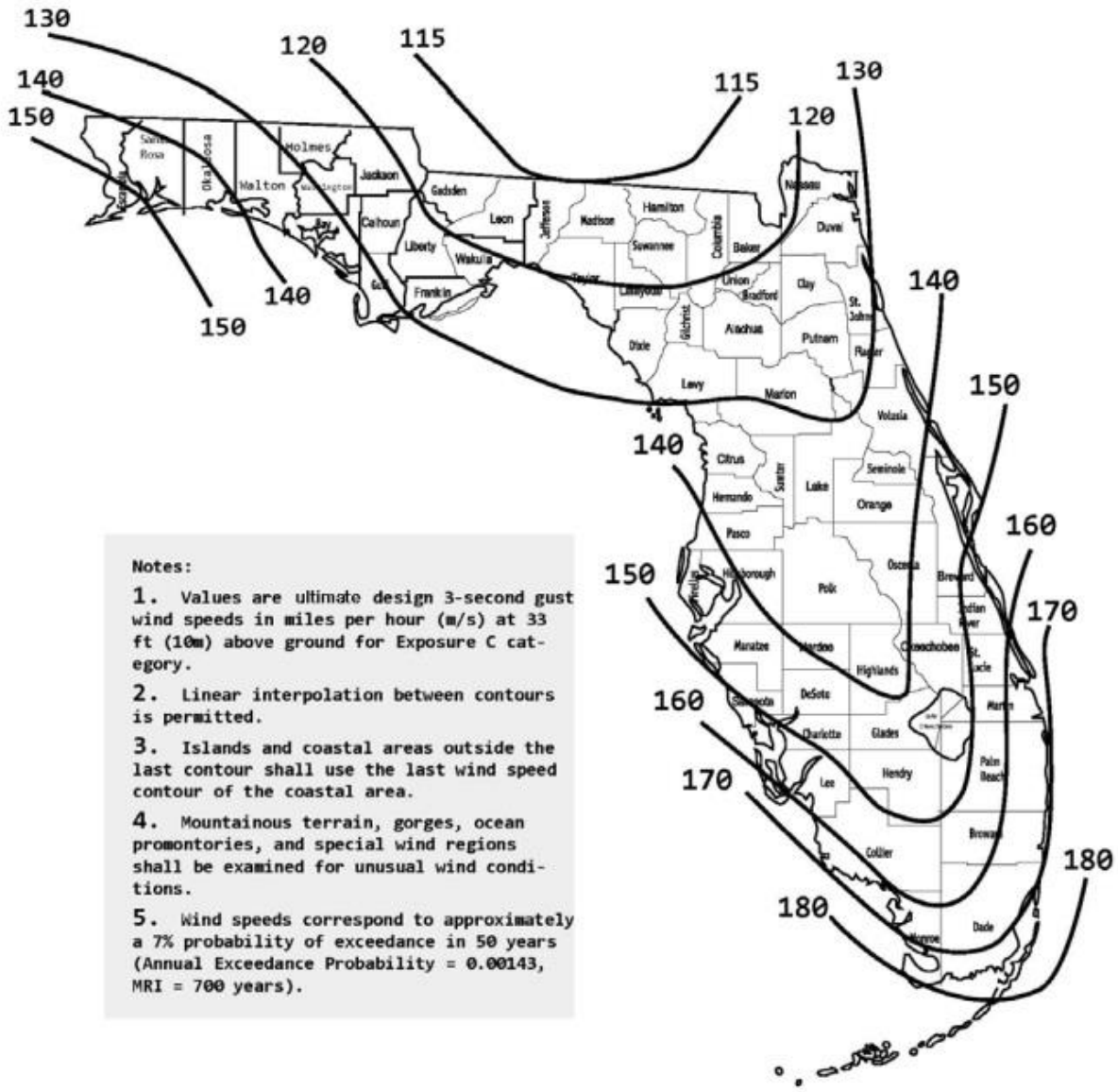
**Notice of Code Change**

As provided in Chapter 553 of the Florida Statutes, the 8th Edition (2023) of the Florida Building Code will take effect on December 31, 2023. All applications for building permits submitted subsequent to this date must comply with the updated Code. Applications submitted *before* this date will remain subject to the 7th (2020) edition of the Code. The Florida Building Code Commission has developed summaries of the changes to the Florida Building Code – Building, Florida Building Code-Residential, and Energy Code which may be accessed by clicking https://www.floridabuilding.org/fbc/Links_to_Code_Resources.html .

Among the most significant revisions in the new Code are the changes to the wind zone maps and, most particularly, the northern shift of the windborne debris zone (140 mph and up), especially as it relates to single family homes (Category II structure). This line no longer follows the northern boundary of Eglin Air Force Base, but rather includes most of northern Okaloosa County including the City of Crestview. The 2020 and 2023 wind zone maps for Category II structures are shown, below, and include a link to and brief explanation of the ASCE hazard tool which can be used to determine the exact wind requirement using a property address. If you do not wish to review the maps, the hazard tool link is: https://asce7hazardtool.online/

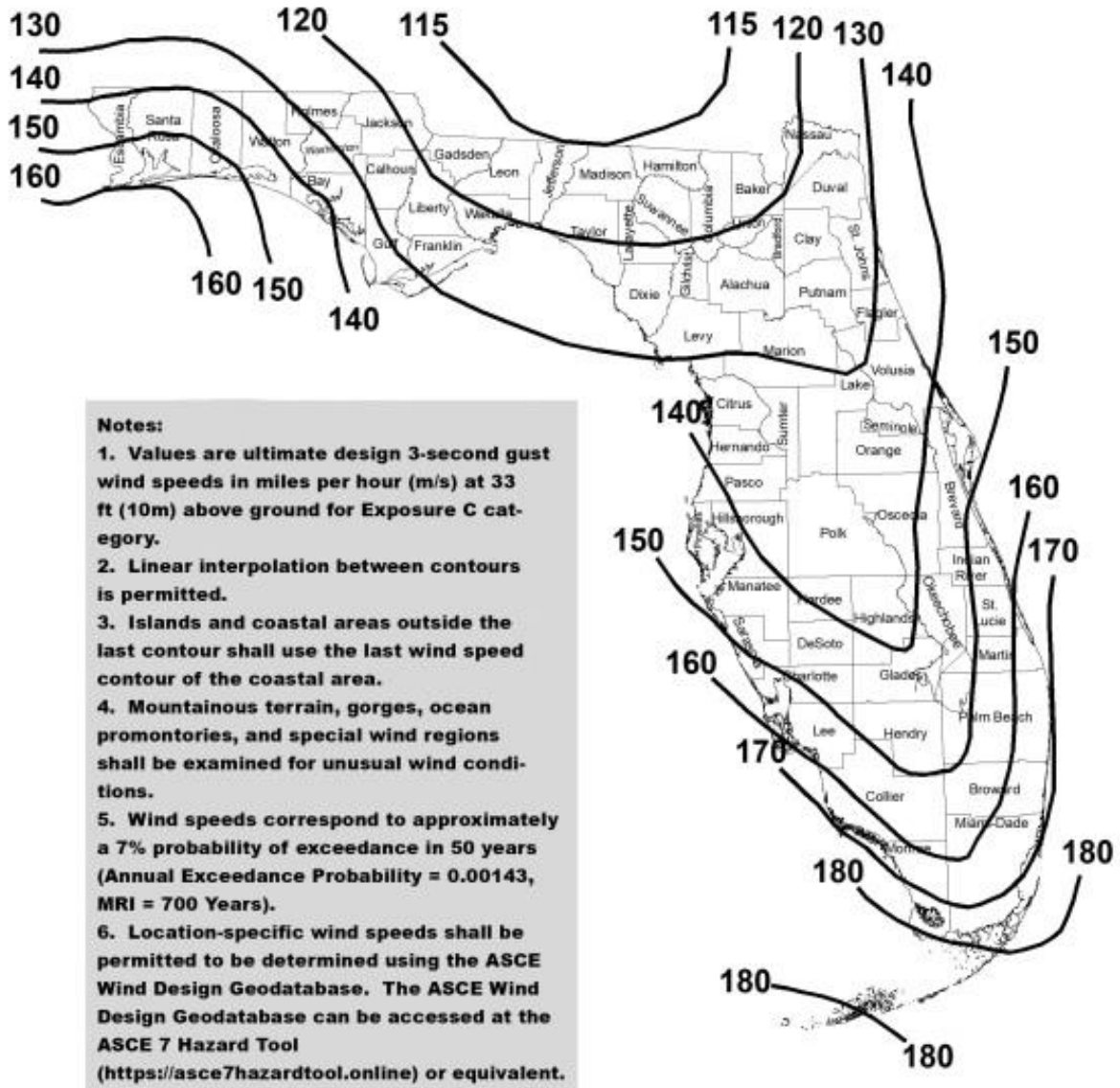
2020 Building Code Category II (Single Family Homes)




Notes:

1. Values are ultimate design 3-second gust wind speeds in miles per hour (m/s) at 33 ft (10m) above ground for Exposure C category.
2. Linear interpolation between contours is permitted.
3. Islands and coastal areas outside the last contour shall use the last wind speed contour of the coastal area.
4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
5. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00143, MRI = 700 years).

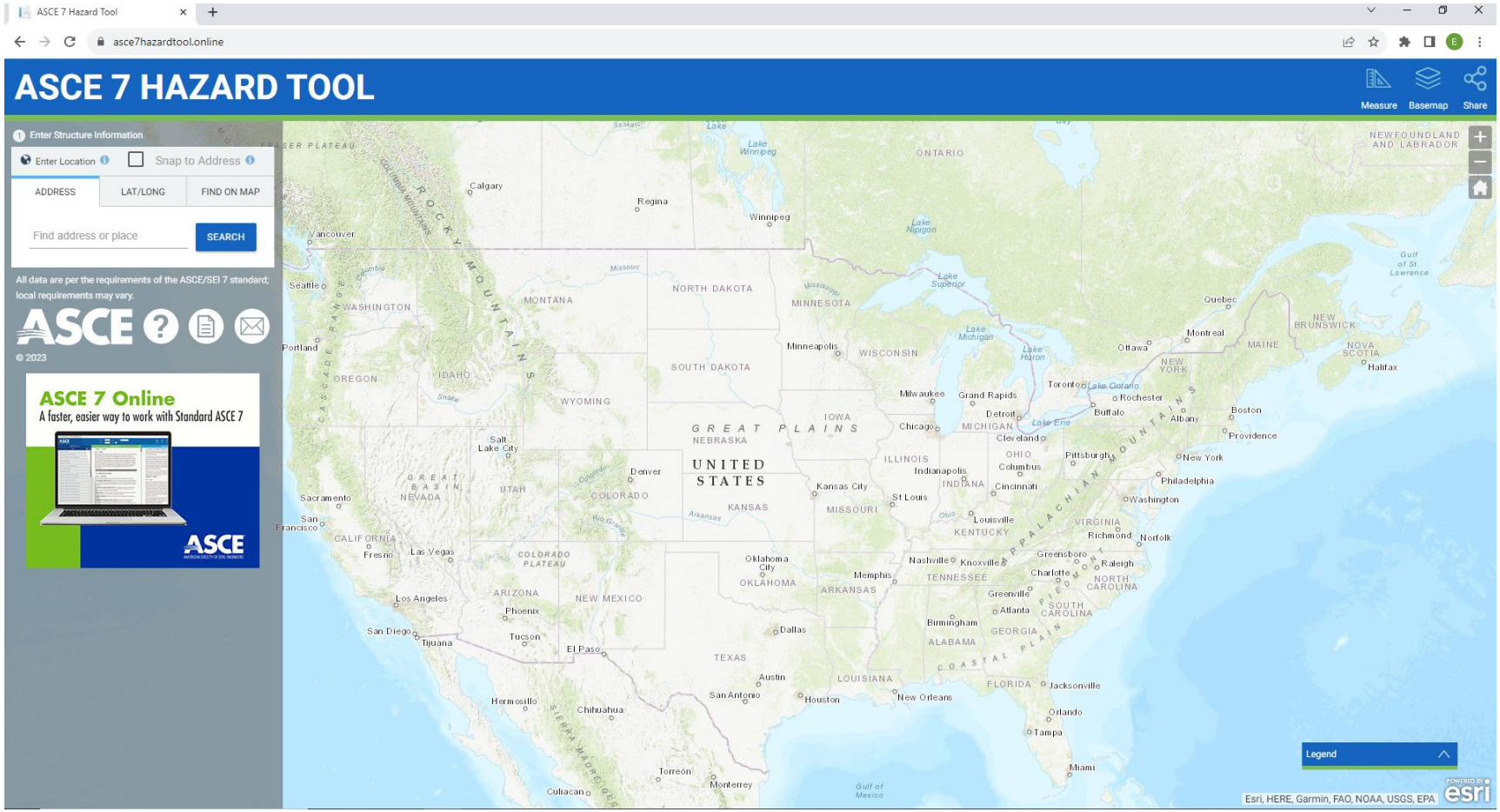
2023 Building Code Category II (Single Family Homes)



