Florida Building Code

8th Edition (2023)

Introduction

This is a three-hour course that has been designed to help you understand the significant changes made to the Florida Building Code 8th Edition. The course is specifically tailored to meet the continued education requirements of the Florida Department of Business and Professional Regulation (DBPR) as in 61G15-22.001. It provides an overview of significant code changes from the 2020 Florida Building Code 7th Edition to the 2023 Florida Building Code 8th Edition, including Florida-specific and legislative changes.

The 2023 Florida Building Code (FBC) is built upon the 2020 FBC as its foundation. The 2020 FBC is itself based on the 2017 FBC codes. The 2023 FBC includes amendments that have been added to fortify the Florida Building Code, declaratory statements, as well as legislative mandates.

Topics covered in the course include repairs, classification of work, change of occupancy, historic buildings, relocated or moved buildings, plus much more. If you'd like to view the Florida Building Code, you can do so at www.floridabuilding.org.

By the end of this course, participants will have a thorough understanding of the updates made to the 2023 Florida Building Code and they will be able to apply this knowledge to their respective professions.

Chapter 1: Scope and Administration

No changes were made to Chapter 1.

Chapter 2: Definitions

The following changes were made in Section 202.

Change of Occupancy

The definition of “change in occupancy” has been modified to include scenarios where no change in occupancy classification takes place. According to the FBC, a change in occupancy no longer refers to any change in occupancy classification. Instead, it pertains only to situations where the FBC mandates a higher degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation, or sanitation than what's currently present in the building or structure, and any one of the following changes occur:

- A change in occupancy classification
- A change in the purpose or level of activity in the building or structure
- A change in use

A new definition for change of use (see the bullet point above) has been added. Sections 1001.2.1 and 1001.2.2 of the Florida Building Code, Existing Building (FBCEB) provide distinct requirements depending on whether a change of use is undertaken or where a change of occupancy is undertaken.

Service Loads

The term “service loads” has been replaced with more specific load types. These include loads that are permanent, routine, or frequent; loads that are already in effect; and loads that are imminent due to environmental factors such as wind, rain, or flood.

Exterior Wall Covering

A new definition of exterior wall covering has been added. It is defined as a material or assembly of materials applied on the exterior side of exterior walls for the purpose of providing a weather-resisting barrier, insulation, or for aesthetics. The definition includes various materials such as veneers, siding, exterior insulation and finish systems, architectural trim, and embellishments like cornices, soffits, facias, gutters, and leaders. The definition is also present in the Florida Building Code – Building (FBCB).

Exterior Wall Envelope

A new definition of exterior wall envelope has been introduced. This definition refers to a system or assembly of exterior wall components that protect the building structural members and the conditioned interior space from the harmful effects of the exterior environment.

Lowest Floor

The text mentions a new definition of "lowest floor" that applies to flood requirements. The lowest floor is defined as the lowest enclosed area, including the basement, but excluding any unfinished or flood-resistant enclosure. The enclosure must be usable solely for vehicle parking, building access, or limited storage. Enclosures must not violate Section 1612 of the FBCB or Section R322 of the Florida Building Code, Residential (FBCR).

Positive Roof Drainage

The definition of positive roof drainage was revised to clarify that additional slope may not be required, but sufficient slope must be provided.

Rehabilitation and Seismic Forces

The definitions of rehabilitation and seismic forces have been deleted.

Chapter 3: Provisions for All Compliance Methods

- Section 301.1.1 has been added. It requires bleachers, grandstands, and folding and telescopic seating to comply with International Code Council (ICC) 300.
- In Section 301.3, the reference to Section 301.4 and the seismic force-resisting system has been removed.
- Section 301.4, Subsections 301.4.1 and 301.4.2, as well as Table 301.4.1 have been deleted.
- Section 301.5 has been added. It requires relocated buildings to comply with Chapter 13. Similar information that was previously in Section 608.2 has been deleted.
- Section 303.2 has been added to the building code. It states that if an exterior wall covering or envelope is being added or replaced, it must meet the requirements set for new constructions in Chapter 14 and 26 of the FBCB and Chapter 7 of the FBCR, as applicable. This applies if the new or replaced exterior wall involves two or more contiguous stories and makes up more than 15% of the total wall area on any side of the building.

