Georgia State Amendments to the International Plumbing Code

(2018 Edition)

Georgia Department of Community Affairs
Community Development Division
60 Executive Park South, N.E.
Atlanta, Georgia 30329-2231
(404) 679-3118
www.dca.ga.gov

Revised January 1, 2020

GEORGIA STATE MINIMUM STANDARD PLUMBING CODE
(INTERNATIONAL PLUMBING CODE WITH GEORGIA STATE AMENDMENTS)

The INTERNATIONAL PLUMBING CODE, 2018 Edition, published by the International Code Council, when used in conjunction with these and any other Georgia State Amendments to the INTERNATIONAL PLUMBING CODE, 2018 EDITION, shall constitute the official *Georgia State Minimum Standard Plumbing Code.*

GEORGIA STATE AMENDMENTS

CODE REFERENCE:

(a) Replace all references to the ICC *Electrical Code* with references to the *Georgia State Minimum Standard Electrical Code* (*National Electrical Code with Georgia State Amendments*).
(b) Replace all references to the *International Energy Conservation Code (IECC)* with references to the *Georgia State Minimum Standard Energy Code (IECC with Georgia State Supplements and Amendments)*. The *Georgia State Minimum Standard Energy Code* shall be used for efficiency and coefficient of performance ratings of equipment.

APPENDICES:

Appendices are not enforceable unless they are specifically referenced in the body of the code or adopted by the Department of Community Affairs or the authority having jurisdiction.

GEORGIA STATE MINIMUM
REQUIREMENTS FOR BOILERS/WATER HEATERS AND PRESSURE VESSELS

The State's minimum requirements for boilers/water heaters and pressure vessels over 200,000 BTU/h (58.61 kW), 210 degrees Fahrenheit or 120 gallons capacity shall be established by O.C.G.A. Title 25, Chapter 15 and the Rules and Regulations of the Office of Insurance and Safety Fire Commissioner.

Revise the International Plumbing Code, 2018 Edition, to read as follows:

CHAPTER 1
SCOPE AND ADMINISTRATION

*Delete Chapter 1 ‘Scope and Administration’ entirely without substitution. Chapter 1 to remain in the Code as a reference guide for local governments to use in development of their own *Administrative Procedures*.
(Effective January 1, 2020)

CHAPTER 2
DEFINITIONS

SECTION 202
GENERAL DEFINITIONS

*Add new definition of 'High Efficiency Plumbing Fixtures and Fittings' to read as follows:

HIGH EFFICIENCY PLUMBING FIXTURES AND FITTINGS.

Dual flush water closet. A dual flush water closet or toilet that the average flush volume of two reduced flushes and one full flush does not exceed 1.28 gallons and is listed to the WaterSense Tank-Type High Efficiency Toilet Specification.

Kitchen faucet or kitchen faucet replacement aerator. A kitchen faucet or kitchen faucet replacement aerator that allows a flow of no more than 2.0 gallons of water per minute.

Lavatory faucet or lavatory faucet replacement aerator. A lavatory faucet or lavatory faucet replacement aerator that allows a flow of no more than 1.5 gallons per minute at a pressure of 60 pounds per square inch and is listed to the WaterSense High Efficiency Lavatory Faucet Specification.

Nonwater urinal. A urinal that is designed to receive and convey only liquid waste through a trap seal into the gravity drainage system without the use of water for such function.

Single flush water closet. A single flush water closet or toilet, including gravity, pressure assisted and electro-hydraulic tank types, that the average flush volume does not exceed 1.28 gallons and is listed to the WaterSense Tank-Type High Efficiency Toilet Specification.

Shower head. A shower head that allows a flow of no more than the average of 2.5 gallons of water per minute at 60 pounds per square inch of pressure.