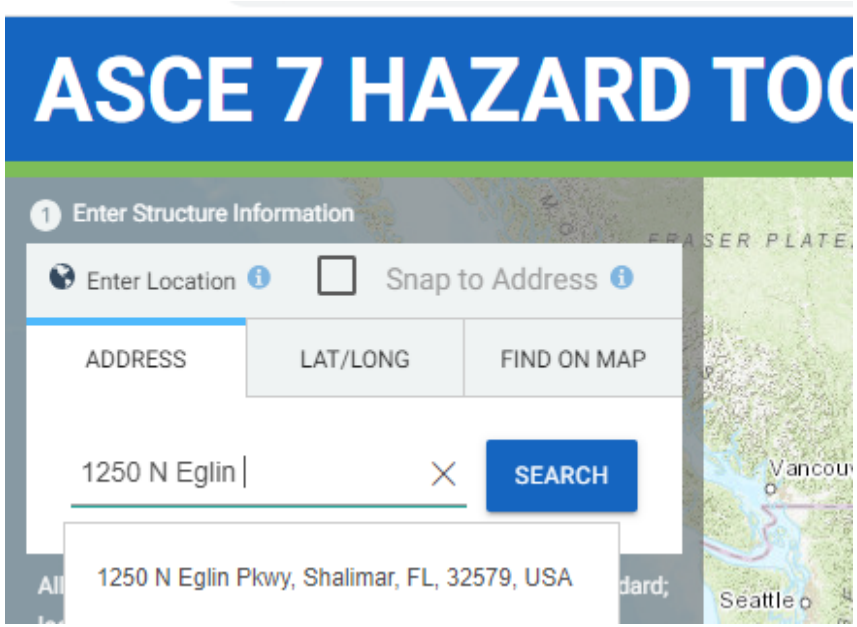

**Notes:**

1. Values are ultimate design 3-second gust wind speeds in miles per hour (m/s) at 33 ft (10m) above ground for Exposure C category.
2. Linear interpolation between contours is permitted.
3. Islands and coastal areas outside the last contour shall use the last wind speed contour of the coastal area.
4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
5. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00143, MRI = 700 Years).
6. Location-specific wind speeds shall be permitted to be determined using the ASCE Wind Design Geodatabase. The ASCE Wind Design Geodatabase can be accessed at the ASCE 7 Hazard Tool (https://asce7hazardtool.online) or equivalent.

https://asce7hazardtool.online/

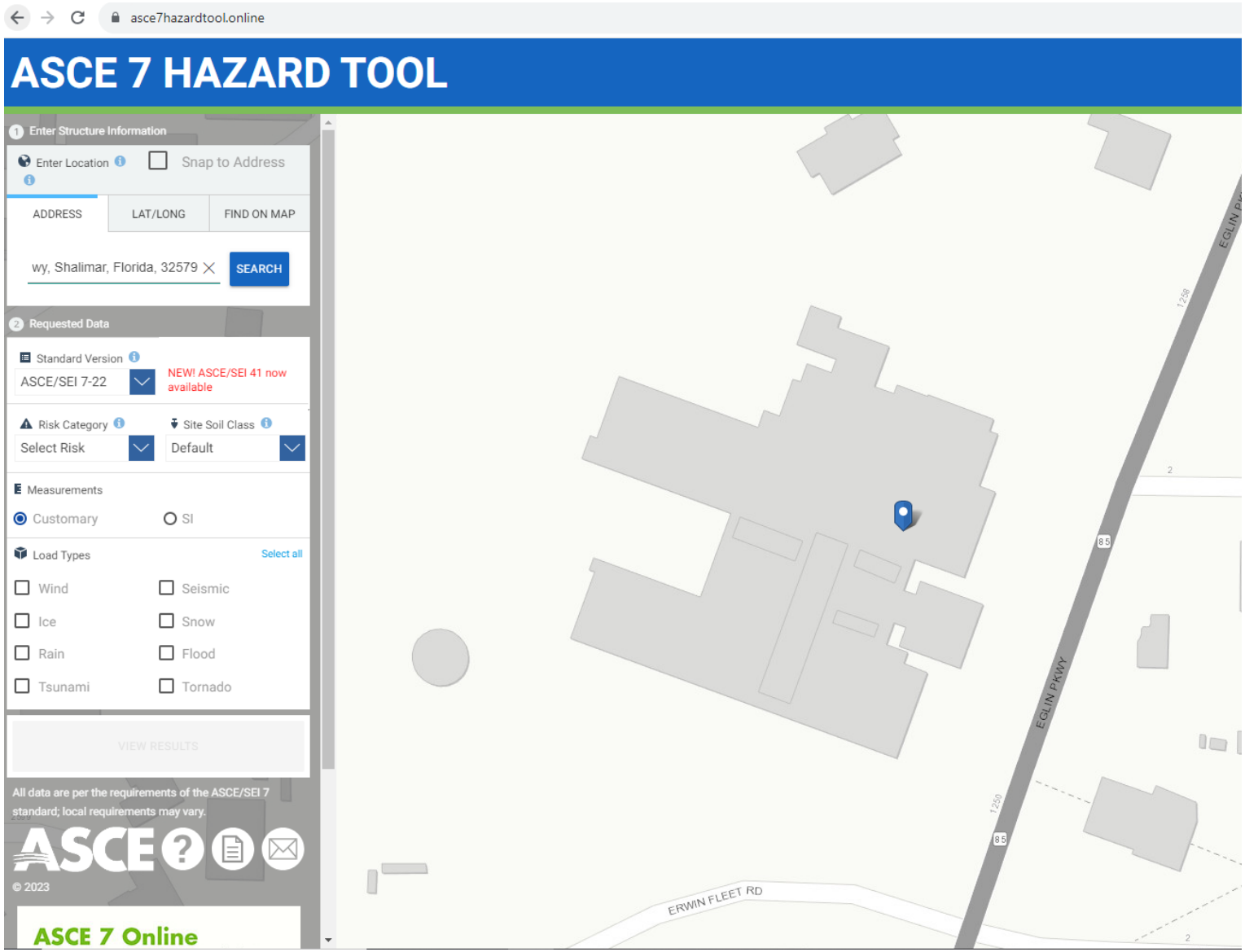


Enter Address in upper left-hand corner – if the correct address appears in the drop down box, go ahead and click it:

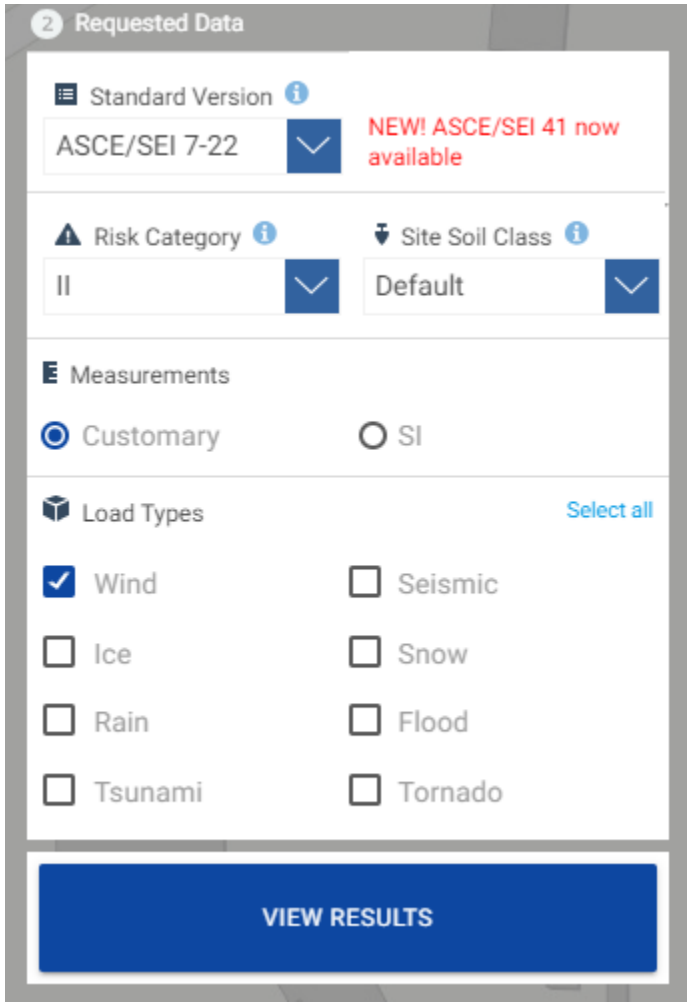



Go ahead and click this ↑ Clicking the automatic address takes you to a screen showing the property ↓ (next page)

(Please note that this example uses the address of the County Administration Building in Shalimar which is not a house, but Category II is being used since that is the type of structure for which most users will need information.)


asce7hazardtool.online
ASCE 7 HAZARD TOOL
1 Enter Structure Information
Enter Location
Snap to Address
ADDRESS
LAT/LONG
FIND ON MAP
wy, Shalimar, Florida, 32579
SEARCH
2 Requested Data
Standard Version
ASCE/SEI 7-22
NEW! ASCE/SEI 41 now available
Risk Category
Select Risk
Site Soil Class
Default
Measurements
Customary
SI
Load Types
Select all
Wind
Seismic
Ice
Snow
Rain
Flood
Tsunami
Tornado
VIEW RESULTS
All data are per the requirements of the ASCE/SEI 7 standard; local requirements may vary.
ASCE
© 2023
ASCE 7 Online
EGLIN PKWY
ERWIN FLEET RD

Go to next page



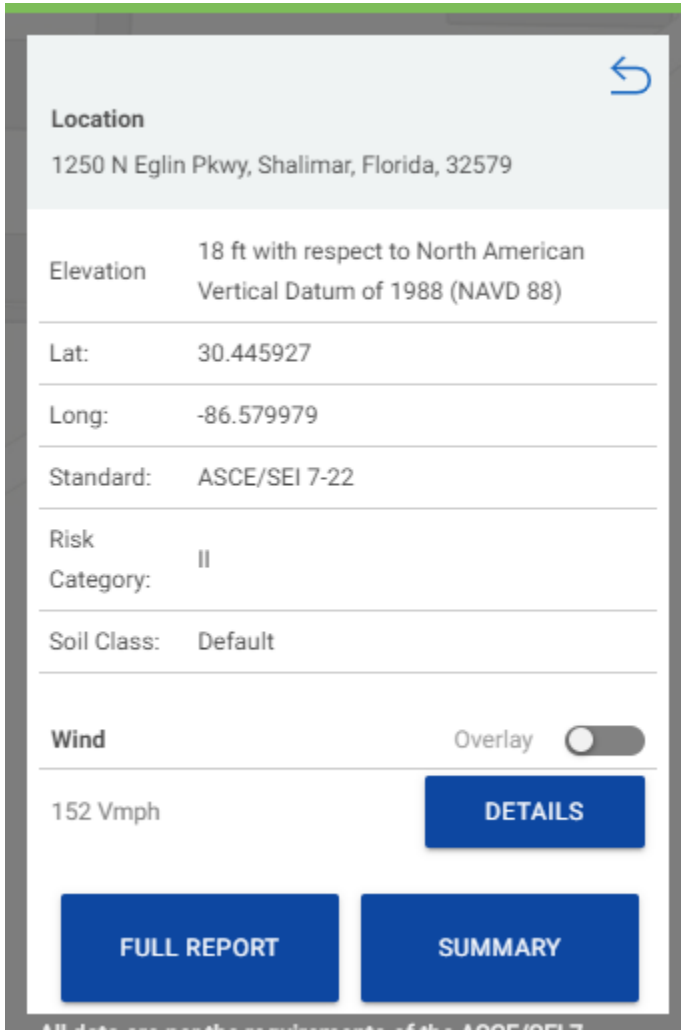

Leave as ASCE/SEI 7-22

Use the drop box to select the Risk Category drop down to select the category you want. If you want to see the wind speed for a single family home, select II as shown on the left. Leave soils as default.

Leave Measurements as customary.

Select the type of risk for which you need information. In the example to the left, Wind has been checked.

When you've selected the proper category and type of hazard (Wind, Flood, Ice, etc.), clicking VIEW RESULTS will open a new window on the left side of the screen as shown on the next page.

