

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

Changes to the Florida Building Code, Fuel Gas

This *Analysis of Changes for the 8th Edition (2023) of the Florida Building Code* is intended to provide a comprehensive comparison of the provisions in the *7th Edition (2020) Florida Building Code, Fuel Gas* (FBCFG) and the *8th Edition (2023) Florida Building Code, Fuel Gas*. The *7th Edition (2020) FBCFG* is the base code for the *8th Edition (2023) FBCFG*. The model code used to update the *8th Edition (2023) FBCFG* is the *2021 International Fuel Gas Code* (IFGC). However, not all changes in the 2021 IFGC are included in the *8th Edition (2023) FBCFG*. As a result of changes from the 2021 IFGC and Florida-specific amendments, certain provisions and criteria of the code have changed. This *Analysis* will serve as 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 *7th Edition (2020) FBCFG*. The next two columns contain section numbers and a brief overview of the corresponding requirements in the *8th Edition (2023) FBCFG*. 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 *7th Edition (2020)* or the *8th Edition (2023) FBCFG*. 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) FBCFG* by means of a numbered section cross reference.

This *Analysis* provides a cross-reference for most of the sections that changed in the *8th Edition (2023) FBCFG*. 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**.

7 th Edition (2020) FBCFG		8 th Edition (2023) FBCFG		Analysis
Section	Requirement	Section	Requirement	
Chapter 1: Scope and Administration				
101.2	Scope and applicability	101.2	Scope and applicability	The exception has been revised to clarify that detached one- and two-family dwellings and townhomes not more than three stories above grade plane in height with separate means of egress and their accessory structures not more than three stories above grade plane in height are permitted to comply with this code or the FBCR.
Chapter 2: Definitions				
-	-	202	Definitions: Copper Alloy	New definition of copper alloy added and defined as a homogeneous mixture of not less than two metals where not less than 50 percent of the finished metal is copper.
202	Definitions: Point of delivery	202	Definitions: Point of delivery	Definition revised to include system shutoff valves provided after the outlet of the service meter assembly.
-	-	202	Definitions: Press-Connect Joint	New definition of press-connect joint added that aligns with the definition currently used in the FBCM and FBCP.
202	Definitions: Regulator, Monitoring	202	Definitions: Regulator, Monitoring	Definition revised to remove technical requirements as they are already covered in Section 416 of the FBCFG.
-	-	202	Definitions: Service Meter Assembly	New definition of service meter assembly added defined as the meter, valve, regulator, piping, fittings and equipment installed by the service gas supplier before the point of delivery.
-	-	202	Definitions: System Shutoff	New definition of system shutoff added defined as a valve installed after the point of delivery to shut off the entire piping system.
202	Definitions: Service Shutoff, Valve	202	Definitions: Service Shutoff, Valve	Definition revised to clarify that service shutoff valves are installed by the serving gas supplier between the source of supply and point of delivery.

Chapter 3: General Regulations				
301.12	Seismic resistance	-	-	Section deleted and shown as Reserved.
303.3.1	Fireplaces and decorative appliances in Group I-2, Condition 2 occupancies	303.3.1	Fireplaces and decorative appliances in Group I-2 occupancies	Section revised to include Group I-2, Condition 1 within the scope of this section. Gas fireplace appliances and decorative gas appliances are prohibited in Group I-2, Condition 1 patient sleeping rooms.
304.8	Engineered solutions (combustion air)	304.8	Engineered solutions (combustion air)	Section revised to require engineered solutions be determined using approved engineering methods.
306.6	Guards (access and service space)	306.6	Guards (access and service space)	Section revised to require guards to extend 30 inches beyond each end of the roof hatch parallel to the roof edge.
307.2	Fuel-burning appliances (condensate disposal)	307.2	Fuel-burning appliances (condensate disposal)	New language has been added requiring the termination of concealed condensate piping to be marked to indicate whether the piping is connected to the primary drain or to the secondary drain.
307.3	Drain pipe materials and sizes (condensate disposal)	307.3	Drain pipe materials and sizes (condensate disposal)	Copper alloy, PE-RT, and PVDF materials have been added as acceptable components of the condensate disposal system. The minimum diameter of condensate waste and drain lines has been clarified that it is a minimum ¼ inch internal diameter.
310.1.1	CSST	-	-	Sections deleted and shown as Reserved.
310.1.1.1	Point of connection			
310.1.1.2	Size and material of jumper			
310.1.1.3	Bonding jumper length			
310.1.1.4	Bonding connections			
310.1.1.5	Connection devices			
Chapter 4: Ventilation				
401.5	Identification (exposed piping)	401.5	Identification (exposed piping)	Section revised to require CSST to be identified as required by ANSI LC 1/CSA 6.26.
402.3	Sizing (pipe)	402.3	Sizing (pipe)	Section revised to editorially clarify that gas piping is permitted to be sized in accordance with “approved engineering methods.”