Urinal. A urinal and associated flush valve that uses no more than 0.5 gallons of water per flush and is listed to the WaterSense Specification for Flushing Urinals.
(Effective January 1, 2020**)**

*Add new definition of 'Lavatory Faucet' to read as follows:

LAVATORY FAUCET. A faucet that discharges into a lavatory basin in a domestic or commercial installation.
(Effective January 1, 2020)

*Revise the definition of 'Plumbing Fixture' to read as follows:

PLUMBING FIXTURE. A receptacle or device that receives water, waste or both and discharges water, waste, or both into a drainage system, and that is either permanently or temporarily connected to the water distribution system of the premises and demands a supply of water therefrom; discharges wastewater, liquid-borne waste materials or sewage either directly or indirectly to the drainage system of the premises; or requires both a water supply connection and a discharge to the drainage system of the premises. The term includes a kitchen sink, utility sink, lavatory, bidet, bathtub, shower, urinal, toilet, water closet or drinking water fountain.
(Effective January 1, 2020)

*Rename and revise the definition of 'Fixture Fitting' to read as follows:

PLUMBING FIXTURE FITTING. A device that controls and directs the flow of water or conveys sanitary waste. The term includes a sink faucet, lavatory faucet, showerhead, or bath filler.

Supply fitting. A fitting that controls the volume, direction of flow or both of water and is either attached to or accessed from a fixture or is used with an open or atmospheric discharge.

Waste fitting. A combination of components that conveys the sanitary waste from the outlet of a fixture to the connection to the sanitary drainage system.
(Effective January 1, 2020)

*Add new definition of 'Pressurized Flushing Device' to read as follows:

PRESSURIZED FLUSHING DEVICE. A device that contains a valve that:

1. Is attached to a pressurized water supply pipe that is of sufficient size to deliver water at the necessary rate of flow to ensure flushing when the valve is open; and
2. Opens on actuation to allow water to flow into the fixture at a rate and in a quantity necessary for the operation of the fixture and gradually closes to avoid water hammer.

(Effective January 1, 2020)

*Under definition of 'Sewer' revise 'Public Sewer' to read as follows:

SEWER
Public sewer. That part of the drainage system of pipes installed or maintained by a city, township, county, public utility company or other public entity, on public property, in the street or in an approved dedicated easement of public or community use.
(Effective January 1, 2020)

*Add new definition of 'Toilet' to read as follows:

TOILET. A water closet.
(Effective January 1, 2020)

*Add new definition of 'Water Closet' to read as follows:

WATER CLOSET. A fixture with a water-containing receptor that receives liquid and solid body waste and on actuation conveys the waste through an exposed integral trap into a drainage system and which is also referred to as a toilet.
(Effective January 1, 2020)

*Add new definition of 'WaterSense' to read as follows:

WATERSENSE. A voluntary program of the United States Environmental Protection Agency designed to identify and promote water efficient products and practices.
(Effective January 1, 2020)

*Add new definition of 'WaterSense Listed Plumbing Fixture or Plumbing Fixture Fitting' to read as follows:

WATERSENSE LISTED PLUMBING FIXTURE OR PLUMBING FIXTURE FITTING. A plumbing fixture or plumbing fixture fitting that has been tested by an accredited third-party certifying body or laboratory in accordance with the WaterSense Program of the United States Environmental Protection Agency and has been listed (certified) by such body or laboratory as meeting the performance and efficiency requirements of the program and has been authorized by the program to use its label.
(Effective January 1, 2020)

CHAPTER 3
GENERAL REGULATIONS

*Add new Section 300 'General Applicability Standards' to read as follows:

SECTION 300
GENERAL APPLICABILITY STANDARDS

300.1 Scope. The provisions of this code shall apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within the state of Georgia. The installation of fuel gas distribution piping and equipment, fuel-gas-fired water heaters and water heater venting systems shall be regulated by the *International Fuel Gas Code.*

300.2 Appendices. Appendices are not enforceable unless they are specifically referenced in the body of the code or adopted by the Department of Community Affairs or the authority having jurisdiction.

300.3 Intent. The purpose of this code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of plumbing equipment and systems.

300.4 Severability. If any section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

300.5 General. The provisions of this code shall apply to all matters affecting or relating to structures, as set forth in Section 300. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

300.6 Maintenance. All plumbing systems, materials and appurtenances, both existing and new, and all parts thereof, shall be maintained in proper operating condition in accordance with the original design in a safe and sanitary condition. All devices or safeguards required by this code shall be maintained in compliance with the code edition under which they were installed. The owner or the owner's designated agent shall be responsible for maintenance of plumbing systems. To determine compliance with this provision, the code official shall have the authority to require any plumbing system to be reinspected.

