

SIGNIFICANT CHANGES TO THE 2007 FLORIDA BUILDING CODE WITH 2009 REVISIONS

January 23, 2009

The following list outlines the significant changes to the 2007 Florida Building Code with 2009 amendments, *Building* as submitted by the membership of the Building Officials Association of Florida, Big Bend and Suwannee River Chapters. The narrative following each code section constitutes the combined interpretation for purposes of interpretation and enforcement of the various building inspection offices in Florida's Big Bend; specifically, Florida State University, City of Tallahassee, City of Quincy, Gadsden County, Hamilton County, Jefferson County, Lafayette County, Leon County, Madison County, Suwannee County and Wakulla County.

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- 1) **Section 202 – Family Day Care Home (Definition):** This is a complete rewrite of the definition in the 2004 code. The definition now centers on the number of families, the receiving of payment, groups of children being cared for and the number of children in certain age groups.
- 2) **Section 302.1 – General:** Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.
- 3) **Section 302.1.1, 302.1.1.1, Table 302.1.1, 302.2, 302.2.1, 302.3, 302.3.1, 302.3.2 and Table 302.3.2** - These code sections have been moved from chapter three and modified as discussed in chapter five.
- 4) **Section 404.4 - Smoke Control:** An exception has been added to this code section that exempts smoke control systems for atriums that connect only two stories.
- 5) **Section 406.1.4 - Separation:** Any door between a private garage and a dwelling unit must now be provided with a self-closing device and a means for self-latching. *Note: Applies only to multi-family buildings.*
- 6) **Section 505.4 – Openness:** Exception #5 has been rewritten and states that a mezzanine provided with at least two means of egress need not be open to the room in which the mezzanine is located, provided the building is fully sprinkled. It is no longer necessary that at least one means of egress provide direct access to an exit.

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- 7) **Section 508.3.1 – Accessory Occupancies (formerly 302.2):** This section has been rewritten. It now provides a definition of the term accessory occupancies. The new language now describes an accessory occupancy as an occupancy that has a maximum of 10% of the area of the story in which they are located. There are three exceptions. Exception #1, Accessory assembly areas having a floor area of less than 750 square feet. Exception #2, Assembly areas that are accessory to Group E occupancies and Exception #3, Accessory religious educational rooms and auditoriums with an occupant load of less than 100.
- 8) **Section 707.14.1 - Elevator Lobby:** The general requirements providing for an elevator lobby where an elevator opens into a fire-rated corridor has been replaced by a new provision mandating lobbies to be installed where the elevator shaft enclosure connects at least four stories.
- 9) **Section 712.5, 713.6 - Penetrations in Smoke Barriers, Fire-Resistant Joint Systems in Smoke Barriers:** This code changes adds quantitative and enforceable requirements for the performance of smoke barriers through the regulation of penetrations and fire-resistant joint systems for air leakage.
- 10) **Section 715.4.3.1 – Door Assemblies in Corridors and Smoke Barriers, Smoke and Draft Control:** This is a new code section that requires fire door assemblies meet the requirements for smoke and draft control door assemblies.
- 11) **Section 903.2.1.2 – Group A-2:** The occupant load threshold at which a Group A-2 occupancy must be provided with an automatic sprinkler system has been reduced from 300 to 100.
- 12) **Section 904.11.1 – Manual System Operation:** This code change revises the height range of the manual device that actuates the fire extinguishing system for commercial cooking systems. The new height range is not more than 48” or less than 42” from the floor.
- 13) **Section 907.2.6.1 – Group I-1:** This is new code language that requires all habitable spaces except kitchens, sleeping units and waiting areas that are open to corridors be provided with automatic smoke detection devices.
- 14) **Section 1002 – Definitions (Aisle):** The definition for the word “Aisle” has been added. “An exit access component that defines and provides a path of egress travel.”