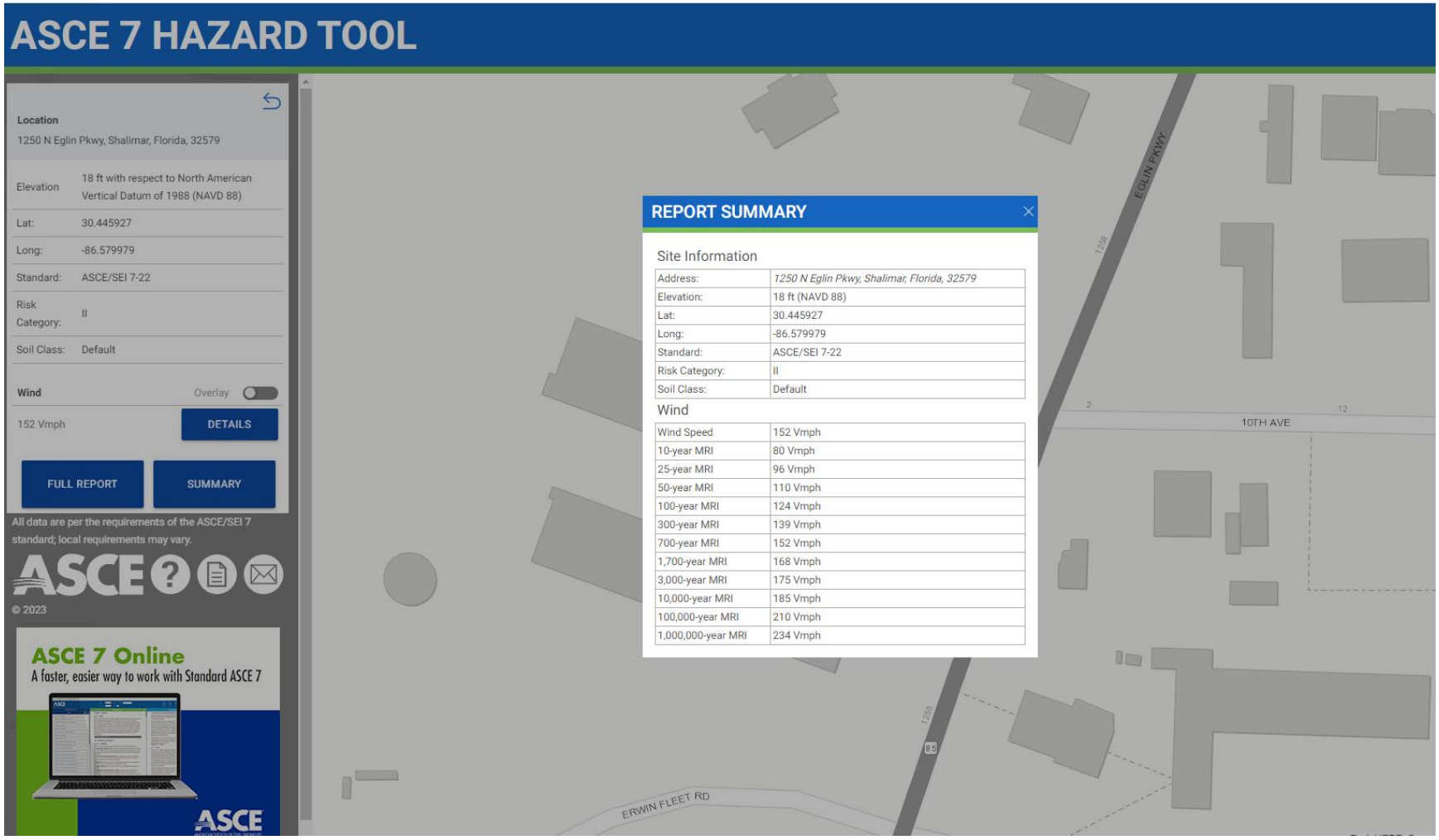



This box shows basic data regarding the parcel you've selected.

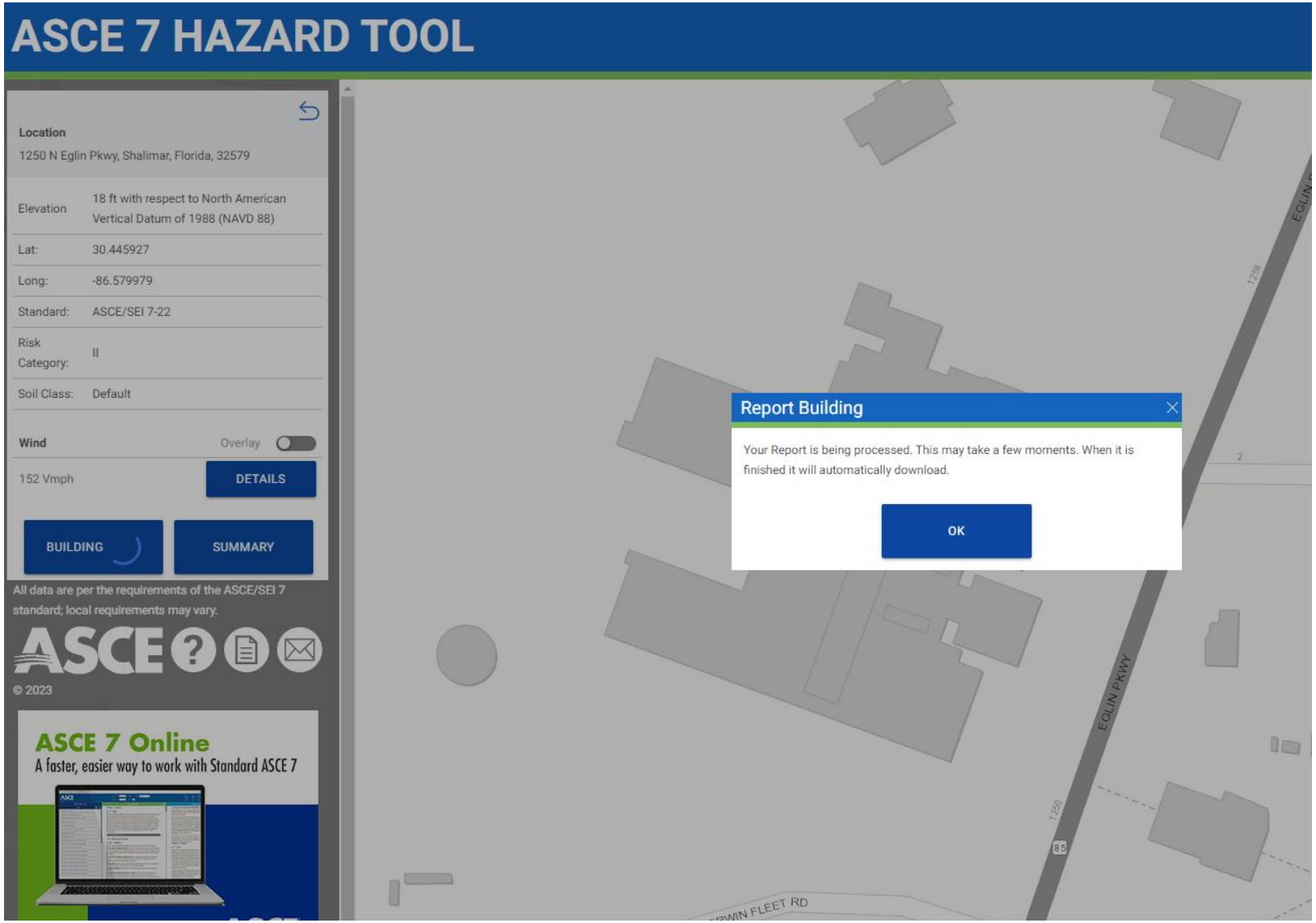
This is the calculated wind speed requirement for a Category II structure at this address. Clicking details will provide a summary of different winds that could be experienced at this location over various recurring intervals.

You can now either access a full report or summary – see following pages.

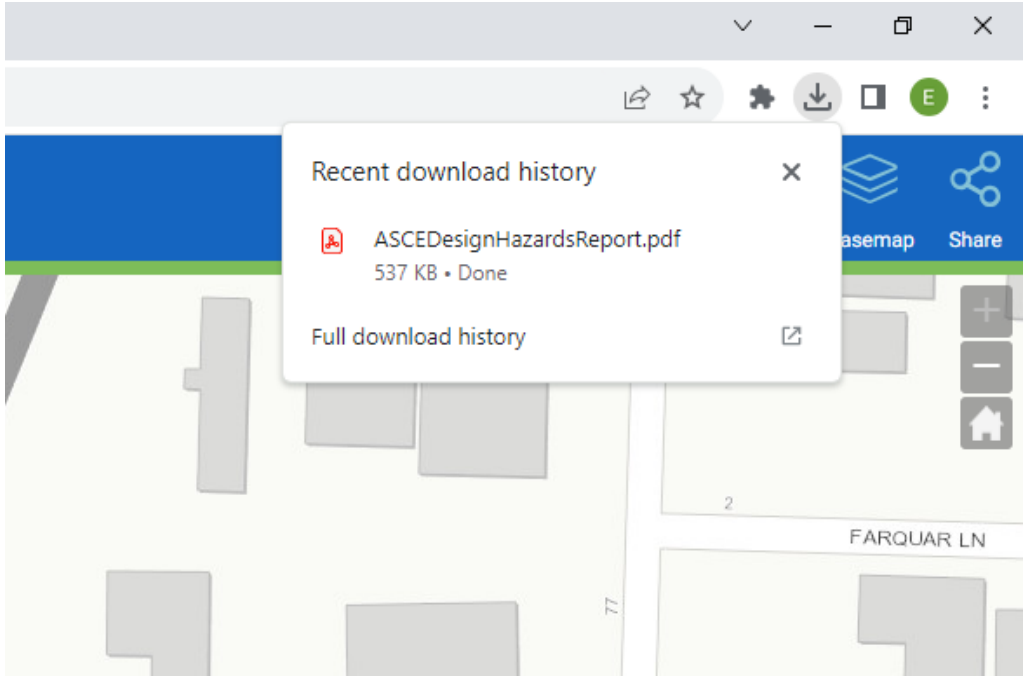
This is the screen that will appear if you click summary:



Clicking Full report will result in the message, below, being displayed on the screen.  It will take a minute or so to complete the report.



The report will be downloaded to your computer to be opened at your convenience:



# *Analysis of Changes for the 8th Edition (2023) Florida Codes*

## *Changes to the Florida Building Code, Energy Conservation*

This *Analysis of Changes for the 8th Edition (2023) of the Florida Codes* is intended to provide a comprehensive comparison of the provisions in the *7th Edition (2020) Florida Building Code, Energy Conservation* (FBCEC) and the *8th Edition (2023) Florida Building Code, Energy Conservation*. The 7th *Edition (2020) FBCEC* is the base code for the 8th Edition (2023) FBCEC, with changes coming from both the 2021 IECC and other Florida Building Commission-approved modification proposals. This *Analysis* will serve as a useful tool to facilitate the transition to the new code.

The *Analysis* is arranged so that comparable provisions in the two codes can be easily located. The left two columns contain section numbers and a brief overview of the corresponding requirements from the *7th Edition (2020)* FBCEC. The next two columns contain section numbers and a brief overview of the corresponding requirements in the *8th Edition (2023)* FBCEC. The far right column contains a brief analysis or comments on the differences between the provisions.

This *Analysis* is not intended to replace or interpret the provisions of the *7th Edition (2020)* or the *8th Edition (2023)* FBCEC. This information simply points out the differences. The *Analysis* is not designed to be used without the aid of the representative code books, as all the details pertaining to a specific section may or may not be provided. However, this *Analysis* will provide an easy means for identifying differences in the two codes, as well as enabling the user to locate issue specific provisions in the *8th Edition (2023)* FBCEC by means of a numbered section cross reference.

Notable changes deemed to be the most significant or to have the greatest impact have been highlighted in yellow.