300.7 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested, placed in good and proper working condition and approved.
(Effective January 1, 2020)

SECTION 301
GENERAL

*Add new Section 301.1.1 'Requirements for high efficiency plumbing fixtures' to read as follows:

301.1.1 Requirements for high efficiency plumbing fixtures. The installation of high efficiency plumbing fixtures shall be required in all new construction.
(Effective January 1, 2020)

*****Add new Section 301.1.2 'Waiver for requirements of high efficiency plumbing fixtures' to read as follows:

301.1.2 Waiver of requirements for high efficiency plumbing fixtures. Counties and municipalities are permitted to adopt an ordinance that grants a waiver for an exemption to the requirements for the installation of high efficiency plumbing fixtures relative to new construction and to the repair or renovation of an existing building under the following conditions:

1. When the repair or renovation of the existing building does not include the replacement of the plumbing or sewage system servicing toilets, faucets, or shower heads within such existing building;
2. When such plumbing or sewerage system within such existing building, because of its capacity, design, or installation, would not function properly if the toilets, faucets, or shower heads required by this part were installed;
3. When such system is a well or gravity flow from a spring and is owned privately by an individual for use in such individual's personal residence; or

4. When units to be installed are:
    a. Specifically designed for use by person with disabilities;
    b. Specifically designed to withstand unusual abuse or installation in a penal institution; or
    c. Toilets for juveniles.

(Effective January 1, 2020)

SECTION 305
PROTECTION OF PIPES AND PLUMBING SYSTEM COMPONENTS

*Revise Section 305.4.1 'Sewer depth' to read as follows:

305.4.1 Sewer depth. Building sewers shall be a minimum of 6 inches (152.4 mm) below grade.
(Effective January 1, 2020)

SECTION 306
TRENCHING, EXCAVATION AND BACKFILL

*Revise Section 306.3 'Backfilling' to read as follows:

306.3 Backfilling. Loose earth free from rocks, broken concrete, frozen chunks and other rubble, shall be placed in the trench in 6-inch (152.4 mm) layers and tamped in place until the crown of the pipe is covered by a minimum of 6 inches (152.4 mm) of tamped earth. The backfill under and beside the pipe shall be compacted for pipe support. Backfill shall be brought up evenly on both sides of the pipe so that the pipe remains aligned. In instances where the manufacturer's installation instructions for materials are more restrictive than those prescribed by the code, the material shall be installed in accordance with the more restrictive requirement.
(Effective January 1, 2020)

*Add new Section 306.5 'Open trenches' to read as follows:

306.5 Open trenches. All excavations required to be made for the installation of a building sewer, building drainage system, or any part thereof within the walls of a building shall be open trench work and shall be kept open until the piping has been inspected, tested and approved.
(Effective January 1, 2020)

SECTION 311
TOILET FACILITIES FOR WORKERS

*Delete Section 311 'Toilet Facilities for Workers' entirely without substitution.
(Effective January 1, 2020)

SECTION 314
CONDENSATE DISPOSAL

*Delete Section 314 'Condensate Disposal' entirely without substitution.
(Effective January 1, 2020)

CHAPTER 4
FIXTURES, FAUCETS AND FIXTURE FITTINGS

SECTION 401
GENERAL

*Add new Section 401.4 'Prohibited locations' to read as follows:

401.4 Prohibited locations. No floor drains or other plumbing fixtures except electric water heaters shall be installed in a room containing air handling machinery when such room is used as a plenum.

Exception: Deep-seal trap floor drains consisting of a minimum 4-inch (102 mm) seal and supplied with a trap primer connected to a water distribution pipe shall be permitted.

(Effective January 1, 2020)

SECTION 403
MINIMUM PLUMBING FIXTURES

*Revise Table 403.1 'Minimum Number of Required Plumbing Fixtures[a]' to delete the requirements for 'service sink' entirely without substitution.