Chapter 4: Repairs

- Section 401.1, the scoping section for repairs, has been updated to clarify that repairs involve the fixing, restoring, or replacing of damaged components, equipment, or fixtures to maintain their good condition and performance with respect to existing loads or performance requirements.
- Section 401.1.1 has been added. It requires repairs to bleachers, grandstands, and folding and telescopic seating to comply with ICC 300.
- Section 401.4 has been added that clarifies that work done on non-damaged components, which is necessary for the required repair of damaged components, will be considered as part of the repair. This work will not be subject to the provisions of Chapter 7, 8, 9, 10, or 11. This section was included in the 6th Edition (2017), but it was mistakenly deleted in the 7th Edition (2020).
- In Section 406.2.2, the exceptions related to rehabilitation for load combinations (including earthquake effects) have been deleted.
- In Section 406.2.2.1, the reference to earthquake effects and reduced level seismic forces have been deleted.
- In Section 406.2.2.3, the reference to seismic rehabilitation has been deleted.
- In Section 406.2.3, the reference to snow loads has been removed.
- In Section 406.2.3.1, the exceptions related to rehabilitation for load combinations (including earthquake effects) have been deleted.

Chapter 5: Prescriptive Compliance Method

- In Section 501.1, the exception about existing bleachers, grandstands and folding and telescopic seating has been deleted. These items are now addressed in new Section 301.1.1.
- New language has been added to Section 502.2, which requires new foundations, extensions of existing foundations, and replacement foundations to comply with six new construction requirements for flood design. The second paragraph has undergone some revisions to clarify that additions that do not constitute substantial improvement are not required to comply with the flood design requirements for new construction. However, this exemption applies only if two conditions are met:
    - The addition does not create or extend nonconformity of the existing building or structure with the flood-resistant construction requirements beyond what existed before the addition.

    - The lowest floor of the addition is at or above the lower of the lowest floor of the existing building or structure or the lowest floor elevation required in Section 1612 of the FBCB or Section R322 of the FBCR, as applicable.
- In Section 502.4, the reference to the seismic requirements of Section 1613 in the FBCB has been deleted.
- Section 502.7 has been added that requires improved classroom acoustics to be provided in all Group E occupancy classrooms in the addition with a volume of 20,000 cubic feet or less. The enhanced classroom acoustics must comply with the reverberation time specified in Section 808 of ICC A117.1.
- In Section 503.4, the seismic requirements and the reference to American Society of Civil Engineers (ASCE) 41 have been deleted.
- Sections 503.5, 503.6, and 503.7 have been deleted and are shown as Reserved.
- In Section 503.9, the fourth item dealing with structural irregularities in ASCE 7 (seismic) has been deleted.
- In Section 503.10, reference to the use of reduced seismic forces has been removed. Also, the reference to conventional light-frame construction methods from FBCB has been eliminated from Exception 1.
- Section 503.11 has been revised to include Group I-1 occupancies and make refuge area capacity requirements match the FBCB.
- Section 503.12 has been added for smoke compartments in Group I-2 occupancies to align with Chapter 8's prescriptive compliance method.
- Section 503.15 has been added that mandates the provision of enhanced classroom acoustics in all Group E occupancy classrooms with a volume of 20,000 cubic feet or less where the work area exceeds 50 percent of the building area. The enhanced classroom acoustics must comply with the reverberation time stated in Section 808 of ICC A117.1.
- Section 503.16 was added requiring egress doors with locking arrangements designed to keep intruders from entering the room to comply with Section 1010.2.8 of the FBCB in Group E occupancies, Group B educational occupancies, and Group I-4 occupancies.
- Section 503.17 was added requiring a two-way communication system to be provided where required by the FBC Accessibility. It is required if the work area for alterations exceeds 50 percent of the building area and the building has elevator service.
- Section 505.2 was revised to include a reference to fall prevention devices, as the American Society for Testing and Materials (ASTM) F2090 now covers both window opening control devices and fall prevention devices. The exception for window fall prevention devices complying with ASTM F2090 has been removed since these products are now addressed in the main body of the section. Item 2 has been revised to clarify that the window fall prevention requirements apply in both applications, regardless of

whether the entire existing window (sash and frame) or only the sash and glazed portion are being replaced with an insert window while the existing frame remains. The height limitation in Items 3 and 5, and the exception are now measured to the bottom of the clear opening instead of the top of the sill. Also, the language applicable to the minimum net clear opening area required for Emergency Escape and Rescue Openings (EEROs) in Section 1030 of the FBCB has been relocated to new Section 505.3.1.