# Commercial Provision Changes

| 7th Edition (2020) FBCEC | | 8th Edition (2023) FBCEC | | Analysis |
|---|---|---|---|---|
| **Section** | **Requirement** | **Section** | **Requirement** | |
| **CHAPTER 1 [CE] SECTION C103 CONSTRUCTION DOCUMENTS** | | | | |
| C103.1 | General | C103.1 | General | Construction documents and supporting data can be submitted digitally, where the code official allows. |
| C103.2 | Information on construction documents | C103.2 | Information on construction documents | Construction documents must include the energy compliance path. |
| C104.2.6 | Final inspection | C104.2.6 | Final inspection | The final building inspection must be completed after the *code official and the owner* have received the preliminary commissioning report. |
| | | | | |
| **CHAPTER 2 [CE] DEFINITIONS** | | | | |
| C202 | Definitions: Demand Recirculation Water System | C202 | Definitions: Demand Recirculation Water System | Edited *Demand Recirculation Water System* definition to include one or more pumps. |
| C202 | Definitions: Skylights | C202 | Definitions: Skylights | Skylights definition also includes glazing materials in *greenhouses*. |
| C202 | Definitions: General lighting | C202 | Definitions: General Lighting | Modifies the definition as interior lighting that provides a substantially uniform illumination level throughout a space. |
| C202 | Definitions: Greenhouse | C202 | Definitions: Greenhouse | Modifies *Greenhouse* definition to include structures erected for 180 days or more. |
| - | - | C202 | Definitions: Internal Curtain System | New definitions. |
| - | - | C202 | Definitions: Large-Diameter Ceiling Fan | New definitions. |
| C202 | Definitions: Networked Guestroom Control System | C202 | Definitions: Networked Guestroom Control System | Modifies the definition for clarification. A control system, with access from the front desk or other central location associated with a *Group R* -1 building, should be capable of identifying a guest room's rented and unrented status. |
| C202 | Definitions: On-Site Renewable Energy | C202 | Definitions: On-Site Renewable Energy | Modifies *On-Site Renewable Energy* is defined as energy from renewable energy resources harvested at the building site. |
| - | - | C202 | Definitions: Renewable Energy Resources | New definitions. |

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| - | - | | Definitions: Thermal Distribution Efficiency (TDE) | New definitions. |
| C202 | Definitions: Wall, Above-Grade | C202 | Definitions: Wall, Above-Grade | Modifies above-grade wall definitions. Expanded to include between-floor spandrels, peripheral edges of floors, roof knee walls, dormer walls, gable end walls, walls enclosing a mansard roof, and skylight shafts. |
| **CHAPTER 3 [CE] GENERAL REQUIREMENTS** | | | | |
| C303.1.3 | Fenestration product rating | C303.1.3 | Fenestration product rating | Modifies *tubular daylighting devices* rating standard. Tubular daylighting devices, VTannual, must be measured and rated per ANSI/NFRC 203. |
| - | - | C303.1.5 | Roof solar reflectance and thermal emittance | Adds new section C303.1.5.<br><br>Reflectance and emittance of low-sloped roofs directly above cooled conditioned spaces in climate zone 1A must comply with Table C402.3. |
| **CHAPTER 4 [CE] COMMERCIAL ENERGY EFFICIENCY** | | | | |
| C402.1.1 | Low-energy buildings and greenhouses | C402.1.1 | Low-energy buildings and greenhouses | Renames the section heading by adding "*greenhouses*." |
| - | - | C402.1.1.1 | Greenhouses | Adds new sub-section C402.1.1.1.<br><br>Greenhouse structures or areas that are mechanically heated or cooled and comply with exterior opaque envelope assemblies sections C402.2 and C402.4.5, interior partition building thermal envelope assemblies that separate the greenhouse from conditioned space comply with sections C402.2, C402.4.3 and C402.4.5, and fenestration assemblies that comply with Table C402.1.1.1 is exempted from the building envelope requirement of this code. Unconditioned greenhouses are exempted. |
| C402.1.2 | Equipment buildings | C402.1.2 | Equipment buildings | Reduces the stringency by increasing the separate buildings' floor area maximum limit from 600 to 1200 $ft^2$ for exemption from the thermal envelope requirement of this code. Replaces "*electronic*" with "*electric*." |
| Table C402.1.3 | Opaque Thermal Envelope Insulation Component Minimum Requirements, R-Value Method | Table C402.1.3 | Opaque Thermal Envelope Insulation Component | Increases thermal envelope stringency. |

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| | | | Minimum Requirements, R-Value Method | Increases thermal envelope minimum *R-Value* requirement of roofs from R-38 to R-49 for *All other* and *Group-R* buildings categories in climate zone 4 and *All other* building types in climate zone 5.<br><br>Increases floor Joist/framing R-value from *not required to R-13 in climate zone 1*. Increases slab-on-grade floor insulation *R-value* requirements for climate zones 3 through 6. |
| Table C402.1.4 | Opaque Thermal Envelope Assembly Maximum Requirements, U-Factor Method | Table C402.1.4 | Opaque Thermal Envelope Assembly Maximum Requirements, U-Factor Method | Increases thermal envelope stringency (reduces *U-factor, F-Factor*).<br><br>Reduces thermal envelope maximum *U-Factor* requirement of roofs from U-0.027 to U-0.021 for *All other* and *Group-R* building categories in climate zone 4 and *All other* building types in climate zone 5. Reduces slab-on-grade floor *F-factor* requirements for climate zones 3 through 6. |
| C402.2.5 | Slabs-on-grade perimeter insulation | C402.2.5 | Slabs-on-grade (Prescriptive) | Removes “perimeter insulation” from the section title and designates it “*Prescriptive*.” |
| - | - | C402.2.5.1 | Insulation installation (Prescriptive) | Adds new sub-section C402.2.5.1 by moving code provisions from section C402.2.5 Slabs-on-grade and designates the new sub-section “*Prescriptive*.”<br><br>Also, it moves the exceptions of section C402.2.5 to the new sub-section C402.2.5.1. |
| - | - | C402.2.7 | Airspaces | Adds new section C402.2.7.<br><br>Where the R-value of airspace is used for compliance per Section C402.1, the airspace must be enclosed in an unventilated cavity bounded on all sides by building components and constructed to minimize airflow into and out of the enclosed airspace.<br><br>Ventilated cavities are exempted, provided the effect of the ventilation of airspaces located on the exterior side of the continuous air barrier and adjacent to and behind the exterior wall-covering material are determined per ASTM C1363. |

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| C402.3 | Table C402.3 | C402.3 | Table C402.3 | Adds minimum roof reflectance of 0.63 and a three-year aged solar reflectance index of 75 requirements for climate zone 1A. |
| C402.4.2 | Minimum skylight fenestration area | C402.4.2 | Minimum skylight fenestration area | Changes referenced section number from C405.2.3 to C405.2.4 in exception item # 5. |
| C402.4.2.1 | Lighting controls in toplit zones | C402.4.2.1 | Lighting controls in toplit zones | Updates referenced section numbers from C405.2.3.1 to C405.2.4.1. |
| C402.4.4 | Daylight zones | C402.4.4 | Daylight zones | Updates referenced section number.<br><br>Daylight zones referenced in sections C402.4.1.1 through C402.4.3.2 must comply with renumbered Sections C405.2.4.2 and C405.2.4.3. |
| C402.5 | Air leakage—thermal envelope (Mandatory) | C402.5 | Air leakage—thermal envelope (Mandatory) | Updates referenced section numbers and edits the code language for clarity. |
| C402.5.1.1 | Air barrier construction | C402.5.1.1 | Air barrier construction | Adds new requirement as item #5.<br><br>To maintain the integrity of the air barrier, continuous air barrier construction must comply with the electrical and communication box installation requirements of Section C402.5.10. |
| C402.5.1.2 | Air barrier compliance options | C402.5.1.2 | Air barrier compliance | Revised opaque thermal envelope air barrier compliance to include buildings' thermal envelope performance testing requirements. Buildings in Group R and Group I occupancies must meet provisions of section C402.5.1.2.1 or C402.5.1.2.2, buildings other than Group R and Group I occupancies must meet either the new thermal envelope performance testing provisions of section C402.5.1.2.3 or meet the requirements of section C402.5.1.2.1 or C402.5.1.2.2. The thermal envelope performance testing requirement has exceptions depending on the building's floor area and climate zones. |
| C402.5.1.2.2 | Assemblies | C402.5.1.2.2 | Assemblies | Adds alternative air leakage testing standard ASTM D8052 for assemblies of materials.<br><br>Assemblies of materials and components must comply with this section when tested in accordance with ASTM D8052. |
| - | - | C402.5.1.2.3 | Building thermal envelope testing | Adds new section C402.5.1.2.3. |

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| | | | | Building thermal envelope must be tested in accordance with ASTM E779, ANSI/RESNET/ICC 380, or ASTM E1827 or an equivalent method approved by the code official. The measured air leakage must not exceed 0.40 cfm/ft$^2$ at a pressure differential of 0.3-inch water gauge (75 Pa).<br><br>Where the measured air leakage rate is > 0.4 cfm/ft$^2$ and < 0.6 cfm/ft$^2$, a diagnostic test is conducted using a smoke tracer or infrared imaging must, leaks are sealed, and an additional report identifying the corrective actions taken to seal leaks is submitted to code official and the building owner is considered to comply this section. |
| - | - | C402.5.10 | Electrical and communication boxes | Adds new section C402.5.10.<br><br>Electrical and communication boxes that penetrate the building thermal envelope's air barrier and do not comply with Section C402.5.11.1 must be caulked, taped, gasketed, or otherwise sealed to the air barrier being penetrated. |
| - | - | C402.5.10.1 | Air-sealed boxes | Adds new sub-section C402.5.10.1.<br><br>Air-sealed boxes must be installed per the manufacturer's instructions and marked according to NEMA OS 4. |
| - | - | C402.5.11 | Operable openings interlocking (Mandatory) | Adds new mandatory section C402.5.11.<br><br>For occupants utilizing operable openings on exterior envelopes and greater than 40 ft$^2$ in area, such openings must be interlocked with the heating and cooling system to raise the cooling set-point to 90°F and lower the heating set-point to 55°F within 10 minutes of opening the operable opening. |
| - | - | C402.5.11.1 | Operable controls (Mandatory) | Adds new sub-section C402.5.11.1.<br><br>Operable opening controls must comply with the operable opening interlocking control requirements of Section C403.6. |

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| C403.2.2 | Equipment sizing | C403.2.2 | Equipment sizing | Adds exception that commercial building living spaces must be sized per Section R403.7.1.1 and the applicable exceptions. |
| Table C403.2.3(1) | Minimum Efficiency Requirements: Electrically Operated Unitary Air Conditioners AND Condensing Units | Table C403.2.3(1) | Minimum Efficiency Requirements: Electrically Operated Unitary Air Conditioners AND Condensing Units | Updates Table C403.2.3(1) per the federal minimum efficiency requirements.<br><br>Air conditioners (air-cooled):<br>For a split system, all heating types, and capacity < 45 kBtu/h 14.0 SEER before 1/1/2023 and 14.3 SEER2 after 1/1/2023<br><br>For a split system, all heating types, and capacity >= 45 kBtu/h and < 65 kBtu/h 14.0 SEER before 1/1/2023 and 13.8 SEER2 after 1/1/2023<br><br>For a single packaged system, all heating types, and capacity < 65 kBtu/h 14.0 SEER before 1/1/2023 13.4 SEER2 after 1/1/2023<br><br>Through-the-wall (air-cooled):<br>For a split system, all heating types and capacity <= 30 kBtu/h 12.0 SEER before 1/1/2023 and 11.7 SEER2 after 1/1/2023.<br><br>For a single packaged system, all heating types and capacity <= 30 kBtu/h 12.0 SEER before 1/1/2023 and 11.7 SEER2 after 1/1/2023.<br><br>Small-duct high-velocity (air-cooled):<br>For a split system, all heating types and capacity < 65 kBtu/h 12.0 SEER before 1/1/2023 and 12.0 SEER2 after 1/1/2023.<br><br>Air conditioners (air-cooled):<br>For split and single packaged systems, electric resistance or none heating type and capacity >= 65 kBtu/h and < 135 kBtu/h IEER increases to 14.8 after 1/1/2023 from 12.9.<br><br>For split and single packaged systems, for all other heating types, capacity >= 65 kBtu/h and < 135 kBtu/h IEER increases to 14.6 after 1/1/2023 from 12.7. |

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| | | | | For split and single packaged systems, electric resistance or none heating type and capacity >= 135 kBtu/h and < 240 kBtu/h IEER increases to 14.2 after 1/1/2023 from 12.4.<br><br>For split and single packaged systems, for all other heating types, capacity >= 135 kBtu/h and < 240 kBtu/h IEER increases to 14.0 after 1/1/2023 from 12.2.<br><br>For split and single packaged systems, electric resistance or none heating type and capacity >= 240 kBtu/h and < 740 kBtu/h IEER increases to 13.2 after 1/1/2023 from 11.6.<br><br>For split and single packaged systems, all other heating types, and capacity >= 240 kBtu/h and < 760 kBtu/h, IEER increases to 13.0 after 1/1/2023 from 11.4.<br><br>For split and single packaged systems, electric resistance or none heating type, and capacity >= 740 kBtu/h IEER increases to 12.5 after 1/1/2023 from 11.2.<br><br>For split and single packaged systems and all other heating types, capacity >= 760 kBtu/h, IEER increases to 12.3 after 1/1/2023 from 11.0. |
| Table C403.2.3(2) | Minimum Efficiency Requirements: Electrically Operated Unitary AND Applied Heat Pumps | Table C403.2.3(2) | Minimum Efficiency Requirements: Electrically Operated Unitary AND Applied Heat Pumps | Updates the minimum efficiency requirements of table C403.2.3(2) per the federal minimum efficiency.<br><br>Air cooled (cooling mode):<br>For split system, all heating types and capacity < 65 kBtu/h 14.0 SEER before 1/1/2023 and 14.3 SEER2 after 1/1/2023.<br><br>For a single packaged system, all heating types and capacity < 65 kBtu/h 14.0 SEER before 1/1/2023 and 13.4 SEER2 after 1/1/2023.<br><br>Through-the-wall (air-cooled): |