(Effective January 1, 2020)

*Revise Table 403.1 'Minimum Number of Required Plumbing Fixtures[a]' by adding the following requirement under the column labeled 'Other' for line number '7' descriptions:

TABLE 403.1
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

NO.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 424.2)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE SECTION 410)	OTHER
			Male	Female	Male	Female			
7	Residential	Apartment house	1 per dwelling unit		1 per dwelling unit		----	---	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units. Detached single-family, duplex and multi-family dwelling structures three stories or less in height shall have not less than two exterior hose bibs, sill cocks or outside hydrants with one being located on the side or rear of the structure.
		One-and two-family dwellings and lodging houses with five or fewer guestrooms	1 per dwelling unit		1 per dwelling unit		1 per dwelling unit	----	1 kitchen sink per dwelling unit, 1 automatic clothes washer connection per dwelling unit. Detached single-family, duplex and multi-family dwelling structures three stories or less in height shall have not less than two exterior hose bibs, sill cocks or outside hydrants with one being located on the side or rear of the structure

Remainder of table remains unchanged.

(Effective January 1, 2020)

*Revise exception of Section 403.3.3 ‘Location of toilet facilities in occupancies other than malls’ to read as follows:

403.3.3 Location of toilet facilities in occupancies other than malls.
Exception: The location and maximum travel distances to required employee toilet facilities in factory, storage and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.
(Effective January 1, 2020)

SECTION 406
AUTOMATIC CLOTHES WASHERS

*Revise Section 406.2 ‘Waste connection’ to read as follows:

406.2 Waste connection. The waste from an automatic clothes washer shall discharge through an air break into a standpipe in accordance with Section 802.4 or into a laundry sink. The trap and fixture drain for an automatic clothes washer standpipe shall be a minimum of 2 inches (51 mm) in diameter. The automatic clothes washer fixture drain shall connect to a building drain, branch drain or drainage stack a minimum of 3 inches (76 mm) in diameter. Automatic clothes washers that discharge by gravity shall be permitted to drain to a trench drain.
(Effective January 1, 2020)

SECTION 410
DRINKING FOUNTAINS

*Revise Section 410.2 ‘Small occupancies’ to read as follows:

410.2 Small occupancies. Drinking fountains shall not be required for an occupant load of 25 or fewer.
(Effective January 1, 2020)

SECTION 412
FAUCETS AND OTHER FIXTURE FITTINGS

*Revise Section 412.1 ‘Approval’ to add a new paragraph at the end of the section:

412.1 Approval. Faucets and fixture fittings shall conform to ASME A112.18.1/CSA B125.1. Faucets and fixture fittings that supply drinking water for human ingestion shall conform to the requirements of NSF 61, Section 9. Flexible water connectors exposed to continuous pressure shall conform to the requirements of Section 605.6.

High efficiency lavatory faucets or lavatory faucet replacement aerators in private use, such as, in residences and apartments, and private (nonpublic) restrooms in hotels and hospitals shall be listed to the WaterSense High Efficiency Lavatory Faucet Specification.

412.1.1 Faucets and supply fittings. Faucets and supply fittings shall conform to the water consumption requirements of Section 604.4.

412.1.2 Waste fittings. Waste fittings shall conform to ASME A112.18.2/CSA B125.2, ASTM F 409 or to one of the standards listed in Tables 702.1 and 702.4 for above-ground drainage and vent pipe and fittings.
(Effective January 1, 2020)

SECTION 419
LAVATORIES

*Revise Section 419.5 'Tempered water for public hand-washing facilities' to read as follows:

419.5 Tempered water for public hand-washing facilities. *Tempered water* may be delivered from lavatories and group wash fixtures located in public toilet facilities provided for customers, patrons and visitors. If provided, tempered water shall be delivered through an *approved* water-temperature limiting device that conforms to ASSE 1070/ASME A112.70/CSA B125.70 or CSA B125.3.
(Effective January 1, 2020)

SECTION 424
URINALS

*Revise Section 424.1 'Approval' to read as follows:

424.1 Approval. Urinals shall conform to ANSI Z124.9, ASME A112.19.2/CSA B45.1, ASME A112.19.19 or CSA B45.5. Urinals shall conform to the water consumption requirements of Section 604.4. Water-supplied urinals shall conform to the hydraulic performance requirements of ASME A112.19.2/CSA B45.1 or CSA B45.5. High efficiency urinals with pressurized flushing devices and flush tank (gravity type) flushing devices shall be listed to the WaterSense Specification for Flushing Urinals and shall conform to ASME A112.19.2/CSA B45.1. Non-water urinals shall conform to ASME A112.19.3/CSA B45.4 or A112.19.19, CSA B45.4. Where non-water urinals are employed, they shall be cleaned and maintained in accordance with the manufacturer's instructions after installation. Where nonwater urinals are installed they shall have a properly sized water distribution line roughed-in to the urinal location at a minimum height of 56 inches (1,422 mm) to allow for the installation of an approved backflow prevention device in the event of a retrofit. Such water distribution lines shall be installed with shut-off valves located as close as possible to the distributing main to prevent the creation of dead ends. Where nonwater urinals are installed, a minimum of one water supplied fixture rated at a minimum of one water supply fixture unit shall be installed upstream on the same drain line to facilitate drain line flow and rinsing.
(Effective January 1, 2020)

SECTION 425
WATER CLOSETS

*Revise Section 425.1 'Approval' to read as follows:

425.1 Approval. Water closets shall conform to the water consumption requirements of Section 604.4 and shall conform to ANSI Z124.4, ASME A112.19.2/CSA B45.1, ASME A 112.19.3/CSA B45.4 or CSA B45.5. Water closets shall conform to the hydraulic performance requirements of

ASME A112.19.2/CSA B45.1. Water closet tanks shall conform to ANSI Z124.4, ASME A112.19.2/CSA B45.1, ASME A 112.19.3/CSA B45.4 or CSA B45.5. Electro-hydraulic water closets shall comply with ASME A112.19.2/CSA B45.1. High efficiency single flush and dual-flush toilets or water closets shall conform to ASME A112.19.2/CSA B45.1 and ASME A112.19.14.
(Effective January 1, 2020)

CHAPTER 5
WATER HEATERS

SECTION 501
GENERAL

*Add new Section 501.9 'Water heaters over 200,000 BTU/h' to read as follows:

501.9 Water heaters over 200,000 BTU/h. The State's minimum requirements for boilers/water heaters and pressure vessels over 200,000 BTU/h (58.61 kW), 210 degrees Fahrenheit or 120 gallons capacity shall be established by O.C.G.A. Title 25, Chapter 15 and the Rules and Regulations of the Office of Insurance and Safety Fire Commissioner.
(Effective January 1, 2020)

SECTION 504
SAFETY DEVICES

*Revise Section 504.6 'Requirements for discharge piping' to read as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the *airgap*.
3. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
4. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
5. Discharge in a manner that does not cause personal injury or structural damage.
6. Discharge to a termination point that is readily observable by the building occupants.
7. When the relief valve discharge piping goes upward, a thermal expansion control device shall be installed on the cold-water distribution or service pipe in accordance with Section 607.3. If the discharge pipe is trapped, provisions shall be made to drain the low point of the trapped portion of the discharge pipe.
8. Terminate not more than 6 inches (152 mm) above and not less than two times the discharge pipe diameter above the floor or *flood level rim* of the waste receptor.
9. Not have a threaded connection at the end of such piping.
10. Not have valves or tee fittings.
11. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.

12. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is installed with insert fittings. The outlet end of such tubing shall be fastened in place.

(Effective January 1, 2020)

*Add new Section 506 ‘Minimum Capacities for Residential Water Heaters’ to read as follows:

SECTION 506
MINIMUM CAPACITIES FOR RESIDENTIAL WATER HEATERS

506.1 General. Water heaters installed in residential occupancies shall be sized in accordance with Table 506 or the manufacturer’s recommendations. The water heater must at a minimum meet the First Hour Rating (FHR) requirements of Table 506.

(Effective January 1, 2020)

*Add new Table 506 'Minimum Capacities for Residential Water Heaters’ to read as follows:

TABLE 506
MINIMUM CAPACITIES FOR RESIDENTIAL WATER HEATERS[1, 2, 3]

Fuel		Gas	Elec	Gas	Elec	Gas	Elec	Gas	Elec
# of Bedrooms		1		2		3		….	
1 to 1 ½ Baths	FHR (gal)	40	40	45	45	48	48	….	….
# of Bedrooms		2		3		4		5	
2 to 2 ½ Baths	FHR (gal)	47	47	60	60	62	62	70	70
# of Bedrooms		3		4		5		6	
3 to 3 ½ Baths	FHR (gal)	60	60	67	67	70	70	72	72

FHR= First Hour Rating, 1 ga1=3.7854 L, 1 gph=1.05 mL/s

1. Tankless Water Heaters shall be sized and installed per manufacturer’s recommendations.
2. Water heaters for single family dwellings having more than six bedrooms and/or 3 ½ baths shall be sized per manufacturer’s recommendations.
3. Table 506 reflects the minimum requirements for one or multiple water heating units.