- Section 505.3 was revised so the replacement of a window that is part of a change of occupancy is required to comply with new Section 1012.5.6.
- Section 505.3.1 was added to consolidate criteria for opening control devices and fall prevention devices on EEROs, which was previously contained in Sections 505.2 and 505.3.
- The exception applicable to seismic requirements in Section 506.1 has been deleted.
- Section 506.4 that dealt with structural (change of occupancy) has been deleted.
- Section 506.4 has been added to address the requirements for emergency escape and rescue openings in case of a change of occupancy. The emergency escape and rescue opening must meet the following criteria:
    - An existing operable window must have a minimum net clear opening of 4 square feet with a minimum net clear opening height of 22 inches and a minimum net clear opening width of 20 inches.
    - A replacement window must meet both of the following requirements:
        - 1. The replacement window must comply with the size requirements listed above.
        - The replacement window must be the largest standard size window offered by the manufacturer that will fit within the existing frame or rough opening and must be of the same operating style as the existing window, or a style that provides for an equal or greater window opening area than the existing window.
- Section 506.5 has been added which requires improved acoustic conditions in all Group E occupancy classrooms with a volume of 20,000 cubic feet or less, where the work area exceeds 50 percent of the building area. These improved acoustic conditions must comply with the reverberation time specified in Section 808 of ICC A117.1.

Chapter 6: Classification of Work

- Section 603.1 was revised. The term “reconfiguration of space” was deleted. It was clarified that Level 2 alterations apply when the work area is equal to or less than 50 percent of building area.
- Section 608 was deleted and shown as Reserved.

Chapter 7: Alterations – Level 1

- Section 701.3 was revised so the replacement of exterior equipment and exterior appliances damaged by flood are required to meet the requirements of Section 1612 of the FBCB or Section R322.1.6 of the FBCR.
- Section 702.4 was revised to include a reference to fall prevention devices that are covered under ASTM F2090. The exception for window fall prevention devices has been removed since these products are now addressed in the main body of the section. Item 2 has been revised to clarify that the window fall prevention requirements apply whether you're replacing the entire existing window (sash and frame) or just the sash and glazed portion with an insert window where the existing frame remains. The height limitation in Items 3 and 5, and the exception are now measured to the bottom of the clear opening instead of the top of the sill. The language applicable to the minimum net clear opening area required for EERO's in Section 1030 of the FBCB has been relocated to new Section 702.5.1.
- Section 702.5 was revised so that the replacement of a window (part of a change of occupancy) is required to comply with new Section 1012.5.6.
- Section 702.5.1 was added to combine the criteria for opening control devices and fall prevention devices on EEROs. This criterion was previously contained in Sections 702.4 and 702.5.
- Section 704.1.1 was added to allow projections into wider corridors for Group I-2 Condition 1 occupancies, where the corridor is at least 96 inches wide (in accordance with FBCB Section 407.4.3).
- Section 704.2 was added to note that new egress door requirements with enhanced locking systems are now mandated in Group E, Group B educational, and Group I-4 occupancies to comply with Section 1010.2.8 of the FBCB.
- Section 706.1.1 was revised to indicate that when the 25 percent rule is triggered, it now applies to a roof replacement and roof recover.
- Item 5 in Section 706.3 has been revised to clarify that it applies where the existing roof "covering" is to be used for attachment for new roof system.
- In Section 706.7.2, The high velocity hurricane zone (HVHZ) no longer has specific requirements for underlayment (secondary water barrier). Instead, underlayment in the HVHZ must now follow the guidelines for new constructions outlined in Section 1518.2 of the FBCB.
- Section 707.3.1 was deleted and is shown as Reserved.

