

Analysis of Changes for the 5th Edition (2014) of the Florida Codes

Changes to the Florida Building Code, Plumbing

This *Analysis of Changes for the 5th Edition (2014) of the Florida Codes* is intended to provide a comprehensive comparison of the provisions in the *2010 Florida Building Code, Plumbing (FBCP)* and the *5th Edition (2014) of the Florida Building Code, Plumbing*. The *2009 International Plumbing Code* was the base code for the 2010 FBCP. The *2012 International Plumbing Code* is the base code for the 5th Edition (2014) of the FBCP. As a result of changing the base code and Florida-specific amendments, certain provisions and criteria of the code have changed. This *Analysis* will serve a useful tool to facilitate the transition to the new code.

This *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 2010 FBCP. The next two columns contain section numbers and a brief overview of the corresponding requirements in the 5th Edition (2014) of the FBCP. The far right column contains a brief analysis or comment on the differences between the provisions.

This *Analysis* is not intended to replace or interpret the provisions contained in either the 2010 FBCP or the 5th Edition (2014) of the FBCP. 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 5th Edition (2014) of the FBCP by means of a numbered section cross reference.

This *Analysis* provides a cross-reference for the majority of the sections that changed in the 5th Edition (2014) of the FBCP. In some cases, sections were grouped together due to substantial differences. This grouping enables the extent of the differences to be more readily identified.

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

Note: Seismic loading and snow loading provisions in the code are no longer reserved (deleted) in the 5th Edition (2014) of the FBCP, even though they do not apply in the State of Florida. While they are technically new sections and provisions to the Florida Codes, they are not shown here in this *Analysis* because they do not apply to construction in the State of Florida.

2010 FBCP		5 th Edition of the FBCP		
Section	Requirement	Section	Requirement	Analysis
Chapter 2 Definitions				
-	-	202	Definitions: Bedroom	New definition of Bedroom specific to on-site sewage treatment systems regulated by Chapter 4E-6 FAC.
202	Definitions: Combination waste and vent system	202	Definitions: Combination waste and vent system	Definition revised to include lavatories and drinking fountains.
202	Definitions: Design flood elevation	202	Definitions: Design flood elevation	Definition revised to include additional criteria for Zones AO.
C101.2	Definitions: Gray water	202	Definitions: Gray water	Definition of gray water moved from Appendix C to Chapter 2 applicable to new Chapter 13 Gray Water Recycling Systems.
202	Definitions: Grease interceptors	202	Definitions: Grease interceptors	Definition revised to distinguish "hydro-mechanical" from "gravity" grease interceptors
202	Definitions: Grease trap	-	-	Definition of grease trap has been deleted.
202	Definitions: Individual sewage disposal system	202	Definitions: Individual sewage disposal system	Definition revised to refer to Sections 381.0065 and 381.00655, Florida Statutes and Chapter 64E-6, Florida Administrative Code.
202	Definitions: Plumbing appliance	202	Definitions: Plumbing appliance	Definition revised to clarify the difference between a plumbing fixture and plumbing appliance.
202	Definitions: Plumbing fixture	202	Definitions: Plumbing fixture	Definition updated reflect new technology
202	Definitions: Reduced pressure principle backflow preventer	202	Definitions: Reduced pressure principle backflow prevention assembly	Preventer changed to prevention assembly.
Chapter 3: General Regulations				
301.3	Connections to drainage system	301.3	Connections to drainage system	New exception permitting bathtubs, showers, lavatories, clothes washers, and laundry trays to discharge to gray water system.
303.1	Identification	303.1	Identification	Requires identification of any markings required by applicable referenced standards.
303.4	Third-party testing and certification	303.4	Third-party certification	Revised to require all plumbing products and materials to be listed by a third-party certification agency as complying with the referenced standards.
Table 303.4	Products and Materials Requiring Third-Party Testing and Third-Party Certification	-	-	Table deleted.