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- 15) **Section 1002 – Definitions (Merchandise Pad):** The definition of the phrase “merchandise pad” has been added. “Area for display of merchandise surrounded by aisles, permanent fixtures or walls.”
- 16) **Section 1008.1.8.7 – Stairway Doors:** New language has been added to the third exception of this section that now requires stairway doors in buildings of not more than four stories that are locked from the opposite side of the egress side to be unlocked remotely from a fire command center or a single location inside the main entrance of the building.
- 17) **Section 1008.1.9 – Panic and Fire Exit Hardware:** This code change requires panic hardware on egress doors in all Group A and E occupancies when a latch or lock is provided and the occupant load exceeds 50 people. This is a change from 100 people in the 2004 code. This change also requires electrical rooms with equipment rated 1,200 amps or more and over six feet in width to have panic hardware.
- 18) **Section 1013.5 – Mechanical Equipment:** New language has been added to this code section that now requires guards protecting equipment within 10 feet of the edge of a roof to extend 30” beyond the end of the equipment.
- 19) **Section 1013.6 – Roof Access:** This is a new code section that requires guards to be placed at the edge of roofs when roof access openings are located within 10 feet of the roof edge. Guards are to have openings such that they will reject a 21” diameter sphere.
- 20) **Table 1015.1 – Spaces with One Means of Egress (formerly Table 1014.1):** This code change clarifies that for A, B, D, E, F, M, U, R-2 & R-3 occupancies, the spaces are required to have 2 exits when the occupant load is 50 or more and 30 or more in Group S occupancies. The maximum occupant load permitted for a Group E day care occupancy with a single means of egress has been reduced from 50 to 10 occupants.
- 21) **Section 1405.12.2 – Window Sills:** This is a new code section. The minimum clear opening height of an operable window that is more than 72” above the finished exterior grade or surface below shall not be less than 24” above the finished floor unless the opening in the window will not allow the passage of a 4” diameter sphere or the opening is protected by a guard complying with ASTM F 2006 or ASTM F 2090.
- 22) **Section 1504.8 – Gravel and Stone:** This is a new code section that prohibits gravel and stone on roofs of buildings in hurricane regions OR buildings that exceed the heights listed in Table 1504.8.
- 23) **Section 1504.9 – Margin of Safety:** This is a new code section that requires all wind uplift tests of roof coverings to include a margin of safety of 2:1.

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- 24) **Section 1609.4.3 – Exposure Categories:** New language has been added to this code section that now requires buildings located in a designated transition zone be designed to wind exposure category “C”, unless a rational analysis is calculated allowing a reduced wind pressure. There are three types of transition zones identified in this code section. (1) Exposure B-type terrain where the building is within 100 feet horizontally in any direction of open areas of Exposure C-type terrain that extends more than 600 feet and has a width greater than 150 feet in the upwind direction. (2) Flat open country, grasslands, ocean and gulf shorelines which extend downwind for a distance of 1500 feet. (3) Within 600 feet of inland bodies of water that present a fetch of 1 mile or more or inland waterways or rivers with a width of 1 mile. *Note: A fetch is defined as the distance along open water or land over which the wind blows.*
- 25) **Section 1714.5.3.4 – Garage Door Labeling:** This is a new code section that requires garage doors to be provided with a permanent label from the manufacturer. The label shall identify the manufacturer, the garage door model/series number, the Florida Product Approval number, the positive and negative design pressure rating, the impact rating if applicable and the applicable test standards.
- 26) **Section 1910.2 – Joints, Exception #2:** This is an exception to the requirement for joints in concrete slabs on ground. In one and two family dwellings where welded wire mesh is utilized in lieu of providing control joints the welded wire mesh shall be supported with approved supports not exceeding 3 feet on center or as per the manufacturer’s installation instructions.
- 27) **Section 2303.1.10 – Structural Log Members:** This is a new code section that now requires a grade mark stamp on non-rectangular shaped logs installed in log homes.
- 28) **Chapter 35 – Reference Standards:** The current standard used to design structures for wind is the ASCE 7-02 standard. It has been revised to ASCE 7-05. All wind analysis performed using the ASCE 7 standard shall be the 2005 edition.