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| | | | | For split and single packaged systems, all heating types and capacity <= 30 kBtu/h 12.0 SEER before 1/1/2023 and 11.9 SEER2 after 1/1/2023.<br><br>Small-duct high-velocity (air cooled):<br>For a split system, all heating types and capacity < 65 kBtu/h 12.0 SEER before 1/1/2023 and 12.0 SEER2 after 1/1/2023.<br><br>Air Cooled (cooling mode):<br>For split and single packaged systems, electric resistance or none heating type and capacity >= 65 kBtu/h and < 135 kBtu/h IEER increases to 14.1 after 1/1/2023 from 12.2.<br><br>For split and single packaged systems, for all other heating types, capacity >= 65 kBtu/h and < 135 kBtu/h IEER increases to 13.9 after 1/1/2023 from 12.0.<br><br>For split and single packaged systems, electric resistance or none heating type and capacity >= 135 kBtu/h and < 240 kBtu/h IEER increases to 13.5 after 1/1/2023 from 11.6.<br><br>For split and single packaged systems, for all other heating types, capacity >= 135 kBtu/h and < 240 kBtu/h IEER increases to 13.3 after 1/1/2023 from 11.4.<br><br>For split and single packaged systems, electric resistance or none heating type, and capacity >= 240 kBtu/h IEER increases to 12.5 after 1/1/2023 from 10.6.<br><br>For split and single packaged systems, for all other heating types, capacity >= 240 kBtu/h IEER increases to 12.3 after 1/1/2023 from 10.4.<br><br>Air Cooled (heating mode):<br>For split system and capacity < 65 kBtu/h, 8.2 HSPF before 1/1/2023 and 7.5 HSPF after 1/1/2023. |

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| | | | | For a single packaged system and capacity < 65 kBtu/h, 8.0 HSPF before 1/1/2023 and 6.7 HSPF2 after 1/1/2023.<br><br>Through-the-wall (air-cooled, heating mode):<br>For split and single packaged systems and capacity <= 30 kBtu/h, 7.4 HSPF before 1/1/2023 and 6.3 HSPF2 after 1/1/2023.<br><br>Small-duct high-velocity (air-cooled, heating mode):<br><br>For a split system and capacity < 65 kBtu/h, 7.2 HSPF before 1/1/2023 and 6.1 HSPF2 after 1/1/2023.<br><br>Air Cooled (heating mode):<br>At 47°F db / 43°F wb outdoor air condition and capacity >= 65 kBtu/h and < 240 kBtu/h, COP increases to 3.3 after 1/1/2023 from 3.2.<br><br>Moves water-source heat pump's minimum efficiency requirements to new table C403.2.3(16). |
| Table C403.2.3(3) | Minimum Efficiency Requirements: Electrically Operated Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Single-Package Vertical Air Conditioners, Single Vertical Heat Pumps, Room Air Conditioners And Room Air-Conditioner Heat Pumps | Table C403.2.3(3) | Minimum Efficiency Requirements: Electrically Operated Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Single-Package Vertical Air Conditioners, Single-Package Vertical Heat Pumps, Room Air Conditioners And Room Air-Conditioner Heat Pumps | Modifies the table title and updates the minimum efficiency values of Table C403.2.3(3) per the federal minimum efficiency requirements.<br><br>Replaces "*new construction*" with "*standard size"* and *"replacement"* with *"nonstandard size."*<br><br>Splits minimum efficiency requirements of PTAC and PTHP into three capacity range categories as follows:<br><br>PTAC (cooling mode, standard size):<br>Standard size PTAC and capacity < 7 kBtu/h changes to 11.9 EER.<br><br>There is no change in standard size PTAC and capacity >= 7 kBtu/h and <= 15 kBtu/h.<br><br>Standard size PTAC and capacity > 15 kBtu/h changes to 9.5 EER. |

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| | | | | PTAC (cooling mode, nonstandard size):<br>Nonstandard size PTAC and capacity < 7 kBtu/h changes to 9.4 EER.<br><br>There is no change in the nonstandard size PTAC and capacity >= 7 kBtu/h and <= 15 kBtu/h.<br><br>Nonstandard size PTAC and capacity > 15 kBtu/h changes to 7.7 EER.<br><br>PTHP (cooling mode, standard size):<br>From equation-based, standard size PTHP and capacity < 7 kBtu/h changed to 11.9 EER.<br><br>There is no change for standard size PTHP and capacity >= 7 kBtu/h and <= 15 kBtu/h.<br><br>From equation-based, standard size PTHP and capacity > 15 kBtu/h, changed to 9.5 EER.<br><br>PTHP (cooling mode, nonstandard size):<br>Nonstandard size PTHP and capacity < 7 kBtu/h changes to 9.3 EER.<br><br>There is no change in the nonstandard size PTHP and capacity >= 7 kBtu/h and <= 15 kBtu/h.<br><br>Nonstandard size PTHP and capacity > 15 kBtu/h changes to 7.6 EER.<br><br>PTHP (heating mode, standard size):<br>Standard size PTHP and capacity < 7 kBtu/h changes to 3.3 COP.<br><br>There is no change for standard size PTHP and capacity >= 7 kBtu/h and <= 15 kBtu/h.<br><br>Standard size PTHP and capacity > 15 kBtu/h changes to 2.9 COP. |

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| | | | | PTHP (heating mode, nonstandard size):<br>Nonstandard size PTHP and capacity < 7 kBtu/h changes to 2.7 COP.<br><br>Nonstandard size PTHP and capacity > 15 kBtu/h changes to 2.5 COP. |
| Table C403.2.3(4) | Warm Air Furnaces And Combination Warm Air Furnaces/Air-Conditioning Units, Warm Air Duct Furnaces And Unit Heaters, Minimum Efficiency Requirements | Table C403.2.3(4) | Warm Air Furnaces And Combination Warm Air Furnaces/Air-Conditioning Units, Warm Air Duct Furnaces And Unit Heaters, Minimum Efficiency Requirements | Updates Tables C403.2.3(4) per the federal minimum efficiency requirements.<br><br>Warm air furnaces, gas-fired, capacity < 225 kBtu/h, excluding mobile home, 80% AFUE for non-weatherized and 81% AFUE for Weatherized.<br><br>Warm air furnaces, gas-fired ≥ 225 kBtu/h, 80% $E_t$ before 1/1/2023 and 81% $E_t$ after 1/1/2023.<br><br>Warm air furnaces, oil-fired, capacity < 225 kBtu/h, excluding mobile home, 83% AFUE for non-weatherized and 78% AFUE for Weatherized.<br><br>Warm air furnaces, oil-fired ≥ 225 kBtu/h is 81% $E_t$ before 1/1/2023 and 82% $E_t$ after 1/1/2023.<br><br>Electric furnaces, capacity < 225 kBtu/h 78% AFUE. |
| Table C403.2.3(5) | Minimum Efficiency Requirements: Gas- And Oil-Fired Boilers | Table C403.2.3(5) | Minimum Efficiency Requirements: Gas- And Oil-Fired Boilers | Adds clarification to Table C403.2.3(5).<br><br>Adds label that boilers with a capacity < 300 kBtu/h are for residential applications and adds footnotes for clarifications. |
| Table C403.2.3(7) | Water Chilling Packages—Efficiency Requirements | Table C403.2.3(7) | Water Chilling Packages—Efficiency Requirements | Adds clarification to the minimum efficiency requirements of water chilling packages Table C403.2.3(7).<br><br>Adds missing units to the minimum efficiency values for clarification and updates the footnotes. |
| Table C403.2.3(8) | Performance Requirements for Heat Rejection Equipment — Minimum Efficiency Requirements | Table C403.2.3(8) | Performance Requirements for Heat Rejection Equipment — Minimum Efficiency Requirements | Updates the minimum efficiency requirements of heat rejection equipment Table C403.2.3(8).<br><br>Adds new equipment category for *Propeller or axial fan dry coolers (air-cooled fluid coolers)* with ≥ 4.5 gpm/hp efficiency requirement. |

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| | | | | Increases the minimum efficiency of *propeller or axial fan evaporative condensers* to ≥ 160 kBtu/h·hp from ≥ 157 kBtu/h·hp.<br><br>Increases the minimum efficiency of *centrifugal fan evaporative condensers* to ≥ 137 kBtu/h·hp from ≥ 135 kBtu/h·hp. |
| Table C403.2.3(9) | Minimum Efficiency Air Conditioners and Condensing Units Serving Computer Rooms | Table C403.2.3(9) | Floor-Mounted Air Conditioners and Condensing Units Serving Computer Rooms—Minimum Efficiency Requirements | Renames Table C403.2.3(9) title.<br><br>Regroups the cooling capacity entry into narrow ranges, removes the class categories, and updates the minimum COP requirements for most equipment types. |
| Table C403.2.3(11) | Minimum Efficiency Requirements Variable Refrigerant Flow Multi-Split Air Conditioners and Heat Pumps | Table C403.2.3(11) | Electronically Operated Variable Refrigerant Flow Multi-Split Air Conditioners—Minimum Efficiency Requirements | Renames Table C403.2.3(11).<br><br>This table now represents only air-cooled Variable Refrigerant Flow (VRF) multi-split Air Conditioners (ACs). Removes "*All Other*" heating type category for cooling capacity ≥ 65 kBtu/h range.<br><br>Reduces the minimum efficiency VRF multi-split ACs, electric resistance or none heating type, and capacity range ≥ 65 kBtu/h and < 135 kBtu/h to 11.0 EER from 11.2 EER. Adds new efficiency metric requirement of 15.5 IEER.<br><br>Adds new minimum efficiency requirement for VRF multi-split ACs, *electric resistance or none* heating type, and capacity range ≥ 135 kBtu/h and < 240 kBtu/h 14.9 IEER.<br><br>Adds new minimum efficiency requirement for VRF multi-split ACs, electric resistance or none heating type, and capacity range ≥ 240 kBtu/h 13.9 IEER.<br><br>Moves the heat pump VRF equipment category into a new table C403.2.3(12). |
| - | - | Table C403.2.3(12) | Electronically Operated Variable Refrigerant Flow and Applied Heat Pumps—Minimum Efficiency Requirements | Adds new Table C403.2.3(12).<br><br>This table represents the minimum efficiency requirements of the VRF equipment, including air-cooled, water-source, groundwater-source, and |

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| | | | | ground-source heat pumps in cooling and heating modes. |
| - | - | Table C403.2.3(13) | Vapor-Compression-based Indoor Pool Dehumidifier—Minimum Efficiency Requirements | Adds new Table C403.2.3(13). |
| - | - | Table C403.2.3(14) | Electronically Operated DX-DOAS Units, Single-Package and Remote Condenser, without Energy Recovery—Minimum Efficiency Requirements | Adds new Table C403.2.3(14). |
| - | - | Table C403.2.3(15) | Electronically Operated DX-DOAS Units, Single-Package and Remote Condenser, with Energy Recovery—Minimum Efficiency Requirements. | Adds new Table C403.2.3(15). |
| - | - | Table C403.2.3(16) | Electronically Operate Water-Source Heat Pumps—Minimum Efficiency Requirements. | Adds new Table C403.2.3(16).<br><br>Creates the new Table by moving the water-source heat pump equipment categories from table C403.2.3(2) of the 7th Edition (2020) Florida Building Code, Energy Conservation, and updates the efficiency values per the federal minimum efficiency requirements. |
| - | - | Table C403.2.3(17) | Ceiling-Mounted Computer-Room Air Conditioners—Minimum Efficiency Requirements. | Adds new Table C403.2.3(17). |
| C403.2.4.1.1 | Heat pump supplementary heat | C403.2.4.1.1 | Heat pump supplementary heat | Revises the code language to clarify that supplemental electric resistance space heater must operate only when the vapor compression cycle cannot provide the necessary heating energy to satisfy the thermostat setting, the heat pump is working in defrost mode, the vapor compression cycle malfunctions, or the thermostat malfunctions. |
| C403.2.4.8.1 | Temperature setpoint controls | C403.2.4.8.1 | Temperature set-point controls | Modifies the code provision that guestroom HVAC controls must be capable of and configured with three modes of temperature control:<br>(1) When the guest room is rented but unoccupied, the controls must automatically raise the cooling set-point and lower the |