304.4	Openings for pipes	304.4	Openings for pipes	Revised to permit the annular space between the pipe and the side of the opening to be sealed with caulk or a gasketing system compatible with the piping.
305.2	Breakage	-	-	Section deleted.
305.4	Sleeves	315	Penetrations	Revised to clarify on the ends of annular spaces need to be sealed or closed. Removes archaic language. Clarifies what sleeves are to be considered. Requires that pipe penetrations of building envelope wall, floor or ceiling assemblies must also be sealed.
305.5	Pipes through or under foundation walls	305.3	Pipes through foundation walls	Revised to remove the requirement for a sleeve when passing under a foundation wall.
305.6	Freezing	305.4	Freezing	Revised to remove specific design temperature triggering this section
-	-	305.4.1	Sewer depth	New section specifying buried depths for sewers connecting to private sewage disposal systems.
Table 308.5	Hanger Spacing	Table 308.5	Hanger Spacing	Adds hanger spacing requirements for polyethylene of raised temperature (PE-RT) pipe.
308.9	Parallel water distribution systems	308.9	Parallel water distribution systems	Revised to permit insulated hot water piping to be grouped in the same bundle as cold water piping.
309.2	Flood hazard	309.2	Flood hazard	Revised to achieve consistency with ASCE 24.
309.3	Flood hazard areas subject to high velocity wave action	309.3	Coastal high hazard areas	Terminology revised for consistency with the Florida Codes.
-	-	310.2	Location of fixtures and compartments	New section referencing moved Section 310.2, 310.4 and 310.5.
312.2	Drainage and vent water test	312.2	Drainage and vent water test	Water test is revised to require a 10 foot head of water.
312.3	Drainage and vent air test	312.3	Drainage and vent air test	Revised to clarify the plastic piping is not permitted to be tested with air.
312.6	Gravity sewer test	312.6	Gravity sewer test	Revised to require gravity sewer test to be conducted with not less than a 10 foot head of water.
312.10.2	Testing	312.10.2	Testing	Revised to use consistent terminology.
314.2.2	Drain pipe materials and sizes	314.2.2	Drain pipe materials and sizes	Exception deleted.
314.2.3	Auxiliary and secondary drain	314.2.3	Auxiliary and secondary drain	Revised to permit water-level detection

	systems		systems	devices as auxiliary protection.
-	-	316	Alternate engineered design	New section specifying criteria for the design, documentation, inspection, testing, and approval of an alternative engineered design plumbing system.
Chapter 4: Fixtures, Faucets and Fixture Fittings				
401.2	Prohibited fixtures and connections	401.2	Prohibited fixtures and connections	Reference standard revised to reflect ASME A112.19.2M.
Table 403.1	Minimum Number of Required Plumbing Fixtures	Table 403.1	Minimum Number of Required Plumbing Fixtures	Revised to remove all Florida-specific amendments. Residential Care/Assisted Living Facilities deleted and replaced with Congregate Living Facilities. Term "patients" deleted and replaced with "care recipients". New Note h, applicable to business and mercantile occupancies with occupant loads of 15 or fewer, states service sinks are not required.
403.1.3.1	Definitions	403.1.3.1	Definitions	Definition of Historic Building has been updated.
403.2	Separate facilities	403.2	Separate facilities	Exception 2 revised to not require separate facilities for structures or tenant spaces with a total occupant load of 15 or less. Exception 3 revised to only apply to mercantile occupancies where the maximum occupant load is 100 or less.
-	-	403.2.1	Family or assisted-use toilet facilities serving as separate facilities	New section permitting two family/assisted-use toilet facilities to serve as required separate facilities where separate toilet facilities are required for each sex and only required to have one water closet.
403.3	Required public toilet facilities	403.3	Required public toilet facilities	New exception for open or enclosed parking garages
-	-	403.3.2	Toilet room location	New section prohibiting toilet rooms from opening directly into a room used for the preparation of food for service to the public.
-	-	403.3.6	Door locking	New section prohibiting locking from the inside for toilet rooms designed for multiple occupants.
-	-	403.5	Required drinking fountains	New section specifying the locating of required