MECHANICAL

- 1) **Section 307.2.3.1 – Water Level Monitoring Devices:** This is a new code section that requires a water-level monitoring device to be installed inside the primary drain pan when down-flow units and other coils do not have a secondary drain and do not have a means to install an auxiliary drain pan. Externally installed devices and devices installed in the drain line shall not be permitted.

MECHANICAL

- 2) **Section 401.4.1 – Intake Openings:** Additional language has been added to this code section that states that the exhaust from a bathroom or kitchen in a residential dwelling shall not be considered a hazardous or noxious contaminant.
- 3) **Section 403.3.4 – Balancing:** This is a new code section that requires ventilation systems to be balanced by an approved method. Such balancing shall verify that the ventilation system is capable of supplying airflow rates required by section 403.
- 4) **Section 507.2.1.1 – Operation:** This is a new code section that requires all Type I hood systems be designed and installed to automatically activate the exhaust fan whenever cooking operations occur. The activation of the exhaust fan shall occur through an interlock with the cooking appliances, by means of heat sensors or by means of other approved methods.
- 5) **Section 507.13.5 – Dishwashing Appliances:** This is a new code section that requires 100 CFM minimum net air flow per linear foot of hood length for Type II hoods on dishwashing appliances.

PLUMBING

- 1) **Section 305.1.2 – Penetrations:** Protective sleeves around piping penetrating concrete slab-on-grade floors shall not be of cellulose containing materials. If soil treatment is used for subterranean termite protection, the sleeve shall have a maximum wall thickness of 0.010 inch, and be sealed within the slab using a non-corrosive clamping device to eliminate the annular space between the pipe and the sleeve. No termiticides shall be applied inside the sleeve.
- 2) **Section 408.3 - Bidet water temperature:** This is a new code section that limits the water temperature supplied to a bidet to 110 degrees Fahrenheit. (*Residential code section P2721.2*)
- 3) **Section 416.5 – Tempered water for public hand washing facilities:** This new code section requires public hand washing facilities to have tempered water heated to a maximum of 110 degrees Fahrenheit when heated water is provided.
- 4) **Section 417.4.2 – Access:** This is a new code section that says that the shower compartment access and egress opening shall have a minimum clear and unobstructed finished width of 22 inches. (*Residential code section P2708.1.1*)

PLUMBING

- 5) **Section 419.2 – Substitutions for water closets:** Language has been added to this code section that identifies the occupancies that are limited in urinal for water closet substitutions. Assembly and Educational occupancies are limited to 67% and all other occupancies are limited to 50% substitutions.
- 6) **Section 421.5 – Access to Pump:** Access shall be provided to circulation pumps in accordance with the fixture or pump manufacturer's installation instructions. Where the location and access opening size are not identified by the manufacturer's instructions, a 12" X 12" field installed opening shall be provided for access to the pump. When the pump is located more than 24" from the access opening, an 18" X 18" access opening shall be provided. In all cases, the access opening shall be large enough to permit removal and replacement of the circulation pump. Note: The 2004 plumbing code required the circulation pump to be located above the weir of the fixture trap. That part of this code section has been deleted.. (Residential code section P2720.1)
- 7) **Section 424.2 – Hand Showers:** New language has been added to this code section that requires hand-held showers to be provided with back flow protection. (Residential code section P2708.4)
- 8) **Section 424.5 – Bathtub and Whirlpool bathtub valves:** This code section has been renumbered, retitled and says that the hot water supplied to bathtubs and whirlpool bathtubs shall be limited to a maximum temperature of 120 degrees fahrenheit by a water temperature limiting device that conforms to ASSE 1070, except where such protection is otherwise provided by a combination tub/shower valve in accordance with section 424.3. (Residential code section P2713.3)
- 9) **Section 608.16.10 – Coffee Machines and Non-Carbonated Beverage Dispensers:** This is a new code section that says that the water supply to coffee and non-carbonated beverage dispensers shall be protected against back-flow by a back-flow preventer or by an air gap.
- 10) **Section 917.3.3 – Stack:** This is a new code section that does not allow stack type air admittance valves to be used as the vent terminal for vent stacks or stack vents that serve drainage stacks exceeding six branch intervals.
- 11) **Section 1002.1 – Fixture Traps:** New language has been added to this code section that says that the horizontal distance from the fixture outlet to the trap weir shall not exceed 30 inches. (Residential code section P3201.6)