Chapter 8: Alterations – Level 2

- In Section 803.3, the term “patients” was changed to “care recipients.”
- Section 803.4 has been revised to make it clear that it applies to both interior trim and interior finish. Additionally, new language has been added to the exception, which now requires that compliance with this section must be demonstrated by testing the fire-retardant coating on the same material and achieving the required performance. If the same material is not available, testing on a similar material is allowed.
- Section 803.4.1 was revised to clarify that the supplemental interior finish requirements apply to interior trim as well as interior finish.
- In Section 804.2.4, Exception 1 was revised. Now, it does not require supervision of underground key or hub gate valves in roadway boxes.
- Section 804.2.5 has been added for buildings and areas listed in Table 903.2.11.6 of the FBCB. It states that work areas that have exits or corridors shared by more than one tenant or have exits or corridors serving an occupant load greater than 30 must be equipped with an automatic sprinkler system under the following conditions:
    - The work area is already required to have an automatic sprinkler system in accordance with the FBCB for new construction.
    - The building has sufficient municipal water supply for design of an automatic sprinkler system, which is available to the floor without installing a new fire pump.
- In Section 804.4.1.2, the fire alarm system for Group 1-1 facilities is now required to be an automatic fire alarm system.
- In Section 804.4.1.3, the fire alarm system for Group 1-2 occupancies is now required to be an automatic fire alarm system.
- In Section 805.4.1.2, now applies to Group I-2, Condition 2 care suites instead of Group I-2 patient sleeping rooms. Any work areas that include modified care suites must comply with Section 407.4.4 and 407.4.4.6.2 of the FBCB.
- In Section 805.4.4, new language has been added for the required panic and fire exit hardware. It references Section 1010.2.9 of the FBCB.
- Section 805.5.3 was revised to clarify that corridor wall openings (protected in accordance with Section 716 of the FBCB) are not mandated to be sealed.
- In Section 805.6, new language has been added to limit the length of dead-end corridors in Group I-2 occupancies to 30 feet. Also, the exceptions have been changed to include Group I-2 occupancies.
- Section 805.10 was revised to include Group I-1 occupancies. It also made refuge area capacities requirements consistent with the FBCB.

- Section 805.12 was added. It requires the clear width of ramps and corridors to not be less than 48 inches in Group I-2 occupancies. In these areas, corridors are used for movement of care recipients in beds,
- In Section 807.4, the reference to effects of snow drift was deleted. Also, the fourth item dealing with structural irregularities in ASCE 7 (seismic) has been deleted.
- In Section 807.5, the seismic requirements and the reference to ASCE 41 have been deleted. Similarly, the reference to the use of reduced seismic forces has also been deleted.

Chapter 9: Alterations – Level 3

- Section 903.4 was added, which requires improved acoustics to be provided in all Group E occupancy classrooms. This applies to classrooms with a volume of 20,000 cubic feet or less where the work area is a Level 3 alteration. The enhanced classroom acoustics must comply with the reverberation time specified in Section 808 of ICC A117.1.
- Section 904.1.4 was added, which specifies that Groups A, B, E, F-1, H, I-1, I-3, I-4, M, R-1, R-2, R-4, S-1 and S-2 work areas are required to have sprinkler systems installed under the following circumstances:
    - The work area is mandated to have automatic sprinkler protection as per the FBCB for new construction.
    - The building site has an adequate municipal water supply to enable the design and installation of an automatic sprinkler system.

  However, an exception allows the use of an automatic smoke detection system (in accordance with the FBCB) in cases where the building site does not have sufficient municipal water supply.
- Section 904.1.5 was added, which requires automatic sprinkler protection in accordance with the FBCB for Group I-2 in the following:
    - In Group I-2, Condition 1, throughout the work area.
    - In Group I-2, Condition 2, throughout the work area where 15 the work area is 50 percent or less of the smoke compartment.
    - In Group I-2, Condition 2, throughout the smoke compartment in which the work occurs where the work area exceeds 50 percent of the smoke compartment.
- Section 904.1.6 was added. It requires work areas located in a windowless story to be sprinklered. This is where the FBCB requires sprinklers for new construction, and the building site has sufficient municipal water supply for the design and installation of a sprinkler system.

- Section 904.1.7 was updated to encompass all buildings and areas mentioned in Table 903.2.11.6 of the FBCB, not just the ones that have exits or corridors shared by multiple tenants or serving an occupant load greater than 30.
- Section 905.4 was added to require a two-way communication system to be provided in buildings that have elevators (required by the FBC Accessibility).
- In Section 907.4.2, the reference to the use of reduced seismic forces was deleted.
- Section 907.4.3 was deleted and is shown as Reserved.
- In Section 907.4.4, the reference to Seismic Design Category F has been deleted.
- Sections 907.4.5 and 907.4.6 have been deleted.