				drinking fountains.
403.5	Unisex toilet and bathing rooms	-	-	Section deleted.
Figure 405.3.1	Fixture Clearance	-	-	Figure deleted.
405.3.1	Water closets, urinals, lavatories and bidets	405.3.1	Water closets, urinals, lavatories and bidets	New language requiring wall hung water closets to be not less than 30 inches wide and 56 inches deep.
405.4	Floor and wall drainage connections	405.4	Floor and wall drainage connections	New language permitting connections between the drain and floor outlet plumbing fixture to be made with a waste connector and sealing assembly.
406.1	Approval (domestic automatic clothes washers)	-	-	Section deleted.
406.2	Water connection	406.1	Water connection	Deleted reference to ASSE 1007.
406.3	Waste connection	406.2	Waste connection	Section revised to clarify the intent.
407.2	Bathtub waste outlets	407.2	Bathtub waste outlets and overflows	Section revised for clarity.
408.3	Bidet water temperature	408.3	Bidet water temperature	Adds CSA B125.3 as additional compliance option for water temperature limiting devices.
409.1	Approval (dishwashing machines)	409.1	Approval (dishwashing machines)	Deleted the reference to domestic dishwashing machines conforming to ASSE 1006.
410.1	Approval (drinking fountains)	410.1	Approval (drinking fountains)	Section reorganized for clarity.
-	-	410.2	Minimum number	Part of the reorganization of Section 410.1.
-	-	410.3	Substitution	Part of the reorganization of Section 410.1.
413.1	Approval (domestic food waste grinders)	413.1	Approval (domestic food waste grinders)	Reference to commercial food waste grinders complying with ASSE 1009 has been deleted.
416.5	Tempered water for public hand-washing facilities	416.5	Tempered water for public hand-washing facilities	Revised to clarify that employee or private toilet rooms are not required to be supplied with tempered water.
417.5.2	Shower lining	417.5.2	Shower lining	Exception for shower compartments where the finished shower drain is depressed a minimum of 2 inches below the surrounding finished floor has been deleted.
417.5.2.1	PVC sheets	417.5.2.1	PVC sheets	Minimum thickness has been deleted.
417.5.2.2	Chlorinated polyethylene (CPE sheets)	417.5.2.2	Chlorinated polyethylene (CPE sheets)	Minimum thickness has been deleted.
-	-	417.5.2.6	Liquid type, load bearing, bonded waterproof materials	New section requiring liquid type, load bearing, bonded waterproof materials to comply with ANSI A118.10.

-	-	424.9	Water closet personal hygiene devices	New section requiring personal hygiene devices integral to water closets to comply with ASME A112.4.2.
Chapter 5: Water Heaters				
502.6	Water heaters installed in garages	-	-	Section requiring water heaters installed in garages to be in accordance with the manufacturer's installation instructions has been deleted.
504.4.1	Installation (relief valves)	504.4.1	Installation (relief valves)	Revised to clarify that a water heater using a storage tank has to have temperature and pressure protection for both the storage water heater and separate storage tank. Clarifies that both devices may have a valve between the units to aid in servicing or replacement purposes.
504.7	Required pan	504.7	Required pan	Revised to clarify a pan is required for storage tank water heaters and hot water storage tanks, not tankless-type water heaters. Specific locations where a pan is required have been deleted and refers to locations where leakage from the tank will cause damage. Language requiring electric water heaters to be installed in a metal or high impact plastic pan has been deleted.
Chapter 6: Water Supply and Distribution				
603.1	Size of water service pipe	603.1	Size of water service pipe	Sizing of water service pipe in accordance with Table 603.1 has been deleted.
Table 603.1	Minimum Water Service Size	⋮	⋮	Table deleted.
604.1	General	604.1	General	Reference to Table 603.1 has been deleted.
Table 604.5	Minimum Sizes of Fixture Water Supply Pipes	Table 604.5	Minimum Sizes of Fixture Water Supply Pipes	For urinals and water closets, "flush valve" has been changed to "flushometer valve".
604.8	Water pressure reducing valve or regulator	604.8	Water pressure reducing valve or regulator	CSA B356 has been added as an approved standard for water pressure reducing valves.
⋮	⋮	605.2.1	Lead content of drinking water pipe and fittings	New section requiring pipe, fittings, joints, valves, faucets, and fixture fittings to comply with NSF 372 and have an average lead content of 0.25 percent or less.
Table 605.3	Water Service Pipe	Table 605.3	Water Service Pipe	New reference standards added. Reference standards have been added for polyethylene of