GAS

- 1) **Section 502.7 – VENTS, Protection from Physical Damage:** This is a new code section that requires vents to be protected by shield plates when in concealed locations and when it is installed through holes or notches in studs, joists, rafters or similar members less than 1.5 inches from the nearest edge of the member. The shield plates shall be a minimum of 1/16 inch thick steel, shall cover the area of the vent where the member is notched or bored and shall extend a minimum of 4 inches above sole plates, below top plates and to each side of a stud, joist or rafter.
- 2) **Section 505.1.1 – Commercial Cooking Appliances Vented by Exhaust Hoods**
Exception: This is a new exception that has been added to this code section that states that an interlock between the cooking appliance and the exhaust hood system shall not be required where heat sensors or other approved methods automatically activate the exhaust hood system when cooking operations occur.

ENERGY

- 1) **Section 13–101.6 - Building Systems:** Thermal efficiency standards are set for the following building systems where new products are installed or replaced in existing buildings, and for which a permit must be obtained. Such systems shall meet the minimum efficiencies allowed for that system on Form 400B for commercial buildings and 1100B for residential buildings.
 1. Heating, Ventilating or Air Conditioning systems.
 2. Service water or pool heating systems.
 3. Electrical systems and motors.
 4. Lighting systems.**Exceptions:**
 1. Where part of a functional unit is repaired or replaced. For example, replacement of an entire HVAC system is not required because of a new compressor or other part does not meet code when installed with an older system. If the unit being replaced is itself a functional unit, such as a condenser, it does not constitute a repair. Outdoor and indoor units that are not designed to be operated together must meet the U.S. Department of Energy certification requirements contained in Section 13-607.AB.3.1.1. Matched systems are required, this match may be verified by any of the following means.
 - 1) ARI (AHRI) data
 - 2) Accredited laboratory (example ARL labs)
 - 3) Manufacturer's letter
 - 4) Letter from registered P.E. State of Florida
 2. Where existing components are utilized with a replacement system, such as air distribution ducts or electrical wiring for lights, such components or controls need not meet code if meeting code would require that component's replacement.

ENERGY

3. Replacement equipment that would require extensive revisions to other systems, equipment or elements of a building where such replacement is a like-for-like replacement, such as through the wall condensing units and PTAC units, chillers and cooling towers in confined spaces.
 4. HVAC equipment sizing calculations are not required for systems installed in existing buildings not meeting the definition of renovation in Section 13-202.
- 2) **Section 13-400.0.B – Method B, the Building Prescriptive Method:** This is a prescriptive methodology that is allowed for shell buildings, renovations, change of occupancy, limited or special use buildings and building system changeouts. The building envelope complies with the standard if the proposed building meets or exceeds the mandatory requirements and all relevant data on Form 400B or the EnergyGauge Summit Fla/Com 2008 computer printout. Only the prescriptive envelope measures of Method B are permitted for shell buildings.
- 3) **Section 13-400.2A.2 – Shell Buildings:** Shell buildings shall comply with this code by Method B or Method A. If Method B is used and once all energy related design parameters are known, a Method A calculation must be resubmitted.