(Effective January 1, 2020)

CHAPTER 6
WATER SUPPLY AND DISTRIBUTION

SECTION 604
DESIGN OF BUILDING WATER DISTRIBUTION SYSTEM

*****Revise Table 604.4 'Maximum Flow Rates and Consumption for Plumbing Fixtures and Fixture Fittings' to read as follows:

TABLE 604.4
MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY[b]
Lavatory, private	1.5[f] gpm at 60 psi
Lavatory, public (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Shower head[a]	2.5 gpm at 60[f] psi
Sink faucet	2.0[f] gpm at 60 psi
Urinal	0.5[f] gallons per flushing cycle
Water closet	1.28[c, d, e, f] gallons per flushing cycle

For SI: 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

a. A hand-held shower spray is a shower head.
b. Consumption tolerances shall be determined from referenced standards.
c. For flushometer valves and flushometer tanks, the average flush volume shall not exceed 1.28 gallons.
d. For single flush water closets, including gravity, pressure assisted and electro-hydraulic tank types, the average flush volume shall not exceed 1.28 gallons.
e. For dual flush water closets, the average flush volume of two reduced flushes and one full flush shall not exceed 1.28 gallons.
f. See 2020 GA Amendment to Section 301.1.2 'Waiver from requirements of high efficiency plumbing fixtures.'

(Effective January 1, 2020)

SECTION 605
MATERIALS, JOINTS AND CONNECTIONS

*Revise Section 605.9 'Prohibited joints and connections' to add a new exception to Item 4. 'Saddle-type fittings' to read as follows:

605.9 Prohibited joints and connections.

4. Saddle-type fittings.

Exception: Saddle-type fittings can be used to connect refrigerator ice makers and humidifiers to an existing residential unit water distribution system provided that the manufacturer's installation instructions for the distribution piping do not prohibit the use of saddle fittings.

(Effective January 1, 2020)

*Revise Section 605.12.3 'Soldered joints' to read as follows:

605.12.3 Soldered joints. Solder joints shall be made in accordance with the methods of ASTM B 828 except a flux conforming to NSF 61 shall be used. Cut tube ends shall be reamed to the full inside diameter of the tube end. Joint surfaces shall be cleaned. The joint shall be soldered with a solder conforming to ASTM B 32. The joining of water supply piping shall be made with lead-free solder and fluxes. "Lead free" shall mean a chemical composition equal to or less than 0.2-percent lead.
(Effective January 1, 2020)

*Revise Section 605.13.6 'Soldered joints' to read as follows:

605.13.6 Soldered joints. Solder joints shall be made in accordance with the methods of ASTM B 828 except a flux conforming to NSF 61 shall be used. All cut tube ends shall be reamed to the full inside diameter of the tube end. All joint surfaces shall be cleaned. The joint shall be soldered with a solder conforming to ASTM B 32. The joining of water supply piping shall be made with lead-free solders and fluxes. "Lead free" shall mean a chemical composition equal to or less than 0.2-percent lead.
(Effective January 1, 2020)

SECTION 606
INSTALLATION OF THE BUILDING WATER DISTRIBUTION SYSTEM

*Revise Section 606.2 'Location of shutoff valves' to add new Location #4 to read as follows:

606.2 Location of shutoff valves.

4. Shutoff valves to water supplies for refrigerators with automatic icemakers shall have access on the same floor as said refrigerators.