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| | | | | heating set-point by ≥ 4°F (2°C) within 30 minutes after the occupants have left the guest room.<br>(2) When the guest room is unrented and unoccupied, the controls must automatically raise the cooling set point to ≥ 80°F (27°C) and lower the heating set point to ≤ 60°F (16°C).<br>(3) When the guest room is occupied, HVAC set points must return to their occupied set points once occupancy is sensed. |
| C403.2.4.8.2 | Ventilation controls | C403.2.4.8.2 | Ventilation controls | Reduces HVAC system automatic turn-off timing of ventilation and exhaust fans to 20 minutes from 30 minutes after the occupants leave the guest room for consistency between HVAC and the lighting control in Section C405.2.1.1. |
| C403.2.6.2 | Enclosed parking garage ventilation controls | C403.2.6.2 | Enclosed parking garage ventilation controls | Replaces "*contamination-sensing devices*" with "*carbon monoxide detectors applied in conjunction with nitrogen dioxide detectors*" in enclosed parking garage ventilation controls for clarification.<br><br>Increases the stringency by reducing the garage's total exhaust capacity exception maximum limits from < 22,500 cfm (10 620 L/s) to < 8,000 cfm (3775 L/s) with ventilation systems that do not utilize heating or mechanical cooling. |
| C403.2.10 | Piping insulation | C403.2.10 | Piping insulation | Adds a new exception.<br><br>Radiant heating system sections of piping intended by design to radiate heat are exempted from thermal insulation requirements. |
| C403.2.12 | Air system design and control | C403.2.12 | Air system design and control | Adds new code provision that large-diameter Ceiling fans must comply with section C403.2.12.6, and low-capacity ventilation fans must comply with section C403.2.12.7. |
| - | - | C403.2.12.6 | Large-diameter ceiling fans | Adds new section C403.2.12.6 Large-diameter ceiling fans.<br><br>Requires that large-diameter ceiling fans must be tested and labeled per the standard AMCA 230 and must meet the efficiency requirements of Table C403.2.12.6 and sub-section C403.2.12.6.1. |

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| - | - | Table C403.2.12.6 | Ceiling fan efficiency requirements | Adds new Table C403.2.12.6. |
| - | - | C403.2.12.6.1 | Ceiling Fan Energy Index | Adds new sub-section C403.2.12.6.1.<br><br>Requires that the Ceiling Fan Energy Index (CFEI) must be calculated as the ratio of the electric input power of a reference large-diameter ceiling fan to the electric input power of the actual large-diameter ceiling fan per AMCA 208 standard. |
| - | - | C403.2.12.7 | Low-capacity ventilation fans | Adds new section C403.2.12.7.<br><br>This new code provision requires that mechanical ventilation system fans with motors less than 1/12 horsepower in capacity must meet the efficacy of Table C403.2.12.7.<br><br>This provision is exempted where ventilation fans are a component of a listed heating or cooling appliance, part of a dryer exhaust duct power ventilators, domestic range hoods, and domestic range booster fans that operate intermittently. |
| - | - | Table C403.2.12.7 | Low-capacity ventilation fan efficiency | Adds new Table C403.2.12.7.<br><br>Adds minimum efficiency requirements for low-capacity ventilation fans. |
| C403.4.2.3.3 | Two-position valve | C403.4.2.3.3 | Two-position valve | Revises the section that each hydronic heat pump on the hydronic system having a total pump system power exceeding 10.0 hp (7.5 kW) must have a two-position "*automatic*" valve, and the value must be "*interlocked with the compressor to shut off the water flow when the compressor is off.*" |
| C403.4.2.4 | Part-load controls | C403.4.2.4 | Part-load controls | Hydronic systems control requirement stringency increases by reducing the heated or chilled water design output capacity threshold to 300 kBtu/h from 500 kBtu/h.<br><br>Reduces the minimum combined motor capacity to 2 hp from 10 hp with three or more control valves or other devices for automatically varying fluid flow by at least 50% for hydronic systems.<br><br>Also, it reduces the minimum combined motor capacity to 2 hp from 10 hp for automatically |

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| | | | | varying pump flow by at least 50% on heating-water systems, chilled-water systems, and heat rejection loops serving water-cooled unitary air conditioners. |
| C403.4.2.5 | Boiler turndown | C403.4.2.5 | Boiler turndown (Mandatory) | Designated section C403.4.2.5 Mandatory. |
| C403.4.4.5 | Supply-air temperature reset controls | C403.4.4.5 | Supply-air temperature reset controls | Adds the text "*are capable of and configured to*" for clarity.<br><br>• Allows controls that adjust the reset based on zone humidity are allowed in climate zones 0B, 1B, 2B, 3B, 3C, and 4 through 8.<br>• HVAC zones with relatively constant loads must have maximum airflow designed to accommodate the fully reset supply air temperature.<br>• Modified and new exceptions include:<br>  • Systems with < 3,000 cfm of design outside air in climate zones 0A, 1A, and 3A<br>  • Systems with < 10,000 cfm of design outside air in climate zone 2A.<br>  • Systems with ≥ 80% outside air and employing exhaust-air *energy* recovery complying with section C403.7.4 in climate zones 0A, 1A, 2A, and 3A. |
| - | - | C403.4.4.5.1 | Dehumidification control interaction | Adds new section C403.4.4.5.1.<br><br>The system design must allow supply air temperature reset while dehumidification is provided in climate zones 0A, 1A, 2A, and 3A. |
| C403.4.6 | Hot gas bypass limitation (Mandatory) | C403.4.6 | Hot gas bypass limitation (Mandatory) | Designates section C403.4.6 Mandatory. |
| - | - | C403.6 | Operable opening interlocking controls (Mandatory) | Adds new section C403.6 and designates it mandatory.<br><br>The heating and cooling systems must have controls that will interlock with operable openings operation such that it resets the thermostat set points or shuts off the system depending on the outside air temperature. |

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| C404.2 | Table C404.2 Minimum Performance of Water-Heating Equipment | C404.2 | Table C404.2 Minimum Performance of Water-Heating Equipment | Adds instantaneous electric water heaters equipment category with capacity > 58.6 kW but has no minimum efficiency requirement. |
| C404.5.2.1 | Water volume determination | C404.5.2.1 | Water volume determination | Adds alternative tubing data from Table C404.5.2.1 for piping “Volume” determination. |
| - | - | C404.5.2.1 | Table C404.5.2.1 Internal volume of various water distribution tubing | Adds new Table C404.5.2.1. |
| C405.1 | C405.1 General (Mandatory) | C405.1 | C405.1 General (Mandatory) | Updates dwelling and sleeping unit lighting compliance reference section C405.2.5 due to section renumbering. |
| - | - | C405.1.1 | Walk-in cooler lighting | Adds new section C405.1.1.<br><br>Adds new provision for light efficacy in walk-in coolers, walk-in freezers, refrigerated warehouse coolers, and refrigerated warehouse freezers. |
| C405.2 | Lighting controls (Mandatory) | C405.2 | Lighting controls (Mandatory) | Changes referenced code sections due to section renumbering.<br>• changed to C405.2.1 through C405.2.8 from C405.2.1 through C405.2.6<br>• changed to C405.2.5 from C405.2.4<br>• changed to C405.2.6 from C405.2.5 |
| C405.2.1 | Occupant sensor controls | C405.2.1 | Occupant sensor controls | Adds “Corridor” space type to the list of space types where occupant *sensor controls* must be installed to control lights.<br><br>Adds a new exception; luminaires requiring specific application controls per Section C405.2.5 are exempted from occupancy sensor-based light control. |
| C405.2.1.1 | Occupant sensor control function | C405.2.1.1 | Occupant sensor control function | Adds a code provision that occupant sensor controls in *corridor* spaces must comply with a new section C405.2.1.4.<br><br>Modified an exception that *full automatic-on* controls with no manual control are allowed in *corridors, interior parking areas, stairways, restrooms, locker rooms, lobbies, library stacks*, and spaces where the manual operation would endanger occupant safety or security. |

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| C405.2.1.2 | Occupant sensor control function in warehouse | C405.2.1.2 | Occupant sensor control function in warehouse storage areas | Renames the section by adding the text "*storage area*."<br><br>Revises the lighting control function requirements:<br>1. Lighting in each aisleway must be controlled independently of lighting in all other aisleways and open areas.<br>2. Occupant sensors must automatically reduce lighting power within each controlled area to an unoccupied set point of not exceeding 50% of full power within 20 minutes after all occupants have left the controlled area.<br>3. Lights not turned off by occupant sensors must be turned off by the time-switch control complying with Section C405.2.2.1.<br>4. A manual control must be provided to allow occupants to turn off lights. |
| C405.2.1.3 | Occupant sensor control function in open plan office areas | C405.2.1.3 | Occupant sensor control function in open plan office areas | Modifies occupancy sensor-based lighting controls in open-office areas compliance requirements and adds an exception to item #3.<br><br>General lighting in each control zone must be permitted to turn on automatically when occupancy is detected. General lighting in other unoccupied zones within the open-plan office space must be allowed to turn on not exceeding 20% of full power or remain unaffected.<br><br>Adds a new exception: where general lighting is turned off by time-switch control complying with Section C405.2.2.1 is exempted from automatic turn-off control requirement.<br><br>General lighting in each control zone must tum off or uniformly reduce lighting power to an unoccupied set point not exceeding 20% of full power within 20 minutes after all occupants have left the control zone. |
| - | - | C405.2.1.4 | Occupant sensor control function in corridors | Adds new section C405.2.1.4<br><br>Occupant sensor controls in corridor spaces must uniformly reduce lighting power to an unoccupied set point not exceeding 50% of full power within 20 minutes after all occupants have left the room. |

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| | | | | Adds an exception: Corridor spaces designed with less than 2 footcandles of illumination on the floor at the darkest point with all lights on are exempted from occupancy sensor controls requirement. |
| C405.2.2 | Time-switch controls | C405.2.2 | Time-switch controls | Updates referenced code section for manual control to C405.2.3.1 from C405.2.2.2.<br><br>Adds a new exception: luminaires requiring specific application controls per section C405.2.5 are exempted from time-switch control requirements. |
| C405.2.2.1 | Time-switch control function | C405.2.2.1 | Time-switch control function | Adds new time-*switch control requirements*; time-switch controls must automatically turn lights off when the space is scheduled to be unoccupied. |
| - | - | C405.2.3 | Light-reduction controls | Adds new section C405.2.3.<br><br>Spaces not provided with occupant sensor controls complying with Section C405.2.1.1 must have manual light reduction controls complying with Section C405.2.3.1 for general lighting. Exceptions to this section are:<br>1. Luminaires controlled by daylight responsive controls complying with Section C405.2.4.<br>2. Luminaires controlled by special application controls complying with Section C405.2.5.<br>3. Where provided with manual control, the light-reduction control is not required if (1) the space has only one luminaire with a rated power < 100 watts, (2) the space use < 0.45 W/ft$^2$, or (3) the space type are corridors, lobbies, electrical rooms, and mechanical rooms. |
| C405.2.2.2 | Light-reduction controls | C405.2.3.1 | Light-reduction controls function | Reorganizes, renumbers, and renames the section and revises the provision for clarity.<br><br>Spaces required to have light-reduction controls must have a *manual control* that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern using one of the following or another *approved* method:<br>1. Continuous dimming of all luminaires from full output to < 20 % of full power.<br>2. Switching all luminaires to a reduced output of |

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| | | | | within 30 % - 70 % of full power<br>3. Switching alternate luminaires or alternate rows of luminaires to achieve a reduced output within 30 % - 70 % of full power. |
| C405.2.3 | Daylight-responsive controls | C405.2.4 | Daylight-responsive controls | Renumbers section to C405.2.4 from C405.2.3. Updates referenced code section due to section renumbering. |
| C405.2.3.1 | Daylight-responsive control function | C405.2.4.1 | Daylight-responsive control function | Renumbers the section and updates the referenced code section due to section renumbering.<br><br>Adds a new requirement item #6; when occupant sensor controls have reduced the lighting power to an unoccupied set point per sections C405.2.1.2 through C405.2.1.4, daylight responsive controls must continue to adjust electric light levels in response to available daylight, but must be configured not to increase the lighting power above the specified unoccupied set point. |
| C405.2.3.2 | Sidelit zone | C405.2.4.2 | Sidelit zone | Renumbers the section and updates referenced code sections due to section renumbering.<br><br>Adds two new requirements:<br>(1) A new provision for sidelit daylight zone area calculation when the fenestration is located in a rooftop monitor by moving it from the toplit zone section.<br>(2) Requires overhang projection factor limits depending on fenestration orientation. |
| C405.2.3.3 | Toplit zone | C405.2.4.3 | Toplit zone | Renumbers the section and updates referenced code sections and figure captions due to section renumbering. |
| - | - | C405.2.4.4 | Atriums | Adds new section C405.2.4.4.<br><br>Daylight zones of atrium spaces must be established at the top and bottom floor of the atrium, not on intermediate floors. Adds new Figure C405.2.4.4 to depict a multistory atrium. |
| C405.2.4 | Specific application controls | C405.2.5 | Specific application controls | Renumbers the section.<br><br>Modifies the code provision that a separate manual control must be provided to control |