402.7	Maximum operating pressure	402.7	Maximum operating pressure	New condition added for exceeding 5 psi pressure inside buildings. Piping has to be joined by fittings listed to ANSI LC4/CSA 6.32 and installed in accordance with the manufacturer's instructions.
403.9.3	Thread joint compounds	403.9.3	Thread joint sealing	Section revised to require threaded joints to be made using a thread joint sealing material. Requires thread joint sealing materials to be compatible with the piping fitting materials on which the sealing materials are used.
403.11	Plastic pipe, joints, and fittings	403.11	Plastic pipe, joints, and fittings	Heat fusion joints (Item 2) have been revised to require polyethylene heat fusion fittings to be marked "ASTM D2513" and polyamide heat fusion fittings to be marked "ASTM F2945."
404.5	Fittings in concealed locations	404.5	Fittings in concealed locations	Threaded plugs and caps have been added as acceptable fittings to be installed in concealed locations.
404.11.5	Prohibited use (uncoated joints)	-	-	Section deleted as unnecessary because Section 404.11.2, Item 2 requires pipe to have a factory-applied, electrically insulating coating.
404.18	Pipe cleaning	404.18	Pipe debris removal	Section revised to require that the interior piping to be clear of debris.
411.1	Connecting appliances	411.1	Connecting appliances	Section revised to require quick-disconnect devices to be listed and labeled and comply with ANSI Z21.41/CSA 6.9. Convenience outlets are required to be listed and labeled and comply with ANSI Z21.90/CSA 6.24.
413	Compressed Natural Gas Motor Vehicle Fuel-Dispensing Facilities	413	Compressed Natural Gas Motor Vehicle Fuel-Dispensing Facilities	Section revised to distinguish between residential fueling appliances (RFA) and nonresidential fueling appliances (VFA). RFA's are required to comply with CSA/ANSI NGV 5.1. Specific requirements applicable to RFA's have been deleted as they are covered in CSA/ANSI NGV 5.1. VFA's are required to comply with CSA/ANSI NGV 5.2 and are limited to a

				capacity of 10 standard cubic feet per minute of natural gas.
Chapter 5: Chimneys and Vents				
503.2.3	Direct-vent appliances (venting)	503.2.3	Direct-vent appliances (venting)	Section revised to require through-the-wall vent terminations for listed direct-vent appliances to be in accordance with Section 503.8. Listed direct-vent appliances are required to be installed in accordance with the manufacturer's instructions.
503.2.4	Appliances with integral vents	503.2.4	Appliances with integral vents	Section revised to require that appliances incorporating integral venting means be installed in accordance with Section 503.8. The requirement that they be installed in accordance with the manufacturer's instructions has been deleted.
503.2.5	Incinerators	503.2.5	Incinerators	The reference to "commercial-industrial-type incinerators has been deleted. All incinerators are required to comply with NFPA 82.
503.3.3	Mechanical draft systems	503.3.3	Mechanical draft systems	Item 6 applying to the location of exit terminals of mechanical draft systems has been deleted.
503.5.1	Factory-built chimneys	503.5.1	Factory-built chimneys	The requirement that factory-built chimneys be installed in accordance with the manufacturer's instructions has been deleted.
503.5.5	Size of chimneys	503.5.5	Size of chimneys	Methods 2 and 3 for determining the effective area of a chimney venting system have been revised for clarity. Terminology in Methods 4 and 5 for effective area of a chimney venting system has been changed from "approved engineering practices" to "approved engineering methods."
503.5.6.1	Chimney lining	503.5.6.1	Chimney lining	The exception permitting existing chimneys to be continued to be used provided specific conditions are met, has been deleted.
503.5.11	Insulation shield	503.5.11	Insulation shield	Language requiring Insulation shields provided as part of a listed chimney system