				raised temperature (PE-RT) pipe.
Table 605.4	Water Distribution Pipe	Table 605.4	Water Distribution Pipe	Reference standards have been added for polyethylene of raised temperature (PE-RT) pipe.
Table 605.5	Pipe Fittings	Table 605.5	Pipe Fittings	Reference standards have been added for polyethylene of raised temperature (PE-RT) pipe.
-	-	605.25	Polyethylene of raised temperature plastic	New section providing criteria for joints between polyethylene of raised temperature plastic tubing and fittings.
-	-	605.25.1	Flared joints	New section for flared joints for polyethylene of raised temperature plastic tubing and fittings
-	-	605.25.2	Mechanical joints	New section for mechanical joints for polyethylene of raised temperature plastic tubing and fittings
606.1	Location of full-open valves	606.1	Location of full-open valves	New criteria requiring full-open valves on the discharge side of every water meter.
606.2	Location of shutoff valves	606.2	Location of shutoff valves	Exception stating that shutoff valves are not required on tubs and showers in residential occupancies has been deleted.
-	-	606.7	Labeling of water distribution pipes in bundles	New section requires labeling of water distribution pipe where it is bundled at installation.
607.1	Where required (hot water supply system)	607.1	Where required (hot water supply system)	Section has been reorganized.
607.1.1	Hand washing lavatories	-	-	Section deleted.
-	-	607.1.1	Temperature limiting means	New section stating that a thermostat control for a water heater is not permitted to serve as the temperature limiting means.
-	-	607.1.2	Tempered water temperature control	New section requiring tempered water to be supplied through a water temperature limiting device and limit tempered water to a maximum of 110°F.
607.2	Hot water supply temperature maintenance	607.2	Hot or tempered water supply to fixtures	Revised to limit the developed length of hot or tempered water piping to 50 ft.
607.2.1	Minimum pipe insulation	-	-	Section revised and relocated to Section 607.5.
Table 607.2.1	Minimum Pipe Insulation	-	-	Table deleted.

-	-	607.5	Pipe insulation	Revised to require hot water piping to be insulated with 1 inch of insulation. The first 8 feet from a hot water source is permitted to be insulated with 0.5 inches of insulation.
Table 608.1	Application of backflow preventers	Table 608.1	Application of backflow preventers	Revised to change “reduced pressure principle fire protection backflow preventer” to “reduced pressure principle fire protection backflow prevention assembly”.
608.3	Devices, appurtenances, appliances and apparatus	608.3	Devices, appurtenances, appliances and apparatus	Revised to delete commercial drinker water dispensers as a device that requires protection from contamination.
608.3.1	Special equipment, water supply protection	608.3.1	Special equipment, water supply protection	Revised to achieve consistent terminology throughout the code.
608.6	Cross-connection control	608.6	Cross-connection control	Revised to be more specific since protective devices are not defined by the code.
608.8	Identification of nonpotable water	608.8	Identification of nonpotable water	Revised to require all nonpotable water systems to be identified not just the systems in buildings.
608.13.2	Reduced pressure principle backflow preventers	608.13.2	Reduced pressure principle backflow prevention assemblies	Terminology changed from “backflow preventers” to “backflow prevention assemblies”.
608.13.5	Pressure-type vacuum breakers	608.13.5	Pressure vacuum breaker assemblies	Terminology revised for consistency with ASSE standards.
608.13.8	Spill proof vacuum breakers	608.13.8	Spill resistant pressure vacuum breakers	Terminology revised for consistency with ASSE standards. Reference standard CSA B64.1.3 added for spill resistant pressure vacuum breakers.
608.14	Location of backflow preventers	608.14	Location of backflow preventers	Revised to clarify the applicability.
608.15.2	Protection by a reduced pressure principle backflow preventer assembly	608.15.2	Protection by reduced pressure principle backflow prevention assembly	Terminology revised for consistency throughout the code.
608.15.4.1	Deck-mounted and integral vacuum breakers	608.15.4.1	Deck-mounted and integral vacuum breakers	Terminology revised for consistency throughout the code.
608.16.4	Connections to automatic fire sprinkler systems and standpipe systems	608.16.4	Connections to automatic fire sprinkler systems and standpipe systems	Terminology revised for consistency throughout the code.
608.16.4.1	Additives of nonpotable source	608.16.4.1	Additives of nonpotable source	Terminology revised for consistency throughout the code.
608.16.5	Connections to lawn irrigation systems	608.16.5	Connections to lawn irrigation systems	Terminology revised for consistency throughout the code.