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| | | | | luminaires for which additional lighting power is claimed per section C405.3.2.2.1, for display lighting used for exhibits in galleries, museums, and monuments, and for task lighting used for medical and dental purposes. |
| C405.2.5 | Manual controls | C405.2.6 | Manual controls | Renumbers the section. |
| C405.2.6 | Exterior lighting controls | C405.2.7 | Exterior lighting controls | Renumbers the section.<br><br>Exterior lighting systems must be provided with controls that comply with renumbered sections C405.2.7.1 through C405.2.7.4. |
| C405.2.6.1 | Daylight shutoff | C405.2.7.1 | Daylight shutoff | Renumbers the section. |
| C405.2.6.2 | Decorative lighting shutoff | C405.2.7.2 | Building facade and landscape lighting | Renumbers and renames the section. |
| C405.2.6.3 | Lighting setback | C405.2.7.3 | Lighting setback | Renumbers the section.<br><br>Adds a new provision for luminaires serving outdoor parking areas and having a rated input wattage of > 78 W and a mounting height of ≤ 24 feet above the ground must be controlled so that the total wattage is automatically reduced by ≥ 50 % during any time where activity has not been detected for at least 15 minutes if the luminaire is not controlled per Section C405.2.**7**.2. Not more than 1,500 W of lighting power should be controlled together. |
| C405.2.6.4 | Exterior time-switch control function | C405.2.7.4 | Exterior time-switch control function | Renumbers the section. |
| - | - | C405.2.8 | Parking garage lighting control | Adds new section C405.2.8.<br><br>Parking garage lighting must be controlled by an occupant sensor complying with Section C405.2.1.1 or a *time-switch control* complying with Section C405.2.2.1. Additional lighting controls must be provided as follows:<br>1. Lighting power of each luminaire must be automatically reduced by ≥ 30 % when no activity is detected for 20 minutes except places where lighting zones with < 1.5 fc of illumination on the floor at the darkest point.<br>2. Covered vehicle entrances and exits from buildings and parking structures must be |

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| | | | | separately controlled by a device that automatically reduces lighting power by ≥ 50 % from sunset to sunrise.<br>3. The power to luminaires within 20 feet of perimeter wall openings must automatically reduce in response to daylight by ≥ 50 %, except where (1) the opening-to-wall ratio is less than 40 % as viewed from the interior and encompassing the vertical distance from the driving surface to the lowest structural element, (2) the distance from the opening to any exterior daylight blocking obstruction is less than one-half the height from the bottom of the opening to the top of the obstruction, (3) the openings are obstructed by permanent screens or architectural elements restricting daylight entering the interior space. |
| C405.3.2 | Interior lighting power allowance | C405.3.2 | Interior lighting power allowance | Edits the section for clarity. |
| C405.3.2.1 | Building Area Method | C405.3.2.1 | Building Area Method | Re-arranges and edits the code language for clarity. |
| C405.3.2.1 | Table C405.3.2(1) | C405.3.2.1 | Table C405.3.2(1) | Reduces the building area method LPD allowances in Table C405.3.2(1). |
| C405.3.2.2 | Space-by-Space Method | C405.3.2.2 | Space-by-Space Method | Rearranges and edits the code language for clarity. |
| C405.3.2.2 | Table C405.3.2(2) | C405.3.2.2 | Table C405.3.2(2) | Reduces the space-by-space method LPD allowances in Table C405.3.2(2). |
| C405.3.2.2.1 | Additional interior lighting power | C405.3.2.2.1 | Additional interior lighting power | Revises the code language that in a space-by-space method, additional power must be permitted only where the specified lighting is installed and controlled per Section C405.2.5. |
| C405.4.2 | Exterior lighting power allowance | C405.4.2 | Exterior lighting power allowance | Reorganizes and edits the section for clarity. |
| C405.4.2.1 | Additional exterior lighting power | C405.4.2.1 | Additional exterior lighting power | Revises the additional exterior lighting power allowance code language for clarity that the allowance must be used only for luminaries serving the building exterior lighting application listed in table C405.4.2(3). |
| C405.8.1 | Elevator cabs | C405.8.1 | Elevator cabs (Mandatory) | Designates section C405.8.1 mandatory. |
| C405.8.2 | Escalators and moving walks | C405.8.2 | Escalators and moving walks (Mandatory) | Designates section C405.8.2 mandatory. |

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| C405.8.2.1 | Regenerative Drive | C405.8.2.1 | Energy recovery (Mandatory) | Renames the section "*Energy recovery*" and designates it as mandatory.<br><br>Revises the code language that escalators must be designed to recover electrical energy when resisting over-speed in the down direction regardless of the loading level. |
| - | - | C405.9 | Lighting for plant growth and maintenance (Mandatory) | Adds new section C405.9.<br><br>This new code requires that at least 95 % of the permanently installed luminaires used for plant growth and maintenance must have a minimum photon efficiency of 1.6 µmol/J as defined per ANSI/ASABE S640. |
| C407.2 | Mandatory requirements | C407.2 | Mandatory requirements | Updates the mandatory requirements list. |
| C408.2 | Mechanical systems and service water-heating systems commissioning and completion requirements | C408.2 | Mechanical systems and service water-heating systems commissioning and completion requirements | Replaces the text "*made available*" with "*provided*" for clarity of requirements. |
| C408.2.3 | Functional performance testing | C408.2.3 | Functional performance testing | Modifies the code language that functional testing must be witnessed and documented by a licensed design professional, electrical engineer, mechanical engineer, or approved agency, and the reporting commissioning professional must be present during any functional performance tests. |
| C408.2.4.1 | Acceptance of report | C408.2.4.1 | Acceptance of report | Revises the code language to clarify that a building must be considered acceptable for a final inspection only when the *code official* has received the preliminary commissioning report. |
| C408.2.5 | Documentation requirements | C408.2.5 | Documentation requirements | The construction documents must specify that the documents described in this section be provided not only to the building owner or owner's authorized agent but also to the *code official* within 90 days of receipt of the certificate of occupancy. |
| C408.3.1 | Functional testing | C408.3.1 | Functional testing | Modifies the code language that before passing the final inspection, the *registered design professional or approved agency must* provide evidence that the lighting control systems have been tested per the *construction documents* and manufacturer's instructions. |
| C408.3.2 | Documentation requirements | C408.3.2 | Documentation requirements | The *construction documents* must specify that the documents described in this section be provided |

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| | | | | not only to the building owner or owner's authorized agent but also *to the code official* within 90 days of receipt of the *certificate of occupancy*. |
| **CHAPTER 5 [CE] EXISTING BUILDINGS** | | | | |
| C501.2 | Existing buildings | C501.1.1 | Existing buildings | Renumbers the section. |
| C501.4 | Compliance | C501.2 | Compliance | Renumbers the section.<br><br>Rearranges the code language for clarity and add a code language that existing buildings and structures must comply with Sections C502, C503, C504, and C505 of this code and with the provisions for *alterations*, *repairs*, *additions,* and changes of occupancy or relocation, respectively, in the *Florida Building Code, Building*.<br><br>Adds a new exception: Additions, alterations, repairs, or changes of occupancy complying with ANSI/ASHRAE/IESNA 90.1 are exempted. |
| C501.5 | New and replacement materials | C501.4 | New and replacement materials | Renumbers the section. |
| C501.6 | Historic buildings | C501.5 | Historic buildings | Renumbers the section. |
| C501.7 | Building systems and components | C501.6 | Building systems and components | Renumbers the section. |
| C501.7.1 | Existing equipment efficiencies | C501.6.1 | Existing equipment efficiencies | Renumbers the section. |
| C503.2 | Change in space conditioning | C502.2 | Change in space conditioning | Moves and renumbers the section.<br><br>Modifies the code such that any unconditioned or low-energy space altered to become conditioned space must comply with Section C502. |
| C502.2 | Prescriptive compliance | C502.3 | Compliance | Creates a new section C502.3 from section C502.2.<br><br>Requires building *additions* must comply with sections C502.3.1 through C502.3.6.2. |
| C502.2.1 | Vertical fenestration | C502.3.1 | Vertical fenestration area | Renames and renumbers the section and rearranges and edits code language for clarity. |
| C502.2.2 | Skylight area | C502.3.2 | Skylight area | Renumbers the section, rearranges and edits code language for clarity. |

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| C502.2.3 | Building mechanical systems | C502.3.3 | Building mechanical systems | Renumbers the section.<br><br>Modifies the code that new mechanical systems and equipment that are part of the *addition* and serve the building's heating, cooling, and ventilation must comply with sections C403 and C408. |
| C502.2.4 | Service water-heating systems | C502.3.4 | Service water-heating systems | Renumbers the section. |
| C502.2.5 | Pools and inground permanently installed spas | C502.3.5 | Pools and inground permanently installed spas | Renumbers the section. |
| C502.2.6 | Lighting power and systems | C502.3.6 | Lighting power and systems | Renumbers the section.<br><br>Modifies the code that new lighting systems installed as part of the *addition* must comply with sections C405 and C408. |
| C502.2.6.1 | Interior lighting power | C502.3.6.1 | Interior lighting power | Renumbers the section. |
| C502.2.6.2 | Exterior lighting power | C502.3.6.2 | Exterior lighting power | Renumbers the section. |
| C503.3 | Building envelope | C503.2 | Building envelope | Renumbers the section. |
| C503.3.1 | Roof replacement | C503.2.1 | Roof replacement | Renumbers the section. |
| C503.3.2 | Vertical fenestration | C503.2.2 | Vertical fenestration | Renumbers the section. |
| - | - | C503.2.2.1 | Replacement fenestration products | Adds new section C503.2.2.1.<br><br>A new fenestration product, including sash and glazing, replacing an existing fenestration unit must meet the applicable requirements for *U*-factor and SHGC in Table C402.4.<br><br>**Exception:** An area-weighted average of the *U*-factor of replacement fenestration products being installed in the building for each fenestration product category listed in Table C402.4 must be permitted to satisfy the *U*-factor requirements for each fenestration product category listed in Table C402.4. |
| C503.3.3 | Skylight area | C503.2.3 | Skylight area | Renumbers the section. |
| C503.4 | Heating and cooling systems | C503.3 | Heating and cooling systems. | Renumbers the section. |

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| | | | | Modifies the code that new heating, cooling, and duct systems that are part of the *alteration* must comply with Sections C403 and C408. |
| C503.4.1 | Economizers | C503.3.1 | Economizers | Renumbers the section. |
| C503.5 | Service hot water systems | C503.4 | Service hot water systems | Renumbers the section.<br><br>New service hot water systems that are part of the *alteration* must comply with Sections C404 and C408. |
| C503.6 | Lighting systems | C503.5 | Lighting systems | Renumbers the section.<br><br>Modified the code that **ne**w lighting systems that are part of the *alteration* must comply with Sections C405 and C408. |
| **Reference Standards** | | | | |
| See Energy Conservation volume for additions, updates, and changes. | | | | |
| **Appendix CA: Forms** | | | | |
| Form C402-2020 | Alterations, Renovations, and Building Systems | Form C402-2023 | Alterations, Renovations, and Building Systems | Updates form. |
| | 2020 Commercial Compliance Checklist | | 2023 Commercial Compliance Checklist | Updates compliance checklist. |
| **Appendix CC: Electric Vehicle Charging Provisions For New Commercial Construction**<br>(*The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance*) | | | | |
| - | - | CC101.1 | General | Adds new section.<br><br>This new section must apply to new commercial construction where electric vehicle charging provisions are adopted. |
| - | - | CC102 | Definitions | New Definitions:<br><br>Electric Vehicle (EV)<br>Electric Vehicle Supply Equipment (EVSE)<br>EV Capable Space<br>EV Ready Space |
| - | - | CC103.1 | Electric vehicle (EV) power transfer for new construction | Adds new section.<br><br>New construction must facilitate future installation and use of EVSE per NFPA 70. |