				to be installed in accordance with the manufacturer's installation instructions has been deleted.
503.6.10.1	Category I appliances (size of vents)	503.6.10.1	Category I appliances (size of vents)	Terminology in Method 4 for sizing vents has been changed from "approved engineering practices" to "approved engineering methods."
503.6.10.4	Mechanical draft	503.6.10.4	Mechanical draft	Section clarified to change the term "approved engineering method" to "engineering methods."
503.6.11	Gas vents serving appliances on more than one floor	503.6.11	Gas vents serving appliances on more than one floor	Section editorially revised for clarity.
503.7.9	Size of single-wall metal pipe	503.7.9	Size of single-wall metal pipe	Terminology in Method 3 for sizing vents has been changed from "approved engineering practices" to "approved engineering methods."
503.8	Venting system termination location	503.8	Venting system terminal clearances	The requirements for the location of through-the-wall vent terminals have been completely rewritten. Specific requirements are now contained in new Table G2427.8 that is correlated with new Figure G2427.8 that pictorially shows the clearance requirements specified in the Table G2427.8. New clearance locations addressed include: above finished grade, unventilated soffit, inside corner of buildings, and others. The specific clearances required from exterior air openings has been clarified.
		Figure 503.8	Through-The-Wall Vent Terminal Clearances	
		Table 503.8	Through-The-Wall Vent Terminal Clearances	
503.9	Condensation drainage	503.9	Condensation drainage	Section revised to simply require the collection and disposal of condensate from venting systems and for condensate drains to be installed in accordance with the appliance and vent manufacturer's instruction. The requirement pertaining to local experience for condensate removal has been deleted.
503.10.2.5	Medium-heat appliances	503.10.2.5	Medium-heat appliances	Item 4 has been editorially revised for clarity.

503.10.3.1	Single draft hood fan-assisted	503.10.3.1	Single draft hood fan-assisted	"Approved engineering methods" has been changed to "engineering methods."
503.10.3.3	Multiple appliances	503.10.3.3	Multiple appliances	"Approved engineering methods" has been changed to "engineering methods."
503.10.3.4	Common connector/manifold	503.10.3.4	Common connector/manifold	"Approved engineering methods" has been changed to "engineering methods."
-	-	503.10.7	Connector junctions	New section requiring the use of a tee or wye where vent connectors are joined together.
503.12.2.2	Special design draft hood	-	-	Section deleted and shown as Reserved.
503.13	Manually operated dampers	503.13	Manually operated dampers	Section revised to clarify that balancing baffles are not to be classified as manually operated dampers.
-	-	503.13.1	Balancing baffles	New section requiring balancing baffles to be listed in accordance with UL 378 and be mechanically locked in the desired position before placing the appliance in operation.
503.15	Obstructions	503.15	Obstructions	In Items 2 and 5, "approved engineering methods" has been changed to "engineering methods."
504.3.18	Multiple input rate appliances	504.3.18	Multiple input rate appliances	Section editorially revised for clarity.
Chapter 6: Specific Appliances				
602.1	General (decorative appliances for installation in fireplaces)	602.1	General (decorative appliances for installation in fireplaces)	Section revised to require appliances to be listed in accordance with the specified standard.
602.2	Flame safeguard device	602.2	Flame safeguard device	Section revised to require appliances to be listed in accordance with the specified standard.
603.1	General (log lighters)	603.1	General (log lighters)	Section revised to require appliances to be listed in accordance with the specified standard.
604.1	General (vented gas fireplaces)	604.1	General (vented gas fireplaces)	Section revised to require appliances to be listed in accordance with the specified standard.
605.1	General (vented gas fireplace heaters)	605.1	General (vented gas fireplace heaters)	Section revised to require appliances to be listed in accordance with the specified standard.