Chapter 10: Change of Occupancy

- Section 1002.1 was revised to clarify that all potential special use hazards are required to comply with the requirements for such special use in Chapter 4 of the FBCB.
- Section 1002.2 has been added for portions of a building undergoing a change of occupancy to one of the incidental uses listed in Table 509 of the FBCB. It mandates compliance with Section 509 of the FBCB. The requirements that pertained to underground buildings have been removed as they are now covered by the revisions to Section 1002.1.
- Section 1002.3 has been added. It requires that work areas with a change in occupancy to a Group I-2 or I-1 facility comply with the FBCB. An exception to complying with the FBCB has been added for the following:
    - Group I-2, Condition 2 to Group I2, Condition 1
    - Group I-2 to ambulatory health care
    - Group I-2 to Group I-1
    - Group I-1, Condition 2 to Group I1, Condition 1
- Section 1002.4 has been added, which requires that all rooms in Group I2 occupancies, which are 250 square feet or less and equipped throughout with automatic sprinklers, must be separated from the rest of the building by construction that can resist the passage of smoke (in accordance with Section 509.4.2 of the FBCB). This applies when the room is undergoing a change in occupancy to a storage room.
- In Section 1007.2, the reference to snow risk category has been removed.
- Section 1007.3, as well as Subsections 1007.3.1 and 1007.3.2, have been deleted.
- In Section 1010.1, an exception has been added regarding increased demand (plumbing). It only requires compliance with the Florida Building Code – Plumbing (FBCP) where the occupant load of story is increased by more than 20 percent.
- Section 1010.5 was revised to mandate that medical gas systems comply with the requirements of the FBCP. This is where the occupancy group is changed to Group I-2.

- Section 1012.1.5 was added. It requires work areas with a change in occupancy to a Group I-2 or I-1 facility to comply with the FBCB. An exception to complying with the FBCB has been added for the following:
    - Group I-2, Condition 2 to Group I2, Condition 1
    - Group I-2 to ambulatory health care
    - Group I-2 to Group I-1
    - Group I-1, Condition 2 to Group I1, Condition 1
- Section 1012.4 has been added, which mandates improved classroom acoustics for all Group E occupancy classrooms with a volume of 20,000 cubic feet or less, where the work area is a Level 3 alteration. The enhanced classroom acoustics must comply with the reverberation time outlined in Section 808 of ICC A117.1.
- In Section 1012.5.1, the specific size limitations on the use of existing windows as emergency escape and rescue openings during a change of occupancy in Exception 7 have been deleted and moved to new Section 1012.5.6.
- In Section 1012.5.6, the minimum opening sizes for existing windows to qualify as emergency escape and rescue openings for a change of occupancy have been relocated from Exception 7 of Section 1012.4.1 (see above). Language has been added that allows the replacement of windows where a change of occupancy would require an emergency escape and rescue opening subject to the following conditions:
    - The replacement window must meet the minimum size requirements in Item 1.
    - The replacement window is allowed to be the manufacturer's biggest standard size window that can fit within the existing frame or rough opening. The replacement window can be of the same operating style as the existing window, or a style that provides for an equal or greater window opening area than the existing window. For instance, it is possible to change from a single hung to a casement window.

Chapter 11: Additions

- Section 1101.4 was added. It requires enhanced classroom acoustics to be provided in all Group E occupancy classrooms with a volume of 20,000 cubic feet or less. Enhanced classroom acoustics are required to comply with the reverberation time in Section 808 of ICC A117.1.
- In Section 1103.3 Exception 1, the reference to the conventional light-frame construction methods of the FBCB has been deleted. Also, in Exception 2, the reference to demand-capacity ratios using the load combinations involving full seismic forces has been deleted.
- In Subsections 1103.3.1 and 1103.3.2, the reference to seismic forces has been deleted.