(Effective January 1, 2020)

SECTION 607
HOT WATER SUPPLY SYSTEM

*Revise Section 607.1 'Where required' to read as follows:

607.1 Where required. In residential occupancies, hot water shall be supplied to plumbing fixtures and equipment utilized for bathing, washing, culinary purposes, cleansing, laundry or building maintenance. In nonresidential occupancies, hot water shall be supplied for culinary purposes, cleansing, laundry or building maintenance purposes. In nonresidential occupancies, hot water or tempered water shall be supplied for bathing and washing purposes except for hand-washing facilities. Accessible hand washing facilities regardless of the facility shall not be required to be supplied with hot water or tempered water.
(Effective January 1, 2020)

SECTION 608
PROTECTION OF POTABLE WATER SUPPLY

*Revise Section 608.17.5 'Connections to lawn irrigation systems' to read as follows:

608.17.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check backflow prevention assembly or a reduced pressure principle backflow preventer. Valves shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system interconnected chemical dispensers are used in conjunction with the lawn irrigation systems, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.
(Effective January 1, 2020)

SECTION 610
DISINFECTION OF POTABLE WATER SYSTEM

*Revise Section 610.1 'General' to read as follows:

610.1 General. New or repaired potable water systems shall be flushed and purged of deleterious matter and disinfected prior to utilization. The method to be followed shall be that prescribed by the health authority or water purveyor having jurisdiction. Systems that cannot be adequately flushed and purged may require disinfection in accordance with a prescribed method. In the absence of a prescribed method, the procedure described in either AWWA C651 or AWWA C652, or as described in this section shall apply. This requirement shall apply to "on-site" or "in-plant" fabrication of a system or to a modular portion of a system.

1. The pipe system shall be flushed with clean, potable water until dirty water does not appear at the points of outlet.
2. The system or part thereof shall be filled with a water/chlorine solution containing not less than 50 parts per million (50 mg/L) of chlorine, and the system or part thereof shall be valved off and allowed to stand for 24 hours; or the system or part thereof shall be filled with a water/chlorine solution containing not less than 200 parts per million (200 mg/L) of chlorine and allowed to stand for 3 hours.
3. Following the required standing time, the system shall be flushed with clean potable water until the chlorine is purged from the system.
4. The procedure shall be repeated where shown by a bacteriological examination.

(Effective January 1, 2020)

CHAPTER 7
SANITARY DRAINAGE

SECTION 705
JOINTS

*Revise Section 705.10.2 'Solvent cementing' to read as follows:

705.10.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. If a primer is required by the solvent manufacturer, a purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA

B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be permitted above or below ground.
(Effective January 1, 2020)

SECTION 706
CONNECTIONS BETWEEN DRAINAGE PIPING AND FITTINGS

*Revise Section 706.3 'Installation of fittings' to read as follows and delete the exception:

706.3 Installation of fittings. Fittings shall be installed to guide sewage and waste in the direction of flow. Change in direction shall be made by fittings installed in accordance with Table 706.3. Change in direction by combination fittings, side inlets or increasers shall be installed in accordance with Table 706.3 based on the pattern of flow created by the fitting. Double sanitary tee patterns shall not receive the discharge of back-to-back fixtures or appliances with pressure or pumping action discharge. Water closets shall not be combined with fixtures other than water closets on a double drainage fitting.
(Effective January 1, 2020)

*Delete Section 706.4 'Heel- or side-inlet quarter bends' entirely without substitution.
(Effective January 1, 2020)

SECTION 708
CLEANOUTS

*Revise Section 708.1.2 'Building sewers' to read as follows:

708.1.2 Building sewers. Building sewers shall be provided with cleanouts located not more than 100 feet (30480 mm) apart measured from the upstream entrance of the cleanout. An additional cleanout shall be provided within 10 feet (3048 mm) of the public right of way. For building sewers 8 inches (203 mm) and larger, manholes shall be provided and located at each change in direction and at intervals of not more than 400 feet (122 m). Manholes and manhole covers shall be of an approved type.
(Effective January 1, 2020)

*Revise Section 708.1.3 'Building drain and building sewer junction' to read as follows:

708.1.3 Building drain and building sewer junction. There shall be a cleanout installed at or near the junction of the building drain and the building sewer. The cleanout shall be outside the building wall unless otherwise approved and shall be brought up to finished ground level. An approved two-way cleanout is allowed to be used at this location to serve as a required cleanout for both the building drain and building sewer.
(Effective January 1, 2020)

*Revise Section 708.1.5 ‘Cleanout size’ to read as follows:

708.1.5 Cleanout size. Cleanouts shall be the same nominal size as the pipe they are connected to except that cleanouts for pipes larger than 4 inches (102 mm) need not be larger than 4 inches (102 mm).