608.16.6	Connections subject to backpressure	608.16.6	Connections subject to backpressure	Terminology revised for consistency throughout the code. Section revised to apply to "high-hazard" back-pressure.
-	-	608.17	Protection of individual water supplies	New section for protecting individual water supplies from contamination.
610.1	General (disinfection of potable water system)	610.1	General (disinfection of potable water system)	"Administrative Authority" has been changed to "Authority Having Jurisdiction".
613.1	Temperature-actuated mixing valves	613.1	Temperature-actuated mixing valves	Revised to require temperature-actuated mixing valves to be installed at the hot water source.
614	Well pumps and tanks used for private potable water systems	-	-	Section deleted.
Chapter 7: Sanitary Drainage				
704.3	Connections to offsets and bases of stacks	704.3	Connections to offsets and bases of stacks	Revised to remove exception for Section 711.2 as Section 711.2 has been deleted.
706.2	Obstructions	706.2	Obstructions	Adds new language indicating this section is not applicable to tubular waste fitting used to convey vertical flow upstream of the trap seal liquid level of a fixture trap.
708.3.2	Building sewers	708.3.2	Building sewers	Revised to require manholes for building sewers 8 inches and larger.
Table 709.1	Drainage Fixture Units for Fixtures and Groups	Table 709.1	Drainage Fixture Units for Fixtures and Groups	Revises Footnote f to apply to any bathroom group by deleting "dwelling unit".
711.2	Horizontal branch connections to horizontal stack offsets	-	-	Section deleted.
711.3.1	Omission of vents for horizontal stack offsets	711.2.1	Omission of vents for horizontal stack offsets	Language stating that omission of offset vents does not constitute approval of horizontal branch connections within the offset has been deleted.
712.3.3	Discharge piping	712.3.3	Discharge pipe and fittings	Revised to refer to Sections 712.3.3.1 and 712.3.3.2 for discharge pipe and fitting serving sump pumps and ejectors.
-	-	712.3.3.1	Materials	Requires pipe and fitting materials to be constructed of brass, copper, CPVC, ductile iron, PE, or PVC.
-	-	712.3.3.2	Ratings	Requires pipe and fittings to be rated for the maximum system operating pressure and temperature.
712.3.5	Ejector connection to the	712.3.5	Pump connection to the drainage	Revised to permit soil waste stacks, waste

	drainage system		system	stacks, and horizontal branch drains as acceptable points of termination for ejector discharge lines.
714.4	Alternative engineered design	-	-	Section deleted. Alternative engineered design is now covered in Section 316.
715.1	Sewage backflow	715.1	Sewage backflow	Revised to provide a consistent elevation measurement for all fixtures on a floor that has an elevation less than the manhole cover of the next upstream manhole. Reference is made to the "floor with a finished floor elevation" instead of "flood level rim".
Chapter 8: Indirect/Special Waste				
802.1.8	Food utensils, dishes, pots and pans sinks	802.1.8	Food utensils, dishes, pots and pans sinks	Revised to delete language allowing sinks used for washing, rinsing, or sanitizing of utensils, dishes, pots, pans, or service ware to be directly connected to the drainage system.
802.2	Installation	802.2	Installation	Increases the length of indirect waste piping permitted without a trap to 30 inches in developed length measure horizontally or 54 inches in total developed length. New exception permits a waste receptor to not be trapped where it only receives clear waste and does not directly connect to a sanitary drainage system.
802.3	Waste receptors	802.3	Waste receptors	Adds plenums, crawl spaces, attics, interstitial spaces above ceiling and below floors as areas where waste receptors are not permitted to be installed.
Chapter 9: Vents				
901.3	Chemical waste vent systems	901.3	Chemical waste vent systems	Revised to allow air admittance valves that are chemically resistant to serve as vents for a chemical waste system.
904.1	Roof extension	903.1	Roof extension	Minimum roof extension of 6 inches has been deleted with the intent of the minimum extension to be determined by the authority having jurisdiction.
904.4	Prohibited use	903.4	Prohibited use	Section revised to clarify that vent terminals should not be used to support any piece of equipment.
904.5	Location of vent terminal	903.5	Location of vent terminal	Section revised to require vent terminals to be