608.1	General (vented wall furnaces)	608.1	General (vented wall furnaces)	Section revised to require appliances to be listed in accordance with the specified standard.
609.1	General (floor furnaces)	609.1	General (floor furnaces)	Section revised to require appliances to be listed in accordance with the specified standard.
610.1	General (duct furnaces)	610.1	General (duct furnaces)	Section revised to require appliances to be listed in accordance with the specified standard.
611.2	Installation (nonrecirculating direct-fired industrial air heaters)	611.2	Installation (nonrecirculating direct-fired industrial air heaters)	Section revised to delete the specific installation limitations as Section 611.1 already requires installation in accordance with the manufacturer's instructions.
612.2	Location (recirculating direct-fired industrial air heaters)	612.2	Location (recirculating direct-fired industrial air heaters)	Section revised to delete the specific installation limitations as Section 612.1 already requires installation in accordance with the manufacturer's instructions.
613.1	General (clothes dryers)	613.1	General (clothes dryers)	Section revised to require appliances to be listed in accordance with the specified standard.
-	-	614.4.1	Termination location (clothes dryer exhaust)	A new section has been added requiring clothes dryer exhaust duct terminations to be in accordance with the dryer manufacturer's installation instructions. Where the manufacturer's instructions do not specify a termination location, the exhaust duct is required to terminate not less than 3 feet (914 mm) in any direction from openings into buildings, including openings in ventilated soffits
-	-	614.6	Booster fans prohibited	New section added prohibiting the use of domestic booster fans in dryer exhaust systems.
614.7	Makeup air (clothes dryer exhaust)	614.7	Makeup air	Section reorganized by relocating the criteria for clothes dryers installed in closets to a new section.
		614.7.1	Closet installation	
617.1	General (pool and spa heaters)	617.1	General (pool and spa heaters)	Section revised to require appliances to be listed in accordance with the specified standard.

618.1	General (forced-air warm-air furnaces)	618.1	General (forced-air warm-air furnaces)	Section revised to require appliances to be listed in accordance with the specified standard.
618.6	Furnace plenums and air ducts	618.6	Furnace plenums and air ducts	New language added prohibiting taking return air from the mechanical room containing the furnace.
620.1	General (unit heaters)	620.1	General (unit heaters)	Section revised to require appliances to be listed in accordance with the specified standard.
621.1	General (unvented room heaters)	621.1	General (unvented room heaters)	Section revised to require appliances to be listed in accordance with the specified standard.
622.1	General (vented room heaters)	622.1	General (vented room heaters)	Section revised to require appliances to be listed in accordance with the specified standard.
623.1	Cooking appliances	623.1	Cooking appliances	Section revised to require appliances to be listed in accordance with the specified standard.
623.2	Prohibited location	623.2	Prohibited location	Exception 2, which permitted installations designed by a licensed Professional Engineer in compliance with the manufacturer's installation instructions, has been deleted.
624.1	General (water heaters)	624.1	General (water heaters)	Section revised to require appliances to be listed in accordance with the specified standard.
625.1	General (refrigerators)	625.1	General (refrigerators)	Section revised to require appliances to be listed in accordance with the specified standard.
626.1	General (gas-fired toilets)	626.1	General (gas-fired toilets)	Section revised to require appliances to be listed in accordance with the specified standard.
627.1	General (gas-fire air-conditioning appliances)	627.1	General (gas-fire air-conditioning appliances)	Section revised to require appliances to be listed in accordance with the specified standard.
628.1	General (illuminating appliances)	628.1	General (illuminating appliances)	Section revised to require appliances to be listed in accordance with the specified standard.

630.1	General (infrared radiant heaters)	630.1	General (infrared radiant heaters)	Section revised to require appliances to be listed in accordance with the specified standard.
633.1	General (stationary fuel-cell power systems)	633.1	General (stationary fuel-cell power systems)	Section revised to require appliances to be listed in accordance with the specified standard.
634	Chimney Damper Opening Area	-	-	Section deleted.
636.1	General (outdoor decorative appliances)	635.1	General (outdoor decorative appliances)	Section revised to require appliances to be listed in accordance with the specified standard.
Chapter 7: Gaseous Hydrogen Systems				
<i>No changes.</i>				
Appendix D: Recommended Procedure for Safety Inspection of an Existing Appliance Installation				
D.6, Item (3)d	Earthquake prone locations	-	-	Section deleted and shown as Reserved.
Appendix E: Board of Appeals				
A new appendix has been added addressing the establishment of a Board of Appeals within the jurisdiction for the purpose of hearing applications for modification of the code pursuant to appeals. Specific criteria related to the rules and procedure and makeup of the board are addressed.				