Exceptions:
1. A removable P-trap with slip or ground joint connections can serve as a clean-out for drain piping that is one size larger than the P-trap size.
2. Cleanouts located on *stacks* can be one size smaller than the stack size.
3. The size of cleanouts for cast-iron piping can be in accordance with the referenced standards for cast-iron fittings as indicated in Table 702.4.
   (Effective January 1, 2020)

CHAPTER 9
VENTS

SECTION 903
VENT TERMINALS

*Revise Section 903.1 ‘Roof extension’ to read as follows:

903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than 6 inches (155 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall terminate not less than 7 feet (2134 mm) above the roof.
(Effective January 1, 2020)

*Delete exception to Section 909.1 ‘Distance of trap from vent’ entirely without substitution.
(Effective January 1, 2020)

SECTION 913
WASTE STACK VENT

*****Revise Section 913.2 ‘Stack installation’ to read as follows:

913.2 Stack installation. The waste stack shall be vertical. *Fixture* drains shall connect separately to the waste stack. The stack shall not receive the discharge of water closets or urinals.
(Effective January 1, 2020)

SECTION 914
CIRCUIT VENTING

*Revise Section 914.2 'Vent connection' to read as follows:

914.2 Vent connection. The circuit vent connection shall be located between the two most upstream fixture drains. The vent shall connect to the horizontal branch and shall be installed in accordance with Section 905. The circuit vent may receive waste discharge from fixtures located within the same branch interval, provided that the wet portion remains the same size as the horizontal branch.
(Effective January 1, 2020)

CHAPTER 10
TRAPS, INTERCEPTORS AND SEPARATORS

SECTION 1002
TRAP REQUIREMENTS

*Revise first paragraph of Section 1002.1 'Fixture traps' to read as follows:

1002.1 Fixture traps. Each plumbing fixture shall be separately trapped by a water-seal trap, except as otherwise permitted by this code. The trap shall be placed as close as possible to the fixture outlet. The vertical distance from the fixture outlet to the trap weir shall not exceed 24 inches (610 mm). The distance of a clothes washer standpipe above a trap shall conform to Section 802.4.3. A fixture shall not be double trapped. Remainder of section unchanged.
(Effective January 1, 2020)

CHAPTER 13
NONPOTABLE WATER SYSTEMS

SECTION 1304
RECLAIMED WATER SYSTEMS

*****Add new Section 1304.3.2 'Connections to water supply' to read as follows:

1304.3.2 Connections to water supply. Reclaimed water provided from a reclaimed wastewater treatment facility permitted by the Environmental Protection Division may be used to supply water closets, urinals, trap primers for floor drains and floor sinks, water features and other uses approved by the Authority Having Jurisdiction, in motels, hotels, apartment and condominium buildings, and commercial, industrial, and institutional buildings, where the individual guest or occupant does not have access to plumbing. Also, other systems that may use a lesser quality of water than potable water such as water chillers, carwashes or an industrial process may be supplied with reclaimed water provided from a reclaimed wastewater treatment facility permitted by the Environmental Protection Division.
(Effective January 1, 2020)

CHAPTER 14
SUBSURFACE LANDSCAPE IRRIGATIONS SYSTEMS

SECTION 1401
GENERAL

*Add new Section 1401.7 'Gray water' to read as follows:

1401.7 Gray water. Gray water may be used for subsurface irrigation of landscape and shall be permitted by the local county health department in accordance with Georgia Department of Human Resources regulations as a separate onsite sewage management system. Permits and inspections are required by the local county health department.
(Effective January 1, 2020)

CHAPTER 15
REFERENCED STANDARDS

*Revise Chapter 15 'Referenced standards' to add the following new reference standards for WaterSense:

WATERSENSE

WaterSense
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

WaterSense: Tank-Type High Efficiency Toilet Specification
202, 420.1
WaterSense: Specification for Flushing Urinals
202, 419.1
WaterSense: High-Efficiency Lavatory Faucet Specification
202

End of Amendments.
Authority: O.C.G.A. § 8-2-20 et seq.