				at least 3 feet above any opening if it is within 10 feet of an opening.
912	Combination drain and vent system	915	Combination waste and vent system	Entire section revised to change "drain" to "waste".
912.2.2	Connection	915.2.2	Connection	New language permitting the horizontal length of a combination drain and vent systems to be unlimited.
916.4.1	Branch vents exceeding 40 feet in developed length	-	-	Section deleted as it is covered in Section 906.
-	-	917	Single stack vent systems	New section providing requirements for single stack vent systems.
917.3	Where permitted	918.3	Where permitted	Revised for clarity
917.3.1	Location of branch	918.3.1	Horizontal branches	Revised for clarity.
917.3.2	Relief vent			
917.8	Prohibited installations	918.8	Prohibited installations	Revised to allow air admittance valves that are chemically resistant to serve as vents for a chemical waste system.
Chapter 10: Traps, Interceptors and Separators				
1002.1	Fixture traps	1002.1	Fixture traps	New exception for floor drains in multi-level parking structures required to discharge to a combined building sewer system. Floor drains are not required to be individually trapped provided they are connected to a main trap.
1003.1	Where required	1003.1	Where required	Revised to not require interceptors and separators where harmful or hazardous to the building drainage system. Clarifies that waste is permitted to flow within the building drainage system.
1003.3.1	Grease interceptors and automatic grease removal devices required	1003.3.1	Grease interceptors and automatic grease removal devices required	Revised to recognize combinations of grease interceptors for renovation projects in existing buildings where there is insufficient space or cost prohibitive to install a large enough in-ground interceptor.
1003.3.4	Grease interceptors and automatic grease removal devices	1003.3.4	Hydromechanical grease interceptors and automatic grease removal devices	Section revised to only apply to hydromechanical grease interceptors.
1003.3.4.1	Grease interceptor capacity	1003.3.4.1	Grease interceptor capacity	Revised to remove the term "grease trap".
1003.3.4.1	Rate of flow controls	1003.3.4.1	Rate of flow controls	Revised to remove the term "grease trap".
1003.4.2	Oil separator design	1003.4.2	Oil separator design	Revise to require oil separators to be listed

				and labeled.
1003.5	Grease interceptors for onsite sewage treatment and disposal systems	1003.5	Grease interceptors for onsite sewage treatment and disposal systems	Revised to delete the requirement that grease interceptors be gas tight. Requires grease interceptors to be sized, constructed, and approved in accordance with Rule 64E-6, Florida Administrative Code.
1003.5.1	Grease interceptor capacity	-	-	Section deleted.
1003.5.2	Construction of interceptor	-	-	Section deleted.
1003.5.3	Inlet and outlet piping	-	-	Section deleted.
Table 1003.5.3	Sizing Formulas for Grease Interceptors	-	-	Table deleted.
Chapter 11: Storm Drainage				
1102.6	Roof drains	1102.6	Roof drains	Reference standard changed to ASME A112.6.4.
1105.1	Strainers	1105.1	General	Provisions specific to strainers have been deleted and the new section references the manufacturer's installation instructions.
1105.2	Flat decks	-	-	Section pertaining to strainers on flat roofs has been deleted.
1106.5	Parapet wall scupper location	1106.5	Parapet wall scupper location	Section 1503.4 has been added as the specific reference to the FBCB.
-	-	1107	Siphonic Roof Drainage Systems	New section requiring siphonic roof drainage systems to comply with ASPE 45.
1107.1	Secondary drainage required	1108.1	Secondary (emergency overflow) drains or scuppers	Revised to clarify that secondary (emergency overflow) drains are only required where roof drains are required.
Chapter 13: Gray Water Recycling Systems				
Appendix C	Gray water recycling systems	Chapter 13	Gray water recycling systems	New provisions for gray water recycling systems added to the boy of the code replacing Appendix C in the 2010 FBCP