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| - | - | CC103.2 | New commercial buildings | Adds new section.<br><br>EV-ready spaces and EV-capable spaces must be provided per the requirements in Table CC103.2. |
| - | - | Table CC103.2 | EV Ready Space and EV Capable Space Requirements | Adds new Table CC103.2.<br><br>Defines the minimum number of EV-ready spaces and EV-capable spaces requirements based on the total number of parking spaces. |
| - | - | CC103.3 | Identification | Adds new Section.<br><br>This new provision requires that construction documents must indicate the raceway or cable assembly termination point and the proposed location of future EV spaces and EVSE. |

# Residential Provision Changes

| 7th Edition (2020) FBCEC | | 8th Edition (2023) FBCEC | | Analysis |
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| **Section** | **Requirement** | **Section** | **Requirement** | |
| **Chapter 1 [RE]: Scope and Administration** | | | | |
| Table R101.5.1 | Index to code compliant forms | Table R101.5.1 | Index to code compliant forms | Removes Florida REScheck from table. |
| R103.1 | General | R103.1 | General | Adds “or in a digital format where allowed by the code official” to how construction documents, technical reports and other supporting data must be submitted. |
| R103.2 | Information on construction documents | R103.2 | Information on construction documents | Adds “energy compliance path” to details required on construction documents and renumbers details listing accordingly. |
| R104.7 | Approval | R106.1 | Approval | Approval section (and related Revocation subsection) is moved from R104.7 to R106.1, under new Section R106: “Notice of Approval.” |
| R106 | Referenced Standards | R107 | Referenced Standards | Referenced Standards section is moved from Section R106 to R107, and renumbered within the section accordingly. |
| R107 | Fees | R108 | Fees | Section is renumbered |
| R108 | Stop Work Order | R109 | Stop Work Order | Section and subsections are renumbered |
| R108.1 | Authority | R109.1 | Authority | Text edited slightly. |
| R108.2 | Issuance | R109.2 | Issuance | Text edited slightly. |
| R108.4 | Failure to comply | R109.4 | Failure to comply | Text edited slightly. |
| R109 | Board of Appeals | R110 | Board of Appeals | Section is renumbered. |
| **Chapter 2 [RE]: Definitions** | | | | |
| R202 | Definitions: Demand Recirculation Water System | R202 | Definitions: Demand Recirculation Water System | “Pump(s)” is replaced with “one or more pumps.” |
| - | - | R202 | Definitions: On-site Renewable Energy | New definition for On-site Renewable Energy. |
| - | - | R202 | Definitions: Renewable Energy Resources | New definition for Renewable Energy Resources. |
| R202 | Definitions: Roof Recover | R202 | Definitions: Roof Recover | Changes “…additional *roof covering* over a prepared existing *roof covering…*” to “…additional *roof covering* over an *existing roof covering….*” |

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| R202 | Definitions: Vertical Fenestration | R202 | Definitions: Vertical Fenestration | Changes “(fixed or moveable)” to “(fixed or operable)”. |
| **Chapter 3 [RE]: General Requirements** | | | | |
| - | - | R303.1.1.3 | Air-impermeable insulation | Adds a determination of compliance for air-impermeable insulation. |
| **Chapter 4 [RE]: Residential Energy Efficiency** | | | | |
| R402.2 | Specific insulation requirements (Prescriptive) | R402.2 | Specific insulation requirements (Prescriptive) | Adds Section R402.2.14 (Common walls/ceilings/floors) to list of prescriptive insulation requirement sections. |
| Table R402.1.2 | Insulation and Fenestration Requirements by Component | Table R402.1.2 | Insulation and Fenestration Requirements by Component | Reduces Climate Zone 5 and Marine 4 maximum glazed fenestration SHGC from “NR” to 0.40. |
| R402.2.1 | Ceilings with attic spaces | R402.2.1 | Ceilings with attics | Minor changes to make text consistent with commonly used roofing terminology. |
| R402.2.1 | Ceilings without attic spaces | R402.2.1 | Ceilings without attics | Minor changes to make text consistent with commonly used roofing terminology. |
| R402.2.4 | Access hatches and doors | R402.2.4 | Access hatch doors and insulation retention | Adds language to address loose-fill insulation retention for higher to lower sections of the attic and for when attics cover conditioned to unconditioned spaces. |
| Table R402.2.6 | Steel-Frame Ceiling, Wall and Floor Insulation (R-value) | Table R402.2.6 | Steel-Frame Ceiling, Wall and Floor Insulation (R-value) | Slightly changes and expands the listing for cold-formed steel equivalent R-values. |
| R402.2.9 | Basement walls | R402.2.9 | Basement walls | Basement wall insulation provisions are separated into insulation and installation sections and clarified. |
| R402.2.10 | Slab-on-grade floors | R402.2.10 | Slab-on-grade floors (Prescriptive) | Slab-on-grade floor insulation provisions are separated into prescriptive insulation and mandatory installation sections and clarified. |
| R402.2.11 | Crawl space walls | R402.2.11 | Crawl space walls | Crawl space wall insulation provisions are separated into prescriptive insulation and mandatory installation sections and clarified. |
| R402.4.1.2 | Testing | R402.4.1.2 | Testing | Adds clarification that whole-house mechanical ventilation is required for dwelling units with air leakage rates less than 3 ACH50, in accordance with provided code sections. |
| R402.4.1.2 | Testing | R402.4.1.2 | Testing | Adds testing requirement clarification that if an attic is both air sealed and insulated at the roof deck, interior access doors and hatches between |

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| | | | | the conditioned space volume and the attic must be opened during the test and the volume of the attic must be added to the conditioned space volume for purposes of reporting infiltration volume and calculating the air leakage of the home. |
| Table R402.4.1.1 | Air Barrier and Insulation Installation | Table R402.4.1.1 | Air Barrier and Insulation Installation | Electrical component air barrier criteria is revised and an insulation installation criteria is added. |
| - | - | R402.4.6 | Air-sealed electrical and communication boxes | New section adds sealing, insulation, marking, and installation requirements for air-sealed electrical and communication boxes. |
| R403.1.3 | Heat pump supplementary heat (Mandatory) | R403.1.3 | Heat pump supplementary heat (Mandatory) | Revises heat pump supplementary heat operation limits language. |
| R403.3.1 | Insulation (Prescriptive) | R403.3.1 | Insulation (Prescriptive) | Adds insulation requirements language for ducts buried beneath a building. |
| R403.5.2 | Demand recirculation systems | R403.5.2 | Demand recirculation water systems (Mandatory) | Makes section mandatory but clarifies that it only applies where a demand recirculation water system is provided, and further revises section language. |
| Table R403.6.1 | Whole-House Mechanical Ventilation System Fan Efficacy | Table R403.6.1 | Whole-House Mechanical Ventilation System Fan Efficacy | Minimum efficacies are increased for “In-line fan” and “Bathroom, utility room” fan locations. |
| R404.1 | Lighting equipment (Mandatory) | R404.1 | Lighting equipment (Mandatory) | Increases percentage of permanently installed luminaires and lamps required to have specified higher efficacies from 90% to “all”, with exception for those in kitchen appliances. |
| R405.2 | Mandatory requirements | R405.2 | Mandatory requirements | Adds performance compliance requirement that site-wrapped supply ducts not completely inside the building thermal envelope be insulated to a minimum of R-8. |
| R405.3 | Performance-based compliance | R405.3 | Performance-based compliance | Increases stringency of performance compliance method by 5%. |
| Table R405.5.2(1) | Specifications for the Standard Reference and Proposed Designs | Table R405.5.2(1) | Specifications for the Standard Reference and Proposed Designs | - Modifies Standard Reference Design specifications for Vertical fenestration other than opaque doors.<br><br>- Modifies Standard Reference Design and Proposed Design specifications for Skylights. |
| R405.6.3.1 | Water-heating EF adjustment factors | R405.6.3.1 | Water-heating efficiency adjustment factors | Reduces instantaneous water heater proposed home Uniform Energy Factor (UEF) for performance compliance calculations. |

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| R405.7.1 | Installation criteria for homes claiming the radiant barrier option | R405.7.1 | Installation criteria for homes claiming the radiant barrier option | Increases Condition #4 operative surface emissivity limit for sheet radiant barriers from 0.06 to 0.10. |
| R405.7.1 | Installation criteria for homes claiming the radiant barrier option | R405.7.1 | Installation criteria for homes claiming the radiant barrier option | In Condition #5, changes one of the standards with which radiant barrier systems must comply from ASTM C1158 to ASTM C1743. |
| R405.7.7 | Installation criteria for homes claiming the heat recovery unit (HRU) option | R405.7.7 | Installation criteria for homes claiming the heat recovery unit (HRU) option | Updates form referenced in this section from Form R400D-2020 to Form R400D-2023. |
| - | - | R406.2.1 | Site-wrapped supply ducts | New Energy Rating Index compliance requirement that site-wrapped supply ducts not completely inside the building thermal envelope be insulated to a minimum of R-8. |
| **Chapter 5 [RE]: Existing Buildings** | | | | |
| - | - | R501.7.2 | Electric space heating | New subsection prohibits electric resistance from being the primary space heating system type used for complete central equipment replacements in Climate Zone 2. |
| R503.1.4 | Lighting | R503.1.4 | Lighting | Reduces the alteration new lighting requirement exception limit from 50% to 10% of the luminaires in a space. |
| **Chapter 6 [RE]: Referenced Standards** | | | | |
| See Energy Conservation volume for additions, updates, and changes. | | | | |
| **Appendix RC: Calculation of End Use Energy Loads** | | | | |
| TABLE RC-1(1) | Coefficients ‘a’ and ‘b’ | TABLE RC-1(1) | Coefficients ‘a’ and ‘b’ | Updates performance compliance end use load calculation coefficients ‘a’ and ‘b’ that apply to Florida heating and cooling equipment. |
| TABLE RC-1(1) | RC-2 | TABLE RC-1(1) | RC-2 | Increases stringency of performance compliance method by 5% (see corresponding Section R405.3 change above). |
| **Appendix RD: Forms** | | | | |
| Forms | Duct Leakage Test Report | Forms | Duct Leakage Test Report | Code edition is updated from 2020 and 7th Edition to 2023 and 8th Edition. |
| Forms | Envelope Leakage Test Report (Blower Door Test) | Forms | Envelope Leakage Test Report (Blower Door Test) | Code edition is updated from 2020 and 7th Edition to 2023 and 8th Edition. |
| Forms | Envelope Leakage Test Report (Blower Door Test) | Forms | Envelope Leakage Test Report (Blower Door Test) | Adds new language to Section R402.4.1.2 quoted on form R402 consistent with main code body |

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| | | | | changes to this section (see corresponding Section R402.4.1.2 changes above). |
| Forms | Form R402-2020 | Forms | Form R402-2023 | Code edition is updated from 2020 to 2023. |
| Forms | Form R402-2020 | Forms | Form R402-2023 | Page 2 “Equipment Requirements and Installed Values” table system types and minimum efficiency levels are updated. |
| Forms | Form R402-2020 | Forms | Form R402-2023 | Page 3 “Mandatory Requirements” table name is changed to “Other Requirements.” |
| Forms | Form R402-2020 | Forms | Form R402-2023 | Page 3 “Mandatory Requirements” table (now “Other Requirements” table) lighting equipment component section is updated (see corresponding Section R404.1 changes above). |
| Forms | Form R402-2020 | Forms | Form R402-2023 | “Prepared By”, “Owner/Agent”, and “Code Official” signature lines are added on page 3. |
| Forms | Residential Energy Conservation Code Documentation Checklist | Forms | Residential Energy Conservation Code Documentation Checklist | Code edition is updated from 2020 to 2023. |
| Forms | Residential Energy Conservation Code Documentation Checklist | Forms | Residential Energy Conservation Code Documentation Checklist | Date and time, approved software title and version, current code edition, and page number footnote are added at bottom of form. |
| Forms | Form R400-2020 | Forms | Form R400-2023 | Code edition is updated from 2020 to 2023. |
| **Appendix RE: Board of Appeals- Residential** | | | | |
| - | - | Board of Appeals- Residential | | New appendix provides for the establishment of a residential code board of appeals for the purpose of hearing applications for modification of the requirements of the code. |
| **Appendix RF: Electric Vehicle Charging Provisions for One- and Two-Family Dwellings and Townhouses** *(The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.)* | | | | |
| - | - | Electric Vehicle Charging Provisions for One- and Two-Family Dwellings and Townhouses | | New appendix specifies electric vehicle charging provisions for one- and two-family dwellings and townhouses, including provision for future installation of electrical vehicle supply equipment, a raceway, and service capacity. |