- Section 1103.4 has been deleted and is shown as Reserved.
- In Section 1103.5, an update has been made to the flood hazard area regulations regarding horizontal additions that are structurally connected to existing buildings. If the addition is not a significant improvement, it is not required to comply with the flood design requirements for new constructions, provided that two conditions are met:
    - The addition does not create or extend a noncompliance issue of the existing building or structure with the flood-resistant construction requirements.
    - The lowest floor of the addition is at or above the lower of the lowest floor of the existing building or structure, or the lowest floor elevation required by Section 1612 of the FBCB or Section R322 of the FBCR, as applicable.

  For horizontal additions that are not structurally interconnected to the building, Item 4 has been revised to include raised or extended foundations in the vertical, as well as new and replacement foundations.

Chapter 12: Historic Buildings

No changes were made to Chapter 12.

Chapter 13: Relocated or Moved Buildings

- Section 1301.1.1 has been added to require relocated or moved bleachers, grandstands, and folding and telescopic seating to comply with ICC 300.
- Sections 1302.4 and 1302.5 have been deleted and are shown as Reserved.

Chapter 14: Performance Compliance Methods

- Section 1401.1 has been revised to clarify that the performance compliance method is alternative to the prescriptive compliance method.
- Section 1401.2 has been revised to show that the performance compliance method applies to Group U occupancies undergoing a change of occupancy or a partial change of occupancy.
- In Section 1401.2.2, new language has been added to clarify that only the part of a building that is converted to a new occupancy and is separated from the rest of the building with fire barriers or horizontal assemblies needs to be evaluated for compliance.
- Section 1401.2.6 was added. It requires plumbing fixtures to be provided in accordance with Section 1010 for a change of occupancy and Section 810 for alterations.
- In Section 1401.3.3, new language has been added for constructing horizontal additions in areas prone to flooding that are structurally connected to an existing building. If the

addition is not a substantial improvement and does not violate the flood-resistant construction requirements, it does not have to comply with the flood design requirements for new construction. This is the case only if the following two conditions are met:
    - The addition does not create or extend any nonconformity of the existing building or structure with the flood-resistant construction requirements.
    - The floor of the addition must be at or above the lowest floor of the existing building or structure, or the lowest floor elevation required by Sections 1612 of the FBCB or Section R322 of the FBCR, whichever is applicable.
- Sections 1401.6.2 and 1401.6.2.2 have been revised to create two separate formulas for single story and multiple story buildings.
- The sizes for compartmentation categories have been moved from the table headings in Table 1401.6.3 to a new section called 1401.6.3.1. A note has been added to Table 1401.6.3, which allows linear interpolation for compartment sizes between categories. These changes have been made to fix a gap in the compartment size ranges. In addition, new compartmentation values have been included for Group I-2 in Table 1401.6.3.
- In Section 1401.6.4, new language has been added. It specifies that a scoring value of 0 is for single tenant buildings and buildings without dwelling units.
- In Section 1401.6.5.1, Category c (corridor walls) has been revised to clarify that corridors are not required by the FBCB. This category applies where Section 1020 of the FCB permits corridors to be constructed without a fire-resistance rating.
- In Section 1401.6.7.1, Category e (HVAC systems) has been revised to provide additional credit for ductless HVAC systems.
- In Section 1401.6.17.1, the category on automatic sprinklers was revised to change the terminology for consistency with the FBCB.
- In Section 1401.6.20.1, the categories on smoke compartmentation have been revised to remove the specific size limitations of each category smoke compartment and refer to Section 407.5 of the FBCB.
- In Section 1401.6.21, the minimum value for compliance has been changed from 9 to 6. This is in determining if compliance in patient ability, concentration, smoke compartment location and ratio to attendant passes or fails.
- In tables 1401.6.21.1, 1401.6.21.2, and 1401.6.21.3, the point values for categories a and c (patient ability values, patient concentration values, and attendant-to-patient ratio values) have been reversed to reflect what is the better situation.
- In Section 1401.9.1, new language has been added to Item 2 (mixed occupancies) to make it clear that even though the altered or changed portions can have multiple

separated occupancies, this won't affect the separated areas outside the work areas that are being addressed by the performance method.

Appendix A: Guidelines for the Seismic Retrofit of Existing Buildings

The entire appendix has been deleted (including Chapters A1, A2, A3, A4, and A5) and is shown as Reserved.

Conclusion

This concludes the course on the Florida Building Code 8th Edition (2023). For more information on the Florida Building Code, please visit www.floridabuilding.org.